# Federal Home Loan Bank of Des Moines Monthly Price Report

The Federal Home Loan Bank of Des Moines (Bank) is providing estimated valuations for specific Convertible, Amortizing and Non-Amortizing advances set forth below for members' information and convenience only. The estimated valuations are generated by models used for the Bank's own asset/liability management purposes. The models use specific assumptions, for example, market volatility and discount curve adjusted for the Bank's spread, to estimate the value of the advance**. The valuations represent theoretical market prices only and should not be construed as a liquidation price for the specific advance.**

It is expressly understood that in providing these valuations to members, the Bank is not performing any advisory service. The valuations are provided without representation or warranty and the member is solely responsible for any decision it makes or actions it takes based on the valuations provided. It is recommended that members maintain independent capabilities to value their asset/liability positions, including Convertible, Amortizing and Non-Amortizing advances. You should consult with your own tax, legal, accounting, credit and financial advisors with respect to the transaction structure and information detailed herein.

The table depicts valuation estimates resulting from immediate parallel interest-rate movements of plus/minus 400 basis points in 100 basis point increments. To identify your advance, locate the appropriate maturity date and verify the advance rate. The advances in report are grouped by advance type and then within each type sorted in ascending order by maturity date. Once the appropriate structure is located, read across to view the sensitivity analysis for that advance.

If you have any questions, contact the Money Desk at 800.544.3452, ext. 2122.

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190709A00002 | 7/9/2019 | 2.31 | 7/3/2020 | 7/9/2019 | 100.01634 | 100.0163418 | 100.0163418 | 100.0163418 | 100.0152023 | 100.0068879 | 99.99858111 | 99.99028182 | 99.98199004 |
| 190815A00016 | 8/15/2019 | 2.06 | 8/14/2020 | 8/15/2019 | 100.22234 | 100.2223398 | 100.2223398 | 100.2223398 | 100.2042755 | 100.0796037 | 99.95525668 | 99.83123317 | 99.70753184 |
| 200129A00006 | 1/29/2020 | 1.84 | 1/25/2021 | 1/29/2020 | 100.91991 | 100.9199074 | 100.9199074 | 100.9199074 | 100.8107786 | 100.2336306 | 99.6630761 | 99.09900258 | 98.54130005 |
| 200220A00022 | 2/20/2020 | 1.75 | 2/16/2021 | 2/20/2020 | 100.95791 | 100.9579112 | 100.9579112 | 100.9579112 | 100.8362518 | 100.1988465 | 99.56948062 | 98.94800261 | 98.33426484 |
| 200311A00018 | 3/11/2020 | 0.71 | 12/11/2020 | 3/11/2020 | 100.20723 | 100.207231 | 100.207231 | 100.207231 | 100.1246595 | 99.6727447 | 99.224904 | 98.78108244 | 98.34122603 |
| 200318A00042 | 3/18/2020 | 0.6 | 12/18/2020 | 3/18/2020 | 100.16856 | 100.1685648 | 100.1685648 | 100.1685648 | 100.0818337 | 99.61082846 | 99.14424992 | 98.68203579 | 98.22412497 |
| 200323A00004 | 3/23/2020 | 0.67 | 12/23/2020 | 3/23/2020 | 100.20773 | 100.2077284 | 100.2077284 | 100.2077284 | 100.1180019 | 99.63321693 | 99.15311526 | 98.67762926 | 98.20669257 |
| 200323A00040 | 3/23/2020 | 0.67 | 12/23/2020 | 3/23/2020 | 100.20773 | 100.2077284 | 100.2077284 | 100.2077284 | 100.1180019 | 99.63321693 | 99.15311526 | 98.67762926 | 98.20669257 |
| 200324A00015 | 3/24/2020 | 0.58 | 9/25/2020 | 3/24/2020 | 100.074 | 100.0740016 | 100.0740016 | 100.0740016 | 100.0358936 | 99.79559584 | 99.55645437 | 99.31846084 | 99.08160701 |
| 200325A00002 | 3/25/2020 | 0.87 | 3/25/2021 | 3/25/2020 | 100.4563 | 100.4562983 | 100.4562983 | 100.4562983 | 100.3134943 | 99.5772956 | 98.85184897 | 98.13692025 | 97.4322821 |
| 200327A00015 | 3/27/2020 | 0.73 | 3/26/2021 | 3/27/2020 | 100.35351 | 100.3535123 | 100.3535123 | 100.3535123 | 100.2101986 | 99.47170846 | 98.74404376 | 98.026968 | 97.32025148 |
| 200413A00001 | 4/13/2020 | 0.56 | 4/13/2021 | 4/13/2020 | 100.35176 | 100.3517551 | 100.3517551 | 100.3517551 | 100.1961019 | 99.40737206 | 98.63099195 | 97.8666733 | 97.11413679 |
| 191112A00020 | 11/12/2019 | 1.85 | 10/13/2020 | 11/12/2019 | 100.45953 | 100.4595337 | 100.4595337 | 100.4595337 | 100.4115325 | 100.1210161 | 99.83218933 | 99.54503754 | 99.25954609 |
| 200122A00009 | 1/22/2020 | 1.86 | 12/22/2020 | 1/22/2020 | 100.78461 | 100.7846082 | 100.7846082 | 100.7846082 | 100.6951961 | 100.2115022 | 99.73245154 | 99.25797751 | 98.78801464 |
| 200214A00008 | 2/18/2020 | 1.81 | 1/12/2021 | 2/18/2020 | 100.85166 | 100.8516578 | 100.8516578 | 100.8516578 | 100.7499809 | 100.2085548 | 99.67294167 | 99.14304821 | 98.618783 |
| 200309A00017 | 3/9/2020 | 0.55 | 3/9/2021 | 3/9/2020 | 100.30181 | 100.3018054 | 100.3018054 | 100.3018054 | 100.168257 | 99.47487883 | 98.79105576 | 98.11659133 | 97.45129439 |
| 200312A00035 | 3/12/2020 | 0.72 | 12/11/2020 | 3/12/2020 | 100.21178 | 100.2117834 | 100.2117834 | 100.2117834 | 100.1292099 | 99.67728273 | 99.22942982 | 98.78559614 | 98.34572767 |
| 200319A00032 | 3/19/2020 | 0.6 | 12/18/2020 | 3/19/2020 | 100.16856 | 100.1685648 | 100.1685648 | 100.1685648 | 100.0818337 | 99.61082846 | 99.14424992 | 98.68203579 | 98.22412497 |
| 200320A00032 | 3/20/2020 | 0.67 | 2/19/2021 | 3/20/2020 | 100.26881 | 100.2688093 | 100.2688093 | 100.2688093 | 100.1458989 | 99.50282216 | 98.86796769 | 98.24117862 | 97.62230203 |
| 200323A00006 | 3/23/2020 | 0.85 | 3/23/2021 | 3/23/2020 | 100.43811 | 100.4381077 | 100.4381077 | 100.4381077 | 100.2964912 | 99.56579763 | 98.84570016 | 98.13596963 | 97.43638345 |
| 200324A00010 | 3/24/2020 | 0.58 | 9/25/2020 | 3/24/2020 | 100.074 | 100.0740016 | 100.0740016 | 100.0740016 | 100.0358936 | 99.79559584 | 99.55645437 | 99.31846084 | 99.08160701 |
| 200325A00027 | 3/25/2020 | 0.71 | 3/25/2021 | 3/25/2020 | 100.44011 | 100.4401147 | 100.4401147 | 100.4401147 | 100.2970537 | 99.55957072 | 98.83287812 | 98.11674051 | 97.41092929 |
| 200330A00025 | 3/30/2020 | 0.5 | 2/26/2021 | 3/30/2020 | 100.16271 | 100.162709 | 100.162709 | 100.162709 | 100.0359132 | 99.37419376 | 98.721177 | 98.07669232 | 97.44057358 |
| 200402A00051 | 4/2/2020 | 0.56 | 12/15/2020 | 4/2/2020 | 100.14237 | 100.1423658 | 100.1423658 | 100.1423658 | 100.057443 | 99.59476699 | 99.13636419 | 98.68217553 | 98.23214302 |
| 200417A00003 | 4/17/2020 | 0.65 | 4/16/2021 | 4/17/2020 | 100.30867 | 100.3086692 | 100.3086692 | 100.3086692 | 100.1512705 | 99.35618942 | 98.57366283 | 97.80339528 | 97.04510053 |
| 200417A00022 | 4/17/2020 | 0.52 | 12/30/2020 | 4/17/2020 | 100.13984 | 100.1398449 | 100.1398449 | 100.1398449 | 100.0459861 | 99.54226986 | 99.04359982 | 98.54990057 | 98.06109819 |
| 200424A00019 | 4/24/2020 | 0.53 | 3/24/2021 | 4/24/2020 | 100.20268 | 100.2026833 | 100.2026833 | 100.2026833 | 100.0606555 | 99.3282111 | 98.60643039 | 97.89508193 | 97.19394092 |
| 200309A00051 | 3/9/2020 | 0.72 | 9/10/2020 | 3/9/2020 | 100.0895 | 100.0895026 | 100.0895026 | 100.0895026 | 100.0588622 | 99.85984538 | 99.66162949 | 99.46420961 | 99.26758093 |
| 200318A00046 | 3/18/2020 | 0.63 | 2/18/2021 | 3/18/2020 | 100.24186 | 100.2418595 | 100.2418595 | 100.2418595 | 100.119532 | 99.47927408 | 98.84716898 | 98.22306172 | 97.6068013 |
| 200320A00028 | 3/20/2020 | 0.62 | 12/18/2020 | 3/20/2020 | 100.17806 | 100.1780583 | 100.1780583 | 100.1780583 | 100.0913226 | 99.62029086 | 99.15368595 | 98.69144564 | 98.23350881 |
| 200326A00008 | 3/26/2020 | 0.56 | 11/25/2020 | 3/26/2020 | 100.12538 | 100.1253768 | 100.1253768 | 100.1253768 | 100.0523866 | 99.64447149 | 99.23987388 | 98.83855341 | 98.44047039 |
| 200326A00041 | 3/26/2020 | 0.36 | 10/2/2020 | 3/26/2020 | 100.02246 | 100.022462 | 100.022462 | 100.022462 | 99.98075647 | 99.7212901 | 99.46316616 | 99.20637427 | 98.95090419 |
| 200327A00082 | 3/27/2020 | 0.36 | 10/8/2020 | 3/27/2020 | 100.02394 | 100.0239428 | 100.0239428 | 100.0239428 | 99.97887358 | 99.70291905 | 99.42849216 | 99.15558022 | 98.88417065 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200331A00025 | 3/31/2020 | 0.56 | 12/31/2020 | 3/31/2020 | 100.16105 | 100.1610454 | 100.1610454 | 100.1610454 | 100.0665805 | 99.56006881 | 99.05865634 | 98.5622666 | 98.07082455 |
| 200401A00018 | 4/1/2020 | 0.7 | 3/30/2021 | 4/1/2020 | 100.33609 | 100.336091 | 100.336091 | 100.336091 | 100.1904441 | 99.44117312 | 98.70303935 | 97.97579623 | 97.25920445 |
| 200403A00033 | 4/3/2020 | 0.73 | 3/29/2021 | 4/3/2020 | 100.35749 | 100.3574905 | 100.3574905 | 100.3574905 | 100.2124139 | 99.46576685 | 98.7301796 | 98.00540811 | 97.29121545 |
| 200406A00010 | 4/6/2020 | 0.74 | 4/1/2021 | 4/6/2020 | 100.36908 | 100.3690752 | 100.3690752 | 100.3690752 | 100.2221154 | 99.46728226 | 98.72374919 | 97.99126426 | 97.26958296 |
| 200406A00045 | 4/6/2020 | 0.53 | 12/4/2020 | 4/6/2020 | 100.11988 | 100.1198838 | 100.1198838 | 100.1198838 | 100.0415189 | 99.60898288 | 99.18017463 | 98.75504614 | 98.33355023 |
| 200413A00014 | 4/13/2020 | 0.56 | 4/13/2021 | 4/13/2020 | 100.35176 | 100.3517551 | 100.3517551 | 100.3517551 | 100.1961019 | 99.40737206 | 98.63099195 | 97.8666733 | 97.11413679 |
| 200605A00001 | 6/5/2020 | 0.52 | 6/4/2021 | 6/5/2020 | 100.23875 | 100.2387514 | 100.2387514 | 100.2387514 | 100.0471671 | 99.12016483 | 98.21021271 | 97.31684423 | 96.43960979 |
| 191210A00005 | 12/10/2019 | 1.85 | 11/10/2020 | 12/10/2019 | 100.58558 | 100.5855827 | 100.5855827 | 100.5855827 | 100.5214188 | 100.1535981 | 99.78847212 | 99.42601114 | 99.06618599 |
| 191219A00046 | 12/19/2019 | 1.77 | 12/18/2020 | 12/19/2019 | 100.78458 | 100.7845818 | 100.7845818 | 100.7845818 | 100.6974207 | 100.223969 | 99.75497201 | 99.29036679 | 98.83009175 |
| 191219A00050 | 12/19/2019 | 1.84 | 11/19/2020 | 12/19/2019 | 100.62496 | 100.624963 | 100.624963 | 100.624963 | 100.5553704 | 100.1626914 | 99.77308172 | 99.38650542 | 99.00292711 |
| 191223A00045 | 12/23/2019 | 1.84 | 9/23/2020 | 12/23/2019 | 100.3697 | 100.3697042 | 100.3697042 | 100.3697042 | 100.3325192 | 100.0972459 | 99.86308129 | 99.63001757 | 99.39804696 |
| 200214A00011 | 2/18/2020 | 1.81 | 1/21/2021 | 2/18/2020 | 100.88522 | 100.8852172 | 100.8852172 | 100.8852172 | 100.7783929 | 100.2122988 | 99.65255453 | 99.0990537 | 98.55169216 |
| 200219A00005 | 2/19/2020 | 1.81 | 1/20/2021 | 2/19/2020 | 100.8809 | 100.8808951 | 100.8808951 | 100.8808951 | 100.7746444 | 100.2112998 | 99.65424455 | 99.10337381 | 98.55858487 |
| 200220A00023 | 2/20/2020 | 1.81 | 11/20/2020 | 2/20/2020 | 100.61744 | 100.6174376 | 100.6174376 | 100.6174376 | 100.5472474 | 100.1518404 | 99.7595449 | 99.37032415 | 98.98414207 |
| 200302A00055 | 3/2/2020 | 1.24 | 2/2/2021 | 3/2/2020 | 100.59365 | 100.5936464 | 100.5936464 | 100.5936464 | 100.4801527 | 99.88224295 | 99.29141818 | 98.70755315 | 98.13052554 |
| 200304A00003 | 3/4/2020 | 0.98 | 12/4/2020 | 3/4/2020 | 100.316 | 100.3160036 | 100.3160036 | 100.3160036 | 100.2375534 | 99.80450814 | 99.37519389 | 98.94956258 | 98.52756698 |
| 200306A00026 | 3/6/2020 | 0.72 | 2/5/2021 | 3/6/2020 | 100.28415 | 100.284147 | 100.284147 | 100.284147 | 100.1691434 | 99.56411954 | 98.9663711 | 98.3757675 | 97.7921813 |
| 200309A00024 | 3/11/2020 | 0.57 | 1/7/2021 | 3/11/2020 | 100.17252 | 100.17252 | 100.17252 | 100.17252 | 100.074062 | 99.54840954 | 99.02826068 | 98.51352928 | 98.00413103 |
| 200313A00012 | 3/16/2020 | 0.77 | 1/5/2021 | 3/16/2020 | 100.27562 | 100.2756223 | 100.2756223 | 100.2756223 | 100.1782493 | 99.65774197 | 99.14262444 | 98.63281329 | 98.12822686 |
| 200316A00039 | 3/16/2020 | 0.83 | 2/16/2021 | 3/16/2020 | 100.36813 | 100.3681255 | 100.3681255 | 100.3681255 | 100.246847 | 99.61157379 | 98.98432079 | 98.36493679 | 97.75327442 |
| 200316A00047 | 3/16/2020 | 1.04 | 3/16/2021 | 3/16/2020 | 100.56305 | 100.563051 | 100.563051 | 100.563051 | 100.425453 | 99.71327297 | 99.01115525 | 98.31888769 | 97.63626407 |
| 200316A00058 | 3/16/2020 | 0.81 | 11/16/2020 | 3/16/2020 | 100.21436 | 100.214357 | 100.214357 | 100.214357 | 100.1467256 | 99.76325692 | 99.38272635 | 99.00510008 | 98.63034488 |
| 200318A00001 | 3/18/2020 | 0.68 | 11/18/2020 | 3/18/2020 | 100.16652 | 100.166523 | 100.166523 | 100.166523 | 100.0977113 | 99.70887418 | 99.32305804 | 98.9402277 | 98.56034853 |
| 200320A00017 | 3/20/2020 | 0.62 | 12/18/2020 | 3/20/2020 | 100.17806 | 100.1780583 | 100.1780583 | 100.1780583 | 100.0913226 | 99.62029086 | 99.15368595 | 98.69144564 | 98.23350881 |
| 200320A00040 | 3/20/2020 | 0.57 | 9/25/2020 | 3/20/2020 | 100.07159 | 100.0715861 | 100.0715861 | 100.0715861 | 100.0334786 | 99.79318485 | 99.55404733 | 99.31605775 | 99.07920785 |
| 200324A00014 | 3/24/2020 | 0.69 | 12/24/2020 | 3/24/2020 | 100.21874 | 100.2187421 | 100.2187421 | 100.2187421 | 100.1284149 | 99.64086476 | 99.15804977 | 98.67990118 | 98.20635158 |
| 200324A00048 | 3/24/2020 | 0.64 | 11/2/2020 | 3/24/2020 | 100.13061 | 100.1306145 | 100.1306145 | 100.1306145 | 100.071415 | 99.72656668 | 99.38408608 | 99.04394895 | 98.70613133 |
| 200326A00044 | 3/26/2020 | 0.38 | 10/9/2020 | 3/26/2020 | 100.0298 | 100.0297979 | 100.0297979 | 100.0297979 | 99.98416649 | 99.70545412 | 99.42830082 | 99.15269349 | 98.87861916 |
| 200330A00051 | 3/30/2020 | 0.37 | 10/1/2020 | 3/30/2020 | 100.0248 | 100.0247973 | 100.0247973 | 100.0247973 | 99.98365179 | 99.72692955 | 99.4715194 | 99.21741134 | 98.96459551 |
| 200403A00020 | 4/3/2020 | 0.63 | 3/5/2021 | 4/3/2020 | 100.25685 | 100.2568457 | 100.2568457 | 100.2568457 | 100.1259229 | 99.44483256 | 98.77296027 | 98.11011998 | 97.45613062 |
| 200406A00058 | 4/6/2020 | 0.53 | 12/4/2020 | 4/6/2020 | 100.11988 | 100.1198838 | 100.1198838 | 100.1198838 | 100.0415189 | 99.60898288 | 99.18017463 | 98.75504614 | 98.33355023 |
| 190910A00026 | 9/10/2019 | 2.06 | 7/10/2020 | 9/10/2019 | 100.04834 | 100.048337 | 100.048337 | 100.048337 | 100.0445385 | 100.0168265 | 99.98914518 | 99.96149434 | 99.93387395 |
| 191216A00010 | 12/16/2019 | 1.84 | 8/17/2020 | 12/16/2019 | 100.20784 | 100.2078363 | 100.2078363 | 100.2078363 | 100.1884301 | 100.0554878 | 99.9229125 | 99.79070281 | 99.65885714 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191223A00049 | 12/23/2019 | 1.85 | 10/23/2020 | 12/23/2019 | 100.50648 | 100.506476 | 100.506476 | 100.506476 | 100.4528394 | 100.1346815 | 99.81854287 | 99.50440441 | 99.19224711 |
| 200311A00011 | 3/11/2020 | 0.71 | 12/11/2020 | 3/11/2020 | 100.20723 | 100.207231 | 100.207231 | 100.207231 | 100.1246595 | 99.6727447 | 99.224904 | 98.78108244 | 98.34122603 |
| 200316A00014 | 3/16/2020 | 1.04 | 3/16/2021 | 3/16/2020 | 100.56305 | 100.563051 | 100.563051 | 100.563051 | 100.425453 | 99.71327297 | 99.01115525 | 98.31888769 | 97.63626407 |
| 200331A00003 | 3/31/2020 | 0.51 | 11/2/2020 | 3/31/2020 | 100.0855 | 100.0855014 | 100.0855014 | 100.0855014 | 100.0263175 | 99.68156641 | 99.33918257 | 98.9991417 | 98.66141986 |
| 200406A00043 | 4/6/2020 | 0.5 | 11/6/2020 | 4/6/2020 | 100.08458 | 100.0845825 | 100.0845825 | 100.0845825 | 100.0230015 | 99.66728639 | 99.31409788 | 98.96340914 | 98.61519367 |
| 200408A00016 | 4/8/2020 | 0.71 | 4/5/2021 | 4/8/2020 | 100.35117 | 100.351171 | 100.351171 | 100.351171 | 100.2014221 | 99.43582878 | 98.68186784 | 97.93927591 | 97.20779752 |
| 200413A00020 | 4/13/2020 | 0.65 | 3/12/2021 | 4/13/2020 | 100.27834 | 100.278339 | 100.278339 | 100.278339 | 100.143294 | 99.44311006 | 98.75267259 | 98.0717791 | 97.40023274 |
| 200414A00018 | 4/16/2020 | 0.61 | 12/21/2020 | 4/16/2020 | 100.17637 | 100.1763741 | 100.1763741 | 100.1763741 | 100.0878534 | 99.60862482 | 99.13397621 | 98.66384203 | 98.19815805 |
| 200520A00003 | 5/20/2020 | 0.33 | 5/20/2021 | 5/20/2020 | 100.19024 | 100.1902428 | 100.1902428 | 100.1902428 | 100.0082735 | 99.12009548 | 98.24758215 | 97.39032225 | 96.54791878 |
| 200622A00009 | 6/22/2020 | 0.33 | 6/22/2021 | 6/22/2020 | 100.20957 | 100.2095685 | 100.2095685 | 100.2095685 | 100.008576 | 99.03114547 | 98.07266576 | 97.13259052 | 96.21039422 |
| 200630A00001 | 6/30/2020 | 0.47 | 6/25/2021 | 6/30/2020 | 100.19352 | 100.1935157 | 100.1935157 | 100.1935157 | 99.99151628 | 99.00832881 | 98.04432208 | 97.09893976 | 96.17164685 |
| 191210A00004 | 12/10/2019 | 1.83 | 8/10/2020 | 12/10/2019 | 100.17639 | 100.1763928 | 100.1763928 | 100.1763928 | 100.1601281 | 100.0465586 | 99.93325936 | 99.82022943 | 99.70746782 |
| 191220A00012 | 12/20/2019 | 1.85 | 11/20/2020 | 12/20/2019 | 100.63332 | 100.6333166 | 100.6333166 | 100.6333166 | 100.5631202 | 100.1676748 | 99.77534119 | 99.38608253 | 98.99986276 |
| 200117A00005 | 1/17/2020 | 1.84 | 10/19/2020 | 1/17/2020 | 100.48576 | 100.4857587 | 100.4857587 | 100.4857587 | 100.4343746 | 100.1272628 | 99.82203685 | 99.51867946 | 99.21717342 |
| 200309A00025 | 3/9/2020 | 0.57 | 2/9/2021 | 3/9/2020 | 100.19579 | 100.1957926 | 100.1957926 | 100.1957926 | 100.0785819 | 99.46297694 | 98.85491253 | 98.25425076 | 97.6608571 |
| 200313A00021 | 3/13/2020 | 0.74 | 3/12/2021 | 3/13/2020 | 100.43994 | 100.4399363 | 100.4399363 | 100.4399363 | 100.3045248 | 99.602436 | 98.91013538 | 98.22741933 | 97.55408977 |
| 200318A00003 | 3/18/2020 | 0.71 | 2/18/2021 | 3/18/2020 | 100.29359 | 100.2935889 | 100.2935889 | 100.2935889 | 100.1712277 | 99.53078139 | 98.89848961 | 98.27419736 | 97.65775361 |
| 200318A00021 | 3/18/2020 | 0.71 | 2/18/2021 | 3/18/2020 | 100.29359 | 100.2935889 | 100.2935889 | 100.2935889 | 100.1712277 | 99.53078139 | 98.89848961 | 98.27419736 | 97.65775361 |
| 200325A00012 | 3/25/2020 | 0.71 | 2/25/2021 | 3/25/2020 | 100.30196 | 100.3019611 | 100.3019611 | 100.3019611 | 100.1756369 | 99.516116 | 98.86523305 | 98.22281939 | 97.5887107 |
| 200327A00011 | 3/27/2020 | 0.46 | 12/24/2020 | 3/27/2020 | 100.10574 | 100.1057387 | 100.1057387 | 100.1057387 | 100.0154671 | 99.52824148 | 99.04574877 | 98.56792021 | 98.0946884 |
| 200330A00035 | 3/30/2020 | 0.39 | 10/30/2020 | 3/30/2020 | 100.04284 | 100.0428365 | 100.0428365 | 100.0428365 | 99.98542634 | 99.64899505 | 99.31481706 | 98.98286985 | 98.65313124 |
| 200330A00052 | 3/30/2020 | 0.46 | 12/30/2020 | 3/30/2020 | 100.10937 | 100.109367 | 100.109367 | 100.109367 | 100.0155236 | 99.51189708 | 99.01331609 | 98.51970524 | 98.03099063 |
| 200403A00019 | 4/3/2020 | 0.47 | 10/5/2020 | 4/3/2020 | 100.05283 | 100.0528268 | 100.0528268 | 100.0528268 | 100.0094312 | 99.74166737 | 99.47533809 | 99.21043187 | 98.94693732 |
| 200403A00027 | 4/3/2020 | 0.62 | 3/3/2021 | 4/3/2020 | 100.24792 | 100.2479217 | 100.2479217 | 100.2479217 | 100.1181786 | 99.4425549 | 98.7759995 | 98.11833094 | 97.46937256 |
| 200406A00003 | 4/6/2020 | 0.47 | 10/7/2020 | 4/6/2020 | 100.05393 | 100.0539309 | 100.0539309 | 100.0539309 | 100.0094138 | 99.73615216 | 99.46438711 | 99.19410639 | 98.92529782 |
| 200413A00025 | 4/13/2020 | 0.63 | 1/13/2021 | 4/13/2020 | 100.21079 | 100.2107856 | 100.2107856 | 100.2107856 | 100.1088896 | 99.56674592 | 99.03045876 | 98.49993347 | 97.9750775 |
| 200422A00029 | 4/22/2020 | 0.47 | 4/22/2021 | 4/22/2020 | 100.28878 | 100.2887783 | 100.2887783 | 100.2887783 | 100.1268584 | 99.31399696 | 98.51425235 | 97.72730923 | 96.95286232 |
| 200408A00023 | 4/8/2020 | 0.71 | 4/8/2021 | 4/8/2020 | 100.35491 | 100.3549119 | 100.3549119 | 100.3549119 | 100.203058 | 99.42932407 | 98.66747394 | 97.91723557 | 97.17834518 |
| 200414A00005 | 4/14/2020 | 0.63 | 10/15/2020 | 4/14/2020 | 100.10588 | 100.1058782 | 100.1058782 | 100.1058782 | 100.0568609 | 99.76152226 | 99.46793477 | 99.17608284 | 98.88595104 |
| 200214A00023 | 2/19/2020 | 1.81 | 12/15/2020 | 2/19/2020 | 100.72529 | 100.725288 | 100.725288 | 100.725288 | 100.6400924 | 100.1758098 | 99.7158112 | 99.26003741 | 98.80843031 |
| 200318A00033 | 3/18/2020 | 0.58 | 2/18/2021 | 3/18/2020 | 100.20953 | 100.2095286 | 100.2095286 | 100.2095286 | 100.0872222 | 99.44708202 | 98.81509358 | 98.19110195 | 97.57495611 |
| 200318A00045 | 3/18/2020 | 0.62 | 1/15/2021 | 3/18/2020 | 100.20741 | 100.2074143 | 100.2074143 | 100.2074143 | 100.104381 | 99.55679154 | 99.01517693 | 98.47943972 | 97.94948456 |
| 200319A00021 | 3/19/2020 | 0.6 | 12/18/2020 | 3/19/2020 | 100.16856 | 100.1685648 | 100.1685648 | 100.1685648 | 100.0818337 | 99.61082846 | 99.14424992 | 98.68203579 | 98.22412497 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200319A00033 | 3/19/2020 | 0.63 | 2/19/2021 | 3/19/2020 | 100.24283 | 100.2428337 | 100.2428337 | 100.2428337 | 100.1199403 | 99.47695848 | 98.84219808 | 98.21550223 | 97.59671802 |
| 200320A00022 | 3/20/2020 | 0.57 | 9/21/2020 | 3/20/2020 | 100.06837 | 100.0683668 | 100.0683668 | 100.0683668 | 100.0322521 | 99.80297401 | 99.57475405 | 99.34758491 | 99.12145931 |
| 200320A00030 | 3/20/2020 | 0.64 | 1/20/2021 | 3/20/2020 | 100.21845 | 100.218446 | 100.218446 | 100.218446 | 100.1125723 | 99.55137734 | 98.99645457 | 98.44769927 | 97.90500898 |
| 200325A00057 | 3/25/2020 | 0.71 | 2/25/2021 | 3/25/2020 | 100.30196 | 100.3019611 | 100.3019611 | 100.3019611 | 100.1756369 | 99.516116 | 98.86523305 | 98.22281939 | 97.5887107 |
| 200403A00004 | 4/3/2020 | 0.47 | 10/5/2020 | 4/3/2020 | 100.05283 | 100.0528268 | 100.0528268 | 100.0528268 | 100.0094312 | 99.74166737 | 99.47533809 | 99.21043187 | 98.94693732 |
| 200406A00047 | 4/6/2020 | 0.63 | 3/5/2021 | 4/6/2020 | 100.25685 | 100.2568457 | 100.2568457 | 100.2568457 | 100.1259229 | 99.44483256 | 98.77296027 | 98.11011998 | 97.45613062 |
| 200408A00018 | 4/8/2020 | 0.5 | 10/9/2020 | 4/8/2020 | 100.06345 | 100.0634475 | 100.0634475 | 100.0634475 | 100.0178065 | 99.7390321 | 99.46181703 | 99.1861482 | 98.91201264 |
| 200422A00025 | 4/22/2020 | 0.47 | 4/22/2021 | 4/22/2020 | 100.28878 | 100.2887783 | 100.2887783 | 100.2887783 | 100.1268584 | 99.31399696 | 98.51425235 | 97.72730923 | 96.95286232 |
| 200428A00008 | 4/28/2020 | 0.45 | 4/28/2021 | 4/28/2020 | 100.27783 | 100.2778335 | 100.2778335 | 100.2778335 | 100.111712 | 99.28263605 | 98.46719609 | 97.66505823 | 96.87589946 |
| 190813A00003 | 8/13/2019 | 2.04 | 7/13/2020 | 8/13/2019 | 100.06247 | 100.0624657 | 100.0624657 | 100.0624657 | 100.0575273 | 100.0215016 | 99.9855186 | 99.9495783 | 99.9136806 |
| 191216A00011 | 12/16/2019 | 1.84 | 10/16/2020 | 12/16/2019 | 100.47262 | 100.4726152 | 100.4726152 | 100.4726152 | 100.4229199 | 100.1240894 | 99.82704625 | 99.53177449 | 99.23825821 |
| 200108A00011 | 1/8/2020 | 1.88 | 1/4/2021 | 1/8/2020 | 100.85339 | 100.8533937 | 100.8533937 | 100.8533937 | 100.7562886 | 100.2367667 | 99.72258962 | 99.21367525 | 98.70994305 |
| 200121A00001 | 1/21/2020 | 1.88 | 1/15/2021 | 1/21/2020 | 100.90337 | 100.9033692 | 100.9033692 | 100.9033692 | 100.7999494 | 100.2501473 | 99.70633742 | 99.16842209 | 98.6363057 |
| 200203A00020 | 2/3/2020 | 1.83 | 9/3/2020 | 2/3/2020 | 100.2813 | 100.2812983 | 100.2812983 | 100.2812983 | 100.2541081 | 100.0741238 | 99.89478683 | 99.71609368 | 99.53804088 |
| 200218A00016 | 2/18/2020 | 1.83 | 9/18/2020 | 2/18/2020 | 100.34583 | 100.3458324 | 100.3458324 | 100.3458324 | 100.3111462 | 100.0896925 | 99.86922653 | 99.64974163 | 99.43123122 |
| 200218A00022 | 2/18/2020 | 1.82 | 12/18/2020 | 2/18/2020 | 100.74767 | 100.7476663 | 100.7476663 | 100.7476663 | 100.6606593 | 100.1880348 | 99.7198479 | 99.25603639 | 98.79653899 |
| 200309A00053 | 3/9/2020 | 0.68 | 12/9/2020 | 3/9/2020 | 100.1912 | 100.1911976 | 100.1911976 | 100.1911976 | 100.1098242 | 99.6634233 | 99.22099697 | 98.78249224 | 98.34785709 |
| 200319A00010 | 3/19/2020 | 0.65 | 3/19/2021 | 3/19/2020 | 100.38658 | 100.3865835 | 100.3865835 | 100.3865835 | 100.2470919 | 99.52615701 | 98.81554475 | 98.11503466 | 97.42441246 |
| 200319A00017 | 3/19/2020 | 0.6 | 12/15/2020 | 3/19/2020 | 100.16102 | 100.1610193 | 100.1610193 | 100.1610193 | 100.0760878 | 99.61336036 | 99.15490649 | 98.70066711 | 98.25058421 |
| 200323A00012 | 3/23/2020 | 0.69 | 2/23/2021 | 3/23/2020 | 100.28636 | 100.2863594 | 100.2863594 | 100.2863594 | 100.1611762 | 99.50715339 | 98.86162925 | 98.22443907 | 97.59542237 |
| 200323A00019 | 3/23/2020 | 0.69 | 3/23/2021 | 3/23/2020 | 100.42205 | 100.4220489 | 100.4220489 | 100.4220489 | 100.2801781 | 99.54821225 | 98.82688033 | 98.1159519 | 97.41520318 |
| 200325A00022 | 3/25/2020 | 0.62 | 10/26/2020 | 3/25/2020 | 100.11676 | 100.1167562 | 100.1167562 | 100.1167562 | 100.0615632 | 99.73595793 | 99.41246952 | 99.09107742 | 98.77176132 |
| 200325A00056 | 3/25/2020 | 0.63 | 11/25/2020 | 3/25/2020 | 100.15414 | 100.1541364 | 100.1541364 | 100.1541364 | 100.0811343 | 99.67314806 | 99.26847967 | 98.86708883 | 98.46893587 |
| 200327A00052 | 3/27/2020 | 0.73 | 3/26/2021 | 3/27/2020 | 100.35351 | 100.3535123 | 100.3535123 | 100.3535123 | 100.2101986 | 99.47170846 | 98.74404376 | 98.026968 | 97.32025148 |
| 200330A00063 | 3/30/2020 | 0.64 | 3/30/2021 | 3/30/2020 | 100.29064 | 100.2906399 | 100.2906399 | 100.2906399 | 100.1450276 | 99.39594615 | 98.65799995 | 97.93094246 | 97.21453437 |
| 200406A00023 | 4/6/2020 | 0.53 | 12/4/2020 | 4/6/2020 | 100.11988 | 100.1198838 | 100.1198838 | 100.1198838 | 100.0415189 | 99.60898288 | 99.18017463 | 98.75504614 | 98.33355023 |
| 200511A00013 | 5/11/2020 | 0.44 | 2/1/2021 | 5/11/2020 | 100.1114 | 100.1113987 | 100.1113987 | 100.1113987 | 99.99876151 | 99.40521973 | 98.81868283 | 98.23902756 | 97.66613356 |
| 200527A00020 | 5/27/2020 | 0.49 | 5/27/2021 | 5/27/2020 | 100.20557 | 100.2055694 | 100.2055694 | 100.2055694 | 100.0189106 | 99.11363515 | 98.22462623 | 97.35144902 | 96.49368404 |
| 150601A00460 | 6/1/2015 | 3.05 | 5/16/2029 | 6/1/2015 | 112.05714 | 112.0571431 | 112.0571431 | 112.0571431 | 109.2005472 | 104.7601599 | 100.5858836 | 96.65874891 | 92.96130205 |
| 150601A00589 | 6/1/2015 | 2.52 | 7/14/2025 | 6/1/2015 | 105.54694 | 105.5469433 | 105.5469433 | 105.5469433 | 104.6970196 | 102.1763367 | 99.7499057 | 97.41337421 | 95.16262349 |
| 160608A00031 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88327 | 110.8832702 | 110.8832702 | 110.8832702 | 107.7858452 | 102.5860448 | 97.68888394 | 93.07488147 | 88.725915 |
| 160610A00017 | 6/10/2016 | 2.21 | 6/11/2029 | 6/10/2016 | 108.97745 | 108.977447 | 108.977447 | 108.977447 | 105.9171012 | 101.3415351 | 97.04875291 | 93.01813816 | 89.23075162 |
| 170324A00011 | 3/24/2017 | 3 | 3/25/2030 | 3/24/2017 | 113.94444 | 113.9444374 | 113.9444374 | 113.9314608 | 110.1943471 | 105.0640749 | 100.2737923 | 95.7970212 | 91.60957582 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170630A00023 | 6/30/2017 | 2.77 | 7/1/2030 | 6/30/2017 | 113.04368 | 113.0436848 | 113.0436848 | 113.0140371 | 109.1331624 | 103.930599 | 99.08053996 | 94.55494997 | 90.3282699 |
| 170908A00007 | 9/8/2017 | 2.52 | 9/9/2030 | 9/8/2017 | 111.97172 | 111.9717227 | 111.9717227 | 111.9195341 | 107.9070455 | 102.6434791 | 97.74426853 | 93.17984277 | 88.92329324 |
| 171020A00012 | 10/20/2017 | 2.85 | 10/21/2030 | 10/20/2017 | 113.94487 | 113.944868 | 113.944868 | 113.8819026 | 109.7422309 | 104.3487928 | 99.3313667 | 94.65922727 | 90.30443364 |
| 180126A00015 | 1/26/2018 | 3.08 | 1/27/2031 | 1/26/2018 | 115.64318 | 115.6431762 | 115.6431762 | 115.5451761 | 111.173373 | 105.5870742 | 100.3984586 | 95.57437688 | 91.08474131 |
| 180302A00012 | 3/2/2018 | 3.3 | 3/4/2031 | 3/2/2018 | 117.08271 | 117.0827114 | 117.0827114 | 116.9703986 | 112.4873761 | 106.7939608 | 101.5086392 | 96.59717098 | 92.02849781 |
| 180607A00028 | 6/7/2018 | 2.76 | 6/7/2021 | 6/7/2018 | 101.2688 | 101.2688037 | 101.2688037 | 101.2688037 | 101.1726696 | 100.6651971 | 100.1641586 | 99.66941774 | 99.18084256 |
| 150601A00433 | 6/1/2015 | 1.91 | 3/17/2021 | 6/1/2015 | 100.59238 | 100.5923833 | 100.5923833 | 100.5923833 | 100.5264673 | 100.1633708 | 99.80391164 | 99.44802917 | 99.09566414 |
| 150601A00440 | 6/1/2015 | 3.27 | 3/16/2029 | 6/1/2015 | 112.79094 | 112.7909402 | 112.7909402 | 112.7909402 | 110.0285258 | 105.6394691 | 101.5090553 | 97.61913117 | 93.95297291 |
| 150601A00450 | 6/1/2015 | 3.28 | 4/27/2029 | 6/1/2015 | 112.99861 | 112.9986074 | 112.9986074 | 112.9986074 | 110.160666 | 105.7151268 | 101.5344207 | 97.59976733 | 93.89387997 |
| 160531A00012 | 5/31/2016 | 1.43 | 6/1/2021 | 5/31/2016 | 100.59354 | 100.5935409 | 100.5935409 | 100.5935409 | 100.4976438 | 99.99166385 | 99.49211267 | 98.99885404 | 98.51175583 |
| 160609A00075 | 6/9/2016 | 1.94 | 6/9/2026 | 6/9/2016 | 105.1078 | 105.1078032 | 105.1078032 | 105.1078032 | 103.8591975 | 100.8036044 | 97.88121631 | 95.08500073 | 92.40834962 |
| 161222A00035 | 12/22/2016 | 2.29 | 12/22/2023 | 12/22/2016 | 103.61266 | 103.6126554 | 103.6126554 | 103.6126554 | 103.1615943 | 101.3721772 | 99.63298536 | 97.94219765 | 96.29807281 |
| 170406A00031 | 4/6/2017 | 3.01 | 4/6/2027 | 4/6/2017 | 116.24583 | 116.2458341 | 116.2458341 | 116.2458341 | 111.9792641 | 105.995271 | 100.3986131 | 95.16164648 | 90.25885803 |
| 170831A00026 | 8/31/2017 | 1.65 | 8/31/2020 | 8/31/2017 | 100.17806 | 100.1780588 | 100.1780588 | 100.1780588 | 100.1593284 | 100.0305652 | 99.90216599 | 99.77412927 | 99.64645336 |
| 170915A00019 | 9/15/2017 | 2.67 | 9/16/2030 | 9/15/2017 | 112.81391 | 112.8139136 | 112.8139136 | 112.7611266 | 108.7184389 | 103.4152722 | 98.4792165 | 93.88047524 | 89.59193493 |
| 180202A00020 | 2/2/2018 | 3.41 | 2/3/2031 | 2/2/2018 | 117.74035 | 117.7403479 | 117.7403479 | 117.6282169 | 113.1208214 | 107.3960357 | 102.0815147 | 97.14284445 | 92.54880848 |
| 150601A00528 | 6/1/2015 | 3.08 | 7/27/2029 | 6/1/2015 | 112.45957 | 112.4595703 | 112.4595703 | 112.4595703 | 109.4673241 | 104.9270116 | 100.6639294 | 96.65796067 | 92.89062325 |
| 150601A00542 | 6/1/2015 | 1.97 | 8/4/2021 | 6/1/2015 | 100.92779 | 100.9277875 | 100.9277875 | 100.9277875 | 100.8210329 | 100.2662088 | 99.7197059 | 99.18131608 | 98.65083858 |
| 150601A00684 | 6/1/2015 | 2.25 | 2/7/2025 | 6/1/2015 | 104.46628 | 104.4662845 | 104.4662845 | 104.4662845 | 103.7506269 | 101.4525615 | 99.23451022 | 97.0930016 | 95.02474082 |
| 170630A00051 | 6/30/2017 | 1.75 | 6/30/2021 | 6/30/2017 | 100.81193 | 100.8119335 | 100.8119335 | 100.8119335 | 100.7069854 | 100.159975 | 99.62049279 | 99.08836596 | 98.56342727 |
| 170929A00028 | 9/29/2017 | 2.8 | 9/30/2030 | 9/29/2017 | 113.54746 | 113.5474564 | 113.5474564 | 113.4939136 | 109.424803 | 104.0870732 | 99.11888039 | 94.49022706 | 90.17381738 |
| 171127A00023 | 11/27/2017 | 2.85 | 11/27/2030 | 11/27/2017 | 114.06087 | 114.0608741 | 114.0608741 | 113.9872977 | 109.7869043 | 104.3507285 | 99.29623033 | 94.59201122 | 90.20953632 |
| 180322A00030 | 3/22/2018 | 2.79 | 3/24/2025 | 3/22/2018 | 106.6809 | 106.6809021 | 106.6809021 | 106.6809021 | 105.8765962 | 103.3769713 | 100.967312 | 98.64360786 | 96.40205758 |
| 180323A00008 | 3/23/2018 | 3.35 | 3/24/2031 | 3/23/2018 | 117.52251 | 117.5225109 | 117.5225109 | 117.3961542 | 112.8395665 | 107.0871311 | 101.7498091 | 96.7925472 | 92.18356982 |
| 150601A00342 | 6/1/2015 | 3.97 | 8/26/2033 | 6/1/2015 | 123.75497 | 123.7549701 | 123.7549701 | 123.0097782 | 117.2229945 | 110.5538765 | 104.4384093 | 98.82246806 | 93.65778666 |
| 150601A00434 | 6/1/2015 | 1.91 | 3/17/2021 | 6/1/2015 | 100.59238 | 100.5923828 | 100.5923828 | 100.5923828 | 100.5264669 | 100.1633707 | 99.8039118 | 99.44802961 | 99.09566485 |
| 150601A00559 | 6/1/2015 | 3.06 | 8/31/2029 | 6/1/2015 | 112.50052 | 112.5005171 | 112.5005171 | 112.5005171 | 109.4434127 | 104.8590052 | 100.557094 | 96.51700182 | 92.71974549 |
| 161222A00036 | 12/22/2016 | 2.69 | 12/22/2026 | 12/22/2016 | 107.91045 | 107.9104466 | 107.9104466 | 107.9104466 | 106.4470976 | 103.1557636 | 100.0161724 | 97.01986092 | 94.15890419 |
| 170616A00012 | 6/16/2017 | 2.69 | 6/17/2030 | 6/16/2017 | 112.60364 | 112.6036374 | 112.6036374 | 112.5744664 | 108.7089135 | 103.5267552 | 98.69568471 | 94.18778343 | 89.97759805 |
| 170804A00009 | 8/4/2017 | 2.71 | 8/5/2030 | 8/4/2017 | 112.92968 | 112.9296823 | 112.9296823 | 112.8858576 | 108.8957738 | 103.6244701 | 98.71545155 | 94.13951483 | 89.87006916 |
| 170825A00015 | 8/25/2017 | 2.68 | 8/26/2030 | 8/25/2017 | 112.76355 | 112.7635478 | 112.7635478 | 112.7191562 | 108.7343954 | 103.470423 | 98.56828741 | 93.99881555 | 89.73544473 |
| 170921A00056 | 9/21/2017 | 2.82 | 9/21/2027 | 9/21/2017 | 115.98134 | 115.9813418 | 115.9813418 | 115.9813418 | 111.1452237 | 104.8682824 | 99.02085344 | 93.57061448 | 88.48786189 |
| 170925A00048 | 9/25/2017 | 2.75 | 9/25/2030 | 9/25/2017 | 113.26497 | 113.2649738 | 113.2649738 | 113.2117099 | 109.1527615 | 103.8283247 | 98.87249307 | 94.25534613 | 89.94965803 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 171117A00017 | 11/17/2017 | 2.9 | 11/18/2030 | 11/17/2017 | 114.34824 | 114.3482423 | 114.3482423 | 114.2747623 | 110.0640263 | 104.6143354 | 99.54724402 | 94.83128059 | 90.43784369 |
| 171208A00017 | 12/8/2017 | 2.9 | 12/9/2030 | 12/8/2017 | 114.46572 | 114.4657205 | 114.4657205 | 114.381315 | 110.1102062 | 104.6179445 | 99.51393873 | 94.76604285 | 90.34506051 |
| 171215A00022 | 12/15/2017 | 2.91 | 12/16/2030 | 12/15/2017 | 114.52429 | 114.5242886 | 114.5242886 | 114.4396102 | 110.1661616 | 104.6709687 | 99.56425717 | 94.8138601 | 90.39056246 |
| 180119A00025 | 1/19/2018 | 3.08 | 1/21/2031 | 1/19/2018 | 115.64276 | 115.6427563 | 115.6427563 | 115.5449544 | 111.1732853 | 105.5870935 | 100.3985609 | 95.57454217 | 91.08495262 |
| 180209A00010 | 2/9/2018 | 3.25 | 2/10/2031 | 2/9/2018 | 116.78239 | 116.7823946 | 116.7823946 | 116.6709361 | 112.1997941 | 106.5212584 | 101.2496992 | 96.35097588 | 91.79411983 |
| 160603A00015 | 6/3/2016 | 1.95 | 6/5/2023 | 6/3/2016 | 104.68517 | 104.6851691 | 104.6851691 | 104.6851691 | 103.9167143 | 101.1327426 | 98.43984551 | 95.83453908 | 93.31349263 |
| 160708A00021 | 7/8/2016 | 2 | 7/6/2029 | 7/8/2016 | 108.03785 | 108.0378479 | 108.0378479 | 108.0378479 | 104.9475668 | 100.3744651 | 96.0862684 | 92.06204836 | 88.28259137 |
| 170417A00018 | 4/17/2017 | 2.82 | 4/17/2030 | 4/17/2017 | 113.09044 | 113.0904447 | 113.0904447 | 113.0729898 | 109.305882 | 104.1763789 | 99.3893315 | 94.91788318 | 90.73751827 |
| 170417A00059 | 4/17/2017 | 2.14 | 4/18/2022 | 4/17/2017 | 103.21242 | 103.2124177 | 103.2124177 | 103.2124177 | 102.8494303 | 101.1327394 | 99.45385196 | 97.81166511 | 96.20511738 |
| 170519A00021 | 5/19/2017 | 2.79 | 5/20/2030 | 5/19/2017 | 113.02854 | 113.0285416 | 113.0285416 | 113.0055643 | 109.1878206 | 104.0277193 | 99.21452497 | 94.72084856 | 90.52170331 |
| 170609A00011 | 6/9/2017 | 2.74 | 6/10/2030 | 6/9/2017 | 112.8776 | 112.8775971 | 112.8775971 | 112.8485539 | 108.9738218 | 103.7792288 | 98.93654519 | 94.41778916 | 90.19744972 |
| 170720A00017 | 7/20/2017 | 2.74 | 7/19/2030 | 7/20/2017 | 112.98803 | 112.9880313 | 112.9880313 | 112.9516543 | 109.0159066 | 103.7787958 | 98.89907937 | 94.34814038 | 90.09990555 |
| 170811A00006 | 8/11/2017 | 2.67 | 8/12/2030 | 8/11/2017 | 112.70694 | 112.7069372 | 112.7069372 | 112.6629856 | 108.6805273 | 103.4194276 | 98.51993118 | 93.95288762 | 89.69175453 |
| 170830A00040 | 8/30/2017 | 1.84 | 8/30/2022 | 8/30/2017 | 101.7606 | 101.7605974 | 101.7605974 | 101.7605974 | 101.5311453 | 100.408133 | 99.30804471 | 98.23021132 | 97.17398934 |
| 180329A00011 | 3/29/2018 | 2.77 | 3/29/2023 | 3/29/2018 | 103.59219 | 103.5921928 | 103.5921928 | 103.5921928 | 103.2708562 | 101.829943 | 100.4232031 | 99.04954131 | 97.70790685 |
| 180402A00025 | 4/2/2018 | 3.27 | 4/2/2031 | 4/2/2018 | 117.17461 | 117.1746101 | 117.1746101 | 117.0347341 | 112.4356437 | 106.6630836 | 101.3098482 | 96.34030707 | 91.7221813 |
| 150601A00320 | 6/1/2015 | 2.63 | 6/28/2023 | 6/1/2015 | 103.48514 | 103.4851416 | 103.4851416 | 103.4851416 | 103.1375891 | 101.6332439 | 100.1666143 | 98.73644524 | 97.34153345 |
| 150601A00443 | 6/1/2015 | 1.91 | 4/9/2021 | 6/1/2015 | 100.64713 | 100.6471261 | 100.6471261 | 100.6471261 | 100.5740879 | 100.1768502 | 99.7839433 | 99.39528857 | 99.0108094 |
| 150601A00506 | 6/1/2015 | 3.14 | 7/6/2029 | 6/1/2015 | 112.65479 | 112.6547917 | 112.6547917 | 112.6547917 | 109.6951947 | 105.1730668 | 100.9255685 | 96.93287151 | 93.17675134 |
| 150601A00549 | 6/1/2015 | 1.94 | 8/13/2021 | 6/1/2015 | 100.93239 | 100.9323929 | 100.9323929 | 100.9323929 | 100.8232103 | 100.2554943 | 99.69647649 | 99.14593469 | 98.60365484 |
| 160628A00006 | 6/28/2016 | 1.44 | 6/28/2023 | 6/28/2016 | 101.79769 | 101.7976876 | 101.7976876 | 101.7976876 | 101.4413156 | 99.90330892 | 98.4040586 | 96.94227168 | 95.51670861 |
| 160707A00017 | 7/7/2016 | 1.22 | 7/7/2021 | 7/7/2016 | 101.10746 | 101.1074622 | 101.1074622 | 101.1074622 | 100.905692 | 99.90949832 | 98.93318445 | 97.97615743 | 97.03784771 |
| 170331A00016 | 3/31/2017 | 3.02 | 4/1/2030 | 3/31/2017 | 114.05264 | 114.0526367 | 114.0526367 | 114.0394835 | 110.298708 | 105.1634945 | 100.3686136 | 95.88755833 | 91.69611749 |
| 170518A00028 | 5/18/2017 | 2.45 | 5/20/2024 | 5/18/2017 | 107.87666 | 107.8766608 | 107.8766608 | 107.8766608 | 106.5716939 | 102.9519654 | 99.48073524 | 96.15109229 | 92.95648407 |
| 170526A00022 | 5/26/2017 | 2.77 | 5/28/2030 | 5/26/2017 | 112.93219 | 112.9321921 | 112.9321921 | 112.908949 | 109.0892494 | 103.9292246 | 99.11626903 | 94.62297132 | 90.42432524 |
| 170714A00014 | 7/14/2017 | 2.78 | 7/15/2030 | 7/14/2017 | 113.19913 | 113.1991265 | 113.1991265 | 113.1628796 | 109.2242805 | 103.9810753 | 99.09554233 | 94.53904974 | 90.28551017 |
| 170817A00008 | 8/17/2017 | 2.71 | 8/16/2030 | 8/17/2017 | 112.93034 | 112.9303429 | 112.9303429 | 112.8861848 | 108.8957894 | 103.6242299 | 98.7150013 | 94.13889346 | 89.86930973 |
| 180302A00014 | 3/2/2018 | 2.69 | 3/2/2023 | 3/2/2018 | 103.37237 | 103.3723742 | 103.3723742 | 103.3723742 | 103.0646271 | 101.6679382 | 100.3037082 | 98.97091267 | 97.66856833 |
| 180612A00012 | 6/12/2018 | 2.94 | 6/12/2023 | 6/12/2018 | 104.18046 | 104.1804588 | 104.1804588 | 104.1804588 | 103.8164481 | 102.243849 | 100.7108245 | 99.21605661 | 97.7582815 |
| 180712A00048 | 7/12/2018 | 3.05 | 7/12/2023 | 7/12/2018 | 108.14158 | 108.1415825 | 108.1415825 | 108.1415825 | 107.3022526 | 104.3478519 | 101.4928677 | 98.7333787 | 96.06564219 |
| 150601A00435 | 6/1/2015 | 1.91 | 3/17/2021 | 6/1/2015 | 100.59238 | 100.5923824 | 100.5923824 | 100.5923824 | 100.5264666 | 100.1633706 | 99.80391193 | 99.44802996 | 99.09566542 |
| 160608A00026 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88327 | 110.8832702 | 110.8832702 | 110.8832702 | 107.7858452 | 102.5860448 | 97.68888394 | 93.07488147 | 88.725915 |
| 160608A00032 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88327 | 110.8832702 | 110.8832702 | 110.8832702 | 107.7858452 | 102.5860448 | 97.68888394 | 93.07488147 | 88.725915 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160620A00018 | 6/20/2016 | 1.25 | 6/21/2021 | 6/20/2016 | 100.53564 | 100.5356362 | 100.5356362 | 100.5356362 | 100.4310394 | 99.88610539 | 99.34863215 | 98.81844981 | 98.29539393 |
| 160701A00032 | 7/1/2016 | 1.99 | 7/2/2029 | 7/1/2016 | 107.98909 | 107.989088 | 107.989088 | 107.989088 | 104.9003965 | 100.3294405 | 96.04324637 | 92.02089738 | 88.24319034 |
| 160715A00015 | 7/15/2016 | 2.13 | 7/16/2029 | 7/15/2016 | 108.67126 | 108.6712603 | 108.6712603 | 108.6712603 | 105.5624689 | 100.9624398 | 96.64901493 | 92.60113899 | 88.79948178 |
| 161222A00037 | 12/22/2016 | 3.08 | 12/22/2031 | 12/22/2016 | 116.11005 | 116.1100475 | 116.1100475 | 115.8635231 | 111.2284804 | 105.4938371 | 100.187086 | 95.27059914 | 90.71042155 |
| 170317A00022 | 3/17/2017 | 3.11 | 3/18/2030 | 3/17/2017 | 114.53738 | 114.537382 | 114.537382 | 114.5245319 | 110.7682562 | 105.6115193 | 100.7965034 | 96.29659747 | 92.08749445 |
| 170407A00012 | 4/7/2017 | 2.88 | 4/8/2030 | 4/7/2017 | 113.41457 | 113.4145723 | 113.4145723 | 113.3973137 | 109.619715 | 104.4757532 | 99.67518569 | 95.19108475 | 90.99886959 |
| 170602A00010 | 6/2/2017 | 2.7 | 6/3/2030 | 6/2/2017 | 112.65766 | 112.6576645 | 112.6576645 | 112.6288762 | 108.7618544 | 103.5775068 | 98.74435665 | 94.23448077 | 90.02242152 |
| 170623A00020 | 6/23/2017 | 2.67 | 6/24/2030 | 6/23/2017 | 112.49452 | 112.4945233 | 112.4945233 | 112.4651844 | 108.603162 | 103.4258528 | 98.59932414 | 94.09567941 | 89.88948588 |
| 171006A00020 | 10/6/2017 | 2.88 | 10/7/2030 | 10/6/2017 | 114.11526 | 114.115264 | 114.115264 | 114.0526491 | 109.9071337 | 104.5058997 | 99.48118365 | 94.8022227 | 90.44104152 |
| 171013A00004 | 10/13/2017 | 2.77 | 10/15/2030 | 10/13/2017 | 113.48871 | 113.4887098 | 113.4887098 | 113.4261812 | 109.3031066 | 103.9312718 | 98.93392984 | 94.28048108 | 89.94309871 |
| 171103A00011 | 11/3/2017 | 2.83 | 11/4/2030 | 11/3/2017 | 113.94443 | 113.9444328 | 113.9444328 | 113.8716522 | 109.6760693 | 104.2458341 | 99.19679634 | 94.49760414 | 90.11976434 |
| 171222A00017 | 12/22/2017 | 3.04 | 12/23/2030 | 12/22/2017 | 115.28214 | 115.2821375 | 115.2821375 | 115.1966755 | 110.8949292 | 105.3633674 | 100.2228736 | 95.44106469 | 90.98852957 |
| 180112A00013 | 1/12/2018 | 3.05 | 1/14/2031 | 1/12/2018 | 115.46552 | 115.4655237 | 115.4655237 | 115.3681035 | 111.0032541 | 105.4257162 | 100.2452044 | 95.42862788 | 90.94595161 |
| 180316A00003 | 3/16/2018 | 2.43 | 3/16/2021 | 3/16/2018 | 100.97413 | 100.9741341 | 100.9741341 | 100.9741341 | 100.8973368 | 100.4764987 | 100.0600238 | 99.64783705 | 99.23986536 |
| 150601A00439 | 6/1/2015 | 2.57 | 3/18/2024 | 6/1/2015 | 104.20782 | 104.207819 | 104.207819 | 104.207819 | 103.7187171 | 101.8551995 | 100.0464128 | 98.29029685 | 96.58488473 |
| 170428A00034 | 4/28/2017 | 2.92 | 4/29/2030 | 4/28/2017 | 113.63277 | 113.6327724 | 113.6327724 | 113.6149101 | 109.8295802 | 104.6753669 | 99.86528967 | 95.37235724 | 91.17193106 |
| 170505A00007 | 5/5/2017 | 2.92 | 5/6/2030 | 5/5/2017 | 113.7497 | 113.7497049 | 113.7497049 | 113.7269252 | 109.880282 | 104.6834526 | 99.83610249 | 95.31063681 | 91.08188115 |
| 170512A00030 | 5/12/2017 | 2.94 | 5/12/2027 | 5/12/2017 | 115.15547 | 115.1554734 | 115.1554734 | 115.1554734 | 111.1203848 | 105.4030912 | 100.0526148 | 95.04282603 | 90.34960571 |
| 170705A00021 | 7/5/2017 | 2.59 | 7/6/2027 | 7/5/2017 | 112.97365 | 112.9736482 | 112.9736482 | 112.9736482 | 109.4412889 | 104.2416337 | 99.36658146 | 94.79318379 | 90.50026273 |
| 170901A00005 | 9/1/2017 | 2.58 | 9/3/2030 | 9/1/2017 | 112.30764 | 112.3076383 | 112.3076383 | 112.2554763 | 108.2311837 | 102.9520085 | 98.03825196 | 93.46025853 | 89.19104274 |
| 171130A00037 | 11/10/2017 | 2.85 | 11/12/2030 | 11/10/2017 | 114.05992 | 114.0599213 | 114.0599213 | 113.9868131 | 109.7867932 | 104.3509166 | 99.29665442 | 94.59261798 | 90.21028097 |
| 180321A00015 | 3/21/2018 | 3.02 | 3/21/2025 | 3/21/2018 | 107.40515 | 107.4051493 | 107.4051493 | 107.4051493 | 106.4642355 | 103.738495 | 101.1171385 | 98.59527489 | 96.16827829 |
| 180508A00038 | 5/8/2018 | 3.57 | 5/9/2033 | 5/8/2018 | 122.84399 | 122.8439943 | 122.8439943 | 122.0536184 | 115.8387577 | 108.8492186 | 102.4516236 | 96.58770622 | 91.20550902 |
| 150601A00571 | 6/1/2015 | 2.5 | 9/23/2022 | 6/1/2015 | 102.1907 | 102.190701 | 102.190701 | 102.190701 | 101.9794182 | 100.9774569 | 99.99848714 | 99.04173234 | 98.1064504 |
| 200211A00014 | 2/11/2020 | 1.75 | 8/11/2023 | 2/11/2020 | 104.57108 | 104.5710756 | 104.5710756 | 104.5710756 | 103.6640372 | 100.5863894 | 97.61592652 | 94.74829983 | 91.97936453 |
| 200214A00018 | 2/18/2020 | 1.77 | 1/12/2022 | 2/18/2020 | 102.30836 | 102.308363 | 102.308363 | 102.308363 | 102.0132694 | 100.4912517 | 98.99954411 | 97.53731431 | 96.10375998 |
| 200220A00013 | 2/20/2020 | 2.09 | 12/14/2029 | 2/20/2020 | 116.87042 | 116.8704231 | 116.8704231 | 116.7310315 | 107.2747284 | 98.40534437 | 90.34782136 | 83.02346115 | 76.36156731 |
| 200221A00011 | 2/21/2020 | 1.69 | 8/21/2024 | 2/21/2020 | 105.82352 | 105.8235158 | 105.8235158 | 105.8235158 | 104.2136894 | 100.1468627 | 96.26068146 | 92.54615204 | 88.99478013 |
| 200221A00024 | 2/21/2020 | 2.05 | 12/28/2029 | 2/21/2020 | 116.55834 | 116.5583415 | 116.5583415 | 116.3828032 | 106.900562 | 98.01740126 | 89.95077966 | 82.62123076 | 75.9573997 |
| 200224A00006 | 2/24/2020 | 1.58 | 11/15/2024 | 2/24/2020 | 105.66706 | 105.6670597 | 105.6670597 | 105.6670597 | 103.8644596 | 99.58362221 | 95.50243087 | 91.61058634 | 87.89837191 |
| 200225A00008 | 2/25/2020 | 1.52 | 6/3/2024 | 2/25/2020 | 104.84772 | 104.8477182 | 104.8477182 | 104.8477182 | 103.4098552 | 99.56228236 | 95.87824067 | 92.34995282 | 88.97005167 |
| 200226A00004 | 2/26/2020 | 1.58 | 2/26/2025 | 2/26/2020 | 105.98078 | 105.9807789 | 105.9807789 | 105.9807789 | 103.9273707 | 99.37952956 | 95.05569357 | 90.94365185 | 87.03192661 |
| 200228A00045 | 2/28/2020 | 1.45 | 2/28/2025 | 2/28/2020 | 105.37679 | 105.3767875 | 105.3767875 | 105.3767875 | 103.3227874 | 98.78339485 | 94.46801971 | 90.36443236 | 86.4611385 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200302A00002 | 3/2/2020 | 1.12 | 3/3/2025 | 3/2/2020 | 104.73513 | 104.7351268 | 104.7351268 | 104.7351268 | 102.6626803 | 98.10343158 | 93.77048064 | 89.65141432 | 85.73456929 |
| 200302A00013 | 3/2/2020 | 1.25 | 3/4/2024 | 3/2/2020 | 103.53975 | 103.5397465 | 103.5397465 | 103.5397465 | 102.2861636 | 98.69370612 | 95.24558796 | 91.93520728 | 88.75630481 |
| 200304A00019 | 3/4/2020 | 1.04 | 3/6/2023 | 3/4/2020 | 102.01486 | 102.0148635 | 102.0148635 | 102.0148635 | 101.3258259 | 98.69542509 | 96.14596622 | 93.67444571 | 91.27799369 |
| 200304A00030 | 3/4/2020 | 1.6 | 12/22/2028 | 3/4/2020 | 110.99003 | 110.990033 | 110.990033 | 110.990033 | 103.2707906 | 95.38230848 | 88.15373978 | 81.52654598 | 75.44765446 |
| 200304A00033 | 3/4/2020 | 1.17 | 3/4/2025 | 3/4/2020 | 104.07068 | 104.0706821 | 104.0706821 | 104.0706821 | 102.0160247 | 97.49692148 | 93.20170026 | 89.11810257 | 85.23460903 |
| 200305A00001 | 3/5/2020 | 1.14 | 3/5/2025 | 3/5/2020 | 103.93169 | 103.9316923 | 103.9316923 | 103.9316923 | 101.8755138 | 97.35718679 | 93.0628599 | 88.98026081 | 85.09785752 |
| 200305A00006 | 3/5/2020 | 0.99 | 3/6/2023 | 3/5/2020 | 101.87945 | 101.879453 | 101.879453 | 101.879453 | 101.1908211 | 98.56225787 | 96.01459366 | 93.54482632 | 91.15008728 |
| 200305A00030 | 3/5/2020 | 1.58 | 3/5/2030 | 3/5/2020 | 112.32601 | 112.3260107 | 112.3260107 | 111.9782374 | 102.4560774 | 93.62467095 | 85.62443469 | 78.37285804 | 71.79600985 |
| 200306A00028 | 3/6/2020 | 1.01 | 3/6/2025 | 3/6/2020 | 103.32103 | 103.3210282 | 103.3210282 | 103.3210282 | 101.2667811 | 96.76010068 | 92.47715291 | 88.40566849 | 84.5341189 |
| 200306A00064 | 3/6/2020 | 1.2 | 3/8/2027 | 3/6/2020 | 106.00316 | 106.0031552 | 106.0031552 | 106.0031552 | 101.2268326 | 94.93008951 | 89.06155369 | 83.5899844 | 78.48657537 |
| 200309A00044 | 3/9/2020 | 0.94 | 9/9/2024 | 3/9/2020 | 102.72494 | 102.724941 | 102.724941 | 102.724941 | 101.0920383 | 97.04135721 | 93.17327909 | 89.47859622 | 85.94861888 |
| 200310A00014 | 3/10/2020 | 0.91 | 3/10/2025 | 3/10/2020 | 103.75756 | 103.7575615 | 103.7575615 | 103.7575615 | 101.6743458 | 97.12054395 | 92.79387991 | 88.68184154 | 84.7726757 |
| 200218A00026 | 2/21/2020 | 1.73 | 3/25/2024 | 2/21/2020 | 105.40339 | 105.4033913 | 105.4033913 | 105.4033913 | 104.1009358 | 100.4211965 | 96.8908402 | 93.50295026 | 90.25097426 |
| 200225A00023 | 2/25/2020 | 1.62 | 2/25/2025 | 2/25/2020 | 106.16498 | 106.1649811 | 106.1649811 | 106.1649811 | 104.1127327 | 99.5633847 | 95.23793936 | 91.12419932 | 87.21069907 |
| 200225A00028 | 2/25/2020 | 1.89 | 12/21/2029 | 2/25/2020 | 115.00965 | 115.0096458 | 115.0096458 | 114.8522166 | 105.4359543 | 96.63456626 | 88.64253497 | 81.38114703 | 74.77971437 |
| 200227A00055 | 2/27/2020 | 1.41 | 2/27/2023 | 2/27/2020 | 102.99539 | 102.9953919 | 102.9953919 | 102.9953919 | 102.311202 | 99.68582085 | 97.1406701 | 94.67279321 | 92.2793641 |
| 200228A00047 | 5/18/2020 | 1.35 | 5/18/2023 | 5/18/2020 | 103.06666 | 103.0666612 | 103.0666612 | 103.0666612 | 102.2870533 | 99.45234235 | 96.71027273 | 94.05733455 | 91.49017015 |
| 200228A00070 | 5/18/2020 | 1.35 | 5/18/2023 | 5/18/2020 | 103.06666 | 103.0666612 | 103.0666612 | 103.0666612 | 102.2870533 | 99.45234235 | 96.71027273 | 94.05733455 | 91.49017015 |
| 200302A00003 | 3/2/2020 | 1.2 | 3/2/2023 | 3/2/2020 | 102.43815 | 102.4381534 | 102.4381534 | 102.4381534 | 101.7523263 | 99.12646804 | 96.58110714 | 94.11326814 | 91.72010732 |
| 200305A00032 | 3/5/2020 | 1.58 | 3/5/2030 | 3/5/2020 | 112.32601 | 112.3260107 | 112.3260107 | 111.9782374 | 102.4560774 | 93.62467095 | 85.62443469 | 78.37285804 | 71.79600985 |
| 200305A00045 | 3/5/2020 | 0.99 | 3/6/2023 | 3/5/2020 | 101.87945 | 101.879453 | 101.879453 | 101.879453 | 101.1908211 | 98.56225787 | 96.01459366 | 93.54482632 | 91.15008728 |
| 200306A00007 | 3/6/2020 | 1.01 | 3/6/2025 | 3/6/2020 | 103.32103 | 103.3210282 | 103.3210282 | 103.3210282 | 101.2667811 | 96.76010068 | 92.47715291 | 88.40566849 | 84.5341189 |
| 200306A00049 | 3/6/2020 | 1.01 | 3/6/2025 | 3/6/2020 | 103.32103 | 103.3210282 | 103.3210282 | 103.3210282 | 101.2667811 | 96.76010068 | 92.47715291 | 88.40566849 | 84.5341189 |
| 200309A00030 | 3/9/2020 | 1.11 | 3/9/2027 | 3/9/2020 | 105.40122 | 105.4012181 | 105.4012181 | 105.4012181 | 100.6295478 | 94.34996533 | 88.49796681 | 83.04233161 | 77.95427356 |
| 200310A00016 | 3/10/2020 | 1.02 | 3/10/2026 | 3/10/2020 | 105.188 | 105.1879997 | 105.1879997 | 105.1879997 | 101.9347903 | 96.45505148 | 91.2992846 | 86.44670566 | 81.87797238 |
| 200311A00032 | 3/11/2020 | 1.11 | 3/11/2025 | 3/11/2020 | 104.7098 | 104.7098008 | 104.7098008 | 104.7098008 | 102.6169947 | 98.03867851 | 93.68852211 | 89.55395929 | 85.62318625 |
| 200312A00019 | 3/17/2020 | 1.06 | 5/16/2022 | 3/17/2020 | 101.4685 | 101.4684959 | 101.4684959 | 101.4684959 | 101.0644329 | 99.21480358 | 97.40782244 | 95.64225765 | 93.91692089 |
| 200316A00071 | 3/16/2020 | 1.18 | 3/16/2023 | 3/16/2020 | 102.41852 | 102.4185209 | 102.4185209 | 102.4185209 | 101.7170813 | 99.05550602 | 96.47645519 | 93.97683973 | 91.55370948 |
| 200317A00027 | 3/17/2020 | 1.29 | 3/17/2025 | 3/17/2020 | 104.67106 | 104.6710621 | 104.6710621 | 104.6710621 | 102.5789968 | 98.01448719 | 93.6773761 | 89.55513598 | 85.63599993 |
| 200319A00039 | 3/19/2020 | 1.12 | 3/18/2022 | 3/19/2020 | 101.4463 | 101.4462968 | 101.4462968 | 101.4462968 | 101.097309 | 99.404089 | 97.74710805 | 96.12526747 | 94.53751336 |
| 200320A00026 | 3/20/2020 | 2.11 | 3/20/2029 | 3/20/2020 | 115.74805 | 115.7480451 | 115.7480451 | 115.7480451 | 107.5019289 | 99.23330538 | 91.66902302 | 84.7452982 | 78.40443688 |
| 200325A00044 | 3/25/2020 | 1.7 | 12/23/2024 | 3/25/2020 | 106.29707 | 106.2970691 | 106.2970691 | 106.2970691 | 104.4012459 | 100.013206 | 95.83416365 | 91.85310025 | 88.05963483 |
| 200325A00048 | 3/25/2020 | 1.34 | 12/27/2022 | 3/25/2020 | 102.63013 | 102.6301295 | 102.6301295 | 102.6301295 | 102.0104626 | 99.55762679 | 97.17616728 | 94.86359979 | 92.61754201 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200207A00007 | 2/7/2020 | 1.74 | 2/7/2023 | 2/7/2020 | 103.80456 | 103.8045602 | 103.8045602 | 103.8045602 | 103.139158 | 100.560287 | 98.05885044 | 95.63204913 | 93.27720466 |
| 200211A00017 | 2/11/2020 | 1.77 | 8/12/2024 | 2/11/2020 | 106.12109 | 106.1210855 | 106.1210855 | 106.1210855 | 104.529043 | 100.4786822 | 96.60730907 | 92.90605726 | 89.3665497 |
| 200228A00071 | 2/28/2020 | 1.74 | 12/14/2029 | 2/28/2020 | 113.56153 | 113.5615317 | 113.5615317 | 113.422204 | 104.0684511 | 95.34420633 | 87.42245463 | 80.22520926 | 73.68242514 |
| 200302A00014 | 3/2/2020 | 1.2 | 3/2/2022 | 3/2/2020 | 101.5444 | 101.5443967 | 101.5443967 | 101.5443967 | 101.2096014 | 99.55733946 | 97.93977681 | 96.35588483 | 94.80467562 |
| 200302A00016 | 3/2/2020 | 1.36 | 3/3/2025 | 3/2/2020 | 104.96261 | 104.9626099 | 104.9626099 | 104.9626099 | 102.9039867 | 98.3667941 | 94.05397868 | 89.95326896 | 86.05313261 |
| 200304A00005 | 3/4/2020 | 0.98 | 3/4/2025 | 3/4/2020 | 104.07557 | 104.0755725 | 104.0755725 | 104.0755725 | 102.0053895 | 97.45891054 | 93.13842307 | 89.03151866 | 85.126539 |
| 200304A00025 | 3/4/2020 | 1.04 | 3/6/2023 | 3/4/2020 | 102.01486 | 102.0148635 | 102.0148635 | 102.0148635 | 101.3258259 | 98.69542509 | 96.14596622 | 93.67444571 | 91.27799369 |
| 200305A00016 | 3/5/2020 | 0.99 | 3/6/2023 | 3/5/2020 | 101.87945 | 101.879453 | 101.879453 | 101.879453 | 101.1908211 | 98.56225787 | 96.01459366 | 93.54482632 | 91.15008728 |
| 200306A00010 | 3/6/2020 | 0.88 | 3/6/2023 | 3/6/2020 | 101.58155 | 101.5815501 | 101.5815501 | 101.5815501 | 100.8938108 | 98.26928999 | 95.72557403 | 93.25966367 | 90.86869319 |
| 200310A00041 | 3/10/2020 | 1.39 | 3/12/2029 | 3/10/2020 | 109.4406 | 109.4405982 | 109.4405982 | 109.4405982 | 101.3974847 | 93.40252598 | 86.09351193 | 79.40815907 | 73.29013485 |
| 200311A00023 | 3/11/2020 | 1.41 | 3/10/2028 | 3/11/2020 | 110.03395 | 110.0339508 | 110.0339508 | 110.0339508 | 103.5221444 | 96.21792847 | 89.47641346 | 83.25143276 | 77.50083214 |
| 200312A00006 | 3/12/2020 | 1.23 | 3/12/2025 | 3/12/2020 | 104.37362 | 104.3736225 | 104.3736225 | 104.3736225 | 102.2964464 | 97.750956 | 93.4314532 | 89.32551676 | 85.42147765 |
| 200312A00014 | 3/12/2020 | 1.04 | 3/12/2025 | 3/12/2020 | 104.37984 | 104.3798353 | 104.3798353 | 104.3798353 | 102.2869005 | 97.71378134 | 93.36878484 | 89.2393375 | 85.31362925 |
| 200313A00019 | 3/13/2020 | 1.55 | 3/13/2026 | 3/13/2020 | 107.13228 | 107.1322814 | 107.1322814 | 107.1322814 | 103.8756479 | 98.37253071 | 93.19305825 | 88.31653191 | 83.7236857 |
| 200316A00042 | 3/16/2020 | 1.23 | 3/15/2024 | 3/16/2020 | 103.49394 | 103.4939432 | 103.4939432 | 103.4939432 | 102.2197805 | 98.60059146 | 95.12781387 | 91.79470307 | 88.59486734 |
| 200316A00046 | 3/16/2020 | 1.18 | 3/18/2024 | 3/16/2020 | 103.31428 | 103.3142831 | 103.3142831 | 103.3142831 | 102.0353264 | 98.4119493 | 94.93545971 | 91.5990772 | 88.39637693 |
| 200316A00055 | 3/16/2020 | 1.06 | 3/14/2025 | 3/16/2020 | 104.48011 | 104.480108 | 104.480108 | 104.480108 | 102.381301 | 97.80095281 | 93.4492819 | 89.31367239 | 85.38227525 |
| 200316A00072 | 3/16/2020 | 1.18 | 3/16/2023 | 3/16/2020 | 102.41852 | 102.4185209 | 102.4185209 | 102.4185209 | 101.7170813 | 99.05550602 | 96.47645519 | 93.97683973 | 91.55370948 |
| 200317A00023 | 3/17/2020 | 1.1 | 3/17/2025 | 3/17/2020 | 104.6786 | 104.6785993 | 104.6785993 | 104.6785993 | 102.5706218 | 97.97830439 | 93.61553766 | 89.46964022 | 85.52870274 |
| 200318A00049 | 3/18/2020 | 0.84 | 3/18/2021 | 3/18/2020 | 100.42257 | 100.4225718 | 100.4225718 | 100.4225718 | 100.2839015 | 99.56684962 | 98.8600077 | 98.16315881 | 97.47609217 |
| 200319A00037 | 3/19/2020 | 0.99 | 6/18/2021 | 3/19/2020 | 100.69897 | 100.6989741 | 100.6989741 | 100.6989741 | 100.499961 | 99.53295159 | 98.58443914 | 97.65389712 | 96.74081883 |
| 200302A00017 | 3/2/2020 | 1.3 | 3/4/2024 | 3/2/2020 | 103.72523 | 103.7252264 | 103.7252264 | 103.7252264 | 102.4707541 | 98.87489739 | 95.42347958 | 92.10989513 | 88.92788118 |
| 200302A00025 | 3/2/2020 | 1.02 | 3/2/2022 | 3/2/2020 | 101.52572 | 101.5257157 | 101.5257157 | 101.5257157 | 101.1899092 | 99.5328549 | 97.91068036 | 96.32234962 | 94.76686786 |
| 200303A00009 | 3/3/2020 | 1.3 | 3/3/2025 | 3/3/2020 | 104.6802 | 104.6801966 | 104.6801966 | 104.6801966 | 102.6236323 | 98.09293501 | 93.78638482 | 89.69172033 | 85.79741878 |
| 200304A00013 | 3/4/2020 | 1.01 | 3/4/2022 | 3/4/2020 | 101.2273 | 101.227299 | 101.227299 | 101.227299 | 100.8912366 | 99.23650765 | 97.6166205 | 96.03053919 | 94.47726899 |
| 200304A00032 | 3/4/2020 | 1.6 | 12/15/2028 | 3/4/2020 | 110.96541 | 110.9654139 | 110.9654139 | 110.9654139 | 103.2782648 | 95.40503741 | 88.1890904 | 81.57224008 | 75.50172407 |
| 200306A00006 | 3/6/2020 | 0.88 | 3/6/2023 | 3/6/2020 | 101.58155 | 101.5815501 | 101.5815501 | 101.5815501 | 100.8938108 | 98.26928999 | 95.72557403 | 93.25966367 | 90.86869319 |
| 200306A00036 | 3/6/2020 | 1.01 | 3/6/2025 | 3/6/2020 | 103.32103 | 103.3210282 | 103.3210282 | 103.3210282 | 101.2667811 | 96.76010068 | 92.47715291 | 88.40566849 | 84.5341189 |
| 200306A00040 | 3/6/2020 | 1.01 | 3/6/2025 | 3/6/2020 | 103.32103 | 103.3210282 | 103.3210282 | 103.3210282 | 101.2667811 | 96.76010068 | 92.47715291 | 88.40566849 | 84.5341189 |
| 200306A00077 | 3/6/2020 | 1.06 | 3/6/2025 | 3/6/2020 | 103.55678 | 103.5567832 | 103.5567832 | 103.5567832 | 101.5008117 | 96.98869991 | 92.70051345 | 88.62397457 | 84.74754671 |
| 200310A00015 | 3/10/2020 | 1.37 | 3/11/2030 | 3/10/2020 | 110.31211 | 110.3121126 | 110.3121126 | 109.9477924 | 100.4763662 | 91.72384816 | 83.79886648 | 76.61902082 | 70.11049969 |
| 200310A00034 | 3/10/2020 | 1.41 | 3/11/2030 | 3/10/2020 | 110.69965 | 110.6996544 | 110.6996544 | 110.3352989 | 100.8512851 | 92.08139624 | 84.14018948 | 76.94517569 | 70.42246222 |
| 200310A00040 | 3/10/2020 | 1.36 | 3/10/2028 | 3/10/2020 | 108.13178 | 108.1317804 | 108.1317804 | 108.1317804 | 101.7331425 | 94.55904292 | 87.9368202 | 81.82127505 | 76.17112887 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200311A00012 | 3/11/2020 | 0.87 | 3/11/2022 | 3/11/2020 | 101.0013 | 101.001304 | 101.001304 | 101.001304 | 100.6593467 | 98.98833489 | 97.35280611 | 95.75169482 | 94.18397832 |
| 200316A00015 | 3/16/2020 | 0.99 | 3/14/2022 | 3/16/2020 | 101.21299 | 101.2129877 | 101.2129877 | 101.2129877 | 100.8679838 | 99.18727731 | 97.54238024 | 95.93221276 | 94.35573877 |
| 200316A00037 | 3/16/2020 | 1.06 | 3/14/2025 | 3/16/2020 | 104.48011 | 104.480108 | 104.480108 | 104.480108 | 102.381301 | 97.80095281 | 93.4492819 | 89.31367239 | 85.38227525 |
| 200318A00026 | 3/20/2020 | 1.08 | 3/16/2022 | 3/20/2020 | 101.3725 | 101.372504 | 101.372504 | 101.372504 | 101.0254358 | 99.33809449 | 97.68678402 | 96.07041497 | 94.48794217 |
| 200319A00025 | 3/19/2020 | 1.39 | 3/21/2024 | 3/19/2020 | 104.11044 | 104.110435 | 104.110435 | 104.110435 | 102.8219135 | 99.17626505 | 95.67851599 | 92.32182977 | 89.09972905 |
| 200324A00013 | 3/25/2020 | 1.78 | 3/25/2025 | 3/25/2020 | 107.02862 | 107.0286217 | 107.0286217 | 107.0286217 | 104.8986464 | 100.2598381 | 95.85226501 | 91.66315874 | 87.68052867 |
| 200324A00051 | 3/24/2020 | 1.73 | 11/1/2024 | 3/24/2020 | 106.274 | 106.2739969 | 106.2739969 | 106.2739969 | 104.5001264 | 100.2419455 | 96.18054658 | 92.30586612 | 88.60840456 |
| 200326A00009 | 3/27/2020 | 1.54 | 3/27/2025 | 3/27/2020 | 105.8913 | 105.8913042 | 105.8913042 | 105.8913042 | 103.7647235 | 99.14751134 | 94.76105755 | 90.592597 | 86.63014345 |
| 200327A00013 | 3/27/2020 | 0.72 | 3/27/2023 | 3/27/2020 | 101.66786 | 101.6678612 | 101.6678612 | 101.6678612 | 100.9531814 | 98.26276139 | 95.6568038 | 93.13210729 | 90.6856166 |
| 200302A00006 | 3/2/2020 | 1.2 | 3/2/2023 | 3/2/2020 | 102.43815 | 102.4381534 | 102.4381534 | 102.4381534 | 101.7523263 | 99.12646804 | 96.58110714 | 94.11326814 | 91.72010732 |
| 200305A00038 | 3/5/2020 | 1.51 | 3/5/2029 | 3/5/2020 | 110.46242 | 110.4624191 | 110.4624191 | 110.4624191 | 102.4247102 | 94.40224404 | 87.06567657 | 80.35289615 | 74.20771125 |
| 200306A00031 | 3/6/2020 | 1.01 | 3/6/2025 | 3/6/2020 | 103.32103 | 103.3210282 | 103.3210282 | 103.3210282 | 101.2667811 | 96.76010068 | 92.47715291 | 88.40566849 | 84.5341189 |
| 200306A00038 | 3/6/2020 | 1.2 | 3/8/2027 | 3/6/2020 | 106.00316 | 106.0031552 | 106.0031552 | 106.0031552 | 101.2268326 | 94.93008951 | 89.06155369 | 83.5899844 | 78.48657537 |
| 200309A00045 | 3/9/2020 | 0.97 | 3/7/2025 | 3/9/2020 | 103.13426 | 103.1342579 | 103.1342579 | 103.1342579 | 101.0788482 | 96.57405911 | 92.29308117 | 88.22363285 | 84.35417467 |
| 200310A00024 | 3/10/2020 | 0.91 | 3/10/2025 | 3/10/2020 | 103.75756 | 103.7575615 | 103.7575615 | 103.7575615 | 101.6743458 | 97.12054395 | 92.79387991 | 88.68184154 | 84.7726757 |
| 200310A00054 | 3/10/2020 | 1.1 | 3/10/2025 | 3/10/2020 | 103.75415 | 103.7541454 | 103.7541454 | 103.7541454 | 101.6865962 | 97.16026148 | 92.85894061 | 88.77027287 | 84.88264542 |
| 200310A00062 | 3/10/2020 | 1.05 | 3/8/2024 | 3/10/2020 | 102.80617 | 102.8061722 | 102.8061722 | 102.8061722 | 101.5485587 | 97.9595518 | 94.51524917 | 91.20901179 | 88.03454629 |
| 200311A00055 | 3/11/2020 | 1.66 | 12/17/2027 | 3/11/2020 | 110.13716 | 110.1371608 | 110.1371608 | 110.1371608 | 104.0597476 | 96.99741634 | 90.46235425 | 84.41255263 | 78.80954802 |
| 200316A00067 | 3/18/2020 | 1.1 | 9/15/2022 | 3/18/2020 | 101.79701 | 101.7970128 | 101.7970128 | 101.7970128 | 101.2758592 | 99.10273911 | 96.98654758 | 94.92537965 | 92.91741072 |
| 200317A00039 | 3/19/2020 | 1.11 | 4/15/2022 | 3/19/2020 | 101.47475 | 101.4747461 | 101.4747461 | 101.4747461 | 101.1001152 | 99.33262438 | 97.60428362 | 95.91393895 | 94.26048026 |
| 200318A00013 | 3/18/2020 | 1.5 | 3/18/2025 | 3/18/2020 | 105.67084 | 105.6708405 | 105.6708405 | 105.6708405 | 103.5688275 | 98.97870338 | 94.61703871 | 90.4712502 | 86.52951867 |
| 200318A00038 | 3/18/2020 | 1.48 | 3/18/2025 | 3/18/2020 | 105.57588 | 105.5758816 | 105.5758816 | 105.5758816 | 103.4745722 | 98.88665036 | 94.52710938 | 90.38336945 | 86.44361469 |
| 200318A00054 | 3/18/2020 | 1.56 | 3/18/2025 | 3/18/2020 | 105.95572 | 105.9557173 | 105.9557173 | 105.9557173 | 103.8515934 | 99.25486243 | 94.88682669 | 90.73489243 | 86.78723058 |
| 200323A00011 | 3/23/2020 | 1.37 | 3/23/2023 | 3/23/2020 | 102.95914 | 102.9591351 | 102.9591351 | 102.9591351 | 102.2482061 | 99.56119963 | 96.9579194 | 94.43521294 | 91.99007061 |
| 200323A00018 | 3/23/2020 | 1.37 | 3/23/2023 | 3/23/2020 | 102.95914 | 102.9591351 | 102.9591351 | 102.9591351 | 102.2482061 | 99.56119963 | 96.9579194 | 94.43521294 | 91.99007061 |
| 200324A00012 | 3/25/2020 | 1.78 | 3/25/2025 | 3/25/2020 | 107.02862 | 107.0286217 | 107.0286217 | 107.0286217 | 104.8986464 | 100.2598381 | 95.85226501 | 91.66315874 | 87.68052867 |
| 200324A00031 | 3/24/2020 | 1.64 | 3/22/2024 | 3/24/2020 | 105.05322 | 105.0532151 | 105.0532151 | 105.0532151 | 103.7581784 | 100.0925198 | 96.57547108 | 93.20016285 | 89.96008674 |
| 200325A00046 | 3/25/2020 | 1.76 | 3/25/2025 | 3/25/2020 | 106.93328 | 106.9332796 | 106.9332796 | 106.9332796 | 104.804016 | 100.1674273 | 95.76199434 | 91.57495226 | 87.59431378 |
| 200325A00047 | 3/25/2020 | 1.68 | 9/25/2024 | 3/25/2020 | 105.91449 | 105.9144883 | 105.9144883 | 105.9144883 | 104.2268922 | 100.0687888 | 96.09898415 | 92.30791606 | 88.68656513 |
| 200326A00011 | 3/30/2020 | 1.54 | 3/31/2025 | 3/30/2020 | 105.90488 | 105.9048814 | 105.9048814 | 105.9048814 | 103.7680079 | 99.14072273 | 94.74515027 | 90.56844711 | 86.59855535 |
| 200207A00013 | 2/12/2020 | 1.73 | 2/10/2023 | 2/12/2020 | 103.78987 | 103.7898656 | 103.7898656 | 103.7898656 | 103.121326 | 100.5340297 | 98.0246166 | 95.59026338 | 93.22826871 |
| 200221A00023 | 2/21/2020 | 2.05 | 12/7/2029 | 2/21/2020 | 116.45923 | 116.4592259 | 116.4592259 | 116.3379269 | 106.9121922 | 98.07460373 | 90.04493654 | 82.74499652 | 76.10452661 |
| 200225A00029 | 2/25/2020 | 1.89 | 12/28/2029 | 2/25/2020 | 115.03966 | 115.0396639 | 115.0396639 | 114.8641661 | 105.4293573 | 96.6130458 | 88.60894331 | 81.33791338 | 74.72890315 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200302A00056 | 3/2/2020 | 1.2 | 3/2/2023 | 3/2/2020 | 102.43815 | 102.4381534 | 102.4381534 | 102.4381534 | 101.7523263 | 99.12646804 | 96.58110714 | 94.11326814 | 91.72010732 |
| 200304A00011 | 3/4/2020 | 0.83 | 3/4/2022 | 3/4/2020 | 101.20807 | 101.2080661 | 101.2080661 | 101.2080661 | 100.8709869 | 99.21145412 | 97.58694456 | 95.99641484 | 94.43886322 |
| 200304A00018 | 3/4/2020 | 0.98 | 3/4/2025 | 3/4/2020 | 104.07557 | 104.0755725 | 104.0755725 | 104.0755725 | 102.0053895 | 97.45891054 | 93.13842307 | 89.03151866 | 85.126539 |
| 200304A00020 | 3/4/2020 | 0.98 | 3/4/2025 | 3/4/2020 | 104.07557 | 104.0755725 | 104.0755725 | 104.0755725 | 102.0053895 | 97.45891054 | 93.13842307 | 89.03151866 | 85.126539 |
| 200304A00035 | 3/4/2020 | 1.17 | 3/4/2025 | 3/4/2020 | 104.07068 | 104.0706821 | 104.0706821 | 104.0706821 | 102.0160247 | 97.49692148 | 93.20170026 | 89.11810257 | 85.23460903 |
| 200305A00017 | 3/5/2020 | 1.19 | 3/5/2025 | 3/5/2020 | 104.16731 | 104.1673105 | 104.1673105 | 104.1673105 | 102.1094105 | 97.58565824 | 93.28609856 | 89.1984506 | 85.31117435 |
| 200305A00019 | 3/5/2020 | 0.81 | 3/6/2023 | 3/5/2020 | 101.87711 | 101.8771082 | 101.8771082 | 101.8771082 | 101.1853869 | 98.54619595 | 95.98844696 | 93.50911036 | 91.10529179 |
| 200306A00003 | 3/6/2020 | 0.7 | 3/6/2023 | 3/6/2020 | 101.57847 | 101.5784653 | 101.5784653 | 101.5784653 | 100.8876412 | 98.25251311 | 95.69873198 | 93.2232713 | 90.82323959 |
| 200306A00022 | 3/6/2020 | 1.2 | 3/8/2027 | 3/6/2020 | 106.00316 | 106.0031552 | 106.0031552 | 106.0031552 | 101.2268326 | 94.93008951 | 89.06155369 | 83.5899844 | 78.48657537 |
| 200306A00066 | 3/6/2020 | 1.2 | 3/8/2027 | 3/6/2020 | 106.00316 | 106.0031552 | 106.0031552 | 106.0031552 | 101.2268326 | 94.93008951 | 89.06155369 | 83.5899844 | 78.48657537 |
| 200309A00009 | 3/9/2020 | 0.92 | 3/9/2027 | 3/9/2020 | 105.41678 | 105.4167777 | 105.4167777 | 105.4167777 | 100.5949756 | 94.2666436 | 88.37092096 | 82.87612391 | 77.75304608 |
| 200309A00029 | 3/9/2020 | 1.02 | 3/7/2025 | 3/9/2020 | 103.37015 | 103.3701498 | 103.3701498 | 103.3701498 | 101.3130127 | 96.8027861 | 92.51656361 | 88.44205524 | 84.56771347 |
| 200309A00040 | 3/9/2020 | 0.91 | 3/8/2024 | 3/9/2020 | 102.28529 | 102.2852903 | 102.2852903 | 102.2852903 | 101.030187 | 97.45075364 | 94.01574338 | 90.71852778 | 87.55282355 |
| 200309A00048 | 3/9/2020 | 1.11 | 3/9/2027 | 3/9/2020 | 105.40122 | 105.4012181 | 105.4012181 | 105.4012181 | 100.6295478 | 94.34996533 | 88.49796681 | 83.04233161 | 77.95427356 |
| 200310A00003 | 3/10/2020 | 1.1 | 3/10/2025 | 3/10/2020 | 103.75415 | 103.7541454 | 103.7541454 | 103.7541454 | 101.6865962 | 97.16026148 | 92.85894061 | 88.77027287 | 84.88264542 |
| 200310A00020 | 3/10/2020 | 1.1 | 3/10/2025 | 3/10/2020 | 103.75415 | 103.7541454 | 103.7541454 | 103.7541454 | 101.6865962 | 97.16026148 | 92.85894061 | 88.77027287 | 84.88264542 |
| 200311A00024 | 3/11/2020 | 1.54 | 3/11/2030 | 3/11/2020 | 113.90009 | 113.9000926 | 113.9000926 | 113.5281524 | 103.8111814 | 94.8108016 | 86.6610141 | 79.27706058 | 72.58302856 |
| 200312A00036 | 3/12/2020 | 1.04 | 3/11/2022 | 3/12/2020 | 101.29286 | 101.2928581 | 101.2928581 | 101.2928581 | 100.9504087 | 99.27682653 | 97.63877428 | 96.035185 | 94.46503475 |
| 180919A00090 | 3/19/2020 | 3.24 | 3/19/2024 | 3/19/2020 | 111.04337 | 111.0433721 | 111.0433721 | 111.0433721 | 109.7247721 | 105.9557308 | 102.3379995 | 98.86462461 | 95.52901664 |
| 200218A00025 | 2/21/2020 | 1.71 | 2/24/2023 | 2/21/2020 | 103.79059 | 103.7905898 | 103.7905898 | 103.7905898 | 103.1072167 | 100.479722 | 97.93224512 | 95.46184691 | 93.06571731 |
| 200220A00014 | 2/20/2020 | 2.09 | 12/21/2029 | 2/20/2020 | 116.90422 | 116.9042168 | 116.9042168 | 116.7467441 | 107.2715364 | 98.3868991 | 90.31700141 | 82.98272038 | 76.31299312 |
| 200228A00091 | 2/28/2020 | 1.72 | 12/7/2029 | 2/28/2020 | 113.34564 | 113.3456443 | 113.3456443 | 113.2243939 | 103.8947795 | 95.19352059 | 87.29139918 | 80.11088715 | 73.58233726 |
| 200304A00012 | 3/4/2020 | 0.98 | 3/4/2025 | 3/4/2020 | 104.07557 | 104.0755725 | 104.0755725 | 104.0755725 | 102.0053895 | 97.45891054 | 93.13842307 | 89.03151866 | 85.126539 |
| 200304A00029 | 3/4/2020 | 1.17 | 3/4/2025 | 3/4/2020 | 104.07068 | 104.0706821 | 104.0706821 | 104.0706821 | 102.0160247 | 97.49692148 | 93.20170026 | 89.11810257 | 85.23460903 |
| 200305A00014 | 3/10/2020 | 1 | 2/15/2023 | 3/10/2020 | 101.8705 | 101.8704977 | 101.8704977 | 101.8704977 | 101.2022637 | 98.62617646 | 96.12814267 | 93.70531628 | 91.35497513 |
| 200305A00037 | 3/5/2020 | 1.43 | 3/6/2028 | 3/5/2020 | 108.65938 | 108.6593801 | 108.6593801 | 108.6593801 | 102.267192 | 95.08230246 | 88.44898763 | 82.3221466 | 76.66058478 |
| 200305A00039 | 3/5/2020 | 1.58 | 3/5/2030 | 3/5/2020 | 112.32601 | 112.3260107 | 112.3260107 | 111.9782374 | 102.4560774 | 93.62467095 | 85.62443469 | 78.37285804 | 71.79600985 |
| 200306A00055 | 3/6/2020 | 0.82 | 3/6/2025 | 3/6/2020 | 103.32251 | 103.322515 | 103.322515 | 103.322515 | 101.2527351 | 96.71876426 | 92.41063491 | 88.31592755 | 84.42297456 |
| 200309A00007 | 3/9/2020 | 1.11 | 3/9/2027 | 3/9/2020 | 105.40122 | 105.4012181 | 105.4012181 | 105.4012181 | 100.6295478 | 94.34996533 | 88.49796681 | 83.04233161 | 77.95427356 |
| 200309A00043 | 3/9/2020 | 0.92 | 6/7/2024 | 3/9/2020 | 102.47884 | 102.4788366 | 102.4788366 | 102.4788366 | 101.0454895 | 97.23394819 | 93.58538946 | 90.09202831 | 86.74649183 |
| 200309A00054 | 3/9/2020 | 0.98 | 3/9/2028 | 3/9/2020 | 106.69082 | 106.6908226 | 106.6908226 | 106.6908226 | 100.2517671 | 93.07226112 | 86.44848258 | 80.33473398 | 74.68929431 |
| 200310A00005 | 3/10/2020 | 1.41 | 3/8/2030 | 3/10/2020 | 110.69068 | 110.6906807 | 110.6906807 | 110.3346848 | 100.8582166 | 92.09436416 | 84.15801407 | 76.96685419 | 70.44714416 |
| 200312A00037 | 3/12/2020 | 1.3 | 3/12/2025 | 3/12/2020 | 104.70483 | 104.7048292 | 104.7048292 | 104.7048292 | 102.6252145 | 98.07206822 | 93.74518187 | 89.63212226 | 85.72120898 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200316A00050 | 3/16/2020 | 1.54 | 3/16/2027 | 3/16/2020 | 108.31245 | 108.3124458 | 108.3124458 | 108.3124458 | 103.466002 | 97.07731243 | 91.12282093 | 85.57081576 | 80.39206109 |
| 200317A00011 | 3/17/2020 | 1.04 | 3/17/2022 | 3/17/2020 | 101.30545 | 101.3054488 | 101.3054488 | 101.3054488 | 100.9575982 | 99.26824265 | 97.61500507 | 95.99679188 | 94.41255402 |
| 200317A00033 | 3/19/2020 | 1.1 | 2/15/2022 | 3/19/2020 | 101.34249 | 101.3424899 | 101.3424899 | 101.3424899 | 101.020899 | 99.41328322 | 97.83885976 | 96.29666661 | 94.7857788 |
| 200317A00045 | 3/19/2020 | 1.43 | 3/19/2025 | 3/19/2020 | 105.34158 | 105.3415771 | 105.3415771 | 105.3415771 | 103.2394594 | 98.65453547 | 94.29803278 | 90.15736088 | 86.22069439 |
| 200317A00064 | 3/19/2020 | 1.12 | 5/16/2022 | 3/19/2020 | 101.58234 | 101.5823392 | 101.5823392 | 101.5823392 | 101.1780602 | 99.32732752 | 97.51926391 | 95.75263702 | 94.02625795 |
| 200318A00037 | 3/18/2020 | 1.35 | 3/18/2024 | 3/18/2020 | 103.95145 | 103.951452 | 103.951452 | 103.951452 | 102.6693866 | 99.03421576 | 95.54628073 | 92.19878797 | 88.98530009 |
| 200310A00021 | 3/10/2020 | 1.1 | 3/10/2025 | 3/10/2020 | 103.75415 | 103.7541454 | 103.7541454 | 103.7541454 | 101.6865962 | 97.16026148 | 92.85894061 | 88.77027287 | 84.88264542 |
| 200310A00028 | 3/10/2020 | 1.1 | 3/10/2025 | 3/10/2020 | 103.75415 | 103.7541454 | 103.7541454 | 103.7541454 | 101.6865962 | 97.16026148 | 92.85894061 | 88.77027287 | 84.88264542 |
| 200310A00033 | 3/10/2020 | 0.91 | 3/10/2025 | 3/10/2020 | 103.75756 | 103.7575615 | 103.7575615 | 103.7575615 | 101.6743458 | 97.12054395 | 92.79387991 | 88.68184154 | 84.7726757 |
| 200310A00051 | 3/10/2020 | 1.41 | 3/8/2030 | 3/10/2020 | 110.69068 | 110.6906807 | 110.6906807 | 110.3346848 | 100.8582166 | 92.09436416 | 84.15801407 | 76.96685419 | 70.44714416 |
| 200311A00031 | 3/11/2020 | 1.41 | 12/24/2027 | 3/11/2020 | 108.28716 | 108.2871613 | 108.2871613 | 108.2871613 | 102.2150342 | 95.20357302 | 88.71829523 | 82.71711883 | 77.16152495 |
| 200312A00009 | 3/12/2020 | 1.46 | 3/12/2027 | 3/12/2020 | 107.76107 | 107.7610702 | 107.7610702 | 107.7610702 | 102.9406511 | 96.57857194 | 90.64861928 | 85.11926406 | 79.96143578 |
| 200316A00040 | 3/16/2020 | 1.04 | 3/16/2022 | 3/16/2020 | 101.30335 | 101.3033503 | 101.3033503 | 101.3033503 | 100.9563999 | 99.26967283 | 97.61896541 | 96.00318849 | 94.42129722 |
| 200316A00043 | 3/16/2020 | 1.3 | 3/14/2025 | 3/16/2020 | 104.7103 | 104.7103032 | 104.7103032 | 104.7103032 | 102.6255674 | 98.06743511 | 93.73603353 | 89.61889109 | 85.70429217 |
| 200319A00005 | 3/19/2020 | 0.81 | 3/19/2021 | 3/19/2020 | 100.40239 | 100.402392 | 100.402392 | 100.402392 | 100.2631496 | 99.54346304 | 98.83406245 | 98.13472848 | 97.44524802 |
| 200320A00025 | 3/20/2020 | 0.78 | 3/19/2021 | 3/20/2020 | 100.38058 | 100.3805813 | 100.3805813 | 100.3805813 | 100.2413549 | 99.52175627 | 98.81244274 | 98.11319495 | 97.4237998 |
| 200324A00066 | 3/26/2020 | 1.81 | 3/26/2025 | 3/26/2020 | 107.17577 | 107.1757679 | 107.1757679 | 107.1757679 | 105.0421364 | 100.3974456 | 95.98434933 | 91.79005419 | 87.80254664 |
| 200327A00043 | 3/27/2020 | 1.48 | 3/27/2028 | 3/27/2020 | 110.64159 | 110.6415915 | 110.6415915 | 110.6415915 | 104.0426737 | 96.67927209 | 89.88563675 | 83.61479939 | 77.82389455 |
| 200327A00047 | 3/27/2020 | 0.99 | 3/27/2025 | 3/27/2020 | 104.17838 | 104.1783805 | 104.1783805 | 104.1783805 | 102.0485 | 97.44336113 | 93.06972259 | 88.91472653 | 84.96630241 |
| 200327A00060 | 3/27/2020 | 1.18 | 3/27/2025 | 3/27/2020 | 104.17318 | 104.1731751 | 104.1731751 | 104.1731751 | 102.0594471 | 97.48227672 | 93.13442981 | 89.00320487 | 85.07667606 |
| 200327A00073 | 3/27/2020 | 0.99 | 3/27/2025 | 3/27/2020 | 104.17838 | 104.1783805 | 104.1783805 | 104.1783805 | 102.0485 | 97.44336113 | 93.06972259 | 88.91472653 | 84.96630241 |
| 200330A00017 | 3/30/2020 | 0.86 | 3/30/2023 | 3/30/2020 | 101.56505 | 101.5650491 | 101.5650491 | 101.5650491 | 100.8505899 | 98.16492966 | 95.56357083 | 93.04331719 | 90.60111852 |
| 200330A00028 | 3/30/2020 | 1.09 | 3/28/2025 | 3/30/2020 | 103.74581 | 103.7458051 | 103.7458051 | 103.7458051 | 101.6327434 | 97.06312002 | 92.72269702 | 88.59876949 | 84.67940896 |
| 200330A00037 | 3/30/2020 | 1.09 | 3/28/2025 | 3/30/2020 | 103.74581 | 103.7458051 | 103.7458051 | 103.7458051 | 101.6327434 | 97.06312002 | 92.72269702 | 88.59876949 | 84.67940896 |
| 200331A00015 | 3/31/2020 | 0.64 | 3/31/2023 | 3/31/2020 | 101.45181 | 101.4518144 | 101.4518144 | 101.4518144 | 100.7333143 | 98.03561371 | 95.42289808 | 92.89193469 | 90.43963893 |
| 200402A00038 | 4/2/2020 | 0.84 | 4/2/2025 | 4/2/2020 | 103.47119 | 103.4711871 | 103.4711871 | 103.4711871 | 101.3311653 | 96.72779784 | 92.35678158 | 88.20517453 | 84.2608286 |
| 200403A00017 | 4/3/2020 | 0.81 | 4/3/2023 | 4/3/2020 | 101.43198 | 101.4319772 | 101.4319772 | 101.4319772 | 100.7132286 | 98.01895723 | 95.40956111 | 92.88182525 | 90.43268057 |
| 200325A00016 | 3/30/2020 | 1.67 | 3/31/2025 | 3/30/2020 | 106.52674 | 106.5267403 | 106.5267403 | 106.5267403 | 104.3851953 | 99.74338653 | 95.33381182 | 91.14360467 | 87.16068518 |
| 200325A00032 | 3/25/2020 | 1.29 | 9/26/2022 | 3/25/2020 | 102.25151 | 102.2515135 | 102.2515135 | 102.2515135 | 101.7191511 | 99.51140817 | 97.36209938 | 95.2692459 | 93.23095358 |
| 200326A00016 | 3/26/2020 | 1.54 | 3/25/2025 | 3/26/2020 | 105.88452 | 105.8845162 | 105.8845162 | 105.8845162 | 103.7630815 | 99.15090838 | 94.76901691 | 90.60468091 | 86.64594993 |
| 200327A00027 | 3/27/2020 | 0.9 | 3/27/2023 | 3/27/2020 | 101.67098 | 101.6709831 | 101.6709831 | 101.6709831 | 100.9595421 | 98.28007784 | 95.68450798 | 93.16966027 | 90.73250684 |
| 200327A00035 | 3/27/2020 | 0.83 | 3/27/2024 | 3/27/2020 | 102.69367 | 102.6936651 | 102.6936651 | 102.6936651 | 101.3931287 | 97.74082546 | 94.23796311 | 90.87758317 | 87.65309558 |
| 200327A00037 | 3/27/2020 | 1.18 | 3/27/2026 | 3/27/2020 | 106.15868 | 106.1586826 | 106.1586826 | 106.1586826 | 102.8278329 | 97.28131302 | 92.06456815 | 87.15630805 | 82.53672987 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200327A00076 | 3/27/2020 | 1.18 | 3/27/2026 | 3/27/2020 | 106.15868 | 106.1586826 | 106.1586826 | 106.1586826 | 102.8278329 | 97.28131302 | 92.06456815 | 87.15630805 | 82.53672987 |
| 200330A00066 | 3/30/2020 | 1.08 | 3/31/2025 | 3/30/2020 | 103.70446 | 103.7044576 | 103.7044576 | 103.7044576 | 101.5841137 | 97.00822008 | 92.66219401 | 88.53327421 | 84.60948054 |
| 200331A00008 | 3/31/2020 | 0.64 | 3/31/2023 | 3/31/2020 | 101.45181 | 101.4518144 | 101.4518144 | 101.4518144 | 100.7333143 | 98.03561371 | 95.42289808 | 92.89193469 | 90.43963893 |
| 200402A00002 | 4/2/2020 | 0.71 | 4/4/2022 | 4/2/2020 | 100.75527 | 100.7552698 | 100.7552698 | 100.7552698 | 100.3921053 | 98.66048762 | 96.96671214 | 95.30962585 | 93.68812257 |
| 200402A00009 | 4/2/2020 | 1.03 | 4/2/2025 | 4/2/2020 | 103.46922 | 103.469221 | 103.469221 | 103.469221 | 101.3454715 | 96.77009688 | 92.42488493 | 88.29705125 | 84.3745936 |
| 200403A00015 | 4/3/2020 | 0.73 | 4/4/2022 | 4/3/2020 | 100.7909 | 100.7908969 | 100.7908969 | 100.7908969 | 100.4276696 | 98.69572653 | 97.00163171 | 95.3442319 | 93.72242079 |
| 200406A00059 | 4/6/2020 | 0.92 | 4/6/2023 | 4/6/2020 | 101.74349 | 101.7434873 | 101.7434873 | 101.7434873 | 101.0201794 | 98.31365068 | 95.69257263 | 93.15371484 | 90.69399258 |
| 200408A00013 | 4/13/2020 | 0.87 | 4/14/2023 | 4/13/2020 | 101.61636 | 101.6163645 | 101.6163645 | 101.6163645 | 100.8838874 | 98.15805114 | 95.51888777 | 92.96313549 | 90.4876769 |
| 200414A00014 | 4/14/2020 | 0.76 | 4/12/2024 | 4/14/2020 | 102.45701 | 102.4570107 | 102.4570107 | 102.4570107 | 101.1266154 | 97.43763471 | 93.90121013 | 90.51021877 | 87.25791189 |
| 200417A00008 | 4/17/2020 | 0.96 | 4/17/2025 | 4/17/2020 | 103.16067 | 103.160668 | 103.160668 | 103.160668 | 101.0005018 | 96.39512773 | 92.02335984 | 87.8721843 | 83.92937959 |
| 200421A00032 | 4/21/2020 | 1.31 | 4/21/2027 | 4/21/2020 | 106.86184 | 106.8618436 | 106.8618436 | 106.8618436 | 101.8790685 | 95.45667673 | 89.47754497 | 83.90892544 | 78.72064489 |
| 200423A00017 | 4/23/2020 | 1.82 | 4/23/2035 | 4/23/2020 | 125.34209 | 125.3420929 | 125.3420929 | 117.095396 | 102.5532271 | 89.84745512 | 78.87966075 | 69.40168086 | 61.20194931 |
| 200423A00020 | 4/28/2020 | 0.68 | 4/15/2022 | 4/28/2020 | 100.69577 | 100.6957691 | 100.6957691 | 100.6957691 | 100.3225373 | 98.56227541 | 96.84102921 | 95.15764841 | 93.51102656 |
| 200429A00062 | 4/29/2020 | 0.65 | 10/29/2021 | 4/29/2020 | 100.49129 | 100.491288 | 100.491288 | 100.491288 | 100.2542327 | 98.94420058 | 97.65787031 | 96.39464344 | 95.15394141 |
| 200508A00016 | 5/12/2020 | 1.2 | 5/8/2024 | 5/12/2020 | 103.51584 | 103.5158391 | 103.5158391 | 103.5158391 | 102.1371091 | 98.38023404 | 94.78066901 | 91.3310512 | 88.02439941 |
| 200327A00025 | 3/30/2020 | 0.86 | 3/30/2022 | 3/30/2020 | 101.01457 | 101.0145732 | 101.0145732 | 101.0145732 | 100.655578 | 98.93495085 | 97.25167906 | 95.60461182 | 93.99264613 |
| 200327A00039 | 3/27/2020 | 0.84 | 3/28/2022 | 3/27/2020 | 100.97613 | 100.9761307 | 100.9761307 | 100.9761307 | 100.6189928 | 98.90391947 | 97.22599597 | 95.58408083 | 93.97707977 |
| 200327A00040 | 3/27/2020 | 0.72 | 3/27/2023 | 3/27/2020 | 101.66786 | 101.6678612 | 101.6678612 | 101.6678612 | 100.9531814 | 98.26276139 | 95.6568038 | 93.13210729 | 90.6856166 |
| 200327A00079 | 3/27/2020 | 0.99 | 3/27/2025 | 3/27/2020 | 104.17838 | 104.1783805 | 104.1783805 | 104.1783805 | 102.0485 | 97.44336113 | 93.06972259 | 88.91472653 | 84.96630241 |
| 200330A00036 | 3/30/2020 | 0.86 | 3/30/2023 | 3/30/2020 | 101.56505 | 101.5650491 | 101.5650491 | 101.5650491 | 100.8505899 | 98.16492966 | 95.56357083 | 93.04331719 | 90.60111852 |
| 200330A00044 | 3/30/2020 | 1.09 | 3/28/2025 | 3/30/2020 | 103.74581 | 103.7458051 | 103.7458051 | 103.7458051 | 101.6327434 | 97.06312002 | 92.72269702 | 88.59876949 | 84.67940896 |
| 200331A00007 | 3/31/2020 | 0.72 | 3/29/2024 | 3/31/2020 | 102.28057 | 102.2805723 | 102.2805723 | 102.2805723 | 100.9782838 | 97.32868397 | 93.82868314 | 90.47130465 | 87.24994185 |
| 200401A00013 | 4/1/2020 | 1.01 | 4/1/2025 | 4/1/2020 | 103.37153 | 103.3715257 | 103.3715257 | 103.3715257 | 101.2510972 | 96.68049289 | 92.33972302 | 88.21602277 | 84.2974086 |
| 200402A00014 | 4/2/2020 | 0.84 | 4/2/2025 | 4/2/2020 | 103.47119 | 103.4711871 | 103.4711871 | 103.4711871 | 101.3311653 | 96.72779784 | 92.35678158 | 88.20517453 | 84.2608286 |
| 200402A00018 | 4/2/2020 | 0.85 | 4/3/2023 | 4/2/2020 | 101.54339 | 101.543391 | 101.543391 | 101.543391 | 100.8242957 | 98.12847144 | 95.51755936 | 92.98834324 | 90.53775289 |
| 200408A00004 | 4/8/2020 | 0.76 | 4/8/2022 | 4/8/2020 | 100.84953 | 100.8495308 | 100.8495308 | 100.8495308 | 100.4824729 | 98.73925298 | 97.03432435 | 95.36653436 | 93.73477619 |
| 200408A00011 | 4/8/2020 | 0.82 | 9/26/2022 | 4/8/2020 | 101.18728 | 101.187279 | 101.187279 | 101.187279 | 100.6574368 | 98.46187854 | 96.32450036 | 94.24333101 | 92.21648355 |
| 200413A00012 | 4/13/2020 | 0.64 | 4/13/2023 | 4/13/2020 | 101.47052 | 101.4705202 | 101.4705202 | 101.4705202 | 100.7363188 | 98.00388502 | 95.35850761 | 92.79690032 | 90.31592309 |
| 200414A00015 | 4/14/2020 | 0.64 | 4/14/2023 | 4/14/2020 | 101.47196 | 101.4719591 | 101.4719591 | 101.4719591 | 100.7365501 | 98.00144562 | 95.35355782 | 92.78959621 | 90.30641636 |
| 200415A00020 | 4/15/2020 | 0.86 | 4/15/2024 | 4/15/2020 | 102.15831 | 102.1583095 | 102.1583095 | 102.1583095 | 100.8315147 | 97.15878149 | 93.63784882 | 90.26164539 | 87.02346939 |
| 200415A00021 | 4/15/2020 | 1.37 | 4/15/2027 | 4/15/2020 | 107.25449 | 107.2544892 | 107.2544892 | 107.2544892 | 102.2919403 | 95.87031513 | 89.8906416 | 84.32032632 | 79.12933727 |
| 200417A00013 | 4/17/2020 | 0.74 | 4/17/2023 | 4/17/2020 | 101.25397 | 101.2539661 | 101.2539661 | 101.2539661 | 100.5190519 | 97.79043134 | 95.14883723 | 92.59099925 | 90.11379084 |
| 200421A00022 | 4/21/2020 | 0.74 | 4/21/2023 | 4/21/2020 | 101.25881 | 101.2588129 | 101.2588129 | 101.2588129 | 100.5191079 | 97.77990343 | 95.1283633 | 92.56120025 | 90.07527024 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200504A00006 | 5/4/2020 | 0.94 | 5/5/2025 | 5/4/2020 | 103.09523 | 103.0952317 | 103.0952317 | 103.0952317 | 100.8888341 | 96.24089037 | 91.83094994 | 87.64568637 | 83.6725833 |
| 200515A00020 | 5/15/2020 | 0.82 | 5/15/2025 | 5/15/2020 | 102.52394 | 102.5239395 | 102.5239395 | 102.5239395 | 100.2956722 | 95.63756295 | 91.21941254 | 87.02771038 | 83.04977175 |
| 200518A00019 | 5/19/2020 | 0.9 | 5/19/2025 | 5/19/2020 | 102.92304 | 102.9230375 | 102.9230375 | 102.9230375 | 100.6810866 | 96.00390975 | 91.56802689 | 87.35982835 | 83.36653803 |
| 200515A00019 | 5/15/2020 | 0.59 | 5/15/2023 | 5/15/2020 | 100.85314 | 100.8531372 | 100.8531372 | 100.8531372 | 100.0847043 | 97.28973699 | 94.58613886 | 91.97045317 | 89.43937278 |
| 200521A00013 | 5/21/2020 | 2.09 | 5/21/2035 | 5/21/2020 | 126.33815 | 126.3381452 | 126.3381452 | 118.1660894 | 103.7344486 | 91.08342907 | 80.15600515 | 70.70628004 | 62.52463021 |
| 200527A00014 | 5/27/2020 | 1.06 | 5/27/2026 | 5/27/2020 | 104.47836 | 104.4783575 | 104.4783575 | 104.4783575 | 100.9509292 | 95.34832106 | 90.08731233 | 85.14543794 | 80.50181649 |
| 200327A00019 | 3/30/2020 | 0.85 | 3/15/2022 | 3/30/2020 | 100.9733 | 100.9732969 | 100.9732969 | 100.9732969 | 100.6278042 | 98.94661452 | 97.30129318 | 95.69075699 | 94.11396671 |
| 200327A00031 | 3/27/2020 | 1.18 | 3/27/2025 | 3/27/2020 | 104.17318 | 104.1731751 | 104.1731751 | 104.1731751 | 102.0594471 | 97.48227672 | 93.13442981 | 89.00320487 | 85.07667606 |
| 200327A00042 | 3/27/2020 | 0.83 | 3/27/2024 | 3/27/2020 | 102.69367 | 102.6936651 | 102.6936651 | 102.6936651 | 101.3931287 | 97.74082546 | 94.2379631 | 90.87758317 | 87.65309558 |
| 200327A00054 | 3/27/2020 | 0.9 | 3/27/2023 | 3/27/2020 | 101.67098 | 101.6709831 | 101.6709831 | 101.6709831 | 100.9595421 | 98.28007784 | 95.68450798 | 93.16966027 | 90.73250684 |
| 200330A00007 | 3/30/2020 | 0.93 | 4/1/2024 | 3/30/2020 | 102.40184 | 102.4018397 | 102.4018397 | 102.4018397 | 101.1009179 | 97.45951386 | 93.96719215 | 90.61700962 | 87.40239056 |
| 200330A00008 | 3/30/2020 | 1.09 | 3/28/2025 | 3/30/2020 | 103.74581 | 103.7458051 | 103.7458051 | 103.7458051 | 101.6327434 | 97.06312002 | 92.72269702 | 88.59876949 | 84.67940896 |
| 200330A00046 | 3/30/2020 | 0.86 | 3/30/2023 | 3/30/2020 | 101.56505 | 101.5650491 | 101.5650491 | 101.5650491 | 100.8505899 | 98.16492966 | 95.56357083 | 93.04331719 | 90.60111852 |
| 200331A00018 | 3/31/2020 | 0.82 | 3/31/2023 | 3/31/2020 | 101.45553 | 101.4555348 | 101.4555348 | 101.4555348 | 100.7402995 | 98.05360571 | 95.45132441 | 92.93025225 | 90.4873323 |
| 200402A00026 | 4/2/2020 | 1.28 | 4/2/2026 | 4/2/2020 | 105.63812 | 105.638118 | 105.638118 | 105.638118 | 102.3192495 | 96.81128619 | 91.63068488 | 86.75632017 | 82.16854119 |
| 200402A00035 | 4/2/2020 | 0.62 | 4/3/2023 | 4/2/2020 | 101.40028 | 101.400282 | 101.400282 | 101.400282 | 100.6783325 | 97.97339456 | 95.35389902 | 92.81660157 | 90.3584056 |
| 200402A00036 | 4/2/2020 | 0.71 | 4/2/2024 | 4/2/2020 | 102.2492 | 102.2492043 | 102.2492043 | 102.2492043 | 100.9393717 | 97.28017273 | 93.77135346 | 90.40589188 | 87.17713824 |
| 200402A00041 | 4/2/2020 | 1.03 | 4/2/2025 | 4/2/2020 | 103.46922 | 103.469221 | 103.469221 | 103.469221 | 101.3454715 | 96.77009688 | 92.42488493 | 88.29705125 | 84.3745936 |
| 200402A00048 | 4/2/2020 | 0.71 | 4/2/2024 | 4/2/2020 | 102.2492 | 102.2492043 | 102.2492043 | 102.2492043 | 100.9393717 | 97.28017273 | 93.77135346 | 90.40589188 | 87.17713824 |
| 200406A00049 | 4/6/2020 | 0.92 | 4/6/2023 | 4/6/2020 | 101.74349 | 101.7434873 | 101.7434873 | 101.7434873 | 101.0201794 | 98.31365068 | 95.69257263 | 93.15371484 | 90.69399258 |
| 200406A00053 | 4/6/2020 | 1.13 | 4/7/2025 | 4/6/2020 | 103.95934 | 103.9593395 | 103.9593395 | 103.9593395 | 101.8189505 | 97.21965275 | 92.85216426 | 88.70360232 | 84.76187086 |
| 200407A00004 | 4/7/2020 | 0.99 | 4/7/2025 | 4/7/2020 | 104.20485 | 104.2048471 | 104.2048471 | 104.2048471 | 102.046181 | 97.41299241 | 93.01402655 | 88.83623245 | 84.86735807 |
| 200414A00019 | 4/16/2020 | 0.69 | 4/20/2021 | 4/16/2020 | 100.34551 | 100.3455085 | 100.3455085 | 100.3455085 | 100.1852788 | 99.37921312 | 98.58604507 | 97.80546715 | 97.03718157 |
| 200415A00033 | 4/15/2020 | 0.82 | 10/13/2023 | 4/15/2020 | 101.73885 | 101.7388471 | 101.7388471 | 101.7388471 | 100.7430841 | 97.54827187 | 94.4701872 | 91.5039181 | 88.64478965 |
| 200421A00028 | 4/21/2020 | 0.56 | 4/21/2023 | 4/21/2020 | 101.25465 | 101.2546488 | 101.2546488 | 101.2546488 | 100.511514 | 97.760951 | 95.09865254 | 92.52130075 | 90.02572268 |
| 200422A00015 | 4/27/2020 | 0.73 | 12/22/2022 | 4/27/2020 | 101.08806 | 101.0880605 | 101.0880605 | 101.0880605 | 100.4773693 | 98.05682677 | 95.70648842 | 93.42392196 | 91.20679442 |
| 200429A00004 | 5/1/2020 | 0.74 | 5/1/2023 | 5/1/2020 | 101.27096 | 101.2709574 | 101.2709574 | 101.2709574 | 100.5191825 | 97.75362418 | 95.07733307 | 92.48697415 | 89.97935477 |
| 200521A00016 | 5/21/2020 | 2.18 | 5/21/2037 | 5/21/2020 | 131.28969 | 131.2896865 | 131.2896865 | 120.5773735 | 104.3505956 | 90.40094424 | 78.56035329 | 68.4946713 | 59.92439202 |
| 200521A00017 | 5/21/2020 | 2.22 | 5/21/2038 | 5/21/2020 | 133.79611 | 133.7961087 | 133.7961087 | 121.8819802 | 104.7633851 | 90.18476452 | 77.9153758 | 67.57160557 | 58.83558323 |
| 200527A00012 | 5/27/2020 | 1.2 | 5/27/2027 | 5/27/2020 | 106.19813 | 106.1981333 | 106.1981333 | 106.1981333 | 101.0687709 | 94.5894054 | 88.56364509 | 82.95755747 | 77.73990587 |
| 200528A00021 | 5/28/2020 | 0.63 | 5/26/2023 | 5/28/2020 | 100.97946 | 100.9794649 | 100.9794649 | 100.9794649 | 100.1964671 | 97.37187493 | 94.64047936 | 91.99872101 | 89.44319613 |
| 200403A00025 | 4/3/2020 | 0.91 | 4/3/2024 | 4/3/2020 | 102.32946 | 102.3294591 | 102.3294591 | 102.3294591 | 101.0250245 | 97.37983971 | 93.88410342 | 90.53085516 | 87.31350215 |
| 200415A00026 | 4/15/2020 | 0.77 | 4/14/2023 | 4/15/2020 | 101.3348 | 101.3348003 | 101.3348003 | 101.3348003 | 100.6032127 | 97.88134229 | 95.24604976 | 92.69407645 | 90.2223079 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200415A00037 | 4/15/2020 | 0.97 | 4/15/2025 | 4/15/2020 | 103.20536 | 103.2053567 | 103.2053567 | 103.2053567 | 101.0500127 | 96.44854429 | 92.08022488 | 87.93207138 | 83.99189158 |
| 200427A00018 | 4/27/2020 | 1.51 | 4/27/2028 | 4/27/2020 | 109.44536 | 109.4453554 | 109.4453554 | 109.4453554 | 102.813102 | 95.48741765 | 88.73286201 | 82.50210157 | 76.75194408 |
| 200428A00003 | 4/29/2020 | 1.01 | 4/29/2025 | 4/29/2020 | 103.42516 | 103.4251558 | 103.4251558 | 103.4251558 | 101.2319721 | 96.59060186 | 92.18604669 | 88.00508649 | 84.03530282 |
| 200429A00057 | 4/29/2020 | 1.4 | 4/29/2027 | 4/29/2020 | 107.50047 | 107.500469 | 107.500469 | 107.500469 | 102.4725654 | 96.01118956 | 89.99666868 | 84.39594022 | 79.17854107 |
| 200504A00007 | 5/4/2020 | 1.47 | 5/4/2028 | 5/4/2020 | 109.15378 | 109.1537815 | 109.1537815 | 109.1537815 | 102.4974601 | 95.16767412 | 88.41087714 | 82.17947675 | 76.43005155 |
| 200521A00015 | 5/21/2020 | 2.14 | 5/21/2036 | 5/21/2020 | 128.85464 | 128.8546385 | 128.8546385 | 119.3391232 | 104.0073901 | 90.69963793 | 79.30562226 | 69.5371011 | 61.15067707 |
| 200629A00021 | 6/29/2020 | 1.21 | 6/29/2028 | 6/29/2020 | 107.24714 | 107.24714 | 107.24714 | 107.24714 | 100.3905462 | 93.01401664 | 86.22640918 | 79.9778425 | 74.22289136 |
| 200529A00022 | 6/1/2020 | 0.98 | 6/1/2026 | 6/1/2020 | 104.01269 | 104.0126908 | 104.0126908 | 104.0126908 | 100.4702618 | 94.86967343 | 89.61153678 | 84.6732747 | 80.03390543 |
| 200327A00066 | 6/25/2020 | 0.93 | 6/26/2023 | 6/25/2020 | 101.91275 | 101.9127495 | 101.9127495 | 101.9127495 | 101.0838467 | 98.16491363 | 95.3448805 | 92.61986267 | 89.98615058 |
| 200611A00021 | 6/11/2020 | 0.72 | 6/11/2024 | 6/11/2020 | 101.68936 | 101.6893552 | 101.6893552 | 101.6893552 | 100.2521134 | 96.44588535 | 92.80303823 | 89.31574221 | 85.97658326 |
| 200326A00025 | 3/26/2020 | 0.99 | 3/28/2022 | 3/26/2020 | 101.24043 | 101.2404318 | 101.2404318 | 101.2404318 | 100.8828344 | 99.16537219 | 97.48510382 | 95.84088653 | 94.23162488 |
| 200327A00022 | 3/27/2020 | 0.9 | 3/27/2023 | 3/27/2020 | 101.67098 | 101.6709831 | 101.6709831 | 101.6709831 | 100.9595421 | 98.28007784 | 95.68450798 | 93.16966027 | 90.73250684 |
| 200327A00059 | 3/27/2020 | 1.01 | 3/27/2024 | 3/27/2020 | 102.6949 | 102.6949037 | 102.6949037 | 102.6949037 | 101.4020048 | 97.76765877 | 94.28158587 | 90.93689939 | 87.72707633 |
| 200327A00088 | 3/27/2020 | 1.22 | 3/27/2025 | 3/27/2020 | 104.36408 | 104.3640783 | 104.3640783 | 104.3640783 | 102.2489222 | 97.66730279 | 93.31516623 | 89.17980399 | 85.24928355 |
| 200330A00006 | 3/30/2020 | 0.9 | 3/28/2025 | 3/30/2020 | 103.74905 | 103.7490465 | 103.7490465 | 103.7490465 | 101.6198322 | 97.0222936 | 92.6561314 | 88.50848424 | 84.56727889 |
| 200330A00043 | 3/30/2020 | 0.86 | 3/30/2023 | 3/30/2020 | 101.56505 | 101.5650491 | 101.5650491 | 101.5650491 | 100.8505899 | 98.16492966 | 95.56357083 | 93.04331719 | 90.60111852 |
| 200330A00064 | 3/30/2020 | 0.83 | 3/30/2023 | 3/30/2020 | 101.48182 | 101.4818193 | 101.4818193 | 101.4818193 | 100.7676176 | 98.08311294 | 95.48288227 | 92.96373027 | 90.52260757 |
| 200401A00012 | 4/2/2020 | 1 | 4/2/2025 | 4/2/2020 | 103.32555 | 103.3255509 | 103.3255509 | 103.3255509 | 101.202883 | 96.6308676 | 92.28889411 | 88.16418355 | 84.24473877 |
| 200402A00013 | 4/2/2020 | 0.89 | 4/2/2024 | 4/2/2020 | 102.252 | 102.2519993 | 102.2519993 | 102.2519993 | 100.9498854 | 97.3087159 | 93.81674845 | 90.46703368 | 87.25298962 |
| 200406A00060 | 4/6/2020 | 1.03 | 4/5/2024 | 4/6/2020 | 102.78851 | 102.7885074 | 102.7885074 | 102.7885074 | 101.4779122 | 97.81899163 | 94.31018317 | 90.94449765 | 87.7153144 |
| 200413A00003 | 4/13/2020 | 0.64 | 4/13/2023 | 4/13/2020 | 101.47052 | 101.4705202 | 101.4705202 | 101.4705202 | 100.7363188 | 98.00388502 | 95.35850761 | 92.79690032 | 90.31592309 |
| 200415A00031 | 4/15/2020 | 0.97 | 4/15/2025 | 4/15/2020 | 103.20536 | 103.2053567 | 103.2053567 | 103.2053567 | 101.0500127 | 96.44854429 | 92.08022488 | 87.93207138 | 83.99189158 |
| 200415A00038 | 4/15/2020 | 1.37 | 4/15/2027 | 4/15/2020 | 107.25449 | 107.2544892 | 107.2544892 | 107.2544892 | 102.2919403 | 95.87031513 | 89.8906416 | 84.32032632 | 79.12933727 |
| 200421A00021 | 4/21/2020 | 0.56 | 4/21/2023 | 4/21/2020 | 101.25465 | 101.2546488 | 101.2546488 | 101.2546488 | 100.511514 | 97.760951 | 95.09865254 | 92.52130075 | 90.02572268 |
| 200423A00006 | 4/23/2020 | 0.82 | 4/23/2025 | 4/23/2020 | 103.41555 | 103.4155507 | 103.4155507 | 103.4155507 | 101.2210893 | 96.56632307 | 92.14912228 | 87.95620282 | 83.9750898 |
| 200423A00022 | 4/28/2020 | 0.76 | 2/15/2023 | 4/28/2020 | 101.23309 | 101.2330925 | 101.2330925 | 101.2330925 | 100.5667196 | 97.99912359 | 95.50938559 | 93.09466564 | 90.75224748 |
| 200508A00017 | 5/12/2020 | 1.18 | 5/8/2024 | 5/12/2020 | 103.43808 | 103.4380771 | 103.4380771 | 103.4380771 | 102.0597506 | 98.30436616 | 94.70624648 | 91.25803047 | 87.9527386 |
| 200515A00021 | 5/15/2020 | 1.12 | 5/17/2027 | 5/15/2020 | 105.62142 | 105.6214216 | 105.6214216 | 105.6214216 | 100.5447908 | 94.10604742 | 88.11681981 | 82.54358739 | 77.35548372 |
| 200527A00016 | 5/27/2020 | 0.92 | 5/27/2025 | 5/27/2020 | 103.03496 | 103.0349582 | 103.0349582 | 103.0349582 | 100.7710435 | 96.07215011 | 91.61662503 | 87.39068677 | 83.38140144 |
| 200605A00005 | 6/5/2020 | 0.99 | 6/5/2025 | 6/5/2020 | 103.39757 | 103.3975714 | 103.3975714 | 103.3975714 | 101.1067385 | 96.37729652 | 91.89383723 | 87.64236816 | 83.60976147 |
| 200611A00019 | 6/11/2020 | 0.88 | 12/11/2025 | 6/11/2020 | 103.14877 | 103.1487734 | 103.1487734 | 103.1487734 | 100.2757486 | 95.10153973 | 90.22146707 | 85.61739151 | 81.27238021 |
| 200218A00030 | 2/21/2020 | 1.71 | 2/24/2023 | 2/21/2020 | 103.79059 | 103.7905898 | 103.7905898 | 103.7905898 | 103.1072167 | 100.479722 | 97.93224512 | 95.46184691 | 93.06571731 |
| 200220A00034 | 2/25/2020 | 1.71 | 3/27/2023 | 2/25/2020 | 103.91149 | 103.9114939 | 103.9114939 | 103.9114939 | 103.1931461 | 100.4826599 | 97.85680194 | 95.31237652 | 92.84633322 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200302A00005 | 3/2/2020 | 1.31 | 3/3/2025 | 3/2/2020 | 104.72727 | 104.7272655 | 104.7272655 | 104.7272655 | 102.670358 | 98.13857819 | 93.8309838 | 89.73531177 | 85.84003775 |
| 200302A00018 | 3/2/2020 | 1.25 | 3/2/2023 | 3/2/2020 | 102.57301 | 102.5730129 | 102.5730129 | 102.5730129 | 101.886784 | 99.25910296 | 96.7119617 | 94.24238339 | 91.84752303 |
| 200304A00002 | 3/4/2020 | 0.98 | 3/4/2025 | 3/4/2020 | 104.07557 | 104.0755725 | 104.0755725 | 104.0755725 | 102.0053895 | 97.45891054 | 93.13842307 | 89.03151866 | 85.126539 |
| 200304A00015 | 3/4/2020 | 0.83 | 3/4/2022 | 3/4/2020 | 101.20807 | 101.2080661 | 101.2080661 | 101.2080661 | 100.8709869 | 99.21145412 | 97.58694456 | 95.99641484 | 94.43886322 |
| 200304A00022 | 3/4/2020 | 0.86 | 3/6/2023 | 3/4/2020 | 102.01285 | 102.012855 | 102.012855 | 102.012855 | 101.3207258 | 98.67968816 | 96.12013559 | 93.63903721 | 91.23349733 |
| 200305A00015 | 3/5/2020 | 0.99 | 3/6/2023 | 3/5/2020 | 101.87945 | 101.879453 | 101.879453 | 101.879453 | 101.1908211 | 98.56225787 | 96.01459366 | 93.54482632 | 91.15008728 |
| 200306A00013 | 3/6/2020 | 1.01 | 3/6/2025 | 3/6/2020 | 103.32103 | 103.3210282 | 103.3210282 | 103.3210282 | 101.2667811 | 96.76010068 | 92.47715291 | 88.40566849 | 84.5341189 |
| 200306A00054 | 3/6/2020 | 1.01 | 3/6/2025 | 3/6/2020 | 103.32103 | 103.3210282 | 103.3210282 | 103.3210282 | 101.2667811 | 96.76010068 | 92.47715291 | 88.40566849 | 84.5341189 |
| 200309A00038 | 3/9/2020 | 1.26 | 3/11/2030 | 3/9/2020 | 109.24637 | 109.2463727 | 109.2463727 | 108.8821496 | 99.44533914 | 90.74059095 | 82.86022823 | 75.72209491 | 69.25260273 |
| 200310A00023 | 3/10/2020 | 1.02 | 3/10/2026 | 3/10/2020 | 105.188 | 105.1879997 | 105.1879997 | 105.1879997 | 101.9347903 | 96.45505148 | 91.2992846 | 86.44670566 | 81.87797238 |
| 200310A00038 | 3/10/2020 | 1.41 | 3/11/2030 | 3/10/2020 | 110.69965 | 110.6996544 | 110.6996544 | 110.3352989 | 100.8512851 | 92.08139624 | 84.14018948 | 76.94517569 | 70.42246222 |
| 200311A00043 | 3/11/2020 | 1.3 | 3/11/2025 | 3/11/2020 | 104.70209 | 104.7020922 | 104.7020922 | 104.7020922 | 102.6250383 | 98.07438532 | 93.74975711 | 89.6387396 | 85.72966993 |
| 200311A00044 | 3/11/2020 | 1.73 | 3/11/2030 | 3/11/2020 | 113.79999 | 113.7999889 | 113.7999889 | 113.4353508 | 103.8506366 | 94.94178086 | 86.87077349 | 79.55441469 | 72.91816244 |
| 200312A00015 | 3/12/2020 | 1.23 | 3/10/2025 | 3/12/2020 | 104.36853 | 104.3685318 | 104.3685318 | 104.3685318 | 102.296469 | 97.75594832 | 93.44094571 | 89.33907827 | 85.43871208 |
| 200316A00009 | 3/16/2020 | 1.25 | 3/14/2025 | 3/16/2020 | 104.47345 | 104.4734533 | 104.4734533 | 104.4734533 | 102.3904651 | 97.83781368 | 93.51169782 | 89.39965453 | 85.48997634 |
| 200316A00041 | 3/16/2020 | 1.16 | 3/16/2023 | 3/16/2020 | 102.36381 | 102.3638057 | 102.3638057 | 102.3638057 | 101.6625324 | 99.00170683 | 96.42338815 | 93.9244878 | 91.50205616 |
| 200316A00048 | 3/16/2020 | 1.11 | 3/16/2023 | 3/16/2020 | 102.22702 | 102.2270178 | 102.2270178 | 102.2270178 | 101.52616 | 98.86720885 | 96.29072056 | 93.79360799 | 91.37292286 |
| 200317A00025 | 3/17/2020 | 1.66 | 3/15/2030 | 3/17/2020 | 115.09047 | 115.0904687 | 115.0904687 | 114.707028 | 104.9409909 | 95.8791676 | 87.67308078 | 80.23745435 | 73.49591584 |
| 200318A00039 | 3/18/2020 | 1.08 | 3/18/2022 | 3/18/2020 | 101.37692 | 101.376922 | 101.376922 | 101.376922 | 101.0280528 | 99.33545083 | 97.67907664 | 96.05783182 | 94.4706628 |
| 200319A00009 | 3/19/2020 | 0.94 | 3/18/2022 | 3/19/2020 | 101.42683 | 101.4268327 | 101.4268327 | 101.4268327 | 101.0767723 | 99.37858933 | 97.71683538 | 96.09040396 | 94.49823377 |
| 200319A00038 | 3/19/2020 | 1.18 | 9/17/2021 | 3/19/2020 | 101.11332 | 101.1133159 | 101.1133159 | 101.1133159 | 100.8920409 | 99.67709082 | 98.49119799 | 97.33333038 | 96.20250432 |
| 200320A00013 | 3/20/2020 | 1.25 | 3/20/2024 | 3/20/2020 | 104.26173 | 104.2617322 | 104.2617322 | 104.2617322 | 102.9668071 | 99.3029465 | 95.78803536 | 92.41517624 | 89.1778348 |
| 200324A00029 | 3/24/2020 | 1.86 | 3/24/2025 | 3/24/2020 | 107.40572 | 107.4057203 | 107.4057203 | 107.4057203 | 105.2754898 | 100.6303625 | 96.21654822 | 92.02128381 | 88.03258332 |
| 200325A00038 | 3/25/2020 | 1.48 | 9/25/2023 | 3/25/2020 | 103.86901 | 103.8690092 | 103.8690092 | 103.8690092 | 102.894002 | 99.71031182 | 96.641117 | 93.68161189 | 90.82722579 |
| 200325A00043 | 3/25/2020 | 1.62 | 6/25/2024 | 3/25/2020 | 105.32337 | 105.3233653 | 105.3233653 | 105.3233653 | 103.8376778 | 99.92412442 | 96.17927502 | 92.59498654 | 89.16355219 |
| 200326A00012 | 3/26/2020 | 0.99 | 3/25/2022 | 3/26/2020 | 101.23455 | 101.2345508 | 101.2345508 | 101.2345508 | 100.8796517 | 99.17006305 | 97.49736942 | 95.86044164 | 94.25819711 |
| 200327A00032 | 3/27/2020 | 0.66 | 3/28/2022 | 3/27/2020 | 100.95554 | 100.9555387 | 100.9555387 | 100.9555387 | 100.5972917 | 98.87715932 | 97.19437261 | 95.54778184 | 93.93628503 |
| 200327A00055 | 3/27/2020 | 1.01 | 3/27/2024 | 3/27/2020 | 102.6949 | 102.6949037 | 102.6949037 | 102.6949037 | 101.4020048 | 97.76765877 | 94.28158587 | 90.93689939 | 87.72707633 |
| 200327A00056 | 3/27/2020 | 1.18 | 3/27/2025 | 3/27/2020 | 104.17318 | 104.1731751 | 104.1731751 | 104.1731751 | 102.0594471 | 97.48227672 | 93.13442981 | 89.00320487 | 85.07667606 |
| 200327A00058 | 3/27/2020 | 0.9 | 3/27/2023 | 3/27/2020 | 101.67098 | 101.6709831 | 101.6709831 | 101.6709831 | 100.9595421 | 98.28007784 | 95.68450798 | 93.16966027 | 90.73250684 |
| 200330A00020 | 3/30/2020 | 0.68 | 3/30/2021 | 3/30/2020 | 100.32094 | 100.3209406 | 100.3209406 | 100.3209406 | 100.1753053 | 99.42609746 | 98.68802622 | 97.96084498 | 97.24431442 |
| 200331A00011 | 3/31/2020 | 1.09 | 3/31/2025 | 3/31/2020 | 103.75229 | 103.7522929 | 103.7522929 | 103.7522929 | 101.6315897 | 97.05457883 | 92.70747567 | 88.57751709 | 84.6527213 |
| 200331A00017 | 3/31/2020 | 0.9 | 3/31/2025 | 3/31/2020 | 103.75554 | 103.7555401 | 103.7555401 | 103.7555401 | 101.6186023 | 97.01359914 | 92.64068856 | 88.48695019 | 84.54025669 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200402A00017 | 4/2/2020 | 0.76 | 4/1/2022 | 4/2/2020 | 100.84044 | 100.8404424 | 100.8404424 | 100.8404424 | 100.4799237 | 98.75558594 | 97.06878142 | 95.4183559 | 93.80320287 |
| 200402A00030 | 4/2/2020 | 0.8 | 4/3/2023 | 4/2/2020 | 101.40412 | 101.4041237 | 101.4041237 | 101.4041237 | 100.6854619 | 97.99157867 | 95.38256155 | 92.85519575 | 90.40641249 |
| 200403A00010 | 4/6/2020 | 0.8 | 4/6/2023 | 4/6/2020 | 101.40825 | 101.4082543 | 101.4082543 | 101.4082543 | 100.6859941 | 97.98415132 | 95.36764767 | 92.8332563 | 90.37789592 |
| 200403A00012 | 4/3/2020 | 0.55 | 4/15/2022 | 4/3/2020 | 100.78289 | 100.7828922 | 100.7828922 | 100.7828922 | 100.4082111 | 98.64135936 | 96.91376217 | 95.22425974 | 93.57173658 |
| 200407A00019 | 4/7/2020 | 1.06 | 4/8/2024 | 4/7/2020 | 102.90869 | 102.9086922 | 102.9086922 | 102.9086922 | 101.5916803 | 97.92278776 | 94.40468711 | 91.03035805 | 87.79314934 |
| 200409A00011 | 4/9/2020 | 0.7 | 4/7/2023 | 4/9/2020 | 101.6301 | 101.6300985 | 101.6300985 | 101.6300985 | 100.9026155 | 98.18384951 | 95.55123738 | 93.00151602 | 90.53156953 |
| 200415A00003 | 4/15/2020 | 0.77 | 4/14/2023 | 4/15/2020 | 101.3348 | 101.3348003 | 101.3348003 | 101.3348003 | 100.6032127 | 97.88134229 | 95.24604976 | 92.69407645 | 90.2223079 |
| 200316A00019 | 3/16/2020 | 1.11 | 3/16/2023 | 3/16/2020 | 102.22702 | 102.2270178 | 102.2270178 | 102.2270178 | 101.52616 | 98.86720885 | 96.29072056 | 93.79360799 | 91.37292286 |
| 200316A00049 | 3/16/2020 | 1.25 | 3/14/2025 | 3/16/2020 | 104.47345 | 104.4734533 | 104.4734533 | 104.4734533 | 102.3904651 | 97.83781368 | 93.51169782 | 89.39965453 | 85.48997634 |
| 200316A00068 | 3/16/2020 | 1.05 | 3/16/2022 | 3/16/2020 | 101.32064 | 101.3206387 | 101.3206387 | 101.3206387 | 100.9736588 | 99.28677824 | 97.63592006 | 96.01999511 | 94.43795846 |
| 200316A00070 | 3/16/2020 | 1.05 | 3/16/2022 | 3/16/2020 | 101.32064 | 101.3206387 | 101.3206387 | 101.3206387 | 100.9736588 | 99.28677824 | 97.63592006 | 96.01999511 | 94.43795846 |
| 200318A00044 | 3/18/2020 | 1.17 | 3/18/2024 | 3/18/2020 | 103.95459 | 103.9545942 | 103.9545942 | 103.9545942 | 102.6649928 | 99.01190167 | 95.50720279 | 92.14403192 | 88.91588564 |
| 200325A00009 | 3/27/2020 | 1.67 | 3/27/2025 | 3/27/2020 | 106.51174 | 106.5117397 | 106.5117397 | 106.5117397 | 104.3805178 | 99.74884606 | 95.34845091 | 91.16654416 | 87.19111778 |
| 200325A00013 | 3/25/2020 | 1.03 | 8/16/2021 | 3/25/2020 | 100.86184 | 100.8618434 | 100.8618434 | 100.8618434 | 100.6471172 | 99.5199612 | 98.41787736 | 97.3400369 | 96.28564724 |
| 200325A00042 | 3/25/2020 | 1.58 | 3/25/2024 | 3/25/2020 | 104.8383 | 104.8382995 | 104.8382995 | 104.8382995 | 103.5386242 | 99.86939535 | 96.34923785 | 92.9712468 | 89.72888108 |
| 200327A00045 | 3/27/2020 | 2.24 | 3/27/2034 | 3/27/2020 | 129.32709 | 129.327089 | 129.327089 | 122.7383908 | 108.8116842 | 96.43247414 | 85.6257794 | 76.18193487 | 67.92026545 |
| 200327A00046 | 3/27/2020 | 1.23 | 3/27/2025 | 3/27/2020 | 104.4118 | 104.4118042 | 104.4118042 | 104.4118042 | 102.296291 | 97.7135593 | 93.36035033 | 89.22395377 | 85.29243542 |
| 200327A00048 | 3/27/2020 | 1.18 | 3/24/2025 | 3/27/2020 | 104.16595 | 104.1659492 | 104.1659492 | 104.1659492 | 102.059878 | 97.49013296 | 93.14900329 | 89.02384556 | 85.10278722 |
| 200327A00051 | 3/27/2020 | 0.99 | 3/27/2025 | 3/27/2020 | 104.17838 | 104.1783805 | 104.1783805 | 104.1783805 | 102.0485 | 97.44336113 | 93.06972259 | 88.91472653 | 84.96630241 |
| 200327A00061 | 3/31/2020 | 1.18 | 3/31/2025 | 3/31/2020 | 104.18281 | 104.1828106 | 104.1828106 | 104.1828106 | 102.0588733 | 97.47180761 | 93.11501059 | 88.9757031 | 85.04188811 |
| 200327A00077 | 3/27/2020 | 0.83 | 3/27/2024 | 3/27/2020 | 102.69367 | 102.6936651 | 102.6936651 | 102.6936651 | 101.3931287 | 97.74082546 | 94.2379631 | 90.87758317 | 87.65309558 |
| 200330A00038 | 3/30/2020 | 1.79 | 3/29/2030 | 3/30/2020 | 114.45358 | 114.4535812 | 114.4535812 | 114.0386768 | 104.3881344 | 95.41551785 | 87.28971064 | 79.92629763 | 73.24968401 |
| 200331A00014 | 3/31/2020 | 0.72 | 3/29/2024 | 3/31/2020 | 102.28057 | 102.2805723 | 102.2805723 | 102.2805723 | 100.9782838 | 97.32868397 | 93.82868314 | 90.47130465 | 87.24994185 |
| 200331A00024 | 3/31/2020 | 0.64 | 3/31/2023 | 3/31/2020 | 101.45181 | 101.4518144 | 101.4518144 | 101.4518144 | 100.7333143 | 98.03561371 | 95.42289808 | 92.89193469 | 90.43963894 |
| 200401A00023 | 4/1/2020 | 0.82 | 4/1/2025 | 4/1/2020 | 103.37303 | 103.3730346 | 103.3730346 | 103.3730346 | 101.236368 | 96.63781521 | 92.27128147 | 88.12384462 | 84.18337553 |
| 200402A00001 | 4/2/2020 | 0.72 | 4/2/2021 | 4/2/2020 | 100.35509 | 100.3550886 | 100.3550886 | 100.3550886 | 100.2074388 | 99.44995519 | 98.70385413 | 97.96888083 | 97.24478804 |
| 200402A00010 | 4/2/2020 | 0.89 | 4/2/2024 | 4/2/2020 | 102.252 | 102.2519993 | 102.2519993 | 102.2519993 | 100.9498854 | 97.3087159 | 93.81674845 | 90.46703368 | 87.25298962 |
| 200402A00022 | 4/2/2020 | 0.96 | 4/2/2024 | 4/2/2020 | 102.51725 | 102.5172469 | 102.5172469 | 102.5172469 | 101.2138153 | 97.56768511 | 94.07090471 | 90.71651911 | 87.49794103 |
| 200318A00047 | 3/18/2020 | 1.29 | 3/18/2025 | 3/18/2020 | 105.58753 | 105.5875344 | 105.5875344 | 105.5875344 | 103.470229 | 98.85430959 | 94.46893398 | 90.30136786 | 86.33965226 |
| 200320A00049 | 3/25/2020 | 1.47 | 3/25/2025 | 3/25/2020 | 105.55082 | 105.5508187 | 105.5508187 | 105.5508187 | 103.4318751 | 98.82747055 | 94.45306954 | 90.29595821 | 86.3441978 |
| 200320A00052 | 3/25/2020 | 1.47 | 3/25/2025 | 3/25/2020 | 105.55082 | 105.5508187 | 105.5508187 | 105.5508187 | 103.4318751 | 98.82747055 | 94.45306954 | 90.29595821 | 86.3441978 |
| 200327A00030 | 3/27/2020 | 1.01 | 3/27/2024 | 3/27/2020 | 102.6949 | 102.6949037 | 102.6949037 | 102.6949037 | 101.4020048 | 97.76765877 | 94.28158587 | 90.93689939 | 87.72707633 |
| 200327A00041 | 3/27/2020 | 0.9 | 3/27/2023 | 3/27/2020 | 101.67098 | 101.6709831 | 101.6709831 | 101.6709831 | 100.9595421 | 98.28007784 | 95.68450798 | 93.16966027 | 90.73250684 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200327A00053 | 3/27/2020 | 0.84 | 3/25/2022 | 3/27/2020 | 100.97149 | 100.9714934 | 100.9714934 | 100.9714934 | 100.6170493 | 98.90982821 | 97.2394586 | 95.60481257 | 94.0048087 |
| 200330A00011 | 3/30/2020 | 0.93 | 4/1/2024 | 3/30/2020 | 102.40184 | 102.4018397 | 102.4018397 | 102.4018397 | 101.1009179 | 97.45951386 | 93.96719215 | 90.61700962 | 87.40239056 |
| 200330A00013 | 3/30/2020 | 0.68 | 3/30/2021 | 3/30/2020 | 100.32094 | 100.3209406 | 100.3209406 | 100.3209406 | 100.1753053 | 99.42609746 | 98.68802622 | 97.96084498 | 97.24431442 |
| 200330A00021 | 3/30/2020 | 0.8 | 3/30/2022 | 3/30/2020 | 100.90852 | 100.9085211 | 100.9085211 | 100.9085211 | 100.5497109 | 98.83004492 | 97.14771659 | 95.5015756 | 93.89051942 |
| 200331A00016 | 3/31/2020 | 1.11 | 3/31/2026 | 3/31/2020 | 105.76351 | 105.7635145 | 105.7635145 | 105.7635145 | 102.4211671 | 96.87637968 | 91.66200319 | 86.75666505 | 82.14048865 |
| 200331A00022 | 4/1/2020 | 1.07 | 4/1/2025 | 4/1/2020 | 103.6587 | 103.6587017 | 103.6587017 | 103.6587017 | 101.5361135 | 96.95879844 | 92.61155882 | 88.48161914 | 84.5569857 |
| 200401A00001 | 4/1/2020 | 1.01 | 4/1/2025 | 4/1/2020 | 103.37153 | 103.3715257 | 103.3715257 | 103.3715257 | 101.2510972 | 96.68049289 | 92.33972302 | 88.21602277 | 84.2974086 |
| 200402A00003 | 4/2/2020 | 0.8 | 4/3/2023 | 4/2/2020 | 101.40412 | 101.4041237 | 101.4041237 | 101.4041237 | 100.6854619 | 97.99157867 | 95.38256155 | 92.85519575 | 90.40641249 |
| 200402A00023 | 4/2/2020 | 1.11 | 4/2/2025 | 4/2/2020 | 103.85234 | 103.8523412 | 103.8523412 | 103.8523412 | 101.7257074 | 97.14137498 | 92.78752713 | 88.65136512 | 84.72087316 |
| 200402A00044 | 4/2/2020 | 1.65 | 4/2/2030 | 4/2/2020 | 113.10489 | 113.1048919 | 113.1048919 | 112.6789883 | 103.0627012 | 94.14309906 | 86.06787252 | 78.75268412 | 72.12202094 |
| 200403A00018 | 4/3/2020 | 0.91 | 4/3/2024 | 4/3/2020 | 102.32946 | 102.3294591 | 102.3294591 | 102.3294591 | 101.0250245 | 97.37983971 | 93.88410342 | 90.53085516 | 87.31350215 |
| 200406A00018 | 4/6/2020 | 0.65 | 4/18/2022 | 4/6/2020 | 100.96876 | 100.9687597 | 100.9687597 | 100.9687597 | 100.5909352 | 98.81426296 | 97.07720897 | 95.3786128 | 93.71735752 |
| 200407A00016 | 4/7/2020 | 0.8 | 4/7/2022 | 4/7/2020 | 100.91982 | 100.919818 | 100.919818 | 100.919818 | 100.5535675 | 98.81238779 | 97.10940285 | 95.44345946 | 93.81345052 |
| 200409A00019 | 4/9/2020 | 0.58 | 4/8/2022 | 4/9/2020 | 100.82841 | 100.8284105 | 100.8284105 | 100.8284105 | 100.460199 | 98.71179775 | 97.00189076 | 95.32931701 | 93.69296171 |
| 200413A00011 | 4/13/2020 | 0.94 | 4/12/2024 | 4/13/2020 | 102.45903 | 102.4590338 | 102.4590338 | 102.4590338 | 101.1365281 | 97.46581556 | 93.94645966 | 90.57141147 | 87.33399136 |
| 200415A00027 | 4/15/2020 | 0.86 | 4/15/2024 | 4/15/2020 | 102.15831 | 102.1583095 | 102.1583095 | 102.1583095 | 100.8315147 | 97.15878149 | 93.63784882 | 90.26164539 | 87.02346939 |
| 200415A00036 | 4/15/2020 | 0.91 | 10/15/2024 | 4/15/2020 | 102.6587 | 102.6587026 | 102.6587026 | 102.6587026 | 100.9462163 | 96.80710313 | 92.85842998 | 89.09045934 | 85.49400457 |
| 200417A00002 | 4/17/2020 | 0.96 | 4/17/2025 | 4/17/2020 | 103.16067 | 103.160668 | 103.160668 | 103.160668 | 101.0005018 | 96.39512773 | 92.02335984 | 87.8721843 | 83.92937959 |
| 200423A00026 | 4/28/2020 | 0.85 | 12/15/2023 | 4/28/2020 | 101.93448 | 101.9344806 | 101.9344806 | 101.9344806 | 100.8321088 | 97.47386599 | 94.24419066 | 91.13749881 | 88.14847914 |
| 200424A00014 | 4/28/2020 | 1.01 | 4/23/2025 | 4/28/2020 | 103.41366 | 103.4136628 | 103.4136628 | 103.4136628 | 101.2360619 | 96.60983793 | 92.21892558 | 88.05020359 | 84.09134793 |
| 200429A00021 | 5/4/2020 | 0.97 | 4/29/2025 | 5/4/2020 | 103.23064 | 103.2306404 | 103.2306404 | 103.2306404 | 101.0389636 | 96.4022081 | 92.00209976 | 87.825426 | 83.85977551 |
| 200429A00054 | 4/29/2020 | 1.04 | 4/29/2025 | 4/29/2020 | 103.57104 | 103.5710424 | 103.5710424 | 103.5710424 | 101.3767285 | 96.73189718 | 92.32400688 | 88.13983186 | 84.1669483 |
| 200429A00064 | 4/29/2020 | 0.69 | 4/29/2022 | 4/29/2020 | 100.72897 | 100.7289665 | 100.7289665 | 100.7289665 | 100.3426452 | 98.5445589 | 96.7870398 | 95.06893821 | 93.38914434 |
| 200429A00065 | 4/29/2020 | 0.74 | 10/28/2022 | 4/29/2020 | 101.04571 | 101.0457149 | 101.0457149 | 101.0457149 | 100.4868401 | 98.21018558 | 95.99582401 | 93.84170935 | 91.74587499 |
| 200504A00005 | 5/4/2020 | 0.6 | 5/4/2022 | 5/4/2020 | 100.56669 | 100.566693 | 100.566693 | 100.566693 | 100.1759095 | 98.36634853 | 96.59788876 | 94.86936214 | 93.17964108 |
| 200629A00020 | 6/29/2020 | 1.4 | 6/28/2030 | 6/29/2020 | 110.92419 | 110.9241949 | 110.9241949 | 110.2470656 | 100.4897284 | 91.5045034 | 83.39212213 | 76.06339602 | 69.4386572 |
| 200629A00023 | 6/29/2020 | 0.95 | 6/29/2026 | 6/29/2020 | 103.88305 | 103.8830454 | 103.8830454 | 103.8830454 | 100.2264971 | 94.56477677 | 89.25366553 | 84.26975332 | 79.59130601 |
| 200611A00023 | 6/11/2020 | 0.64 | 6/12/2023 | 6/11/2020 | 101.02482 | 101.0248207 | 101.0248207 | 101.0248207 | 100.2185132 | 97.34936801 | 94.57633377 | 91.89568205 | 89.3038502 |
| 200417A00011 | 4/22/2020 | 0.68 | 7/15/2022 | 4/22/2020 | 100.79248 | 100.7924762 | 100.7924762 | 100.7924762 | 100.3317202 | 98.33148519 | 96.38087912 | 94.47835072 | 92.62240861 |
| 200417A00014 | 4/17/2020 | 0.96 | 4/17/2025 | 4/17/2020 | 103.16067 | 103.160668 | 103.160668 | 103.160668 | 101.0005018 | 96.39512773 | 92.02335984 | 87.8721843 | 83.92937959 |
| 200417A00018 | 4/21/2020 | 0.67 | 7/25/2022 | 4/21/2020 | 100.78233 | 100.782327 | 100.782327 | 100.782327 | 100.3119781 | 98.28596117 | 96.31063877 | 94.38440834 | 92.50573004 |
| 200421A00029 | 4/24/2020 | 0.72 | 12/15/2022 | 4/24/2020 | 101.05473 | 101.0547265 | 101.0547265 | 101.0547265 | 100.4508205 | 98.04857901 | 95.71550478 | 93.4492194 | 91.24744085 |
| 200421A00031 | 4/21/2020 | 0.84 | 4/19/2024 | 4/21/2020 | 102.08774 | 102.0877412 | 102.0877412 | 102.0877412 | 100.75357 | 97.07193007 | 93.54287031 | 90.15928222 | 86.91442745 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200428A00002 | 4/28/2020 | 1.47 | 4/26/2030 | 4/28/2020 | 113.38626 | 113.3862597 | 113.3862597 | 112.8835415 | 103.0662656 | 93.99844989 | 85.7984487 | 78.37884527 | 71.66142625 |
| 200429A00049 | 4/29/2020 | 1.25 | 4/29/2026 | 4/29/2020 | 105.53376 | 105.5337583 | 105.5337583 | 105.5337583 | 102.1082333 | 96.53916819 | 91.30507801 | 86.3842062 | 81.75631157 |
| 200429A00061 | 4/29/2020 | 1.66 | 10/29/2029 | 4/29/2020 | 112.63726 | 112.6372629 | 112.6372629 | 112.6090469 | 103.4036783 | 94.81091286 | 86.99979245 | 79.89523246 | 73.42970514 |
| 200429A00066 | 4/29/2020 | 0.8 | 4/28/2023 | 4/29/2020 | 101.43855 | 101.4385473 | 101.4385473 | 101.4385473 | 100.6899084 | 97.92974595 | 95.25842824 | 92.67263598 | 90.16919215 |
| 200430A00030 | 4/30/2020 | 0.96 | 4/30/2025 | 4/30/2020 | 103.18379 | 103.183791 | 103.183791 | 103.183791 | 100.9898978 | 96.35178075 | 91.95051911 | 87.77288566 | 83.80645513 |
| 200511A00006 | 5/11/2020 | 1.65 | 5/13/2030 | 5/11/2020 | 113.25325 | 113.2532518 | 113.2532518 | 112.7110198 | 102.987509 | 93.98222433 | 85.83830888 | 78.468939 | 71.7964399 |
| 200527A00013 | 5/27/2020 | 1.13 | 11/25/2026 | 5/27/2020 | 105.30319 | 105.303193 | 105.303193 | 105.303193 | 100.9897022 | 94.94884884 | 89.30355634 | 84.0260294 | 79.09055587 |
| 200327A00068 | 6/25/2020 | 0.93 | 6/26/2023 | 6/25/2020 | 101.91275 | 101.9127495 | 101.9127495 | 101.9127495 | 101.0838467 | 98.16491363 | 95.3448805 | 92.61986267 | 89.98615058 |
| 200611A00020 | 6/11/2020 | 0.81 | 6/11/2025 | 6/11/2020 | 102.51224 | 102.5122358 | 102.5122358 | 102.5122358 | 100.2124124 | 95.48971958 | 91.01377699 | 86.77049328 | 82.74665118 |
| 200402A00028 | 4/2/2020 | 0.71 | 4/4/2022 | 4/2/2020 | 100.75527 | 100.7552698 | 100.7552698 | 100.7552698 | 100.3921053 | 98.66048762 | 96.96671214 | 95.30962585 | 93.68812257 |
| 200413A00004 | 4/13/2020 | 0.89 | 4/11/2025 | 4/13/2020 | 103.73087 | 103.7308698 | 103.7308698 | 103.7308698 | 101.5653441 | 96.9332458 | 92.53596922 | 88.36041599 | 84.39428869 |
| 200413A00026 | 4/13/2020 | 0.82 | 4/13/2023 | 4/13/2020 | 101.47415 | 101.4741504 | 101.4741504 | 101.4741504 | 100.7433176 | 98.02211732 | 95.3873835 | 92.83586005 | 90.36443537 |
| 200413A00027 | 4/13/2020 | 0.94 | 4/12/2024 | 4/13/2020 | 102.45903 | 102.4590338 | 102.4590338 | 102.4590338 | 101.1365281 | 97.46581556 | 93.94645966 | 90.57141147 | 87.33399136 |
| 200414A00013 | 4/14/2020 | 0.55 | 4/14/2022 | 4/14/2020 | 100.7817 | 100.781701 | 100.781701 | 100.781701 | 100.4079578 | 98.6438122 | 96.91881086 | 95.23179381 | 93.58164574 |
| 200415A00023 | 4/15/2020 | 1.71 | 4/15/2030 | 4/15/2020 | 113.7388 | 113.7387952 | 113.7387952 | 113.276583 | 103.6065073 | 94.63282755 | 86.51071436 | 79.1549168 | 72.48911742 |
| 200415A00024 | 4/15/2020 | 2.2 | 4/16/2035 | 4/15/2020 | 127.78577 | 127.7857707 | 127.7857707 | 119.7311414 | 105.2839384 | 92.58891256 | 81.6097843 | 72.10339434 | 63.86224047 |
| 200417A00004 | 4/17/2020 | 0.86 | 4/17/2024 | 4/17/2020 | 102.16138 | 102.1613847 | 102.1613847 | 102.1613847 | 100.830707 | 97.15279403 | 93.62709303 | 90.24651326 | 87.00433388 |
| 200417A00006 | 4/17/2020 | 0.74 | 4/17/2023 | 4/17/2020 | 101.25397 | 101.2539661 | 101.2539661 | 101.2539661 | 100.5190519 | 97.79043134 | 95.14883723 | 92.59099925 | 90.11379084 |
| 200417A00012 | 4/22/2020 | 0.71 | 12/15/2022 | 4/22/2020 | 101.02988 | 101.0298768 | 101.0298768 | 101.0298768 | 100.4260373 | 98.02410658 | 95.69133625 | 93.42534813 | 91.2238604 |
| 200417A00019 | 4/17/2020 | 0.77 | 4/17/2025 | 4/17/2020 | 103.16133 | 103.1613342 | 103.1613342 | 103.1613342 | 100.9844943 | 96.35078639 | 91.95291726 | 87.77771189 | 83.81279945 |
| 200421A00020 | 4/24/2020 | 0.83 | 3/15/2024 | 4/24/2020 | 101.99802 | 101.9980184 | 101.9980184 | 101.9980184 | 100.7311274 | 97.13956934 | 93.69360799 | 90.38652943 | 87.21197127 |
| 200421A00024 | 4/24/2020 | 0.8 | 10/16/2023 | 4/24/2020 | 101.67672 | 101.6767206 | 101.6767206 | 101.6767206 | 100.676316 | 97.47499062 | 94.39089318 | 91.41909312 | 88.5548968 |
| 200423A00027 | 4/28/2020 | 0.88 | 4/15/2024 | 4/28/2020 | 102.23481 | 102.2348085 | 102.2348085 | 102.2348085 | 100.9076275 | 97.23345059 | 93.71111751 | 90.33355532 | 87.09406065 |
| 200427A00017 | 4/27/2020 | 1.02 | 4/25/2025 | 4/27/2020 | 103.46601 | 103.466013 | 103.466013 | 103.466013 | 101.282843 | 96.65042016 | 92.25385135 | 88.07998059 | 84.11645067 |
| 200527A00015 | 5/27/2020 | 0.99 | 11/26/2025 | 5/27/2020 | 103.72349 | 103.7234911 | 103.7234911 | 103.7234911 | 100.8977064 | 95.74322611 | 90.87942762 | 86.28852061 | 81.95388885 |
| 200605A00017 | 6/5/2020 | 1.02 | 6/5/2025 | 6/5/2020 | 103.29822 | 103.2982218 | 103.2982218 | 103.2982218 | 101.2182789 | 96.81219947 | 92.62991544 | 88.65884534 | 84.88717981 |
| 200605A00016 | 6/5/2020 | 1.02 | 6/5/2025 | 6/5/2020 | 103.29822 | 103.2982218 | 103.2982218 | 103.2982218 | 101.2182789 | 96.81219947 | 92.62991544 | 88.65884534 | 84.88717981 |
| 200605A00014 | 6/5/2020 | 1.02 | 6/5/2025 | 6/5/2020 | 103.29822 | 103.2982218 | 103.2982218 | 103.2982218 | 101.2182789 | 96.81219947 | 92.62991544 | 88.65884534 | 84.88717981 |
| 011107A00031 | 11/7/2001 | 5.56 | 11/5/2021 | 11/7/2001 | 107.20835 | 107.2083495 | 107.2083495 | 107.2083495 | 106.9578176 | 105.5818482 | 104.2303862 | 102.9028308 | 101.5986005 |
| 051003A00008 | 10/3/2005 | 5.08 | 10/15/2020 | 10/3/2005 | 101.42782 | 101.4278176 | 101.4278176 | 101.4278176 | 101.3784001 | 101.0805118 | 100.7843862 | 100.4900075 | 100.1973603 |
| 051107A00075 | 11/7/2005 | 5.29 | 11/17/2025 | 11/7/2005 | 128.14987 | 128.1498695 | 128.1498695 | 128.1498695 | 125.0973084 | 119.2863314 | 113.7922236 | 108.5959358 | 103.6796619 |
| 060308A00014 | 3/8/2006 | 5.44 | 3/16/2026 | 3/8/2006 | 129.4711 | 129.4710953 | 129.4710953 | 129.4710953 | 125.9632151 | 119.833006 | 114.0531878 | 108.6016647 | 103.4578582 |
| 060613A00029 | 6/13/2006 | 5.47 | 6/15/2021 | 6/13/2006 | 105.19959 | 105.1995937 | 105.1995937 | 105.1995937 | 104.9971216 | 104.0124633 | 103.0463831 | 102.0983575 | 101.1678826 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 060808A00022 | 8/8/2006 | 5.57 | 6/15/2026 | 8/8/2006 | 131.52415 | 131.5241478 | 131.5241478 | 131.5241478 | 127.6015225 | 121.1737166 | 115.1269675 | 109.4364691 | 104.0791601 |
| 061220A00034 | 12/20/2006 | 5.07 | 12/30/2021 | 12/20/2006 | 107.5305 | 107.5305046 | 107.5305046 | 107.5305046 | 107.2372122 | 105.7040859 | 104.2010697 | 102.7273522 | 101.2821512 |
| 081211A00029 | 12/11/2008 | 4.57 | 12/15/2023 | 12/11/2008 | 114.91641 | 114.9164133 | 114.9164133 | 114.9164133 | 113.7576676 | 110.1749711 | 106.727119 | 103.4083007 | 100.212988 |
| 100930A00008 | 9/30/2010 | 3.82 | 9/30/2025 | 9/30/2010 | 118.57043 | 118.5704274 | 118.5704274 | 118.5704274 | 115.8009644 | 110.4004119 | 105.2902896 | 100.4533391 | 95.87342544 |
| 110113A00008 | 1/13/2011 | 4.15 | 1/15/2021 | 1/13/2011 | 102.15719 | 102.1571929 | 102.1571929 | 102.1571929 | 102.0530765 | 101.4992882 | 100.9515234 | 100.409684 | 99.87367394 |
| 110527A00007 | 5/27/2011 | 3.98 | 6/1/2021 | 5/27/2011 | 103.46165 | 103.4616511 | 103.4616511 | 103.4616511 | 103.2684921 | 102.3333645 | 101.4151929 | 100.513519 | 99.62790068 |
| 110818A00012 | 8/18/2011 | 2.86 | 8/31/2022 | 8/18/2011 | 106.02338 | 106.0233765 | 106.0233765 | 106.0233765 | 105.5044325 | 103.3167492 | 101.1854191 | 99.1085881 | 97.08447871 |
| 120112A00014 | 1/12/2012 | 3.43 | 1/15/2032 | 1/12/2012 | 138.51201 | 138.5120124 | 138.5120124 | 135.619289 | 123.1947491 | 111.678471 | 101.3954488 | 92.20532178 | 83.98443954 |
| 120306A00004 | 3/6/2012 | 2.95 | 3/15/2023 | 3/6/2012 | 107.25349 | 107.2534859 | 107.2534859 | 107.2534859 | 106.5384973 | 103.8133015 | 101.1720368 | 98.61157305 | 96.12892041 |
| 120907A00023 | 9/7/2012 | 2.05 | 9/15/2022 | 9/7/2012 | 104.32397 | 104.3239736 | 104.3239736 | 104.3239736 | 103.7948525 | 101.5851859 | 99.43339371 | 97.3375375 | 95.29576056 |
| 121116A00006 | 11/16/2012 | 2.64 | 11/13/2025 | 11/16/2012 | 112.61626 | 112.6162565 | 112.6162565 | 112.6162565 | 109.7506272 | 104.394135 | 99.33403139 | 94.55240208 | 90.03250342 |
| 130107A00002 | 1/7/2013 | 3.22 | 1/18/2028 | 1/7/2013 | 122.06628 | 122.0662848 | 122.0662848 | 122.0662848 | 115.6175925 | 108.0580691 | 101.0592086 | 94.5762816 | 88.56835209 |
| 130213A00039 | 2/13/2013 | 1.92 | 2/16/2021 | 2/13/2013 | 101.06689 | 101.0668934 | 101.0668934 | 101.0668934 | 100.9451635 | 100.3073643 | 99.67760798 | 99.05574303 | 98.44162176 |
| 130405A00006 | 4/5/2013 | 2.41 | 4/7/2025 | 4/5/2013 | 111.05607 | 111.0560733 | 111.0560733 | 111.0560733 | 108.8453434 | 104.0509936 | 99.49668725 | 95.16911317 | 91.05577266 |
| 130424A00004 | 4/24/2013 | 2.46 | 4/24/2025 | 4/24/2013 | 111.40716 | 111.4071624 | 111.4071624 | 111.4071624 | 109.1482546 | 104.301258 | 99.69898607 | 95.32782717 | 91.17499597 |
| 130712A00005 | 7/12/2013 | 3.25 | 7/17/2023 | 7/12/2013 | 109.65458 | 109.6545803 | 109.6545803 | 109.6545803 | 108.7628805 | 105.6583936 | 102.6598747 | 99.76310266 | 96.96405038 |
| 130904A00035 | 9/4/2013 | 2.85 | 9/15/2020 | 9/4/2013 | 100.58443 | 100.5844325 | 100.5844325 | 100.5844325 | 100.5511309 | 100.3372249 | 100.1242428 | 99.91217871 | 99.70102649 |
| 131011A00005 | 10/11/2013 | 2.97 | 10/15/2020 | 10/11/2013 | 100.80101 | 100.8010104 | 100.8010104 | 100.8010104 | 100.7517827 | 100.4551033 | 100.1601811 | 99.86700054 | 99.57554603 |
| 131217A00023 | 12/17/2013 | 3.74 | 1/2/2024 | 12/17/2013 | 112.19058 | 112.1905823 | 112.1905823 | 112.1905823 | 111.0113835 | 107.4285727 | 103.9828364 | 100.6681793 | 97.47890207 |
| 010824A00028 | 8/24/2001 | 6.24 | 8/24/2021 | 8/24/2001 | 106.94652 | 106.9465202 | 106.9465202 | 106.9465202 | 106.7233371 | 105.5370628 | 104.3774106 | 103.2434887 | 102.1344448 |
| 020627A00001 | 6/27/2002 | 6.07 | 6/27/2022 | 6/27/2002 | 111.62424 | 111.6242424 | 111.6242424 | 111.6242424 | 111.1587599 | 109.0943986 | 107.0798746 | 105.1136683 | 103.1943168 |
| 050902A00032 | 9/2/2005 | 4.69 | 8/22/2025 | 9/2/2005 | 123.78617 | 123.786169 | 123.786169 | 123.786169 | 121.0761076 | 115.6124879 | 110.4365748 | 105.5315829 | 100.8817994 |
| 061221A00005 | 12/21/2006 | 5.28 | 12/30/2021 | 12/21/2006 | 107.5856 | 107.5856029 | 107.5856029 | 107.5856029 | 107.2930672 | 105.7638265 | 104.2645523 | 102.7944388 | 101.3527088 |
| 071231A00068 | 12/31/2007 | 4.93 | 12/30/2022 | 12/31/2007 | 112.18389 | 112.183893 | 112.183893 | 112.183893 | 111.5325152 | 108.9407775 | 106.4240471 | 103.9797105 | 101.6052615 |
| 100824A00009 | 8/24/2010 | 3.91 | 9/2/2025 | 8/24/2010 | 118.77051 | 118.770509 | 118.770509 | 118.770509 | 116.0909564 | 110.7587565 | 105.7095286 | 100.9266773 | 96.39467231 |
| 101006A00011 | 10/6/2010 | 2.9 | 10/15/2020 | 10/6/2010 | 100.82685 | 100.8268541 | 100.8268541 | 100.8268541 | 100.7775312 | 100.4802838 | 100.1848032 | 99.89107354 | 99.59907915 |
| 101130A00010 | 11/30/2010 | 3.25 | 11/30/2020 | 11/30/2010 | 101.33076 | 101.3307603 | 101.3307603 | 101.3307603 | 101.2541393 | 100.8287922 | 100.4070123 | 99.98875492 | 99.57397614 |
| 110805A00013 | 8/5/2011 | 3.43 | 8/16/2021 | 8/5/2011 | 103.60386 | 103.603862 | 103.603862 | 103.603862 | 103.3859425 | 102.2421525 | 101.1236916 | 100.0297247 | 98.95945253 |
| 110805A00014 | 8/5/2011 | 4.06 | 8/17/2026 | 8/5/2011 | 123.12724 | 123.127236 | 123.127236 | 123.127236 | 119.0247846 | 112.6821815 | 106.7290198 | 101.1391891 | 95.88846798 |
| 120312A00009 | 3/12/2012 | 2.72 | 3/15/2024 | 3/12/2012 | 109.76232 | 109.7623178 | 109.7623178 | 109.7623178 | 108.4501213 | 104.6970463 | 101.0949622 | 97.63692466 | 94.31635261 |
| 120503A00014 | 5/3/2012 | 2.4 | 5/16/2022 | 5/3/2012 | 104.33599 | 104.3359912 | 104.3359912 | 104.3359912 | 103.9251147 | 102.041775 | 100.201848 | 98.40407731 | 96.6472512 |
| 120824A00023 | 8/24/2012 | 2.4 | 8/30/2022 | 8/24/2012 | 104.60846 | 104.608457 | 104.608457 | 104.608457 | 104.0956898 | 101.9341501 | 99.82818436 | 97.7759689 | 95.77575523 |
| 120907A00022 | 9/7/2012 | 1.88 | 9/15/2021 | 9/7/2012 | 102.16128 | 102.1612779 | 102.1612779 | 102.1612779 | 101.9386255 | 100.7192811 | 99.52897249 | 98.36667213 | 97.23140059 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 130117A00011 | 1/17/2013 | 2.18 | 1/30/2023 | 1/17/2013 | 105.39755 | 105.3975478 | 105.3975478 | 105.3975478 | 104.7331497 | 102.1459849 | 99.63604873 | 97.20056661 | 94.83688241 |
| 130211A00015 | 2/11/2013 | 1.88 | 2/16/2021 | 2/11/2013 | 101.04125 | 101.0412505 | 101.0412505 | 101.0412505 | 100.9195372 | 100.2818307 | 99.65216625 | 99.03039235 | 98.41636131 |
| 130531A00019 | 5/31/2013 | 2.09 | 6/1/2021 | 5/31/2013 | 101.83903 | 101.8390259 | 101.8390259 | 101.8390259 | 101.6469968 | 100.7180857 | 99.80609176 | 98.91055634 | 98.03103711 |
| 130606A00013 | 6/6/2013 | 2.94 | 6/15/2023 | 6/6/2013 | 107.89627 | 107.8962661 | 107.8962661 | 107.8962661 | 107.0622064 | 104.0828704 | 101.202723 | 98.41792031 | 95.72478969 |
| 130821A00019 | 8/21/2013 | 3.81 | 8/29/2025 | 8/21/2013 | 119.27883 | 119.2788332 | 119.2788332 | 119.2788332 | 116.5862073 | 111.2183215 | 106.1355989 | 101.3213036 | 96.75977402 |
| 130904A00039 | 9/4/2013 | 4.19 | 9/15/2028 | 9/4/2013 | 133.74972 | 133.7497155 | 133.7497155 | 133.7497155 | 125.8455076 | 117.2101416 | 109.2577362 | 101.9300893 | 95.17426782 |
| 131024A00018 | 10/24/2013 | 2.8 | 11/1/2021 | 10/24/2013 | 103.6396 | 103.6396007 | 103.6396007 | 103.6396007 | 103.3960425 | 102.0529188 | 100.7336115 | 99.4375411 | 98.16414681 |
| 131107A00010 | 11/7/2013 | 2.84 | 11/8/2021 | 11/7/2013 | 103.74668 | 103.7466822 | 103.7466822 | 103.7466822 | 103.4980504 | 102.1348939 | 100.7962204 | 99.48142646 | 98.18992838 |
| 140908A00059 | 9/8/2014 | 2.28 | 8/31/2020 | 9/8/2014 | 100.34586 | 100.3458645 | 100.3458645 | 100.3458645 | 100.3201593 | 100.1483733 | 99.9771708 | 99.80654897 | 99.63650487 |
| 141015A00020 | 10/15/2014 | 2.13 | 10/15/2021 | 10/15/2014 | 102.63537 | 102.6353675 | 102.6353675 | 102.6353675 | 102.401482 | 101.1043495 | 99.83463959 | 98.591486 | 97.37405926 |
| 000829A00072 | 8/29/2000 | 7.19 | 8/31/2020 | 8/29/2000 | 101.19118 | 101.1911797 | 101.1911797 | 101.1911797 | 101.1653163 | 100.9924435 | 100.8201574 | 100.6484549 | 100.4773332 |
| 020619A00062 | 6/19/2002 | 5.86 | 6/20/2022 | 6/19/2002 | 111.46874 | 111.4687425 | 111.4687425 | 111.4687425 | 111.0089864 | 108.958906 | 106.9579923 | 105.0047563 | 103.0977644 |
| 020916A00006 | 9/16/2002 | 5.38 | 9/16/2022 | 9/16/2002 | 111.37246 | 111.3724582 | 111.3724582 | 111.3724582 | 110.8280576 | 108.5438774 | 106.3189952 | 104.1514336 | 102.0392985 |
| 050916A00047 | 9/16/2005 | 4.98 | 9/21/2020 | 9/16/2005 | 101.08467 | 101.0846709 | 101.0846709 | 101.0846709 | 101.0483095 | 100.8174023 | 100.5875591 | 100.3587726 | 100.1310355 |
| 051107A00074 | 11/7/2005 | 5.24 | 11/16/2020 | 11/7/2005 | 101.97725 | 101.9772542 | 101.9772542 | 101.9772542 | 101.9088281 | 101.5205777 | 101.1353013 | 100.7529648 | 100.3735343 |
| 051230A00040 | 12/30/2005 | 5.16 | 12/30/2020 | 12/30/2005 | 102.4968 | 102.4968037 | 102.4968037 | 102.4968037 | 102.4017505 | 101.8910979 | 101.3855418 | 100.885006 | 100.3894162 |
| 081219A00069 | 12/19/2008 | 4.26 | 12/22/2023 | 12/19/2008 | 113.91097 | 113.9109661 | 113.9109661 | 113.9109661 | 112.7440013 | 109.1601616 | 105.7120789 | 102.3938686 | 99.19993421 |
| 110104A00019 | 1/4/2011 | 3.78 | 1/15/2021 | 1/4/2011 | 102.02378 | 102.0237808 | 102.0237808 | 102.0237808 | 101.9195701 | 101.3653328 | 100.817137 | 100.2748838 | 99.73847678 |
| 110505A00021 | 5/5/2011 | 4.08 | 5/17/2021 | 5/5/2011 | 103.39617 | 103.3961698 | 103.3961698 | 103.3961698 | 103.2138487 | 102.3201029 | 101.4418694 | 100.5787463 | 99.73034537 |
| 110824A00004 | 8/24/2011 | 3.11 | 8/30/2023 | 8/24/2011 | 109.58746 | 109.5874613 | 109.5874613 | 109.5874613 | 108.6272693 | 105.4070094 | 102.2999003 | 99.3012916 | 96.40675525 |
| 111006A00022 | 10/6/2011 | 3.08 | 10/15/2021 | 10/6/2011 | 103.66976 | 103.6697561 | 103.6697561 | 103.6697561 | 103.435103 | 102.1341226 | 100.8605657 | 99.61356784 | 98.39230121 |
| 111024A00010 | 10/24/2011 | 3.11 | 10/30/2023 | 10/24/2011 | 110.0924 | 110.0923961 | 110.0923961 | 110.0923961 | 109.029118 | 105.6369073 | 102.3691326 | 99.22058407 | 96.18629739 |
| 111201A00005 | 12/1/2011 | 3.16 | 12/15/2021 | 12/1/2011 | 104.26127 | 104.2612734 | 104.2612734 | 104.2612734 | 103.9853723 | 102.5217888 | 101.0862104 | 99.67790282 | 98.29615678 |
| 111216A00001 | 12/16/2011 | 3.95 | 12/30/2031 | 12/16/2011 | 141.76439 | 141.764385 | 141.764385 | 138.9950742 | 126.6407749 | 115.103277 | 104.785195 | 95.54903152 | 87.27353334 |
| 120127A00019 | 1/27/2012 | 3.87 | 1/30/2032 | 1/27/2012 | 141.14418 | 141.1441795 | 141.1441795 | 138.2400264 | 125.8315889 | 114.2676628 | 103.9347138 | 94.69303485 | 86.41952711 |
| 120202A00020 | 2/2/2012 | 2.7 | 2/15/2022 | 2/2/2012 | 103.98039 | 103.9803864 | 103.9803864 | 103.9803864 | 103.6545267 | 102.0244924 | 100.4280531 | 98.86423567 | 97.33210436 |
| 120307A00002 | 3/7/2012 | 2.21 | 3/15/2021 | 3/7/2012 | 101.49813 | 101.4981304 | 101.4981304 | 101.4981304 | 101.3601887 | 100.6457132 | 99.94129702 | 99.24672875 | 98.56180268 |
| 120411A00013 | 4/11/2012 | 3.59 | 4/15/2027 | 4/11/2012 | 122.38607 | 122.3860708 | 122.3860708 | 122.3860708 | 117.1883906 | 110.2735536 | 103.8245672 | 97.80744862 | 92.19086772 |
| 120515A00020 | 5/15/2012 | 2.28 | 5/16/2022 | 5/15/2012 | 104.10793 | 104.1079262 | 104.1079262 | 104.1079262 | 103.6974832 | 101.8163589 | 99.97860498 | 98.1829665 | 96.42823276 |
| 121031A00004 | 10/31/2012 | 2.07 | 10/31/2022 | 10/31/2012 | 104.61753 | 104.6175275 | 104.6175275 | 104.6175275 | 104.0446399 | 101.709058 | 99.43747406 | 97.22779063 | 95.07799119 |
| 121227A00024 | 12/27/2012 | 2.2 | 12/30/2021 | 12/27/2012 | 102.90789 | 102.9078876 | 102.9078876 | 102.9078876 | 102.6223069 | 101.1298811 | 99.66677561 | 98.23220256 | 96.82540174 |
| 130212A00015 | 2/12/2013 | 1.91 | 2/16/2021 | 2/12/2013 | 101.06048 | 101.0604826 | 101.0604826 | 101.0604826 | 100.938757 | 100.3009809 | 99.67124755 | 99.04940536 | 98.43530665 |
| 130212A00017 | 2/12/2013 | 2.29 | 2/15/2023 | 2/12/2013 | 105.29655 | 105.2965502 | 105.2965502 | 105.2965502 | 104.6183133 | 101.9965856 | 99.45396198 | 96.98756345 | 94.59463626 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 130314A00027 | 3/14/2013 | 2.38 | 3/15/2023 | 3/14/2013 | 106.19596 | 106.195961 | 106.195961 | 106.195961 | 105.4809835 | 102.7593078 | 100.1217851 | 97.56526734 | 95.08674832 |
| 020920A00012 | 9/20/2002 | 5.4 | 9/20/2022 | 9/20/2002 | 111.47348 | 111.4734773 | 111.4734773 | 111.4734773 | 110.9250139 | 108.6284822 | 106.391796 | 104.2129509 | 102.0900274 |
| 060908A00017 | 9/8/2006 | 5.27 | 9/15/2021 | 9/8/2006 | 106.32021 | 106.3202141 | 106.3202141 | 106.3202141 | 106.0924169 | 104.8461041 | 103.6292735 | 102.4408852 | 101.2799479 |
| 081205A00033 | 12/5/2008 | 4.77 | 12/7/2023 | 12/5/2008 | 115.51586 | 115.5158601 | 115.5158601 | 115.5158601 | 114.368976 | 110.7972876 | 107.3591338 | 104.0487972 | 100.8608366 |
| 091112A00011 | 11/12/2009 | 4.77 | 11/15/2024 | 11/12/2009 | 120.6055 | 120.6055025 | 120.6055025 | 120.6055025 | 118.6936809 | 114.0655061 | 109.6496026 | 105.4350961 | 101.4117257 |
| 100809A00029 | 8/9/2010 | 4.23 | 8/15/2025 | 8/9/2010 | 120.24358 | 120.2435784 | 120.2435784 | 120.2435784 | 117.6076374 | 112.2847114 | 107.2414983 | 102.4617372 | 97.93020149 |
| 100817A00002 | 8/17/2010 | 3.03 | 8/31/2020 | 8/17/2010 | 100.50172 | 100.5017213 | 100.5017213 | 100.5017213 | 100.4759439 | 100.3036731 | 100.1319907 | 99.9608936 | 99.79037893 |
| 110103A00009 | 1/3/2011 | 3.99 | 1/3/2022 | 1/3/2011 | 105.93102 | 105.9310243 | 105.9310243 | 105.9310243 | 105.6368757 | 104.1055698 | 102.6044999 | 101.1328461 | 99.6898177 |
| 110302A00006 | 3/2/2011 | 4.26 | 3/15/2021 | 3/2/2011 | 102.86617 | 102.8661713 | 102.8661713 | 102.8661713 | 102.7274988 | 102.0088743 | 101.3003269 | 100.6016453 | 99.91262403 |
| 110302A00007 | 3/2/2011 | 4.86 | 3/16/2026 | 3/2/2011 | 126.1419 | 126.141898 | 126.141898 | 126.141898 | 122.6697098 | 116.6319167 | 110.9406499 | 105.5740103 | 100.5116046 |
| 110524A00009 | 5/24/2011 | 3.64 | 6/1/2021 | 5/24/2011 | 103.28482 | 103.2848233 | 103.2848233 | 103.2848233 | 103.0914129 | 102.1552166 | 101.2360305 | 100.3333939 | 99.44686259 |
| 110818A00006 | 8/18/2011 | 3.09 | 8/30/2021 | 8/18/2011 | 103.32468 | 103.3246792 | 103.3246792 | 103.3246792 | 103.1048077 | 101.9245326 | 100.7712588 | 99.64406739 | 98.54208072 |
| 111024A00027 | 10/24/2011 | 3.11 | 10/30/2023 | 10/24/2011 | 110.0924 | 110.0923961 | 110.0923961 | 110.0923961 | 109.029118 | 105.6369073 | 102.3691326 | 99.22058407 | 96.1862974 |
| 111031A00013 | 10/31/2011 | 2.82 | 11/1/2021 | 10/31/2011 | 103.66674 | 103.6667442 | 103.6667442 | 103.6667442 | 103.4231495 | 102.079833 | 100.7603361 | 99.46407938 | 98.19050187 |
| 111223A00006 | 12/23/2011 | 2.98 | 12/30/2021 | 12/23/2011 | 104.0925 | 104.0925038 | 104.0925038 | 104.0925038 | 103.8051617 | 102.3034127 | 100.8311476 | 99.38757408 | 97.97192755 |
| 120113A00012 | 1/13/2012 | 3.62 | 1/15/2027 | 1/13/2012 | 121.78051 | 121.780505 | 121.780505 | 121.780505 | 117.0069559 | 110.3345248 | 104.0973682 | 98.26466928 | 92.80795046 |
| 120126A00006 | 1/26/2012 | 2.93 | 1/31/2022 | 1/26/2012 | 104.25098 | 104.2509802 | 104.2509802 | 104.2509802 | 103.937599 | 102.3493773 | 100.793331 | 99.26855003 | 97.77415881 |
| 120209A00012 | 2/9/2012 | 2.27 | 2/16/2021 | 2/9/2012 | 101.38014 | 101.3801383 | 101.3801383 | 101.3801383 | 101.2579857 | 100.6179284 | 99.98595391 | 99.36190964 | 98.74564689 |
| 120228A00010 | 2/28/2012 | 2.34 | 3/2/2022 | 2/28/2012 | 103.76003 | 103.7600309 | 103.7600309 | 103.7600309 | 103.420507 | 101.7439893 | 100.1027046 | 98.49560701 | 96.92169235 |
| 120517A00007 | 5/17/2012 | 2.42 | 5/31/2023 | 5/17/2012 | 106.79628 | 106.7962752 | 106.7962752 | 106.7962752 | 105.9834505 | 103.0484108 | 100.2101615 | 97.46499262 | 94.80935733 |
| 120801A00015 | 8/1/2012 | 2.08 | 8/17/2020 | 8/1/2012 | 100.23983 | 100.2398259 | 100.2398259 | 100.2398259 | 100.2204144 | 100.0874353 | 99.95482326 | 99.82257692 | 99.69069469 |
| 121101A00011 | 11/1/2012 | 2.03 | 11/1/2022 | 11/1/2012 | 104.52818 | 104.5281767 | 104.5281767 | 104.5281767 | 103.9545631 | 101.6173347 | 99.34422534 | 97.13313125 | 94.98202986 |
| 130117A00010 | 1/17/2013 | 1.98 | 1/31/2022 | 1/17/2013 | 102.99665 | 102.9966469 | 102.9966469 | 102.9966469 | 102.6843074 | 101.1018917 | 99.55163133 | 98.03261517 | 96.54396621 |
| 130508A00013 | 5/8/2013 | 2.23 | 5/15/2023 | 5/8/2013 | 106.14159 | 106.1415915 | 106.1415915 | 106.1415915 | 105.3520531 | 102.4684298 | 99.67869184 | 96.97928821 | 94.3668219 |
| 130517A00013 | 5/17/2013 | 2.07 | 5/17/2022 | 5/17/2013 | 103.71423 | 103.7142269 | 103.7142269 | 103.7142269 | 103.3035598 | 101.4236241 | 99.58710286 | 97.79273809 | 96.0393163 |
| 001003A00018 | 10/3/2000 | 7.13 | 10/5/2020 | 10/3/2000 | 101.84645 | 101.8464513 | 101.8464513 | 101.8464513 | 101.802563 | 101.5316052 | 101.2620952 | 100.9940214 | 100.7273722 |
| 050923A00095 | 9/23/2005 | 4.77 | 9/21/2020 | 9/23/2005 | 101.0725 | 101.0724985 | 101.0724985 | 101.0724985 | 101.0360777 | 100.8047988 | 100.5745902 | 100.3454446 | 100.1173546 |
| 050923A00096 | 9/23/2005 | 4.86 | 9/22/2025 | 9/23/2005 | 125.07638 | 125.0763802 | 125.0763802 | 125.0763802 | 122.2519832 | 116.6715723 | 111.3887417 | 106.3858978 | 101.6465881 |
| 060613A00028 | 6/13/2006 | 5.47 | 6/15/2021 | 6/13/2006 | 105.19959 | 105.1995937 | 105.1995937 | 105.1995937 | 104.9971216 | 104.0124633 | 103.0463831 | 102.0983575 | 101.1678826 |
| 081217A00076 | 12/17/2008 | 3.86 | 12/22/2023 | 12/17/2008 | 113.17116 | 113.1711635 | 113.1711635 | 113.1711635 | 112.0010895 | 108.4135989 | 104.9625192 | 101.64192 | 98.44616187 |
| 091210A00005 | 12/10/2009 | 5.08 | 12/16/2024 | 12/10/2009 | 121.46681 | 121.4668099 | 121.4668099 | 121.4668099 | 119.4859891 | 114.7811363 | 110.295024 | 106.0162806 | 101.9341859 |
| 101101A00006 | 11/1/2010 | 3.34 | 11/16/2020 | 11/1/2010 | 101.19063 | 101.1906288 | 101.1906288 | 101.1906288 | 101.1226186 | 100.7368426 | 100.3540178 | 99.97411022 | 99.59708655 |
| 110802A00008 | 8/2/2011 | 3.34 | 8/16/2021 | 8/2/2011 | 103.68436 | 103.6843557 | 103.6843557 | 103.6843557 | 103.4658176 | 102.3187991 | 101.1972234 | 100.1002498 | 99.02707483 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 110822A00010 | 8/22/2011 | 2.8 | 8/30/2021 | 8/22/2011 | 103.17102 | 103.1710236 | 103.1710236 | 103.1710236 | 102.9508048 | 101.7686279 | 100.6135502 | 99.48464806 | 98.38103914 |
| 111006A00023 | 10/6/2011 | 3.81 | 10/15/2026 | 10/6/2011 | 122.15064 | 122.1506352 | 122.1506352 | 122.1506352 | 117.7941495 | 111.333981 | 105.2802025 | 99.60498816 | 94.28256193 |
| 120113A00013 | 1/13/2012 | 3.87 | 1/15/2032 | 1/13/2012 | 141.00067 | 141.0006746 | 141.0006746 | 138.1628404 | 125.7996531 | 114.2714495 | 103.9668658 | 94.74742314 | 86.49105816 |
| 120119A00010 | 1/18/2012 | 2.43 | 1/31/2022 | 1/18/2012 | 103.72092 | 103.7209205 | 103.7209205 | 103.7209205 | 103.4074386 | 101.8190035 | 100.2628311 | 98.73800749 | 97.24365267 |
| 120709A00015 | 7/9/2012 | 2.5 | 7/15/2022 | 7/9/2012 | 104.5469 | 104.5469036 | 104.5469036 | 104.5469036 | 104.0782539 | 102.0386497 | 100.0494542 | 98.10909371 | 96.21605545 |
| 120709A00016 | 7/9/2012 | 3.2 | 7/15/2027 | 7/9/2012 | 120.444 | 120.4439985 | 120.4439985 | 120.4439985 | 114.8638469 | 107.7967048 | 101.222969 | 95.10546574 | 89.41000936 |
| 120907A00024 | 9/7/2012 | 2.31 | 9/16/2024 | 9/7/2012 | 109.34484 | 109.3448417 | 109.3448417 | 109.3448417 | 107.6455565 | 103.4169174 | 99.37848361 | 95.52064395 | 91.83433017 |
| 121121A00003 | 11/21/2012 | 2.3 | 11/30/2022 | 11/21/2012 | 104.89786 | 104.8978597 | 104.8978597 | 104.8978597 | 104.2982595 | 101.8870792 | 99.54391575 | 97.2664726 | 95.05254436 |
| 130211A00017 | 2/11/2013 | 3.27 | 2/15/2028 | 2/11/2013 | 122.6696 | 122.6695976 | 122.6695976 | 122.6695976 | 116.083162 | 108.4352749 | 101.3591986 | 94.80894373 | 88.74245424 |
| 130523A00042 | 5/28/2013 | 2.38 | 5/23/2022 | 5/28/2013 | 104.01364 | 104.0136412 | 104.0136412 | 104.0136412 | 103.5979703 | 101.7052892 | 99.85654042 | 98.05044366 | 96.2857645 |
| 130528A00028 | 5/28/2013 | 2.63 | 5/30/2023 | 5/28/2013 | 106.86784 | 106.8678428 | 106.8678428 | 106.8678428 | 106.0599329 | 103.1387635 | 100.3135776 | 97.58070849 | 94.93665009 |
| 130821A00017 | 8/21/2013 | 2.8 | 8/28/2020 | 8/21/2013 | 100.43976 | 100.4397575 | 100.4397575 | 100.4397575 | 100.4153393 | 100.2514534 | 100.0881066 | 99.9252963 | 99.76301976 |
| 130821A00018 | 8/21/2013 | 3.37 | 8/30/2022 | 8/21/2013 | 107.13485 | 107.134847 | 107.134847 | 107.134847 | 106.6143339 | 104.4169639 | 102.276084 | 100.1898385 | 98.15644805 |
| 131106A00002 | 11/6/2013 | 2.76 | 11/16/2020 | 11/6/2013 | 100.96682 | 100.9668194 | 100.9668194 | 100.9668194 | 100.8988961 | 100.5136491 | 100.1313502 | 99.7519656 | 99.37546198 |
| 140521A00019 | 5/21/2014 | 3.43 | 5/22/2028 | 5/21/2014 | 126.39303 | 126.3930301 | 126.3930301 | 126.3930301 | 119.2069829 | 111.129638 | 103.6748506 | 96.79109668 | 90.43137177 |
| 140702A00034 | 7/2/2014 | 2.7 | 7/1/2022 | 7/2/2014 | 105.23518 | 105.2351827 | 105.2351827 | 105.2351827 | 104.777082 | 102.7604599 | 100.7931821 | 98.87372992 | 97.00064219 |
| 010824A00019 | 8/24/2001 | 6.24 | 8/24/2021 | 8/24/2001 | 106.94652 | 106.9465202 | 106.9465202 | 106.9465202 | 106.7233371 | 105.5370628 | 104.3774106 | 103.2434887 | 102.1344448 |
| 011029A00020 | 10/29/2001 | 5.73 | 10/29/2021 | 10/29/2001 | 107.56943 | 107.569432 | 107.569432 | 107.569432 | 107.3222864 | 105.9586929 | 104.6197755 | 103.3049077 | 102.0134839 |
| 050308A00058 | 3/8/2005 | 5.32 | 3/11/2025 | 3/8/2005 | 123.71181 | 123.7118132 | 123.7118132 | 123.7118132 | 121.4949542 | 116.5051284 | 111.756946 | 107.2373042 | 102.9338868 |
| 050912A00098 | 9/12/2005 | 4.74 | 9/21/2020 | 9/12/2005 | 101.06558 | 101.0655831 | 101.0655831 | 101.0655831 | 101.029164 | 100.7978962 | 100.5676987 | 100.3385641 | 100.110485 |
| 100713A00024 | 7/13/2010 | 3.95 | 7/15/2020 | 7/13/2010 | 100.15164 | 100.1516387 | 100.1516387 | 100.1516387 | 100.1459316 | 100.1042996 | 100.0627193 | 100.0211906 | 99.97971343 |
| 110201A00004 | 2/1/2011 | 4.25 | 2/16/2021 | 2/1/2011 | 102.56059 | 102.5605899 | 102.5605899 | 102.5605899 | 102.4378953 | 101.7946964 | 101.1595889 | 100.5324206 | 99.91304314 |
| 110505A00022 | 5/5/2011 | 4.59 | 5/15/2026 | 5/5/2011 | 125.29346 | 125.2934593 | 125.2934593 | 125.2934593 | 121.5781284 | 115.4093169 | 109.6041251 | 104.1391028 | 98.99243039 |
| 110601A00013 | 6/1/2011 | 3.49 | 6/15/2021 | 6/1/2011 | 103.2758 | 103.2757967 | 103.2757967 | 103.2757967 | 103.0752468 | 102.1006627 | 101.1445231 | 100.2063074 | 99.28551436 |
| 110919A00026 | 9/19/2011 | 2.66 | 9/30/2021 | 9/19/2011 | 103.22387 | 103.2238668 | 103.2238668 | 103.2238668 | 102.9963865 | 101.7292332 | 100.4931819 | 99.28709832 | 98.10990259 |
| 111006A00021 | 10/6/2011 | 2.93 | 10/15/2020 | 10/6/2011 | 100.78913 | 100.7891278 | 100.7891278 | 100.7891278 | 100.7399037 | 100.4432472 | 100.1483479 | 99.85518998 | 99.56375808 |
| 111024A00022 | 10/24/2011 | 3.11 | 10/30/2023 | 10/24/2011 | 110.0924 | 110.0923961 | 110.0923961 | 110.0923961 | 109.029118 | 105.6369073 | 102.3691326 | 99.22058407 | 96.18629739 |
| 120127A00018 | 1/27/2012 | 3.64 | 2/1/2027 | 1/27/2012 | 122.06637 | 122.0663749 | 122.0663749 | 122.0663749 | 117.2103034 | 110.4878076 | 104.206309 | 98.3344128 | 92.84312115 |
| 120330A00009 | 3/30/2012 | 2.98 | 3/30/2022 | 3/30/2012 | 104.76175 | 104.7617477 | 104.7617477 | 104.7617477 | 104.3962157 | 102.6416269 | 100.9250194 | 99.24522482 | 97.60112325 |
| 120411A00012 | 4/11/2012 | 2.87 | 4/15/2022 | 4/11/2012 | 104.66312 | 104.6631174 | 104.6631174 | 104.6631174 | 104.2827601 | 102.4856806 | 100.7283017 | 99.00945369 | 97.32801169 |
| 120601A00012 | 6/1/2012 | 1.93 | 6/15/2021 | 6/1/2012 | 101.76008 | 101.7600778 | 101.7600778 | 101.7600778 | 101.5610424 | 100.5943957 | 99.646088 | 98.71560116 | 97.80243633 |
| 120718A00011 | 7/18/2012 | 2.29 | 7/30/2021 | 7/18/2012 | 102.20637 | 102.206375 | 102.206375 | 102.206375 | 101.9928808 | 100.9037548 | 99.83781254 | 98.79431998 | 97.77257374 |
| 120928A00018 | 9/28/2012 | 1.87 | 9/30/2020 | 9/28/2012 | 100.40768 | 100.4076782 | 100.4076782 | 100.4076782 | 100.3669944 | 100.1123717 | 99.85903335 | 99.60696984 | 99.3561716 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 131113A00036 | 11/13/2013 | 3.14 | 11/15/2021 | 11/13/2013 | 103.994 | 103.9939954 | 103.9939954 | 103.9939954 | 103.7407447 | 102.3600856 | 101.0044845 | 99.67331726 | 98.3659802 |
| 131113A00040 | 11/13/2013 | 2.8 | 11/16/2020 | 11/13/2013 | 100.98225 | 100.9822545 | 100.9822545 | 100.9822545 | 100.9143252 | 100.5290417 | 100.1467066 | 99.76728592 | 99.39074643 |
| 140113A00011 | 1/13/2014 | 2.88 | 1/15/2021 | 1/13/2014 | 101.45571 | 101.4557145 | 101.4557145 | 101.4557145 | 101.3519878 | 100.8004296 | 100.2548775 | 99.71523349 | 99.18140184 |
| 140204A00007 | 2/4/2014 | 2.68 | 2/16/2021 | 2/4/2014 | 101.55411 | 101.5541077 | 101.5541077 | 101.5541077 | 101.4320632 | 100.7925027 | 100.1610009 | 99.5374061 | 98.92157036 |
| 140626A00036 | 6/26/2014 | 3.55 | 6/26/2029 | 6/26/2014 | 131.1234 | 131.1233988 | 131.1233988 | 131.1233988 | 121.8655305 | 112.6663204 | 104.2599524 | 96.57329697 | 89.5403418 |
| 140827A00038 | 8/27/2014 | 3.07 | 8/30/2024 | 8/27/2014 | 111.65538 | 111.6553773 | 111.6553773 | 111.6553773 | 109.9914501 | 105.7817606 | 101.7584675 | 97.9122829 | 94.23443615 |
| 140908A00061 | 9/8/2014 | 2.39 | 2/26/2021 | 9/8/2014 | 101.42674 | 101.4267422 | 101.4267422 | 101.4267422 | 101.2990962 | 100.6326444 | 99.97493953 | 99.32581029 | 98.68508987 |
| 001003A00016 | 10/3/2000 | 7.13 | 10/5/2020 | 10/3/2000 | 101.84645 | 101.8464513 | 101.8464513 | 101.8464513 | 101.802563 | 101.5316052 | 101.2620952 | 100.9940214 | 100.7273722 |
| 011107A00022 | 11/7/2001 | 5.56 | 11/5/2021 | 11/7/2001 | 107.20835 | 107.2083495 | 107.2083495 | 107.2083495 | 106.9578176 | 105.5818482 | 104.2303862 | 102.9028308 | 101.5986005 |
| 050927A00012 | 9/27/2005 | 5.06 | 9/21/2020 | 9/27/2005 | 101.10311 | 101.1031073 | 101.1031073 | 101.1031073 | 101.0667414 | 100.8358046 | 100.6059319 | 100.3771161 | 100.1493498 |
| 080909A00042 | 9/9/2008 | 4.74 | 9/11/2023 | 9/9/2008 | 114.96477 | 114.9647743 | 114.9647743 | 114.9647743 | 113.9642995 | 110.6247973 | 107.4028713 | 104.29366 | 101.2925365 |
| 081215A00091 | 12/15/2008 | 4.19 | 12/15/2023 | 12/15/2008 | 114.25397 | 114.2539658 | 114.2539658 | 114.2539658 | 113.0918305 | 109.5041662 | 106.0520308 | 102.7295669 | 99.53120284 |
| 100809A00028 | 8/9/2010 | 3.61 | 8/17/2020 | 8/9/2010 | 100.44376 | 100.4437597 | 100.4437597 | 100.4437597 | 100.4243145 | 100.2911006 | 100.1582544 | 100.0257744 | 99.89365909 |
| 100826A00013 | 8/26/2010 | 3.32 | 8/31/2020 | 8/26/2010 | 100.52491 | 100.524913 | 100.524913 | 100.524913 | 100.4991742 | 100.327158 | 100.155726 | 99.98487528 | 99.81460293 |
| 101208A00006 | 12/8/2010 | 4.12 | 12/15/2020 | 12/8/2010 | 101.80253 | 101.8025282 | 101.8025282 | 101.8025282 | 101.7168285 | 101.2495769 | 100.7866293 | 100.3279262 | 99.87340924 |
| 110222A00011 | 2/22/2011 | 4.35 | 3/2/2021 | 2/22/2011 | 102.7829 | 102.7828999 | 102.7828999 | 102.7828999 | 102.6520131 | 101.9694921 | 101.2960559 | 100.6315238 | 99.97572011 |
| 111024A00009 | 10/24/2011 | 2.65 | 10/30/2020 | 10/24/2011 | 100.85809 | 100.8580927 | 100.8580927 | 100.8580927 | 100.8003101 | 100.4615975 | 100.1251575 | 99.79096735 | 99.45900453 |
| 111024A00026 | 10/24/2011 | 2.65 | 10/30/2020 | 10/24/2011 | 100.85809 | 100.8580927 | 100.8580927 | 100.8580927 | 100.8003101 | 100.4615975 | 100.1251575 | 99.79096735 | 99.45900453 |
| 120112A00013 | 1/12/2012 | 2.76 | 1/16/2024 | 1/12/2012 | 109.4817 | 109.481703 | 109.481703 | 109.481703 | 108.2823446 | 104.6937192 | 101.2443992 | 97.92821337 | 94.73929911 |
| 120320A00005 | 3/20/2012 | 3.18 | 3/30/2022 | 3/20/2012 | 105.11525 | 105.1152547 | 105.1152547 | 105.1152547 | 104.7491061 | 102.9913133 | 101.2715609 | 99.58867887 | 97.94154561 |
| 121116A00007 | 11/16/2012 | 1.99 | 11/16/2021 | 11/16/2012 | 102.3952 | 102.3951984 | 102.3951984 | 102.3951984 | 102.1434481 | 100.771711 | 99.42492573 | 98.10247033 | 96.80374313 |
| 121116A00021 | 11/16/2012 | 2.35 | 11/17/2025 | 11/16/2012 | 112.14682 | 112.1468222 | 112.1468222 | 112.1468222 | 109.2473805 | 103.8583331 | 98.76931208 | 93.96209018 | 89.419637 |
| 121116A00022 | 11/16/2012 | 2.78 | 11/16/2029 | 11/16/2012 | 125.18543 | 125.1854336 | 125.1854336 | 125.1148672 | 115.3519406 | 106.0916188 | 97.66686431 | 89.99749567 | 83.01141652 |
| 130211A00025 | 2/11/2013 | 1.88 | 2/16/2021 | 2/11/2013 | 101.04125 | 101.0412505 | 101.0412505 | 101.0412505 | 100.9195372 | 100.2818307 | 99.65216625 | 99.03039235 | 98.41636131 |
| 130212A00016 | 2/12/2013 | 2.13 | 2/15/2022 | 2/12/2013 | 103.04064 | 103.0406358 | 103.0406358 | 103.0406358 | 102.7162968 | 101.0942491 | 99.50565298 | 97.94953919 | 96.42497588 |
| 130405A00007 | 4/5/2013 | 2.91 | 4/17/2028 | 4/5/2013 | 121.97969 | 121.9796911 | 121.9796911 | 121.9796911 | 115.0495917 | 107.2186884 | 99.98813226 | 93.3085818 | 87.13499637 |
| 130424A00005 | 4/24/2013 | 3.07 | 4/24/2030 | 4/24/2013 | 129.21777 | 129.2177728 | 129.2177728 | 128.7183711 | 118.3768047 | 108.5923683 | 99.7231212 | 91.6779816 | 84.3753862 |
| 130509A00004 | 5/9/2013 | 2.4 | 5/15/2023 | 5/9/2013 | 106.10397 | 106.1039729 | 106.1039729 | 106.1039729 | 105.3182508 | 102.4471871 | 99.66935215 | 96.98122855 | 94.37945088 |
| 130513A00007 | 5/13/2013 | 2.54 | 5/15/2023 | 5/13/2013 | 106.51011 | 106.5101148 | 106.5101148 | 106.5101148 | 105.7230555 | 102.8461059 | 100.0625289 | 97.36880234 | 94.76155637 |
| 130530A00008 | 5/30/2013 | 2.29 | 6/1/2021 | 5/30/2013 | 101.88645 | 101.8864459 | 101.8864459 | 101.8864459 | 101.6947893 | 100.7675855 | 99.85723688 | 98.96328705 | 98.0852961 |
| 130531A00020 | 5/31/2013 | 2.5 | 5/30/2023 | 5/31/2013 | 107.02592 | 107.0259183 | 107.0259183 | 107.0259183 | 106.213642 | 103.277841 | 100.4387468 | 97.69265626 | 95.03602875 |
| 051003A00009 | 10/3/2005 | 5.15 | 10/15/2025 | 10/3/2005 | 125.79689 | 125.7968852 | 125.7968852 | 125.7968852 | 122.9093719 | 117.2839445 | 111.9603537 | 106.92069 | 102.1482034 |
| 080910A00065 | 9/10/2008 | 5.03 | 9/15/2023 | 9/10/2008 | 115.3369 | 115.3369008 | 115.3369008 | 115.3369008 | 114.3334441 | 110.9913948 | 107.7669687 | 104.6553007 | 101.6517605 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 081209A00008 | 12/9/2008 | 4.87 | 12/15/2023 | 12/9/2008 | 115.96334 | 115.9633433 | 115.9633433 | 115.9633433 | 114.8000514 | 111.1992538 | 107.7338068 | 104.3978815 | 101.1859322 |
| 090226A00006 | 2/26/2009 | 4.55 | 3/1/2024 | 2/26/2009 | 116.45785 | 116.4578546 | 116.4578546 | 116.4578546 | 115.1407939 | 111.3014673 | 107.6139784 | 104.0714355 | 100.667303 |
| 100712A00003 | 7/12/2010 | 3.91 | 7/15/2020 | 7/12/2010 | 100.14997 | 100.1499725 | 100.1499725 | 100.1499725 | 100.1442656 | 100.102635 | 100.061056 | 100.0195287 | 99.97805291 |
| 100923A00051 | 9/23/2010 | 3.4 | 9/30/2021 | 9/23/2010 | 103.95862 | 103.9586187 | 103.9586187 | 103.9586187 | 103.7307633 | 102.4618623 | 101.2240154 | 100.0160924 | 98.83701744 |
| 100930A00007 | 9/30/2010 | 3.27 | 9/30/2020 | 9/30/2010 | 100.76529 | 100.76529 | 100.76529 | 100.76529 | 100.7245137 | 100.469285 | 100.2153431 | 99.9626783 | 99.71128114 |
| 110810A00020 | 8/10/2011 | 2.86 | 8/16/2021 | 8/10/2011 | 103.13542 | 103.1354217 | 103.1354217 | 103.1354217 | 102.917524 | 101.7738418 | 100.6555505 | 99.56181122 | 98.49182141 |
| 110825A00016 | 8/25/2011 | 3.06 | 8/31/2022 | 8/25/2011 | 106.46278 | 106.4627821 | 106.4627821 | 106.4627821 | 105.9428377 | 103.7502638 | 101.6141434 | 99.53261948 | 97.50391174 |
| 111024A00021 | 10/24/2011 | 2.65 | 10/30/2020 | 10/24/2011 | 100.85809 | 100.8580927 | 100.8580927 | 100.8580927 | 100.8003101 | 100.4615975 | 100.1251575 | 99.79096735 | 99.45900453 |
| 120130A00009 | 1/30/2012 | 2.79 | 1/31/2022 | 1/30/2012 | 104.02597 | 104.0259693 | 104.0259693 | 104.0259693 | 103.7129423 | 102.1265868 | 100.5723733 | 99.04939297 | 97.55677088 |
| 120315A00021 | 3/15/2012 | 3.12 | 3/15/2022 | 3/15/2012 | 104.8915 | 104.8914961 | 104.8914961 | 104.8914961 | 104.5393414 | 102.8234003 | 101.1439616 | 99.49992465 | 97.890233 |
| 120726A00001 | 7/26/2012 | 2.36 | 8/1/2022 | 7/26/2012 | 104.35522 | 104.3552237 | 104.3552237 | 104.3552237 | 103.8704494 | 101.7880627 | 99.7578944 | 97.77828315 | 95.84763337 |
| 130107A00001 | 1/7/2013 | 2.53 | 1/17/2023 | 1/7/2013 | 105.75625 | 105.7562466 | 105.7562466 | 105.7562466 | 105.1069026 | 102.5593108 | 100.0868142 | 97.68675185 | 95.35657468 |
| 130911A00009 | 9/11/2013 | 2.87 | 9/15/2020 | 9/11/2013 | 100.58871 | 100.5887095 | 100.5887095 | 100.5887095 | 100.5554069 | 100.3414944 | 100.1285058 | 99.91643514 | 99.70527643 |
| 130920A00020 | 9/20/2013 | 2.71 | 9/30/2020 | 9/20/2013 | 100.66237 | 100.6623687 | 100.6623687 | 100.6623687 | 100.621548 | 100.3660552 | 100.1118559 | 99.85894039 | 99.60729892 |
| 130926A00009 | 9/26/2013 | 4 | 10/2/2028 | 9/26/2013 | 132.3562 | 132.3561982 | 132.3561982 | 132.3561982 | 124.4023799 | 115.7799572 | 107.8441664 | 100.5361519 | 93.80241471 |
| 131024A00019 | 10/24/2013 | 3.23 | 10/30/2023 | 10/24/2013 | 110.49723 | 110.4972315 | 110.4972315 | 110.4972315 | 109.4322905 | 106.0333055 | 102.7589413 | 99.60398142 | 96.56345529 |
| 140113A00012 | 1/13/2014 | 3.48 | 1/17/2023 | 1/13/2014 | 108.20338 | 108.2033824 | 108.2033824 | 108.2033824 | 107.5471784 | 104.9679219 | 102.4644752 | 100.0341553 | 97.67439169 |
| 140423A00036 | 4/23/2014 | 4.03 | 4/23/2029 | 4/23/2014 | 132.84721 | 132.8472059 | 132.8472059 | 132.8472059 | 123.9801435 | 114.9346465 | 106.6493321 | 99.05563283 | 92.09151748 |
| 140820A00026 | 8/20/2014 | 2.94 | 8/19/2024 | 8/20/2014 | 111.81281 | 111.8128135 | 111.8128135 | 111.8128135 | 110.1618255 | 105.9555885 | 101.9350435 | 98.09096866 | 94.41465343 |
| 140908A00060 | 9/8/2014 | 2.34 | 11/30/2020 | 9/8/2014 | 100.88555 | 100.8855483 | 100.8855483 | 100.8855483 | 100.8092417 | 100.3857091 | 99.96572237 | 99.54923718 | 99.13621 |
| 140908A00062 | 9/8/2014 | 2.45 | 5/28/2021 | 9/8/2014 | 102.01135 | 102.0113461 | 102.0113461 | 102.0113461 | 101.8222634 | 100.9053082 | 100.0048277 | 99.12038099 | 98.25154276 |
| 141024A00009 | 10/24/2014 | 2.05 | 10/26/2020 | 10/24/2014 | 100.63333 | 100.6333331 | 100.6333331 | 100.6333331 | 100.577877 | 100.2506634 | 99.92558216 | 99.6026123 | 99.28173332 |
| 140402A00010 | 4/2/2014 | 2.62 | 4/2/2021 | 4/2/2014 | 101.91687 | 101.9168718 | 101.9168718 | 101.9168718 | 101.7677343 | 101.0022545 | 100.2482685 | 99.50551889 | 98.77375583 |
| 140701A00001 | 7/1/2014 | 3.22 | 7/1/2024 | 7/1/2014 | 111.80325 | 111.8032543 | 111.8032543 | 111.8032543 | 110.2693255 | 106.2116778 | 102.3280796 | 98.61013281 | 95.04988973 |
| 140815A00032 | 8/15/2014 | 3.59 | 10/15/2029 | 8/15/2014 | 130.51964 | 130.5196412 | 130.5196412 | 130.5050205 | 120.8196736 | 111.4818155 | 102.9693247 | 95.20418012 | 88.1161363 |
| 140827A00037 | 8/27/2014 | 2.55 | 8/30/2021 | 8/27/2014 | 102.68679 | 102.6867934 | 102.6867934 | 102.6867934 | 102.4676855 | 101.291396 | 100.1420442 | 99.01871288 | 97.9205261 |
| 140911A00027 | 9/11/2014 | 3.18 | 9/16/2024 | 9/11/2014 | 112.25178 | 112.2517804 | 112.2517804 | 112.2517804 | 110.5458258 | 106.2786951 | 102.2021746 | 98.30667631 | 94.58315172 |
| 140922A00026 | 9/22/2014 | 3.02 | 9/30/2024 | 9/22/2014 | 112.48446 | 112.4844636 | 112.4844636 | 112.4844636 | 110.7341005 | 106.4022794 | 102.2660262 | 98.31539963 | 94.54102449 |
| 141009A00026 | 10/9/2014 | 2.23 | 10/9/2020 | 10/9/2014 | 100.54856 | 100.5485634 | 100.5485634 | 100.5485634 | 100.5027834 | 100.2231147 | 99.94500916 | 99.66845368 | 99.39343524 |
| 141024A00008 | 10/24/2014 | 2.52 | 10/24/2022 | 10/24/2014 | 105.63562 | 105.6356234 | 105.6356234 | 105.6356234 | 105.066763 | 102.7375453 | 100.4716434 | 98.26696652 | 96.12150638 |
| 150105A00026 | 1/5/2015 | 2.54 | 1/5/2024 | 1/5/2015 | 108.6183 | 108.6182995 | 108.6182995 | 108.6182995 | 107.4430188 | 103.8984496 | 100.4907515 | 97.21389839 | 94.06216384 |
| 150112A00014 | 1/12/2015 | 1.86 | 1/15/2021 | 1/12/2015 | 100.96285 | 100.9628467 | 100.9628467 | 100.9628467 | 100.8592262 | 100.3083666 | 99.76352184 | 99.22459352 | 98.69148554 |
| 150116A00040 | 1/16/2015 | 2.07 | 1/18/2022 | 1/16/2015 | 102.80445 | 102.8044532 | 102.8044532 | 102.8044532 | 102.5037851 | 100.9619079 | 99.4509054 | 97.9699216 | 96.51813171 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150319A00013 | 3/19/2015 | 3.25 | 3/19/2030 | 3/19/2015 | 128.59018 | 128.5901783 | 128.5901783 | 128.2017411 | 118.114876 | 108.526494 | 99.82297438 | 91.91723602 | 84.73121603 |
| 150422A00019 | 4/22/2015 | 2.62 | 4/22/2025 | 4/22/2015 | 111.21015 | 111.2101547 | 111.2101547 | 111.2101547 | 108.9751734 | 104.167145 | 99.60086457 | 95.26292737 | 91.14074076 |
| 150424A00035 | 4/24/2015 | 1.8 | 4/23/2021 | 4/24/2015 | 101.38641 | 101.3864094 | 101.3864094 | 101.3864094 | 101.2228694 | 100.402343 | 99.59507593 | 98.80074889 | 98.01905257 |
| 150506A00014 | 5/6/2015 | 2.21 | 5/6/2022 | 5/6/2015 | 103.91687 | 103.916865 | 103.916865 | 103.916865 | 103.51652 | 101.6636495 | 99.85295306 | 98.08322607 | 96.3533062 |
| 150601A00515 | 6/1/2015 | 2.95 | 1/16/2024 | 6/1/2015 | 110.01422 | 110.0142227 | 110.0142227 | 110.0142227 | 108.8124358 | 105.2143009 | 101.7557434 | 98.43058172 | 95.23294398 |
| 150601A00606 | 6/1/2015 | 2.39 | 3/31/2021 | 6/1/2015 | 101.59403 | 101.5940265 | 101.5940265 | 101.5940265 | 101.4468296 | 100.6895744 | 99.94359037 | 99.2086274 | 98.48444279 |
| 150601A00630 | 6/1/2015 | 2.27 | 9/30/2020 | 6/1/2015 | 100.50035 | 100.5003474 | 100.5003474 | 100.5003474 | 100.4596396 | 100.2048599 | 99.95136513 | 99.69914582 | 99.44819237 |
| 150601A00704 | 6/1/2015 | 2.3 | 3/25/2022 | 6/1/2015 | 103.47348 | 103.4734825 | 103.4734825 | 103.4734825 | 103.1147063 | 101.3849482 | 99.69245575 | 98.03608934 | 96.41475634 |
| 150601A01022 | 6/1/2015 | 5.28 | 2/22/2021 | 6/1/2015 | 103.24923 | 103.2492254 | 103.2492254 | 103.2492254 | 103.1226445 | 102.460393 | 101.806672 | 101.161317 | 100.524168 |
| 150601A01053 | 6/1/2015 | 5.28 | 2/26/2027 | 6/1/2015 | 134.21935 | 134.21935 | 134.21935 | 134.21935 | 129.0154641 | 121.7862384 | 115.0304481 | 108.714243 | 102.8063766 |
| 150603A00017 | 6/3/2015 | 2.84 | 6/3/2025 | 6/3/2015 | 113.55918 | 113.5591818 | 113.5591818 | 113.5591818 | 111.1737111 | 106.1732196 | 101.4297097 | 96.92864062 | 92.6563682 |
| 150610A00037 | 6/10/2015 | 2.48 | 6/10/2022 | 6/10/2015 | 104.65169 | 104.6516854 | 104.6516854 | 104.6516854 | 104.2156354 | 102.2622258 | 100.3553363 | 98.49357503 | 96.67560134 |
| 150702A00009 | 7/2/2015 | 1.89 | 7/2/2020 | 7/2/2015 | 100.00985 | 100.0098527 | 100.0098527 | 100.0098527 | 100.0090914 | 100.003537 | 99.99798762 | 99.99244324 | 99.98690387 |
| 141024A00010 | 10/24/2014 | 2.81 | 10/24/2024 | 10/24/2014 | 111.75955 | 111.7595462 | 111.7595462 | 111.7595462 | 109.9575135 | 105.5790184 | 101.4010724 | 97.41344526 | 93.60648219 |
| 150115A00002 | 1/15/2015 | 1.72 | 1/15/2021 | 1/15/2015 | 100.88549 | 100.885487 | 100.885487 | 100.885487 | 100.7819095 | 100.2312962 | 99.68669573 | 99.14800986 | 98.61514242 |
| 150202A00018 | 2/2/2015 | 1.89 | 2/2/2021 | 2/2/2015 | 100.98511 | 100.9851093 | 100.9851093 | 100.9851093 | 100.871379 | 100.2721327 | 99.67998262 | 99.09480346 | 98.51647274 |
| 150213A00025 | 2/13/2015 | 2.37 | 2/14/2022 | 2/13/2015 | 103.43063 | 103.4306279 | 103.4306279 | 103.4306279 | 103.1065162 | 101.4840813 | 99.89505915 | 98.33848335 | 96.8134245 |
| 150220A00020 | 2/20/2015 | 2.42 | 2/18/2022 | 2/20/2015 | 103.53625 | 103.5362461 | 103.5362461 | 103.5362461 | 103.2085297 | 101.5734863 | 99.97226602 | 98.40388454 | 96.8673955 |
| 150319A00012 | 3/19/2015 | 3.13 | 3/19/2029 | 3/19/2015 | 124.64255 | 124.6425504 | 124.6425504 | 124.6425504 | 116.1666943 | 107.5369512 | 99.63301615 | 92.38960468 | 85.74763881 |
| 150407A00010 | 4/7/2015 | 2.21 | 4/10/2023 | 4/7/2015 | 105.88078 | 105.8807824 | 105.8807824 | 105.8807824 | 105.136294 | 102.3497703 | 99.65130905 | 97.03758853 | 94.50543576 |
| 150515A00003 | 5/15/2015 | 2.17 | 5/17/2021 | 5/15/2015 | 101.69529 | 101.6952932 | 101.6952932 | 101.6952932 | 101.5145184 | 100.6289943 | 99.75888202 | 98.90378183 | 98.06330751 |
| 150518A00014 | 5/18/2016 | 2.38 | 5/18/2021 | 5/18/2016 | 101.88817 | 101.8881711 | 101.8881711 | 101.8881711 | 101.7064919 | 100.817317 | 99.94365961 | 99.08511595 | 98.24129618 |
| 150518A00026 | 5/18/2015 | 2.08 | 11/18/2021 | 5/18/2015 | 102.75482 | 102.754822 | 102.754822 | 102.754822 | 102.5005253 | 101.1171428 | 99.75906347 | 98.42565319 | 97.11629846 |
| 150519A00013 | 5/19/2015 | 2.98 | 5/19/2025 | 5/19/2015 | 113.15165 | 113.1516518 | 113.1516518 | 113.1516518 | 110.8287625 | 105.9063071 | 101.2341551 | 96.7982882 | 92.58554346 |
| 150601A00470 | 6/1/2015 | 2.98 | 5/31/2024 | 6/1/2015 | 111.17798 | 111.1779821 | 111.1779821 | 111.1779821 | 109.7036543 | 105.7207455 | 101.9058312 | 98.25095033 | 94.74856098 |
| 150601A00512 | 6/1/2015 | 3.79 | 7/16/2029 | 6/1/2015 | 131.02622 | 131.0262182 | 131.0262182 | 131.0262182 | 121.7837303 | 112.6251956 | 104.2564901 | 96.60463827 | 89.60378234 |
| 150601A00514 | 6/1/2015 | 3.07 | 11/15/2024 | 6/1/2015 | 112.87703 | 112.8770349 | 112.8770349 | 112.8770349 | 111.0154824 | 106.5549954 | 102.3011273 | 98.24324199 | 94.3713048 |
| 150601A00522 | 6/1/2015 | 4.52 | 7/25/2030 | 6/1/2015 | 141.72218 | 141.7221822 | 141.7221822 | 140.9518273 | 130.0596988 | 119.5987638 | 110.1183434 | 101.5198514 | 93.71514484 |
| 150601A00615 | 6/1/2015 | 2.67 | 6/30/2022 | 6/1/2015 | 104.72143 | 104.7214297 | 104.7214297 | 104.7214297 | 104.2670486 | 102.265255 | 100.3123056 | 98.40670217 | 96.54700295 |
| 150601A00638 | 6/1/2015 | 2.51 | 9/30/2021 | 6/1/2015 | 102.78388 | 102.7838773 | 102.7838773 | 102.7838773 | 102.5575081 | 101.2964272 | 100.0662674 | 98.86590214 | 97.69425906 |
| 150601A00667 | 6/1/2015 | 3.88 | 1/16/2036 | 6/1/2015 | 154.178 | 154.1780046 | 154.1780046 | 144.64697 | 127.9673105 | 113.1687756 | 100.3883875 | 89.33326492 | 79.75476552 |
| 150601A00768 | 6/1/2015 | 2.34 | 5/13/2022 | 6/1/2015 | 103.79732 | 103.7973179 | 103.7973179 | 103.7973179 | 103.3918182 | 101.5278146 | 99.70652725 | 97.92672757 | 96.1872303 |
| 150626A00039 | 6/26/2015 | 3.23 | 6/26/2025 | 6/26/2015 | 114.68488 | 114.6848799 | 114.6848799 | 114.6848799 | 112.2445799 | 107.1875064 | 102.3922311 | 97.84380935 | 93.52822674 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150813A00008 | 8/13/2015 | 3.03 | 8/13/2025 | 8/13/2015 | 114.03875 | 114.0387494 | 114.0387494 | 114.0387494 | 111.4627238 | 106.3005057 | 101.4115437 | 96.7798997 | 92.390651 |
| 150819A00011 | 8/19/2015 | 2.53 | 8/19/2022 | 8/19/2015 | 104.82514 | 104.8251443 | 104.8251443 | 104.8251443 | 104.322298 | 102.1873477 | 100.1067543 | 98.07875463 | 96.1016571 |
| 150824A00048 | 8/24/2015 | 1.93 | 2/24/2021 | 8/24/2015 | 101.10994 | 101.1099359 | 101.1099359 | 101.1099359 | 100.9836378 | 100.3238321 | 99.67262278 | 99.02984275 | 98.39532918 |
| 150921A00037 | 9/21/2015 | 1.92 | 9/21/2020 | 9/21/2015 | 100.37948 | 100.3794803 | 100.3794803 | 100.3794803 | 100.3432901 | 100.1135133 | 99.8847964 | 99.65713215 | 99.43051325 |
| 130501A00013 | 5/1/2013 | 1.82 | 5/3/2021 | 5/1/2013 | 101.32315 | 101.3231515 | 101.3231515 | 101.3231515 | 101.1529018 | 100.3071574 | 99.47550108 | 98.65758332 | 97.85306594 |
| 130523A00038 | 5/28/2013 | 2.58 | 5/23/2023 | 5/28/2013 | 106.67659 | 106.6765925 | 106.6765925 | 106.6765925 | 105.878497 | 102.9783239 | 100.1729029 | 97.45863564 | 94.83208014 |
| 130531A00021 | 5/31/2013 | 3.22 | 5/30/2028 | 5/31/2013 | 124.78763 | 124.7876344 | 124.7876344 | 124.7876344 | 117.599209 | 109.5636942 | 102.150399 | 95.30764173 | 88.98828856 |
| 130702A00018 | 7/2/2013 | 3.17 | 7/17/2023 | 7/2/2013 | 109.40793 | 109.407933 | 109.407933 | 109.407933 | 108.517118 | 105.4164195 | 102.4215921 | 99.52841819 | 96.73287365 |
| 131029A00011 | 10/29/2013 | 2.47 | 10/30/2020 | 10/29/2013 | 100.79711 | 100.7971078 | 100.7971078 | 100.7971078 | 100.7393458 | 100.4007618 | 100.0644497 | 99.73038683 | 99.39855066 |
| 131106A00003 | 11/6/2013 | 3.57 | 11/15/2023 | 11/6/2013 | 111.15656 | 111.1565641 | 111.1565641 | 111.1565641 | 110.0668605 | 106.6289301 | 103.3181202 | 100.1290645 | 97.05665179 |
| 131107A00008 | 11/7/2013 | 2.52 | 11/9/2020 | 11/7/2013 | 100.88069 | 100.8806859 | 100.8806859 | 100.8806859 | 100.8169044 | 100.4505459 | 100.086857 | 99.72580864 | 99.36737187 |
| 140131A00025 | 1/31/2014 | 3.28 | 1/30/2023 | 1/31/2014 | 107.79532 | 107.7953229 | 107.7953229 | 107.7953229 | 107.1269616 | 104.5185107 | 101.9875001 | 99.53115748 | 97.14682877 |
| 140701A00002 | 7/1/2014 | 2.84 | 7/1/2022 | 7/1/2014 | 105.14975 | 105.1497468 | 105.1497468 | 105.1497468 | 104.693516 | 102.6846921 | 100.7249041 | 98.81264615 | 96.94646953 |
| 140701A00004 | 7/1/2014 | 2.3 | 7/1/2020 | 7/1/2014 | 100.00537 | 100.0053657 | 100.0053657 | 100.0053657 | 100.004986 | 100.0022149 | 99.99944625 | 99.99667992 | 99.99391594 |
| 140908A00064 | 9/8/2014 | 2.57 | 11/30/2021 | 9/8/2014 | 103.29424 | 103.2942397 | 103.2942397 | 103.2942397 | 103.031456 | 101.6149282 | 100.2247994 | 98.86039546 | 97.5210648 |
| 141009A00028 | 10/9/2014 | 3.02 | 10/9/2024 | 10/9/2014 | 111.74397 | 111.7439651 | 111.7439651 | 111.7439651 | 109.9885606 | 105.6719243 | 101.5507531 | 97.6151214 | 93.85566464 |
| 141128A00003 | 11/28/2014 | 2.62 | 11/30/2023 | 11/28/2014 | 108.65371 | 108.6537057 | 108.6537057 | 108.6537057 | 107.5427319 | 104.0911969 | 100.7695156 | 97.57212194 | 94.49371859 |
| 141202A00012 | 12/2/2014 | 2.32 | 12/2/2021 | 12/2/2014 | 103.17728 | 103.1772801 | 103.1772801 | 103.1772801 | 102.9124065 | 101.4877491 | 100.0897957 | 98.71786067 | 97.37128142 |
| 141208A00008 | 12/8/2014 | 3.02 | 12/16/2024 | 12/8/2014 | 112.20499 | 112.2049859 | 112.2049859 | 112.2049859 | 110.2862506 | 105.7853372 | 101.4962043 | 97.40777617 | 93.50961422 |
| 150123A00010 | 1/23/2015 | 2.02 | 1/31/2022 | 1/23/2015 | 103.06103 | 103.0610267 | 103.0610267 | 103.0610267 | 102.7485857 | 101.165635 | 99.61484909 | 98.09531671 | 96.60616056 |
| 150317A00013 | 3/17/2015 | 2.58 | 3/17/2025 | 3/17/2015 | 111.73348 | 111.733475 | 111.733475 | 111.733475 | 109.5730742 | 104.8166949 | 100.2957334 | 95.99724822 | 91.90908355 |
| 150401A00008 | 4/1/2015 | 2.62 | 4/1/2025 | 4/1/2015 | 111.07741 | 111.0774147 | 111.0774147 | 111.0774147 | 108.8990357 | 104.1483584 | 99.63398353 | 95.34285869 | 91.2627275 |
| 150407A00008 | 4/7/2015 | 1.78 | 4/7/2021 | 4/7/2015 | 101.29622 | 101.2962243 | 101.2962243 | 101.2962243 | 101.1440395 | 100.3675366 | 99.60291998 | 98.84991826 | 98.10826826 |
| 150601A00147 | 6/1/2015 | 3.45 | 7/30/2021 | 6/1/2015 | 103.59636 | 103.5963558 | 103.5963558 | 103.5963558 | 103.3807839 | 102.2809537 | 101.2045248 | 100.1507558 | 99.11893659 |
| 150601A00149 | 6/1/2015 | 3.45 | 7/30/2021 | 6/1/2015 | 103.59636 | 103.5963558 | 103.5963558 | 103.5963558 | 103.3807839 | 102.2809537 | 101.2045248 | 100.1507558 | 99.11893659 |
| 150601A00485 | 6/1/2015 | 3.09 | 6/21/2024 | 6/1/2015 | 111.7774 | 111.7773955 | 111.7773955 | 111.7773955 | 110.2553751 | 106.2043865 | 102.3265577 | 98.61356696 | 95.05753702 |
| 150601A00490 | 6/1/2015 | 3.19 | 7/2/2024 | 6/1/2015 | 111.50488 | 111.5048847 | 111.5048847 | 111.5048847 | 109.9704635 | 105.9161496 | 102.0359014 | 98.32131352 | 94.76443233 |
| 150601A00532 | 6/1/2015 | 2.48 | 9/24/2020 | 6/1/2015 | 100.51715 | 100.5171469 | 100.5171469 | 100.5171469 | 100.4794267 | 100.2411565 | 100.0040206 | 99.7680108 | 99.53311914 |
| 140710A00027 | 7/10/2014 | 2.8 | 7/17/2023 | 7/10/2014 | 108.26719 | 108.2671894 | 108.2671894 | 108.2671894 | 107.3804668 | 104.2972891 | 101.3195353 | 98.4430025 | 95.66368129 |
| 140930A00030 | 9/30/2014 | 2.36 | 9/30/2020 | 9/30/2014 | 100.53284 | 100.5328423 | 100.5328423 | 100.5328423 | 100.4921262 | 100.2372913 | 99.98374175 | 99.7314678 | 99.48045994 |
| 141201A00024 | 12/1/2014 | 2.19 | 12/1/2020 | 12/1/2014 | 100.82722 | 100.8272166 | 100.8272166 | 100.8272166 | 100.7503369 | 100.3242047 | 99.90166572 | 99.48267487 | 99.06718763 |
| 150116A00039 | 1/16/2015 | 1.85 | 1/19/2021 | 1/16/2015 | 100.89911 | 100.89911 | 100.89911 | 100.89911 | 100.7934201 | 100.2327522 | 99.67831404 | 99.13000213 | 98.58771524 |
| 150203A00005 | 2/3/2015 | 2.11 | 2/3/2022 | 2/3/2015 | 102.94798 | 102.9479797 | 102.9479797 | 102.9479797 | 102.6340769 | 101.0478869 | 99.49396761 | 97.97140187 | 96.47930696 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150206A00015 | 2/6/2015 | 1.87 | 2/8/2021 | 2/6/2015 | 101.08492 | 101.0849198 | 101.0849198 | 101.0849198 | 100.9675107 | 100.3504364 | 99.74089034 | 99.13873537 | 98.54383756 |
| 150303A00011 | 3/3/2015 | 2.06 | 3/3/2021 | 3/3/2015 | 101.32595 | 101.325951 | 101.325951 | 101.325951 | 101.1952284 | 100.5142812 | 99.84247455 | 99.17962549 | 98.52555572 |
| 150601A00006 | 6/1/2015 | 4.71 | 6/27/2025 | 6/1/2015 | 122.83498 | 122.8349774 | 122.8349774 | 122.8349774 | 120.3053729 | 115.0144962 | 109.9957156 | 105.2335294 | 100.7134008 |
| 150601A00039 | 6/1/2015 | 5.76 | 6/12/2026 | 6/1/2015 | 133.43132 | 133.4313159 | 133.4313159 | 133.4313159 | 129.4643201 | 122.9463446 | 116.8148336 | 111.0446171 | 105.6122965 |
| 150601A00484 | 6/1/2015 | 2.45 | 6/23/2021 | 6/1/2015 | 102.28028 | 102.2802825 | 102.2802825 | 102.2802825 | 102.0766699 | 101.0854684 | 100.1134712 | 99.16012413 | 98.22489429 |
| 150601A00495 | 6/1/2015 | 2.99 | 6/27/2024 | 6/1/2015 | 111.42761 | 111.4276096 | 111.4276096 | 111.4276096 | 109.8948243 | 105.8347131 | 101.9489268 | 98.22905171 | 94.66712553 |
| 150601A00523 | 6/1/2015 | 4.55 | 7/25/2031 | 6/1/2015 | 146.12228 | 146.1222763 | 146.1222763 | 144.0142388 | 131.908498 | 120.4612946 | 110.1766508 | 100.9281137 | 92.60368052 |
| 150601A00609 | 6/1/2015 | 2.52 | 9/30/2021 | 6/1/2015 | 102.79636 | 102.7963607 | 102.7963607 | 102.7963607 | 102.5699756 | 101.3088115 | 100.0785698 | 98.87812405 | 97.70640183 |
| 150601A00613 | 6/1/2015 | 2.63 | 3/31/2022 | 6/1/2015 | 104.08218 | 104.0821837 | 104.0821837 | 104.0821837 | 103.7169272 | 101.9658282 | 100.2526977 | 98.57636588 | 96.93571154 |
| 150601A00616 | 6/1/2015 | 2.72 | 9/30/2022 | 6/1/2015 | 105.42767 | 105.4276684 | 105.4276684 | 105.4276684 | 104.8840426 | 102.6290298 | 100.4337278 | 98.29610893 | 96.21423296 |
| 150601A00668 | 6/1/2015 | 3.89 | 1/16/2037 | 6/1/2015 | 157.73598 | 157.7359754 | 157.7359754 | 146.8279468 | 129.0591017 | 113.458134 | 100.0946451 | 88.62690095 | 78.76745607 |
| 150601A00681 | 6/1/2015 | 2.7 | 2/7/2025 | 6/1/2015 | 110.93129 | 110.9312933 | 110.9312933 | 110.9312933 | 108.8901661 | 104.281684 | 99.8963787 | 95.72224697 | 91.74799679 |
| 150601A00733 | 6/1/2015 | 2.72 | 5/1/2025 | 6/1/2015 | 112.53066 | 112.5306639 | 112.5306639 | 112.5306639 | 110.2442431 | 105.3523598 | 100.7079847 | 96.29733835 | 92.10747625 |
| 150601A00734 | 6/1/2015 | 2.92 | 5/1/2025 | 6/1/2015 | 112.52091 | 112.5209068 | 112.5209068 | 112.5209068 | 110.2519176 | 105.3896962 | 100.7726493 | 96.38716566 | 92.22045691 |
| 150601A00916 | 6/1/2015 | 7.27 | 4/5/2030 | 6/1/2015 | 166.92325 | 166.923248 | 166.923248 | 166.4824361 | 155.0877703 | 143.7352153 | 133.3893278 | 123.9530343 | 115.3391964 |
| 150601A00940 | 6/1/2015 | 6.58 | 2/16/2021 | 6/1/2015 | 103.9874 | 103.9873969 | 103.9873969 | 103.9873969 | 103.8637797 | 103.2154173 | 102.5751928 | 101.9429533 | 101.3185498 |
| 150601A01024 | 6/1/2015 | 5.33 | 2/27/2026 | 6/1/2015 | 128.16893 | 128.1689337 | 128.1689337 | 128.1689337 | 124.7452928 | 118.6955359 | 112.9896771 | 107.6061639 | 102.5249135 |
| 150603A00018 | 6/3/2015 | 2.84 | 6/3/2025 | 6/3/2015 | 113.55918 | 113.5591818 | 113.5591818 | 113.5591818 | 111.1737111 | 106.1732196 | 101.4297097 | 96.92864062 | 92.6563682 |
| 150610A00017 | 6/10/2015 | 2.9 | 6/15/2023 | 6/10/2015 | 107.77681 | 107.7768115 | 107.7768115 | 107.7768115 | 106.9431616 | 103.9656054 | 101.0871934 | 98.30408319 | 95.61260352 |
| 150710A00029 | 7/10/2015 | 2.07 | 7/10/2020 | 7/10/2015 | 100.04861 | 100.0486147 | 100.0486147 | 100.0486147 | 100.0448161 | 100.017104 | 99.9894224 | 99.96177132 | 99.9341507 |
| 150721A00027 | 7/21/2015 | 3.74 | 7/22/2030 | 7/21/2015 | 134.50473 | 134.5047315 | 134.5047315 | 133.7461083 | 123.1131765 | 112.9927526 | 103.8287933 | 95.52472743 | 87.99423778 |
| 150722A00031 | 7/22/2015 | 2.09 | 7/22/2020 | 7/22/2015 | 100.10936 | 100.1093581 | 100.1093581 | 100.1093581 | 100.1010003 | 100.0400392 | 99.97916557 | 99.91837936 | 99.85768035 |
| 150814A00004 | 8/14/2015 | 2.32 | 8/15/2022 | 8/14/2015 | 104.7393 | 104.7392955 | 104.7392955 | 104.7392955 | 104.2385024 | 102.1075078 | 100.0307221 | 98.00639022 | 96.03282832 |
| 150817A00003 | 8/17/2015 | 1.83 | 8/17/2020 | 8/17/2015 | 100.22846 | 100.2284569 | 100.2284569 | 100.2284569 | 100.2090138 | 100.0758195 | 99.9429956 | 99.81054053 | 99.67845268 |
| 150817A00015 | 8/17/2015 | 2.01 | 8/17/2020 | 8/17/2015 | 100.2305 | 100.2304956 | 100.2304956 | 100.2304956 | 100.2110857 | 100.0781172 | 99.94551596 | 99.8132803 | 99.68140874 |
| 150817A00077 | 8/17/2015 | 2.49 | 8/17/2023 | 8/17/2015 | 107.51506 | 107.5150621 | 107.5150621 | 107.5150621 | 106.5831275 | 103.4299959 | 100.3870002 | 97.44964952 | 94.6136653 |
| 150821A00017 | 8/21/2015 | 2.22 | 8/23/2022 | 8/21/2015 | 104.57065 | 104.570652 | 104.570652 | 104.570652 | 104.0626233 | 101.9122815 | 99.81703224 | 97.77507674 | 95.78468969 |
| 150826A00038 | 8/26/2015 | 2.94 | 8/26/2026 | 8/26/2015 | 117.55305 | 117.5530468 | 117.5530468 | 117.5530468 | 113.4415514 | 107.1990283 | 101.3454287 | 95.85441266 | 90.70156206 |
| 150831A00002 | 8/31/2015 | 1.97 | 8/31/2020 | 8/31/2015 | 100.29249 | 100.2924943 | 100.2924943 | 100.2924943 | 100.266799 | 100.0950816 | 99.92394761 | 99.75339402 | 99.58341795 |
| 150909A00018 | 9/9/2015 | 2.28 | 9/9/2021 | 9/9/2015 | 102.42323 | 102.4232339 | 102.4232339 | 102.4232339 | 102.2021911 | 101.0004122 | 99.82680818 | 98.68039699 | 97.56024167 |
| 150923A00012 | 9/23/2015 | 1.86 | 9/23/2020 | 9/23/2015 | 100.37442 | 100.3744243 | 100.3744243 | 100.3744243 | 100.3372381 | 100.1019572 | 99.86778493 | 99.6347136 | 99.40273541 |
| 150925A00023 | 9/25/2015 | 3.03 | 9/25/2025 | 9/25/2015 | 114.35891 | 114.358912 | 114.358912 | 114.358912 | 111.6438374 | 106.3642028 | 101.3694299 | 96.64258152 | 92.16782229 |
| 151001A00048 | 10/1/2015 | 1.74 | 10/1/2020 | 10/1/2015 | 100.37855 | 100.378548 | 100.378548 | 100.378548 | 100.3373099 | 100.0799818 | 99.82396823 | 99.56925916 | 99.31584466 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 151001A00051 | 10/1/2015 | 1.75 | 10/1/2020 | 10/1/2015 | 100.38113 | 100.3811301 | 100.3811301 | 100.3811301 | 100.3398913 | 100.0825588 | 99.82654085 | 99.57182739 | 99.31840852 |
| 151002A00048 | 10/2/2015 | 1.68 | 11/2/2020 | 10/2/2015 | 100.49152 | 100.4915196 | 100.4915196 | 100.4915196 | 100.4321952 | 100.0865688 | 99.74331412 | 99.4024069 | 99.06382312 |
| 151008A00049 | 10/8/2015 | 1.75 | 10/8/2020 | 10/8/2015 | 100.40986 | 100.4098604 | 100.4098604 | 100.4098604 | 100.3646817 | 100.0880217 | 99.81289224 | 99.53928071 | 99.26717451 |
| 151014A00024 | 10/14/2015 | 1.51 | 10/14/2020 | 10/14/2015 | 100.40994 | 100.4099393 | 100.4099393 | 100.4099393 | 100.3613053 | 100.0676202 | 99.77566565 | 99.48542643 | 99.19688729 |
| 151116A00015 | 11/16/2015 | 2.02 | 11/16/2020 | 11/16/2015 | 100.68127 | 100.6812696 | 100.6812696 | 100.6812696 | 100.613457 | 100.2288849 | 99.84725704 | 99.46853971 | 99.09269959 |
| 151223A00065 | 12/23/2015 | 2.15 | 12/23/2021 | 12/23/2015 | 103.05036 | 103.0503629 | 103.0503629 | 103.0503629 | 102.7692236 | 101.289932 | 99.83941906 | 98.4169186 | 97.02169124 |
| 151223A00074 | 12/23/2015 | 3.01 | 12/23/2027 | 12/23/2015 | 121.84406 | 121.8440566 | 121.8440566 | 121.8440566 | 115.4460332 | 107.8943452 | 100.900687 | 94.42074444 | 88.41394273 |
| 151229A00079 | 12/29/2015 | 3 | 12/30/2025 | 12/29/2015 | 114.90787 | 114.9078696 | 114.9078696 | 114.9078696 | 111.8504703 | 106.3173221 | 101.096237 | 96.16795902 | 91.5145181 |
| 160107A00039 | 1/7/2016 | 2.06 | 2/10/2021 | 1/7/2016 | 101.12701 | 101.1270069 | 101.1270069 | 101.1270069 | 101.0086455 | 100.3870301 | 99.77305144 | 99.16656927 | 98.56744687 |
| 160108A00020 | 1/8/2016 | 2.04 | 1/8/2021 | 1/8/2016 | 100.95684 | 100.9568352 | 100.9568352 | 100.9568352 | 100.857388 | 100.3265904 | 99.80137306 | 99.28164815 | 98.7673298 |
| 150121A00004 | 1/21/2015 | 1.97 | 1/24/2022 | 1/21/2015 | 102.94458 | 102.9445772 | 102.9445772 | 102.9445772 | 102.6379657 | 101.0745647 | 99.54271948 | 98.04154518 | 96.57018975 |
| 150123A00012 | 1/23/2015 | 2 | 1/29/2021 | 1/23/2015 | 101.03211 | 101.0321139 | 101.0321139 | 101.0321139 | 100.9206345 | 100.3321732 | 99.75055339 | 99.17565655 | 98.60736666 |
| 150130A00050 | 1/30/2015 | 1.87 | 1/31/2022 | 1/30/2015 | 102.8196 | 102.8196022 | 102.8196022 | 102.8196022 | 102.507542 | 100.9265977 | 99.37778248 | 97.86018593 | 96.37293174 |
| 150220A00022 | 2/20/2015 | 2.8 | 2/20/2025 | 2/20/2015 | 111.66594 | 111.665944 | 111.665944 | 111.665944 | 109.5865376 | 104.9250284 | 100.4905969 | 96.27095199 | 92.25453642 |
| 150422A00017 | 4/22/2015 | 2.16 | 4/22/2022 | 4/22/2015 | 103.41287 | 103.4128664 | 103.4128664 | 103.4128664 | 103.02818 | 101.2236928 | 99.45946656 | 97.73433837 | 96.04718753 |
| 150518A00016 | 5/18/2015 | 1.84 | 11/18/2020 | 5/18/2015 | 100.67439 | 100.6743921 | 100.6743921 | 100.6743921 | 100.6052684 | 100.2145965 | 99.82696514 | 99.44233882 | 99.06068256 |
| 150518A00020 | 5/18/2015 | 1.99 | 5/18/2021 | 5/18/2015 | 101.67298 | 101.6729757 | 101.6729757 | 101.6729757 | 101.4911033 | 100.6011321 | 99.7267255 | 98.86747779 | 98.02299718 |
| 150601A00182 | 6/1/2015 | 3.85 | 7/18/2022 | 6/1/2015 | 107.2467 | 107.2467008 | 107.2467008 | 107.2467008 | 106.7694132 | 104.6934344 | 102.6687529 | 100.6937636 | 98.76692313 |
| 150601A00222 | 6/1/2015 | 2.2 | 9/27/2022 | 6/1/2015 | 104.24593 | 104.2459275 | 104.2459275 | 104.2459275 | 103.7079069 | 101.4745991 | 99.30033116 | 97.18310346 | 95.1210022 |
| 150601A00405 | 6/1/2015 | 4.63 | 1/17/2034 | 6/1/2015 | 157.31385 | 157.3138501 | 157.3138501 | 150.9403698 | 135.8692093 | 122.0860416 | 109.9603151 | 99.27885249 | 89.85714907 |
| 150601A00494 | 6/1/2015 | 2.37 | 6/25/2021 | 6/1/2015 | 102.21428 | 102.2142812 | 102.2142812 | 102.2142812 | 102.009723 | 101.0134231 | 100.0365314 | 99.0784848 | 98.13874204 |
| 150601A00530 | 6/1/2015 | 3.08 | 7/24/2024 | 6/1/2015 | 112.00338 | 112.0033822 | 112.0033822 | 112.0033822 | 110.4088818 | 106.2665562 | 102.3045634 | 98.51407227 | 94.88673387 |
| 150601A00636 | 6/1/2015 | 2.45 | 6/30/2021 | 6/1/2015 | 102.16325 | 102.1632486 | 102.1632486 | 102.1632486 | 101.9567023 | 100.9493744 | 99.96189245 | 98.99367441 | 98.04416094 |
| 150601A00640 | 6/1/2015 | 2.57 | 12/31/2021 | 6/1/2015 | 103.41903 | 103.41903 | 103.41903 | 103.41903 | 103.1319045 | 101.6327976 | 100.1631828 | 98.72226625 | 97.30928219 |
| 150601A00644 | 6/1/2015 | 2.64 | 6/30/2022 | 6/1/2015 | 104.66166 | 104.6616579 | 104.6616579 | 104.6616579 | 104.2073994 | 102.2062208 | 100.2538743 | 98.34886198 | 96.48974257 |
| 150601A00717 | 6/1/2015 | 2.13 | 4/1/2022 | 6/1/2015 | 103.21485 | 103.2148548 | 103.2148548 | 103.2148548 | 102.850175 | 101.1042335 | 99.39622373 | 97.72498016 | 96.08938551 |
| 150601A00737 | 6/1/2015 | 2.68 | 12/31/2024 | 6/1/2015 | 111.49463 | 111.4946311 | 111.4946311 | 111.4946311 | 109.530315 | 104.9811125 | 100.6487284 | 96.52168717 | 92.58918122 |
| 150601A00830 | 6/1/2015 | 6.743 | 7/31/2025 | 6/1/2015 | 133.56293 | 133.5629272 | 133.5629272 | 133.5629272 | 130.8394773 | 125.1901178 | 119.8319372 | 114.7482103 | 109.9232658 |
| 150601A00839 | 6/1/2015 | 6.93 | 10/30/2020 | 6/1/2015 | 102.21946 | 102.2194567 | 102.2194567 | 102.2194567 | 102.1613145 | 101.8203011 | 101.481564 | 101.1450805 | 100.8108282 |
| 150707A00053 | 7/7/2015 | 1.92 | 7/7/2020 | 7/7/2015 | 100.03111 | 100.0311143 | 100.0311143 | 100.0311143 | 100.0284556 | 100.0090579 | 99.9896801 | 99.97032201 | 99.95098364 |
| 150803A00053 | 8/3/2015 | 2.49 | 8/3/2022 | 8/3/2015 | 104.64164 | 104.6416383 | 104.6416383 | 104.6416383 | 104.15435 | 102.0636148 | 100.0253836 | 98.03798247 | 96.09980388 |
| 150817A00016 | 8/17/2015 | 2.24 | 8/17/2021 | 8/17/2015 | 102.24973 | 102.2497293 | 102.2497293 | 102.2497293 | 102.0332265 | 100.8949362 | 99.78196816 | 98.69348438 | 97.62868343 |
| 150824A00071 | 8/24/2015 | 2.86 | 8/25/2025 | 8/24/2015 | 113.24675 | 113.2467511 | 113.2467511 | 113.2467511 | 110.6407857 | 105.4684956 | 100.5717352 | 95.93434191 | 91.54118869 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150827A00005 | 8/27/2015 | 2.07 | 8/27/2021 | 8/27/2015 | 102.29158 | 102.2915793 | 102.2915793 | 102.2915793 | 102.0728973 | 100.9043894 | 99.76252627 | 98.64640487 | 97.55516246 |
| 140908A00065 | 9/8/2014 | 2.63 | 2/28/2022 | 9/8/2014 | 103.94833 | 103.9483268 | 103.9483268 | 103.9483268 | 103.6113513 | 101.9434928 | 100.3105183 | 98.71139733 | 97.14514017 |
| 141009A00029 | 10/9/2014 | 3.5 | 10/9/2029 | 10/9/2014 | 129.63154 | 129.6315419 | 129.6315419 | 129.6227695 | 119.9896747 | 110.7030777 | 102.2369627 | 94.51382266 | 87.46387153 |
| 141017A00020 | 10/17/2014 | 2.28 | 10/18/2021 | 10/17/2014 | 102.84987 | 102.8498735 | 102.8498735 | 102.8498735 | 102.614277 | 101.3088835 | 100.030219 | 98.77747089 | 97.54985986 |
| 150331A00004 | 3/31/2015 | 2.08 | 3/31/2022 | 3/31/2015 | 103.47779 | 103.4777897 | 103.4777897 | 103.4777897 | 103.1124269 | 101.3615066 | 99.64865609 | 97.97269998 | 96.33251184 |
| 150407A00009 | 4/7/2015 | 2.03 | 4/7/2022 | 4/7/2015 | 103.42619 | 103.4261899 | 103.4261899 | 103.4261899 | 103.0543048 | 101.2847184 | 99.5539601 | 97.86085605 | 96.20427959 |
| 150413A00034 | 4/13/2015 | 2.25 | 4/13/2022 | 4/13/2015 | 103.54729 | 103.5472871 | 103.5472871 | 103.5472871 | 103.1707419 | 101.3891331 | 99.64682401 | 97.94264973 | 96.27549038 |
| 150601A00531 | 6/1/2015 | 3.28 | 7/24/2024 | 6/1/2015 | 112.0404 | 112.040402 | 112.040402 | 112.040402 | 110.4555928 | 106.3336032 | 102.3905125 | 98.61758289 | 95.00655197 |
| 150601A00594 | 6/1/2015 | 3.2 | 10/20/2026 | 6/1/2015 | 118.04376 | 118.0437587 | 118.0437587 | 118.0437587 | 113.7187857 | 107.3714639 | 101.4264046 | 95.85595386 | 90.634498 |
| 150601A00632 | 6/1/2015 | 2.33 | 12/31/2020 | 6/1/2015 | 101.04554 | 101.0455449 | 101.0455449 | 101.0455449 | 100.9506291 | 100.4415002 | 99.93748965 | 99.43852059 | 98.94451781 |
| 150601A00634 | 6/1/2015 | 2.39 | 3/31/2021 | 6/1/2015 | 101.59403 | 101.5940265 | 101.5940265 | 101.5940265 | 101.4468296 | 100.6895744 | 99.94359037 | 99.2086274 | 98.48444279 |
| 150601A00646 | 6/1/2015 | 2.68 | 9/30/2022 | 6/1/2015 | 105.33796 | 105.3379559 | 105.3379559 | 105.3379559 | 104.7945439 | 102.5405633 | 100.3462718 | 98.20964263 | 96.12873599 |
| 150601A00648 | 6/1/2015 | 2.71 | 12/30/2022 | 6/1/2015 | 106.00233 | 106.0023329 | 106.0023329 | 106.0023329 | 105.3705621 | 102.8671484 | 100.4365131 | 98.07611929 | 95.78353424 |
| 150601A00689 | 6/1/2015 | 2.81 | 2/28/2025 | 6/1/2015 | 111.57463 | 111.5746317 | 111.5746317 | 111.5746317 | 109.4756309 | 104.7939755 | 100.3413683 | 96.10535907 | 92.07424399 |
| 150601A00696 | 6/1/2015 | 2.83 | 3/13/2025 | 6/1/2015 | 111.75588 | 111.7558789 | 111.7558789 | 111.7558789 | 109.6217889 | 104.9031765 | 100.4168587 | 96.15012704 | 92.09104095 |
| 150610A00009 | 6/10/2015 | 3.03 | 6/10/2025 | 6/10/2015 | 114.56204 | 114.5620418 | 114.5620418 | 114.5620418 | 112.1487368 | 107.1055344 | 102.3221334 | 97.78378742 | 93.47666233 |
| 150720A00011 | 7/20/2015 | 2.69 | 7/20/2023 | 7/20/2015 | 107.94942 | 107.9494172 | 107.9494172 | 107.9494172 | 107.0592791 | 103.9730711 | 100.9926393 | 98.11375688 | 95.33239215 |
| 150803A00049 | 8/3/2015 | 2.01 | 8/3/2020 | 8/3/2015 | 100.16236 | 100.162364 | 100.162364 | 100.162364 | 100.1492403 | 100.0550435 | 99.96102752 | 99.86719187 | 99.77353603 |
| 150817A00005 | 8/17/2015 | 1.83 | 8/17/2020 | 8/17/2015 | 100.22846 | 100.2284569 | 100.2284569 | 100.2284569 | 100.2090138 | 100.0758195 | 99.9429956 | 99.81054053 | 99.67845268 |
| 150817A00007 | 8/17/2015 | 1.83 | 8/17/2020 | 8/17/2015 | 100.22846 | 100.2284569 | 100.2284569 | 100.2284569 | 100.2090138 | 100.0758195 | 99.9429956 | 99.81054053 | 99.67845268 |
| 150817A00073 | 8/17/2015 | 2.06 | 8/17/2021 | 8/17/2015 | 102.22592 | 102.2259231 | 102.2259231 | 102.2259231 | 102.0089258 | 100.8680477 | 99.75259547 | 98.66172633 | 97.59463441 |
| 150821A00016 | 8/21/2015 | 1.74 | 8/21/2020 | 8/21/2015 | 100.2345 | 100.2344957 | 100.2344957 | 100.2344957 | 100.2132561 | 100.0689875 | 99.92514826 | 99.78173646 | 99.63875013 |
| 150824A00040 | 8/24/2015 | 2.36 | 8/24/2022 | 8/24/2015 | 104.48659 | 104.4865921 | 104.4865921 | 104.4865921 | 103.9797725 | 101.8353667 | 99.74581539 | 97.70932968 | 95.72419368 |
| 150824A00049 | 8/24/2015 | 1.99 | 5/24/2021 | 8/24/2015 | 101.56853 | 101.5685304 | 101.5685304 | 101.5685304 | 101.3827753 | 100.4788707 | 99.59103201 | 98.71883386 | 97.8618657 |
| 150827A00004 | 8/27/2015 | 1.82 | 8/27/2020 | 8/27/2015 | 100.27444 | 100.2744384 | 100.2744384 | 100.2744384 | 100.250499 | 100.0895857 | 99.92919494 | 99.76932409 | 99.60997065 |
| 130712A00004 | 7/12/2013 | 2.82 | 7/15/2021 | 7/12/2013 | 102.84968 | 102.8496768 | 102.8496768 | 102.8496768 | 102.6384315 | 101.5839847 | 100.5511803 | 99.53935658 | 98.54787874 |
| 130904A00036 | 9/4/2013 | 3.57 | 9/15/2023 | 9/4/2013 | 111.21443 | 111.2144297 | 111.2144297 | 111.2144297 | 110.2218683 | 106.9317257 | 103.7582866 | 100.6967004 | 97.74235095 |
| 131011A00006 | 10/11/2013 | 3.28 | 10/15/2021 | 10/11/2013 | 103.93147 | 103.9314745 | 103.9314745 | 103.9314745 | 103.6964805 | 102.3937014 | 101.1183766 | 99.86964065 | 98.64666492 |
| 131210A00003 | 12/10/2013 | 2.67 | 12/15/2020 | 12/10/2013 | 101.19067 | 101.1906727 | 101.1906727 | 101.1906727 | 101.1051156 | 100.6387854 | 100.1767649 | 99.71899411 | 99.2654146 |
| 131217A00024 | 12/17/2013 | 4.34 | 1/2/2029 | 12/17/2013 | 134.37182 | 134.3718218 | 134.3718218 | 134.3718218 | 126.0162961 | 117.1708967 | 109.0444573 | 101.5740597 | 94.70261953 |
| 140131A00024 | 1/31/2014 | 2.71 | 2/1/2021 | 1/31/2014 | 101.47221 | 101.472213 | 101.472213 | 101.472213 | 101.3587579 | 100.7605906 | 100.1694672 | 99.58526387 | 99.00785977 |
| 140307A00011 | 3/7/2014 | 3.19 | 3/15/2023 | 3/7/2014 | 108.41524 | 108.4152417 | 108.4152417 | 108.4152417 | 107.6935132 | 104.9413791 | 102.2741141 | 99.68854755 | 97.18165123 |
| 140411A00009 | 4/11/2014 | 3.1 | 4/11/2024 | 4/11/2014 | 111.41093 | 111.4109304 | 111.4109304 | 111.4109304 | 110.0373647 | 106.1819744 | 102.4840052 | 98.9361499 | 95.53148429 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 140416A00014 | 4/16/2014 | 2.66 | 4/30/2021 | 4/16/2014 | 102.01866 | 102.018656 | 102.018656 | 102.018656 | 101.8499962 | 101.0092028 | 100.1822591 | 99.3688252 | 98.56857213 |
| 140929A00098 | 9/29/2014 | 2.62 | 9/29/2021 | 9/29/2014 | 102.96382 | 102.9638183 | 102.9638183 | 102.9638183 | 102.7374564 | 101.4779019 | 100.2491584 | 99.05010559 | 97.87967726 |
| 141009A00027 | 10/9/2014 | 2.69 | 10/11/2022 | 10/9/2014 | 105.52076 | 105.520761 | 105.520761 | 105.520761 | 104.966633 | 102.6815869 | 100.4577119 | 98.29296073 | 96.18537053 |
| 141016A00022 | 10/16/2014 | 2.13 | 10/18/2021 | 10/16/2014 | 102.65212 | 102.6521212 | 102.6521212 | 102.6521212 | 102.416784 | 101.1127599 | 99.83544141 | 98.58401655 | 97.35770659 |
| 141016A00024 | 10/16/2014 | 1.85 | 10/16/2020 | 10/16/2014 | 100.51966 | 100.5196554 | 100.5196554 | 100.5196554 | 100.4698629 | 100.170451 | 99.87283574 | 99.57700098 | 99.28293062 |
| 141028A00012 | 10/28/2014 | 2.73 | 10/28/2022 | 10/28/2014 | 105.72739 | 105.7273904 | 105.7273904 | 105.7273904 | 105.156867 | 102.8246394 | 100.5558896 | 98.34853589 | 96.20057774 |
| 150105A00027 | 1/5/2015 | 2.23 | 1/5/2022 | 1/5/2015 | 103.24666 | 103.2466583 | 103.2466583 | 103.2466583 | 102.9549232 | 101.4396077 | 99.95431598 | 98.4982315 | 97.0705667 |
| 150206A00017 | 2/6/2015 | 2.05 | 2/7/2022 | 2/6/2015 | 103.14659 | 103.1465929 | 103.1465929 | 103.1465929 | 102.8279845 | 101.2237448 | 99.65236173 | 98.11289345 | 96.60443402 |
| 150310A00019 | 3/10/2015 | 2.24 | 3/10/2021 | 3/10/2015 | 101.39242 | 101.3924245 | 101.3924245 | 101.3924245 | 101.2577651 | 100.5586568 | 99.86918608 | 99.18915445 | 98.51836895 |
| 150316A00043 | 3/16/2015 | 2.37 | 3/16/2023 | 3/16/2015 | 106.1748 | 106.174802 | 106.174802 | 106.174802 | 105.4587469 | 102.7347269 | 100.0950022 | 97.5364168 | 95.0559568 |
| 150317A00012 | 3/17/2015 | 2.46 | 3/18/2024 | 3/17/2015 | 108.8061 | 108.8060954 | 108.8060954 | 108.8060954 | 107.4927493 | 103.7496046 | 100.1575185 | 96.70952588 | 93.39902694 |
| 150406A00003 | 4/6/2015 | 1.9 | 4/6/2021 | 4/6/2015 | 101.27695 | 101.2769547 | 101.2769547 | 101.2769547 | 101.1257789 | 100.3535198 | 99.59301914 | 98.84401001 | 98.10623338 |
| 150512A00029 | 5/12/2015 | 3.03 | 5/12/2025 | 5/12/2015 | 113.34525 | 113.345253 | 113.345253 | 113.345253 | 111.039879 | 106.130366 | 101.4695406 | 97.04352624 | 92.83928978 |
| 150515A00057 | 5/15/2015 | 1.77 | 8/14/2020 | 5/15/2015 | 100.20668 | 100.2066802 | 100.2066802 | 100.2066802 | 100.1885873 | 100.06372 | 99.93918049 | 99.81496733 | 99.6910792 |
| 150519A00012 | 5/19/2015 | 2.44 | 5/19/2022 | 5/19/2015 | 104.10479 | 104.1047854 | 104.1047854 | 104.1047854 | 103.6928151 | 101.8097498 | 99.97016677 | 98.17280546 | 96.41645012 |
| 150601A00148 | 6/1/2015 | 3.45 | 7/30/2021 | 6/1/2015 | 103.59636 | 103.5963558 | 103.5963558 | 103.5963558 | 103.3807839 | 102.2809537 | 101.2045248 | 100.1507558 | 99.11893659 |
| 130702A00017 | 7/2/2013 | 2.5 | 7/15/2020 | 7/2/2013 | 100.09931 | 100.0993094 | 100.0993094 | 100.0993094 | 100.0935973 | 100.0519295 | 100.0103143 | 99.96875161 | 99.92724136 |
| 130926A00008 | 9/26/2013 | 2.91 | 9/30/2021 | 9/26/2013 | 103.54097 | 103.5409741 | 103.5409741 | 103.5409741 | 103.3130911 | 102.0438194 | 100.8056858 | 99.59755509 | 98.41834639 |
| 131003A00005 | 10/3/2013 | 2.65 | 10/15/2020 | 10/3/2013 | 100.75257 | 100.7525654 | 100.7525654 | 100.7525654 | 100.703265 | 100.4061612 | 100.1108234 | 99.81723598 | 99.52538317 |
| 131107A00012 | 11/7/2013 | 3.14 | 11/7/2022 | 11/7/2013 | 107.2077 | 107.2077015 | 107.2077015 | 107.2077015 | 106.6216016 | 104.2358568 | 101.9157912 | 99.65923757 | 97.46411288 |
| 140307A00010 | 3/7/2014 | 2.63 | 3/15/2021 | 3/7/2014 | 101.79899 | 101.798988 | 101.798988 | 101.798988 | 101.6608289 | 100.9451545 | 100.2395516 | 99.54380824 | 98.85771865 |
| 140313A00030 | 3/13/2014 | 3.27 | 3/15/2024 | 3/13/2014 | 111.82622 | 111.8262246 | 111.8262246 | 111.8262246 | 110.5039635 | 106.7126588 | 103.073475 | 99.57942492 | 96.2238869 |
| 140423A00035 | 4/23/2014 | 2.71 | 4/23/2021 | 4/23/2014 | 102.01349 | 102.0134894 | 102.0134894 | 102.0134894 | 101.8497661 | 101.0280704 | 100.219615 | 99.42408184 | 98.64116271 |
| 140710A00026 | 7/10/2014 | 2.36 | 7/15/2021 | 7/10/2014 | 102.36445 | 102.3644486 | 102.3644486 | 102.3644486 | 102.1537296 | 101.1020211 | 100.0719157 | 99.06275264 | 98.07389803 |
| 140815A00029 | 8/15/2014 | 2.56 | 10/15/2021 | 8/15/2014 | 102.98929 | 102.9892883 | 102.9892883 | 102.9892883 | 102.7555214 | 101.4592175 | 100.1902573 | 98.94777853 | 97.73095559 |
| 140815A00030 | 8/15/2014 | 2.96 | 10/16/2023 | 8/15/2014 | 108.85829 | 108.8582885 | 108.8582885 | 108.8582885 | 107.8289832 | 104.5091029 | 101.3096476 | 98.22557437 | 95.25208199 |
| 140820A00025 | 8/20/2014 | 2.59 | 8/19/2022 | 8/20/2014 | 105.34794 | 105.347938 | 105.347938 | 105.347938 | 104.8419773 | 102.6936973 | 100.6002217 | 98.55976932 | 96.57063123 |
| 140905A00017 | 9/5/2014 | 2.19 | 9/8/2020 | 9/5/2014 | 100.40306 | 100.4030576 | 100.4030576 | 100.4030576 | 100.3732971 | 100.1790197 | 99.98550473 | 99.79274773 | 99.60074414 |
| 140908A00063 | 9/8/2014 | 2.5 | 8/31/2021 | 9/8/2014 | 102.6339 | 102.6339 | 102.6339 | 102.6339 | 102.4146941 | 101.2360128 | 100.084386 | 98.95889068 | 97.85864508 |
| 141015A00025 | 10/15/2014 | 2.48 | 10/17/2022 | 10/15/2014 | 105.0728 | 105.0728014 | 105.0728014 | 105.0728014 | 104.5141621 | 102.2185719 | 99.98483299 | 97.81089039 | 95.69477202 |
| 141017A00029 | 10/17/2014 | 2.02 | 10/19/2020 | 10/17/2014 | 100.5865 | 100.5865013 | 100.5865013 | 100.5865013 | 100.5349996 | 100.2271826 | 99.9212616 | 99.61721913 | 99.31503779 |
| 150220A00021 | 2/20/2015 | 2.72 | 2/20/2024 | 2/20/2015 | 108.90658 | 108.9065785 | 108.9065785 | 108.9065785 | 107.6517743 | 103.9960712 | 100.4850162 | 97.11207168 | 93.87103527 |
| 150408A00004 | 4/8/2015 | 2.17 | 4/10/2023 | 4/8/2015 | 105.76831 | 105.768309 | 105.768309 | 105.768309 | 105.024175 | 102.2392336 | 99.54231671 | 96.93010393 | 94.39942343 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150601A00360 | 6/1/2015 | 2.82 | 10/2/2020 | 6/1/2015 | 100.65243 | 100.6524256 | 100.6524256 | 100.6524256 | 100.6105531 | 100.3499968 | 100.0907873 | 99.83291419 | 99.57636719 |
| 150601A00404 | 6/1/2015 | 4.29 | 1/17/2029 | 6/1/2015 | 133.57568 | 133.5756811 | 133.5756811 | 133.5756811 | 125.1665916 | 116.3184957 | 108.1932398 | 100.7272853 | 93.86300988 |
| 150601A00513 | 6/1/2015 | 2.87 | 7/15/2022 | 6/1/2015 | 105.22509 | 105.2250934 | 105.2250934 | 105.2250934 | 104.7550115 | 102.7082661 | 100.7120709 | 98.76484826 | 96.86508148 |
| 150601A00548 | 6/1/2015 | 2.55 | 8/13/2021 | 6/1/2015 | 102.53638 | 102.536378 | 102.536378 | 102.536378 | 102.3201827 | 101.1910156 | 100.0867184 | 99.00647592 | 97.94950831 |
| 150601A00608 | 6/1/2015 | 2.45 | 6/30/2021 | 6/1/2015 | 102.16325 | 102.1632486 | 102.1632486 | 102.1632486 | 101.9567023 | 100.9493744 | 99.96189245 | 98.99367441 | 98.04416094 |
| 150601A00611 | 6/1/2015 | 2.58 | 12/31/2021 | 6/1/2015 | 103.43402 | 103.4340228 | 103.4340228 | 103.4340228 | 103.146875 | 101.6476498 | 100.1779187 | 98.73688803 | 97.32379175 |
| 150601A00665 | 6/1/2015 | 3.82 | 1/14/2033 | 6/1/2015 | 143.16943 | 143.1694318 | 143.1694318 | 138.6591232 | 125.2535017 | 112.9359689 | 102.0236971 | 92.34606327 | 83.7540902 |
| 151001A00028 | 10/1/2015 | 1.74 | 10/1/2020 | 10/1/2015 | 100.37855 | 100.378548 | 100.378548 | 100.378548 | 100.3373099 | 100.0799818 | 99.82396823 | 99.56925916 | 99.31584466 |
| 151001A00038 | 10/1/2015 | 1.75 | 10/1/2020 | 10/1/2015 | 100.38113 | 100.3811301 | 100.3811301 | 100.3811301 | 100.3398913 | 100.0825588 | 99.82654085 | 99.57182739 | 99.31840852 |
| 151102A00009 | 11/2/2015 | 1.89 | 11/2/2020 | 11/2/2015 | 100.56439 | 100.5643947 | 100.5643947 | 100.5643947 | 100.505045 | 100.1592615 | 99.81585056 | 99.47478783 | 99.13604934 |
| 151116A00025 | 11/16/2015 | 3.04 | 11/14/2025 | 11/16/2015 | 114.78539 | 114.7853885 | 114.7853885 | 114.7853885 | 111.895642 | 106.4797256 | 101.3627419 | 96.5266413 | 91.95455291 |
| 151119A00030 | 11/19/2015 | 2.1 | 11/19/2020 | 11/19/2015 | 100.72746 | 100.7274557 | 100.7274557 | 100.7274557 | 100.6578225 | 100.2648972 | 99.87504274 | 99.48822303 | 99.10440271 |
| 151211A00004 | 12/11/2015 | 2.48 | 12/15/2023 | 12/11/2015 | 108.26746 | 108.2674635 | 108.2674635 | 108.2674635 | 107.1314039 | 103.6475296 | 100.2962746 | 97.07188679 | 93.96889545 |
| 151211A00007 | 12/11/2015 | 2.73 | 12/15/2025 | 12/11/2015 | 114.41706 | 114.4170589 | 114.4170589 | 114.4170589 | 111.3938997 | 105.8746376 | 100.6658 | 95.74830495 | 91.10433973 |
| 160119A00027 | 1/19/2016 | 3.25 | 1/18/2030 | 1/19/2016 | 128.11547 | 128.1154743 | 128.1154743 | 127.8839141 | 117.9832511 | 108.5473103 | 99.96931897 | 92.16606684 | 85.06283567 |
| 160129A00066 | 1/29/2016 | 3.04 | 1/29/2031 | 1/29/2016 | 131.16591 | 131.1659115 | 131.1659115 | 129.7280417 | 118.5491225 | 108.0963641 | 98.68752935 | 90.21188502 | 82.57100591 |
| 160129A00067 | 1/29/2016 | 2.53 | 1/29/2026 | 1/29/2016 | 113.61266 | 113.6126624 | 113.6126624 | 113.6126624 | 110.4274204 | 104.818887 | 99.5322803 | 94.54742183 | 89.84550242 |
| 160204A00024 | 2/4/2016 | 1.68 | 2/4/2021 | 2/4/2016 | 100.86641 | 100.8664079 | 100.8664079 | 100.8664079 | 100.7516145 | 100.1473084 | 99.5502282 | 98.96024502 | 98.37723288 |
| 160307A00026 | 3/7/2016 | 2.2 | 3/7/2023 | 3/7/2016 | 105.16165 | 105.1616465 | 105.1616465 | 105.1616465 | 104.4620494 | 101.7863396 | 99.19271368 | 96.67812849 | 94.23967625 |
| 160330A00034 | 3/30/2016 | 1.95 | 3/30/2022 | 3/30/2016 | 102.94119 | 102.9411865 | 102.9411865 | 102.9411865 | 102.5788304 | 100.8407418 | 99.14033044 | 97.47643643 | 95.84794804 |
| 160427A00019 | 4/27/2016 | 1.78 | 4/27/2021 | 4/27/2016 | 101.2639 | 101.2639042 | 101.2639042 | 101.2639042 | 101.0979964 | 100.2688147 | 99.45318145 | 98.65076674 | 97.86125138 |
| 160505A00007 | 5/5/2016 | 1.45 | 5/5/2021 | 5/5/2016 | 101.14215 | 101.1421483 | 101.1421483 | 101.1421483 | 100.9702374 | 100.1181677 | 99.28041573 | 98.45662296 | 97.64644285 |
| 160523A00013 | 5/23/2016 | 2.11 | 5/23/2023 | 5/23/2016 | 105.30276 | 105.3027625 | 105.3027625 | 105.3027625 | 104.5092381 | 101.6291182 | 98.84325778 | 96.14807448 | 93.54014185 |
| 160606A00005 | 6/6/2016 | 2.92 | 6/6/2031 | 6/6/2016 | 128.50832 | 128.5083193 | 128.5083193 | 126.6229705 | 115.3575766 | 104.8862463 | 95.49053173 | 87.05327829 | 79.47067725 |
| 160610A00009 | 6/10/2016 | 1.89 | 6/12/2023 | 6/10/2016 | 104.74745 | 104.7474529 | 104.7474529 | 104.7474529 | 103.928426 | 101.003963 | 98.17698808 | 95.44372741 | 92.80057459 |
| 160620A00026 | 6/20/2016 | 1.39 | 6/21/2021 | 6/20/2016 | 101.25654 | 101.2565435 | 101.2565435 | 101.2565435 | 101.0549872 | 100.0746904 | 99.11331622 | 98.17032113 | 97.24518211 |
| 160624A00010 | 6/24/2016 | 1.66 | 6/24/2022 | 6/24/2016 | 102.73485 | 102.7348485 | 102.7348485 | 102.7348485 | 102.2904302 | 100.3252034 | 98.40764472 | 96.53630283 | 94.70978072 |
| 160628A00068 | 6/28/2016 | 1.28 | 6/28/2021 | 6/28/2016 | 101.17036 | 101.170359 | 101.170359 | 101.170359 | 100.9653653 | 99.96654262 | 98.98736428 | 98.02725562 | 97.08566427 |
| 160701A00026 | 7/1/2016 | 1.43 | 7/1/2021 | 7/1/2016 | 101.17122 | 101.1712195 | 101.1712195 | 101.1712195 | 100.9654794 | 99.96083007 | 98.97606117 | 98.0105876 | 97.06384703 |
| 160706A00018 | 7/6/2016 | 1.29 | 7/6/2020 | 7/6/2016 | 100.01617 | 100.0161722 | 100.0161722 | 100.0161722 | 100.0138944 | 99.99727616 | 99.98067439 | 99.96408909 | 99.94752022 |
| 160706A00019 | 7/6/2016 | 1.41 | 7/6/2021 | 7/6/2016 | 101.16669 | 101.1666875 | 101.1666875 | 101.1666875 | 100.9598142 | 99.94165213 | 98.94391609 | 97.96599645 | 97.00730763 |
| 150601A00547 | 6/1/2015 | 2.29 | 8/13/2020 | 6/1/2015 | 100.24092 | 100.2409152 | 100.2409152 | 100.2409152 | 100.223296 | 100.1013667 | 99.97974843 | 99.85843993 | 99.73743999 |
| 150601A00604 | 6/1/2015 | 2.33 | 12/31/2020 | 6/1/2015 | 101.04554 | 101.0455449 | 101.0455449 | 101.0455449 | 100.9506291 | 100.4415002 | 99.93748965 | 99.43852059 | 98.94451781 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150601A00642 | 6/1/2015 | 2.6 | 3/31/2022 | 6/1/2015 | 104.02984 | 104.0298438 | 104.0298438 | 104.0298438 | 103.6646788 | 101.9140552 | 100.2013912 | 98.52551748 | 96.88531293 |
| 150601A00650 | 6/1/2015 | 2.75 | 3/31/2023 | 6/1/2015 | 106.70688 | 106.7068834 | 106.7068834 | 106.7068834 | 105.975364 | 103.2156499 | 100.54208 | 97.95139556 | 95.44048641 |
| 150601A00664 | 6/1/2015 | 3.78 | 1/16/2032 | 6/1/2015 | 139.35305 | 139.3530462 | 139.3530462 | 136.5149711 | 124.2203322 | 112.7757327 | 102.5486456 | 93.40110077 | 85.21149832 |
| 150601A00688 | 6/1/2015 | 2.61 | 2/21/2025 | 6/1/2015 | 111.53263 | 111.5326279 | 111.5326279 | 111.5326279 | 109.4362762 | 104.7475524 | 100.2881584 | 96.04563909 | 92.00828503 |
| 150601A00825 | 6/1/2015 | 2.87 | 5/29/2025 | 6/1/2015 | 112.47488 | 112.4748772 | 112.4748772 | 112.4748772 | 110.1302516 | 105.1990854 | 100.5201767 | 96.07932004 | 91.86318105 |
| 150601A00833 | 6/1/2015 | 7.14 | 8/28/2020 | 6/1/2015 | 101.13175 | 101.131751 | 101.131751 | 101.131751 | 101.1072069 | 100.9424541 | 100.7782428 | 100.6145703 | 100.451434 |
| 150610A00008 | 6/10/2015 | 3.58 | 6/10/2030 | 6/10/2015 | 134.7131 | 134.7130985 | 134.7130985 | 134.0708573 | 123.4106731 | 113.2746634 | 104.0913541 | 95.76518696 | 88.21067868 |
| 150720A00012 | 7/20/2015 | 2.99 | 7/21/2025 | 7/20/2015 | 114.68707 | 114.6870658 | 114.6870658 | 114.6870658 | 112.1546417 | 107.0023231 | 102.1207045 | 97.49411495 | 93.10787324 |
| 150727A00013 | 7/27/2015 | 3.04 | 7/28/2025 | 7/27/2015 | 113.97043 | 113.9704302 | 113.9704302 | 113.9704302 | 111.443673 | 106.3233034 | 101.4721023 | 96.8744774 | 92.51582247 |
| 150804A00002 | 8/4/2015 | 2.84 | 8/5/2024 | 8/4/2015 | 110.5143 | 110.5143016 | 110.5143016 | 110.5143016 | 108.9121346 | 104.7900925 | 100.8484491 | 97.078328 | 93.47133945 |
| 150817A00012 | 8/17/2015 | 2.01 | 8/17/2020 | 8/17/2015 | 100.2305 | 100.2304956 | 100.2304956 | 100.2304956 | 100.2110857 | 100.0781172 | 99.94551596 | 99.8132803 | 99.68140874 |
| 150825A00011 | 8/25/2015 | 1.9 | 8/25/2020 | 8/25/2015 | 100.25331 | 100.2533071 | 100.2533071 | 100.2533071 | 100.230307 | 100.0752052 | 99.92059047 | 99.76646056 | 99.61281318 |
| 150902A00002 | 9/2/2015 | 2.25 | 9/2/2021 | 9/2/2015 | 102.3488 | 102.3487959 | 102.3487959 | 102.3487959 | 102.1294679 | 100.9471462 | 99.79210318 | 98.66340336 | 97.56015347 |
| 150910A00039 | 9/10/2015 | 1.81 | 9/10/2020 | 9/10/2015 | 100.33857 | 100.3385659 | 100.3385659 | 100.3385659 | 100.3078195 | 100.1081062 | 99.90920019 | 99.71109652 | 99.51379026 |
| 150921A00031 | 9/21/2015 | 1.92 | 9/21/2020 | 9/21/2015 | 100.37948 | 100.3794803 | 100.3794803 | 100.3794803 | 100.3432901 | 100.1135133 | 99.8847964 | 99.65713215 | 99.43051325 |
| 150923A00041 | 9/23/2015 | 2.23 | 9/23/2022 | 9/23/2015 | 104.77368 | 104.7736756 | 104.7736756 | 104.7736756 | 104.2360055 | 101.9994098 | 99.821827 | 97.70126326 | 95.63580989 |
| 150930A00083 | 9/30/2015 | 2.06 | 9/30/2021 | 9/30/2015 | 102.26073 | 102.2607309 | 102.2607309 | 102.2607309 | 102.0350273 | 100.7774476 | 99.55072911 | 98.35374713 | 97.18543091 |
| 151015A00063 | 10/15/2015 | 1.68 | 10/15/2020 | 10/15/2015 | 100.4178 | 100.4177965 | 100.4177965 | 100.4177965 | 100.3686848 | 100.0727445 | 99.77855814 | 99.48611001 | 99.19538469 |
| 151020A00008 | 10/20/2015 | 1.76 | 10/20/2020 | 10/20/2015 | 100.46526 | 100.465264 | 100.465264 | 100.465264 | 100.4133249 | 100.1035025 | 99.79559895 | 99.48959635 | 99.1854771 |
| 151120A00017 | 11/20/2015 | 2.11 | 11/20/2020 | 11/20/2015 | 100.73653 | 100.7365307 | 100.7365307 | 100.7365307 | 100.6662932 | 100.2705985 | 99.87801705 | 99.48851199 | 99.10204725 |
| 160114A00007 | 1/14/2016 | 1.92 | 1/14/2021 | 1/14/2016 | 100.92081 | 100.9208088 | 100.9208088 | 100.9208088 | 100.8179508 | 100.2708312 | 99.72964472 | 99.19429519 | 98.6646884 |
| 160119A00030 | 1/19/2016 | 3.44 | 1/18/2033 | 1/19/2016 | 139.14982 | 139.1498168 | 139.1498168 | 134.6414542 | 121.4216747 | 109.3207142 | 98.60841743 | 89.11558492 | 80.69453514 |
| 150701A00053 | 7/1/2015 | 1.92 | 7/1/2020 | 7/1/2015 | 100.00501 | 100.0050097 | 100.0050097 | 100.0050097 | 100.004629 | 100.0018517 | 99.99907679 | 99.99630432 | 99.99353428 |
| 150715A00009 | 7/15/2015 | 2.67 | 7/15/2022 | 7/15/2015 | 104.89759 | 104.8975919 | 104.8975919 | 104.8975919 | 104.4282048 | 102.3849233 | 100.3921233 | 98.44822904 | 96.55172576 |
| 150722A00013 | 7/22/2015 | 2.09 | 7/22/2020 | 7/22/2015 | 100.10936 | 100.1093581 | 100.1093581 | 100.1093581 | 100.1010003 | 100.0400392 | 99.97916557 | 99.91837936 | 99.85768035 |
| 150729A00012 | 7/29/2015 | 2.06 | 7/29/2020 | 7/29/2015 | 100.14252 | 100.142518 | 100.142518 | 100.142518 | 100.1315008 | 100.051151 | 99.97093214 | 99.89084405 | 99.81088639 |
| 150819A00012 | 8/19/2015 | 3.04 | 8/19/2025 | 8/19/2015 | 114.13522 | 114.1352171 | 114.1352171 | 114.1352171 | 111.539911 | 106.3602366 | 101.4554294 | 96.80941698 | 92.40715353 |
| 150824A00047 | 8/24/2015 | 1.88 | 11/24/2020 | 8/24/2015 | 100.66321 | 100.6632054 | 100.6632054 | 100.6632054 | 100.5905948 | 100.1840934 | 99.78087453 | 99.38089848 | 98.98412622 |
| 150824A00072 | 8/24/2015 | 2.14 | 8/24/2022 | 8/24/2015 | 104.40227 | 104.4022696 | 104.4022696 | 104.4022696 | 103.893669 | 101.7425388 | 99.64657896 | 97.60398605 | 95.61303056 |
| 150824A00097 | 8/24/2015 | 2.67 | 8/25/2025 | 8/24/2015 | 113.29709 | 113.2970906 | 113.2970906 | 113.2970906 | 110.6696451 | 105.4634878 | 100.5356174 | 95.86966325 | 91.45030652 |
| 150904A00015 | 9/4/2015 | 1.79 | 10/15/2020 | 9/4/2015 | 100.49701 | 100.4970123 | 100.4970123 | 100.4970123 | 100.4477894 | 100.1511793 | 99.856333 | 99.56323479 | 99.27186902 |
| 150914A00053 | 9/14/2015 | 1.77 | 9/14/2020 | 9/14/2015 | 100.34889 | 100.3488926 | 100.3488926 | 100.3488926 | 100.316145 | 100.1053627 | 99.89547987 | 99.68649053 | 99.47838893 |
| 150923A00049 | 9/23/2015 | 1.97 | 9/23/2021 | 9/23/2015 | 102.31274 | 102.3127366 | 102.3127366 | 102.3127366 | 102.0880382 | 100.845977 | 99.63400202 | 98.45103051 | 97.29603125 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150924A00030 | 9/24/2015 | 1.67 | 9/24/2020 | 9/24/2015 | 100.37082 | 100.3708218 | 100.3708218 | 100.3708218 | 100.333073 | 100.094637 | 99.85734091 | 99.6211767 | 99.38613622 |
| 151008A00019 | 10/8/2015 | 1.58 | 10/15/2020 | 10/8/2015 | 100.43461 | 100.4346098 | 100.4346098 | 100.4346098 | 100.3854059 | 100.0889163 | 99.79418999 | 99.50121125 | 99.2099644 |
| 151013A00030 | 10/13/2015 | 1.89 | 4/14/2021 | 10/13/2015 | 101.30533 | 101.3053265 | 101.3053265 | 101.3053265 | 101.1485004 | 100.3543525 | 99.57264074 | 98.80307459 | 98.04537252 |
| 151106A00011 | 11/6/2015 | 3.1 | 1/15/2026 | 11/6/2015 | 115.58343 | 115.5834311 | 115.5834311 | 115.5834311 | 112.4586396 | 106.86795 | 101.5943444 | 96.61814106 | 91.92098116 |
| 151120A00016 | 11/20/2015 | 2.11 | 11/20/2020 | 11/20/2015 | 100.73653 | 100.7365307 | 100.7365307 | 100.7365307 | 100.6662932 | 100.2705985 | 99.87801705 | 99.48851199 | 99.10204725 |
| 151223A00072 | 12/23/2015 | 2.81 | 12/23/2025 | 12/23/2015 | 114.91816 | 114.9181619 | 114.9181619 | 114.9181619 | 111.8604023 | 106.307964 | 101.0687773 | 96.12352032 | 91.45416079 |
| 151223A00077 | 12/23/2015 | 3.57 | 12/24/2035 | 12/23/2015 | 153.71353 | 153.7135255 | 153.7135255 | 144.0473085 | 127.1961603 | 112.2888007 | 99.42343909 | 88.30322815 | 78.67618299 |
| 160104A00014 | 1/4/2016 | 2.49 | 1/4/2023 | 1/4/2016 | 105.57439 | 105.5743923 | 105.5743923 | 105.5743923 | 104.9387595 | 102.4276809 | 99.98993123 | 97.62294175 | 95.32425011 |
| 160119A00005 | 1/19/2016 | 1.89 | 1/19/2021 | 1/19/2016 | 100.92165 | 100.9216469 | 100.9216469 | 100.9216469 | 100.8159442 | 100.2552035 | 99.70069307 | 99.15230947 | 98.60995145 |
| 160119A00025 | 1/19/2016 | 3.05 | 1/19/2028 | 1/19/2016 | 120.78665 | 120.786646 | 120.786646 | 120.786646 | 114.3585165 | 106.8426598 | 99.88536702 | 93.44202275 | 87.4717986 |
| 160119A00026 | 1/19/2016 | 3.14 | 1/19/2029 | 1/19/2016 | 124.27915 | 124.2791498 | 124.2791498 | 124.2791498 | 116.095903 | 107.6164304 | 99.83849948 | 92.70001445 | 86.14468733 |
| 160120A00010 | 1/20/2016 | 1.99 | 10/20/2021 | 1/20/2016 | 102.25402 | 102.2540234 | 102.2540234 | 102.2540234 | 102.018881 | 100.716609 | 99.44039285 | 98.18946331 | 96.96308169 |
| 160218A00029 | 2/18/2016 | 1.81 | 4/15/2021 | 2/18/2016 | 101.23774 | 101.237742 | 101.237742 | 101.237742 | 101.0802891 | 100.2838253 | 99.49987631 | 98.72814877 | 97.96835847 |
| 160203A00001 | 2/3/2016 | 1.44 | 8/3/2020 | 2/3/2016 | 100.125 | 100.1249985 | 100.1249985 | 100.1249985 | 100.111856 | 100.0175256 | 99.92337817 | 99.82941315 | 99.73563001 |
| 160216A00028 | 2/16/2016 | 1.69 | 2/16/2022 | 2/16/2016 | 102.59914 | 102.5991394 | 102.5991394 | 102.5991394 | 102.2736676 | 100.6476625 | 99.0553149 | 97.49564607 | 95.96771524 |
| 160328A00014 | 3/28/2016 | 2.49 | 3/27/2026 | 3/28/2016 | 113.75917 | 113.7591741 | 113.7591741 | 113.7591741 | 110.345598 | 104.5863024 | 99.16574447 | 94.06217502 | 89.25535923 |
| 160330A00054 | 3/30/2016 | 2.9 | 3/31/2031 | 3/30/2016 | 130.13714 | 130.1371367 | 130.1371367 | 128.4739312 | 117.1657786 | 106.6372733 | 97.17698951 | 88.66994736 | 81.01413034 |
| 160415A00014 | 4/15/2016 | 2.05 | 4/14/2023 | 4/15/2016 | 104.93882 | 104.938822 | 104.938822 | 104.938822 | 104.195848 | 101.4232156 | 98.73837626 | 96.13803208 | 93.61903105 |
| 160419A00005 | 4/19/2016 | 1.66 | 4/19/2021 | 4/19/2016 | 101.13288 | 101.1328757 | 101.1328757 | 101.1328757 | 100.9726977 | 100.1658305 | 99.37181471 | 98.59034512 | 97.82112609 |
| 160422A00026 | 4/22/2016 | 2.62 | 4/22/2026 | 4/22/2016 | 113.5179 | 113.5178975 | 113.5178975 | 113.5178975 | 110.0315421 | 104.2537433 | 98.8184692 | 93.70363704 | 88.88869787 |
| 160516A00027 | 5/16/2016 | 2.01 | 5/16/2023 | 5/16/2016 | 104.97731 | 104.9773124 | 104.9773124 | 104.9773124 | 104.1939961 | 101.33668 | 98.57235731 | 95.89751446 | 93.30878984 |
| 160524A00027 | 5/24/2016 | 3.06 | 5/27/2031 | 5/24/2016 | 129.96099 | 129.9609942 | 129.9609942 | 128.112816 | 116.815379 | 106.2908703 | 96.84280306 | 88.3543265 | 80.72186144 |
| 160606A00004 | 6/6/2016 | 2.43 | 6/8/2026 | 6/6/2016 | 112.68071 | 112.6807072 | 112.6807072 | 112.6807072 | 109.0084734 | 103.1419908 | 97.6308264 | 92.45162852 | 87.58269495 |
| 160614A00066 | 6/14/2016 | 1.35 | 6/14/2021 | 6/14/2016 | 101.19313 | 101.1931294 | 101.1931294 | 101.1931294 | 100.9951643 | 100.0342009 | 99.09143454 | 98.16635219 | 97.25845997 |
| 160616A00027 | 6/16/2016 | 2.27 | 6/16/2026 | 6/16/2016 | 111.7684 | 111.7683978 | 111.7683978 | 111.7683978 | 108.0730225 | 102.2134925 | 96.7105837 | 91.54075933 | 86.6821519 |
| 160624A00065 | 6/28/2016 | 2.08 | 6/28/2021 | 6/28/2016 | 101.81607 | 101.8160704 | 101.8160704 | 101.8160704 | 101.6108944 | 100.6108783 | 99.63047339 | 98.66910718 | 97.72622941 |
| 160630A00021 | 6/30/2016 | 1.59 | 6/30/2023 | 6/30/2016 | 104.46732 | 104.4673176 | 104.4673176 | 104.4673176 | 103.6197775 | 100.6390647 | 97.75963965 | 94.97750535 | 92.28884612 |
| 160706A00029 | 7/6/2016 | 2.49 | 7/8/2030 | 7/6/2016 | 121.86369 | 121.8636889 | 121.8636889 | 121.1527661 | 110.9943434 | 101.4861414 | 92.88893613 | 85.11020384 | 78.06726959 |
| 160706A00067 | 7/6/2016 | 1.29 | 7/6/2020 | 7/6/2016 | 100.01617 | 100.0161722 | 100.0161722 | 100.0161722 | 100.0138944 | 99.99727616 | 99.98067439 | 99.96408909 | 99.94752022 |
| 160707A00001 | 7/7/2016 | 1.34 | 7/7/2020 | 7/7/2016 | 100.01984 | 100.0198396 | 100.0198396 | 100.0198396 | 100.0171821 | 99.9977938 | 99.97842532 | 99.95907657 | 99.93974753 |
| 160714A00020 | 9/6/2016 | 2.28 | 9/4/2026 | 9/6/2016 | 112.25955 | 112.2595531 | 112.2595531 | 112.2595531 | 108.2139706 | 102.151397 | 96.46917849 | 91.14144862 | 86.14423402 |
| 160718A00010 | 7/18/2016 | 1.65 | 7/18/2023 | 7/18/2016 | 104.72588 | 104.7258792 | 104.7258792 | 104.7258792 | 103.8503574 | 100.8189762 | 97.89178695 | 95.06462432 | 92.33351503 |
| 160727A00016 | 7/27/2016 | 1.78 | 7/27/2022 | 7/27/2016 | 103.11098 | 103.1109806 | 103.1109806 | 103.1109806 | 102.6337158 | 100.5777411 | 98.57317128 | 96.61837919 | 94.71180143 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160728A00021 | 7/28/2016 | 1.23 | 7/28/2020 | 7/28/2016 | 100.08661 | 100.0866095 | 100.0866095 | 100.0866095 | 100.0759589 | 99.99828219 | 99.92073158 | 99.84330672 | 99.76600732 |
| 160729A00040 | 7/29/2016 | 1.19 | 7/29/2020 | 7/29/2016 | 100.08648 | 100.0864808 | 100.0864808 | 100.0864808 | 100.0754502 | 99.99500372 | 99.91469003 | 99.83450879 | 99.75445969 |
| 160829A00039 | 8/29/2016 | 1.61 | 3/26/2021 | 8/29/2016 | 101.01037 | 101.0103703 | 101.0103703 | 101.0103703 | 100.8665629 | 100.1253655 | 99.39502141 | 98.67529381 | 97.96595249 |
| 160830A00031 | 8/30/2016 | 1.65 | 8/31/2021 | 8/30/2016 | 101.62747 | 101.6274674 | 101.6274674 | 101.6274674 | 101.409469 | 100.2370906 | 99.0916661 | 97.97227497 | 96.87803813 |
| 150915A00048 | 9/15/2015 | 1.79 | 9/15/2020 | 9/15/2015 | 100.35775 | 100.357751 | 100.357751 | 100.357751 | 100.3245016 | 100.110943 | 99.89830712 | 99.686588 | 99.47577961 |
| 150930A00011 | 9/30/2015 | 2.06 | 9/30/2021 | 9/30/2015 | 102.26073 | 102.2607309 | 102.2607309 | 102.2607309 | 102.0350273 | 100.7774476 | 99.55072911 | 98.35374713 | 97.18543091 |
| 151005A00012 | 10/5/2015 | 1.53 | 10/5/2020 | 10/5/2015 | 100.3805 | 100.3804995 | 100.3804995 | 100.3804995 | 100.3369377 | 100.0681269 | 99.80076108 | 99.53482858 | 99.27031784 |
| 151013A00099 | 10/15/2015 | 2.44 | 10/15/2020 | 10/15/2015 | 100.69016 | 100.6901629 | 100.6901629 | 100.6901629 | 100.6408814 | 100.3438981 | 100.0486804 | 99.75521244 | 99.46347856 |
| 151211A00055 | 12/11/2015 | 2.62 | 12/11/2024 | 12/11/2015 | 111.26117 | 111.261167 | 111.261167 | 111.261167 | 109.3473187 | 104.8541943 | 100.5728394 | 96.49217375 | 92.60175429 |
| 151223A00070 | 12/23/2015 | 2.57 | 12/26/2023 | 12/23/2015 | 108.6572 | 108.6572007 | 108.6572007 | 108.6572007 | 107.4998301 | 103.9806244 | 100.5964102 | 97.3412851 | 94.20963771 |
| 160119A00029 | 1/19/2016 | 3.39 | 1/20/2032 | 1/19/2016 | 135.52083 | 135.5208301 | 135.5208301 | 132.6751515 | 120.5366789 | 109.2841634 | 99.23560263 | 90.25409301 | 82.21901413 |
| 160122A00022 | 1/22/2016 | 1.9 | 1/22/2021 | 1/22/2016 | 100.941 | 100.9409961 | 100.9409961 | 100.9409961 | 100.8335686 | 100.2645569 | 99.70195705 | 99.14566097 | 98.59556312 |
| 160211A00035 | 2/11/2016 | 2.25 | 2/11/2025 | 2/11/2016 | 109.04646 | 109.0464643 | 109.0464643 | 109.0464643 | 107.0086098 | 102.4318131 | 98.07770697 | 93.93427346 | 89.99020884 |
| 160212A00043 | 2/12/2016 | 1.8 | 2/14/2022 | 2/12/2016 | 102.49245 | 102.492453 | 102.492453 | 102.492453 | 102.1698567 | 100.5553825 | 98.97417818 | 97.42528121 | 95.90776605 |
| 160216A00002 | 2/16/2016 | 1.88 | 2/16/2022 | 2/16/2016 | 102.6328 | 102.6328022 | 102.6328022 | 102.6328022 | 102.3082673 | 100.6867694 | 99.09875899 | 97.54326422 | 96.01935077 |
| 160328A00013 | 3/28/2016 | 2.17 | 3/28/2024 | 3/28/2016 | 107.77224 | 107.7722373 | 107.7722373 | 107.7722373 | 106.444645 | 102.6949081 | 99.09763284 | 95.64573987 | 92.33252407 |
| 160330A00042 | 3/30/2016 | 1.53 | 3/30/2021 | 3/30/2016 | 101.06988 | 101.0698773 | 101.0698773 | 101.0698773 | 100.9233944 | 100.1696757 | 99.42716681 | 98.69561926 | 97.97479186 |
| 160401A00055 | 4/1/2016 | 1.66 | 4/1/2021 | 4/1/2016 | 101.07109 | 101.071093 | 101.071093 | 101.071093 | 100.9235939 | 100.1658115 | 99.41936037 | 98.68398793 | 97.95944915 |
| 160407A00007 | 4/7/2016 | 1.6 | 3/25/2021 | 4/7/2016 | 100.99917 | 100.999168 | 100.999168 | 100.999168 | 100.8559574 | 100.1175281 | 99.38987368 | 98.67275981 | 97.96595872 |
| 160420A00005 | 4/20/2016 | 1.48 | 4/20/2021 | 4/20/2016 | 101.11123 | 101.1112311 | 101.1112311 | 101.1112311 | 100.950034 | 100.1389154 | 99.34078307 | 98.55532685 | 97.7822466 |
| 160422A00021 | 4/22/2016 | 2.17 | 4/21/2023 | 4/22/2016 | 105.31275 | 105.3127508 | 105.3127508 | 105.3127508 | 104.5601181 | 101.7634426 | 99.05581377 | 96.4338996 | 93.89451325 |
| 160502A00002 | 5/2/2016 | 1.68 | 5/3/2021 | 5/2/2016 | 101.20391 | 101.2039109 | 101.2039109 | 101.2039109 | 101.0337643 | 100.1885729 | 99.35746314 | 98.54008559 | 97.73610218 |
| 160509A00020 | 5/9/2016 | 2.01 | 5/9/2023 | 5/9/2016 | 104.94417 | 104.944167 | 104.944167 | 104.944167 | 104.1700881 | 101.3313181 | 98.58438653 | 95.92584457 | 93.35239147 |
| 160526A00010 | 5/26/2016 | 1.58 | 5/26/2021 | 5/26/2016 | 101.33896 | 101.3389558 | 101.3389558 | 101.3389558 | 101.1515549 | 100.2414662 | 99.34768222 | 98.46976803 | 97.60730395 |
| 160606A00040 | 6/8/2016 | 1.98 | 12/15/2020 | 6/8/2016 | 100.80457 | 100.8045654 | 100.8045654 | 100.8045654 | 100.7193327 | 100.2548316 | 99.79461599 | 99.33862663 | 98.88680539 |
| 160609A00010 | 6/9/2016 | 1.58 | 6/9/2022 | 6/9/2016 | 102.8748 | 102.8747994 | 102.8747994 | 102.8747994 | 102.4432648 | 100.5104109 | 98.62360377 | 96.78146708 | 94.98267501 |
| 160615A00043 | 6/15/2016 | 1.59 | 6/15/2021 | 6/15/2016 | 101.28518 | 101.2851844 | 101.2851844 | 101.2851844 | 101.08706 | 100.1249473 | 99.18107007 | 98.25491361 | 97.34598251 |
| 160615A00045 | 6/15/2016 | 1.59 | 6/15/2021 | 6/15/2016 | 101.28518 | 101.2851844 | 101.2851844 | 101.2851844 | 101.08706 | 100.1249473 | 99.18107007 | 98.25491361 | 97.34598251 |
| 150601A00603 | 6/1/2015 | 2.26 | 9/30/2020 | 6/1/2015 | 100.49783 | 100.4978349 | 100.4978349 | 100.4978349 | 100.4571278 | 100.2023523 | 99.94886178 | 99.69664669 | 99.44569746 |
| 150601A00666 | 6/1/2015 | 3.88 | 1/16/2035 | 6/1/2015 | 150.7716 | 150.7716041 | 150.7716041 | 142.7818667 | 127.1757143 | 113.1748148 | 100.9815853 | 90.34773352 | 81.06049808 |
| 150601A00694 | 6/1/2015 | 3.56 | 3/6/2030 | 6/1/2015 | 130.9902 | 130.9902031 | 130.9902031 | 130.6380474 | 120.5088325 | 110.8399708 | 102.0577094 | 94.07521702 | 86.81461689 |
| 150601A00930 | 6/1/2015 | 7.1 | 8/30/2030 | 6/1/2015 | 167.94047 | 167.9404699 | 167.9404699 | 167.0431799 | 155.1204271 | 143.3575648 | 132.6750386 | 122.9650909 | 114.1313523 |
| 150623A00025 | 6/23/2015 | 2.65 | 6/30/2022 | 6/23/2015 | 104.75863 | 104.7586304 | 104.7586304 | 104.7586304 | 104.3041789 | 102.3020297 | 100.3487316 | 98.44278608 | 96.58275124 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150708A00003 | 7/8/2015 | 1.95 | 7/8/2020 | 7/8/2015 | 100.03623 | 100.0362258 | 100.0362258 | 100.0362258 | 100.0331871 | 100.0110184 | 99.98887298 | 99.96675071 | 99.94465159 |
| 150722A00014 | 7/22/2015 | 2.32 | 7/22/2021 | 7/22/2015 | 102.19384 | 102.1938428 | 102.1938428 | 102.1938428 | 101.9822006 | 100.9148737 | 99.86982843 | 98.84637225 | 97.84384128 |
| 150817A00097 | 8/17/2015 | 3.1 | 8/17/2026 | 8/17/2015 | 117.21369 | 117.2136939 | 117.2136939 | 117.2136939 | 113.1848528 | 107.0176641 | 101.2321259 | 95.80254636 | 90.70509656 |
| 150817A00099 | 8/17/2015 | 3.19 | 8/17/2027 | 8/17/2015 | 120.63249 | 120.6324881 | 120.6324881 | 120.6324881 | 114.9009563 | 107.7504882 | 101.1045266 | 94.92467177 | 89.17564287 |
| 150821A00018 | 8/21/2015 | 2.6 | 8/21/2024 | 8/21/2015 | 110.4031 | 110.4030999 | 110.4030999 | 110.4030999 | 108.7559633 | 104.5735396 | 100.5762983 | 96.75502454 | 93.10101521 |
| 150824A00039 | 8/24/2015 | 1.93 | 1/25/2021 | 8/24/2015 | 100.97211 | 100.9721131 | 100.9721131 | 100.9721131 | 100.8629539 | 100.2856333 | 99.71490747 | 99.15066406 | 98.59279302 |
| 150824A00093 | 8/24/2015 | 1.87 | 8/24/2021 | 8/24/2015 | 102.04216 | 102.0421609 | 102.0421609 | 102.0421609 | 101.8242567 | 100.6654574 | 99.53291334 | 98.42574027 | 97.34309322 |
| 150824A00095 | 8/24/2015 | 2.34 | 8/24/2023 | 8/24/2015 | 107.0828 | 107.0828038 | 107.0828038 | 107.0828038 | 106.1415188 | 102.9768676 | 99.92332666 | 96.97634186 | 94.1315756 |
| 150825A00007 | 8/25/2015 | 2.46 | 8/25/2022 | 8/25/2015 | 104.70991 | 104.7099073 | 104.7099073 | 104.7099073 | 104.2016399 | 102.0521402 | 99.9576602 | 97.91640387 | 95.92664862 |
| 150826A00039 | 8/26/2015 | 3.22 | 8/27/2029 | 8/26/2015 | 128.65898 | 128.658982 | 128.658982 | 128.658982 | 119.1490866 | 109.9162126 | 101.4946927 | 93.80839017 | 86.78870188 |
| 150904A00021 | 9/4/2015 | 2.52 | 9/5/2023 | 9/4/2015 | 107.73645 | 107.7364493 | 107.7364493 | 107.7364493 | 106.7736007 | 103.566668 | 100.4731644 | 97.48840156 | 94.60791625 |
| 150914A00018 | 9/14/2015 | 3.05 | 9/15/2025 | 9/14/2015 | 114.38944 | 114.3894382 | 114.3894382 | 114.3894382 | 111.7064409 | 106.4517044 | 101.4791596 | 96.77210664 | 92.31492607 |
| 151002A00075 | 10/2/2015 | 2.04 | 10/3/2022 | 10/2/2015 | 104.39735 | 104.3973484 | 104.3973484 | 104.3973484 | 103.8512092 | 101.5919573 | 99.39292985 | 97.25208456 | 95.16746606 |
| 151008A00024 | 10/8/2015 | 1.58 | 10/8/2020 | 10/8/2015 | 100.40616 | 100.4061611 | 100.4061611 | 100.4061611 | 100.3609041 | 100.0837715 | 99.80817789 | 99.53411042 | 99.26155632 |
| 151022A00011 | 10/22/2015 | 1.57 | 10/22/2020 | 10/22/2015 | 100.45989 | 100.4598927 | 100.4598927 | 100.4598927 | 100.4067432 | 100.0909091 | 99.77706995 | 99.4652069 | 99.15530118 |
| 151211A00002 | 12/11/2015 | 2.05 | 12/15/2021 | 12/11/2015 | 102.85733 | 102.8573333 | 102.8573333 | 102.8573333 | 102.5827372 | 101.1260925 | 99.6973969 | 98.29591651 | 96.92094243 |
| 151223A00066 | 12/23/2015 | 2.34 | 12/23/2022 | 12/23/2015 | 105.58243 | 105.5824349 | 105.5824349 | 105.5824349 | 104.9559883 | 102.4666784 | 100.0494395 | 97.70177102 | 95.42127496 |
| 151229A00081 | 12/29/2015 | 3.76 | 12/31/2035 | 12/29/2015 | 153.03915 | 153.0391509 | 153.0391509 | 143.588829 | 127.0184416 | 112.319413 | 99.62289427 | 88.6387259 | 79.12049831 |
| 160107A00042 | 1/7/2016 | 2.05 | 1/7/2021 | 1/7/2016 | 100.95715 | 100.9571497 | 100.9571497 | 100.9571497 | 100.8582743 | 100.3302161 | 99.80767967 | 99.29057861 | 98.77882839 |
| 160707A00034 | 7/7/2016 | 1.25 | 7/7/2021 | 7/7/2016 | 101.16841 | 101.1684123 | 101.1684123 | 101.1684123 | 100.9608157 | 99.93757112 | 98.9349474 | 97.95232638 | 96.98911443 |
| 160714A00029 | 8/10/2016 | 2.27 | 8/10/2026 | 8/10/2016 | 112.06337 | 112.0633653 | 112.0633653 | 112.0633653 | 108.1290525 | 102.1310189 | 96.5058465 | 91.22840731 | 86.27539474 |
| 160714A00054 | 7/14/2016 | 2.03 | 7/15/2024 | 7/14/2016 | 107.06685 | 107.0668507 | 107.0668507 | 107.0668507 | 105.5293939 | 101.5304148 | 97.70534355 | 94.04569902 | 90.54345991 |
| 160726A00005 | 7/26/2016 | 2.28 | 7/27/2026 | 7/26/2016 | 112.04923 | 112.0492272 | 112.0492272 | 112.0492272 | 108.1757109 | 102.2108907 | 96.61492818 | 91.36309119 | 86.43243077 |
| 160804A00014 | 8/4/2016 | 1.99 | 8/5/2024 | 8/4/2016 | 107.00179 | 107.001793 | 107.001793 | 107.001793 | 105.4198728 | 101.3691941 | 97.49663819 | 93.79341995 | 90.25123686 |
| 160815A00074 | 8/15/2016 | 1.57 | 8/13/2021 | 8/15/2016 | 101.46801 | 101.4680083 | 101.4680083 | 101.4680083 | 101.2530516 | 100.1303329 | 99.03238499 | 97.95839531 | 96.90758644 |
| 160830A00035 | 8/30/2016 | 2.06 | 8/30/2024 | 8/30/2016 | 107.41242 | 107.4124228 | 107.4124228 | 107.4124228 | 105.7736674 | 101.6515406 | 97.71298033 | 93.94881377 | 90.35037972 |
| 160922A00049 | 9/22/2016 | 1.79 | 9/22/2022 | 9/22/2016 | 103.36723 | 103.3672342 | 103.3672342 | 103.3672342 | 102.8359364 | 100.6261953 | 98.47464175 | 96.37931518 | 94.33833822 |
| 160923A00033 | 9/23/2016 | 2.04 | 9/23/2026 | 9/23/2016 | 112.10232 | 112.1023155 | 112.1023155 | 112.1023155 | 107.9351979 | 101.7878691 | 96.03071022 | 90.63690548 | 85.58162265 |
| 160926A00046 | 9/26/2016 | 1.66 | 9/26/2023 | 9/26/2016 | 105.05547 | 105.0554682 | 105.0554682 | 105.0554682 | 104.0691085 | 100.8490831 | 97.74508477 | 94.75223151 | 91.86588081 |
| 161004A00040 | 10/4/2016 | 1.45 | 10/4/2021 | 10/4/2016 | 101.70386 | 101.7038624 | 101.7038624 | 101.7038624 | 101.476413 | 100.2104181 | 98.9743846 | 97.76725344 | 96.58801493 |
| 161027A00013 | 10/28/2016 | 1.66 | 3/15/2021 | 10/28/2016 | 101.00474 | 101.0047443 | 101.0047443 | 101.0047443 | 100.8674151 | 100.1561962 | 99.45498078 | 98.76355865 | 98.08172566 |
| 161031A00007 | 10/31/2016 | 1.91 | 10/31/2022 | 10/31/2016 | 103.81166 | 103.8116606 | 103.8116606 | 103.8116606 | 103.2431209 | 100.925814 | 98.67189868 | 96.47930206 | 94.34603072 |
| 161123A00008 | 11/23/2016 | 2.2 | 11/23/2021 | 11/23/2016 | 102.72578 | 102.7257814 | 102.7257814 | 102.7257814 | 102.4686863 | 101.0754649 | 99.70789983 | 98.36534368 | 97.04717042 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 161214A00023 | 12/14/2016 | 3.3 | 12/15/2031 | 12/14/2016 | 136.72979 | 136.7297851 | 136.7297851 | 133.9798579 | 121.7136197 | 110.348655 | 100.1954817 | 91.11689778 | 82.99194458 |
| 170111A00016 | 1/11/2017 | 3.51 | 1/11/2033 | 1/11/2017 | 139.96408 | 139.9640839 | 139.9640839 | 135.484595 | 122.2421351 | 110.1079011 | 99.36285367 | 89.8380394 | 81.38595746 |
| 170119A00006 | 1/19/2017 | 2.85 | 1/21/2025 | 1/19/2017 | 111.69209 | 111.6920853 | 111.6920853 | 111.6920853 | 109.6881742 | 105.1073078 | 100.7461849 | 96.59309229 | 92.6370041 |
| 170203A00013 | 2/3/2017 | 3.67 | 2/1/2036 | 2/3/2017 | 151.94267 | 151.9426658 | 151.9426658 | 142.3900762 | 125.81574 | 111.1396064 | 98.47516306 | 87.52934455 | 78.05349551 |
| 170203A00031 | 2/3/2017 | 2.09 | 2/3/2022 | 2/3/2017 | 103.19 | 103.1900019 | 103.1900019 | 103.1900019 | 102.8747714 | 101.281926 | 99.72155469 | 98.19273268 | 96.69457013 |
| 170215A00009 | 2/15/2017 | 2.21 | 2/16/2021 | 2/15/2017 | 101.2528 | 101.2528041 | 101.2528041 | 101.2528041 | 101.1309542 | 100.4924829 | 99.86206054 | 99.23953552 | 98.62476004 |
| 170215A00036 | 2/15/2017 | 2.61 | 7/30/2021 | 2/15/2017 | 102.55692 | 102.5569156 | 102.5569156 | 102.5569156 | 102.3430281 | 101.2518593 | 100.1839045 | 99.138429 | 98.11472865 |
| 170215A00037 | 2/15/2017 | 2.71 | 5/23/2022 | 2/15/2017 | 104.64616 | 104.6461602 | 104.6461602 | 104.6461602 | 104.2292752 | 102.3304057 | 100.4755864 | 98.66353391 | 96.89301061 |
| 170224A00011 | 2/24/2017 | 1.83 | 2/24/2021 | 2/24/2017 | 101.1357 | 101.1356998 | 101.1356998 | 101.1356998 | 101.0091538 | 100.3480783 | 99.69563169 | 99.0516458 | 98.4159569 |
| 170228A00018 | 2/28/2017 | 2.25 | 2/28/2022 | 2/28/2017 | 103.30817 | 103.30817 | 103.30817 | 103.30817 | 102.9722533 | 101.3099416 | 99.6824136 | 98.08864163 | 96.52763857 |
| 150601A00731 | 6/1/2015 | 2.4 | 4/29/2022 | 6/1/2015 | 103.82874 | 103.8287434 | 103.8287434 | 103.8287434 | 103.4367159 | 101.6092781 | 99.82295893 | 98.07659318 | 96.36905612 |
| 150630A00008 | 6/30/2015 | 2.41 | 6/30/2022 | 6/30/2015 | 104.6407 | 104.6407026 | 104.6407026 | 104.6407026 | 104.1848061 | 102.176979 | 100.218269 | 98.30716595 | 96.44221683 |
| 150710A00039 | 7/10/2015 | 2.07 | 7/10/2020 | 7/10/2015 | 100.04861 | 100.0486147 | 100.0486147 | 100.0486147 | 100.0448161 | 100.017104 | 99.9894224 | 99.96177132 | 99.9341507 |
| 150710A00040 | 7/10/2015 | 2.63 | 7/11/2022 | 7/10/2015 | 104.78924 | 104.7892433 | 104.7892433 | 104.7892433 | 104.3239878 | 102.2924165 | 100.3108742 | 98.37780638 | 96.49171816 |
| 150717A00009 | 7/17/2015 | 2.18 | 7/19/2021 | 7/17/2015 | 102.19748 | 102.1974764 | 102.1974764 | 102.1974764 | 101.9860155 | 100.9243414 | 99.88470448 | 98.86642397 | 97.86884675 |
| 150807A00003 | 8/7/2015 | 1.9 | 8/7/2020 | 8/7/2015 | 100.18825 | 100.1882527 | 100.1882527 | 100.1882527 | 100.1733055 | 100.0678367 | 99.96260146 | 99.85759894 | 99.75282834 |
| 150819A00013 | 8/19/2015 | 3.51 | 8/19/2030 | 8/19/2015 | 132.4359 | 132.4359049 | 132.4359049 | 131.5881519 | 120.9506961 | 110.8684126 | 101.7478309 | 93.49109973 | 86.01083181 |
| 150825A00016 | 8/25/2015 | 1.9 | 8/25/2020 | 8/25/2015 | 100.25331 | 100.2533071 | 100.2533071 | 100.2533071 | 100.230307 | 100.0752052 | 99.92059047 | 99.76646056 | 99.61281318 |
| 150828A00010 | 8/28/2015 | 1.96 | 8/28/2020 | 8/28/2015 | 100.27671 | 100.2767056 | 100.2767056 | 100.2767056 | 100.2523576 | 100.088945 | 99.92606703 | 99.76372101 | 99.60190437 |
| 150901A00002 | 9/1/2015 | 1.98 | 9/1/2020 | 9/1/2015 | 100.29893 | 100.2989346 | 100.2989346 | 100.2989346 | 100.2727389 | 100.0982522 | 99.92436995 | 99.7510892 | 99.57840683 |
| 150914A00052 | 9/14/2015 | 1.77 | 9/14/2020 | 9/14/2015 | 100.34889 | 100.3488926 | 100.3488926 | 100.3488926 | 100.316145 | 100.1053627 | 99.89547987 | 99.68649053 | 99.47838893 |
| 150921A00051 | 9/21/2015 | 1.92 | 9/21/2020 | 9/21/2015 | 100.37948 | 100.3794803 | 100.3794803 | 100.3794803 | 100.3432901 | 100.1135133 | 99.8847964 | 99.65713215 | 99.43051325 |
| 150930A00052 | 9/30/2015 | 1.79 | 9/30/2020 | 9/30/2015 | 100.38724 | 100.3872433 | 100.3872433 | 100.3872433 | 100.3465647 | 100.0919766 | 99.83867279 | 99.58664364 | 99.33587962 |
| 151005A00053 | 10/5/2015 | 1.99 | 10/5/2021 | 10/5/2015 | 102.19582 | 102.1958203 | 102.1958203 | 102.1958203 | 101.9678275 | 100.69944 | 99.46070193 | 98.25057616 | 97.06807357 |
| 151109A00020 | 11/9/2015 | 2.79 | 11/9/2023 | 11/9/2015 | 108.4578 | 108.4578002 | 108.4578002 | 108.4578002 | 107.3896824 | 104.013387 | 100.7617951 | 97.62965846 | 94.61197708 |
| 151123A00014 | 11/23/2015 | 2.13 | 11/23/2020 | 11/23/2015 | 100.76004 | 100.7600359 | 100.7600359 | 100.7600359 | 100.6879865 | 100.2839933 | 99.88324113 | 99.48569112 | 99.09130496 |
| 151208A00019 | 12/8/2015 | 2.1 | 12/8/2020 | 12/8/2015 | 100.82463 | 100.8246337 | 100.8246337 | 100.8246337 | 100.7435723 | 100.2982239 | 99.85681155 | 99.41928312 | 98.98558747 |
| 151217A00014 | 12/17/2015 | 3 | 12/17/2025 | 12/17/2015 | 114.81202 | 114.8120172 | 114.8120172 | 114.8120172 | 111.8031828 | 106.3043471 | 101.1138 | 96.21263338 | 91.58319385 |
| 151229A00080 | 12/29/2015 | 3.49 | 12/30/2030 | 12/29/2015 | 133.37313 | 133.373127 | 133.373127 | 132.0724752 | 121.0386131 | 110.6412013 | 101.2667201 | 92.80792783 | 85.16937944 |
| 160113A00005 | 1/13/2016 | 1.95 | 1/13/2021 | 1/13/2016 | 100.93256 | 100.9325586 | 100.9325586 | 100.9325586 | 100.8302657 | 100.2858472 | 99.74730278 | 99.21453772 | 98.68745919 |
| 160113A00006 | 1/13/2016 | 1.95 | 1/11/2021 | 1/13/2016 | 100.92308 | 100.9230838 | 100.9230838 | 100.9230838 | 100.8219394 | 100.2830279 | 99.74987213 | 99.22238006 | 98.7004617 |
| 160129A00068 | 1/29/2016 | 1.97 | 1/30/2023 | 1/29/2016 | 104.84776 | 104.8477624 | 104.8477624 | 104.8477624 | 104.1849376 | 101.6049967 | 99.10211961 | 96.67353677 | 94.31659701 |
| 160211A00033 | 2/11/2016 | 1.67 | 2/11/2022 | 2/11/2016 | 102.26721 | 102.2672115 | 102.2672115 | 102.2672115 | 101.9475442 | 100.3437179 | 98.77283454 | 97.2339454 | 95.72613813 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160307A00027 | 3/7/2016 | 2.71 | 3/6/2026 | 3/7/2016 | 113.73515 | 113.7351489 | 113.7351489 | 113.7351489 | 110.4358638 | 104.7665907 | 99.42666279 | 94.3951775 | 89.65267028 |
| 160122A00029 | 1/22/2016 | 2.48 | 1/22/2025 | 1/22/2016 | 110.9052 | 110.9051983 | 110.9051983 | 110.9051983 | 108.8897069 | 104.2973702 | 99.9264015 | 95.76495626 | 91.80188731 |
| 160328A00012 | 3/28/2016 | 1.85 | 3/28/2022 | 3/28/2016 | 103.05557 | 103.0555716 | 103.0555716 | 103.0555716 | 102.6936654 | 100.9545116 | 99.25305433 | 97.58813396 | 95.958639 |
| 160328A00045 | 3/28/2016 | 2.49 | 3/27/2026 | 3/28/2016 | 113.75917 | 113.7591741 | 113.7591741 | 113.7591741 | 110.345598 | 104.5863024 | 99.16574447 | 94.06217502 | 89.25535923 |
| 160329A00004 | 3/29/2016 | 1.78 | 3/25/2021 | 3/29/2016 | 101.13303 | 101.1330263 | 101.1330263 | 101.1330263 | 100.9897155 | 100.2507361 | 99.5225373 | 98.80488464 | 98.09755022 |
| 160329A00006 | 3/29/2016 | 2.12 | 3/29/2023 | 3/29/2016 | 105.05566 | 105.0556615 | 105.0556615 | 105.0556615 | 104.3315287 | 101.6000034 | 98.95377908 | 96.38963128 | 93.90448228 |
| 160420A00002 | 4/20/2016 | 1.96 | 11/16/2022 | 4/20/2016 | 104.00294 | 104.002945 | 104.002945 | 104.002945 | 103.4188574 | 101.0562599 | 98.75940082 | 96.52609242 | 94.35423261 |
| 160606A00043 | 6/8/2016 | 2.23 | 12/15/2021 | 6/8/2016 | 102.88732 | 102.8873229 | 102.8873229 | 102.8873229 | 102.6134134 | 101.1603803 | 99.73516864 | 98.33704926 | 96.96531776 |
| 160610A00036 | 6/10/2016 | 1.42 | 6/10/2021 | 6/10/2016 | 101.24652 | 101.2465236 | 101.2465236 | 101.2465236 | 101.0505218 | 100.1001422 | 99.16755417 | 98.25226183 | 97.35378756 |
| 160614A00009 | 6/14/2016 | 1.55 | 6/14/2021 | 6/14/2016 | 101.2428 | 101.2428044 | 101.2428044 | 101.2428044 | 101.0452249 | 100.0860411 | 99.14498761 | 98.22155412 | 97.31524936 |
| 160617A00045 | 6/17/2016 | 1.55 | 6/17/2021 | 6/17/2016 | 101.24376 | 101.2437623 | 101.2437623 | 101.2437623 | 101.0447034 | 100.0775305 | 99.12879026 | 98.19795966 | 97.28453529 |
| 160620A00015 | 6/20/2016 | 1.71 | 6/20/2023 | 6/20/2016 | 104.78764 | 104.7876407 | 104.7876407 | 104.7876407 | 103.9531733 | 100.9942895 | 98.13501902 | 95.37146735 | 92.6999149 |
| 160627A00070 | 6/27/2016 | 1.52 | 9/27/2021 | 6/27/2016 | 101.56621 | 101.5662103 | 101.5662103 | 101.5662103 | 101.342076 | 100.0972137 | 98.88274489 | 97.69756797 | 96.54063379 |
| 160628A00054 | 6/28/2016 | 1.28 | 6/28/2021 | 6/28/2016 | 101.17036 | 101.170359 | 101.170359 | 101.170359 | 100.9653653 | 99.96654262 | 98.98736428 | 98.02725562 | 97.08566427 |
| 160630A00011 | 6/30/2016 | 1.8 | 6/30/2023 | 6/30/2016 | 104.55375 | 104.5537498 | 104.5537498 | 104.5537498 | 103.7100249 | 100.7407866 | 97.8721598 | 95.10018431 | 92.42107897 |
| 160630A00034 | 6/30/2016 | 1.51 | 6/28/2021 | 6/30/2016 | 101.24218 | 101.2421844 | 101.2421844 | 101.2421844 | 101.0376022 | 100.0406833 | 99.06333293 | 98.10497986 | 97.1650747 |
| 160705A00009 | 7/5/2016 | 1.21 | 7/6/2021 | 7/5/2016 | 101.12407 | 101.1240723 | 101.1240723 | 101.1240723 | 100.9167509 | 99.89646618 | 98.89668881 | 97.91680571 | 96.95622802 |
| 160705A00104 | 7/5/2016 | 2.1 | 7/6/2026 | 7/5/2016 | 110.84771 | 110.8477056 | 110.8477056 | 110.8477056 | 107.078587 | 101.198064 | 95.67895196 | 90.49718051 | 85.63040179 |
| 160706A00026 | 7/6/2016 | 2.19 | 7/6/2027 | 7/6/2016 | 113.26373 | 113.2637312 | 113.2637312 | 113.2637312 | 107.8438226 | 101.0388085 | 94.71227371 | 88.82808444 | 83.35301221 |
| 160706A00027 | 7/6/2016 | 2.29 | 7/6/2028 | 7/6/2016 | 115.93902 | 115.9390196 | 115.9390196 | 115.9390196 | 108.8593049 | 101.1388633 | 94.02814104 | 87.47573303 | 81.43481729 |
| 160706A00030 | 7/6/2016 | 2.59 | 7/7/2031 | 7/6/2016 | 125.09978 | 125.0997789 | 125.0997789 | 123.0976716 | 111.8902337 | 101.5308062 | 92.24822798 | 83.92408028 | 76.45355123 |
| 160708A00002 | 7/8/2016 | 1.46 | 7/8/2021 | 7/8/2016 | 101.22472 | 101.2247214 | 101.2247214 | 101.2247214 | 101.0173314 | 99.99343459 | 98.99018767 | 98.00697098 | 97.04318946 |
| 160712A00016 | 7/12/2016 | 1.32 | 7/12/2021 | 7/12/2016 | 101.25739 | 101.2573936 | 101.2573936 | 101.2573936 | 101.0485603 | 100.0112443 | 98.99510864 | 97.9995099 | 97.02383057 |
| 160727A00018 | 7/27/2016 | 2.27 | 7/27/2026 | 7/27/2016 | 111.9882 | 111.9882002 | 111.9882002 | 111.9882002 | 108.1154283 | 102.1524025 | 96.55815541 | 91.30795896 | 86.37886818 |
| 160808A00012 | 8/8/2016 | 1.6 | 8/9/2021 | 8/8/2016 | 101.48732 | 101.4873164 | 101.4873164 | 101.4873164 | 101.2729719 | 100.1609603 | 99.0732456 | 98.00903854 | 96.96758354 |
| 160301A00009 | 3/1/2016 | 2.06 | 3/1/2023 | 3/1/2016 | 104.75286 | 104.7528609 | 104.7528609 | 104.7528609 | 104.0612671 | 101.4067272 | 98.83326668 | 96.33789513 | 93.91775444 |
| 160329A00045 | 3/29/2016 | 2.12 | 3/29/2024 | 3/29/2016 | 107.58835 | 107.5883529 | 107.5883529 | 107.5883529 | 106.2597427 | 102.5108706 | 98.91455544 | 95.46370808 | 92.15161447 |
| 160408A00015 | 4/8/2016 | 2.01 | 4/7/2023 | 4/8/2016 | 104.79323 | 104.7932296 | 104.7932296 | 104.7932296 | 104.0591813 | 101.3073435 | 98.64213073 | 96.0602758 | 93.55865843 |
| 160415A00010 | 4/15/2016 | 1.66 | 4/15/2021 | 4/15/2016 | 101.11747 | 101.1174671 | 101.1174671 | 101.1174671 | 100.9601119 | 100.1641773 | 99.38075172 | 98.60954181 | 97.8502635 |
| 160502A00018 | 5/2/2016 | 2.09 | 5/2/2023 | 5/2/2016 | 105.14024 | 105.1402393 | 105.1402393 | 105.1402393 | 104.3746582 | 101.551161 | 98.81843329 | 96.17308736 | 93.61188038 |
| 160516A00019 | 5/16/2016 | 1.44 | 5/17/2021 | 5/16/2016 | 101.17764 | 101.1776432 | 101.1776432 | 101.1776432 | 100.9969522 | 100.1121023 | 99.24269316 | 98.38832332 | 97.54860509 |
| 160523A00047 | 5/23/2016 | 1.77 | 5/18/2021 | 5/23/2016 | 101.34327 | 101.343269 | 101.343269 | 101.343269 | 101.1620868 | 100.2755531 | 99.40450455 | 98.54853807 | 97.70726443 |
| 160606A00003 | 6/6/2016 | 1.66 | 6/7/2021 | 6/6/2016 | 101.32234 | 101.3223413 | 101.3223413 | 101.3223413 | 101.1282036 | 100.1875711 | 99.26436238 | 98.35809697 | 97.46831175 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160628A00040 | 6/28/2016 | 1.56 | 6/28/2023 | 6/28/2016 | 104.36827 | 104.3682657 | 104.3682657 | 104.3682657 | 103.5239076 | 100.5500133 | 97.67700934 | 94.90092154 | 92.21795543 |
| 160630A00044 | 6/30/2016 | 1.42 | 10/30/2020 | 6/30/2016 | 100.3917 | 100.3916976 | 100.3916976 | 100.3916976 | 100.3341701 | 99.99700443 | 99.66209572 | 99.32942145 | 98.99895941 |
| 160701A00007 | 7/1/2016 | 1.42 | 7/1/2021 | 7/1/2016 | 101.16107 | 101.1610683 | 101.1610683 | 101.1610683 | 100.9553387 | 99.95074458 | 98.9660301 | 98.00061021 | 97.05392258 |
| 160701A00027 | 7/1/2016 | 1.93 | 7/1/2024 | 7/1/2016 | 106.59639 | 106.596391 | 106.596391 | 106.596391 | 105.0912668 | 101.137054 | 97.353653 | 93.73279347 | 90.26664996 |
| 160701A00028 | 7/1/2016 | 2.16 | 7/1/2026 | 7/1/2016 | 111.18508 | 111.1850843 | 111.1850843 | 111.1850843 | 107.4333431 | 101.5546964 | 96.03649263 | 90.85477521 | 85.98729858 |
| 160707A00005 | 7/7/2016 | 1.34 | 7/7/2020 | 7/7/2016 | 100.01984 | 100.0198396 | 100.0198396 | 100.0198396 | 100.0171821 | 99.9977938 | 99.97842532 | 99.95907657 | 99.93974753 |
| 160714A00053 | 7/14/2016 | 1.58 | 7/15/2021 | 7/14/2016 | 101.37424 | 101.3742376 | 101.3742376 | 101.3742376 | 101.1650927 | 100.1214079 | 99.09915712 | 98.09768535 | 97.11636406 |
| 160801A00001 | 8/1/2016 | 1.97 | 8/1/2024 | 8/1/2016 | 106.90072 | 106.9007156 | 106.9007156 | 106.9007156 | 105.3280876 | 101.2895538 | 97.42825713 | 93.7354745 | 90.20296077 |
| 160809A00002 | 8/9/2016 | 1.6 | 8/9/2021 | 8/9/2016 | 101.48732 | 101.4873164 | 101.4873164 | 101.4873164 | 101.2729719 | 100.1609603 | 99.0732456 | 98.00903854 | 96.96758354 |
| 160830A00034 | 8/30/2016 | 1.9 | 8/30/2023 | 8/30/2016 | 105.12671 | 105.1267122 | 105.1267122 | 105.1267122 | 104.1882509 | 101.0529795 | 98.02819401 | 95.10935273 | 92.29213045 |
| 160907A00009 | 9/7/2016 | 1.36 | 9/8/2021 | 9/7/2016 | 101.49926 | 101.4992584 | 101.4992584 | 101.4992584 | 101.2790395 | 100.0829406 | 98.91491109 | 97.77397251 | 96.65919148 |
| 160922A00051 | 9/22/2016 | 2.5 | 9/22/2028 | 9/22/2016 | 118.0899 | 118.0899025 | 118.0899025 | 118.0899025 | 110.6104697 | 102.6366512 | 95.30513621 | 88.56065615 | 82.35297599 |
| 160923A00030 | 9/23/2016 | 1.41 | 9/23/2021 | 9/23/2016 | 101.61329 | 101.613289 | 101.613289 | 101.613289 | 101.3894682 | 100.1520168 | 98.94457404 | 97.76605933 | 96.61544352 |
| 160923A00032 | 9/23/2016 | 1.67 | 9/25/2023 | 9/23/2016 | 105.08398 | 105.0839756 | 105.0839756 | 105.0839756 | 104.0991114 | 100.8812871 | 97.77932321 | 94.78834867 | 91.90373099 |
| 161013A00037 | 10/13/2016 | 1.52 | 10/13/2021 | 10/13/2016 | 101.82846 | 101.8284642 | 101.8284642 | 101.8284642 | 101.5965812 | 100.3095015 | 99.05022966 | 97.81786615 | 96.61155041 |
| 161031A00005 | 10/31/2016 | 1.56 | 11/2/2020 | 10/31/2016 | 100.44988 | 100.4498767 | 100.4498767 | 100.4498767 | 100.3905667 | 100.0450301 | 99.70186473 | 99.36104636 | 99.02255099 |
| 160830A00061 | 8/30/2018 | 1.89 | 8/30/2023 | 8/30/2018 | 105.09476 | 105.094757 | 105.094757 | 105.094757 | 104.1564167 | 101.0216531 | 97.99736213 | 95.07900251 | 92.26224949 |
| 160913A00021 | 9/13/2016 | 1.52 | 9/14/2020 | 9/13/2016 | 100.26321 | 100.2632059 | 100.2632059 | 100.2632059 | 100.2305332 | 100.0202341 | 99.81082816 | 99.60230982 | 99.39467336 |
| 160920A00004 | 9/20/2016 | 1.68 | 9/20/2021 | 9/20/2016 | 101.74049 | 101.7404888 | 101.7404888 | 101.7404888 | 101.5177458 | 100.2906197 | 99.09300362 | 97.9238432 | 96.78213391 |
| 160922A00014 | 9/22/2016 | 2.06 | 9/22/2026 | 9/22/2016 | 112.22293 | 112.2229334 | 112.2229334 | 112.2229334 | 108.0587021 | 101.9101532 | 96.15163042 | 90.75634059 | 85.69947161 |
| 160926A00018 | 9/26/2016 | 1.47 | 9/28/2020 | 9/26/2016 | 100.2989 | 100.2988973 | 100.2988973 | 100.2988973 | 100.2592379 | 100.0103071 | 99.76260911 | 99.51613488 | 99.27087539 |
| 160926A00023 | 9/26/2016 | 1.74 | 9/26/2022 | 9/26/2016 | 103.27046 | 103.2704614 | 103.2704614 | 103.2704614 | 102.735686 | 100.516277 | 98.35554524 | 96.25150483 | 94.20225467 |
| 161006A00012 | 10/6/2016 | 1.98 | 10/7/2024 | 10/6/2016 | 108.04573 | 108.0457342 | 108.0457342 | 108.0457342 | 106.3065541 | 102.0506225 | 97.98874863 | 94.11103041 | 90.40812852 |
| 161020A00002 | 10/20/2016 | 1.96 | 8/15/2023 | 10/20/2016 | 105.24953 | 105.2495323 | 105.2495323 | 105.2495323 | 104.3337984 | 101.235218 | 98.24474147 | 95.35797202 | 92.57071979 |
| 161031A00006 | 10/31/2016 | 1.76 | 11/1/2021 | 10/31/2016 | 101.99898 | 101.9989781 | 101.9989781 | 101.9989781 | 101.758269 | 100.4304055 | 99.12604277 | 97.84461113 | 96.58555874 |
| 161115A00011 | 11/15/2016 | 2.46 | 11/15/2023 | 11/15/2016 | 107.37447 | 107.3744684 | 107.3744684 | 107.3744684 | 106.3005784 | 102.9265631 | 99.67791298 | 96.54932425 | 93.53574545 |
| 161117A00014 | 11/17/2016 | 1.88 | 11/17/2020 | 11/17/2016 | 100.63174 | 100.6317414 | 100.6317414 | 100.6317414 | 100.5633474 | 100.1761453 | 99.79192867 | 99.41066292 | 99.0323141 |
| 161213A00016 | 12/13/2016 | 2.06 | 12/14/2020 | 12/13/2016 | 100.83686 | 100.8368559 | 100.8368559 | 100.8368559 | 100.7522053 | 100.2903585 | 99.83274735 | 99.3793137 | 98.9300004 |
| 170110A00023 | 1/10/2017 | 2.08 | 1/10/2022 | 1/10/2017 | 103.04327 | 103.0432676 | 103.0432676 | 103.0432676 | 102.7478016 | 101.2208031 | 99.72420966 | 98.25718726 | 96.81893213 |
| 170117A00037 | 1/17/2017 | 2 | 1/18/2022 | 1/17/2017 | 102.96095 | 102.9609452 | 102.9609452 | 102.9609452 | 102.6591484 | 101.1115487 | 99.59500466 | 98.10865353 | 96.65166416 |
| 170123A00039 | 1/23/2017 | 2.79 | 1/23/2026 | 1/23/2017 | 115.03601 | 115.0360082 | 115.0360082 | 115.0360082 | 111.8591258 | 106.226623 | 100.9160133 | 95.90718726 | 91.18139618 |
| 170130A00031 | 1/30/2017 | 2.96 | 7/30/2025 | 1/30/2017 | 113.57626 | 113.5762557 | 113.5762557 | 113.5762557 | 111.0470642 | 105.9314936 | 101.0852174 | 96.49261878 | 92.13906916 |
| 170215A00032 | 2/15/2017 | 2.33 | 7/30/2020 | 2/15/2017 | 100.16993 | 100.1699271 | 100.1699271 | 100.1699271 | 100.1585276 | 100.0753905 | 99.99239127 | 99.90952961 | 99.8268052 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170215A00043 | 2/15/2017 | 2.7 | 8/28/2024 | 2/15/2017 | 110.08781 | 110.0878053 | 110.0878053 | 110.0878053 | 108.4375676 | 104.265332 | 100.2780264 | 96.46643612 | 92.82185944 |
| 170216A00045 | 2/16/2017 | 3.73 | 2/17/2037 | 2/16/2017 | 156.32462 | 156.3246219 | 156.3246219 | 145.3403119 | 127.590673 | 112.036318 | 98.72700239 | 87.31793761 | 77.51938878 |
| 170224A00044 | 5/24/2017 | 3.29 | 5/24/2029 | 5/24/2017 | 126.57105 | 126.5710484 | 126.5710484 | 126.5710484 | 117.7199462 | 108.8654741 | 100.7678056 | 93.35781525 | 86.5730345 |
| 170228A00014 | 2/28/2017 | 2.89 | 3/1/2027 | 2/28/2017 | 118.67002 | 118.670023 | 118.670023 | 118.670023 | 113.685029 | 106.9480186 | 100.6615677 | 94.79308898 | 89.31252043 |
| 170309A00024 | 3/9/2017 | 2.27 | 3/9/2021 | 3/9/2017 | 101.40789 | 101.4078912 | 101.4078912 | 101.4078912 | 101.273811 | 100.577374 | 99.89049924 | 99.21299074 | 98.54465773 |
| 170310A00032 | 3/10/2017 | 2.27 | 3/10/2022 | 3/10/2017 | 103.6893 | 103.689303 | 103.689303 | 103.689303 | 103.3426302 | 101.6454788 | 99.98433351 | 98.35811351 | 96.76578137 |
| 170313A00027 | 3/13/2017 | 2.27 | 3/14/2022 | 3/13/2017 | 103.71318 | 103.7131822 | 103.7131822 | 103.7131822 | 103.3628369 | 101.6548558 | 99.98328019 | 98.34701112 | 96.74499418 |
| 160616A00044 | 6/20/2016 | 2.31 | 6/18/2021 | 6/20/2016 | 101.99141 | 101.9914093 | 101.9914093 | 101.9914093 | 101.7910957 | 100.8172785 | 99.86204911 | 98.92487906 | 98.00525967 |
| 160624A00005 | 6/24/2016 | 1.52 | 6/24/2021 | 6/24/2016 | 101.23851 | 101.238514 | 101.238514 | 101.238514 | 101.0359442 | 100.0498614 | 99.08293188 | 98.1346021 | 97.20433955 |
| 160624A00011 | 6/24/2016 | 1.83 | 6/26/2023 | 6/24/2016 | 104.62773 | 104.6277307 | 104.6277307 | 104.6277307 | 103.7893813 | 100.8296082 | 97.96976152 | 95.20592246 | 92.53434865 |
| 160627A00025 | 6/27/2016 | 1.65 | 6/27/2022 | 6/27/2016 | 102.72598 | 102.7259819 | 102.7259819 | 102.7259819 | 102.2786371 | 100.3054433 | 98.38030297 | 96.50174719 | 94.6683622 |
| 160627A00040 | 6/27/2016 | 1.28 | 6/28/2021 | 6/27/2016 | 101.17036 | 101.170359 | 101.170359 | 101.170359 | 100.9653653 | 99.96654262 | 98.98736428 | 98.02725562 | 97.08566427 |
| 160628A00049 | 6/28/2016 | 1.88 | 6/27/2025 | 6/28/2016 | 108.89287 | 108.892872 | 108.892872 | 108.892872 | 106.4785705 | 101.5300019 | 96.84069621 | 92.39574423 | 88.18116995 |
| 160630A00012 | 6/30/2016 | 2.11 | 6/30/2025 | 6/30/2016 | 109.08045 | 109.0804469 | 109.0804469 | 109.0804469 | 106.6753259 | 101.7452622 | 97.07294387 | 92.64356902 | 88.44326136 |
| 160701A00020 | 7/1/2016 | 2.13 | 7/1/2026 | 7/1/2016 | 111.00413 | 111.0041292 | 111.0041292 | 111.0041292 | 107.2545408 | 101.3811569 | 95.86798627 | 90.69108457 | 85.8282176 |
| 160701A00039 | 7/1/2016 | 1.92 | 7/1/2026 | 7/1/2016 | 110.92902 | 110.9290186 | 110.9290186 | 110.9290186 | 107.1451004 | 101.2326131 | 95.68414412 | 90.47542273 | 85.58391659 |
| 160706A00010 | 7/6/2016 | 1.99 | 7/7/2025 | 7/6/2016 | 108.50889 | 108.5088943 | 108.5088943 | 108.5088943 | 106.0885054 | 101.1552934 | 96.48099368 | 92.05068634 | 87.85038759 |
| 160706A00028 | 7/6/2016 | 2.39 | 7/6/2029 | 7/6/2016 | 118.80006 | 118.8000612 | 118.8000612 | 118.8000612 | 109.9534451 | 101.3312431 | 93.4630945 | 86.27889126 | 79.71538365 |
| 160714A00023 | 8/10/2016 | 2.49 | 8/10/2028 | 8/10/2016 | 117.75306 | 117.7530631 | 117.7530631 | 117.7530631 | 110.4758059 | 102.6100641 | 95.37021072 | 88.70303634 | 82.56011807 |
| 160727A00002 | 7/27/2016 | 1.87 | 7/27/2023 | 7/27/2016 | 104.88307 | 104.8830655 | 104.8830655 | 104.8830655 | 103.9978517 | 100.953971 | 98.01501527 | 95.17677374 | 92.43523065 |
| 160727A00017 | 7/27/2016 | 2.03 | 7/29/2024 | 7/27/2016 | 107.13368 | 107.1336797 | 107.1336797 | 107.1336797 | 105.5661389 | 101.530458 | 97.67155445 | 93.98074309 | 90.44981368 |
| 160802A00003 | 8/2/2016 | 2.53 | 8/1/2031 | 8/2/2016 | 126.94147 | 126.941469 | 126.941469 | 124.7909156 | 113.2902311 | 102.6846742 | 93.19082324 | 84.68549583 | 77.05976759 |
| 160816A00003 | 8/16/2016 | 1.63 | 8/16/2023 | 8/16/2016 | 104.78564 | 104.7856378 | 104.7856378 | 104.7856378 | 103.8654548 | 100.757947 | 97.75929157 | 94.8650459 | 92.07097729 |
| 160921A00020 | 9/21/2016 | 1.97 | 9/21/2023 | 9/21/2016 | 105.45149 | 105.4514855 | 105.4514855 | 105.4514855 | 104.4766705 | 101.2778963 | 98.19359258 | 95.21897433 | 92.34948929 |
| 160923A00002 | 9/23/2016 | 1.5 | 9/23/2020 | 9/23/2016 | 100.28946 | 100.2894621 | 100.2894621 | 100.2894621 | 100.2522969 | 100.017154 | 99.78311931 | 99.55018502 | 99.31834337 |
| 160926A00016 | 9/26/2016 | 1.47 | 9/28/2020 | 9/26/2016 | 100.2989 | 100.2988973 | 100.2988973 | 100.2988973 | 100.2592379 | 100.0103071 | 99.76260911 | 99.51613488 | 99.27087539 |
| 160930A00005 | 9/30/2016 | 2.03 | 9/30/2024 | 9/30/2016 | 107.4335 | 107.4335013 | 107.4335013 | 107.4335013 | 105.7254674 | 101.5225638 | 97.51012128 | 93.6784503 | 90.01841261 |
| 161003A00004 | 10/3/2016 | 1.91 | 10/3/2023 | 10/3/2016 | 105.30935 | 105.3093451 | 105.3093451 | 105.3093451 | 104.3157641 | 101.0877658 | 97.97630312 | 94.97647378 | 92.08361515 |
| 161208A00017 | 12/8/2016 | 2.6 | 12/8/2023 | 12/8/2016 | 107.99713 | 107.9971328 | 107.9971328 | 107.9971328 | 106.880801 | 103.4357464 | 100.1208251 | 96.93043643 | 93.85925107 |
| 161215A00001 | 12/15/2016 | 2.5 | 12/15/2021 | 12/15/2016 | 103.28621 | 103.2862118 | 103.2862118 | 103.2862118 | 103.0117241 | 101.5556279 | 100.1274066 | 98.72632933 | 97.35169038 |
| 161215A00014 | 12/15/2016 | 2.66 | 12/15/2022 | 12/15/2016 | 105.87555 | 105.8755538 | 105.8755538 | 105.8755538 | 105.258759 | 102.7962309 | 100.4041991 | 98.08024488 | 95.82204725 |
| 160114A00015 | 1/14/2016 | 1.92 | 1/14/2021 | 1/14/2016 | 100.92081 | 100.9208088 | 100.9208088 | 100.9208088 | 100.8179508 | 100.2708312 | 99.72964472 | 99.19429519 | 98.6646884 |
| 160119A00019 | 1/19/2016 | 2.95 | 1/19/2027 | 1/19/2016 | 117.40667 | 117.4066674 | 117.4066674 | 117.4066674 | 112.6775954 | 106.1335756 | 100.0195774 | 94.30502182 | 88.96165895 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160126A00053 | 1/26/2016 | 1.75 | 7/20/2020 | 1/26/2016 | 100.08053 | 100.0805321 | 100.0805321 | 100.0805321 | 100.0729362 | 100.0175297 | 99.96219982 | 99.90694627 | 99.85176895 |
| 160209A00047 | 2/9/2016 | 1.5 | 8/10/2020 | 2/9/2016 | 100.13882 | 100.1388207 | 100.1388207 | 100.1388207 | 100.1225617 | 100.009032 | 99.89577247 | 99.78278219 | 99.67006014 |
| 160307A00028 | 3/7/2016 | 2.91 | 3/7/2028 | 3/7/2016 | 120.0645 | 120.0645049 | 120.0645049 | 120.0645049 | 113.4364368 | 105.8333499 | 98.80460256 | 92.30361362 | 86.2878169 |
| 160331A00023 | 3/31/2016 | 1.68 | 3/31/2021 | 3/31/2016 | 101.08242 | 101.0824188 | 101.0824188 | 101.0824188 | 100.9356141 | 100.1805045 | 99.43664345 | 98.70378128 | 97.98167567 |
| 160510A00012 | 5/10/2016 | 1.49 | 10/12/2021 | 5/10/2016 | 101.78552 | 101.7855202 | 101.7855202 | 101.7855202 | 101.5541677 | 100.2696307 | 99.01313685 | 97.78376889 | 96.58064961 |
| 160601A00016 | 6/1/2016 | 1.74 | 6/1/2021 | 6/1/2016 | 101.37381 | 101.3738052 | 101.3738052 | 101.3738052 | 101.1826375 | 100.2580125 | 99.35020976 | 98.45877369 | 97.58326502 |
| 160614A00025 | 6/14/2016 | 1.83 | 6/14/2023 | 6/14/2016 | 104.57719 | 104.57719 | 104.57719 | 104.57719 | 103.7559254 | 100.8286917 | 97.99923612 | 95.26376619 | 92.61865808 |
| 160614A00067 | 6/14/2016 | 1.51 | 2/16/2021 | 6/14/2016 | 100.80405 | 100.8040541 | 100.8040541 | 100.8040541 | 100.682494 | 100.0456449 | 99.41683023 | 98.79589848 | 98.18270212 |
| 160615A00031 | 6/15/2016 | 2.51 | 6/17/2030 | 6/15/2016 | 124.02869 | 124.0286919 | 124.0286919 | 123.3676875 | 113.0541912 | 103.3955374 | 94.65937518 | 86.75230763 | 79.59084861 |
| 160616A00006 | 6/16/2016 | 1.51 | 6/16/2021 | 6/16/2016 | 101.2013 | 101.2013015 | 101.2013015 | 101.2013015 | 101.0027876 | 100.0385435 | 99.09262679 | 98.16451865 | 97.25371988 |
| 160616A00034 | 6/16/2016 | 1.97 | 6/17/2024 | 6/16/2016 | 106.69365 | 106.6936495 | 106.6936495 | 106.6936495 | 105.2169617 | 101.2970332 | 97.54486289 | 93.95240484 | 90.51204136 |
| 160624A00026 | 6/24/2016 | 1.52 | 6/24/2021 | 6/24/2016 | 101.23851 | 101.238514 | 101.238514 | 101.238514 | 101.0359442 | 100.0498614 | 99.08293188 | 98.1346021 | 97.20433955 |
| 160628A00050 | 6/28/2016 | 1.56 | 6/28/2023 | 6/28/2016 | 104.36827 | 104.3682657 | 104.3682657 | 104.3682657 | 103.5239076 | 100.5500133 | 97.67700934 | 94.90092154 | 92.21795543 |
| 160629A00052 | 6/29/2016 | 1.29 | 6/29/2021 | 6/29/2016 | 101.18368 | 101.1836813 | 101.1836813 | 101.1836813 | 100.9781703 | 99.97656451 | 98.99470849 | 98.03202316 | 97.08795185 |
| 160630A00019 | 6/30/2016 | 1.52 | 7/1/2021 | 6/30/2016 | 101.26258 | 101.262581 | 101.262581 | 101.262581 | 101.0567455 | 100.0515995 | 99.06634083 | 98.10038415 | 97.15316701 |
| 160630A00042 | 6/30/2016 | 1.52 | 6/30/2021 | 6/30/2016 | 101.25912 | 101.2591223 | 101.2591223 | 101.2591223 | 101.0535183 | 100.0511006 | 99.06846115 | 98.10501948 | 97.16021778 |
| 160630A00049 | 6/30/2016 | 1.51 | 6/30/2021 | 6/30/2016 | 101.249 | 101.2489987 | 101.2489987 | 101.2489987 | 101.0434053 | 100.0410425 | 99.05845712 | 98.09506884 | 97.15031981 |
| 160630A00091 | 6/30/2016 | 1.51 | 6/30/2021 | 6/30/2016 | 101.249 | 101.2489987 | 101.2489987 | 101.2489987 | 101.0434053 | 100.0410425 | 99.05845712 | 98.09506884 | 97.15031981 |
| 160701A00034 | 7/1/2016 | 1.43 | 7/21/2021 | 7/1/2016 | 101.23541 | 101.2354103 | 101.2354103 | 101.2354103 | 101.025051 | 99.96591649 | 98.92887194 | 97.91323204 | 96.91833959 |
| 160705A00006 | 7/5/2016 | 1.38 | 7/5/2022 | 7/5/2016 | 102.57221 | 102.5722068 | 102.5722068 | 102.5722068 | 102.115689 | 100.1160314 | 98.16560214 | 96.2628776 | 94.40639238 |
| 160727A00015 | 7/27/2016 | 1.48 | 7/27/2020 | 7/27/2016 | 100.0892 | 100.0891996 | 100.0891996 | 100.0891996 | 100.0789469 | 100.0041707 | 99.92951224 | 99.85497136 | 99.78054777 |
| 160810A00032 | 8/10/2016 | 1.32 | 8/10/2021 | 8/10/2016 | 101.35423 | 101.3542254 | 101.3542254 | 101.3542254 | 101.1393585 | 100.0227763 | 98.93069948 | 97.86232863 | 96.81689875 |
| 170303A00020 | 3/3/2017 | 2 | 3/3/2021 | 3/3/2017 | 101.28497 | 101.2849695 | 101.2849695 | 101.2849695 | 101.1542751 | 100.4734841 | 99.8018323 | 99.13913656 | 98.48521867 |
| 170317A00059 | 3/17/2017 | 2.47 | 3/17/2023 | 3/17/2017 | 106.45558 | 106.4555805 | 106.4555805 | 106.4555805 | 105.7375271 | 103.0070117 | 100.3610319 | 97.79642044 | 95.31015278 |
| 170320A00014 | 3/20/2017 | 2.22 | 3/21/2022 | 3/20/2017 | 103.6677 | 103.6677044 | 103.6677044 | 103.6677044 | 103.3110828 | 101.5849378 | 99.89588796 | 98.24280288 | 96.6245985 |
| 170322A00023 | 3/22/2017 | 3.82 | 9/22/2039 | 3/22/2017 | 166.54846 | 166.5484606 | 166.5484606 | 151.7771958 | 131.1719964 | 113.5584635 | 98.79277252 | 86.38337574 | 75.92689046 |
| 170327A00072 | 3/29/2017 | 3.09 | 3/29/2027 | 3/29/2017 | 120.24674 | 120.2467433 | 120.2467433 | 120.2467433 | 115.1078142 | 108.253127 | 101.8604938 | 95.89620287 | 90.32918025 |
| 170327A00075 | 3/27/2019 | 2.47 | 3/28/2022 | 3/27/2019 | 103.8482 | 103.8482026 | 103.8482026 | 103.8482026 | 103.4860712 | 101.745039 | 100.0416345 | 98.37470279 | 96.74313657 |
| 170501A00007 | 5/1/2017 | 2.04 | 5/3/2021 | 5/1/2017 | 101.51053 | 101.5105295 | 101.5105295 | 101.5105295 | 101.3401179 | 100.4935044 | 99.66098926 | 98.84222262 | 98.03686612 |
| 170508A00010 | 5/8/2017 | 2.43 | 5/8/2024 | 5/8/2017 | 109.01921 | 109.0192127 | 109.0192127 | 109.0192127 | 107.6034793 | 103.7218857 | 100.002084 | 96.43650861 | 93.01798635 |
| 170515A00056 | 5/15/2017 | 3.2 | 5/17/2032 | 5/15/2017 | 136.87504 | 136.8750374 | 136.8750374 | 133.434156 | 120.757478 | 109.093189 | 98.71381484 | 89.46929322 | 81.22785789 |
| 170519A00034 | 5/19/2017 | 1.97 | 5/19/2022 | 5/19/2017 | 103.53417 | 103.53417 | 103.53417 | 103.53417 | 103.1219021 | 101.2384523 | 99.39861752 | 97.60113045 | 95.84476899 |
| 170524A00047 | 5/24/2017 | 2.22 | 5/24/2023 | 5/24/2017 | 106.16491 | 106.1649117 | 106.1649117 | 106.1649117 | 105.363437 | 102.4559678 | 99.64388866 | 96.9235636 | 94.29151569 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170530A00060 | 5/30/2017 | 2.12 | 3/25/2022 | 5/30/2017 | 103.21625 | 103.21625 | 103.21625 | 103.21625 | 102.8579227 | 101.1304988 | 99.44029761 | 97.78618064 | 96.16705648 |
| 170531A00005 | 5/31/2017 | 1.94 | 5/31/2022 | 5/31/2017 | 103.53755 | 103.5375531 | 103.5375531 | 103.5375531 | 103.1136194 | 101.1985647 | 99.32853867 | 97.50221285 | 95.7183068 |
| 170602A00023 | 6/2/2017 | 2.09 | 6/2/2023 | 6/2/2017 | 105.83269 | 105.8326856 | 105.8326856 | 105.8326856 | 105.0202569 | 102.0940399 | 99.2646162 | 96.52826673 | 93.88143633 |
| 170615A00033 | 6/15/2017 | 2.01 | 6/15/2021 | 6/15/2017 | 101.69294 | 101.6929447 | 101.6929447 | 101.6929447 | 101.4944137 | 100.5301693 | 99.58418856 | 98.65595627 | 97.74497636 |
| 170616A00018 | 6/16/2017 | 2.4 | 6/16/2025 | 6/16/2017 | 111.44884 | 111.4488394 | 111.4488394 | 111.4488394 | 109.0440887 | 104.0611516 | 99.33682861 | 94.85636181 | 90.60591051 |
| 170616A00019 | 6/16/2017 | 2.64 | 6/16/2027 | 6/16/2017 | 117.72933 | 117.7293263 | 117.7293263 | 117.7293263 | 112.2670938 | 105.3060798 | 98.82990855 | 92.80223171 | 87.18960452 |
| 170619A00067 | 6/19/2017 | 1.84 | 9/20/2021 | 6/19/2017 | 102.13605 | 102.1360548 | 102.1360548 | 102.1360548 | 101.9122738 | 100.6795188 | 99.47644175 | 98.30198123 | 97.15512582 |
| 170619A00084 | 6/19/2017 | 1.95 | 6/20/2022 | 6/19/2017 | 103.65838 | 103.6583842 | 103.6583842 | 103.6583842 | 103.2144025 | 101.2438205 | 99.32085443 | 97.44405959 | 95.61204496 |
| 170622A00015 | 6/22/2017 | 1.99 | 6/22/2021 | 6/22/2017 | 101.69704 | 101.6970377 | 101.6970377 | 101.6970377 | 101.4950057 | 100.511893 | 99.54775989 | 98.60206081 | 97.67427091 |
| 170622A00036 | 6/22/2017 | 3.23 | 6/22/2032 | 6/22/2017 | 134.88359 | 134.8835867 | 134.8835867 | 131.3621733 | 118.8605885 | 107.3596862 | 97.13125648 | 88.02594629 | 79.91270759 |
| 170629A00067 | 6/29/2017 | 2.19 | 6/29/2022 | 6/29/2017 | 103.82354 | 103.8235371 | 103.8235371 | 103.8235371 | 103.3719853 | 101.3821492 | 99.44084635 | 97.54658958 | 95.6979478 |
| 170630A00010 | 6/30/2017 | 2.63 | 6/30/2026 | 6/30/2017 | 115.22943 | 115.2294304 | 115.2294304 | 115.2294304 | 111.3985008 | 105.3629106 | 99.69654262 | 94.37486329 | 89.37509237 |
| 170630A00027 | 6/30/2017 | 2.35 | 6/28/2024 | 6/30/2017 | 109.02169 | 109.0216934 | 109.0216934 | 109.0216934 | 107.5000921 | 103.4851527 | 99.643271 | 95.96607563 | 92.44564525 |
| 160330A00035 | 3/30/2016 | 2.32 | 4/1/2024 | 3/30/2016 | 107.66508 | 107.6650822 | 107.6650822 | 107.6650822 | 106.3380471 | 102.5982784 | 99.01052037 | 95.56771854 | 92.26319101 |
| 160330A00056 | 3/30/2016 | 2.26 | 3/31/2025 | 3/30/2016 | 110.29099 | 110.2909868 | 110.2909868 | 110.2909868 | 108.1047624 | 103.34662 | 98.82608321 | 94.52998577 | 90.44596738 |
| 160331A00024 | 3/31/2016 | 1.91 | 3/31/2022 | 3/31/2016 | 102.87499 | 102.8749872 | 102.8749872 | 102.8749872 | 102.5118449 | 100.7717258 | 99.06937285 | 97.40362179 | 95.77335694 |
| 160429A00007 | 4/29/2016 | 1.52 | 4/29/2021 | 4/29/2016 | 101.17884 | 101.17884 | 101.17884 | 101.17884 | 101.0112479 | 100.1753276 | 99.35317825 | 98.54446194 | 97.74885179 |
| 160510A00011 | 5/10/2016 | 1.59 | 4/5/2021 | 5/10/2016 | 101.03242 | 101.0324229 | 101.0324229 | 101.0324229 | 100.8821417 | 100.1136462 | 99.35681406 | 98.61138146 | 97.87709235 |
| 160523A00018 | 5/23/2016 | 1.77 | 5/24/2021 | 5/23/2016 | 101.36835 | 101.3683507 | 101.3683507 | 101.3683507 | 101.1827818 | 100.2798631 | 99.39299811 | 98.52176161 | 97.66574332 |
| 160524A00011 | 5/24/2016 | 1.78 | 5/19/2021 | 5/24/2016 | 101.35641 | 101.3564098 | 101.3564098 | 101.3564098 | 101.1744883 | 100.2851798 | 99.4114514 | 98.55289637 | 97.70912195 |
| 160524A00035 | 5/24/2016 | 1.79 | 5/24/2021 | 5/24/2016 | 101.38655 | 101.3865489 | 101.3865489 | 101.3865489 | 101.200963 | 100.2979547 | 99.41100119 | 98.53967727 | 97.68357263 |
| 160527A00026 | 5/27/2016 | 1.72 | 4/29/2021 | 5/27/2016 | 101.22184 | 101.2218359 | 101.2218359 | 101.2218359 | 101.0545589 | 100.2201402 | 99.39944153 | 98.59212705 | 97.79787159 |
| 160603A00004 | 6/3/2016 | 1.65 | 6/3/2021 | 6/3/2016 | 101.29756 | 101.2975638 | 101.2975638 | 101.2975638 | 101.1054624 | 100.1757985 | 99.26315306 | 98.36706223 | 97.48707897 |
| 160620A00003 | 6/20/2016 | 1.59 | 6/21/2021 | 6/20/2016 | 101.29733 | 101.2973301 | 101.2973301 | 101.2973301 | 101.0962074 | 100.1179271 | 99.15849447 | 98.21736904 | 97.29403075 |
| 160628A00031 | 6/28/2016 | 1.77 | 6/28/2023 | 6/28/2016 | 104.45483 | 104.4548252 | 104.4548252 | 104.4548252 | 103.6142614 | 100.6518001 | 97.78955646 | 95.02359255 | 92.35014832 |
| 160628A00038 | 6/28/2016 | 1.88 | 6/27/2025 | 6/28/2016 | 108.89287 | 108.892872 | 108.892872 | 108.892872 | 106.4785705 | 101.5300019 | 96.84069621 | 92.39574423 | 88.18116995 |
| 160701A00018 | 7/1/2016 | 1.42 | 7/1/2021 | 7/1/2016 | 101.16107 | 101.1610683 | 101.1610683 | 101.1610683 | 100.9553387 | 99.95074458 | 98.9660301 | 98.00061021 | 97.05392258 |
| 160705A00005 | 7/5/2016 | 1.49 | 7/5/2023 | 7/5/2016 | 104.18272 | 104.1827211 | 104.1827211 | 104.1827211 | 103.3286689 | 100.3393025 | 97.45188865 | 94.66238857 | 91.96694759 |
| 160706A00006 | 7/6/2016 | 1.47 | 7/6/2023 | 7/6/2016 | 104.12547 | 104.1254697 | 104.1254697 | 104.1254697 | 103.2701181 | 100.2790315 | 97.39003035 | 94.59906765 | 91.90228088 |
| 160706A00014 | 7/6/2016 | 1.41 | 7/6/2021 | 7/6/2016 | 101.16669 | 101.1666875 | 101.1666875 | 101.1666875 | 100.9598142 | 99.94165213 | 98.94391609 | 97.96599645 | 97.00730763 |
| 160707A00032 | 7/7/2016 | 1.52 | 7/7/2023 | 7/7/2016 | 104.28199 | 104.2819868 | 104.2819868 | 104.2819868 | 103.4245795 | 100.4285194 | 97.53476048 | 94.73924446 | 92.03809838 |
| 160808A00011 | 8/8/2016 | 1.6 | 8/9/2021 | 8/8/2016 | 101.48732 | 101.4873164 | 101.4873164 | 101.4873164 | 101.2729719 | 100.1609603 | 99.0732456 | 98.00903854 | 96.96758354 |
| 160830A00037 | 8/30/2016 | 2.16 | 8/29/2025 | 8/30/2016 | 109.63718 | 109.6371776 | 109.6371776 | 109.6371776 | 107.050679 | 101.9596378 | 97.14163219 | 92.58057805 | 88.26142511 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160830A00038 | 8/30/2016 | 2.24 | 8/28/2026 | 8/30/2016 | 111.9743 | 111.9742993 | 111.9742993 | 111.9742993 | 107.9629272 | 101.925474 | 96.26592602 | 90.95864661 | 85.97987023 |
| 160909A00024 | 9/9/2016 | 1.7 | 9/9/2021 | 9/9/2016 | 101.72204 | 101.7220423 | 101.7220423 | 101.7220423 | 101.5018557 | 100.3045576 | 99.1353613 | 97.99328673 | 96.87739887 |
| 161004A00034 | 10/4/2016 | 1.67 | 10/4/2021 | 10/4/2016 | 101.78206 | 101.7820552 | 101.7820552 | 101.7820552 | 101.555065 | 100.2917072 | 99.05819203 | 97.85346615 | 96.67652538 |
| 161006A00010 | 10/6/2016 | 1.35 | 10/6/2020 | 10/6/2016 | 100.33544 | 100.3354351 | 100.3354351 | 100.3354351 | 100.2913231 | 100.0198349 | 99.7498225 | 99.48127376 | 99.21417678 |
| 160811A00014 | 8/11/2016 | 1.18 | 8/11/2020 | 8/11/2016 | 100.12408 | 100.1240778 | 100.1240778 | 100.1240778 | 100.1073443 | 99.99087004 | 99.87468202 | 99.75877915 | 99.64316034 |
| 160815A00006 | 8/15/2016 | 2.23 | 8/17/2026 | 8/15/2016 | 111.85455 | 111.8545463 | 111.8545463 | 111.8545463 | 107.8924145 | 101.8841952 | 96.25056587 | 90.96621384 | 86.00766621 |
| 160826A00008 | 8/26/2016 | 1.48 | 8/26/2020 | 8/26/2016 | 100.19135 | 100.1913523 | 100.1913523 | 100.1913523 | 100.1679154 | 100.0101294 | 99.852846 | 99.69606271 | 99.5397772 |
| 160830A00007 | 8/30/2016 | 1.65 | 8/30/2021 | 8/30/2016 | 101.62365 | 101.6236502 | 101.6236502 | 101.6236502 | 101.4058153 | 100.2361683 | 99.09335311 | 97.97645536 | 96.88460172 |
| 160916A00014 | 9/16/2016 | 1.66 | 9/16/2021 | 9/16/2016 | 101.70042 | 101.700422 | 101.700422 | 101.700422 | 101.4786496 | 100.2625838 | 99.07551041 | 97.91640246 | 96.78428097 |
| 160916A00016 | 9/16/2016 | 1.66 | 9/16/2021 | 9/16/2016 | 101.70042 | 101.700422 | 101.700422 | 101.700422 | 101.4786496 | 100.2625838 | 99.07551041 | 97.91640246 | 96.78428097 |
| 160921A00021 | 9/21/2016 | 1.45 | 9/21/2021 | 9/21/2016 | 101.65587 | 101.6558729 | 101.6558729 | 101.6558729 | 101.4324604 | 100.2001434 | 98.99758088 | 97.82370608 | 96.67750254 |
| 160922A00009 | 9/22/2016 | 1.55 | 9/22/2022 | 9/22/2016 | 103.23241 | 103.2324086 | 103.2324086 | 103.2324086 | 102.6993123 | 100.4830535 | 98.32531115 | 96.22410883 | 94.17755445 |
| 160922A00050 | 9/22/2016 | 2.24 | 9/22/2025 | 9/22/2016 | 110.17954 | 110.1795408 | 110.1795408 | 110.1795408 | 107.5118059 | 102.3467403 | 97.46157171 | 92.83963264 | 88.46534023 |
| 160930A00010 | 9/30/2016 | 1.47 | 9/30/2022 | 9/30/2016 | 103.08169 | 103.0816851 | 103.0816851 | 103.0816851 | 102.5414974 | 100.3053213 | 98.12865968 | 96.00948489 | 93.94585645 |
| 161014A00024 | 10/18/2016 | 2.34 | 10/16/2020 | 10/18/2016 | 100.62254 | 100.6225382 | 100.6225382 | 100.6225382 | 100.5727971 | 100.2736754 | 99.97634241 | 99.68078212 | 99.38697859 |
| 161212A00040 | 12/12/2016 | 2.45 | 12/12/2023 | 12/12/2016 | 108.14307 | 108.1430717 | 108.1430717 | 108.1430717 | 107.012897 | 103.5389597 | 100.1969895 | 96.98127531 | 93.88638452 |
| 170110A00020 | 1/10/2017 | 2.4 | 1/10/2024 | 1/10/2017 | 108.15163 | 108.1516254 | 108.1516254 | 108.1516254 | 106.9692778 | 103.4198946 | 100.0080531 | 96.72767744 | 93.57299473 |
| 170111A00014 | 1/11/2017 | 3.47 | 1/12/2032 | 1/11/2017 | 136.37415 | 136.3741532 | 136.3741532 | 133.5612314 | 121.4060166 | 110.1238306 | 100.045458 | 91.03430704 | 82.97000109 |
| 170120A00009 | 1/20/2017 | 3.67 | 1/22/2035 | 1/20/2017 | 148.59863 | 148.5986295 | 148.5986295 | 140.6103732 | 125.1180959 | 111.2435625 | 99.16689619 | 88.64055619 | 79.45249067 |
| 170120A00010 | 1/20/2017 | 3.71 | 1/22/2036 | 1/20/2017 | 152.47 | 152.470003 | 152.470003 | 142.9459042 | 126.3610396 | 111.6655674 | 98.98011556 | 88.01239321 | 78.51432889 |
| 170130A00008 | 1/30/2017 | 2.58 | 1/30/2023 | 1/30/2017 | 105.96709 | 105.9670872 | 105.9670872 | 105.9670872 | 105.3039436 | 102.719455 | 100.2118609 | 97.77840605 | 95.41645253 |
| 170130A00010 | 1/30/2017 | 2.92 | 1/30/2025 | 1/30/2017 | 112.07829 | 112.0782864 | 112.0782864 | 112.0782864 | 110.0492873 | 105.4368916 | 101.046585 | 96.8664817 | 92.88539692 |
| 170207A00013 | 2/7/2017 | 2.05 | 2/7/2022 | 2/7/2017 | 103.14659 | 103.1465929 | 103.1465929 | 103.1465929 | 102.8279845 | 101.2237448 | 99.65236173 | 98.11289345 | 96.60443402 |
| 170207A00023 | 2/7/2017 | 2.26 | 2/7/2022 | 2/7/2017 | 103.21186 | 103.2118593 | 103.2118593 | 103.2118593 | 102.8941061 | 101.2940067 | 99.72660387 | 98.19096228 | 96.68618203 |
| 170215A00034 | 2/15/2017 | 2.69 | 12/18/2020 | 2/15/2017 | 101.16063 | 101.1606321 | 101.1606321 | 101.1606321 | 101.0734284 | 100.5996491 | 100.1303153 | 99.66536469 | 99.20473588 |
| 170216A00043 | 2/16/2017 | 3.17 | 2/16/2027 | 2/16/2017 | 119.07199 | 119.0719943 | 119.0719943 | 119.0719943 | 114.190815 | 107.5241166 | 101.2990581 | 95.48395676 | 90.04956597 |
| 170223A00003 | 2/23/2017 | 2.05 | 2/23/2022 | 2/23/2017 | 103.23181 | 103.2318076 | 103.2318076 | 103.2318076 | 102.8992788 | 101.2473256 | 99.62982478 | 98.04576403 | 96.49417067 |
| 170224A00019 | 2/24/2017 | 2.21 | 2/24/2022 | 2/24/2017 | 103.21978 | 103.2197809 | 103.2197809 | 103.2197809 | 102.8874353 | 101.2375607 | 99.62205627 | 98.03991259 | 96.49015966 |
| 170313A00032 | 3/13/2017 | 3.69 | 6/14/2032 | 3/13/2017 | 140.29828 | 140.298284 | 140.298284 | 136.7932795 | 124.0650947 | 112.2888577 | 101.8042633 | 92.46053936 | 84.12531737 |
| 170322A00015 | 3/22/2017 | 2.31 | 3/22/2022 | 3/22/2017 | 103.53263 | 103.5326308 | 103.5326308 | 103.5326308 | 103.1764647 | 101.4541049 | 99.76872086 | 98.11918646 | 96.50442164 |
| 170412A00045 | 4/12/2017 | 2.01 | 4/12/2022 | 4/12/2017 | 103.41653 | 103.4165299 | 103.4165299 | 103.4165299 | 103.0399402 | 101.256784 | 99.51300613 | 97.80743362 | 96.13893916 |
| 170424A00009 | 4/24/2017 | 2.04 | 4/25/2022 | 4/24/2017 | 103.53989 | 103.5398918 | 103.5398918 | 103.5398918 | 103.1508053 | 101.3310065 | 99.55205955 | 97.81279142 | 96.11207114 |
| 170427A00047 | 4/27/2017 | 3.18 | 4/27/2029 | 4/27/2017 | 125.38165 | 125.3816538 | 125.3816538 | 125.3816538 | 116.6962202 | 107.9495879 | 99.94606707 | 92.61822202 | 85.90506897 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170515A00043 | 5/15/2017 | 3.1 | 5/15/2028 | 5/15/2017 | 122.05127 | 122.0512679 | 122.0512679 | 122.0512679 | 115.0717212 | 107.237956 | 100.0074744 | 93.33046892 | 87.1614871 |
| 170517A00027 | 5/17/2017 | 1.99 | 5/17/2022 | 5/17/2017 | 103.56196 | 103.5619619 | 103.5619619 | 103.5619619 | 103.1515847 | 101.27313 | 99.43806164 | 97.64512231 | 95.89309932 |
| 170518A00034 | 5/18/2017 | 2.15 | 5/18/2023 | 5/18/2017 | 105.92578 | 105.9257816 | 105.9257816 | 105.9257816 | 105.1330052 | 102.2446885 | 99.45067754 | 96.74739587 | 94.1314224 |
| 170530A00003 | 5/30/2017 | 1.99 | 5/28/2021 | 5/30/2017 | 101.58769 | 101.5876901 | 101.5876901 | 101.5876901 | 101.3990062 | 100.4841591 | 99.58576014 | 98.703369 | 97.83656086 |
| 170608A00020 | 6/8/2017 | 2.27 | 6/10/2024 | 6/8/2017 | 108.59129 | 108.5912914 | 108.5912914 | 108.5912914 | 107.1098111 | 103.1509555 | 99.36079455 | 95.73126537 | 92.25473285 |
| 170613A00032 | 6/13/2017 | 2.45 | 6/13/2025 | 6/13/2017 | 111.68045 | 111.6804465 | 111.6804465 | 111.6804465 | 109.2821829 | 104.3013521 | 99.57852924 | 95.09901735 | 90.84903113 |
| 170614A00012 | 6/14/2017 | 1.9 | 6/14/2022 | 6/14/2017 | 103.52892 | 103.5289158 | 103.5289158 | 103.5289158 | 103.0911344 | 101.1381469 | 99.23197484 | 97.37120945 | 95.55449387 |
| 170621A00014 | 6/21/2017 | 1.82 | 6/21/2021 | 6/21/2017 | 101.6815 | 101.6814958 | 101.6814958 | 101.6814958 | 101.4795074 | 100.4969513 | 99.53334831 | 98.58815417 | 97.66084522 |
| 170622A00039 | 6/22/2017 | 3.36 | 6/22/2035 | 6/22/2017 | 145.3429 | 145.3429042 | 145.3429042 | 136.7687473 | 121.1170026 | 107.2098896 | 95.15841346 | 84.70015375 | 75.6112665 |
| 170626A00017 | 6/26/2017 | 1.8 | 6/28/2021 | 6/26/2017 | 101.69435 | 101.6943538 | 101.6943538 | 101.6943538 | 101.4888168 | 100.4871612 | 99.5051888 | 98.54232409 | 97.59801383 |
| 170628A00056 | 6/28/2017 | 1.97 | 6/28/2022 | 6/28/2017 | 103.73934 | 103.7393423 | 103.7393423 | 103.7393423 | 103.2872758 | 101.2941612 | 99.34972008 | 97.45245956 | 95.60094302 |
| 170629A00017 | 6/29/2017 | 2 | 4/26/2021 | 6/29/2017 | 101.44283 | 101.4428296 | 101.4428296 | 101.4428296 | 101.2774735 | 100.4501943 | 99.63638595 | 98.83572164 | 98.04788492 |
| 170629A00022 | 6/29/2017 | 2.2 | 6/29/2023 | 6/29/2017 | 106.31355 | 106.3135473 | 106.3135473 | 106.3135473 | 105.4609581 | 102.4549906 | 99.55083589 | 96.74448428 | 94.03210749 |
| 170630A00008 | 6/30/2017 | 2.35 | 7/1/2024 | 6/30/2017 | 109.0402 | 109.0401968 | 109.0401968 | 109.0401968 | 107.5121416 | 103.4889758 | 99.63953923 | 95.95541231 | 92.42862889 |
| 170724A00016 | 7/24/2017 | 2.5 | 7/24/2024 | 7/24/2017 | 109.03655 | 109.0365478 | 109.0365478 | 109.0365478 | 107.4687975 | 103.4073695 | 99.52292244 | 95.80679524 | 92.25079851 |
| 170731A00028 | 7/31/2017 | 2.16 | 8/1/2022 | 7/31/2017 | 103.93326 | 103.9332638 | 103.9332638 | 103.9332638 | 103.4494019 | 101.3715333 | 99.34579255 | 97.37052094 | 95.44412535 |
| 170802A00027 | 8/2/2017 | 2.16 | 8/2/2022 | 8/2/2017 | 103.93842 | 103.9384234 | 103.9384234 | 103.9384234 | 103.4536055 | 101.3730503 | 99.34473579 | 97.36699776 | 95.43823799 |
| 170811A00018 | 8/11/2017 | 1.63 | 8/11/2020 | 8/11/2017 | 100.17657 | 100.1765712 | 100.1765712 | 100.1765712 | 100.1598297 | 100.0432989 | 99.92705448 | 99.81109534 | 99.69542039 |
| 170818A00003 | 8/18/2017 | 2.23 | 8/20/2024 | 8/18/2017 | 108.84617 | 108.8461721 | 108.8461721 | 108.8461721 | 107.2104174 | 103.0626054 | 99.09873161 | 95.30963852 | 91.68667722 |
| 161206A00008 | 12/6/2016 | 2.6 | 12/6/2023 | 12/6/2016 | 107.98444 | 107.9844358 | 107.9844358 | 107.9844358 | 106.8716931 | 103.4320056 | 100.1220561 | 96.93626967 | 93.86934083 |
| 161213A00013 | 12/13/2016 | 1.85 | 12/14/2020 | 12/13/2016 | 100.80332 | 100.8033179 | 100.8033179 | 100.8033179 | 100.7185405 | 100.2560278 | 99.79776678 | 99.34369898 | 98.89376685 |
| 161222A00030 | 12/22/2016 | 3.09 | 12/22/2026 | 12/22/2016 | 119.45285 | 119.4528482 | 119.4528482 | 119.4528482 | 114.7765075 | 108.1868358 | 102.0262871 | 96.26459904 | 90.87379492 |
| 170109A00031 | 1/9/2017 | 2.29 | 1/10/2022 | 1/9/2017 | 103.10569 | 103.1056875 | 103.1056875 | 103.1056875 | 102.8109876 | 101.2878528 | 99.79497742 | 98.33153325 | 96.89672181 |
| 170119A00004 | 1/19/2017 | 2.36 | 1/18/2022 | 1/19/2017 | 103.26012 | 103.260123 | 103.260123 | 103.260123 | 102.9587534 | 101.413173 | 99.89853291 | 98.41397524 | 96.95867349 |
| 170203A00012 | 2/3/2017 | 3.63 | 2/2/2035 | 2/3/2017 | 148.11793 | 148.1179286 | 148.1179286 | 140.0880699 | 124.5982836 | 110.7363329 | 98.67493766 | 88.16567311 | 78.9957982 |
| 170213A00010 | 2/13/2017 | 2 | 8/13/2020 | 2/13/2017 | 100.21007 | 100.2100687 | 100.2100687 | 100.2100687 | 100.1924544 | 100.0705591 | 99.94897472 | 99.82770007 | 99.70673392 |
| 170215A00035 | 2/15/2017 | 2.51 | 5/7/2021 | 2/15/2017 | 101.93576 | 101.9357599 | 101.9357599 | 101.9357599 | 101.7620612 | 100.902583 | 100.0575963 | 99.22673666 | 98.40965196 |
| 170216A00041 | 2/16/2017 | 2.37 | 2/16/2022 | 2/16/2017 | 103.44201 | 103.4420125 | 103.4420125 | 103.4420125 | 103.1161658 | 101.4877799 | 99.89300539 | 98.33086686 | 96.8004267 |
| 170303A00021 | 3/3/2017 | 2.2 | 3/3/2022 | 3/3/2017 | 103.52883 | 103.5288339 | 103.5288339 | 103.5288339 | 103.1887866 | 101.5116278 | 99.86976299 | 98.26214292 | 96.68776017 |
| 170313A00035 | 3/13/2017 | 3.31 | 3/15/2027 | 3/13/2017 | 120.2242 | 120.2242009 | 120.2242009 | 120.2242009 | 115.2021084 | 108.4318304 | 102.1138431 | 96.21540915 | 90.70633255 |
| 170314A00005 | 3/14/2017 | 2.29 | 3/14/2022 | 3/14/2017 | 103.7477 | 103.7477007 | 103.7477007 | 103.7477007 | 103.3972967 | 101.6890093 | 100.0171329 | 98.38056855 | 96.77826159 |
| 170322A00010 | 3/22/2017 | 2.11 | 3/22/2022 | 3/22/2017 | 103.48124 | 103.4812444 | 103.4812444 | 103.4812444 | 103.124037 | 101.3969151 | 99.70695776 | 98.05303082 | 96.43404679 |
| 170322A00011 | 3/22/2017 | 2.48 | 3/22/2024 | 3/22/2017 | 108.90746 | 108.9074572 | 108.9074572 | 108.9074572 | 107.5858642 | 103.8304622 | 100.2269647 | 96.76835026 | 93.44796668 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170322A00024 | 3/22/2017 | 3.72 | 9/22/2036 | 3/22/2017 | 154.8266 | 154.8265991 | 154.8265991 | 144.3828038 | 127.0762153 | 111.8476709 | 98.77403164 | 87.530963 | 77.84489817 |
| 170327A00070 | 3/29/2017 | 3.05 | 3/29/2027 | 3/29/2017 | 119.9742 | 119.9741963 | 119.9741963 | 119.9741963 | 114.8394596 | 107.9936338 | 101.6094339 | 95.65317295 | 90.09380018 |
| 170404A00033 | 4/4/2017 | 2.22 | 4/4/2022 | 4/4/2017 | 103.44511 | 103.445109 | 103.445109 | 103.445109 | 103.0772082 | 101.3210256 | 99.60313904 | 97.92238264 | 96.27763795 |
| 170428A00030 | 4/28/2017 | 2.25 | 4/28/2022 | 4/28/2017 | 103.60997 | 103.6099694 | 103.6099694 | 103.6099694 | 103.2192879 | 101.3966556 | 99.61499019 | 97.87312761 | 96.16994452 |
| 170515A00010 | 5/15/2017 | 2.58 | 5/15/2024 | 5/15/2017 | 108.92542 | 108.9254202 | 108.9254202 | 108.9254202 | 107.5044177 | 103.6259736 | 99.90946127 | 96.34729359 | 92.93227769 |
| 170515A00022 | 5/15/2017 | 2.04 | 5/17/2021 | 5/15/2017 | 101.57953 | 101.5795268 | 101.5795268 | 101.5795268 | 101.3988572 | 100.5138926 | 99.64433315 | 98.78977901 | 97.9498442 |
| 170524A00046 | 5/24/2017 | 1.84 | 5/24/2021 | 5/24/2017 | 101.56758 | 101.5675828 | 101.5675828 | 101.5675828 | 101.3814271 | 100.4756438 | 99.58598853 | 98.71203342 | 97.8533657 |
| 170530A00058 | 5/30/2017 | 1.96 | 3/26/2021 | 5/30/2017 | 101.27162 | 101.2716207 | 101.2716207 | 101.2716207 | 101.1276169 | 100.3853427 | 99.65393298 | 98.93315066 | 98.22276539 |
| 170531A00003 | 5/31/2017 | 1.94 | 5/31/2022 | 5/31/2017 | 103.53755 | 103.5375531 | 103.5375531 | 103.5375531 | 103.1136194 | 101.1985647 | 99.32853867 | 97.50221285 | 95.7183068 |
| 170531A00004 | 5/31/2017 | 1.79 | 6/1/2021 | 5/31/2017 | 101.55919 | 101.5591941 | 101.5591941 | 101.5591941 | 101.3674324 | 100.4399313 | 99.52932943 | 98.63516842 | 97.75700637 |
| 161223A00028 | 12/23/2016 | 2.23 | 12/23/2021 | 12/23/2016 | 103.17047 | 103.1704723 | 103.1704723 | 103.1704723 | 102.8891562 | 101.4089279 | 99.95749476 | 98.53409004 | 97.13797393 |
| 170110A00021 | 1/10/2017 | 1.89 | 1/11/2021 | 1/10/2017 | 100.95973 | 100.9597303 | 100.9597303 | 100.9597303 | 100.8584028 | 100.3185294 | 99.78443286 | 99.25602072 | 98.73320239 |
| 170111A00009 | 1/11/2017 | 3.16 | 1/11/2028 | 1/11/2017 | 121.5577 | 121.5576972 | 121.5576972 | 121.5576972 | 115.1503122 | 107.6250913 | 100.6571766 | 94.20218119 | 88.21947596 |
| 170111A00011 | 1/11/2017 | 3.24 | 1/11/2029 | 1/11/2017 | 125.07207 | 125.0720706 | 125.0720706 | 125.0720706 | 116.9068973 | 108.413253 | 100.6200433 | 93.46543382 | 86.89335965 |
| 170111A00013 | 1/11/2017 | 3.4 | 1/10/2031 | 1/11/2017 | 132.5216 | 132.5215959 | 132.5215959 | 131.1813643 | 120.1501664 | 109.7718919 | 100.4183397 | 91.98176051 | 84.36628966 |
| 170120A00008 | 1/20/2017 | 3.63 | 1/20/2034 | 1/20/2017 | 144.77693 | 144.7769344 | 144.7769344 | 138.4987285 | 124.0956842 | 111.0487958 | 99.59531662 | 89.52848985 | 80.66952832 |
| 170120A00011 | 1/20/2017 | 3.75 | 1/20/2037 | 1/20/2017 | 156.40018 | 156.400181 | 156.400181 | 145.5071311 | 127.8196392 | 112.304262 | 99.01887606 | 87.62240053 | 77.82799938 |
| 170130A00011 | 1/30/2017 | 2.15 | 2/1/2021 | 1/30/2017 | 101.13651 | 101.1365055 | 101.1365055 | 101.1365055 | 101.0232522 | 100.426226 | 99.83623403 | 99.25315271 | 98.67686124 |
| 170206A00012 | 2/6/2017 | 2.04 | 2/5/2021 | 2/6/2017 | 101.0901 | 101.0900986 | 101.0900986 | 101.0900986 | 100.9746004 | 100.3667883 | 99.76627554 | 99.17293124 | 98.58662761 |
| 170217A00035 | 2/17/2017 | 1.9 | 2/17/2021 | 2/17/2017 | 101.14774 | 101.1477394 | 101.1477394 | 101.1477394 | 101.0251681 | 100.3832133 | 99.74940237 | 99.12358108 | 98.50559891 |
| 170307A00033 | 3/7/2017 | 2.2 | 3/7/2022 | 3/7/2017 | 103.55194 | 103.5519369 | 103.5519369 | 103.5519369 | 103.2082195 | 101.5202405 | 99.86795065 | 98.25028292 | 96.66621309 |
| 170316A00018 | 3/16/2017 | 2.8 | 3/18/2024 | 3/16/2017 | 109.38613 | 109.3861275 | 109.3861275 | 109.3861275 | 108.0775475 | 104.3417826 | 100.7562247 | 97.31396809 | 94.00846825 |
| 170321A00013 | 3/21/2017 | 2.18 | 3/21/2022 | 3/21/2017 | 103.59789 | 103.5978912 | 103.5978912 | 103.5978912 | 103.2413898 | 101.5158709 | 99.82743555 | 98.17495384 | 96.55734197 |
| 170323A00009 | 3/23/2017 | 2.1 | 3/23/2022 | 3/23/2017 | 103.46926 | 103.469262 | 103.469262 | 103.469262 | 103.1111684 | 101.3815057 | 99.68910566 | 98.03282976 | 96.41158622 |
| 170330A00012 | 3/30/2017 | 2.11 | 3/30/2021 | 3/30/2017 | 101.40419 | 101.4041932 | 101.4041932 | 101.4041932 | 101.2577325 | 100.5040069 | 99.76146513 | 99.02985994 | 98.30895115 |
| 170331A00004 | 3/31/2017 | 2.12 | 3/31/2021 | 3/31/2017 | 101.41695 | 101.4169469 | 101.4169469 | 101.4169469 | 101.2698863 | 100.5133764 | 99.76812968 | 99.03389637 | 98.31043384 |
| 170405A00013 | 4/5/2017 | 2.07 | 4/5/2022 | 4/5/2017 | 103.48708 | 103.4870797 | 103.4870797 | 103.4870797 | 103.116976 | 101.3522974 | 99.62623725 | 97.93762128 | 96.28532269 |
| 170417A00068 | 4/17/2019 | 2.59 | 4/17/2024 | 4/17/2019 | 108.78805 | 108.7880477 | 108.7880477 | 108.7880477 | 107.4238392 | 103.6206926 | 99.97351971 | 96.47508586 | 93.11853284 |
| 170419A00022 | 4/19/2017 | 1.75 | 4/19/2021 | 4/19/2017 | 101.32709 | 101.3270911 | 101.3270911 | 101.3270911 | 101.1664201 | 100.357061 | 99.56061286 | 98.77676839 | 98.00523015 |
| 170419A00025 | 4/19/2017 | 2.72 | 4/19/2027 | 4/19/2017 | 117.87612 | 117.876118 | 117.876118 | 117.876118 | 112.6768781 | 105.8483825 | 99.48529032 | 93.55340478 | 88.0212118 |
| 170427A00044 | 4/27/2017 | 3.02 | 4/27/2027 | 4/27/2017 | 118.58937 | 118.5893714 | 118.5893714 | 118.5893714 | 113.396128 | 106.5762386 | 100.2202234 | 94.29405279 | 88.7663597 |
| 170427A00046 | 4/27/2017 | 3.1 | 4/27/2028 | 4/27/2017 | 121.91474 | 121.9147366 | 121.9147366 | 121.9147366 | 115.0194795 | 107.2314457 | 100.0398562 | 93.39572952 | 87.25434622 |
| 170502A00028 | 5/2/2017 | 2.84 | 5/3/2027 | 5/2/2017 | 118.80564 | 118.8056371 | 118.8056371 | 118.8056371 | 113.5272843 | 106.6345118 | 100.213374 | 94.22910603 | 88.64967385 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170515A00005 | 5/15/2017 | 2.04 | 5/16/2022 | 5/15/2017 | 103.6518 | 103.6517963 | 103.6517963 | 103.6517963 | 103.2422204 | 101.3655266 | 99.53211899 | 97.74074488 | 95.99019588 |
| 170706A00027 | 7/6/2017 | 1.75 | 7/6/2020 | 7/6/2017 | 100.02722 | 100.0272249 | 100.0272249 | 100.0272249 | 100.0249414 | 100.0082816 | 99.99163858 | 99.97501246 | 99.95840319 |
| 170706A00073 | 7/6/2017 | 1.93 | 7/6/2020 | 7/6/2017 | 100.02684 | 100.026836 | 100.026836 | 100.026836 | 100.024557 | 100.0079299 | 99.99131931 | 99.97472517 | 99.95814747 |
| 170719A00004 | 7/19/2017 | 1.67 | 7/20/2020 | 7/19/2017 | 100.08631 | 100.0863059 | 100.0863059 | 100.0863059 | 100.0786952 | 100.0231823 | 99.96774714 | 99.91238964 | 99.85710959 |
| 170724A00025 | 7/24/2017 | 1.66 | 7/24/2020 | 7/24/2017 | 100.1029 | 100.1029005 | 100.1029005 | 100.1029005 | 100.093768 | 100.0271586 | 99.96064989 | 99.89424171 | 99.82793379 |
| 170728A00027 | 7/28/2017 | 1.87 | 7/28/2020 | 7/28/2017 | 100.12283 | 100.1228293 | 100.1228293 | 100.1228293 | 100.1121936 | 100.0346247 | 99.95718014 | 99.87985966 | 99.80266298 |
| 170731A00069 | 7/31/2017 | 1.75 | 1/29/2021 | 7/31/2017 | 100.96555 | 100.965551 | 100.965551 | 100.965551 | 100.8539135 | 100.2646589 | 99.68226964 | 99.10662637 | 98.53761241 |
| 170803A00013 | 8/3/2017 | 2.14 | 8/3/2022 | 8/3/2017 | 103.90128 | 103.9012767 | 103.9012767 | 103.9012767 | 103.4155946 | 101.3328071 | 99.30236413 | 97.32259629 | 95.39190049 |
| 170803A00032 | 8/3/2017 | 2.12 | 8/3/2023 | 8/3/2017 | 106.26495 | 106.2649532 | 106.2649532 | 106.2649532 | 105.3595765 | 102.2627221 | 99.27321201 | 96.38670944 | 93.59908037 |
| 170808A00014 | 8/8/2017 | 1.67 | 8/10/2020 | 8/8/2017 | 100.17692 | 100.1769224 | 100.1769224 | 100.1769224 | 100.1606298 | 100.0468667 | 99.93337653 | 99.82015829 | 99.70721093 |
| 170815A00006 | 8/15/2017 | 2.5 | 8/15/2024 | 8/15/2017 | 109.16991 | 109.1699132 | 109.1699132 | 109.1699132 | 107.5535774 | 103.4333511 | 99.4947281 | 95.72871648 | 92.12682084 |
| 170822A00011 | 8/22/2017 | 1.83 | 8/24/2020 | 8/22/2017 | 100.23809 | 100.2380934 | 100.2380934 | 100.2380934 | 100.215544 | 100.0632216 | 99.91137077 | 99.75998933 | 99.6090751 |
| 170828A00031 | 8/28/2017 | 2.07 | 8/1/2022 | 8/28/2017 | 103.74338 | 103.7433818 | 103.7433818 | 103.7433818 | 103.2599305 | 101.1840951 | 99.16034673 | 97.18702795 | 95.26254675 |
| 170829A00017 | 8/29/2017 | 1.76 | 8/31/2020 | 8/29/2017 | 100.25634 | 100.2563403 | 100.2563403 | 100.2563403 | 100.2306518 | 100.0589809 | 99.8878932 | 99.71738582 | 99.54745585 |
| 170829A00018 | 8/29/2017 | 1.9 | 8/30/2021 | 8/29/2017 | 101.91897 | 101.9189678 | 101.9189678 | 101.9189678 | 101.7007792 | 100.5292871 | 99.38465618 | 98.26597134 | 97.17235849 |
| 170829A00025 | 8/29/2017 | 1.9 | 8/30/2021 | 8/29/2017 | 101.91897 | 101.9189678 | 101.9189678 | 101.9189678 | 101.7007792 | 100.5292871 | 99.38465618 | 98.26597134 | 97.17235849 |
| 170829A00044 | 8/29/2017 | 2.01 | 8/29/2022 | 8/29/2017 | 103.74968 | 103.7496758 | 103.7496758 | 103.7496758 | 103.2397984 | 101.0904027 | 98.99627066 | 96.9555901 | 94.96662327 |
| 170830A00034 | 8/30/2017 | 2.05 | 8/30/2022 | 8/30/2017 | 103.84202 | 103.8420153 | 103.8420153 | 103.8420153 | 103.3309859 | 101.1779461 | 99.08030628 | 97.03624788 | 95.0440273 |
| 170831A00029 | 8/31/2017 | 1.87 | 8/31/2022 | 8/31/2017 | 103.84832 | 103.8483186 | 103.8483186 | 103.8483186 | 103.3343268 | 101.1708521 | 99.06323392 | 97.00963278 | 95.00828521 |
| 170911A00044 | 9/11/2017 | 1.73 | 9/13/2021 | 9/11/2017 | 101.96832 | 101.9683244 | 101.9683244 | 101.9683244 | 101.746374 | 100.5337077 | 99.34979938 | 98.19363589 | 97.06425097 |
| 170912A00007 | 9/12/2017 | 1.84 | 12/15/2020 | 9/12/2017 | 100.73928 | 100.7392781 | 100.7392781 | 100.7392781 | 100.654076 | 100.1897548 | 99.72971792 | 99.27390609 | 98.82226121 |
| 170912A00008 | 9/12/2017 | 1.98 | 12/15/2021 | 9/12/2017 | 102.51798 | 102.5179814 | 102.5179814 | 102.5179814 | 102.2446073 | 100.7944102 | 99.37198537 | 97.97660476 | 96.60756534 |
| 170915A00001 | 9/15/2017 | 2.43 | 9/16/2024 | 9/15/2017 | 109.0661 | 109.0661038 | 109.0661038 | 109.0661038 | 107.379427 | 103.1787426 | 99.16650247 | 95.33320709 | 91.66989246 |
| 170918A00108 | 9/18/2017 | 1.97 | 9/20/2022 | 9/18/2017 | 104.17051 | 104.1705089 | 104.1705089 | 104.1705089 | 103.6370694 | 101.4155341 | 99.25248028 | 97.14593803 | 95.09402118 |
| 170921A00063 | 9/21/2017 | 2.23 | 9/21/2022 | 9/21/2017 | 104.35336 | 104.353358 | 104.353358 | 104.353358 | 103.8206697 | 101.6023966 | 99.44241658 | 97.33876838 | 95.28957417 |
| 160812A00005 | 8/12/2016 | 1.69 | 8/12/2022 | 8/12/2016 | 102.98415 | 102.9841464 | 102.9841464 | 102.9841464 | 102.491986 | 100.3954938 | 98.35215735 | 96.36026402 | 94.41816998 |
| 160815A00005 | 8/15/2016 | 2.23 | 8/17/2026 | 8/15/2016 | 111.85455 | 111.8545463 | 111.8545463 | 111.8545463 | 107.8924145 | 101.8841952 | 96.25056587 | 90.96621384 | 86.00766621 |
| 160815A00007 | 8/15/2016 | 2.23 | 8/17/2026 | 8/15/2016 | 111.85455 | 111.8545463 | 111.8545463 | 111.8545463 | 107.8924145 | 101.8841952 | 96.25056587 | 90.96621384 | 86.00766621 |
| 160825A00055 | 8/29/2016 | 2.32 | 8/30/2021 | 8/29/2016 | 102.4151 | 102.4151012 | 102.4151012 | 102.4151012 | 102.1963187 | 101.0217267 | 99.87404534 | 98.75235818 | 97.65578987 |
| 160830A00010 | 8/30/2016 | 1.65 | 8/30/2021 | 8/30/2016 | 101.62365 | 101.6236502 | 101.6236502 | 101.6236502 | 101.4058153 | 100.2361683 | 99.09335311 | 97.97645536 | 96.88460172 |
| 160830A00030 | 8/30/2016 | 1.52 | 8/28/2020 | 8/30/2016 | 100.20462 | 100.2046191 | 100.2046191 | 100.2046191 | 100.1802841 | 100.0169617 | 99.85417366 | 99.69191731 | 99.53019009 |
| 160830A00032 | 8/30/2016 | 1.82 | 8/30/2022 | 8/30/2016 | 103.33835 | 103.3383536 | 103.3383536 | 103.3383536 | 102.8284663 | 100.6810121 | 98.58884354 | 96.5501455 | 94.56317752 |
| 160926A00002 | 9/26/2016 | 1.6 | 9/27/2021 | 9/26/2016 | 101.66691 | 101.6669124 | 101.6669124 | 101.6669124 | 101.4426511 | 100.1971211 | 98.98199603 | 97.79617377 | 96.63860494 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160926A00004 | 9/26/2016 | 1.66 | 9/26/2023 | 9/26/2016 | 105.05547 | 105.0554682 | 105.0554682 | 105.0554682 | 104.0691085 | 100.8490831 | 97.74508477 | 94.75223151 | 91.86588081 |
| 160926A00022 | 9/26/2016 | 1.6 | 9/24/2021 | 9/26/2016 | 101.65595 | 101.6559514 | 101.6559514 | 101.6559514 | 101.4323937 | 100.1950282 | 98.98767861 | 97.80926353 | 96.658753 |
| 160926A00074 | 9/26/2016 | 1.38 | 9/27/2021 | 9/26/2016 | 101.5898 | 101.5897951 | 101.5897951 | 101.5897951 | 101.3650814 | 100.1169606 | 98.89936488 | 97.71118602 | 96.55136899 |
| 160929A00004 | 9/29/2016 | 1.74 | 9/29/2022 | 9/29/2016 | 103.28238 | 103.2823807 | 103.2823807 | 103.2823807 | 102.7447986 | 100.5171783 | 98.3486241 | 96.23713028 | 94.18077728 |
| 161006A00011 | 10/6/2016 | 1.64 | 10/6/2022 | 10/6/2016 | 103.49463 | 103.4946314 | 103.4946314 | 103.4946314 | 102.9478606 | 100.6911817 | 98.49490044 | 96.35697562 | 94.27545229 |
| 161006A00013 | 10/6/2016 | 2.07 | 10/6/2025 | 10/6/2016 | 110.39644 | 110.396444 | 110.396444 | 110.396444 | 107.6585633 | 102.4197306 | 97.46756309 | 92.78485881 | 88.35554109 |
| 161115A00010 | 11/15/2016 | 2.09 | 11/15/2021 | 11/15/2016 | 102.5299 | 102.5299047 | 102.5299047 | 102.5299047 | 102.2786671 | 100.9086704 | 99.56354836 | 98.24268198 | 96.94547241 |
| 161117A00015 | 11/17/2016 | 2.08 | 11/17/2021 | 11/17/2016 | 102.52592 | 102.5259209 | 102.5259209 | 102.5259209 | 102.2732924 | 100.8978787 | 99.54752737 | 98.22161273 | 96.9195293 |
| 170213A00011 | 2/13/2017 | 2.13 | 2/16/2021 | 2/13/2017 | 101.20152 | 101.2015184 | 101.2015184 | 101.2015184 | 101.0797016 | 100.4414157 | 99.81117707 | 99.18883414 | 98.57423914 |
| 170215A00031 | 2/15/2017 | 2.13 | 7/24/2020 | 2/15/2017 | 100.12261 | 100.1226111 | 100.1226111 | 100.1226111 | 100.1134924 | 100.0469836 | 99.980574 | 99.91426348 | 99.84805182 |
| 170215A00033 | 2/15/2017 | 2.24 | 11/9/2020 | 2/15/2017 | 100.72411 | 100.7241133 | 100.7241133 | 100.7241133 | 100.6604991 | 100.2951126 | 99.93238166 | 99.57227739 | 99.21477124 |
| 170215A00040 | 2/15/2017 | 2.59 | 5/15/2023 | 2/15/2017 | 106.65517 | 106.6551655 | 106.6551655 | 106.6551655 | 105.8676286 | 102.9885769 | 100.2029491 | 97.50722155 | 94.89802262 |
| 170216A00010 | 2/16/2017 | 2.37 | 2/16/2022 | 2/16/2017 | 103.44201 | 103.4420125 | 103.4420125 | 103.4420125 | 103.1161658 | 101.4877799 | 99.89300539 | 98.33086686 | 96.8004267 |
| 170216A00044 | 2/16/2017 | 3.52 | 2/17/2032 | 2/16/2017 | 137.25853 | 137.2585339 | 137.2585339 | 134.2882131 | 122.0002512 | 110.6034285 | 100.4305526 | 91.34181849 | 83.21413035 |
| 170228A00015 | 2/28/2017 | 2.87 | 5/28/2025 | 2/28/2017 | 112.67399 | 112.6739923 | 112.6739923 | 112.6739923 | 110.3304604 | 105.3969583 | 100.7156379 | 96.27230709 | 92.05364344 |
| 170322A00026 | 3/22/2017 | 3.22 | 3/22/2028 | 3/22/2017 | 122.57155 | 122.5715483 | 122.5715483 | 122.5715483 | 115.8249493 | 108.0962007 | 100.9520207 | 94.34486561 | 88.23130484 |
| 161213A00014 | 12/13/2016 | 2.07 | 12/13/2021 | 12/13/2016 | 102.87608 | 102.8760829 | 102.8760829 | 102.8760829 | 102.6030248 | 101.1515244 | 99.72777624 | 98.331054 | 96.96065611 |
| 170111A00020 | 1/11/2017 | 2.27 | 1/11/2022 | 1/11/2017 | 103.0802 | 103.0802048 | 103.0802048 | 103.0802048 | 102.7847396 | 101.2591596 | 99.76391733 | 98.298181 | 96.86114884 |
| 170117A00045 | 1/17/2017 | 2.21 | 1/18/2022 | 1/17/2017 | 103.02443 | 103.0244317 | 103.0244317 | 103.0244317 | 102.723425 | 101.17976 | 99.66700144 | 98.18429232 | 96.73080705 |
| 170130A00054 | 3/30/2017 | 2.33 | 4/29/2022 | 3/30/2017 | 103.76338 | 103.7633768 | 103.7633768 | 103.7633768 | 103.3714739 | 101.5446761 | 99.75898481 | 98.01323516 | 96.30630274 |
| 170215A00038 | 2/15/2017 | 2.71 | 8/22/2022 | 2/15/2017 | 105.23388 | 105.2338828 | 105.2338828 | 105.2338828 | 104.7272808 | 102.5799279 | 100.487367 | 98.44781556 | 96.45956355 |
| 170215A00039 | 2/15/2017 | 2.72 | 11/7/2022 | 2/15/2017 | 105.77068 | 105.7706835 | 105.7706835 | 105.7706835 | 105.1906039 | 102.8309719 | 100.5362366 | 98.30426098 | 96.13299041 |
| 170215A00041 | 2/15/2017 | 2.6 | 10/16/2023 | 2/15/2017 | 107.66136 | 107.6613605 | 107.6613605 | 107.6613605 | 106.636872 | 103.3367509 | 100.1565219 | 97.09116083 | 94.13588446 |
| 170224A00020 | 2/24/2017 | 3.08 | 2/24/2027 | 2/24/2017 | 118.53256 | 118.5325624 | 118.5325624 | 118.5325624 | 113.6228104 | 106.9525395 | 100.7258317 | 94.91075975 | 89.47785926 |
| 170224A00021 | 2/24/2017 | 3.4 | 2/24/2032 | 2/24/2017 | 135.92536 | 135.9253571 | 135.9253571 | 132.9291318 | 120.6807699 | 109.3399975 | 99.22111594 | 90.18422038 | 82.10616105 |
| 170224A00039 | 5/24/2017 | 3.17 | 5/24/2027 | 5/24/2017 | 119.82728 | 119.8272773 | 119.8272773 | 119.8272773 | 114.4918472 | 107.5683257 | 101.1195917 | 95.11051763 | 89.50874694 |
| 170303A00023 | 3/3/2017 | 2 | 3/3/2021 | 3/3/2017 | 101.28497 | 101.2849695 | 101.2849695 | 101.2849695 | 101.1542751 | 100.4734841 | 99.8018323 | 99.13913656 | 98.48521867 |
| 170313A00034 | 3/13/2017 | 3.31 | 3/15/2027 | 3/13/2017 | 120.2242 | 120.2242009 | 120.2242009 | 120.2242009 | 115.2021084 | 108.4318304 | 102.1138431 | 96.21540915 | 90.70633255 |
| 170314A00006 | 3/14/2017 | 2.67 | 3/14/2024 | 3/14/2017 | 109.56763 | 109.5676283 | 109.5676283 | 109.5676283 | 108.2583235 | 104.5114594 | 100.9152822 | 97.46286506 | 94.14764344 |
| 170317A00060 | 3/17/2017 | 2.04 | 3/17/2021 | 3/17/2017 | 101.38703 | 101.3870321 | 101.3870321 | 101.3870321 | 101.2479884 | 100.528484 | 99.81918857 | 99.11988582 | 98.43036548 |
| 170322A00025 | 3/22/2017 | 3.58 | 3/22/2033 | 3/22/2017 | 141.44787 | 141.447865 | 141.447865 | 136.6349989 | 123.1422301 | 110.7995183 | 99.88674645 | 90.22786244 | 81.66944714 |
| 170417A00043 | 4/17/2017 | 2.14 | 4/18/2022 | 4/17/2017 | 103.35592 | 103.3559166 | 103.3559166 | 103.3559166 | 102.9750896 | 101.1819943 | 99.42870562 | 97.71406073 | 96.03694013 |
| 170417A00094 | 4/17/2017 | 1.95 | 4/19/2022 | 4/17/2017 | 103.34365 | 103.343652 | 103.343652 | 103.343652 | 102.960586 | 101.1590015 | 99.39756126 | 97.67509326 | 95.99046907 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170419A00023 | 4/19/2017 | 2.11 | 4/19/2023 | 4/19/2017 | 105.64917 | 105.6491741 | 105.6491741 | 105.6491741 | 104.8944279 | 102.0868131 | 99.36864258 | 96.73655866 | 94.18735061 |
| 170505A00003 | 5/5/2017 | 2.09 | 5/5/2021 | 5/5/2017 | 101.56325 | 101.5632492 | 101.5632492 | 101.5632492 | 101.3913346 | 100.5390405 | 99.70103212 | 98.87695251 | 98.06645661 |
| 170515A00054 | 5/15/2017 | 3.2 | 5/17/2032 | 5/15/2017 | 136.87504 | 136.8750374 | 136.8750374 | 133.434156 | 120.757478 | 109.093189 | 98.71381484 | 89.46929322 | 81.22785789 |
| 170524A00011 | 5/24/2017 | 2.54 | 5/24/2024 | 5/24/2017 | 108.82471 | 108.8247107 | 108.8247107 | 108.8247107 | 107.3859929 | 103.4865515 | 99.75088088 | 96.17126306 | 92.74038352 |
| 170530A00027 | 5/30/2017 | 1.97 | 5/31/2022 | 5/30/2017 | 103.59582 | 103.5958165 | 103.5958165 | 103.5958165 | 103.1717692 | 101.2561372 | 99.38554493 | 97.55866368 | 95.77421269 |
| 170601A00018 | 6/1/2017 | 1.96 | 6/1/2022 | 6/1/2017 | 103.58149 | 103.5814936 | 103.5814936 | 103.5814936 | 103.1564834 | 101.238275 | 99.36523068 | 97.53601586 | 95.74934453 |
| 170602A00033 | 6/2/2017 | 2.09 | 6/2/2022 | 6/2/2017 | 103.50772 | 103.5077164 | 103.5077164 | 103.5077164 | 103.0833109 | 101.1692306 | 99.30017807 | 97.47482379 | 95.69188653 |
| 170322A00022 | 3/22/2017 | 3.89 | 9/23/2041 | 3/22/2017 | 174.71876 | 174.7187607 | 174.7187607 | 155.845215 | 133.1297881 | 114.0667599 | 98.33041347 | 85.29932414 | 74.47269662 |
| 170404A00049 | 4/6/2017 | 2.42 | 4/6/2022 | 4/6/2017 | 103.81315 | 103.8131491 | 103.8131491 | 103.8131491 | 103.442717 | 101.6777209 | 99.95130125 | 98.26229093 | 96.60956966 |
| 170417A00014 | 4/17/2017 | 1.95 | 4/18/2022 | 4/17/2017 | 103.33858 | 103.3385805 | 103.3385805 | 103.3385805 | 102.9564674 | 101.1576584 | 99.3988812 | 97.67896368 | 95.9967777 |
| 170509A00006 | 5/9/2017 | 2.3 | 5/9/2022 | 5/9/2017 | 103.76335 | 103.7633468 | 103.7633468 | 103.7633468 | 103.361788 | 101.5086331 | 99.69772652 | 97.92785966 | 96.19786617 |
| 170515A00041 | 5/15/2017 | 3.02 | 5/17/2027 | 5/15/2017 | 118.7372 | 118.7372009 | 118.7372009 | 118.7372009 | 113.4509738 | 106.5796715 | 100.1790768 | 94.21442453 | 88.65368636 |
| 170602A00007 | 6/2/2017 | 1.94 | 6/2/2021 | 6/2/2017 | 101.56485 | 101.564846 | 101.564846 | 101.564846 | 101.372992 | 100.4446908 | 99.53332459 | 98.63843345 | 97.7595739 |
| 170608A00017 | 6/8/2017 | 1.95 | 6/8/2022 | 6/8/2017 | 103.59754 | 103.5975382 | 103.5975382 | 103.5975382 | 103.1655618 | 101.2281735 | 99.33684422 | 97.49019948 | 95.68691508 |
| 170609A00009 | 6/9/2017 | 1.82 | 6/9/2021 | 6/9/2017 | 101.6249 | 101.6249046 | 101.6249046 | 101.6249046 | 101.4290359 | 100.4794224 | 99.54752397 | 98.63284848 | 97.73492182 |
| 170720A00009 | 7/20/2017 | 2.14 | 7/20/2022 | 7/20/2017 | 103.8298 | 103.8297988 | 103.8297988 | 103.8297988 | 103.3577956 | 101.312564 | 99.3181308 | 97.3729007 | 95.4753406 |
| 170721A00007 | 7/21/2017 | 1.8 | 7/21/2021 | 7/21/2017 | 101.80176 | 101.8017606 | 101.8017606 | 101.8017606 | 101.5902738 | 100.5254121 | 99.48277931 | 98.46168503 | 97.46146722 |
| 170726A00033 | 7/26/2017 | 1.89 | 7/27/2020 | 7/26/2017 | 100.11994 | 100.1199421 | 100.1199421 | 100.1199421 | 100.109686 | 100.0348842 | 99.9602003 | 99.88563399 | 99.811185 |
| 170822A00018 | 8/22/2017 | 2.25 | 8/22/2023 | 8/22/2017 | 106.20201 | 106.2020079 | 106.2020079 | 106.2020079 | 105.2718777 | 102.1402148 | 99.11817982 | 96.20129445 | 93.38529232 |
| 170824A00037 | 8/24/2017 | 1.98 | 8/24/2021 | 8/24/2017 | 101.98508 | 101.9850789 | 101.9850789 | 101.9850789 | 101.7677678 | 100.6121144 | 99.4826012 | 98.37834906 | 97.29851793 |
| 170830A00029 | 8/30/2017 | 1.87 | 3/30/2021 | 8/30/2017 | 101.22239 | 101.2223885 | 101.2223885 | 101.2223885 | 101.0760664 | 100.323099 | 99.58130755 | 98.85044484 | 98.13027086 |
| 170831A00004 | 8/31/2017 | 2 | 8/31/2023 | 8/31/2017 | 106.03529 | 106.0352868 | 106.0352868 | 106.0352868 | 105.0870225 | 101.9207579 | 98.86632204 | 95.91910591 | 93.07472106 |
| 170831A00006 | 8/31/2017 | 1.87 | 8/31/2022 | 8/31/2017 | 103.84832 | 103.8483186 | 103.8483186 | 103.8483186 | 103.3343268 | 101.1708521 | 99.06323392 | 97.00963278 | 95.00828521 |
| 170906A00020 | 9/6/2017 | 2.14 | 9/6/2023 | 9/6/2017 | 105.92909 | 105.9290933 | 105.9290933 | 105.9290933 | 104.976431 | 101.8098375 | 98.75527628 | 95.80811929 | 92.9639607 |
| 170906A00036 | 9/6/2017 | 1.81 | 9/6/2022 | 9/6/2017 | 103.74458 | 103.7445836 | 103.7445836 | 103.7445836 | 103.2252214 | 101.0465817 | 98.92453332 | 96.85719943 | 94.84278148 |
| 170907A00002 | 9/7/2017 | 1.69 | 9/7/2021 | 9/7/2017 | 101.89335 | 101.8933496 | 101.8933496 | 101.8933496 | 101.6728812 | 100.4769786 | 99.30905885 | 98.1681491 | 97.05332115 |
| 170908A00017 | 9/9/2019 | 2.32 | 9/9/2024 | 9/9/2019 | 108.56009 | 108.560093 | 108.560093 | 108.560093 | 106.8921634 | 102.7203007 | 98.73497705 | 94.92682405 | 91.28699907 |
| 170919A00076 | 9/19/2017 | 1.97 | 9/19/2022 | 9/19/2017 | 104.16538 | 104.1653845 | 104.1653845 | 104.1653845 | 103.6328923 | 101.4141363 | 99.25373175 | 97.14971518 | 95.10020662 |
| 170920A00028 | 9/21/2017 | 2.16 | 9/21/2022 | 9/21/2017 | 104.19582 | 104.1958206 | 104.1958206 | 104.1958206 | 103.6635026 | 101.447023 | 99.28879917 | 97.18687106 | 95.13936183 |
| 171010A00038 | 10/10/2017 | 2.23 | 10/11/2022 | 10/10/2017 | 104.46014 | 104.4601354 | 104.4601354 | 104.4601354 | 103.9085791 | 101.6358877 | 99.42410722 | 97.2711981 | 95.17520501 |
| 171016A00021 | 10/16/2017 | 2.2 | 10/17/2022 | 10/16/2017 | 104.42257 | 104.422569 | 104.422569 | 104.422569 | 103.8655212 | 101.5775567 | 99.35128243 | 97.18464793 | 95.0756858 |
| 170818A00025 | 8/18/2017 | 1.77 | 8/18/2021 | 8/18/2017 | 101.89806 | 101.8980581 | 101.8980581 | 101.8980581 | 101.6812842 | 100.5396843 | 99.42359971 | 98.33218263 | 97.26462229 |
| 170822A00012 | 8/22/2017 | 2.11 | 8/22/2022 | 8/22/2017 | 103.93323 | 103.9332299 | 103.9332299 | 103.9332299 | 103.4295402 | 101.2964786 | 99.21791818 | 97.19208498 | 95.21727709 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170828A00030 | 8/28/2017 | 1.96 | 9/1/2021 | 8/28/2017 | 101.99917 | 101.9991693 | 101.9991693 | 101.9991693 | 101.7804936 | 100.6030794 | 99.45278231 | 98.32867434 | 97.22986934 |
| 170829A00021 | 8/29/2017 | 1.58 | 8/31/2020 | 8/29/2017 | 100.25204 | 100.2520366 | 100.2520366 | 100.2520366 | 100.226306 | 100.0543567 | 99.88299487 | 99.7122175 | 99.54202162 |
| 170830A00033 | 8/30/2017 | 1.93 | 8/30/2021 | 8/30/2017 | 101.95441 | 101.9544059 | 101.9544059 | 101.9544059 | 101.7361749 | 100.5644613 | 99.41961255 | 98.30071326 | 97.20688931 |
| 170831A00009 | 8/31/2017 | 1.93 | 8/30/2021 | 8/31/2017 | 101.95441 | 101.9544059 | 101.9544059 | 101.9544059 | 101.7361749 | 100.5644613 | 99.41961255 | 98.30071326 | 97.20688931 |
| 170831A00052 | 8/31/2017 | 1.78 | 11/30/2021 | 8/31/2017 | 102.38876 | 102.388759 | 102.388759 | 102.388759 | 102.1265673 | 100.7131196 | 99.32607759 | 97.96476582 | 96.62853159 |
| 170831A00053 | 8/31/2017 | 1.81 | 3/1/2022 | 8/31/2017 | 102.85822 | 102.8582248 | 102.8582248 | 102.8582248 | 102.5211072 | 100.8550913 | 99.22406859 | 97.62700171 | 96.06289431 |
| 170906A00006 | 9/6/2017 | 1.81 | 9/6/2022 | 9/6/2017 | 103.74458 | 103.7445836 | 103.7445836 | 103.7445836 | 103.2252214 | 101.0465817 | 98.92453332 | 96.85719943 | 94.84278148 |
| 170906A00034 | 9/6/2017 | 1.87 | 9/7/2021 | 9/6/2017 | 101.91876 | 101.9187621 | 101.9187621 | 101.9187621 | 101.6987971 | 100.5056518 | 99.34037471 | 98.20199847 | 97.0896 |
| 170907A00059 | 9/7/2017 | 1.99 | 9/7/2022 | 9/7/2017 | 103.74795 | 103.747953 | 103.747953 | 103.747953 | 103.2296885 | 101.0561332 | 98.93895011 | 96.8762717 | 94.86630828 |
| 170912A00031 | 9/12/2017 | 1.89 | 9/12/2022 | 9/12/2017 | 103.95109 | 103.9510921 | 103.9510921 | 103.9510921 | 103.4256453 | 101.228364 | 99.08848554 | 97.00409352 | 94.97335188 |
| 170914A00039 | 9/14/2017 | 2.23 | 9/16/2024 | 9/14/2017 | 109.00372 | 109.0037233 | 109.0037233 | 109.0037233 | 107.3065094 | 103.0850064 | 99.05347548 | 95.20231507 | 91.52246603 |
| 170915A00005 | 9/15/2017 | 1.81 | 9/15/2021 | 9/15/2017 | 102.0754 | 102.0754002 | 102.0754002 | 102.0754002 | 101.852854 | 100.6340665 | 99.44430551 | 98.28254384 | 97.14780227 |
| 170915A00031 | 9/15/2017 | 2.1 | 9/15/2023 | 9/15/2017 | 106.43822 | 106.4382175 | 106.4382175 | 106.4382175 | 105.4641815 | 102.2511603 | 99.15279731 | 96.16431284 | 93.28115892 |
| 170918A00007 | 9/18/2017 | 2.8 | 9/20/2027 | 9/18/2017 | 118.07313 | 118.0731275 | 118.0731275 | 118.0731275 | 112.2347124 | 105.0921786 | 98.46117405 | 92.30225682 | 86.57922926 |
| 170919A00073 | 9/19/2017 | 2.28 | 9/19/2024 | 9/19/2017 | 109.23483 | 109.2348287 | 109.2348287 | 109.2348287 | 107.5294157 | 103.2951584 | 99.25171106 | 95.38941438 | 91.69915591 |
| 170921A00062 | 9/21/2017 | 1.95 | 9/21/2020 | 9/21/2017 | 100.38639 | 100.386394 | 100.386394 | 100.386394 | 100.3502021 | 100.1204141 | 99.89168623 | 99.66401098 | 99.43738111 |
| 171005A00006 | 10/5/2017 | 2.32 | 10/7/2024 | 10/5/2017 | 109.51522 | 109.5152194 | 109.5152194 | 109.5152194 | 107.7669004 | 103.4798312 | 99.38784825 | 95.48100691 | 91.74992737 |
| 171010A00005 | 10/10/2017 | 2.06 | 10/11/2022 | 10/10/2017 | 104.48619 | 104.4861887 | 104.4861887 | 104.4861887 | 103.9323448 | 101.6509761 | 99.43090568 | 97.27007617 | 95.1665155 |
| 171016A00060 | 10/16/2017 | 1.93 | 10/16/2020 | 10/16/2017 | 100.4996 | 100.4996014 | 100.4996014 | 100.4996014 | 100.4498978 | 100.1510148 | 99.85391955 | 99.55859587 | 99.26502788 |
| 171017A00023 | 10/17/2017 | 1.97 | 10/19/2020 | 10/17/2017 | 100.52582 | 100.525821 | 100.525821 | 100.525821 | 100.4744244 | 100.1672332 | 99.86192834 | 99.55849234 | 99.25690804 |
| 171026A00007 | 10/26/2017 | 2.47 | 10/26/2023 | 10/26/2017 | 107.28908 | 107.2890791 | 107.2890791 | 107.2890791 | 106.2495054 | 102.9296989 | 99.7314217 | 96.64958753 | 93.67935083 |
| 171026A00011 | 10/26/2017 | 2.94 | 10/26/2027 | 10/26/2017 | 119.3453 | 119.3452967 | 119.3452967 | 119.3452967 | 113.3238343 | 106.0543341 | 99.31092058 | 93.05267858 | 87.24207486 |
| 170531A00080 | 5/31/2017 | 2.3 | 5/31/2024 | 5/31/2017 | 108.65083 | 108.650826 | 108.650826 | 108.650826 | 107.1900129 | 103.2564489 | 99.48935795 | 95.88083841 | 92.42340503 |
| 170602A00015 | 6/2/2017 | 1.76 | 6/2/2021 | 6/2/2017 | 101.53576 | 101.5357604 | 101.5357604 | 101.5357604 | 101.3435157 | 100.4134104 | 99.50030379 | 98.60373332 | 97.72325316 |
| 170602A00034 | 6/2/2017 | 1.76 | 6/2/2021 | 6/2/2017 | 101.53576 | 101.5357604 | 101.5357604 | 101.5357604 | 101.3435157 | 100.4134104 | 99.50030379 | 98.60373332 | 97.72325316 |
| 170609A00026 | 6/9/2017 | 2.3 | 6/9/2023 | 6/9/2017 | 105.95196 | 105.9519598 | 105.9519598 | 105.9519598 | 105.1330657 | 102.1987121 | 99.36176124 | 96.61845558 | 93.9652038 |
| 170613A00033 | 6/13/2017 | 2.3 | 6/13/2024 | 6/13/2017 | 108.72916 | 108.7291621 | 108.7291621 | 108.7291621 | 107.2406394 | 103.2711398 | 99.47109898 | 95.83240143 | 92.34736325 |
| 170615A00034 | 6/15/2017 | 2.13 | 6/15/2022 | 6/15/2017 | 103.63168 | 103.6316758 | 103.6316758 | 103.6316758 | 103.1943018 | 101.2442154 | 99.34081821 | 97.48270647 | 95.66852825 |
| 170616A00017 | 6/16/2017 | 2.11 | 6/16/2023 | 6/16/2017 | 105.96896 | 105.9689579 | 105.9689579 | 105.9689579 | 105.136102 | 102.1702357 | 99.30370937 | 96.53265602 | 93.85338161 |
| 170622A00016 | 6/22/2017 | 2.11 | 6/22/2022 | 6/22/2017 | 103.62706 | 103.6270574 | 103.6270574 | 103.6270574 | 103.1827986 | 101.2138615 | 99.29251215 | 97.41730589 | 95.58685203 |
| 170622A00037 | 6/22/2017 | 3.27 | 6/22/2033 | 6/22/2017 | 138.2517 | 138.2516984 | 138.2516984 | 133.0250365 | 119.4694439 | 107.1519325 | 96.29323204 | 86.7102172 | 78.24372008 |
| 170622A00038 | 6/22/2017 | 3.32 | 6/22/2034 | 6/22/2017 | 141.82752 | 141.8275244 | 141.8275244 | 134.8747616 | 120.2677877 | 107.1465054 | 95.67881039 | 85.64387925 | 76.85157653 |
| 170626A00042 | 6/26/2017 | 1.92 | 6/27/2022 | 6/26/2017 | 103.63337 | 103.6333698 | 103.6333698 | 103.6333698 | 103.1825098 | 101.193196 | 99.25240379 | 97.35864673 | 95.51049454 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170706A00028 | 7/6/2017 | 2.09 | 7/6/2022 | 7/6/2017 | 104.02544 | 104.0254361 | 104.0254361 | 104.0254361 | 103.5649291 | 101.5475434 | 99.57979028 | 97.66013244 | 95.78709148 |
| 170712A00019 | 7/12/2017 | 2.18 | 7/12/2022 | 7/12/2017 | 103.87114 | 103.8711358 | 103.8711358 | 103.8711358 | 103.4068248 | 101.3822002 | 99.40752238 | 97.48123705 | 95.6018498 |
| 170717A00033 | 7/17/2017 | 2.19 | 7/18/2022 | 7/17/2017 | 103.92314 | 103.9231448 | 103.9231448 | 103.9231448 | 103.4528886 | 101.4119324 | 99.42157822 | 97.48024063 | 95.58639575 |
| 170726A00011 | 7/26/2017 | 2.2 | 7/26/2022 | 7/26/2017 | 103.98603 | 103.9860282 | 103.9860282 | 103.9860282 | 103.5078591 | 101.4452006 | 99.43402404 | 97.47270223 | 95.55967157 |
| 170728A00029 | 7/28/2017 | 2.1 | 1/27/2022 | 7/28/2017 | 102.89687 | 102.8968657 | 102.8968657 | 102.8968657 | 102.588828 | 101.0224077 | 99.48762591 | 97.98359338 | 96.5094536 |
| 170731A00012 | 7/31/2017 | 1.82 | 8/2/2021 | 7/31/2017 | 101.8799 | 101.879904 | 101.879904 | 101.879904 | 101.6657133 | 100.5677492 | 99.49338719 | 98.44187299 | 97.4124841 |
| 170731A00029 | 7/31/2017 | 2.34 | 7/31/2023 | 7/31/2017 | 106.36355 | 106.3635548 | 106.3635548 | 106.3635548 | 105.4669771 | 102.3898473 | 99.41885982 | 96.54974685 | 93.77843867 |
| 170801A00018 | 8/1/2017 | 1.87 | 8/3/2020 | 8/1/2017 | 100.14915 | 100.1491454 | 100.1491454 | 100.1491454 | 100.1360233 | 100.0418389 | 99.94783518 | 99.85401179 | 99.76036818 |
| 170801A00020 | 8/1/2017 | 2.02 | 8/2/2021 | 8/1/2017 | 101.92513 | 101.9251335 | 101.9251335 | 101.9251335 | 101.7114054 | 100.6157731 | 99.54364884 | 98.49428268 | 97.46695606 |
| 170808A00036 | 8/8/2017 | 2.04 | 11/15/2021 | 8/8/2017 | 102.46019 | 102.4601861 | 102.4601861 | 102.4601861 | 102.2090443 | 100.8395554 | 99.49493235 | 98.1745565 | 96.87782919 |
| 170822A00020 | 8/22/2017 | 2.59 | 8/22/2025 | 8/22/2017 | 111.82786 | 111.8278623 | 111.8278623 | 111.8278623 | 109.243473 | 104.1143866 | 99.25870067 | 94.66038232 | 90.30442519 |
| 170824A00031 | 8/24/2017 | 1.98 | 8/24/2021 | 8/24/2017 | 101.98508 | 101.9850789 | 101.9850789 | 101.9850789 | 101.7677678 | 100.6121144 | 99.4826012 | 98.37834906 | 97.29851793 |
| 170831A00050 | 8/31/2017 | 1.72 | 6/14/2021 | 8/31/2017 | 101.5516 | 101.5516003 | 101.5516003 | 101.5516003 | 101.3532781 | 100.3904424 | 99.44582847 | 98.51892282 | 97.60923102 |
| 170515A00007 | 5/15/2017 | 2.04 | 5/14/2021 | 5/15/2017 | 101.56474 | 101.5647416 | 101.5647416 | 101.5647416 | 101.3862698 | 100.5095208 | 99.64789454 | 98.80100215 | 97.96846801 |
| 170519A00002 | 5/19/2017 | 2.15 | 5/19/2022 | 5/19/2017 | 103.55214 | 103.5521397 | 103.5521397 | 103.5521397 | 103.1412229 | 101.263536 | 99.42922886 | 97.63704405 | 95.88576853 |
| 170530A00006 | 5/30/2017 | 2.15 | 5/31/2022 | 5/30/2017 | 103.6141 | 103.6141043 | 103.6141043 | 103.6141043 | 103.1914635 | 101.2817398 | 99.41681171 | 97.59536062 | 95.81611537 |
| 170531A00018 | 5/31/2017 | 1.97 | 5/28/2021 | 5/31/2017 | 101.56927 | 101.5692702 | 101.5692702 | 101.5692702 | 101.3806038 | 100.4658483 | 99.56753981 | 98.68523804 | 97.81851817 |
| 170606A00017 | 6/6/2017 | 1.9 | 6/6/2022 | 6/6/2017 | 103.48946 | 103.4894603 | 103.4894603 | 103.4894603 | 103.059678 | 101.1288026 | 99.24370984 | 97.40303728 | 95.60547223 |
| 170608A00003 | 6/8/2017 | 1.97 | 6/8/2021 | 6/8/2017 | 101.62115 | 101.6211462 | 101.6211462 | 101.6211462 | 101.4262137 | 100.4813378 | 99.55400695 | 98.64373594 | 97.75005725 |
| 170615A00004 | 6/15/2017 | 2.01 | 6/11/2021 | 6/15/2017 | 101.67366 | 101.6736647 | 101.6736647 | 101.6736647 | 101.4771687 | 100.5238796 | 99.5884441 | 98.67036421 | 97.76916021 |
| 170629A00014 | 6/29/2017 | 1.89 | 8/25/2020 | 6/29/2017 | 100.25175 | 100.2517521 | 100.2517521 | 100.2517521 | 100.2287523 | 100.0736524 | 99.91903953 | 99.76491151 | 99.61126603 |
| 170726A00034 | 7/26/2017 | 2.05 | 7/26/2021 | 7/26/2017 | 101.92376 | 101.9237626 | 101.9237626 | 101.9237626 | 101.7115013 | 100.6348695 | 99.58094561 | 98.54901728 | 97.53840148 |
| 170728A00031 | 7/28/2017 | 2.27 | 1/27/2023 | 7/28/2017 | 105.14107 | 105.1410694 | 105.1410694 | 105.1410694 | 104.4833207 | 101.9175056 | 99.42793682 | 97.01188803 | 94.66674892 |
| 170728A00033 | 7/28/2017 | 2.46 | 1/29/2024 | 7/28/2017 | 107.82133 | 107.8213324 | 107.8213324 | 107.8213324 | 106.6125723 | 103.0366783 | 99.60054991 | 96.29795553 | 93.12297779 |
| 170728A00040 | 7/28/2017 | 2.44 | 1/27/2025 | 7/28/2017 | 110.75259 | 110.752588 | 110.752588 | 110.752588 | 108.7256456 | 104.1240117 | 99.74476899 | 95.5759888 | 91.60644663 |
| 170731A00004 | 7/31/2017 | 2.16 | 7/29/2022 | 7/31/2017 | 103.91778 | 103.9177825 | 103.9177825 | 103.9177825 | 103.4368439 | 101.3670293 | 99.34900956 | 97.38114186 | 95.46184822 |
| 170731A00006 | 7/31/2017 | 2.16 | 8/1/2022 | 7/31/2017 | 103.93326 | 103.9332638 | 103.9332638 | 103.9332638 | 103.4494019 | 101.3715333 | 99.34579255 | 97.37052094 | 95.44412535 |
| 170804A00020 | 8/4/2017 | 2.13 | 8/1/2022 | 8/4/2017 | 103.86997 | 103.8699698 | 103.8699698 | 103.8699698 | 103.3862447 | 101.3090539 | 99.28397728 | 97.30935661 | 95.38359915 |
| 170818A00037 | 8/18/2017 | 2.08 | 8/18/2022 | 8/18/2017 | 103.84844 | 103.8484413 | 103.8484413 | 103.8484413 | 103.3487149 | 101.2270833 | 99.15947754 | 97.14414647 | 95.1794097 |
| 170821A00038 | 8/23/2017 | 2.39 | 8/23/2024 | 8/23/2017 | 109.53532 | 109.5353222 | 109.5353222 | 109.5353222 | 107.8888748 | 103.7191692 | 99.73449304 | 95.92562393 | 92.28385256 |
| 170822A00017 | 8/22/2017 | 2.11 | 8/22/2022 | 8/22/2017 | 103.93323 | 103.9332299 | 103.9332299 | 103.9332299 | 103.4295402 | 101.2964786 | 99.21791818 | 97.19208498 | 95.21727709 |
| 170822A00019 | 8/22/2017 | 2.44 | 8/22/2024 | 8/22/2017 | 108.9616 | 108.9616042 | 108.9616042 | 108.9616042 | 107.3311604 | 103.1973865 | 99.2465382 | 95.46952291 | 91.85775238 |
| 170831A00021 | 8/31/2017 | 1.99 | 2/25/2022 | 8/31/2017 | 102.85624 | 102.8562387 | 102.8562387 | 102.8562387 | 102.5236346 | 100.873976 | 99.25873087 | 97.67688674 | 96.12747098 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170906A00037 | 9/6/2017 | 1.99 | 9/6/2022 | 9/6/2017 | 103.74329 | 103.7432904 | 103.7432904 | 103.7432904 | 103.2259657 | 101.0551666 | 98.94061272 | 96.88044283 | 94.87287323 |
| 170908A00016 | 9/10/2018 | 1.94 | 9/10/2021 | 9/10/2018 | 102.01679 | 102.0167853 | 102.0167853 | 102.0167853 | 101.7960076 | 100.5941201 | 99.42049245 | 98.274137 | 97.15411171 |
| 170913A00024 | 9/13/2017 | 1.8 | 8/17/2020 | 9/13/2017 | 100.2025 | 100.2025047 | 100.2025047 | 100.2025047 | 100.1830994 | 100.0501632 | 99.91759404 | 99.78539045 | 99.65355088 |
| 170915A00009 | 9/15/2017 | 1.86 | 9/15/2020 | 9/15/2017 | 100.33934 | 100.3393395 | 100.3393395 | 100.3393395 | 100.3061508 | 100.0929785 | 99.88072321 | 99.66937891 | 99.45893969 |
| 170928A00020 | 9/29/2017 | 2.29 | 9/29/2022 | 9/29/2017 | 104.53231 | 104.532314 | 104.532314 | 104.532314 | 103.9917586 | 101.7497798 | 99.56716715 | 97.44190598 | 95.37206819 |
| 171002A00012 | 10/2/2017 | 2.08 | 10/1/2021 | 10/2/2017 | 102.29108 | 102.2910786 | 102.2910786 | 102.2910786 | 102.0648619 | 100.8048299 | 99.57542145 | 98.37552911 | 97.20409827 |
| 171003A00007 | 10/3/2017 | 2.22 | 10/3/2022 | 10/3/2017 | 104.3945 | 104.3944975 | 104.3944975 | 104.3944975 | 103.8505467 | 101.5995815 | 99.40846728 | 97.27517889 | 95.19777727 |
| 171005A00003 | 10/5/2017 | 2.02 | 10/5/2022 | 10/5/2017 | 104.36213 | 104.3621257 | 104.3621257 | 104.3621257 | 103.8141988 | 101.5500838 | 99.34644682 | 97.20124236 | 95.11251133 |
| 171010A00004 | 10/10/2017 | 1.92 | 10/12/2021 | 10/10/2017 | 102.34526 | 102.345255 | 102.345255 | 102.345255 | 102.113176 | 100.8248073 | 99.56454722 | 98.33147669 | 97.12471669 |
| 171012A00025 | 10/12/2017 | 1.93 | 10/13/2020 | 10/12/2017 | 100.48285 | 100.4828549 | 100.4828549 | 100.4828549 | 100.4348467 | 100.1442859 | 99.85541507 | 99.56821934 | 99.28268413 |
| 171018A00002 | 10/18/2017 | 1.82 | 10/19/2020 | 10/18/2017 | 100.52485 | 100.524849 | 100.524849 | 100.524849 | 100.4733667 | 100.1656719 | 99.85987264 | 99.55595133 | 99.25389058 |
| 171030A00094 | 10/30/2017 | 2.13 | 11/1/2021 | 10/30/2017 | 102.50053 | 102.5005284 | 102.5005284 | 102.5005284 | 102.2591472 | 100.9277271 | 99.61986866 | 98.3350005 | 97.07256915 |
| 171031A00061 | 10/31/2017 | 2.28 | 10/31/2022 | 10/31/2017 | 104.68518 | 104.6851847 | 104.6851847 | 104.6851847 | 104.1144618 | 101.7867521 | 99.52265627 | 97.32009458 | 95.17706727 |
| 171116A00012 | 11/16/2017 | 2.14 | 7/15/2020 | 11/16/2017 | 100.07624 | 100.0762415 | 100.0762415 | 100.0762415 | 100.070543 | 100.0289736 | 99.98745578 | 99.94598952 | 99.90457469 |
| 171129A00010 | 11/29/2017 | 2.32 | 11/29/2021 | 11/29/2017 | 102.92963 | 102.9296267 | 102.9296267 | 102.9296267 | 102.6680552 | 101.2569766 | 99.87215447 | 98.51291946 | 97.17862459 |
| 171201A00025 | 12/1/2017 | 2.08 | 5/3/2021 | 12/1/2017 | 101.6717 | 101.6717001 | 101.6717001 | 101.6717001 | 101.5007891 | 100.6516974 | 99.81676725 | 98.99564678 | 98.18799552 |
| 171205A00005 | 12/6/2017 | 2.27 | 12/6/2022 | 12/6/2017 | 105.30514 | 105.3051439 | 105.3051439 | 105.3051439 | 104.6960928 | 102.254944 | 99.88324577 | 97.57863213 | 95.33883206 |
| 171206A00040 | 12/6/2017 | 2.23 | 12/6/2022 | 12/6/2017 | 105.20652 | 105.2065153 | 105.2065153 | 105.2065153 | 104.5977251 | 102.1578009 | 99.78730036 | 97.48385835 | 95.24520463 |
| 171207A00017 | 12/7/2017 | 2.23 | 10/16/2020 | 12/7/2017 | 100.58956 | 100.5895552 | 100.5895552 | 100.5895552 | 100.5398241 | 100.2407665 | 99.94349725 | 99.64800044 | 99.35426011 |
| 171213A00034 | 12/13/2017 | 2.05 | 12/15/2020 | 12/13/2017 | 100.90143 | 100.9014337 | 100.9014337 | 100.9014337 | 100.8160121 | 100.3504803 | 99.88925266 | 99.43226958 | 98.97947245 |
| 171220A00003 | 12/20/2017 | 2.36 | 12/21/2020 | 12/20/2017 | 101.02162 | 101.0216176 | 101.0216176 | 101.0216176 | 100.9326876 | 100.4510629 | 99.97403467 | 99.50153734 | 99.03350643 |
| 180102A00020 | 1/2/2018 | 2.5 | 1/3/2023 | 1/2/2018 | 105.5937 | 105.593703 | 105.593703 | 105.593703 | 104.9590331 | 102.4503383 | 100.014847 | 97.64999725 | 95.35333302 |
| 180102A00021 | 1/2/2018 | 2.82 | 1/2/2026 | 1/2/2018 | 113.93265 | 113.9326513 | 113.9326513 | 113.9326513 | 110.8737204 | 105.3593936 | 100.1568805 | 95.24690316 | 90.61147342 |
| 180110A00027 | 1/10/2018 | 2.6 | 1/10/2023 | 1/10/2018 | 105.892 | 105.8919994 | 105.8919994 | 105.8919994 | 105.2493906 | 102.7184585 | 100.2617349 | 97.8766067 | 95.56056971 |
| 180110A00028 | 1/10/2018 | 2.85 | 1/10/2025 | 1/10/2018 | 111.61527 | 111.6152698 | 111.6152698 | 111.6152698 | 109.6392501 | 105.0880247 | 100.7540013 | 96.62566202 | 92.69216082 |
| 180117A00011 | 1/17/2018 | 2.4 | 1/14/2021 | 1/17/2018 | 101.1846 | 101.1846032 | 101.1846032 | 101.1846032 | 101.0815994 | 100.5336446 | 99.99162962 | 99.45545797 | 98.92503541 |
| 180118A00004 | 1/18/2018 | 2.88 | 1/17/2025 | 1/18/2018 | 111.80166 | 111.8016626 | 111.8016626 | 111.8016626 | 109.8069374 | 105.2337621 | 100.8795112 | 96.73253821 | 92.78187852 |
| 180118A00010 | 1/18/2018 | 2.51 | 8/18/2021 | 1/18/2018 | 102.56515 | 102.565153 | 102.565153 | 102.565153 | 102.348121 | 101.2051942 | 100.0877397 | 98.99491261 | 97.92590531 |
| 170323A00013 | 3/23/2017 | 2.1 | 3/23/2022 | 3/23/2017 | 103.46926 | 103.469262 | 103.469262 | 103.469262 | 103.1111684 | 101.3815057 | 99.68910566 | 98.03282976 | 96.41158622 |
| 170328A00015 | 3/28/2017 | 2.75 | 11/29/2024 | 3/28/2017 | 110.92322 | 110.9232171 | 110.9232171 | 110.9232171 | 109.0534727 | 104.6224224 | 100.3982187 | 96.37014104 | 92.52807934 |
| 170425A00069 | 4/25/2017 | 2.06 | 4/26/2021 | 4/25/2017 | 101.49277 | 101.4927688 | 101.4927688 | 101.4927688 | 101.3273705 | 100.4998644 | 99.68583175 | 98.88494567 | 98.09688968 |
| 170504A00038 | 5/4/2017 | 2.09 | 5/4/2022 | 5/4/2017 | 103.68119 | 103.6811862 | 103.6811862 | 103.6811862 | 103.2832272 | 101.4378911 | 99.63445568 | 97.87172764 | 96.14855505 |
| 170517A00098 | 5/19/2017 | 2.32 | 5/19/2022 | 5/19/2017 | 103.8761 | 103.8761044 | 103.8761044 | 103.8761044 | 103.4645701 | 101.5837303 | 99.74633039 | 97.95111108 | 96.19685774 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170518A00011 | 5/18/2017 | 1.94 | 5/18/2022 | 5/18/2017 | 103.47185 | 103.4718503 | 103.4718503 | 103.4718503 | 103.060673 | 101.1804628 | 99.34373905 | 97.54923986 | 95.79574823 |
| 170530A00002 | 5/30/2017 | 2.15 | 5/31/2022 | 5/30/2017 | 103.6141 | 103.6141043 | 103.6141043 | 103.6141043 | 103.1914635 | 101.2817398 | 99.41681171 | 97.59536062 | 95.81611537 |
| 170602A00026 | 6/2/2017 | 2.25 | 6/3/2024 | 6/2/2017 | 108.47022 | 108.4702159 | 108.4702159 | 108.4702159 | 107.0040743 | 103.0661008 | 99.29516729 | 95.68332771 | 92.22305573 |
| 170608A00021 | 6/8/2017 | 1.8 | 6/8/2021 | 6/8/2017 | 101.60114 | 101.6011448 | 101.6011448 | 101.6011448 | 101.4058048 | 100.4590351 | 99.52987705 | 98.61784269 | 97.72246199 |
| 170612A00003 | 6/12/2017 | 1.97 | 6/13/2022 | 6/12/2017 | 103.66245 | 103.6624534 | 103.6624534 | 103.6624534 | 103.2253955 | 101.2737749 | 99.36886726 | 97.50926885 | 95.69362763 |
| 170612A00039 | 6/12/2017 | 2.29 | 6/12/2024 | 6/12/2017 | 108.68315 | 108.6831499 | 108.6831499 | 108.6831499 | 107.1969754 | 103.2310257 | 99.43427992 | 95.79863999 | 92.31643834 |
| 170613A00007 | 6/13/2017 | 2.01 | 6/11/2021 | 6/13/2017 | 101.67366 | 101.6736647 | 101.6736647 | 101.6736647 | 101.4771687 | 100.5238796 | 99.5884441 | 98.67036421 | 97.76916021 |
| 170628A00008 | 6/28/2017 | 2.04 | 9/15/2021 | 6/28/2017 | 102.16231 | 102.1623148 | 102.1623148 | 102.1623148 | 101.9402024 | 100.7238472 | 99.53640587 | 98.37685681 | 97.24422606 |
| 170705A00034 | 7/5/2017 | 1.75 | 7/6/2020 | 7/5/2017 | 100.02722 | 100.0272249 | 100.0272249 | 100.0272249 | 100.0249414 | 100.0082816 | 99.99163858 | 99.97501246 | 99.95840319 |
| 170706A00013 | 7/6/2017 | 2.27 | 7/6/2022 | 7/6/2017 | 104.02326 | 104.0232612 | 104.0232612 | 104.0232612 | 103.5644727 | 101.5540666 | 99.59299852 | 97.67974407 | 95.81283676 |
| 170714A00018 | 7/14/2017 | 1.67 | 7/14/2020 | 7/14/2017 | 100.06041 | 100.0604141 | 100.0604141 | 100.0604141 | 100.0550864 | 100.0162225 | 99.9774066 | 99.9386386 | 99.89991842 |
| 170721A00017 | 7/21/2017 | 1.8 | 7/21/2021 | 7/21/2017 | 101.80176 | 101.8017606 | 101.8017606 | 101.8017606 | 101.5902738 | 100.5254121 | 99.48277931 | 98.46168503 | 97.46146722 |
| 170724A00015 | 7/24/2017 | 2.32 | 7/24/2023 | 7/24/2017 | 106.26219 | 106.2621929 | 106.2621929 | 106.2621929 | 105.3764798 | 102.3190774 | 99.36667409 | 96.51506842 | 93.76025308 |
| 170803A00020 | 8/3/2017 | 2.84 | 8/3/2027 | 8/3/2017 | 118.03231 | 118.0323085 | 118.0323085 | 118.0323085 | 112.4080383 | 105.378426 | 98.84428318 | 92.76799459 | 87.11498983 |
| 170803A00027 | 8/3/2017 | 1.67 | 8/3/2020 | 8/3/2017 | 100.14672 | 100.1467184 | 100.1467184 | 100.1467184 | 100.1335731 | 100.0392224 | 99.94505474 | 99.85106955 | 99.75726627 |
| 170810A00001 | 8/11/2017 | 1.66 | 8/11/2020 | 8/11/2017 | 100.18007 | 100.1800708 | 100.1800708 | 100.1800708 | 100.1633287 | 100.0467942 | 99.93054598 | 99.81458309 | 99.6989044 |
| 170818A00004 | 8/18/2017 | 1.95 | 8/18/2021 | 8/18/2017 | 101.92225 | 101.9222477 | 101.9222477 | 101.9222477 | 101.7059675 | 100.566958 | 99.45335991 | 98.36433007 | 97.29906226 |
| 170824A00038 | 8/24/2017 | 2.23 | 8/24/2023 | 8/24/2017 | 106.14921 | 106.1492115 | 106.1492115 | 106.1492115 | 105.2161785 | 102.0801736 | 99.05410052 | 96.13346209 | 93.31397432 |
| 170825A00025 | 8/25/2017 | 2.12 | 8/25/2022 | 8/25/2017 | 103.97006 | 103.9700557 | 103.9700557 | 103.9700557 | 103.4634528 | 101.3221111 | 99.23562271 | 97.20219655 | 95.22011466 |
| 170609A00043 | 6/9/2017 | 3.07 | 6/9/2032 | 6/9/2017 | 135.50531 | 135.5053075 | 135.5053075 | 131.9633149 | 119.2903629 | 107.6575979 | 97.31484968 | 88.11058659 | 79.91185224 |
| 170612A00013 | 6/12/2017 | 1.83 | 6/14/2021 | 6/12/2017 | 101.65817 | 101.6581727 | 101.6581727 | 101.6581727 | 101.4597443 | 100.496352 | 99.55118882 | 98.62374112 | 97.7135143 |
| 170615A00015 | 6/15/2017 | 2.25 | 6/14/2024 | 6/15/2017 | 108.53498 | 108.5349799 | 108.5349799 | 108.5349799 | 107.0454155 | 103.0770982 | 99.27834757 | 95.6410364 | 92.15747 |
| 170616A00016 | 6/16/2017 | 1.82 | 6/16/2021 | 6/16/2017 | 101.65792 | 101.6579161 | 101.6579161 | 101.6579161 | 101.4584775 | 100.4896453 | 99.539248 | 98.60676313 | 97.69168791 |
| 170622A00040 | 6/22/2017 | 3.41 | 6/23/2036 | 6/22/2017 | 149.10187 | 149.1018748 | 149.1018748 | 139.0895629 | 122.3677003 | 107.6612379 | 95.02270773 | 84.14369351 | 74.76355854 |
| 170629A00016 | 6/29/2017 | 1.94 | 12/21/2020 | 6/29/2017 | 100.81876 | 100.8187592 | 100.8187592 | 100.8187592 | 100.7299273 | 100.2488777 | 99.77242064 | 99.30049047 | 98.83302282 |
| 170629A00020 | 6/29/2017 | 2.03 | 6/29/2021 | 6/29/2017 | 101.77058 | 101.7705771 | 101.7705771 | 101.7705771 | 101.5649446 | 100.5624643 | 99.5796959 | 98.6160628 | 97.67101049 |
| 170629A00073 | 6/29/2017 | 2.2 | 6/29/2023 | 6/29/2017 | 106.31355 | 106.3135473 | 106.3135473 | 106.3135473 | 105.4609581 | 102.4549906 | 99.55083589 | 96.74448428 | 94.03210749 |
| 170706A00090 | 7/6/2017 | 2.48 | 7/6/2023 | 7/6/2017 | 106.64871 | 106.6487142 | 106.6487142 | 106.6487142 | 105.7886434 | 102.7721413 | 99.85797649 | 97.04210778 | 94.32067772 |
| 170719A00006 | 7/19/2017 | 1.93 | 1/19/2021 | 7/19/2017 | 100.94418 | 100.9441838 | 100.9441838 | 100.9441838 | 100.8384684 | 100.2776548 | 99.72307209 | 99.17461681 | 98.63218767 |
| 170724A00014 | 7/24/2017 | 2.14 | 7/25/2022 | 7/24/2017 | 103.85533 | 103.8553281 | 103.8553281 | 103.8553281 | 103.3784107 | 101.3197687 | 99.31247225 | 97.35490002 | 95.44549416 |
| 170725A00002 | 7/25/2017 | 2.03 | 7/26/2021 | 7/25/2017 | 101.90208 | 101.9020754 | 101.9020754 | 101.9020754 | 101.6898382 | 100.6133316 | 99.55953123 | 98.52772456 | 97.51722867 |
| 170725A00047 | 7/25/2017 | 2.19 | 7/25/2022 | 7/25/2017 | 103.95985 | 103.9598519 | 103.9598519 | 103.9598519 | 103.4827111 | 101.4229594 | 99.41457543 | 97.45593716 | 95.54548614 |
| 170731A00026 | 7/31/2017 | 1.85 | 7/30/2020 | 7/31/2017 | 100.12994 | 100.1299368 | 100.1299368 | 100.1299368 | 100.1185418 | 100.0354379 | 99.95247182 | 99.86964325 | 99.78695186 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170803A00018 | 8/3/2017 | 1.85 | 8/3/2020 | 8/3/2017 | 100.14726 | 100.147257 | 100.147257 | 100.147257 | 100.1341352 | 100.0399525 | 99.94595056 | 99.85212892 | 99.75848706 |
| 170803A00021 | 8/3/2017 | 2.5 | 8/5/2024 | 8/3/2017 | 109.1093 | 109.1092981 | 109.1092981 | 109.1092981 | 107.5152299 | 103.4217331 | 99.50772475 | 95.76436478 | 92.18329841 |
| 170814A00084 | 8/14/2017 | 1.91 | 8/15/2022 | 8/14/2017 | 103.85669 | 103.8566888 | 103.8566888 | 103.8566888 | 103.3578545 | 101.2364997 | 99.16915821 | 97.15408072 | 95.18958878 |
| 170818A00035 | 8/18/2017 | 1.77 | 8/18/2021 | 8/18/2017 | 101.89806 | 101.8980581 | 101.8980581 | 101.8980581 | 101.6812842 | 100.5396843 | 99.42359971 | 98.33218263 | 97.26462229 |
| 170829A00023 | 8/29/2017 | 1.83 | 8/29/2022 | 8/29/2017 | 103.75094 | 103.7509421 | 103.7509421 | 103.7509421 | 103.2390687 | 101.0819506 | 98.98043479 | 96.93269393 | 94.93697583 |
| 170830A00009 | 8/30/2017 | 1.94 | 3/2/2023 | 8/30/2017 | 104.92479 | 104.9247891 | 104.9247891 | 104.9247891 | 104.2284613 | 101.5582951 | 98.9699513 | 96.46040246 | 94.02675548 |
| 170831A00048 | 8/31/2017 | 1.64 | 11/16/2020 | 8/31/2017 | 100.58764 | 100.5876419 | 100.5876419 | 100.5876419 | 100.5197557 | 100.1347942 | 99.75278817 | 99.37370341 | 98.99750639 |
| 170905A00071 | 9/5/2017 | 1.78 | 9/8/2020 | 9/5/2017 | 100.29309 | 100.2930911 | 100.2930911 | 100.2930911 | 100.263404 | 100.0696068 | 99.87656658 | 99.68427885 | 99.49273919 |
| 170906A00039 | 9/6/2017 | 1.99 | 9/6/2022 | 9/6/2017 | 103.74329 | 103.7432904 | 103.7432904 | 103.7432904 | 103.2259657 | 101.0551666 | 98.94061272 | 96.88044283 | 94.87287323 |
| 170907A00050 | 9/7/2017 | 1.69 | 9/7/2021 | 9/7/2017 | 101.89335 | 101.8933496 | 101.8933496 | 101.8933496 | 101.6728812 | 100.4769786 | 99.30905885 | 98.1681491 | 97.05332115 |
| 171026A00023 | 10/26/2017 | 2 | 10/26/2020 | 10/26/2017 | 100.56884 | 100.5688427 | 100.5688427 | 100.5688427 | 100.5135014 | 100.1869636 | 99.86254729 | 99.54023182 | 99.21999682 |
| 171027A00029 | 10/27/2017 | 2.04 | 10/27/2020 | 10/27/2017 | 100.58688 | 100.5868829 | 100.5868829 | 100.5868829 | 100.5309741 | 100.2016484 | 99.87447839 | 99.54944307 | 99.22652159 |
| 171030A00019 | 10/30/2017 | 2.04 | 3/16/2021 | 10/30/2017 | 101.28176 | 101.2817568 | 101.2817568 | 101.2817568 | 101.1436382 | 100.4285891 | 99.72363091 | 99.02855109 | 98.34314292 |
| 171031A00006 | 10/31/2017 | 2.02 | 1/25/2021 | 10/31/2017 | 101.02432 | 101.0243189 | 101.0243189 | 101.0243189 | 100.9151293 | 100.3376359 | 99.76673883 | 99.20232554 | 98.64428599 |
| 171101A00023 | 11/1/2017 | 2.78 | 11/3/2025 | 11/1/2017 | 113.30538 | 113.3053775 | 113.3053775 | 113.3053775 | 110.4684167 | 105.1190999 | 100.0640723 | 95.2856398 | 90.76725842 |
| 171130A00005 | 11/30/2017 | 2.45 | 11/30/2022 | 11/30/2017 | 105.2644 | 105.2644008 | 105.2644008 | 105.2644008 | 104.6638423 | 102.248152 | 99.90057687 | 97.61881742 | 95.40066541 |
| 171207A00029 | 12/7/2017 | 2.04 | 12/7/2020 | 12/7/2017 | 100.85405 | 100.8540461 | 100.8540461 | 100.8540461 | 100.7734348 | 100.3300327 | 99.89053332 | 99.45488512 | 99.02303757 |
| 171208A00008 | 12/8/2017 | 2.25 | 12/8/2022 | 12/8/2017 | 105.26765 | 105.2676477 | 105.2676477 | 105.2676477 | 104.656737 | 102.2107967 | 99.83459386 | 97.52574753 | 95.28197248 |
| 171212A00027 | 12/12/2017 | 2.21 | 12/13/2021 | 12/12/2017 | 103.08239 | 103.0823924 | 103.0823924 | 103.0823924 | 102.8090358 | 101.3559536 | 99.93065117 | 98.53240146 | 97.16050216 |
| 171218A00020 | 12/18/2017 | 2.99 | 12/20/2027 | 12/18/2017 | 120.11324 | 120.1132375 | 120.1132375 | 120.1132375 | 113.8321147 | 106.4085524 | 99.53194755 | 93.15899587 | 87.25003541 |
| 171219A00063 | 12/19/2017 | 2.8 | 12/20/2027 | 12/19/2017 | 120.23545 | 120.2354486 | 120.2354486 | 120.2354486 | 113.8820247 | 106.3947214 | 99.46133349 | 93.0378691 | 87.08404658 |
| 171229A00007 | 12/29/2017 | 2.12 | 12/30/2020 | 12/29/2017 | 101.01753 | 101.0175257 | 101.0175257 | 101.0175257 | 100.9230718 | 100.4159859 | 99.91398313 | 99.41698733 | 98.92492392 |
| 180103A00007 | 1/3/2018 | 2.44 | 1/7/2022 | 1/3/2018 | 103.32015 | 103.3201491 | 103.3201491 | 103.3201491 | 103.0275384 | 101.5106436 | 100.0237935 | 98.56617002 | 97.13698393 |
| 180104A00013 | 1/4/2018 | 2.39 | 1/4/2023 | 1/4/2018 | 105.78363 | 105.7836333 | 105.7836333 | 105.7836333 | 105.1447063 | 102.6212206 | 100.1716002 | 97.79325137 | 95.48368847 |
| 180111A00007 | 1/11/2018 | 2.66 | 1/14/2025 | 1/11/2018 | 111.68016 | 111.6801602 | 111.6801602 | 111.6801602 | 109.679336 | 105.0900132 | 100.7208386 | 96.56008359 | 92.59670719 |
| 180111A00016 | 1/11/2018 | 2.57 | 1/11/2023 | 1/11/2018 | 105.82158 | 105.8215836 | 105.8215836 | 105.8215836 | 105.1781538 | 102.6454953 | 100.187157 | 97.80051928 | 95.48307209 |
| 180116A00010 | 1/16/2018 | 2.58 | 1/17/2023 | 1/16/2018 | 105.88504 | 105.8850432 | 105.8850432 | 105.8850432 | 105.2353382 | 102.6860798 | 100.2119542 | 97.8102994 | 95.47856505 |
| 180116A00031 | 1/16/2018 | 2.58 | 1/17/2023 | 1/16/2018 | 105.88504 | 105.8850432 | 105.8850432 | 105.8850432 | 105.2353382 | 102.6860798 | 100.2119542 | 97.8102994 | 95.47856505 |
| 180123A00026 | 1/23/2018 | 2.57 | 1/14/2022 | 1/23/2018 | 103.56477 | 103.5647707 | 103.5647707 | 103.5647707 | 103.2661526 | 101.7287134 | 100.2219273 | 98.74494982 | 97.29696711 |
| 180202A00004 | 2/2/2018 | 2.57 | 2/2/2022 | 2/2/2018 | 103.95978 | 103.959785 | 103.959785 | 103.959785 | 103.6441976 | 102.0478735 | 100.4840414 | 98.95177761 | 97.45019321 |
| 180205A00018 | 2/5/2018 | 2.66 | 2/3/2023 | 2/5/2018 | 106.68227 | 106.6822691 | 106.6822691 | 106.6822691 | 106.0099306 | 103.3944295 | 100.8571361 | 98.39523183 | 96.00601919 |
| 180207A00002 | 2/7/2018 | 3.13 | 2/6/2026 | 2/7/2018 | 115.92015 | 115.9201531 | 115.9201531 | 115.9201531 | 112.7077103 | 107.0522544 | 101.7203525 | 96.69174667 | 91.94755359 |
| 180214A00003 | 2/14/2018 | 2.45 | 2/16/2021 | 2/14/2018 | 101.49559 | 101.4955887 | 101.4955887 | 101.4955887 | 101.3733615 | 100.7328862 | 100.1004975 | 99.47604272 | 98.85937312 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180216A00001 | 2/16/2018 | 2.5 | 2/16/2021 | 2/16/2018 | 101.52766 | 101.5276583 | 101.5276583 | 101.5276583 | 101.4054103 | 100.7648189 | 100.1323152 | 99.50774635 | 98.89096374 |
| 170831A00051 | 8/31/2017 | 1.75 | 8/31/2021 | 8/31/2017 | 101.93399 | 101.9339854 | 101.9339854 | 101.9339854 | 101.7150903 | 100.537936 | 99.38787962 | 98.2639945 | 97.16539583 |
| 170905A00072 | 9/5/2017 | 1.84 | 3/5/2021 | 9/5/2017 | 101.08958 | 101.0895794 | 101.0895794 | 101.0895794 | 100.9580804 | 100.2737947 | 99.59875769 | 98.93278283 | 98.27568854 |
| 170906A00005 | 9/6/2017 | 1.69 | 9/7/2021 | 9/6/2017 | 101.89335 | 101.8933496 | 101.8933496 | 101.8933496 | 101.6728812 | 100.4769786 | 99.30905885 | 98.1681491 | 97.05332115 |
| 170906A00028 | 9/6/2017 | 1.57 | 9/8/2020 | 9/6/2017 | 100.28252 | 100.2825222 | 100.2825222 | 100.2825222 | 100.2527873 | 100.0586825 | 99.8653395 | 99.67275393 | 99.48092123 |
| 170912A00009 | 9/12/2017 | 2.11 | 12/15/2022 | 9/12/2017 | 104.50882 | 104.5088244 | 104.5088244 | 104.5088244 | 103.8956837 | 101.4502471 | 99.0749301 | 96.76732529 | 94.52512275 |
| 170913A00003 | 9/13/2017 | 2.08 | 9/13/2022 | 9/13/2017 | 103.97649 | 103.9764901 | 103.9764901 | 103.9764901 | 103.452122 | 101.2597709 | 99.12460381 | 97.04471352 | 95.01827305 |
| 170926A00002 | 9/26/2017 | 1.73 | 12/3/2020 | 9/26/2017 | 100.69839 | 100.6983926 | 100.6983926 | 100.6983926 | 100.6202436 | 100.18825 | 99.75995983 | 99.33532547 | 98.91430026 |
| 171002A00011 | 10/2/2017 | 1.9 | 8/31/2020 | 10/2/2017 | 100.28044 | 100.280443 | 100.280443 | 100.280443 | 100.25475 | 100.0830481 | 99.91192947 | 99.74139128 | 99.57143058 |
| 171002A00013 | 10/2/2017 | 2.23 | 11/30/2022 | 10/2/2017 | 104.72681 | 104.7268072 | 104.7268072 | 104.7268072 | 104.1276541 | 101.7185785 | 99.3774739 | 97.10204502 | 94.89008787 |
| 171004A00034 | 10/4/2017 | 1.73 | 10/5/2020 | 10/4/2017 | 100.43438 | 100.4343771 | 100.4343771 | 100.4343771 | 100.3908005 | 100.1218936 | 99.85443207 | 99.58840427 | 99.32379861 |
| 171010A00024 | 10/10/2017 | 2.38 | 10/10/2023 | 10/10/2017 | 106.89542 | 106.8954244 | 106.8954244 | 106.8954244 | 105.8839616 | 102.6119698 | 99.45845471 | 96.41844405 | 93.48720602 |
| 171016A00005 | 10/16/2017 | 2.2 | 10/17/2022 | 10/16/2017 | 104.42257 | 104.422569 | 104.422569 | 104.422569 | 103.8655212 | 101.5775567 | 99.35128243 | 97.18464793 | 95.0756858 |
| 171016A00033 | 10/16/2017 | 2.2 | 10/17/2022 | 10/16/2017 | 104.42257 | 104.422569 | 104.422569 | 104.422569 | 103.8655212 | 101.5775567 | 99.35128243 | 97.18464793 | 95.0756858 |
| 171018A00003 | 10/18/2017 | 2.23 | 10/18/2023 | 10/18/2017 | 107.05343 | 107.0534289 | 107.0534289 | 107.0534289 | 106.0226669 | 102.7124833 | 99.52316305 | 96.44962821 | 93.48704458 |
| 171025A00020 | 10/25/2017 | 2.02 | 10/26/2020 | 10/25/2017 | 100.57539 | 100.5753947 | 100.5753947 | 100.5753947 | 100.5200512 | 100.1934999 | 99.86907016 | 99.5467413 | 99.22649298 |
| 171027A00005 | 10/27/2017 | 1.88 | 10/27/2020 | 10/27/2017 | 100.58252 | 100.5825216 | 100.5825216 | 100.5825216 | 100.5265195 | 100.1966548 | 99.86895617 | 99.5434022 | 99.21997191 |
| 171031A00012 | 10/31/2017 | 2.28 | 10/31/2022 | 10/31/2017 | 104.68518 | 104.6851847 | 104.6851847 | 104.6851847 | 104.1144618 | 101.7867521 | 99.52265627 | 97.32009458 | 95.17706727 |
| 171116A00013 | 11/16/2017 | 2.2 | 1/15/2021 | 11/16/2017 | 101.08012 | 101.0801197 | 101.0801197 | 101.0801197 | 100.9766017 | 100.4262376 | 99.88187025 | 99.34340174 | 98.81073646 |
| 171122A00009 | 11/22/2017 | 2.2 | 11/22/2022 | 11/22/2017 | 105.05184 | 105.0518367 | 105.0518367 | 105.0518367 | 104.4569313 | 102.0563869 | 99.72315553 | 97.45497797 | 95.24968444 |
| 171130A00053 | 11/30/2017 | 2.19 | 8/17/2020 | 11/30/2017 | 100.25449 | 100.2544878 | 100.2544878 | 100.2544878 | 100.2350739 | 100.1020779 | 99.96944903 | 99.83718589 | 99.7052869 |
| 171205A00004 | 12/6/2017 | 2.07 | 12/7/2020 | 12/6/2017 | 100.86738 | 100.8673753 | 100.8673753 | 100.8673753 | 100.7867581 | 100.3433207 | 99.90378624 | 99.46810323 | 99.03622108 |
| 171206A00008 | 12/6/2017 | 2.36 | 12/6/2021 | 12/6/2017 | 103.02738 | 103.0273757 | 103.0273757 | 103.0273757 | 102.7602849 | 101.3299133 | 99.92649293 | 98.54932825 | 97.19774715 |
| 171206A00041 | 12/6/2017 | 2.44 | 12/6/2024 | 12/6/2017 | 110.41878 | 110.4187769 | 110.4187769 | 110.4187769 | 108.522771 | 104.0609029 | 99.80896275 | 95.75599292 | 91.89166399 |
| 171206A00042 | 12/6/2017 | 2.24 | 12/7/2020 | 12/6/2017 | 100.88169 | 100.8816864 | 100.8816864 | 100.8816864 | 100.8011971 | 100.3584432 | 99.9195768 | 99.48454694 | 99.05330337 |
| 170911A00032 | 9/11/2017 | 1.85 | 9/12/2022 | 9/11/2017 | 103.86188 | 103.8618813 | 103.8618813 | 103.8618813 | 103.3366417 | 101.1403677 | 99.00147595 | 96.91805032 | 94.88825543 |
| 170922A00006 | 9/22/2017 | 2.09 | 9/22/2021 | 9/22/2017 | 102.25866 | 102.2586626 | 102.2586626 | 102.2586626 | 102.0348113 | 100.7988846 | 99.59278219 | 98.41543468 | 97.26582315 |
| 170926A00031 | 9/26/2017 | 1.94 | 9/28/2020 | 9/26/2017 | 100.41634 | 100.4163433 | 100.4163433 | 100.4163433 | 100.376654 | 100.1275264 | 99.87963232 | 99.63296279 | 99.38750877 |
| 170928A00044 | 9/28/2017 | 1.9 | 9/28/2021 | 9/28/2017 | 102.24999 | 102.2499877 | 102.2499877 | 102.2499877 | 102.0242079 | 100.768988 | 99.54449784 | 98.34962034 | 97.18329184 |
| 171003A00008 | 10/3/2017 | 2.88 | 10/4/2027 | 10/3/2017 | 118.75059 | 118.7505885 | 118.7505885 | 118.7505885 | 112.8378567 | 105.6392521 | 98.95817451 | 92.754567 | 86.99167899 |
| 171006A00034 | 10/6/2017 | 2.27 | 10/6/2022 | 10/6/2017 | 104.52506 | 104.5250611 | 104.5250611 | 104.5250611 | 103.9780033 | 101.7176631 | 99.51759603 | 97.37577094 | 95.29024201 |
| 171012A00027 | 10/12/2017 | 2.21 | 10/12/2022 | 10/12/2017 | 104.41932 | 104.4193163 | 104.4193163 | 104.4193163 | 103.8669284 | 101.5920933 | 99.37829021 | 97.22347804 | 95.1256997 |
| 171013A00020 | 10/13/2017 | 1.9 | 10/15/2020 | 10/13/2017 | 100.48315 | 100.4831508 | 100.4831508 | 100.4831508 | 100.4340193 | 100.137953 | 99.84364113 | 99.55106808 | 99.26021841 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 171026A00005 | 10/26/2017 | 2.16 | 10/26/2021 | 10/26/2017 | 102.51002 | 102.5100217 | 102.5100217 | 102.5100217 | 102.2716976 | 100.9541687 | 99.66129783 | 98.39242441 | 97.1469115 |
| 171027A00049 | 10/27/2017 | 2.04 | 10/27/2020 | 10/27/2017 | 100.58688 | 100.5868829 | 100.5868829 | 100.5868829 | 100.5309741 | 100.2016484 | 99.87447839 | 99.54944307 | 99.22652159 |
| 171031A00060 | 10/31/2017 | 1.98 | 10/30/2020 | 10/31/2017 | 100.58137 | 100.5813697 | 100.5813697 | 100.5813697 | 100.5237784 | 100.1862134 | 99.85090742 | 99.51783786 | 99.18698249 |
| 171101A00021 | 11/1/2017 | 2.51 | 11/1/2023 | 11/1/2017 | 107.45977 | 107.4597694 | 107.4597694 | 107.4597694 | 106.4094929 | 103.0712713 | 99.85575375 | 96.75780473 | 93.77253038 |
| 171116A00009 | 11/16/2017 | 2.17 | 10/20/2020 | 11/16/2017 | 100.59275 | 100.5927524 | 100.5927524 | 100.5927524 | 100.5407731 | 100.2306966 | 99.92254016 | 99.61628586 | 99.31191607 |
| 171116A00022 | 11/16/2017 | 1.92 | 11/16/2020 | 11/16/2017 | 100.69572 | 100.6957228 | 100.6957228 | 100.6957228 | 100.6277946 | 100.2425774 | 99.86031697 | 99.48097929 | 99.10453079 |
| 171206A00029 | 12/6/2017 | 2.21 | 9/16/2020 | 12/6/2017 | 100.41953 | 100.4195264 | 100.4195264 | 100.4195264 | 100.3858204 | 100.1697671 | 99.95465454 | 99.74047665 | 99.52722724 |
| 171211A00033 | 12/11/2017 | 2.26 | 12/12/2022 | 12/11/2017 | 105.31611 | 105.3161071 | 105.3161071 | 105.3161071 | 104.7011505 | 102.2440939 | 99.85738416 | 97.53860881 | 95.2854532 |
| 171211A00045 | 12/11/2017 | 2.32 | 6/11/2021 | 12/11/2017 | 101.9712 | 101.9711956 | 101.9711956 | 101.9711956 | 101.7744064 | 100.8195781 | 99.88262365 | 98.96304452 | 98.06036058 |
| 171227A00018 | 12/27/2017 | 2.83 | 12/27/2024 | 12/27/2017 | 111.42697 | 111.4269732 | 111.4269732 | 111.4269732 | 109.4868126 | 104.9752706 | 100.6775763 | 96.58246844 | 92.67933779 |
| 180104A00017 | 1/4/2018 | 2.77 | 1/3/2025 | 1/4/2018 | 111.20276 | 111.2027608 | 111.2027608 | 111.2027608 | 109.2469829 | 104.7227256 | 100.4137824 | 96.30877051 | 92.39696876 |
| 180109A00025 | 1/9/2018 | 2.33 | 1/11/2021 | 1/9/2018 | 101.12876 | 101.1287589 | 101.1287589 | 101.1287589 | 101.0275026 | 100.4879486 | 99.95415528 | 99.42603054 | 98.90348433 |
| 180116A00048 | 1/16/2018 | 2.37 | 1/19/2021 | 1/16/2018 | 101.19209 | 101.1920896 | 101.1920896 | 101.1920896 | 101.0862337 | 100.5246189 | 99.96924135 | 99.41999752 | 98.87678607 |
| 180117A00017 | 1/17/2018 | 2.45 | 6/17/2021 | 1/17/2018 | 102.12248 | 102.1224751 | 102.1224751 | 102.1224751 | 101.9225347 | 100.9507449 | 99.99744927 | 99.06212343 | 98.14426263 |
| 180123A00024 | 1/23/2018 | 2.44 | 2/16/2021 | 1/23/2018 | 101.40025 | 101.4002505 | 101.4002505 | 101.4002505 | 101.2783054 | 100.6393011 | 100.0083505 | 99.38530197 | 98.77000765 |
| 180124A00020 | 1/24/2018 | 2.53 | 1/24/2023 | 1/24/2018 | 106.27375 | 106.2737535 | 106.2737535 | 106.2737535 | 105.6129885 | 103.0301942 | 100.5240792 | 98.09190388 | 95.73104508 |
| 170829A00022 | 8/29/2017 | 1.72 | 8/30/2021 | 8/29/2017 | 101.89398 | 101.8939807 | 101.8939807 | 101.8939807 | 101.6752938 | 100.5011108 | 99.35389934 | 98.23273905 | 97.13675098 |
| 170829A00035 | 8/29/2017 | 1.58 | 8/31/2020 | 8/29/2017 | 100.25204 | 100.2520366 | 100.2520366 | 100.2520366 | 100.226306 | 100.0543567 | 99.88299487 | 99.7122175 | 99.54202162 |
| 170830A00044 | 8/30/2017 | 1.94 | 8/30/2021 | 8/30/2017 | 101.96622 | 101.9662186 | 101.9662186 | 101.9662186 | 101.7479735 | 100.5761861 | 99.43126467 | 98.3122939 | 97.21839958 |
| 170831A00010 | 8/31/2017 | 2.05 | 8/30/2022 | 8/31/2017 | 103.84202 | 103.8420153 | 103.8420153 | 103.8420153 | 103.3309859 | 101.1779461 | 99.08030628 | 97.03624788 | 95.0440273 |
| 170906A00033 | 9/6/2017 | 1.75 | 9/8/2020 | 9/6/2017 | 100.28726 | 100.2872601 | 100.2872601 | 100.2872601 | 100.2575742 | 100.0637853 | 99.8707534 | 99.67847395 | 99.48694255 |
| 170929A00057 | 9/29/2017 | 2.16 | 9/29/2023 | 9/29/2017 | 106.71218 | 106.7121804 | 106.7121804 | 106.7121804 | 105.7144582 | 102.4593899 | 99.32160993 | 96.2961773 | 93.37839383 |
| 171011A00013 | 10/11/2017 | 2.77 | 10/13/2026 | 10/11/2017 | 115.56367 | 115.5636698 | 115.5636698 | 115.5636698 | 111.3028333 | 105.0475188 | 99.18889836 | 93.69969894 | 88.55466198 |
| 171012A00020 | 10/12/2017 | 1.93 | 10/13/2020 | 10/12/2017 | 100.48285 | 100.4828549 | 100.4828549 | 100.4828549 | 100.4348467 | 100.1442859 | 99.85541507 | 99.56821934 | 99.28268413 |
| 171012A00026 | 10/12/2017 | 2.09 | 10/12/2021 | 10/12/2017 | 102.35915 | 102.3591486 | 102.3591486 | 102.3591486 | 102.1276254 | 100.8423951 | 99.58515278 | 98.35498454 | 97.15101651 |
| 171017A00024 | 10/17/2017 | 2.04 | 4/19/2021 | 10/17/2017 | 101.44178 | 101.4417848 | 101.4417848 | 101.4417848 | 101.2813523 | 100.4731093 | 99.67773314 | 98.89491831 | 98.12436889 |
| 171024A00069 | 10/24/2017 | 1.99 | 10/26/2020 | 10/24/2017 | 100.56557 | 100.5655667 | 100.5655667 | 100.5655667 | 100.5102265 | 100.1836954 | 99.85928586 | 99.53697707 | 99.21674873 |
| 171026A00010 | 10/26/2017 | 2.84 | 10/26/2026 | 10/26/2017 | 116.09567 | 116.0956726 | 116.0956726 | 116.0956726 | 111.7696516 | 105.4675764 | 99.56689568 | 94.03993767 | 88.86107409 |
| 171030A00020 | 10/30/2017 | 2.16 | 1/14/2022 | 10/30/2017 | 102.92508 | 102.9250826 | 102.9250826 | 102.9250826 | 102.6274425 | 101.0951682 | 99.5934559 | 98.12146352 | 96.67837962 |
| 171031A00037 | 10/31/2017 | 1.98 | 10/30/2020 | 10/31/2017 | 100.58137 | 100.5813697 | 100.5813697 | 100.5813697 | 100.5237784 | 100.1862134 | 99.85090742 | 99.51783786 | 99.18698249 |
| 171102A00001 | 11/3/2017 | 1.84 | 11/3/2020 | 11/3/2017 | 100.60277 | 100.6027706 | 100.6027706 | 100.6027706 | 100.542704 | 100.1935027 | 99.84672535 | 99.50234675 | 99.16034204 |
| 171115A00006 | 11/15/2017 | 2.14 | 11/16/2020 | 11/15/2017 | 100.72757 | 100.7275749 | 100.7275749 | 100.7275749 | 100.6597444 | 100.2750629 | 99.8933262 | 99.51450067 | 99.13855295 |
| 171116A00021 | 11/16/2017 | 2.16 | 11/16/2022 | 11/16/2017 | 104.92086 | 104.9208615 | 104.9208615 | 104.9208615 | 104.3319976 | 101.9493335 | 99.63306749 | 97.38098531 | 95.19095966 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 171204A00020 | 12/4/2017 | 2.48 | 12/5/2022 | 12/4/2017 | 105.36789 | 105.3678927 | 105.3678927 | 105.3678927 | 104.7621924 | 102.3321484 | 99.97098211 | 97.67635536 | 95.44602347 |
| 171205A00012 | 12/5/2017 | 2.28 | 12/7/2020 | 12/5/2017 | 100.89945 | 100.8994522 | 100.8994522 | 100.8994522 | 100.818955 | 100.3761541 | 99.9372411 | 99.50216489 | 99.07087528 |
| 171219A00051 | 12/19/2017 | 2.34 | 1/21/2021 | 12/19/2017 | 101.18677 | 101.186771 | 101.186771 | 101.186771 | 101.0797742 | 100.5126977 | 99.95197895 | 99.39751141 | 98.84919086 |
| 171221A00003 | 12/21/2017 | 2.35 | 12/21/2020 | 12/21/2017 | 101.01679 | 101.0167877 | 101.0167877 | 101.0167877 | 100.9278599 | 100.4462489 | 99.96923434 | 99.49675051 | 99.02873301 |
| 180103A00018 | 1/3/2018 | 2.29 | 1/4/2021 | 1/3/2018 | 101.06735 | 101.0673456 | 101.0673456 | 101.0673456 | 100.9701287 | 100.4499604 | 99.93514178 | 99.42559057 | 98.92122622 |
| 180110A00005 | 1/10/2018 | 2.22 | 1/11/2021 | 1/10/2018 | 101.13841 | 101.1384142 | 101.1384142 | 101.1384142 | 101.0369894 | 100.496557 | 99.96190585 | 99.43294333 | 98.90957883 |
| 180116A00039 | 1/16/2018 | 2.37 | 1/19/2021 | 1/16/2018 | 101.19209 | 101.1920896 | 101.1920896 | 101.1920896 | 101.0862337 | 100.5246189 | 99.96924135 | 99.41999752 | 98.87678607 |
| 170926A00036 | 9/26/2017 | 1.7 | 9/25/2020 | 9/26/2017 | 100.38237 | 100.3823741 | 100.3823741 | 100.3823741 | 100.3441229 | 100.102907 | 99.862856 | 99.62396159 | 99.38621535 |
| 171010A00037 | 10/10/2017 | 2.09 | 10/12/2021 | 10/10/2017 | 102.35915 | 102.3591486 | 102.3591486 | 102.3591486 | 102.1276254 | 100.8423951 | 99.58515278 | 98.35498454 | 97.15101651 |
| 171016A00045 | 10/16/2017 | 2.2 | 10/17/2022 | 10/16/2017 | 104.42257 | 104.422569 | 104.422569 | 104.422569 | 103.8655212 | 101.5775567 | 99.35128243 | 97.18464793 | 95.0756858 |
| 171018A00001 | 10/18/2017 | 1.96 | 10/18/2021 | 10/18/2017 | 102.428 | 102.4280019 | 102.4280019 | 102.4280019 | 102.1929587 | 100.8904866 | 99.61469351 | 98.3647683 | 97.13993289 |
| 171018A00011 | 10/18/2017 | 2.68 | 10/18/2027 | 10/18/2017 | 118.88557 | 118.885567 | 118.885567 | 118.885567 | 112.8425442 | 105.550201 | 98.78672591 | 92.51092184 | 86.68500489 |
| 171026A00009 | 10/26/2017 | 2.75 | 10/27/2025 | 10/26/2017 | 113.0973 | 113.0973001 | 113.0973001 | 113.0973001 | 110.286349 | 104.9598482 | 99.92550621 | 95.16579517 | 90.66432584 |
| 171030A00022 | 10/30/2017 | 2.28 | 10/31/2022 | 10/30/2017 | 104.68518 | 104.6851847 | 104.6851847 | 104.6851847 | 104.1144618 | 101.7867521 | 99.52265627 | 97.32009458 | 95.17706727 |
| 171121A00013 | 11/21/2017 | 1.98 | 11/23/2020 | 11/21/2017 | 100.75503 | 100.7550273 | 100.7550273 | 100.7550273 | 100.6828619 | 100.2782335 | 99.87685939 | 99.47870043 | 99.083718 |
| 171129A00020 | 11/29/2017 | 2.89 | 11/30/2026 | 11/29/2017 | 116.65924 | 116.6592417 | 116.6592417 | 116.6592417 | 112.1679108 | 105.764256 | 99.77393808 | 94.16809439 | 88.92001904 |
| 171205A00014 | 12/5/2017 | 2.49 | 12/5/2022 | 12/5/2017 | 105.39247 | 105.3924666 | 105.3924666 | 105.3924666 | 104.7867015 | 102.3563535 | 99.99488989 | 97.69997222 | 95.46935565 |
| 171206A00038 | 12/6/2017 | 2.69 | 12/6/2027 | 12/6/2017 | 119.30617 | 119.3061744 | 119.3061744 | 119.3061744 | 113.0339382 | 105.6118589 | 98.73694389 | 92.36591679 | 86.45913492 |
| 171207A00036 | 12/7/2017 | 2.23 | 12/7/2022 | 12/7/2017 | 105.21237 | 105.212369 | 105.212369 | 105.212369 | 104.6025841 | 102.1599592 | 99.78690816 | 97.48105797 | 95.24013117 |
| 171208A00006 | 12/8/2017 | 2.67 | 12/8/2026 | 12/8/2017 | 116.60483 | 116.6048342 | 116.6048342 | 116.6048342 | 112.0329654 | 105.5655832 | 99.51865452 | 93.86263458 | 88.57019995 |
| 171220A00004 | 12/20/2017 | 2.52 | 12/20/2021 | 12/20/2017 | 103.33195 | 103.3319504 | 103.3319504 | 103.3319504 | 103.0535399 | 101.5841392 | 100.1431101 | 98.72970253 | 97.34319228 |
| 180111A00044 | 1/11/2018 | 2.34 | 1/11/2021 | 1/11/2018 | 101.13417 | 101.1341714 | 101.1341714 | 101.1341714 | 101.0329122 | 100.4933413 | 99.95953115 | 99.43138976 | 98.90882703 |
| 180112A00025 | 1/12/2018 | 2.39 | 1/12/2021 | 1/12/2018 | 101.16719 | 101.1671917 | 101.1671917 | 101.1671917 | 101.0653422 | 100.522926 | 99.98633042 | 99.45546207 | 98.93022942 |
| 180116A00009 | 1/16/2018 | 2.49 | 1/14/2022 | 1/16/2018 | 103.43995 | 103.4399535 | 103.4399535 | 103.4399535 | 103.1415263 | 101.6050948 | 100.0992987 | 98.62329396 | 97.17626711 |
| 180116A00012 | 1/16/2018 | 2.4 | 1/15/2021 | 1/16/2018 | 101.26123 | 101.2612344 | 101.2612344 | 101.2612344 | 101.1574479 | 100.6056384 | 100.0598511 | 99.51998766 | 98.98595182 |
| 180116A00014 | 1/16/2018 | 3.01 | 1/19/2027 | 1/16/2018 | 117.80159 | 117.801591 | 117.801591 | 117.801591 | 113.0668376 | 106.510356 | 100.3844819 | 94.65860334 | 89.30443917 |
| 180116A00046 | 1/16/2018 | 2.58 | 1/11/2023 | 1/16/2018 | 105.84718 | 105.8471776 | 105.8471776 | 105.8471776 | 105.2036766 | 102.6706889 | 100.2120289 | 97.8250766 | 95.50732177 |
| 180118A00037 | 1/18/2018 | 2.88 | 1/21/2025 | 1/18/2018 | 111.82992 | 111.8299242 | 111.8299242 | 111.8299242 | 109.8250518 | 105.241087 | 100.8769734 | 96.720993 | 92.76211561 |
| 180130A00091 | 1/30/2018 | 2.74 | 1/25/2023 | 1/30/2018 | 106.35121 | 106.3512084 | 106.3512084 | 106.3512084 | 105.6920547 | 103.1156897 | 100.615662 | 98.18924851 | 95.83384161 |
| 180207A00012 | 2/7/2018 | 2.53 | 2/7/2022 | 2/7/2018 | 103.92847 | 103.9284661 | 103.9284661 | 103.9284661 | 103.608608 | 101.9977941 | 100.4199546 | 98.87414445 | 97.35945455 |
| 180212A00042 | 2/12/2018 | 2.57 | 2/11/2022 | 2/12/2018 | 104.02069 | 104.020692 | 104.020692 | 104.020692 | 103.69723 | 102.0738411 | 100.4838332 | 98.92624366 | 97.40014646 |
| 180124A00019 | 1/24/2018 | 2.41 | 1/24/2022 | 1/24/2018 | 103.64422 | 103.6442166 | 103.6442166 | 103.6442166 | 103.3365145 | 101.7673616 | 100.2298667 | 98.72314237 | 97.24633368 |
| 180129A00004 | 1/29/2018 | 2.63 | 1/31/2022 | 1/29/2018 | 103.76881 | 103.768814 | 103.768814 | 103.768814 | 103.4561918 | 101.871969 | 100.3198503 | 98.79892776 | 97.30832753 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180130A00085 | 1/30/2018 | 2.79 | 1/30/2025 | 1/30/2018 | 112.39576 | 112.3957585 | 112.3957585 | 112.3957585 | 110.3496906 | 105.7031796 | 101.28105 | 97.07126257 | 93.06248962 |
| 180201A00003 | 2/1/2018 | 2.54 | 2/1/2021 | 2/1/2018 | 101.3703 | 101.3703018 | 101.3703018 | 101.3703018 | 101.256908 | 100.6590871 | 100.0683071 | 99.48444441 | 98.90737807 |
| 180205A00049 | 2/5/2018 | 2.55 | 2/5/2021 | 2/5/2018 | 101.40149 | 101.4014889 | 101.4014889 | 101.4014889 | 101.2857997 | 100.6769103 | 100.0753295 | 99.48092632 | 98.89357278 |
| 180205A00050 | 2/5/2018 | 2.81 | 2/6/2023 | 2/5/2018 | 106.61588 | 106.6158799 | 106.6158799 | 106.6158799 | 105.943433 | 103.3303224 | 100.7953444 | 98.33568151 | 95.94863759 |
| 180207A00022 | 2/7/2018 | 2.79 | 2/7/2023 | 2/7/2018 | 106.57006 | 106.5700608 | 106.5700608 | 106.5700608 | 105.8966745 | 103.2812576 | 100.7441116 | 98.28241145 | 95.89345358 |
| 180215A00029 | 2/15/2018 | 2.65 | 2/16/2021 | 2/15/2018 | 101.53488 | 101.5348755 | 101.5348755 | 101.5348755 | 101.4128435 | 100.7733525 | 100.1419196 | 99.51839308 | 98.90262502 |
| 180216A00004 | 2/16/2018 | 2.75 | 2/16/2023 | 2/16/2018 | 107.01324 | 107.0132383 | 107.0132383 | 107.0132383 | 106.3259076 | 103.667889 | 101.0901831 | 98.58986003 | 96.16411753 |
| 180223A00022 | 2/23/2018 | 2.93 | 2/23/2023 | 2/23/2018 | 107.0538 | 107.0538006 | 107.0538006 | 107.0538006 | 106.3618544 | 103.6934153 | 101.1058549 | 98.59621027 | 96.16164871 |
| 180226A00040 | 2/26/2018 | 2.79 | 2/28/2022 | 2/26/2018 | 104.21787 | 104.2178665 | 104.2178665 | 104.2178665 | 103.8804453 | 102.2102512 | 100.5749834 | 98.97361026 | 97.40514084 |
| 180227A00004 | 2/27/2018 | 2.67 | 3/26/2021 | 2/27/2018 | 101.80159 | 101.8015857 | 101.8015857 | 101.8015857 | 101.6571836 | 100.912725 | 100.1791536 | 99.45623171 | 98.74372871 |
| 180302A00020 | 3/2/2018 | 2.79 | 3/17/2022 | 3/2/2018 | 104.33576 | 104.33576 | 104.33576 | 104.33576 | 103.9827388 | 102.2664264 | 100.5867246 | 98.9425259 | 97.33276809 |
| 180321A00005 | 3/21/2018 | 2.65 | 3/22/2021 | 3/21/2018 | 101.86254 | 101.8625358 | 101.8625358 | 101.8625358 | 101.7201843 | 100.985067 | 100.2605659 | 99.54645215 | 98.84250334 |
| 180327A00013 | 3/27/2018 | 2.77 | 3/26/2021 | 3/27/2018 | 101.87623 | 101.8762286 | 101.8762286 | 101.8762286 | 101.7317705 | 100.9870042 | 100.2531283 | 99.5299051 | 98.81710382 |
| 180402A00028 | 4/2/2018 | 2.58 | 4/1/2021 | 4/2/2018 | 101.87939 | 101.8793946 | 101.8793946 | 101.8793946 | 101.7309936 | 100.9684103 | 100.2172354 | 99.47721415 | 98.74809968 |
| 180410A00016 | 4/10/2018 | 2.89 | 4/11/2022 | 4/10/2018 | 104.6889 | 104.6888991 | 104.6888991 | 104.6888991 | 104.3121984 | 102.5254957 | 100.778068 | 99.0687446 | 97.39640066 |
| 180412A00036 | 4/12/2018 | 3.54 | 4/15/2038 | 4/12/2018 | 161.09937 | 161.0993748 | 161.0993748 | 148.2241724 | 128.8653149 | 112.1475382 | 97.99460573 | 85.98845099 | 75.78173762 |
| 180416A00015 | 4/16/2018 | 2.79 | 4/14/2022 | 4/16/2018 | 104.84025 | 104.8402505 | 104.8402505 | 104.8402505 | 104.4592139 | 102.6573729 | 100.8953783 | 99.17205044 | 97.486255 |
| 180426A00011 | 4/26/2018 | 2.94 | 4/26/2023 | 4/26/2018 | 108.05832 | 108.0583179 | 108.0583179 | 108.0583179 | 107.2872756 | 104.4263417 | 101.6568276 | 98.97531724 | 96.37854222 |
| 180430A00013 | 4/30/2018 | 3.01 | 2/15/2022 | 4/30/2018 | 104.49148 | 104.4914788 | 104.4914788 | 104.4914788 | 104.164792 | 102.5304142 | 100.9297093 | 99.36170218 | 97.82545494 |
| 180430A00014 | 4/30/2018 | 3.01 | 3/15/2022 | 4/30/2018 | 104.70163 | 104.7016274 | 104.7016274 | 104.7016274 | 104.3497956 | 102.6355384 | 100.957753 | 99.31533944 | 97.70724212 |
| 180430A00078 | 10/30/2018 | 3.24 | 10/30/2023 | 10/30/2018 | 109.9028 | 109.9028006 | 109.9028006 | 109.9028006 | 108.8458926 | 105.4721494 | 102.2218465 | 99.08982822 | 96.07118119 |
| 180514A00033 | 5/14/2018 | 3.36 | 5/15/2028 | 5/14/2018 | 125.77265 | 125.7726521 | 125.7726521 | 125.7726521 | 118.6325725 | 110.5947393 | 103.1755486 | 96.3238904 | 89.9931292 |
| 171030A00021 | 10/30/2017 | 2.29 | 11/30/2022 | 10/30/2017 | 104.87342 | 104.8734236 | 104.8734236 | 104.8734236 | 104.2738873 | 101.8630076 | 99.52013835 | 97.24298295 | 95.02933629 |
| 171030A00023 | 10/30/2017 | 2.9 | 11/1/2027 | 10/30/2017 | 119.0939 | 119.0939024 | 119.0939024 | 119.0939024 | 113.0503485 | 105.7759113 | 99.02916936 | 92.76901217 | 86.95772991 |
| 171103A00017 | 11/3/2017 | 2.09 | 11/3/2022 | 11/3/2017 | 104.68121 | 104.6812147 | 104.6812147 | 104.6812147 | 104.1053162 | 101.760829 | 99.48078849 | 97.26307559 | 95.10565314 |
| 171127A00016 | 11/27/2017 | 2.28 | 11/27/2023 | 11/27/2017 | 107.45959 | 107.459589 | 107.459589 | 107.459589 | 106.3588854 | 102.9358283 | 99.64146526 | 96.4702883 | 93.41705486 |
| 171205A00013 | 12/5/2017 | 2.4 | 12/6/2021 | 12/5/2017 | 103.08547 | 103.0854746 | 103.0854746 | 103.0854746 | 102.8183009 | 101.3874902 | 99.9836383 | 98.60604953 | 97.25405152 |
| 171206A00048 | 12/6/2017 | 3.04 | 12/6/2032 | 12/6/2017 | 136.58406 | 136.5840603 | 136.5840603 | 132.1944063 | 119.0170018 | 107.0025037 | 96.36816725 | 86.94621688 | 78.59013442 |
| 171208A00021 | 12/8/2017 | 2.24 | 12/8/2020 | 12/8/2017 | 100.8872 | 100.8872023 | 100.8872023 | 100.8872023 | 100.8061129 | 100.3605983 | 99.91902071 | 99.48132818 | 99.04746946 |
| 171215A00004 | 12/15/2017 | 2.29 | 12/15/2020 | 12/15/2017 | 100.94913 | 100.9491301 | 100.9491301 | 100.9491301 | 100.8638298 | 100.3989302 | 99.93831885 | 99.48193637 | 99.02972464 |
| 171219A00025 | 12/19/2017 | 2.33 | 12/19/2022 | 12/19/2017 | 105.53278 | 105.5327845 | 105.5327845 | 105.5327845 | 104.9103906 | 102.4322197 | 100.0255039 | 97.68777444 | 95.41666343 |
| 180103A00019 | 1/3/2018 | 2.51 | 1/3/2023 | 1/3/2018 | 105.61908 | 105.6190764 | 105.6190764 | 105.6190764 | 104.9843368 | 102.4753184 | 100.0395108 | 97.67435166 | 95.37738488 |
| 180103A00027 | 1/3/2018 | 2.51 | 1/3/2023 | 1/3/2018 | 105.61908 | 105.6190764 | 105.6190764 | 105.6190764 | 104.9843368 | 102.4753184 | 100.0395108 | 97.67435166 | 95.37738488 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180108A00006 | 1/8/2018 | 2.18 | 1/8/2021 | 1/8/2018 | 101.09957 | 101.0995704 | 101.0995704 | 101.0995704 | 100.9998868 | 100.467817 | 99.94135045 | 99.42039895 | 98.90487601 |
| 180109A00006 | 1/9/2018 | 2.18 | 1/8/2021 | 1/9/2018 | 101.09957 | 101.0995704 | 101.0995704 | 101.0995704 | 100.9998868 | 100.467817 | 99.94135045 | 99.42039895 | 98.90487601 |
| 180110A00048 | 1/10/2018 | 2.37 | 1/7/2021 | 1/10/2018 | 101.1268 | 101.1267994 | 101.1267994 | 101.1267994 | 101.0278337 | 100.4992554 | 99.97620269 | 99.45858927 | 98.94633052 |
| 180116A00008 | 1/16/2018 | 2.37 | 1/15/2021 | 1/16/2018 | 101.17402 | 101.1740184 | 101.1740184 | 101.1740184 | 101.0704482 | 100.5197856 | 99.97512206 | 99.43635968 | 98.90340281 |
| 180116A00015 | 1/16/2018 | 3.06 | 1/18/2028 | 1/16/2018 | 120.8549 | 120.8548966 | 120.8548966 | 120.8548966 | 114.4298984 | 106.9138715 | 99.95619812 | 93.51229494 | 87.54136157 |
| 180116A00045 | 1/16/2018 | 2.49 | 1/11/2022 | 1/16/2018 | 103.42163 | 103.4216271 | 103.4216271 | 103.4216271 | 103.1256428 | 101.5973197 | 100.0993827 | 98.63099866 | 97.19136455 |
| 180119A00026 | 1/19/2018 | 2.87 | 1/21/2025 | 1/19/2018 | 111.78398 | 111.7839779 | 111.7839779 | 111.7839779 | 109.7794259 | 105.1964939 | 100.8333772 | 96.67835943 | 92.72041177 |
| 180125A00026 | 1/26/2018 | 2.46 | 1/25/2021 | 1/26/2018 | 101.27955 | 101.2795469 | 101.2795469 | 101.2795469 | 101.1702087 | 100.5918711 | 100.0201366 | 99.45489276 | 98.8960294 |
| 180130A00070 | 1/30/2018 | 3.14 | 1/29/2027 | 1/30/2018 | 118.73455 | 118.7345541 | 118.7345541 | 118.7345541 | 113.940697 | 107.3311781 | 101.1567132 | 95.386291 | 89.991269 |
| 180201A00033 | 2/1/2018 | 2.53 | 2/1/2022 | 2/1/2018 | 103.88853 | 103.8885268 | 103.8885268 | 103.8885268 | 103.5739163 | 101.9811372 | 100.4207425 | 98.89181306 | 97.39346445 |
| 180206A00013 | 2/6/2018 | 2.72 | 2/6/2024 | 2/6/2018 | 109.48922 | 109.489217 | 109.489217 | 109.489217 | 108.2509326 | 104.606137 | 101.1046022 | 97.73989829 | 94.50592216 |
| 180214A00004 | 2/14/2018 | 2.71 | 2/14/2023 | 2/14/2018 | 106.89234 | 106.8923405 | 106.8923405 | 106.8923405 | 106.2075223 | 103.556982 | 100.986407 | 98.49288525 | 96.07363156 |
| 180215A00018 | 2/15/2018 | 2.57 | 9/15/2020 | 2/15/2018 | 100.49114 | 100.4911371 | 100.4911371 | 100.4911371 | 100.4579135 | 100.244509 | 100.0320222 | 99.82044721 | 99.6097781 |
| 180220A00035 | 2/20/2018 | 2.69 | 2/19/2021 | 2/20/2018 | 101.58058 | 101.5805775 | 101.5805775 | 101.5805775 | 101.4568091 | 100.808938 | 100.1693329 | 99.53783614 | 98.9142942 |
| 180222A00014 | 2/22/2018 | 2.68 | 2/19/2021 | 2/22/2018 | 101.57408 | 101.5740836 | 101.5740836 | 101.5740836 | 101.4503194 | 100.8024721 | 100.1628905 | 99.53141705 | 98.9078982 |
| 180222A00026 | 2/22/2018 | 2.98 | 2/21/2025 | 2/22/2018 | 113.45061 | 113.4506084 | 113.4506084 | 113.4506084 | 111.3403353 | 106.6075557 | 102.1056658 | 97.8221418 | 93.74520946 |
| 180306A00038 | 3/6/2018 | 2.7 | 3/5/2021 | 3/6/2018 | 101.68144 | 101.6814398 | 101.6814398 | 101.6814398 | 101.5495311 | 100.8629744 | 100.1856881 | 99.51748535 | 98.85818425 |
| 180308A00010 | 3/8/2018 | 2.72 | 4/8/2021 | 3/8/2018 | 101.92767 | 101.9276668 | 101.9276668 | 101.9276668 | 101.7745693 | 100.9940672 | 100.225522 | 99.46866054 | 98.7232176 |
| 180308A00014 | 3/8/2018 | 2.79 | 9/15/2021 | 3/8/2018 | 103.08148 | 103.0814842 | 103.0814842 | 103.0814842 | 102.8582369 | 101.6359326 | 100.4426404 | 99.27733608 | 98.13904301 |
| 180328A00010 | 3/28/2018 | 3.1 | 3/28/2025 | 3/28/2018 | 113.34419 | 113.3441941 | 113.3441941 | 113.3441941 | 111.159256 | 106.365817 | 101.809603 | 97.47755285 | 93.35740004 |
| 180328A00019 | 3/28/2018 | 2.55 | 3/29/2021 | 3/28/2018 | 101.83624 | 101.8362392 | 101.8362392 | 101.8362392 | 101.6897633 | 100.9355812 | 100.1925635 | 99.46046371 | 98.73904247 |
| 180328A00035 | 3/28/2018 | 2.73 | 3/29/2021 | 3/28/2018 | 101.86698 | 101.8669841 | 101.8669841 | 101.8669841 | 101.7207613 | 100.9678371 | 100.2260383 | 99.49511957 | 98.77484304 |
| 180402A00041 | 4/2/2018 | 2.77 | 4/6/2021 | 4/2/2018 | 101.95288 | 101.9528765 | 101.9528765 | 101.9528765 | 101.8011705 | 101.026022 | 100.2626631 | 99.51082609 | 98.77025155 |
| 180410A00017 | 4/10/2018 | 3.02 | 10/10/2023 | 4/10/2018 | 109.01274 | 109.0127358 | 109.0127358 | 109.0127358 | 107.992818 | 104.6860396 | 101.4986725 | 98.42571174 | 95.46239409 |
| 180411A00014 | 4/11/2018 | 2.88 | 6/27/2022 | 4/11/2018 | 105.20219 | 105.2021946 | 105.2021946 | 105.2021946 | 104.7498025 | 102.7512385 | 100.8012245 | 98.89827727 | 97.04096947 |
| 180430A00016 | 4/30/2018 | 3.07 | 12/15/2022 | 4/30/2018 | 106.89439 | 106.8943884 | 106.8943884 | 106.8943884 | 106.2748698 | 103.7996006 | 101.3951087 | 99.05896677 | 96.78884551 |
| 180430A00066 | 4/30/2018 | 2.84 | 3/30/2022 | 4/30/2018 | 104.81776 | 104.8177579 | 104.8177579 | 104.8177579 | 104.4509602 | 102.6905198 | 100.9682733 | 99.28304356 | 97.63370242 |
| 180514A00032 | 5/14/2018 | 3.27 | 5/14/2026 | 5/14/2018 | 118.70188 | 118.7018779 | 118.7018779 | 118.7018779 | 115.0326766 | 109.0135123 | 103.353379 | 98.02896119 | 93.01857272 |
| 180515A00018 | 5/15/2018 | 2.98 | 5/14/2021 | 5/15/2018 | 102.39401 | 102.3940082 | 102.3940082 | 102.3940082 | 102.2147903 | 101.3340663 | 100.4685133 | 99.61774121 | 98.78137361 |
| 180518A00020 | 5/21/2018 | 3.08 | 3/15/2022 | 5/21/2018 | 104.82245 | 104.8224529 | 104.8224529 | 104.8224529 | 104.4704156 | 102.7550869 | 101.0762494 | 99.43280276 | 97.82369086 |
| 180524A00020 | 5/24/2018 | 2.74 | 5/24/2021 | 5/24/2018 | 102.3871 | 102.3871005 | 102.3871005 | 102.3871005 | 102.2001814 | 101.2903548 | 100.3967068 | 99.51880831 | 98.65624566 |
| 180529A00037 | 5/29/2018 | 2.83 | 5/28/2021 | 5/29/2018 | 102.36132 | 102.3613229 | 102.3613229 | 102.3613229 | 102.1719106 | 101.2532139 | 100.3510139 | 99.46486915 | 98.5943539 |
| 180529A00044 | 5/29/2018 | 3.11 | 5/29/2024 | 5/29/2018 | 111.10467 | 111.1046715 | 111.1046715 | 111.1046715 | 109.643695 | 105.6872053 | 101.8969078 | 98.26495663 | 94.78391742 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180529A00056 | 5/29/2018 | 3 | 5/26/2023 | 5/29/2018 | 107.92665 | 107.926654 | 107.926654 | 107.926654 | 107.1204516 | 104.1941851 | 101.3636185 | 98.6251104 | 95.97517812 |
| 180601A00022 | 6/1/2018 | 3.03 | 6/1/2023 | 6/1/2018 | 108.05983 | 108.0598279 | 108.0598279 | 108.0598279 | 107.2451711 | 104.3011753 | 101.4539385 | 98.69976014 | 96.03510186 |
| 180614A00034 | 6/15/2018 | 2.89 | 1/11/2021 | 6/15/2018 | 101.43186 | 101.431859 | 101.431859 | 101.431859 | 101.3304378 | 100.789937 | 100.2552041 | 99.72614704 | 99.20267558 |
| 180615A00031 | 6/15/2018 | 2.92 | 6/15/2021 | 6/15/2018 | 102.57643 | 102.5764255 | 102.5764255 | 102.5764255 | 102.3770132 | 101.4081501 | 100.457612 | 99.52488205 | 98.60946303 |
| 171207A00019 | 12/7/2017 | 2.41 | 6/16/2022 | 12/7/2017 | 104.19191 | 104.1919149 | 104.1919149 | 104.1919149 | 103.7524347 | 101.793988 | 99.88246839 | 98.01646321 | 96.19461201 |
| 171211A00024 | 12/11/2017 | 2.26 | 12/11/2020 | 12/11/2017 | 100.91285 | 100.9128546 | 100.9128546 | 100.9128546 | 100.829961 | 100.3761406 | 99.92640686 | 99.48070465 | 99.03897981 |
| 171212A00023 | 12/12/2017 | 2.3 | 2/12/2021 | 12/12/2017 | 101.28808 | 101.2880808 | 101.2880808 | 101.2880808 | 101.1684813 | 100.5408243 | 99.92094452 | 99.30869798 | 98.70394424 |
| 171212A00024 | 12/12/2017 | 2.29 | 12/12/2022 | 12/12/2017 | 105.39058 | 105.3905771 | 105.3905771 | 105.3905771 | 104.7754217 | 102.3174345 | 99.92981463 | 97.61014908 | 95.35612256 |
| 171213A00019 | 12/13/2017 | 2.17 | 12/13/2021 | 12/13/2017 | 103.02345 | 103.0234468 | 103.0234468 | 103.0234468 | 102.7501755 | 101.2975452 | 99.87268691 | 98.47487362 | 97.10340329 |
| 171213A00032 | 12/13/2017 | 2.17 | 12/13/2021 | 12/13/2017 | 103.02345 | 103.0234468 | 103.0234468 | 103.0234468 | 102.7501755 | 101.2975452 | 99.87268691 | 98.47487362 | 97.10340329 |
| 180103A00011 | 1/3/2018 | 2.35 | 1/3/2023 | 1/3/2018 | 105.67561 | 105.6756069 | 105.6756069 | 105.6756069 | 105.0380005 | 102.5185445 | 100.0727908 | 97.69815364 | 95.39215481 |
| 180109A00028 | 1/9/2018 | 2.6 | 1/9/2025 | 1/9/2018 | 111.37012 | 111.3701216 | 111.3701216 | 111.3701216 | 109.3840072 | 104.814454 | 100.463669 | 96.32002258 | 92.37256507 |
| 180110A00029 | 1/10/2018 | 3.13 | 1/10/2028 | 1/10/2018 | 121.32345 | 121.3234536 | 121.3234536 | 121.3234536 | 114.9251038 | 107.4105654 | 100.4525481 | 94.00673337 | 88.03255361 |
| 180123A00023 | 1/23/2018 | 2.43 | 1/29/2021 | 1/23/2018 | 101.28631 | 101.2863119 | 101.2863119 | 101.2863119 | 101.174682 | 100.5853674 | 100.0029017 | 99.42716578 | 98.85804378 |
| 180123A00045 | 1/23/2018 | 2.43 | 1/25/2021 | 1/23/2018 | 101.26215 | 101.262145 | 101.262145 | 101.262145 | 101.152817 | 100.5745368 | 100.0028595 | 99.43767227 | 98.87886508 |
| 180124A00018 | 1/24/2018 | 2.3 | 1/25/2021 | 1/24/2018 | 101.26659 | 101.2665924 | 101.2665924 | 101.2665924 | 101.1570688 | 100.5777795 | 100.005118 | 99.43897074 | 98.87922706 |
| 180126A00028 | 1/26/2018 | 2.69 | 1/26/2023 | 1/26/2018 | 106.22792 | 106.2279234 | 106.2279234 | 106.2279234 | 105.5681023 | 102.9907141 | 100.4897609 | 98.06251337 | 95.70635838 |
| 180126A00029 | 1/26/2018 | 2.88 | 1/27/2025 | 1/26/2018 | 111.87232 | 111.8723169 | 111.8723169 | 111.8723169 | 109.8522266 | 105.2520853 | 100.8731888 | 96.70371197 | 92.7325254 |
| 180130A00084 | 1/30/2018 | 2.59 | 1/30/2023 | 1/30/2018 | 106.47094 | 106.4709384 | 106.4709384 | 106.4709384 | 105.8034688 | 103.2021999 | 100.6784818 | 98.22952963 | 95.85267773 |
| 180207A00003 | 2/7/2018 | 3.28 | 2/7/2028 | 2/7/2018 | 122.68185 | 122.681855 | 122.681855 | 122.681855 | 116.1311858 | 108.5024784 | 101.4426494 | 94.90606067 | 88.85096728 |
| 180306A00005 | 3/6/2018 | 2.65 | 3/4/2022 | 3/6/2018 | 104.2988 | 104.2988028 | 104.2988028 | 104.2988028 | 103.9565617 | 102.2700194 | 100.6189911 | 99.0024196 | 97.41929008 |
| 180316A00010 | 3/16/2018 | 2.58 | 3/16/2021 | 3/16/2018 | 101.77001 | 101.770009 | 101.770009 | 101.770009 | 101.6312785 | 100.9129786 | 100.2048259 | 99.50660626 | 98.81811157 |
| 180406A00014 | 4/6/2018 | 2.95 | 4/6/2023 | 4/6/2018 | 107.41451 | 107.4145117 | 107.4145117 | 107.4145117 | 106.6734812 | 103.8876815 | 101.1892199 | 98.57480517 | 96.04129456 |
| 180412A00034 | 4/12/2018 | 3.23 | 4/15/2030 | 4/12/2018 | 130.72484 | 130.7248353 | 130.7248353 | 130.2510099 | 119.88486 | 110.0514617 | 101.1338643 | 93.041197 | 85.6920674 |
| 180416A00016 | 4/16/2018 | 2.85 | 4/17/2023 | 4/16/2018 | 107.73325 | 107.7332543 | 107.7332543 | 107.7332543 | 106.9743202 | 104.1426024 | 101.4007132 | 98.74528045 | 96.17308048 |
| 180425A00020 | 4/25/2018 | 3.11 | 10/25/2022 | 4/25/2018 | 106.59805 | 106.5980455 | 106.5980455 | 106.5980455 | 106.0281687 | 103.6935339 | 101.422195 | 99.2120702 | 97.06115907 |
| 180430A00012 | 4/30/2018 | 2.95 | 7/15/2021 | 4/30/2018 | 102.81808 | 102.8180785 | 102.8180785 | 102.8180785 | 102.6073705 | 101.5555526 | 100.5252852 | 99.51591039 | 98.52679705 |
| 180430A00069 | 4/30/2018 | 2.75 | 3/30/2021 | 4/30/2018 | 101.99458 | 101.9945847 | 101.9945847 | 101.9945847 | 101.8473962 | 101.089815 | 100.3434841 | 99.60815446 | 98.88358412 |
| 180124A00038 | 1/24/2018 | 2.51 | 9/1/2021 | 1/24/2018 | 102.65191 | 102.6519128 | 102.6519128 | 102.6519128 | 102.4324525 | 101.2509409 | 100.0966121 | 98.96853624 | 97.86582557 |
| 180125A00023 | 1/25/2018 | 2.57 | 1/25/2022 | 1/25/2018 | 103.6344 | 103.6344011 | 103.6344011 | 103.6344011 | 103.3268199 | 101.7596244 | 100.2240074 | 98.71908407 | 97.24400196 |
| 180202A00011 | 2/2/2018 | 2.45 | 2/2/2021 | 2/2/2018 | 101.40539 | 101.4053932 | 101.4053932 | 101.4053932 | 101.2912061 | 100.6894826 | 100.0948941 | 99.50731425 | 98.92661967 |
| 180226A00034 | 2/26/2018 | 2.82 | 6/27/2022 | 2/26/2018 | 105.0814 | 105.0814038 | 105.0814038 | 105.0814038 | 104.6292579 | 102.6319315 | 100.6831308 | 98.78137336 | 96.92523253 |
| 180227A00016 | 2/27/2018 | 2.66 | 2/26/2021 | 2/27/2018 | 101.60732 | 101.6073184 | 101.6073184 | 101.6073184 | 101.4795509 | 100.8124231 | 100.1540485 | 99.50425572 | 98.86287791 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180402A00005 | 4/2/2018 | 2.94 | 4/3/2023 | 4/2/2018 | 107.36476 | 107.3647629 | 107.3647629 | 107.3647629 | 106.6275508 | 103.8505892 | 101.1604678 | 98.5539084 | 96.02778148 |
| 180403A00041 | 4/3/2018 | 2.91 | 4/3/2025 | 4/3/2018 | 113.43766 | 113.4376592 | 113.4376592 | 113.4376592 | 111.2196145 | 106.3798094 | 101.7810378 | 97.40996527 | 93.25407134 |
| 180417A00005 | 4/17/2018 | 2.67 | 4/19/2021 | 4/17/2018 | 102.07547 | 102.0754713 | 102.0754713 | 102.0754713 | 101.9141828 | 101.1014852 | 100.3017359 | 99.51462711 | 98.73986069 |
| 180420A00012 | 4/20/2018 | 2.91 | 4/20/2021 | 4/20/2018 | 102.15634 | 102.1563406 | 102.1563406 | 102.1563406 | 101.994614 | 101.1804595 | 100.3792937 | 99.59080726 | 98.81470073 |
| 180425A00004 | 4/25/2018 | 2.97 | 4/26/2021 | 4/25/2018 | 102.25018 | 102.2501793 | 102.2501793 | 102.2501793 | 102.0841421 | 101.2531944 | 100.4357597 | 99.63151016 | 98.84012865 |
| 180430A00015 | 4/30/2018 | 3.02 | 4/15/2022 | 4/30/2018 | 104.93485 | 104.9348536 | 104.9348536 | 104.9348536 | 104.5540082 | 102.754407 | 100.9945532 | 99.27327597 | 97.58944903 |
| 180522A00008 | 5/22/2018 | 2.98 | 5/24/2021 | 5/22/2018 | 102.46934 | 102.4693391 | 102.4693391 | 102.4693391 | 102.2827462 | 101.3744048 | 100.4821845 | 99.60565896 | 98.74441639 |
| 180522A00039 | 5/22/2018 | 3.43 | 5/22/2028 | 5/22/2018 | 126.39303 | 126.3930301 | 126.3930301 | 126.3930301 | 119.2069829 | 111.129638 | 103.6748506 | 96.79109668 | 90.43137177 |
| 180524A00029 | 5/24/2018 | 2.74 | 5/24/2021 | 5/24/2018 | 102.3871 | 102.3871005 | 102.3871005 | 102.3871005 | 102.2001814 | 101.2903548 | 100.3967068 | 99.51880831 | 98.65624566 |
| 180525A00005 | 5/25/2018 | 3.32 | 5/25/2028 | 5/25/2018 | 125.54277 | 125.5427669 | 125.5427669 | 125.5427669 | 118.3611512 | 110.3087732 | 102.8783132 | 96.01822153 | 89.68147667 |
| 180529A00007 | 5/29/2018 | 2.83 | 6/1/2021 | 5/29/2018 | 102.38977 | 102.3897659 | 102.3897659 | 102.3897659 | 102.1976292 | 101.2678936 | 100.3550453 | 99.45862744 | 98.57819933 |
| 180529A00066 | 5/29/2018 | 2.99 | 5/26/2023 | 5/29/2018 | 107.89734 | 107.897341 | 107.897341 | 107.897341 | 107.0912365 | 104.165399 | 101.3352509 | 98.59715095 | 95.94761701 |
| 180604A00027 | 6/4/2018 | 2.87 | 6/4/2021 | 6/4/2018 | 102.44866 | 102.448656 | 102.448656 | 102.448656 | 102.2549425 | 101.3167271 | 100.3957059 | 99.49140928 | 98.60338474 |
| 180605A00010 | 6/5/2018 | 2.87 | 6/5/2023 | 6/5/2018 | 108.16318 | 108.1631835 | 108.1631835 | 108.1631835 | 107.3385664 | 104.369781 | 101.4991787 | 98.72298081 | 96.03757594 |
| 180615A00066 | 6/15/2018 | 3 | 6/14/2024 | 6/15/2018 | 111.5381 | 111.5381009 | 111.5381009 | 111.5381009 | 110.032195 | 106.0047017 | 102.1486148 | 98.45573491 | 94.9182982 |
| 180618A00024 | 6/18/2018 | 2.91 | 4/13/2021 | 6/18/2018 | 102.11306 | 102.1130593 | 102.1130593 | 102.1130593 | 101.9562854 | 101.1613249 | 100.3787544 | 99.60828552 | 98.84963899 |
| 180621A00051 | 6/25/2018 | 3.63 | 6/23/2023 | 6/25/2018 | 110.03019 | 110.0301924 | 110.0301924 | 110.0301924 | 109.1773439 | 106.1444562 | 103.212994 | 100.3790024 | 97.63870383 |
| 180622A00018 | 6/22/2018 | 2.92 | 6/22/2023 | 6/22/2018 | 108.44326 | 108.4432612 | 108.4432612 | 108.4432612 | 107.5932634 | 104.5740972 | 101.6562832 | 98.83585968 | 96.10904317 |
| 180705A00003 | 7/5/2018 | 3.04 | 7/5/2023 | 7/5/2018 | 108.34588 | 108.3458828 | 108.3458828 | 108.3458828 | 107.4813395 | 104.4417146 | 101.5049221 | 98.66690826 | 95.92380327 |
| 180117A00016 | 1/17/2018 | 2.46 | 7/19/2021 | 1/17/2018 | 102.32592 | 102.3259164 | 102.3259164 | 102.3259164 | 102.1148196 | 101.0548937 | 100.0169245 | 99.00023474 | 98.00417484 |
| 180118A00039 | 1/18/2018 | 3.09 | 1/19/2027 | 1/18/2018 | 118.32816 | 118.3281558 | 118.3281558 | 118.3281558 | 113.5858271 | 107.0127299 | 100.8710214 | 95.13004538 | 89.76147947 |
| 180123A00025 | 1/23/2018 | 2.44 | 3/1/2021 | 1/23/2018 | 101.47824 | 101.4782385 | 101.4782385 | 101.4782385 | 101.348833 | 100.6739951 | 100.0081205 | 99.35103151 | 98.70255524 |
| 180129A00006 | 1/29/2018 | 2.49 | 11/30/2020 | 1/29/2018 | 100.94926 | 100.949257 | 100.949257 | 100.949257 | 100.8729236 | 100.4492297 | 100.0290825 | 99.61243797 | 99.19925238 |
| 180202A00012 | 2/2/2018 | 2.57 | 2/2/2022 | 2/2/2018 | 103.95978 | 103.959785 | 103.959785 | 103.959785 | 103.6441976 | 102.0478735 | 100.4840414 | 98.95177761 | 97.45019321 |
| 180222A00023 | 2/22/2018 | 2.84 | 2/22/2022 | 2/22/2018 | 104.26014 | 104.2601432 | 104.2601432 | 104.2601432 | 103.9278078 | 102.2748388 | 100.6562021 | 99.07089252 | 97.51794408 |
| 180222A00025 | 2/22/2018 | 3.48 | 2/22/2033 | 2/22/2018 | 142.81094 | 142.8109353 | 142.8109353 | 138.0163093 | 124.3340741 | 111.8306166 | 100.7743457 | 90.98744652 | 82.31490748 |
| 180222A00027 | 2/22/2018 | 3.24 | 2/22/2028 | 2/22/2018 | 124.10558 | 124.1055758 | 124.1055758 | 124.1055758 | 117.3839651 | 109.6046195 | 102.4096447 | 95.75183262 | 89.58803091 |
| 180223A00026 | 2/23/2018 | 2.92 | 12/15/2022 | 2/23/2018 | 106.52164 | 106.521644 | 106.521644 | 106.521644 | 105.9031219 | 103.4325141 | 101.0325808 | 98.70089778 | 96.43513883 |
| 180227A00005 | 2/27/2018 | 2.59 | 9/22/2020 | 2/27/2018 | 100.5403 | 100.5402968 | 100.5402968 | 100.5402968 | 100.5035686 | 100.2707759 | 100.0390684 | 99.80843859 | 99.57887889 |
| 180308A00011 | 3/8/2018 | 2.9 | 9/15/2022 | 3/8/2018 | 105.81817 | 105.8181747 | 105.8181747 | 105.8181747 | 105.2876604 | 103.0690779 | 100.9083642 | 98.80358654 | 96.75289384 |
| 180323A00005 | 3/23/2018 | 2.79 | 3/23/2021 | 3/23/2018 | 101.87005 | 101.8700459 | 101.8700459 | 101.8700459 | 101.7273645 | 100.9908232 | 100.2649378 | 99.54947819 | 98.84422077 |
| 180326A00010 | 3/26/2018 | 2.6 | 3/26/2021 | 3/26/2018 | 101.85332 | 101.8533195 | 101.8533195 | 101.8533195 | 101.7086065 | 100.9625684 | 100.2274593 | 99.50304007 | 98.78907883 |
| 180327A00024 | 3/27/2018 | 2.79 | 5/26/2023 | 3/27/2018 | 107.85188 | 107.8518846 | 107.8518846 | 107.8518846 | 107.0421248 | 104.1046818 | 101.2635736 | 98.5151252 | 95.8558226 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180328A00018 | 3/28/2018 | 2.73 | 3/28/2023 | 3/28/2018 | 107.24898 | 107.2489801 | 107.2489801 | 107.2489801 | 106.5159031 | 103.7453655 | 101.0612787 | 98.4603738 | 95.93953118 |
| 180406A00005 | 4/6/2018 | 2.76 | 4/6/2021 | 4/6/2018 | 101.94511 | 101.9451073 | 101.9451073 | 101.9451073 | 101.7934073 | 101.0182921 | 100.254966 | 99.50316154 | 98.76261916 |
| 180425A00007 | 4/25/2018 | 2.98 | 4/25/2023 | 4/25/2018 | 108.16465 | 108.1646462 | 108.1646462 | 108.1646462 | 107.3944922 | 104.5347749 | 101.7663488 | 99.08580162 | 96.48986819 |
| 180426A00016 | 4/26/2018 | 2.77 | 4/26/2021 | 4/26/2018 | 102.20829 | 102.2082889 | 102.2082889 | 102.2082889 | 102.0419397 | 101.2094981 | 100.3906195 | 99.58497444 | 98.79224388 |
| 180430A00010 | 4/30/2018 | 2.88 | 1/15/2021 | 4/30/2018 | 101.45571 | 101.4557145 | 101.4557145 | 101.4557145 | 101.3519878 | 100.8004296 | 100.2548775 | 99.71523349 | 99.18140184 |
| 180507A00005 | 5/7/2018 | 3.06 | 5/5/2023 | 5/7/2018 | 107.94238 | 107.9423793 | 107.9423793 | 107.9423793 | 107.1637783 | 104.2922856 | 101.5130259 | 98.82255283 | 96.21756731 |
| 180529A00014 | 5/29/2018 | 2.83 | 5/30/2023 | 5/29/2018 | 107.9995 | 107.9994983 | 107.9994983 | 107.9994983 | 107.1839443 | 104.233808 | 101.3807334 | 98.62100536 | 95.95107228 |
| 180530A00028 | 5/30/2018 | 3.67 | 5/31/2033 | 5/30/2018 | 143.21597 | 143.215966 | 143.215966 | 138.0600257 | 124.3063665 | 111.7432764 | 100.6522461 | 90.84992264 | 82.17678434 |
| 180530A00044 | 5/30/2018 | 2.87 | 5/31/2022 | 5/30/2018 | 105.01006 | 105.0100572 | 105.0100572 | 105.0100572 | 104.5847008 | 102.6611754 | 100.7827105 | 98.94797971 | 97.15570487 |
| 180530A00067 | 5/30/2018 | 2.76 | 5/28/2021 | 5/30/2018 | 102.29685 | 102.2968535 | 102.2968535 | 102.2968535 | 102.1075019 | 101.189126 | 100.2872427 | 99.40141081 | 98.53120448 |
| 180215A00043 | 2/15/2018 | 2.63 | 1/7/2021 | 2/15/2018 | 101.26464 | 101.2646398 | 101.2646398 | 101.2646398 | 101.1656008 | 100.6365998 | 100.1131277 | 99.59509794 | 99.08242601 |
| 180226A00015 | 2/26/2018 | 2.85 | 9/28/2022 | 2/26/2018 | 105.79794 | 105.7979372 | 105.7979372 | 105.7979372 | 105.2553061 | 103.0015109 | 100.8072556 | 98.67052331 | 96.58938339 |
| 180308A00015 | 3/8/2018 | 2.82 | 12/15/2021 | 3/8/2018 | 103.75897 | 103.7589689 | 103.7589689 | 103.7589689 | 103.483796 | 102.0240695 | 100.5922812 | 99.1876983 | 97.80961349 |
| 180314A00005 | 3/14/2018 | 2.74 | 3/15/2021 | 3/14/2018 | 101.77795 | 101.7779524 | 101.7779524 | 101.7779524 | 101.6400652 | 100.9257702 | 100.2215092 | 99.52707155 | 98.84225267 |
| 180315A00017 | 3/15/2018 | 2.72 | 3/15/2021 | 3/15/2018 | 101.76363 | 101.7636338 | 101.7636338 | 101.7636338 | 101.6257569 | 100.9115188 | 100.2073142 | 99.51293243 | 98.82816884 |
| 180326A00012 | 3/26/2018 | 2.74 | 12/28/2020 | 3/26/2018 | 101.25367 | 101.2536674 | 101.2536674 | 101.2536674 | 101.1604396 | 100.6589347 | 100.1623946 | 99.67074577 | 99.18391625 |
| 180328A00014 | 3/28/2018 | 2.55 | 3/29/2021 | 3/28/2018 | 101.83624 | 101.8362392 | 101.8362392 | 101.8362392 | 101.6897633 | 100.9355812 | 100.1925635 | 99.46046371 | 98.73904247 |
| 180403A00009 | 4/3/2018 | 2.91 | 4/3/2025 | 4/3/2018 | 113.43766 | 113.4376592 | 113.4376592 | 113.4376592 | 111.2196145 | 106.3798094 | 101.7810378 | 97.40996527 | 93.25407134 |
| 180425A00019 | 4/25/2018 | 3.02 | 10/25/2021 | 4/25/2018 | 103.65393 | 103.6539302 | 103.6539302 | 103.6539302 | 103.4145653 | 102.0912744 | 100.7930162 | 99.51910801 | 98.26889198 |
| 180426A00018 | 4/26/2018 | 2.94 | 4/26/2023 | 4/26/2018 | 108.05832 | 108.0583179 | 108.0583179 | 108.0583179 | 107.2872756 | 104.4263417 | 101.6568276 | 98.97531724 | 96.37854222 |
| 180427A00010 | 4/27/2018 | 2.95 | 4/27/2023 | 4/27/2018 | 108.09471 | 108.0947129 | 108.0947129 | 108.0947129 | 107.3223233 | 104.4581364 | 101.6855469 | 99.00113415 | 96.40162441 |
| 180430A00070 | 4/30/2018 | 2.91 | 3/30/2023 | 4/30/2018 | 107.7641 | 107.7641019 | 107.7641019 | 107.7641019 | 107.0271357 | 104.2441431 | 101.5480748 | 98.9356394 | 96.40369584 |
| 180503A00040 | 5/3/2018 | 3.3 | 5/5/2025 | 5/3/2018 | 114.61039 | 114.6103862 | 114.6103862 | 114.6103862 | 112.3142073 | 107.39219 | 102.7181779 | 98.27839363 | 94.05989348 |
| 180507A00025 | 5/7/2018 | 2.92 | 5/7/2021 | 5/7/2018 | 102.28951 | 102.2895087 | 102.2895087 | 102.2895087 | 102.1154996 | 101.2543604 | 100.4077322 | 99.57525048 | 98.75656259 |
| 180518A00012 | 5/18/2018 | 3.1 | 5/18/2022 | 5/18/2018 | 105.35474 | 105.354743 | 105.354743 | 105.354743 | 104.9413628 | 103.0487771 | 101.1997883 | 99.39313421 | 97.62759767 |
| 180518A00014 | 5/18/2018 | 3.17 | 5/18/2023 | 5/18/2018 | 108.36154 | 108.3615414 | 108.3615414 | 108.3615414 | 107.5644303 | 104.6527764 | 101.8356479 | 99.10947333 | 96.47083599 |
| 180521A00005 | 5/21/2018 | 3.02 | 5/22/2023 | 5/21/2018 | 108.49574 | 108.4957437 | 108.4957437 | 108.4957437 | 107.6891369 | 104.7528091 | 101.9123767 | 99.16419513 | 96.50477884 |
| 180521A00022 | 5/21/2018 | 2.99 | 5/21/2021 | 5/21/2018 | 102.45576 | 102.4557557 | 102.4557557 | 102.4557557 | 102.2713669 | 101.371265 | 100.4869982 | 99.61815125 | 98.76432296 |
| 180523A00014 | 5/23/2018 | 2.79 | 5/24/2021 | 5/23/2018 | 102.43263 | 102.4326292 | 102.4326292 | 102.4326292 | 102.2456677 | 101.3356165 | 100.4417467 | 99.56362914 | 98.7008501 |
| 180530A00005 | 5/30/2018 | 2.78 | 5/30/2023 | 5/30/2018 | 107.85199 | 107.8519861 | 107.8519861 | 107.8519861 | 107.0369288 | 104.0889645 | 101.2380081 | 98.4803464 | 95.81242932 |
| 180530A00014 | 5/30/2018 | 2.93 | 5/30/2023 | 5/30/2018 | 107.75054 | 107.7505383 | 107.7505383 | 107.7505383 | 106.939665 | 104.0055322 | 101.1677031 | 98.42250022 | 95.76640751 |
| 180530A00016 | 5/30/2018 | 2.76 | 5/28/2021 | 5/30/2018 | 102.29685 | 102.2968535 | 102.2968535 | 102.2968535 | 102.1075019 | 101.189126 | 100.2872427 | 99.40141081 | 98.53120448 |
| 180530A00030 | 5/30/2018 | 3.68 | 5/30/2034 | 5/30/2018 | 146.6167 | 146.6166951 | 146.6166951 | 139.7193085 | 124.899818 | 111.5262175 | 99.82083751 | 89.5625646 | 80.56082147 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180530A00057 | 5/30/2018 | 2.76 | 5/28/2021 | 5/30/2018 | 102.29685 | 102.2968535 | 102.2968535 | 102.2968535 | 102.1075019 | 101.189126 | 100.2872427 | 99.40141081 | 98.53120448 |
| 180517A00059 | 5/17/2018 | 3.13 | 5/17/2022 | 5/17/2018 | 105.40396 | 105.4039595 | 105.4039595 | 105.4039595 | 104.991459 | 103.1010402 | 101.2541104 | 99.44941247 | 97.68573365 |
| 180522A00005 | 5/22/2018 | 3.16 | 5/22/2023 | 5/22/2018 | 108.36406 | 108.3640556 | 108.3640556 | 108.3640556 | 107.5616633 | 104.6394809 | 101.8124895 | 99.07707999 | 96.42980042 |
| 180522A00018 | 5/22/2018 | 3.1 | 5/23/2022 | 5/22/2018 | 105.39368 | 105.3936828 | 105.3936828 | 105.3936828 | 104.975363 | 103.0691796 | 101.2071862 | 99.38809513 | 97.61066511 |
| 180522A00037 | 5/22/2018 | 3.01 | 5/22/2023 | 5/22/2018 | 108.46646 | 108.4664627 | 108.4664627 | 108.4664627 | 107.6599535 | 104.7240539 | 101.884039 | 99.13626486 | 96.47724611 |
| 180525A00016 | 5/25/2018 | 2.72 | 5/25/2021 | 5/25/2018 | 102.37611 | 102.3761134 | 102.3761134 | 102.3761134 | 102.1884724 | 101.27597 | 100.3797411 | 99.49935307 | 98.63438858 |
| 180530A00026 | 5/30/2018 | 3.55 | 5/30/2031 | 5/30/2018 | 135.3172 | 135.3171994 | 135.3171994 | 133.4501363 | 121.9321721 | 111.1364055 | 101.4378219 | 92.71768759 | 84.87073191 |
| 180530A00039 | 5/30/2018 | 2.93 | 5/30/2023 | 5/30/2018 | 107.75054 | 107.7505383 | 107.7505383 | 107.7505383 | 106.939665 | 104.0055322 | 101.1677031 | 98.42250022 | 95.76640751 |
| 180614A00033 | 6/15/2018 | 2.82 | 7/10/2020 | 6/15/2018 | 100.06944 | 100.0694425 | 100.0694425 | 100.0694425 | 100.0656415 | 100.0379121 | 100.0102133 | 99.98254492 | 99.95490707 |
| 180615A00063 | 6/15/2018 | 3.2 | 6/15/2026 | 6/15/2018 | 118.55846 | 118.5584634 | 118.5584634 | 118.5584634 | 114.7529956 | 108.6581248 | 102.9319647 | 97.55023488 | 92.49037574 |
| 180618A00025 | 6/18/2018 | 3.01 | 4/13/2022 | 6/18/2018 | 104.92001 | 104.9200125 | 104.9200125 | 104.9200125 | 104.5410102 | 102.7466974 | 100.9919203 | 99.27550729 | 97.59633225 |
| 180619A00021 | 6/19/2018 | 3.24 | 6/19/2028 | 6/19/2018 | 125.11915 | 125.1191481 | 125.1191481 | 125.1191481 | 117.8302879 | 109.7348675 | 102.2701638 | 95.3834551 | 89.02668988 |
| 180619A00023 | 6/19/2018 | 3.04 | 6/19/2023 | 6/19/2018 | 108.22507 | 108.2250732 | 108.2250732 | 108.2250732 | 107.3841827 | 104.3891599 | 101.4941645 | 98.69530662 | 95.98887012 |
| 180620A00014 | 6/20/2018 | 3.4 | 6/20/2028 | 6/20/2018 | 124.72051 | 124.7205107 | 124.7205107 | 124.7205107 | 117.5193003 | 109.5029977 | 102.1090188 | 95.28548278 | 88.98509379 |
| 180620A00017 | 6/20/2018 | 3.24 | 6/20/2028 | 6/20/2018 | 125.12773 | 125.1277311 | 125.1277311 | 125.1277311 | 117.8340243 | 109.735909 | 102.2689205 | 95.38028587 | 89.02190824 |
| 180620A00026 | 6/20/2018 | 2.91 | 6/18/2021 | 6/20/2018 | 102.57888 | 102.5788799 | 102.5788799 | 102.5788799 | 102.3779752 | 101.4010634 | 100.4427809 | 99.50259813 | 98.58000551 |
| 180622A00004 | 6/22/2018 | 3.47 | 12/22/2028 | 6/22/2018 | 126.86562 | 126.8656208 | 126.8656208 | 126.8656208 | 118.7508587 | 110.229865 | 102.4059128 | 95.21788444 | 88.61032901 |
| 180627A00057 | 6/27/2018 | 2.98 | 6/27/2022 | 6/27/2018 | 105.40351 | 105.4035128 | 105.4035128 | 105.4035128 | 104.9507103 | 102.9500837 | 100.9980474 | 99.09311711 | 97.23386437 |
| 180705A00057 | 7/5/2018 | 2.81 | 7/6/2020 | 7/5/2018 | 100.0415 | 100.0414988 | 100.0414988 | 100.0414988 | 100.0392181 | 100.0225788 | 100.0059561 | 99.98934978 | 99.97275994 |
| 180705A00060 | 7/5/2018 | 3 | 7/6/2022 | 7/5/2018 | 105.51102 | 105.5110216 | 105.5110216 | 105.5110216 | 105.0491532 | 103.0233258 | 101.0471401 | 99.11906266 | 97.2376189 |
| 180716A00034 | 7/16/2018 | 2.89 | 7/14/2023 | 7/16/2018 | 108.52164 | 108.5216393 | 108.5216393 | 108.5216393 | 107.6385682 | 104.5594192 | 101.5853171 | 98.71208379 | 95.93573269 |
| 180717A00076 | 7/17/2018 | 3.03 | 7/17/2023 | 7/17/2018 | 108.40595 | 108.4059476 | 108.4059476 | 108.4059476 | 107.5230638 | 104.450995 | 101.4836641 | 98.61690629 | 95.84674792 |
| 180719A00058 | 7/19/2018 | 2.9 | 7/20/2020 | 7/19/2018 | 100.14441 | 100.1444051 | 100.1444051 | 100.1444051 | 100.1368018 | 100.0813424 | 100.0259595 | 99.97065308 | 99.91542295 |
| 180720A00006 | 7/20/2018 | 3.03 | 7/17/2023 | 7/20/2018 | 108.40595 | 108.4059476 | 108.4059476 | 108.4059476 | 107.5230638 | 104.450995 | 101.4836641 | 98.61690629 | 95.84674792 |
| 180720A00010 | 7/20/2018 | 2.86 | 7/20/2020 | 7/20/2018 | 100.14218 | 100.1421834 | 100.1421834 | 100.1421834 | 100.1345804 | 100.0791228 | 100.0237418 | 99.96843719 | 99.9132089 |
| 180306A00010 | 3/6/2018 | 2.8 | 2/15/2022 | 3/6/2018 | 104.14525 | 104.1452549 | 104.1452549 | 104.1452549 | 103.8191284 | 102.187693 | 100.5898777 | 99.02470874 | 97.49124971 |
| 180313A00026 | 3/13/2018 | 3.34 | 3/13/2028 | 3/13/2018 | 123.42673 | 123.4267276 | 123.4267276 | 123.4267276 | 116.7032455 | 108.963744 | 101.8073177 | 95.1867031 | 89.05871184 |
| 180320A00007 | 3/20/2018 | 2.92 | 3/21/2022 | 3/20/2018 | 104.59005 | 104.5900458 | 104.5900458 | 104.5900458 | 104.2329658 | 102.5037818 | 100.8116475 | 99.15543635 | 97.53406797 |
| 180323A00013 | 3/23/2018 | 3.18 | 3/23/2028 | 3/23/2018 | 123.89502 | 123.8950215 | 123.8950215 | 123.8950215 | 117.0397718 | 109.1970467 | 101.9492246 | 95.24779465 | 89.048453 |
| 180329A00033 | 4/2/2018 | 2.79 | 4/1/2021 | 4/2/2018 | 101.93335 | 101.9333541 | 101.9333541 | 101.9333541 | 101.7851925 | 101.0237877 | 100.2737524 | 99.5348333 | 98.8067848 |
| 180403A00006 | 4/3/2018 | 3.07 | 4/3/2028 | 4/3/2018 | 123.12586 | 123.1258558 | 123.1258558 | 123.1258558 | 116.23603 | 108.3959638 | 101.1532803 | 94.45908598 | 88.26874134 |
| 180406A00009 | 4/6/2018 | 2.58 | 4/6/2021 | 4/6/2018 | 101.91352 | 101.9135239 | 101.9135239 | 101.9135239 | 101.7615595 | 100.985142 | 100.2205548 | 99.46752912 | 98.72580391 |
| 180411A00001 | 4/11/2018 | 2.84 | 1/25/2022 | 4/11/2018 | 104.06387 | 104.0638713 | 104.0638713 | 104.0638713 | 103.755621 | 102.1848965 | 100.6458133 | 99.13748473 | 97.6590567 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180412A00016 | 4/12/2018 | 2.79 | 4/12/2021 | 4/12/2018 | 102.01049 | 102.0104882 | 102.0104882 | 102.0104882 | 101.8545025 | 101.0627206 | 100.2832386 | 99.51577123 | 98.76004218 |
| 180416A00027 | 4/16/2018 | 2.86 | 4/16/2021 | 4/16/2018 | 102.08684 | 102.0868441 | 102.0868441 | 102.0868441 | 101.9279962 | 101.1250667 | 100.3347789 | 99.55683555 | 98.790949 |
| 180425A00008 | 4/25/2018 | 2.89 | 4/25/2022 | 4/25/2018 | 105.10588 | 105.1058814 | 105.1058814 | 105.1058814 | 104.7139268 | 102.8793567 | 101.0859158 | 99.33242308 | 97.61774018 |
| 180426A00017 | 4/26/2018 | 2.85 | 4/26/2022 | 4/26/2018 | 105.03975 | 105.0397538 | 105.0397538 | 105.0397538 | 104.6469718 | 102.8102773 | 101.0148135 | 99.25939982 | 97.54289774 |
| 180426A00053 | 4/26/2018 | 2.94 | 4/26/2023 | 4/26/2018 | 108.05832 | 108.0583179 | 108.0583179 | 108.0583179 | 107.2872756 | 104.4263417 | 101.6568276 | 98.97531724 | 96.37854222 |
| 180511A00035 | 5/11/2018 | 2.93 | 5/11/2023 | 5/11/2018 | 108.14654 | 108.146543 | 108.146543 | 108.146543 | 107.3556923 | 104.4534983 | 101.645237 | 98.92737134 | 96.29651732 |
| 180524A00006 | 5/24/2018 | 2.71 | 2/16/2021 | 5/24/2018 | 101.66235 | 101.6623505 | 101.6623505 | 101.6623505 | 101.5400154 | 100.8989364 | 100.2659493 | 99.64090161 | 99.02364434 |
| 180524A00050 | 5/24/2018 | 2.9 | 5/24/2021 | 5/24/2018 | 102.39655 | 102.3965464 | 102.3965464 | 102.3965464 | 102.2100213 | 101.3020384 | 100.4101722 | 99.53399632 | 98.67309916 |
| 180529A00042 | 5/29/2018 | 3.42 | 5/30/2028 | 5/29/2018 | 124.70329 | 124.7032913 | 124.7032913 | 124.7032913 | 117.5986564 | 109.6319596 | 102.2795066 | 95.49044211 | 89.21837355 |
| 180529A00063 | 5/29/2018 | 2.95 | 5/31/2022 | 5/29/2018 | 105.16516 | 105.1651631 | 105.1651631 | 105.1651631 | 104.7395049 | 102.8144461 | 100.934477 | 99.09827072 | 97.30454814 |
| 180530A00007 | 5/30/2018 | 2.66 | 11/30/2021 | 5/30/2018 | 103.65384 | 103.6538415 | 103.6538415 | 103.6538415 | 103.3898626 | 101.9669404 | 100.5705877 | 99.2001249 | 97.85489475 |
| 180530A00027 | 5/30/2018 | 3.61 | 6/1/2032 | 5/30/2018 | 139.23092 | 139.2309182 | 139.2309182 | 135.788111 | 123.1422803 | 111.4471862 | 101.0329809 | 91.7504551 | 83.46856976 |
| 180531A00015 | 5/31/2018 | 2.95 | 5/31/2023 | 5/31/2018 | 107.81671 | 107.8167072 | 107.8167072 | 107.8167072 | 107.0042945 | 104.0665738 | 101.225347 | 98.47692654 | 95.81778659 |
| 180531A00032 | 5/31/2018 | 2.8 | 6/1/2021 | 5/31/2018 | 102.3618 | 102.3618037 | 102.3618037 | 102.3618037 | 102.1696937 | 101.2400987 | 100.3273893 | 99.43110853 | 98.55081582 |
| 180611A00030 | 6/11/2018 | 2.91 | 6/12/2023 | 6/11/2018 | 108.33591 | 108.3359076 | 108.3359076 | 108.3359076 | 107.5006447 | 104.5102611 | 101.6193815 | 98.82415189 | 96.12088969 |
| 180622A00006 | 6/22/2018 | 3.53 | 12/21/2029 | 6/22/2018 | 130.54513 | 130.5451282 | 130.5451282 | 130.387342 | 120.4877274 | 111.0036956 | 102.3731598 | 94.51404851 | 87.35260007 |
| 180705A00062 | 7/5/2018 | 3.04 | 7/6/2023 | 7/5/2018 | 108.35345 | 108.3534502 | 108.3534502 | 108.3534502 | 107.4873691 | 104.4450002 | 101.5056227 | 98.66517376 | 95.91977484 |
| 180719A00061 | 7/19/2018 | 3.07 | 7/19/2023 | 7/19/2018 | 108.54423 | 108.5442255 | 108.5442255 | 108.5442255 | 107.657826 | 104.5783853 | 101.6040522 | 98.73064151 | 95.9541604 |
| 180723A00028 | 1/23/2019 | 3.22 | 1/23/2024 | 1/23/2019 | 110.51924 | 110.5192416 | 110.5192416 | 110.5192416 | 109.3090539 | 105.7005993 | 102.2321979 | 98.89763825 | 95.6910208 |
| 180724A00025 | 7/24/2018 | 2.93 | 7/25/2022 | 7/24/2018 | 105.88873 | 105.8887344 | 105.8887344 | 105.8887344 | 105.405648 | 103.3181516 | 101.2827424 | 99.29777299 | 97.36166087 |
| 180730A00002 | 7/30/2018 | 3.03 | 7/30/2021 | 7/30/2018 | 103.017 | 103.0170001 | 103.0170001 | 103.0170001 | 102.8025966 | 101.7087465 | 100.6381503 | 99.5900721 | 98.56380697 |
| 180730A00004 | 7/30/2018 | 3.14 | 7/28/2023 | 7/30/2018 | 108.83041 | 108.8304067 | 108.8304067 | 108.8304067 | 107.9293798 | 104.821893 | 101.8210541 | 98.92259017 | 96.12242588 |
| 180801A00010 | 8/1/2018 | 2.99 | 4/15/2021 | 8/1/2018 | 102.1839 | 102.1839043 | 102.1839043 | 102.1839043 | 102.0256831 | 101.225056 | 100.4369898 | 99.66119018 | 98.89737224 |
| 180801A00015 | 8/1/2018 | 3.16 | 8/1/2023 | 8/1/2018 | 108.92409 | 108.9240911 | 108.9240911 | 108.9240911 | 108.016622 | 104.8971728 | 101.8850478 | 98.97593504 | 96.16572261 |
| 180808A00009 | 8/8/2018 | 3.12 | 8/7/2023 | 8/8/2018 | 108.84618 | 108.8461757 | 108.8461757 | 108.8461757 | 107.9295972 | 104.7955747 | 101.7698178 | 98.84795753 | 96.02582887 |
| 180809A00030 | 8/9/2018 | 2.94 | 2/9/2021 | 8/9/2018 | 101.66913 | 101.6691292 | 101.6691292 | 101.6691292 | 101.5509966 | 100.9302087 | 100.3170065 | 99.71125163 | 99.11280886 |
| 180814A00033 | 8/14/2018 | 3.25 | 8/13/2027 | 8/14/2018 | 122.51886 | 122.5188632 | 122.5188632 | 122.5188632 | 116.7113104 | 109.4505449 | 102.7022229 | 96.42731788 | 90.58997572 |
| 180815A00009 | 8/15/2018 | 2.93 | 8/16/2021 | 8/15/2018 | 103.03261 | 103.0326081 | 103.0326081 | 103.0326081 | 102.8153539 | 101.6750293 | 100.5599803 | 99.46937304 | 98.40240976 |
| 180815A00024 | 8/15/2018 | 2.71 | 8/17/2020 | 8/15/2018 | 100.34577 | 100.3457745 | 100.3457745 | 100.3457745 | 100.3263119 | 100.1929823 | 100.0600235 | 99.92743379 | 99.79521164 |
| 180816A00024 | 8/16/2018 | 3.01 | 8/16/2023 | 8/16/2018 | 108.56898 | 108.5689767 | 108.5689767 | 108.5689767 | 107.6393476 | 104.4860351 | 101.4423422 | 98.5038159 | 95.66621316 |
| 180821A00021 | 8/21/2018 | 2.68 | 8/21/2020 | 8/21/2018 | 100.37025 | 100.3702545 | 100.3702545 | 100.3702545 | 100.3489915 | 100.2045608 | 100.0605599 | 99.91698676 | 99.77383953 |
| 180824A00023 | 8/24/2018 | 2.79 | 8/24/2021 | 8/24/2018 | 103.1147 | 103.1147003 | 103.1147003 | 103.1147003 | 102.8955243 | 101.7300932 | 100.5910219 | 99.47742347 | 98.38845017 |
| 180827A00031 | 8/27/2018 | 2.9 | 8/27/2021 | 8/27/2018 | 103.0784 | 103.0784006 | 103.0784006 | 103.0784006 | 102.8593096 | 101.6887392 | 100.5447798 | 99.42653132 | 98.33313396 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180905A00011 | 9/5/2018 | 2.85 | 9/8/2020 | 9/5/2018 | 100.50107 | 100.5010655 | 100.5010655 | 100.5010655 | 100.4713343 | 100.2772399 | 100.0839034 | 99.8913203 | 99.69948624 |
| 180906A00013 | 9/6/2018 | 2.81 | 9/7/2021 | 9/6/2018 | 103.24254 | 103.242542 | 103.242542 | 103.242542 | 103.0204294 | 101.8159267 | 100.6395467 | 99.4903128 | 98.36729317 |
| 180906A00020 | 9/6/2018 | 2.81 | 9/7/2021 | 9/6/2018 | 103.24254 | 103.242542 | 103.242542 | 103.242542 | 103.0204294 | 101.8159267 | 100.6395467 | 99.4903128 | 98.36729317 |
| 180910A00007 | 9/10/2018 | 2.96 | 9/8/2023 | 9/10/2018 | 109.17746 | 109.1774617 | 109.1774617 | 109.1774617 | 108.2042068 | 104.9660203 | 101.8424079 | 98.828627 | 95.92016341 |
| 180910A00033 | 9/10/2018 | 3.43 | 9/8/2028 | 9/10/2018 | 125.63794 | 125.6379388 | 125.6379388 | 125.6379388 | 118.0467953 | 109.8126957 | 102.2322875 | 95.2498562 | 88.8147233 |
| 180911A00011 | 9/11/2018 | 3 | 9/10/2021 | 9/11/2018 | 103.30121 | 103.3012073 | 103.3012073 | 103.3012073 | 103.0788585 | 101.8687455 | 100.6870267 | 99.53271089 | 98.4048525 |
| 180918A00012 | 9/18/2018 | 3.06 | 9/17/2021 | 9/18/2018 | 103.42778 | 103.4277752 | 103.4277752 | 103.4277752 | 103.2036321 | 101.9736401 | 100.7729548 | 99.60053735 | 98.45539751 |
| 180530A00069 | 5/30/2018 | 2.87 | 5/31/2022 | 5/30/2018 | 105.01006 | 105.0100572 | 105.0100572 | 105.0100572 | 104.5847008 | 102.6611754 | 100.7827105 | 98.94797971 | 97.15570487 |
| 180607A00026 | 6/7/2018 | 2.92 | 6/7/2021 | 6/7/2018 | 102.5177 | 102.517698 | 102.517698 | 102.517698 | 102.3223972 | 101.3756481 | 100.446402 | 99.53417684 | 98.63850772 |
| 180612A00005 | 6/12/2018 | 3.09 | 6/12/2023 | 6/12/2018 | 108.32118 | 108.3211799 | 108.3211799 | 108.3211799 | 107.4899423 | 104.5123741 | 101.6336162 | 98.84985095 | 96.15743001 |
| 180614A00008 | 6/14/2018 | 2.94 | 6/14/2021 | 6/14/2018 | 102.58845 | 102.5884463 | 102.5884463 | 102.5884463 | 102.3895287 | 101.4233284 | 100.4753511 | 99.54508448 | 98.6320353 |
| 180619A00020 | 6/19/2018 | 3.1 | 6/19/2025 | 6/19/2018 | 114.9862 | 114.9861973 | 114.9861973 | 114.9861973 | 112.5440461 | 107.4668569 | 102.652331 | 98.08549106 | 93.75229086 |
| 180621A00017 | 6/21/2018 | 3.42 | 6/21/2028 | 6/21/2018 | 124.88871 | 124.8887122 | 124.8887122 | 124.8887122 | 117.6792332 | 109.6542572 | 102.2523427 | 95.42153654 | 89.11447796 |
| 180621A00052 | 6/25/2018 | 3.35 | 6/23/2023 | 6/25/2018 | 109.18784 | 109.187844 | 109.187844 | 109.187844 | 108.3379152 | 105.3176659 | 102.3985251 | 99.57654835 | 96.8479684 |
| 180622A00003 | 6/22/2018 | 2.87 | 6/22/2022 | 6/22/2018 | 105.51136 | 105.5113554 | 105.5113554 | 105.5113554 | 105.0616386 | 103.0667208 | 101.1200478 | 99.22015255 | 97.36562261 |
| 180625A00039 | 6/25/2018 | 2.93 | 6/25/2021 | 6/25/2018 | 102.64984 | 102.6498443 | 102.6498443 | 102.6498443 | 102.4453238 | 101.4489737 | 100.4719833 | 99.5137923 | 98.57386175 |
| 180625A00040 | 6/25/2018 | 3 | 6/24/2022 | 6/25/2018 | 105.42141 | 105.4214114 | 105.4214114 | 105.4214114 | 104.9715438 | 102.9788955 | 101.0344506 | 99.13674253 | 97.28435965 |
| 180628A00027 | 6/28/2018 | 2.72 | 6/28/2021 | 6/28/2018 | 102.62142 | 102.6214215 | 102.6214215 | 102.6214215 | 102.4149235 | 101.4082557 | 100.4213399 | 99.45359906 | 98.50447844 |
| 180629A00071 | 6/29/2018 | 3.02 | 6/29/2023 | 6/29/2018 | 108.24 | 108.2400033 | 108.2400033 | 108.2400033 | 107.3848113 | 104.3626248 | 101.4422719 | 98.6197563 | 95.89126201 |
| 180705A00061 | 7/5/2018 | 3 | 7/6/2022 | 7/5/2018 | 105.51102 | 105.5110216 | 105.5110216 | 105.5110216 | 105.0491532 | 103.0233258 | 101.0471401 | 99.11906266 | 97.2376189 |
| 180719A00011 | 7/19/2018 | 3 | 11/12/2021 | 7/19/2018 | 103.76231 | 103.7623122 | 103.7623122 | 103.7623122 | 103.5115238 | 102.1409925 | 100.7952004 | 99.47353503 | 98.17540331 |
| 180720A00029 | 7/20/2018 | 2.71 | 7/20/2020 | 7/20/2018 | 100.14408 | 100.1440781 | 100.1440781 | 100.1440781 | 100.1364608 | 100.0808998 | 100.0254167 | 99.9700113 | 99.9146834 |
| 180720A00049 | 7/20/2018 | 2.93 | 7/20/2021 | 7/20/2018 | 102.83382 | 102.8338188 | 102.8338188 | 102.8338188 | 102.621935 | 101.5563949 | 100.5129652 | 99.49096267 | 98.48973175 |
| 180720A00068 | 7/20/2018 | 2.89 | 7/20/2023 | 7/20/2018 | 108.5677 | 108.5676959 | 108.5676959 | 108.5676959 | 107.6753311 | 104.5796026 | 101.5898939 | 98.70196988 | 95.91179107 |
| 180723A00030 | 6/21/2019 | 3.24 | 6/21/2024 | 6/21/2019 | 111.80326 | 111.8032626 | 111.8032626 | 111.8032626 | 110.2903681 | 106.2592118 | 102.3998488 | 98.70404444 | 95.16400271 |
| 180731A00002 | 7/31/2018 | 2.83 | 2/16/2021 | 7/31/2018 | 101.73932 | 101.7393175 | 101.7393175 | 101.7393175 | 101.6169326 | 100.9755749 | 100.3423117 | 99.71699033 | 99.09946183 |
| 180731A00004 | 7/31/2018 | 2.97 | 7/31/2023 | 7/31/2018 | 108.90188 | 108.9018802 | 108.9018802 | 108.9018802 | 107.9915652 | 104.8615762 | 101.8395022 | 98.92099985 | 96.10192773 |
| 180731A00046 | 7/31/2018 | 2.84 | 3/26/2021 | 7/31/2018 | 102.03256 | 102.0325649 | 102.0325649 | 102.0325649 | 101.8877169 | 101.1409389 | 100.4050975 | 99.67995362 | 98.96527506 |
| 180802A00006 | 8/2/2018 | 2.99 | 8/2/2023 | 8/2/2018 | 108.98022 | 108.9802209 | 108.9802209 | 108.9802209 | 108.0664644 | 104.929955 | 101.9017185 | 98.97739085 | 96.15281158 |
| 180809A00016 | 8/9/2018 | 3.1 | 8/9/2023 | 8/9/2018 | 108.79899 | 108.7989922 | 108.7989922 | 108.7989922 | 107.8794574 | 104.7409146 | 101.7109434 | 98.78515615 | 95.95937034 |
| 180814A00032 | 8/14/2018 | 3.1 | 8/14/2025 | 8/14/2018 | 115.44737 | 115.4473747 | 115.4473747 | 115.4473747 | 112.8353468 | 107.6028106 | 102.6478179 | 97.95414263 | 93.50659526 |
| 180514A00034 | 5/14/2018 | 3.07 | 5/14/2024 | 5/14/2018 | 111.56541 | 111.5654061 | 111.5654061 | 111.5654061 | 110.1240404 | 106.1778458 | 102.3962187 | 98.771446 | 95.29621616 |
| 180516A00019 | 5/16/2018 | 3.19 | 5/16/2023 | 5/16/2018 | 108.40376 | 108.4037583 | 108.4037583 | 108.4037583 | 107.6091451 | 104.702127 | 101.8893178 | 99.16716416 | 96.53226636 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180522A00004 | 5/22/2018 | 2.98 | 5/21/2021 | 5/22/2018 | 102.44674 | 102.4467397 | 102.4467397 | 102.4467397 | 102.2623592 | 101.3623014 | 100.4780782 | 99.60927416 | 98.75548833 |
| 180522A00019 | 5/22/2018 | 3.16 | 5/22/2023 | 5/22/2018 | 108.36406 | 108.3640556 | 108.3640556 | 108.3640556 | 107.5616633 | 104.6394809 | 101.8124895 | 99.07707999 | 96.42980042 |
| 180522A00035 | 5/22/2018 | 2.83 | 5/21/2021 | 5/22/2018 | 102.44646 | 102.4464633 | 102.4464633 | 102.4464633 | 102.2616862 | 101.3597617 | 100.4737329 | 99.60318224 | 98.74770633 |
| 180522A00038 | 5/22/2018 | 3.23 | 5/22/2025 | 5/22/2018 | 115.3991 | 115.3991021 | 115.3991021 | 115.3991021 | 113.0321596 | 108.0180023 | 103.2593073 | 98.7417268 | 94.45179075 |
| 180523A00025 | 5/23/2018 | 2.86 | 12/15/2021 | 5/23/2018 | 104.05547 | 104.0554734 | 104.0554734 | 104.0554734 | 103.7791372 | 102.3132743 | 100.8755213 | 99.46513971 | 98.0814165 |
| 180524A00024 | 5/24/2018 | 3 | 3/21/2022 | 5/24/2018 | 104.72946 | 104.7294587 | 104.7294587 | 104.7294587 | 104.3721392 | 102.6417076 | 100.9483487 | 99.29093516 | 97.66838595 |
| 180525A00001 | 5/25/2018 | 3.04 | 5/25/2023 | 5/25/2018 | 108.03633 | 108.0363348 | 108.0363348 | 108.0363348 | 107.2310823 | 104.3058272 | 101.4761449 | 98.73840198 | 96.08912362 |
| 180529A00026 | 5/29/2018 | 2.67 | 6/1/2021 | 5/29/2018 | 102.38003 | 102.3800339 | 102.3800339 | 102.3800339 | 102.187488 | 101.2558508 | 100.3411656 | 99.44297297 | 98.56082987 |
| 180529A00043 | 5/29/2018 | 2.99 | 5/30/2023 | 5/29/2018 | 107.92708 | 107.9270774 | 107.9270774 | 107.9270774 | 107.1156114 | 104.178886 | 101.3385282 | 98.59085857 | 95.93235899 |
| 180530A00002 | 5/30/2018 | 2.75 | 11/30/2022 | 5/30/2018 | 106.44492 | 106.4449244 | 106.4449244 | 106.4449244 | 105.8387646 | 103.3993386 | 101.028782 | 98.72476519 | 96.48505142 |
| 180530A00024 | 5/30/2018 | 3.44 | 5/30/2029 | 5/30/2018 | 127.95745 | 127.9574497 | 127.9574497 | 127.9574497 | 119.0384698 | 110.1133138 | 101.9508805 | 94.48145639 | 87.64204857 |
| 180530A00025 | 5/30/2018 | 3.49 | 5/30/2030 | 5/30/2018 | 131.53859 | 131.5385945 | 131.5385945 | 130.9425537 | 120.5591728 | 110.6866122 | 101.7383741 | 93.62214519 | 86.25530065 |
| 180530A00038 | 5/30/2018 | 2.77 | 5/28/2021 | 5/30/2018 | 102.30606 | 102.3060634 | 102.3060634 | 102.3060634 | 102.1167032 | 101.1982814 | 100.2963529 | 99.41047628 | 98.54022583 |
| 180601A00018 | 6/1/2018 | 2.87 | 6/1/2023 | 6/1/2018 | 108.13274 | 108.1327406 | 108.1327406 | 108.1327406 | 107.3139735 | 104.356517 | 101.4965171 | 98.73023723 | 96.05410544 |
| 180601A00023 | 6/1/2018 | 3.3 | 6/1/2028 | 6/1/2018 | 125.44451 | 125.4445087 | 125.4445087 | 125.4445087 | 118.2324883 | 110.1675716 | 102.7270104 | 95.85893576 | 89.51604486 |
| 180604A00048 | 6/4/2018 | 3.01 | 6/5/2023 | 6/4/2018 | 108.03071 | 108.0307113 | 108.0307113 | 108.0307113 | 107.2104468 | 104.2560794 | 101.3991693 | 98.63597507 | 95.96292 |
| 180612A00018 | 6/12/2018 | 2.88 | 6/10/2022 | 6/12/2018 | 105.43961 | 105.4396147 | 105.4396147 | 105.4396147 | 105.0020005 | 103.0406757 | 101.1260242 | 99.25665 | 97.43120798 |
| 180615A00061 | 6/15/2018 | 3.28 | 6/15/2028 | 6/15/2018 | 125.40626 | 125.4062599 | 125.4062599 | 125.4062599 | 118.1297221 | 110.0329317 | 102.565896 | 95.67605343 | 89.31549167 |
| 180618A00011 | 6/18/2018 | 3.02 | 6/20/2022 | 6/18/2018 | 105.43147 | 105.4314687 | 105.4314687 | 105.4314687 | 104.9855437 | 103.0036807 | 101.0695043 | 99.18157155 | 97.33849316 |
| 180618A00012 | 6/18/2018 | 2.9 | 6/19/2023 | 6/18/2018 | 108.3599 | 108.3599018 | 108.3599018 | 108.3599018 | 107.5145014 | 104.5047357 | 101.5957471 | 98.7836069 | 96.06456263 |
| 180618A00032 | 6/18/2018 | 2.93 | 6/18/2021 | 6/18/2018 | 102.59846 | 102.5984622 | 102.5984622 | 102.5984622 | 102.3975378 | 101.4205229 | 100.4621387 | 99.52185543 | 98.5991637 |
| 180619A00019 | 6/19/2018 | 2.89 | 6/18/2021 | 6/19/2018 | 102.5593 | 102.5592975 | 102.5592975 | 102.5592975 | 102.3584125 | 101.3816039 | 100.4234232 | 99.48334083 | 98.56084731 |
| 180530A00072 | 5/30/2018 | 3.06 | 5/30/2024 | 5/30/2018 | 110.91499 | 110.9149883 | 110.9149883 | 110.9149883 | 109.4529823 | 105.4976109 | 101.7085319 | 98.07788879 | 94.59823739 |
| 180531A00014 | 5/31/2018 | 2.8 | 5/31/2023 | 5/31/2018 | 107.91842 | 107.9184191 | 107.9184191 | 107.9184191 | 107.1018115 | 104.1502341 | 101.2958565 | 98.53495535 | 95.86397073 |
| 180531A00065 | 5/31/2018 | 2.65 | 6/1/2021 | 5/31/2018 | 102.36138 | 102.3613785 | 102.3613785 | 102.3613785 | 102.1688503 | 101.2373072 | 100.3227148 | 99.42461377 | 98.54256115 |
| 180601A00003 | 6/1/2018 | 2.65 | 12/1/2020 | 6/1/2018 | 101.08287 | 101.0828703 | 101.0828703 | 101.0828703 | 101.0057543 | 100.5782793 | 100.1544162 | 99.73411943 | 99.31734416 |
| 180614A00038 | 6/14/2018 | 3.08 | 6/14/2023 | 6/14/2018 | 108.3067 | 108.3067043 | 108.3067043 | 108.3067043 | 107.4726631 | 104.4899108 | 101.6063208 | 98.81805462 | 96.12144461 |
| 180627A00027 | 6/27/2018 | 2.87 | 6/27/2023 | 6/27/2018 | 108.33062 | 108.3306199 | 108.3306199 | 108.3306199 | 107.4738359 | 104.4427926 | 101.5139677 | 98.68334729 | 95.94709873 |
| 180627A00030 | 6/27/2018 | 3.02 | 6/27/2023 | 6/27/2018 | 108.22503 | 108.2250269 | 108.2250269 | 108.2250269 | 107.3727361 | 104.3561577 | 101.4410462 | 98.62342671 | 95.89950356 |
| 180629A00008 | 6/29/2018 | 3.02 | 6/29/2023 | 6/29/2018 | 108.24 | 108.2400033 | 108.2400033 | 108.2400033 | 107.3848113 | 104.3626248 | 101.4422719 | 98.6197563 | 95.89126201 |
| 180702A00012 | 7/2/2018 | 3.01 | 7/3/2023 | 7/2/2018 | 108.23967 | 108.2396705 | 108.2396705 | 108.2396705 | 107.3785228 | 104.3457648 | 101.4154868 | 98.58365447 | 95.84641642 |
| 180706A00010 | 7/6/2018 | 2.92 | 7/6/2021 | 7/6/2018 | 102.72044 | 102.7204384 | 102.7204384 | 102.7204384 | 102.5119217 | 101.4852012 | 100.4790264 | 99.49278498 | 98.5258886 |
| 180712A00002 | 7/12/2018 | 3.06 | 7/12/2023 | 7/12/2018 | 108.46007 | 108.4600684 | 108.4600684 | 108.4600684 | 107.584544 | 104.5247815 | 101.5689913 | 98.71305415 | 95.95303869 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180713A00027 | 7/13/2018 | 3.23 | 7/13/2028 | 7/13/2018 | 125.24414 | 125.24414 | 125.24414 | 125.24414 | 117.8403937 | 109.6841145 | 102.1678918 | 95.23784134 | 88.8448864 |
| 180713A00035 | 7/13/2018 | 3.02 | 7/13/2022 | 7/13/2018 | 105.60453 | 105.6045271 | 105.6045271 | 105.6045271 | 105.1356113 | 103.0902248 | 101.0952507 | 99.14911934 | 97.25032161 |
| 180719A00004 | 7/19/2018 | 3.07 | 7/19/2023 | 7/19/2018 | 108.54423 | 108.5442255 | 108.5442255 | 108.5442255 | 107.657826 | 104.5783853 | 101.6040522 | 98.73064151 | 95.9541604 |
| 180719A00065 | 7/19/2018 | 3.36 | 7/20/2026 | 7/19/2018 | 118.58176 | 118.5817646 | 118.5817646 | 118.5817646 | 114.6590777 | 108.5191348 | 102.7544891 | 97.34015545 | 92.25294021 |
| 180727A00002 | 7/27/2018 | 2.93 | 7/28/2020 | 7/27/2018 | 100.20525 | 100.2052538 | 100.2052538 | 100.2052538 | 100.1946087 | 100.1169714 | 100.0394585 | 99.96206987 | 99.88480511 |
| 180727A00028 | 7/27/2018 | 3.25 | 7/27/2026 | 7/27/2018 | 119.22237 | 119.2223734 | 119.2223734 | 119.2223734 | 115.2242131 | 109.0055392 | 103.169094 | 97.68930117 | 92.54242818 |
| 180727A00038 | 7/27/2018 | 3.36 | 7/25/2025 | 7/27/2018 | 115.58022 | 115.5802237 | 115.5802237 | 115.5802237 | 113.0485072 | 107.8957023 | 103.0128322 | 98.38429738 | 93.99548266 |
| 180803A00009 | 8/3/2018 | 2.93 | 10/30/2020 | 8/3/2018 | 100.90313 | 100.9031348 | 100.9031348 | 100.9031348 | 100.8454353 | 100.5071929 | 100.171213 | 99.83747282 | 99.50595021 |
| 180813A00026 | 8/13/2018 | 2.87 | 8/11/2023 | 8/13/2018 | 108.67352 | 108.6735162 | 108.6735162 | 108.6735162 | 107.7467026 | 104.5911607 | 101.5452422 | 98.60449916 | 95.76469287 |
| 180817A00013 | 8/17/2018 | 2.94 | 2/15/2022 | 8/17/2018 | 104.37607 | 104.3760709 | 104.3760709 | 104.3760709 | 104.0495708 | 102.4161738 | 100.8164321 | 99.24937103 | 97.71405319 |
| 180820A00054 | 8/20/2018 | 3 | 8/18/2023 | 8/20/2018 | 108.55232 | 108.5523177 | 108.5523177 | 108.5523177 | 107.6196256 | 104.4613325 | 101.4129791 | 98.47009332 | 95.62841382 |
| 180823A00044 | 8/23/2018 | 2.69 | 8/21/2020 | 8/23/2018 | 100.3717 | 100.3716988 | 100.3716988 | 100.3716988 | 100.3504355 | 100.2060031 | 100.0620004 | 99.91842559 | 99.77527665 |
| 180829A00008 | 8/29/2018 | 3.23 | 8/30/2027 | 8/29/2018 | 122.52082 | 122.5208154 | 122.5208154 | 122.5208154 | 116.6354233 | 109.3340978 | 102.5509528 | 96.24631386 | 90.38374922 |
| 180625A00041 | 6/25/2018 | 3.06 | 6/20/2023 | 6/25/2018 | 108.29262 | 108.2926184 | 108.2926184 | 108.2926184 | 107.4500693 | 104.4513397 | 101.5528424 | 98.75067595 | 96.04111355 |
| 180627A00026 | 6/27/2018 | 2.87 | 6/27/2023 | 6/27/2018 | 108.33062 | 108.3306199 | 108.3306199 | 108.3306199 | 107.4738359 | 104.4427926 | 101.5139677 | 98.68334729 | 95.94709873 |
| 180706A00013 | 7/6/2018 | 3.01 | 7/6/2023 | 7/6/2018 | 108.26213 | 108.262125 | 108.262125 | 108.262125 | 107.3963659 | 104.3553827 | 101.417356 | 98.5782238 | 95.83410892 |
| 180713A00011 | 7/13/2018 | 2.95 | 7/13/2021 | 7/13/2018 | 102.80324 | 102.8032405 | 102.8032405 | 102.8032405 | 102.5930121 | 101.5467328 | 100.5217801 | 99.51750652 | 98.53329043 |
| 180713A00013 | 7/13/2018 | 2.88 | 7/13/2023 | 7/13/2018 | 108.48324 | 108.483243 | 108.483243 | 108.483243 | 107.6018306 | 104.5259157 | 101.5548741 | 98.68453734 | 95.91092827 |
| 180713A00030 | 7/13/2018 | 2.8 | 7/13/2021 | 7/13/2018 | 102.81369 | 102.81369 | 102.81369 | 102.81369 | 102.6029489 | 101.5541775 | 100.526822 | 99.52023116 | 98.53377969 |
| 180716A00054 | 7/16/2018 | 3.59 | 7/16/2040 | 7/16/2018 | 169.7499 | 169.7499005 | 169.7499005 | 153.0089029 | 131.1737365 | 112.7193273 | 97.37520768 | 84.58305245 | 73.88851885 |
| 180717A00047 | 7/17/2018 | 3.3 | 9/17/2025 | 7/17/2018 | 115.71653 | 115.7165269 | 115.7165269 | 115.7165269 | 113.0151651 | 107.7214367 | 102.7117521 | 97.96930105 | 93.47836204 |
| 180726A00032 | 7/26/2018 | 2.95 | 10/26/2020 | 7/26/2018 | 100.88006 | 100.8800617 | 100.8800617 | 100.8800617 | 100.8246182 | 100.4974385 | 100.1723834 | 99.8494323 | 99.52856473 |
| 180807A00017 | 8/7/2018 | 2.77 | 8/7/2020 | 8/7/2018 | 100.28008 | 100.2800752 | 100.2800752 | 100.2800752 | 100.2651149 | 100.1595532 | 100.0542252 | 99.9491301 | 99.84426713 |
| 180809A00029 | 8/9/2018 | 2.99 | 9/9/2021 | 8/9/2018 | 103.28159 | 103.281589 | 103.281589 | 103.281589 | 103.0594982 | 101.8522342 | 100.6732346 | 99.52151472 | 98.39613544 |
| 180810A00006 | 8/10/2018 | 2.73 | 8/10/2020 | 8/10/2018 | 100.29763 | 100.2976297 | 100.2976297 | 100.2976297 | 100.2813189 | 100.1674276 | 100.0538096 | 99.94046375 | 99.82738907 |
| 180821A00016 | 8/21/2018 | 2.76 | 8/20/2021 | 8/21/2018 | 103.05039 | 103.0503933 | 103.0503933 | 103.0503933 | 102.8319439 | 101.6778421 | 100.5496074 | 99.4463772 | 98.36732669 |
| 180823A00013 | 8/23/2018 | 2.97 | 8/23/2023 | 8/23/2018 | 108.49431 | 108.4943077 | 108.4943077 | 108.4943077 | 107.5540227 | 104.3835473 | 101.3238075 | 98.37028279 | 95.51866659 |
| 180827A00060 | 8/27/2018 | 2.9 | 8/27/2021 | 8/27/2018 | 103.0784 | 103.0784006 | 103.0784006 | 103.0784006 | 102.8593096 | 101.6887392 | 100.5447798 | 99.42653132 | 98.33313396 |
| 180828A00032 | 8/28/2018 | 3.49 | 8/29/2033 | 8/28/2018 | 144.67204 | 144.6720437 | 144.6720437 | 138.9485511 | 124.6968297 | 111.7557549 | 100.3638406 | 90.3243014 | 81.46641725 |
| 180830A00006 | 8/30/2018 | 2.99 | 8/30/2022 | 8/30/2018 | 105.90046 | 105.9004588 | 105.9004588 | 105.9004588 | 105.3847621 | 103.208894 | 101.0888931 | 99.02292719 | 97.00923945 |
| 180831A00016 | 8/31/2018 | 2.99 | 8/31/2023 | 8/31/2018 | 108.61726 | 108.6172583 | 108.6172583 | 108.6172583 | 107.6640159 | 104.4706531 | 101.3893941 | 98.41563718 | 95.545 |
| 180905A00015 | 9/5/2018 | 2.85 | 9/1/2022 | 9/5/2018 | 106.00897 | 106.0089684 | 106.0089684 | 106.0089684 | 105.4891139 | 103.2988392 | 101.1650414 | 99.08586025 | 97.05951233 |
| 180910A00013 | 9/10/2018 | 3.08 | 9/11/2023 | 9/10/2018 | 108.98922 | 108.9892194 | 108.9892194 | 108.9892194 | 108.0167766 | 104.7877526 | 101.6729352 | 98.66759699 | 95.76723854 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180912A00028 | 9/12/2018 | 2.93 | 9/14/2020 | 9/12/2018 | 100.56075 | 100.5607492 | 100.5607492 | 100.5607492 | 100.5280088 | 100.3172583 | 100.1074026 | 99.89843604 | 99.69035283 |
| 180912A00030 | 9/12/2018 | 3 | 9/13/2021 | 9/12/2018 | 103.32379 | 103.3237939 | 103.3237939 | 103.3237939 | 103.1007153 | 101.8822877 | 100.6926411 | 99.53076409 | 98.39569211 |
| 180914A00013 | 9/14/2018 | 3.48 | 9/14/2028 | 9/14/2018 | 126.09971 | 126.0997069 | 126.0997069 | 126.0997069 | 118.4698569 | 110.2039179 | 102.5949865 | 95.58698431 | 89.12890971 |
| 180918A00041 | 9/18/2018 | 3.18 | 9/18/2024 | 9/18/2018 | 113.07142 | 113.0714171 | 113.0714171 | 113.0714171 | 111.3449196 | 107.0329426 | 102.9141777 | 98.97887468 | 95.21783406 |
| 180918A00023 | 9/18/2018 | 3.17 | 9/18/2023 | 9/18/2018 | 109.33505 | 109.3350494 | 109.3350494 | 109.3350494 | 108.3499513 | 105.0964422 | 101.9585353 | 98.9314208 | 96.0105222 |
| 180924A00043 | 9/24/2018 | 2.99 | 9/24/2020 | 9/24/2018 | 100.64863 | 100.6486335 | 100.6486335 | 100.6486335 | 100.6108807 | 100.3723955 | 100.1350453 | 99.89882199 | 99.66371766 |
| 180924A00055 | 9/24/2018 | 3.1 | 9/24/2021 | 9/24/2018 | 103.53166 | 103.5316591 | 103.5316591 | 103.5316591 | 103.3057482 | 102.0560195 | 100.8365149 | 99.64614701 | 98.48388043 |
| 180925A00045 | 9/25/2018 | 3.31 | 9/25/2025 | 9/25/2018 | 116.90538 | 116.90538 | 116.90538 | 116.90538 | 114.1449915 | 108.7663592 | 103.6779653 | 98.86253367 | 94.30391364 |
| 181002A00019 | 10/2/2018 | 2.98 | 10/4/2021 | 10/2/2018 | 103.66153 | 103.6615316 | 103.6615316 | 103.6615316 | 103.4315776 | 102.1523948 | 100.9033987 | 99.68352374 | 98.49175405 |
| 181004A00049 | 10/4/2018 | 3.06 | 11/4/2020 | 10/4/2018 | 100.98589 | 100.9858948 | 100.9858948 | 100.9858948 | 100.9251946 | 100.5729898 | 100.223242 | 99.87592537 | 99.53101477 |
| 181009A00008 | 10/9/2018 | 3.24 | 10/7/2022 | 10/9/2018 | 106.75636 | 106.7563557 | 106.7563557 | 106.7563557 | 106.2029904 | 103.9141564 | 101.6862694 | 99.51728019 | 97.40522551 |
| 181009A00036 | 10/9/2018 | 3.07 | 10/8/2021 | 10/9/2018 | 103.80945 | 103.8094545 | 103.8094545 | 103.8094545 | 103.5773927 | 102.2881045 | 101.0280572 | 99.79625524 | 98.5917485 |
| 181022A00051 | 10/22/2018 | 3.11 | 10/22/2020 | 10/22/2018 | 100.90085 | 100.9008543 | 100.9008543 | 100.9008543 | 100.8476531 | 100.5314506 | 100.2172377 | 99.90499558 | 99.59470575 |
| 181025A00021 | 10/25/2018 | 2.97 | 10/26/2020 | 10/25/2018 | 100.93482 | 100.9348154 | 100.9348154 | 100.9348154 | 100.8792602 | 100.5514239 | 100.2257228 | 99.90213628 | 99.5806436 |
| 181026A00021 | 10/29/2018 | 3.11 | 1/15/2021 | 10/29/2018 | 101.58275 | 101.5827539 | 101.5827539 | 101.5827539 | 101.4789566 | 100.9269946 | 100.3810417 | 99.84100012 | 99.30677395 |
| 181030A00012 | 10/30/2018 | 3.32 | 10/30/2023 | 10/30/2018 | 110.17186 | 110.1718648 | 110.1718648 | 110.1718648 | 109.1138549 | 105.7356215 | 102.4809507 | 99.34468219 | 96.32189869 |
| 181109A00027 | 11/13/2018 | 3.48 | 4/15/2024 | 11/13/2018 | 112.17968 | 112.1796761 | 112.1796761 | 112.1796761 | 110.8022956 | 106.9404336 | 103.2360468 | 99.68184685 | 96.27092502 |
| 181114A00010 | 11/14/2018 | 3.08 | 11/15/2021 | 11/14/2018 | 104.13452 | 104.1345162 | 104.1345162 | 104.1345162 | 103.8804227 | 102.4951811 | 101.1351318 | 99.79964602 | 98.48811577 |
| 181115A00061 | 11/15/2018 | 2.95 | 11/16/2020 | 11/15/2018 | 101.09331 | 101.0933064 | 101.0933064 | 101.0933064 | 101.0252237 | 100.6390654 | 100.2558693 | 99.87560129 | 99.49822767 |
| 181121A00015 | 11/21/2018 | 3.24 | 11/21/2022 | 11/21/2018 | 107.12188 | 107.1218808 | 107.1218808 | 107.1218808 | 106.5250384 | 104.1109979 | 101.7642451 | 99.48253148 | 97.2636968 |
| 181127A00026 | 11/27/2018 | 3.2 | 11/26/2021 | 11/27/2018 | 104.16652 | 104.1665241 | 104.1665241 | 104.1665241 | 103.9053157 | 102.4932275 | 101.1072665 | 99.74676997 | 98.41109669 |
| 181129A00023 | 11/29/2018 | 3.16 | 11/29/2021 | 11/29/2018 | 104.13344 | 104.1334366 | 104.1334366 | 104.1334366 | 103.8701704 | 102.4501083 | 101.0564581 | 99.68854614 | 98.34572131 |
| 181130A00025 | 11/30/2018 | 3 | 6/1/2022 | 11/30/2018 | 105.60417 | 105.6041721 | 105.6041721 | 105.6041721 | 105.175211 | 103.2369329 | 101.3442047 | 99.49568127 | 97.6900659 |
| 181206A00012 | 12/6/2018 | 3.14 | 12/6/2023 | 12/6/2018 | 109.85555 | 109.855551 | 109.855551 | 109.855551 | 108.7347756 | 105.2629579 | 101.9217721 | 98.70561067 | 95.60913769 |
| 181213A00024 | 12/13/2018 | 3.05 | 12/11/2020 | 12/13/2018 | 101.2725 | 101.272495 | 101.272495 | 101.272495 | 101.1894372 | 100.7346456 | 100.283947 | 99.83728628 | 99.39460916 |
| 181218A00033 | 12/18/2018 | 2.96 | 12/18/2020 | 12/18/2018 | 101.28879 | 101.288794 | 101.288794 | 101.288794 | 101.2015292 | 100.7273914 | 100.2577018 | 99.79239761 | 99.33141767 |
| 181221A00015 | 12/21/2018 | 2.96 | 12/21/2020 | 12/21/2018 | 101.31142 | 101.3114154 | 101.3114154 | 101.3114154 | 101.222345 | 100.7398988 | 100.2620547 | 99.78874716 | 99.31991159 |
| 181226A00035 | 12/26/2018 | 2.95 | 12/27/2022 | 12/26/2018 | 106.68418 | 106.6841848 | 106.6841848 | 106.6841848 | 106.0534924 | 103.5493269 | 101.1176795 | 98.7560309 | 96.46196515 |
| 180618A00026 | 6/18/2018 | 3.05 | 4/13/2023 | 6/18/2018 | 107.74689 | 107.74689 | 107.74689 | 107.74689 | 106.996266 | 104.1867983 | 101.4659086 | 98.83027274 | 96.2767138 |
| 180620A00038 | 6/20/2018 | 3.4 | 6/20/2028 | 6/20/2018 | 124.72051 | 124.7205107 | 124.7205107 | 124.7205107 | 117.5193003 | 109.5029977 | 102.1090188 | 95.28548278 | 88.98509379 |
| 180702A00034 | 7/2/2018 | 2.86 | 7/3/2023 | 7/2/2018 | 108.34587 | 108.345872 | 108.345872 | 108.345872 | 107.4801639 | 104.4328128 | 101.4887028 | 98.64375982 | 95.89409496 |
| 180712A00033 | 7/12/2018 | 2.86 | 7/13/2020 | 7/12/2018 | 100.09207 | 100.0920692 | 100.0920692 | 100.0920692 | 100.0871274 | 100.0510771 | 100.0150696 | 99.97910476 | 99.94318257 |
| 180716A00016 | 7/16/2018 | 3.03 | 7/14/2023 | 7/16/2018 | 108.38333 | 108.3833277 | 108.3833277 | 108.3833277 | 107.5050552 | 104.4412099 | 101.4816215 | 98.62215304 | 95.85885714 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180716A00056 | 7/16/2018 | 3.1 | 7/16/2025 | 7/16/2018 | 115.2085 | 115.2085002 | 115.2085002 | 115.2085002 | 112.686367 | 107.5338683 | 102.6512985 | 98.02307014 | 93.63457794 |
| 180718A00026 | 7/18/2018 | 3.03 | 7/18/2023 | 7/18/2018 | 108.41349 | 108.4134876 | 108.4134876 | 108.4134876 | 107.5290668 | 104.4542572 | 101.4843461 | 98.61515947 | 95.84271474 |
| 180719A00063 | 7/19/2018 | 3.21 | 7/19/2024 | 7/19/2018 | 111.90709 | 111.9070929 | 111.9070929 | 111.9070929 | 110.3337922 | 106.2274213 | 102.2988385 | 98.53938239 | 94.94086162 |
| 180723A00026 | 10/23/2018 | 3.2 | 10/23/2023 | 10/23/2018 | 109.71225 | 109.7122534 | 109.7122534 | 109.7122534 | 108.6678154 | 105.3155324 | 102.085326 | 98.97209201 | 95.97096861 |
| 180731A00022 | 7/31/2018 | 3.47 | 7/31/2028 | 7/31/2018 | 125.63157 | 125.6315669 | 125.6315669 | 125.6315669 | 118.2215021 | 110.07683 | 102.571443 | 95.65144784 | 89.26776905 |
| 180816A00044 | 8/16/2018 | 2.83 | 8/17/2020 | 8/16/2018 | 100.33979 | 100.3397935 | 100.3397935 | 100.3397935 | 100.3203655 | 100.1872712 | 100.0545444 | 99.92218353 | 99.79018704 |
| 180821A00028 | 8/21/2018 | 2.99 | 8/21/2023 | 8/21/2018 | 108.54298 | 108.5429768 | 108.5429768 | 108.5429768 | 107.6056329 | 104.4396266 | 101.3840477 | 98.43439463 | 95.58637871 |
| 180823A00055 | 8/23/2018 | 3.44 | 8/23/2033 | 8/23/2018 | 143.95503 | 143.955029 | 143.955029 | 138.2661692 | 124.0668087 | 111.1777286 | 99.83127386 | 89.83159881 | 81.00878016 |
| 180830A00039 | 8/30/2018 | 3.03 | 8/30/2023 | 8/30/2018 | 108.73765 | 108.7376521 | 108.7376521 | 108.7376521 | 107.7855176 | 104.5928625 | 101.5121969 | 98.53892739 | 95.66867926 |
| 180831A00018 | 8/31/2018 | 2.95 | 8/31/2022 | 8/31/2018 | 105.8202 | 105.8202042 | 105.8202042 | 105.8202042 | 105.3037381 | 103.1261082 | 101.0044428 | 98.9369044 | 96.92173155 |
| 180910A00028 | 9/10/2018 | 3.56 | 9/9/2033 | 9/10/2018 | 145.703 | 145.7029962 | 145.7029962 | 139.9183805 | 125.5847049 | 112.5642365 | 101.1036584 | 91.00456278 | 82.09486289 |
| 180911A00080 | 9/11/2018 | 2.94 | 9/9/2022 | 9/11/2018 | 106.26944 | 106.2694425 | 106.2694425 | 106.2694425 | 105.741442 | 103.5262348 | 101.3685864 | 99.26658367 | 97.21839338 |
| 180918A00038 | 9/18/2018 | 3.11 | 9/16/2022 | 9/18/2018 | 106.29506 | 106.2950631 | 106.2950631 | 106.2950631 | 105.7625007 | 103.5357916 | 101.367191 | 99.25475665 | 97.19662809 |
| 180924A00047 | 9/24/2018 | 3.14 | 9/23/2022 | 9/24/2018 | 106.41701 | 106.4170145 | 106.4170145 | 106.4170145 | 105.877601 | 103.630366 | 101.4421704 | 99.31102578 | 97.2350281 |
| 180925A00095 | 9/25/2018 | 3.01 | 9/25/2020 | 9/25/2018 | 100.66099 | 100.660987 | 100.660987 | 100.660987 | 100.6227321 | 100.3814681 | 100.1413641 | 99.90241164 | 99.66460249 |
| 180927A00042 | 9/27/2018 | 3.02 | 9/27/2022 | 9/27/2018 | 106.5918 | 106.5917963 | 106.5917963 | 106.5917963 | 106.0460549 | 103.7776606 | 101.5692357 | 99.41874706 | 97.32424884 |
| 181001A00049 | 10/1/2018 | 3.01 | 10/1/2020 | 10/1/2018 | 100.70648 | 100.7064774 | 100.7064774 | 100.7064774 | 100.6651534 | 100.4072638 | 100.1506909 | 99.89542464 | 99.64145518 |
| 181001A00074 | 10/1/2018 | 3.03 | 10/3/2022 | 10/1/2018 | 106.66291 | 106.6629104 | 106.6629104 | 106.6629104 | 106.1113336 | 103.8258723 | 101.6011856 | 99.43521475 | 97.32598869 |
| 181005A00005 | 10/5/2018 | 3.31 | 10/5/2023 | 10/5/2018 | 109.93062 | 109.9306212 | 109.9306212 | 109.9306212 | 108.9154063 | 105.6066622 | 102.4168332 | 99.34093313 | 96.3742187 |
| 180720A00050 | 7/20/2018 | 2.86 | 7/20/2020 | 7/20/2018 | 100.14218 | 100.1421834 | 100.1421834 | 100.1421834 | 100.1345804 | 100.0791228 | 100.0237418 | 99.96843719 | 99.9132089 |
| 180730A00036 | 7/30/2018 | 3.14 | 7/31/2023 | 7/30/2018 | 108.85394 | 108.8539359 | 108.8539359 | 108.8539359 | 107.9482887 | 104.8325597 | 101.8239653 | 98.91820398 | 96.11117386 |
| 180730A00078 | 7/30/2018 | 3.14 | 7/28/2023 | 7/30/2018 | 108.83041 | 108.8304067 | 108.8304067 | 108.8304067 | 107.9293798 | 104.821893 | 101.8210541 | 98.92259017 | 96.12242588 |
| 180801A00013 | 8/1/2018 | 3.04 | 10/15/2021 | 8/1/2018 | 103.61741 | 103.6174124 | 103.6174124 | 103.6174124 | 103.3828275 | 102.0822068 | 100.8090035 | 99.56235328 | 98.34142847 |
| 180801A00014 | 8/1/2018 | 3.03 | 8/2/2021 | 8/1/2018 | 103.03992 | 103.0399165 | 103.0399165 | 103.0399165 | 102.8249292 | 101.7227514 | 100.6441797 | 99.58846137 | 98.55487568 |
| 180806A00008 | 8/6/2018 | 2.95 | 8/7/2023 | 8/6/2018 | 108.89433 | 108.8943328 | 108.8943328 | 108.8943328 | 107.9730064 | 104.8245893 | 101.7852286 | 98.85051284 | 96.01623685 |
| 180810A00028 | 8/10/2018 | 2.91 | 8/10/2023 | 8/10/2018 | 108.79188 | 108.7918766 | 108.7918766 | 108.7918766 | 107.8662 | 104.7114466 | 101.6662004 | 98.7260218 | 95.88667957 |
| 180813A00059 | 8/13/2018 | 3.01 | 8/11/2023 | 8/13/2018 | 108.53156 | 108.5315616 | 108.5315616 | 108.5315616 | 107.609886 | 104.4702729 | 101.4394487 | 98.51300993 | 95.6867595 |
| 180815A00011 | 8/15/2018 | 2.97 | 8/15/2022 | 8/15/2018 | 105.74573 | 105.7457329 | 105.7457329 | 105.7457329 | 105.2446367 | 103.1102088 | 101.0298844 | 99.00191666 | 97.02462915 |
| 180816A00043 | 8/16/2018 | 2.83 | 8/16/2022 | 8/16/2018 | 105.84469 | 105.8446905 | 105.8446905 | 105.8446905 | 105.340488 | 103.1947538 | 101.1035886 | 99.06522467 | 97.07796596 |
| 180817A00026 | 8/17/2018 | 2.83 | 8/17/2020 | 8/17/2018 | 100.33979 | 100.3397935 | 100.3397935 | 100.3397935 | 100.3203655 | 100.1872712 | 100.0545444 | 99.92218353 | 99.79018704 |
| 180821A00002 | 8/22/2018 | 2.89 | 8/23/2021 | 8/22/2018 | 103.03767 | 103.0376661 | 103.0376661 | 103.0376661 | 102.8192712 | 101.6598447 | 100.5265393 | 99.41847932 | 98.33482773 |
| 180821A00011 | 8/21/2018 | 2.98 | 8/21/2023 | 8/21/2018 | 108.51127 | 108.5112692 | 108.5112692 | 108.5112692 | 107.574044 | 104.408538 | 101.3534463 | 98.40426782 | 95.55671437 |
| 180823A00001 | 8/23/2018 | 2.88 | 8/23/2021 | 8/23/2018 | 103.02605 | 103.0260472 | 103.0260472 | 103.0260472 | 102.807666 | 101.6483111 | 100.5150761 | 99.40708549 | 98.32350218 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180827A00010 | 8/27/2018 | 2.99 | 8/25/2023 | 8/27/2018 | 108.57269 | 108.572689 | 108.572689 | 108.572689 | 107.6289863 | 104.4520349 | 101.3861803 | 98.42688094 | 95.56981082 |
| 180827A00032 | 8/27/2018 | 2.96 | 8/29/2022 | 8/27/2018 | 105.8274 | 105.8273957 | 105.8273957 | 105.8273957 | 105.3128145 | 103.140403 | 101.0237258 | 98.96095698 | 96.95034555 |
| 180904A00036 | 9/4/2018 | 2.83 | 9/4/2020 | 9/4/2018 | 100.46887 | 100.4688658 | 100.4688658 | 100.4688658 | 100.441139 | 100.2581396 | 100.0758098 | 99.89414599 | 99.71314457 |
| 180914A00028 | 9/14/2018 | 3.37 | 9/12/2025 | 9/14/2018 | 116.04211 | 116.0421061 | 116.0421061 | 116.0421061 | 113.3540864 | 108.0650105 | 103.0589459 | 98.31918621 | 93.83010408 |
| 180914A00034 | 9/14/2018 | 2.85 | 9/15/2020 | 9/14/2018 | 100.58443 | 100.5844325 | 100.5844325 | 100.5844325 | 100.5511309 | 100.3372249 | 100.1242428 | 99.91217871 | 99.70102649 |
| 180917A00032 | 9/17/2018 | 3.17 | 9/15/2023 | 9/17/2018 | 109.31137 | 109.3113656 | 109.3113656 | 109.3113656 | 108.3312117 | 105.0861961 | 101.9562365 | 98.93655663 | 96.02261138 |
| 180917A00078 | 9/17/2018 | 3.05 | 9/15/2023 | 9/17/2018 | 109.52489 | 109.5248852 | 109.5248852 | 109.5248852 | 108.5388771 | 105.2760155 | 102.129134 | 99.09340682 | 96.1642422 |
| 180920A00011 | 9/20/2018 | 2.89 | 9/18/2020 | 9/20/2018 | 100.61606 | 100.6160611 | 100.6160611 | 100.6160611 | 100.5812516 | 100.3589999 | 100.1377435 | 99.91747554 | 99.69818946 |
| 180921A00021 | 9/21/2018 | 2.99 | 9/21/2021 | 9/21/2018 | 103.57081 | 103.5708112 | 103.5708112 | 103.5708112 | 103.3450043 | 102.1001167 | 100.8851945 | 99.69916467 | 98.54100534 |
| 180924A00052 | 9/24/2018 | 3.22 | 9/22/2023 | 9/24/2018 | 109.52957 | 109.5295675 | 109.5295675 | 109.5295675 | 108.5372419 | 105.2697724 | 102.1187055 | 99.07918406 | 96.14658706 |
| 180620A00015 | 6/20/2018 | 3.04 | 6/20/2023 | 6/20/2018 | 108.23262 | 108.2326158 | 108.2326158 | 108.2326158 | 107.3902739 | 104.3924422 | 101.4948204 | 98.69350766 | 95.98477797 |
| 180620A00044 | 6/20/2018 | 2.89 | 6/20/2023 | 6/20/2018 | 108.33751 | 108.3375119 | 108.3375119 | 108.3375119 | 107.4907529 | 104.478607 | 101.5674107 | 98.75322511 | 96.03228804 |
| 180622A00005 | 6/22/2018 | 3.5 | 7/2/2029 | 6/22/2018 | 128.77706 | 128.7770646 | 128.7770646 | 128.7770646 | 119.6694197 | 110.6362841 | 102.3816251 | 94.83365201 | 87.92755943 |
| 180628A00034 | 6/28/2018 | 2.72 | 6/28/2021 | 6/28/2018 | 102.62142 | 102.6214215 | 102.6214215 | 102.6214215 | 102.4149235 | 101.4082557 | 100.4213399 | 99.45359906 | 98.50447844 |
| 180716A00037 | 7/16/2018 | 3.01 | 7/18/2022 | 7/16/2018 | 105.62149 | 105.6214907 | 105.6214907 | 105.6214907 | 105.1476458 | 103.0888134 | 101.0809379 | 99.12242364 | 97.21173695 |
| 180719A00059 | 7/19/2018 | 2.98 | 7/19/2021 | 7/19/2018 | 102.8797 | 102.8797039 | 102.8797039 | 102.8797039 | 102.6680016 | 101.6049266 | 100.5638539 | 99.544105 | 98.54502935 |
| 180719A00060 | 7/19/2018 | 3.05 | 7/19/2022 | 7/19/2018 | 105.71195 | 105.7119547 | 105.7119547 | 105.7119547 | 105.2369399 | 103.1745016 | 101.1631476 | 99.20127666 | 97.28734966 |
| 180720A00008 | 7/20/2018 | 3 | 7/20/2022 | 7/20/2018 | 105.61574 | 105.6157389 | 105.6157389 | 105.6157389 | 105.1399493 | 103.0758728 | 101.0629693 | 99.09963274 | 97.18431971 |
| 180720A00011 | 7/20/2018 | 2.93 | 7/20/2021 | 7/20/2018 | 102.83382 | 102.8338188 | 102.8338188 | 102.8338188 | 102.621935 | 101.5563949 | 100.5129652 | 99.49096267 | 98.48973175 |
| 180723A00024 | 10/23/2018 | 3.1 | 10/22/2021 | 10/23/2018 | 103.73742 | 103.7374205 | 103.7374205 | 103.7374205 | 103.4993757 | 102.1822873 | 100.8909546 | 99.62463969 | 98.38263328 |
| 180731A00009 | 7/31/2018 | 2.97 | 7/31/2023 | 7/31/2018 | 108.90188 | 108.9018802 | 108.9018802 | 108.9018802 | 107.9915652 | 104.8615762 | 101.8395022 | 98.92099985 | 96.10192773 |
| 180801A00012 | 8/1/2018 | 3.03 | 8/16/2021 | 8/1/2018 | 103.14686 | 103.1468589 | 103.1468589 | 103.1468589 | 102.9294716 | 101.7884539 | 100.6727226 | 99.58144336 | 98.51381831 |
| 180806A00009 | 8/6/2018 | 2.9 | 8/6/2020 | 8/6/2018 | 100.26813 | 100.2681327 | 100.2681327 | 100.2681327 | 100.2536494 | 100.1510545 | 100.048678 | 99.94651911 | 99.84457723 |
| 180813A00013 | 8/13/2018 | 2.99 | 12/5/2022 | 8/13/2018 | 106.62116 | 106.6211628 | 106.6211628 | 106.6211628 | 106.0121611 | 103.5666114 | 101.1902788 | 98.88081483 | 96.63596495 |
| 180813A00016 | 8/13/2018 | 2.92 | 8/13/2021 | 8/13/2018 | 102.99918 | 102.9991804 | 102.9991804 | 102.9991804 | 102.7824518 | 101.6505066 | 100.5434738 | 99.46053731 | 98.40091608 |
| 180813A00037 | 8/13/2018 | 2.95 | 2/14/2022 | 8/13/2018 | 104.38526 | 104.3852621 | 104.3852621 | 104.3852621 | 104.0596082 | 102.429073 | 100.8320959 | 99.26770658 | 97.73497169 |
| 180815A00010 | 8/15/2018 | 3.02 | 8/15/2023 | 8/15/2018 | 108.59304 | 108.5930361 | 108.5930361 | 108.5930361 | 107.6648805 | 104.5138123 | 101.4722101 | 98.53563051 | 95.69983918 |
| 180816A00032 | 8/16/2018 | 3.02 | 8/16/2023 | 8/16/2018 | 108.60055 | 108.6005467 | 108.6005467 | 108.6005467 | 107.6708002 | 104.5169917 | 101.4728156 | 98.53381863 | 95.69575721 |
| 180816A00038 | 8/16/2018 | 3.38 | 8/16/2028 | 8/16/2018 | 125.03604 | 125.0360449 | 125.0360449 | 125.0360449 | 117.5653811 | 109.4070831 | 101.8926193 | 94.96744881 | 88.58192926 |
| 180820A00036 | 8/20/2018 | 3 | 8/21/2023 | 8/20/2018 | 108.57468 | 108.5746844 | 108.5746844 | 108.5746844 | 107.6372218 | 104.4707152 | 101.4146491 | 98.46452143 | 95.61604306 |
| 180827A00030 | 8/27/2018 | 2.84 | 8/27/2020 | 8/27/2018 | 100.41375 | 100.413746 | 100.413746 | 100.413746 | 100.3898211 | 100.2289986 | 100.0686952 | 99.90890839 | 99.74963567 |
| 180829A00044 | 8/29/2018 | 2.98 | 8/26/2022 | 8/29/2018 | 105.84887 | 105.8488679 | 105.8488679 | 105.8488679 | 105.3370879 | 103.1723808 | 101.0630651 | 99.0073317 | 97.00344547 |
| 180904A00014 | 9/4/2018 | 3.37 | 9/1/2028 | 9/4/2018 | 125.08762 | 125.087619 | 125.087619 | 125.087619 | 117.5418138 | 109.3452514 | 101.798499 | 94.84626642 | 88.43825167 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180911A00042 | 9/11/2018 | 2.99 | 9/11/2023 | 9/11/2018 | 109.29818 | 109.2981759 | 109.2981759 | 109.2981759 | 108.3195663 | 105.0712638 | 101.9381248 | 98.91537156 | 95.99845717 |
| 180820A00002 | 8/20/2018 | 2.91 | 8/20/2021 | 8/20/2018 | 103.03898 | 103.0389842 | 103.0389842 | 103.0389842 | 102.8210738 | 101.6698107 | 100.5443059 | 99.44370163 | 98.36717784 |
| 180821A00014 | 8/21/2018 | 2.68 | 8/21/2020 | 8/21/2018 | 100.37025 | 100.3702545 | 100.3702545 | 100.3702545 | 100.3489915 | 100.2045608 | 100.0605599 | 99.91698676 | 99.77383953 |
| 180823A00033 | 8/23/2018 | 2.85 | 8/23/2023 | 8/23/2018 | 108.70125 | 108.7012463 | 108.7012463 | 108.7012463 | 107.7554351 | 104.5677586 | 101.491698 | 98.52268602 | 95.65637226 |
| 180823A00035 | 8/23/2018 | 3.05 | 8/22/2025 | 8/23/2018 | 115.25311 | 115.2531134 | 115.2531134 | 115.2531134 | 112.6178267 | 107.3698063 | 102.4012034 | 97.695624 | 93.23772503 |
| 180827A00034 | 8/27/2018 | 2.99 | 8/28/2023 | 8/27/2018 | 108.59497 | 108.5949733 | 108.5949733 | 108.5949733 | 107.6465019 | 104.4613439 | 101.387786 | 98.42125673 | 95.55740191 |
| 180831A00019 | 8/31/2018 | 3.21 | 9/2/2025 | 8/31/2018 | 115.12529 | 115.1252887 | 115.1252887 | 115.1252887 | 112.4779017 | 107.2379918 | 102.2774982 | 97.5799938 | 93.13010717 |
| 180905A00024 | 9/5/2018 | 2.9 | 9/5/2023 | 9/5/2018 | 108.9606 | 108.960602 | 108.960602 | 108.960602 | 107.9930672 | 104.7665303 | 101.6539393 | 98.65058776 | 95.75199556 |
| 180910A00032 | 9/10/2018 | 3.22 | 9/10/2024 | 9/10/2018 | 112.37363 | 112.373635 | 112.373635 | 112.373635 | 110.6805457 | 106.4268251 | 102.3624414 | 98.47790457 | 94.76425642 |
| 180911A00012 | 9/11/2018 | 3.06 | 9/9/2022 | 9/11/2018 | 106.12992 | 106.1299224 | 106.1299224 | 106.1299224 | 105.6043083 | 103.3986062 | 101.2500793 | 99.15683111 | 97.11704468 |
| 180913A00040 | 9/13/2018 | 2.89 | 9/13/2021 | 9/13/2018 | 103.38501 | 103.3850064 | 103.3850064 | 103.3850064 | 103.16131 | 101.9394957 | 100.7465903 | 99.58157627 | 98.44348346 |
| 180914A00012 | 9/14/2018 | 2.97 | 10/13/2020 | 9/14/2018 | 100.78603 | 100.7860301 | 100.7860301 | 100.7860301 | 100.7379317 | 100.4467945 | 100.1573497 | 99.86958263 | 99.58347859 |
| 180920A00027 | 9/20/2018 | 3.04 | 9/20/2022 | 9/20/2018 | 106.58061 | 106.5806128 | 106.5806128 | 106.5806128 | 106.0415043 | 103.7924967 | 101.6025421 | 99.46965368 | 97.39192902 |
| 180920A00062 | 9/20/2018 | 3.12 | 9/20/2023 | 9/20/2018 | 109.79382 | 109.7938249 | 109.7938249 | 109.7938249 | 108.7986148 | 105.5177641 | 102.3539126 | 99.30217436 | 96.3579013 |
| 180924A00056 | 9/24/2018 | 3.14 | 9/23/2022 | 9/24/2018 | 106.41701 | 106.4170145 | 106.4170145 | 106.4170145 | 105.877601 | 103.630366 | 101.4421704 | 99.31102578 | 97.2350281 |
| 181005A00010 | 10/5/2018 | 2.95 | 10/5/2020 | 10/5/2018 | 100.76303 | 100.7630304 | 100.7630304 | 100.7630304 | 100.7193634 | 100.4498703 | 100.1818251 | 99.91521592 | 99.65003132 |
| 181009A00024 | 10/9/2018 | 3.06 | 10/9/2020 | 10/9/2018 | 100.78131 | 100.7813069 | 100.7813069 | 100.7813069 | 100.7354601 | 100.4553624 | 100.1768297 | 99.89984879 | 99.62440678 |
| 181009A00035 | 10/9/2018 | 3.12 | 10/11/2022 | 10/9/2018 | 106.93543 | 106.9354315 | 106.9354315 | 106.9354315 | 106.3756336 | 104.0656661 | 101.8176003 | 99.62936111 | 97.49895905 |
| 181010A00020 | 10/10/2018 | 3.27 | 12/1/2022 | 10/10/2018 | 107.27637 | 107.2763735 | 107.2763735 | 107.2763735 | 106.6695733 | 104.2264841 | 101.8521977 | 99.54439072 | 97.300832 |
| 181015A00008 | 10/15/2018 | 3.15 | 9/15/2021 | 10/15/2018 | 103.52269 | 103.5226856 | 103.5226856 | 103.5226856 | 103.2988935 | 102.0737336 | 100.877633 | 99.70956612 | 98.56855515 |
| 181018A00014 | 10/18/2018 | 3.21 | 10/18/2021 | 10/18/2018 | 103.85106 | 103.8510641 | 103.8510641 | 103.8510641 | 103.6147788 | 102.3059587 | 101.0238602 | 99.76767255 | 98.53661806 |
| 181022A00026 | 10/22/2018 | 3.18 | 10/15/2021 | 10/22/2018 | 103.80062 | 103.8006153 | 103.8006153 | 103.8006153 | 103.5657917 | 102.263912 | 100.9894711 | 99.74160425 | 98.51948307 |
| 181115A00036 | 11/15/2018 | 3.2 | 11/15/2021 | 11/15/2018 | 104.07766 | 104.0776578 | 104.0776578 | 104.0776578 | 103.824292 | 102.4430236 | 101.0868237 | 99.75506784 | 98.44715207 |
| 181126A00050 | 11/26/2018 | 3.29 | 11/24/2023 | 11/26/2018 | 110.27651 | 110.2765074 | 110.2765074 | 110.2765074 | 109.1749534 | 105.727669 | 102.4088624 | 99.21307019 | 96.13509072 |
| 181206A00011 | 12/6/2018 | 3.11 | 12/6/2022 | 12/6/2018 | 106.92382 | 106.9238235 | 106.9238235 | 106.9238235 | 106.3130443 | 103.8611141 | 101.4786309 | 99.16323635 | 96.91266621 |
| 180830A00005 | 8/30/2018 | 2.88 | 8/28/2020 | 8/30/2018 | 100.42743 | 100.4274321 | 100.4274321 | 100.4274321 | 100.4030566 | 100.2394555 | 100.0763895 | 99.91385602 | 99.75185239 |
| 180906A00047 | 9/6/2018 | 2.81 | 9/7/2021 | 9/6/2018 | 103.24254 | 103.242542 | 103.242542 | 103.242542 | 103.0204294 | 101.8159267 | 100.6395467 | 99.4903128 | 98.36729317 |
| 180912A00011 | 9/12/2018 | 3.41 | 9/11/2026 | 9/12/2018 | 119.33483 | 119.3348307 | 119.3348307 | 119.3348307 | 115.1682852 | 108.8768474 | 102.977389 | 97.44331293 | 92.24996828 |
| 180914A00011 | 9/14/2018 | 3.01 | 4/12/2021 | 9/14/2018 | 102.18507 | 102.1850697 | 102.1850697 | 102.1850697 | 102.0289438 | 101.2364007 | 100.456166 | 99.68795406 | 98.93148848 |
| 180917A00054 | 9/17/2018 | 3.17 | 9/15/2023 | 9/17/2018 | 109.31137 | 109.3113656 | 109.3113656 | 109.3113656 | 108.3312117 | 105.0861961 | 101.9562365 | 98.93655663 | 96.02261138 |
| 180918A00037 | 9/18/2018 | 3.06 | 9/17/2021 | 9/18/2018 | 103.42778 | 103.4277752 | 103.4277752 | 103.4277752 | 103.2036321 | 101.9736401 | 100.7729548 | 99.60053735 | 98.45539751 |
| 180920A00030 | 9/20/2018 | 3.12 | 9/20/2023 | 9/20/2018 | 109.79382 | 109.7938249 | 109.7938249 | 109.7938249 | 108.7986148 | 105.5177641 | 102.3539126 | 99.30217436 | 96.3579013 |
| 180921A00024 | 9/21/2018 | 2.99 | 9/21/2021 | 9/21/2018 | 103.57081 | 103.5708112 | 103.5708112 | 103.5708112 | 103.3450043 | 102.1001167 | 100.8851945 | 99.69916467 | 98.54100534 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180925A00060 | 9/25/2018 | 3.23 | 8/25/2023 | 9/25/2018 | 109.33631 | 109.3363124 | 109.3363124 | 109.3363124 | 108.3897361 | 105.200698 | 102.1230724 | 99.15230679 | 96.28406493 |
| 180927A00008 | 9/27/2018 | 3.14 | 9/27/2022 | 9/27/2018 | 106.44836 | 106.4483571 | 106.4483571 | 106.4483571 | 105.9051187 | 103.6465924 | 101.4476319 | 99.30622207 | 97.22043414 |
| 180928A00011 | 9/28/2018 | 3.12 | 7/15/2022 | 9/28/2018 | 105.82588 | 105.8258844 | 105.8258844 | 105.8258844 | 105.3545456 | 103.3015299 | 101.2991885 | 99.34594022 | 97.44026482 |
| 181002A00055 | 10/2/2018 | 3.14 | 10/3/2022 | 10/2/2018 | 106.49545 | 106.495447 | 106.495447 | 106.495447 | 105.9464664 | 103.6712547 | 101.4564017 | 99.29986712 | 97.19969753 |
| 181004A00029 | 10/4/2018 | 3.7 | 10/4/2028 | 10/4/2018 | 128.09215 | 128.0921524 | 128.0921524 | 128.0921524 | 120.3219099 | 111.9321671 | 104.2115397 | 97.10267305 | 90.55342793 |
| 181005A00012 | 10/5/2018 | 3.33 | 10/4/2024 | 10/5/2018 | 113.85381 | 113.8538135 | 113.8538135 | 113.8538135 | 112.0855791 | 107.7144132 | 103.5406822 | 99.55435432 | 95.74596738 |
| 181010A00017 | 10/10/2018 | 3.08 | 10/1/2020 | 10/10/2018 | 100.72455 | 100.7245523 | 100.7245523 | 100.7245523 | 100.6832236 | 100.425303 | 100.1686992 | 99.91340227 | 99.65940222 |
| 181010A00019 | 10/10/2018 | 3.21 | 9/15/2021 | 10/10/2018 | 103.59622 | 103.5962191 | 103.5962191 | 103.5962191 | 103.3723363 | 102.1467004 | 100.9501318 | 99.78160446 | 98.6401405 |
| 181015A00024 | 10/15/2018 | 3.29 | 10/16/2023 | 10/15/2018 | 109.95547 | 109.9554725 | 109.9554725 | 109.9554725 | 108.9217518 | 105.583759 | 102.3666796 | 99.26545345 | 96.27526306 |
| 181023A00020 | 10/23/2018 | 3.15 | 10/22/2021 | 10/23/2018 | 103.80381 | 103.8038141 | 103.8038141 | 103.8038141 | 103.5656817 | 102.2481311 | 100.956344 | 99.68958244 | 98.44713681 |
| 181102A00007 | 11/2/2018 | 3.01 | 11/2/2020 | 11/2/2018 | 101.00414 | 101.0041426 | 101.0041426 | 101.0041426 | 100.9445391 | 100.5972266 | 100.2523027 | 99.90974264 | 99.56952235 |
| 181106A00003 | 11/6/2018 | 3.31 | 11/5/2021 | 11/6/2018 | 104.13348 | 104.1334839 | 104.1334839 | 104.1334839 | 103.8871039 | 102.5331098 | 101.2032466 | 99.89692387 | 98.61357022 |
| 181115A00076 | 11/15/2018 | 3.22 | 12/31/2021 | 11/15/2018 | 104.46513 | 104.4651288 | 104.4651288 | 104.4651288 | 104.1764486 | 102.6691116 | 101.191411 | 99.74254885 | 98.32175565 |
| 181120A00006 | 11/20/2018 | 3.08 | 11/16/2020 | 11/20/2018 | 101.0903 | 101.0903004 | 101.0903004 | 101.0903004 | 101.0223292 | 100.6367904 | 100.2542013 | 99.87452815 | 99.49773761 |
| 181123A00007 | 11/23/2018 | 3.08 | 11/23/2020 | 11/23/2018 | 101.14507 | 101.1450724 | 101.1450724 | 101.1450724 | 101.0728667 | 100.6679294 | 100.2662386 | 99.86775561 | 99.47244191 |
| 181211A00009 | 12/11/2018 | 3.14 | 12/11/2023 | 12/11/2018 | 109.89472 | 109.8947152 | 109.8947152 | 109.8947152 | 108.7648838 | 105.2793991 | 101.9255447 | 98.69764891 | 95.59031546 |
| 181227A00029 | 12/27/2018 | 2.91 | 12/27/2021 | 12/27/2018 | 103.96438 | 103.9643757 | 103.9643757 | 103.9643757 | 103.6795684 | 102.1867568 | 100.7231072 | 99.28783973 | 97.88020173 |
| 181231A00007 | 12/31/2018 | 2.86 | 12/31/2021 | 12/31/2018 | 103.91739 | 103.9173874 | 103.9173874 | 103.9173874 | 103.6295231 | 102.1265045 | 100.6530466 | 99.20835352 | 97.79165772 |
| 190102A00050 | 1/2/2019 | 3.38 | 1/3/2034 | 1/2/2019 | 144.34691 | 144.3469118 | 144.3469118 | 138.0087766 | 123.4595217 | 110.3205353 | 98.79282781 | 88.66694379 | 79.76178708 |
| 190103A00014 | 1/3/2019 | 2.8 | 1/4/2021 | 1/3/2019 | 101.33348 | 101.333481 | 101.333481 | 101.333481 | 101.2361249 | 100.7151526 | 100.1995359 | 99.68919255 | 99.18404188 |
| 190107A00020 | 1/7/2019 | 2.8 | 1/7/2021 | 1/7/2019 | 101.35477 | 101.3547662 | 101.3547662 | 101.3547662 | 101.2556792 | 100.7264019 | 100.2026555 | 99.6843536 | 99.17141151 |
| 190110A00001 | 1/10/2019 | 2.88 | 1/10/2022 | 1/10/2019 | 104.01969 | 104.0196886 | 104.0196886 | 104.0196886 | 103.7236016 | 102.1931357 | 100.6930584 | 99.22253788 | 97.78077235 |
| 190122A00008 | 1/22/2019 | 2.98 | 1/20/2023 | 1/22/2019 | 106.93766 | 106.9376567 | 106.9376567 | 106.9376567 | 106.2819401 | 103.7111329 | 101.2161665 | 98.79434785 | 96.44309778 |
| 190123A00034 | 1/23/2019 | 2.98 | 1/23/2025 | 1/23/2019 | 113.22193 | 113.2219339 | 113.2219339 | 113.2219339 | 111.1876827 | 106.5404917 | 102.1167209 | 97.90442875 | 93.89237663 |
| 190130A00010 | 1/30/2019 | 2.89 | 7/30/2020 | 1/30/2019 | 100.21658 | 100.2165825 | 100.2165825 | 100.2165825 | 100.2051776 | 100.1220018 | 100.038964 | 99.95606371 | 99.87330077 |
| 190130A00019 | 1/30/2019 | 3.01 | 1/30/2024 | 1/30/2019 | 109.8162 | 109.8161996 | 109.8161996 | 109.8161996 | 108.5964557 | 104.9823115 | 101.5091399 | 98.17065943 | 94.96090566 |
| 190131A00017 | 1/31/2019 | 2.83 | 3/25/2022 | 1/31/2019 | 104.46139 | 104.4613885 | 104.4613885 | 104.4613885 | 104.1009071 | 102.3622771 | 100.6610755 | 98.99615823 | 97.36642829 |
| 190201A00016 | 2/1/2019 | 2.8 | 2/1/2022 | 2/1/2019 | 104.04892 | 104.0489223 | 104.0489223 | 104.0489223 | 103.7349983 | 102.1455117 | 100.5882667 | 99.06235009 | 97.56688287 |
| 190204A00036 | 2/4/2019 | 2.86 | 11/4/2021 | 2/4/2019 | 103.5114 | 103.5114015 | 103.5114015 | 103.5114015 | 103.2665624 | 101.9197536 | 100.5969067 | 99.29743684 | 98.02077775 |
| 190208A00009 | 2/8/2019 | 2.67 | 2/8/2024 | 2/8/2019 | 109.32092 | 109.3209235 | 109.3209235 | 109.3209235 | 108.0796438 | 104.4323008 | 100.9285307 | 97.56188047 | 94.32622553 |
| 190214A00008 | 2/14/2019 | 2.64 | 2/14/2023 | 2/14/2019 | 106.70617 | 106.7061714 | 106.7061714 | 106.7061714 | 106.0218974 | 103.3738409 | 100.8056925 | 98.3145419 | 95.89760557 |
| 190215A00003 | 2/15/2019 | 2.82 | 2/15/2022 | 2/15/2019 | 104.17823 | 104.1782286 | 104.1782286 | 104.1782286 | 103.8520488 | 102.2203331 | 100.6222426 | 99.05680335 | 97.52307878 |
| 190222A00028 | 2/22/2019 | 2.62 | 2/22/2022 | 2/22/2019 | 104.17866 | 104.1786583 | 104.1786583 | 104.1786583 | 103.8454363 | 102.1882668 | 100.5655969 | 98.97641459 | 97.41974746 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190313A00011 | 3/13/2019 | 2.53 | 3/11/2022 | 3/13/2019 | 104.14185 | 104.1418515 | 104.1418515 | 104.1418515 | 103.7935051 | 102.0897007 | 100.4220742 | 98.78953794 | 97.19104848 |
| 190321A00021 | 3/21/2019 | 2.67 | 3/21/2024 | 3/21/2019 | 108.91849 | 108.918489 | 108.918489 | 108.918489 | 107.6064248 | 103.8715951 | 100.2873033 | 96.84661321 | 93.54295225 |
| 190326A00004 | 3/26/2019 | 2.58 | 9/26/2023 | 3/26/2019 | 107.46903 | 107.4690283 | 107.4690283 | 107.4690283 | 106.4783133 | 103.2335063 | 100.1049293 | 97.08771145 | 94.17721971 |
| 190326A00014 | 3/26/2019 | 2.56 | 9/28/2020 | 3/26/2019 | 100.57127 | 100.5712722 | 100.5712722 | 100.5712722 | 100.5315433 | 100.282156 | 100.0340034 | 99.78707621 | 99.54136556 |
| 190328A00019 | 3/28/2019 | 2.56 | 3/28/2024 | 3/28/2019 | 108.54893 | 108.5489348 | 108.5489348 | 108.5489348 | 107.2252472 | 103.4793037 | 99.88506651 | 96.43551286 | 93.12399004 |
| 190328A00024 | 3/28/2019 | 2.5 | 4/23/2021 | 3/28/2019 | 101.84045 | 101.8404484 | 101.8404484 | 101.8404484 | 101.6768697 | 100.8559536 | 100.0482691 | 99.25349803 | 98.47133252 |
| 190328A00032 | 4/25/2019 | 2.48 | 4/26/2021 | 4/25/2019 | 101.84234 | 101.8423429 | 101.8423429 | 101.8423429 | 101.6766497 | 100.8475552 | 100.0319523 | 99.2295139 | 98.43992305 |
| 180920A00028 | 9/20/2018 | 3.12 | 9/20/2023 | 9/20/2018 | 109.79382 | 109.7938249 | 109.7938249 | 109.7938249 | 108.7986148 | 105.5177641 | 102.3539126 | 99.30217436 | 96.3579013 |
| 180920A00063 | 9/20/2018 | 3 | 9/20/2021 | 9/20/2018 | 103.57526 | 103.5752585 | 103.5752585 | 103.5752585 | 103.3496811 | 102.1074975 | 100.8951495 | 99.71157144 | 98.55574757 |
| 180926A00004 | 9/26/2018 | 3.04 | 9/26/2022 | 9/26/2018 | 106.62914 | 106.6291442 | 106.6291442 | 106.6291442 | 106.0842578 | 103.8181851 | 101.6119597 | 99.4635551 | 97.3710312 |
| 180926A00031 | 9/26/2018 | 3.24 | 9/26/2023 | 9/26/2018 | 109.62709 | 109.6270922 | 109.6270922 | 109.6270922 | 108.627914 | 105.3480466 | 102.1853432 | 99.13490056 | 96.19205439 |
| 180928A00029 | 9/28/2018 | 2.87 | 9/28/2020 | 9/28/2018 | 100.68798 | 100.6879774 | 100.6879774 | 100.6879774 | 100.6481496 | 100.3981391 | 100.1493712 | 99.90183659 | 99.65552612 |
| 180928A00050 | 9/28/2018 | 2.98 | 9/28/2020 | 9/28/2018 | 100.67622 | 100.676224 | 100.676224 | 100.676224 | 100.6364683 | 100.3869051 | 100.1385773 | 99.89147563 | 99.64559113 |
| 181001A00059 | 10/1/2018 | 3.02 | 11/2/2020 | 10/1/2018 | 100.95653 | 100.9565319 | 100.9565319 | 100.9565319 | 100.8970465 | 100.5504177 | 100.2061657 | 99.86426618 | 99.52469522 |
| 181004A00028 | 10/4/2018 | 3.31 | 10/4/2023 | 10/4/2018 | 109.92232 | 109.922317 | 109.922317 | 109.922317 | 108.9088091 | 105.602825 | 102.4155724 | 99.34207199 | 96.37758711 |
| 181005A00011 | 10/5/2018 | 3.2 | 10/5/2023 | 10/5/2018 | 110.18274 | 110.1827356 | 110.1827356 | 110.1827356 | 109.1612405 | 105.8335426 | 102.6257382 | 99.53278852 | 96.54990058 |
| 181005A00041 | 10/5/2018 | 3.06 | 10/5/2020 | 10/5/2018 | 100.75035 | 100.7503474 | 100.7503474 | 100.7503474 | 100.7067603 | 100.4377543 | 100.1701881 | 99.90405001 | 99.63932865 |
| 181012A00012 | 10/12/2018 | 3.05 | 10/9/2020 | 10/12/2018 | 100.7785 | 100.7785027 | 100.7785027 | 100.7785027 | 100.7326568 | 100.4525642 | 100.1740366 | 99.8970609 | 99.62162399 |
| 181018A00011 | 10/18/2018 | 3.35 | 10/18/2023 | 10/18/2018 | 110.17179 | 110.1717891 | 110.1717891 | 110.1717891 | 109.1338508 | 105.7870429 | 102.5616079 | 99.45246871 | 96.4547909 |
| 181023A00021 | 10/23/2018 | 3.28 | 10/23/2023 | 10/23/2018 | 109.97978 | 109.9797774 | 109.9797774 | 109.9797774 | 108.9342533 | 105.5775297 | 102.343003 | 99.2255647 | 96.22034897 |
| 181025A00010 | 10/25/2018 | 3.07 | 10/25/2022 | 10/25/2018 | 106.93444 | 106.934444 | 106.934444 | 106.934444 | 106.3614183 | 104.0141498 | 101.7306598 | 99.50884572 | 97.3466876 |
| 181102A00006 | 11/2/2018 | 3.07 | 11/2/2021 | 11/2/2018 | 104.01422 | 104.0142179 | 104.0142179 | 104.0142179 | 103.7694515 | 102.420908 | 101.0963196 | 99.79510214 | 98.51669039 |
| 181114A00014 | 11/14/2018 | 3.17 | 11/14/2023 | 11/14/2018 | 110.42138 | 110.4213776 | 110.4213776 | 110.4213776 | 109.3306804 | 105.8922513 | 102.5813436 | 99.39256219 | 96.32076901 |
| 181114A00024 | 11/14/2018 | 3.27 | 12/14/2021 | 11/14/2018 | 104.41549 | 104.4154882 | 104.4154882 | 104.4154882 | 104.1401471 | 102.678034 | 101.2438469 | 99.83685472 | 98.45635145 |
| 181115A00051 | 11/15/2018 | 2.98 | 5/17/2021 | 11/15/2018 | 102.55002 | 102.5500175 | 102.5500175 | 102.5500175 | 102.3680768 | 101.4765819 | 100.6006092 | 99.73975544 | 98.89363131 |
| 181116A00015 | 11/19/2018 | 3.29 | 2/15/2024 | 11/19/2018 | 110.95976 | 110.9597628 | 110.9597628 | 110.9597628 | 109.7046766 | 106.0256146 | 102.4912826 | 99.09516905 | 95.83109452 |
| 181119A00018 | 11/19/2018 | 3.28 | 11/17/2023 | 11/19/2018 | 110.18484 | 110.1848352 | 110.1848352 | 110.1848352 | 109.0957434 | 105.6688503 | 102.3690181 | 99.19087184 | 96.12929259 |
| 181120A00007 | 11/20/2018 | 3.15 | 11/15/2021 | 11/20/2018 | 104.00794 | 104.0079392 | 104.0079392 | 104.0079392 | 103.7546693 | 102.3739086 | 101.0182077 | 99.68694235 | 98.37950885 |
| 181128A00031 | 11/28/2018 | 3.29 | 11/28/2023 | 11/28/2018 | 110.30939 | 110.3093901 | 110.3093901 | 110.3093901 | 109.2007977 | 105.7421961 | 102.4128759 | 99.20732317 | 96.12028889 |
| 181130A00037 | 11/30/2018 | 3.05 | 11/30/2023 | 11/30/2018 | 110.14124 | 110.1412421 | 110.1412421 | 110.1412421 | 109.0239128 | 105.5468831 | 102.2004155 | 98.97891827 | 95.87706983 |
| 181207A00018 | 12/7/2018 | 3.21 | 7/15/2024 | 12/7/2018 | 111.87505 | 111.8750478 | 111.8750478 | 111.8750478 | 110.3105437 | 106.2151718 | 102.296748 | 98.54666995 | 94.95680112 |
| 181005A00016 | 10/5/2018 | 3.26 | 1/10/2023 | 10/5/2018 | 107.57938 | 107.5793806 | 107.5793806 | 107.5793806 | 106.9320885 | 104.3794783 | 101.9015636 | 99.49571593 | 97.15941686 |
| 181009A00060 | 10/9/2018 | 3.07 | 10/12/2021 | 10/9/2018 | 103.84222 | 103.8422204 | 103.8422204 | 103.8422204 | 103.6081981 | 102.3095818 | 101.0392494 | 99.79627659 | 98.5797798 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 181010A00021 | 10/10/2018 | 3.29 | 3/15/2023 | 10/10/2018 | 108.18271 | 108.182707 | 108.182707 | 108.182707 | 107.4648994 | 104.7269828 | 102.0732958 | 99.50069868 | 97.00619249 |
| 181016A00004 | 10/16/2018 | 3.07 | 10/16/2020 | 10/16/2018 | 100.84143 | 100.8414257 | 100.8414257 | 100.8414257 | 100.7916178 | 100.492071 | 100.1943148 | 99.89833324 | 99.60411035 |
| 181016A00087 | 10/16/2018 | 3.31 | 10/16/2023 | 10/16/2018 | 110.02197 | 110.0219685 | 110.0219685 | 110.0219685 | 108.9879802 | 105.6488896 | 102.4307421 | 99.32847643 | 96.33727403 |
| 181022A00029 | 10/22/2018 | 3.22 | 10/24/2022 | 10/22/2018 | 106.84784 | 106.8478402 | 106.8478402 | 106.8478402 | 106.2782833 | 103.9433395 | 101.6716206 | 99.46104492 | 97.30961245 |
| 181023A00025 | 10/23/2018 | 3.27 | 10/23/2023 | 10/23/2018 | 109.94634 | 109.9463369 | 109.9463369 | 109.9463369 | 108.9009486 | 105.5447801 | 102.3107934 | 99.19388061 | 96.18917642 |
| 181023A00052 | 10/23/2018 | 3.15 | 10/23/2023 | 10/23/2018 | 110.16859 | 110.1685886 | 110.1685886 | 110.1685886 | 109.1167924 | 105.7417638 | 102.4899147 | 99.35608353 | 96.33535396 |
| 181109A00029 | 11/9/2018 | 3.72 | 11/9/2026 | 11/9/2018 | 121.81439 | 121.8143863 | 121.8143863 | 121.8143863 | 117.3483359 | 110.837232 | 104.739968 | 99.02798886 | 93.67485108 |
| 181115A00012 | 11/15/2018 | 3.14 | 11/16/2020 | 11/15/2018 | 101.11345 | 101.1134531 | 101.1134531 | 101.1134531 | 101.0454729 | 100.6598793 | 100.2772359 | 99.89750863 | 99.52066429 |
| 181115A00028 | 11/15/2018 | 2.95 | 11/16/2020 | 11/15/2018 | 101.09331 | 101.0933064 | 101.0933064 | 101.0933064 | 101.0252237 | 100.6390654 | 100.2558693 | 99.87560129 | 99.49822767 |
| 181115A00055 | 11/15/2018 | 3.01 | 11/15/2021 | 11/15/2018 | 104.0368 | 104.0367963 | 104.0367963 | 104.0367963 | 103.7828375 | 102.3983089 | 101.0389603 | 99.70416335 | 98.39331028 |
| 181120A00023 | 11/20/2018 | 3.15 | 11/19/2021 | 11/20/2018 | 104.0397 | 104.0397007 | 104.0397007 | 104.0397007 | 103.7835802 | 102.3916178 | 101.025098 | 99.6833827 | 98.36585484 |
| 181206A00010 | 12/6/2018 | 3.09 | 12/6/2021 | 12/6/2018 | 104.08768 | 104.0876795 | 104.0876795 | 104.0876795 | 103.8190766 | 102.3806913 | 100.9693961 | 99.58449157 | 98.22530197 |
| 181207A00004 | 12/7/2018 | 3.05 | 12/7/2020 | 12/7/2018 | 101.24144 | 101.2414433 | 101.2414433 | 101.2414433 | 101.1607941 | 100.7170896 | 100.2772788 | 99.84131054 | 99.40913454 |
| 181211A00019 | 12/11/2018 | 3.04 | 12/11/2020 | 12/11/2018 | 101.26794 | 101.2679426 | 101.2679426 | 101.2679426 | 101.1848869 | 100.7301076 | 100.2794212 | 99.83277259 | 99.39010752 |
| 181213A00031 | 12/13/2018 | 2.97 | 12/13/2023 | 12/13/2018 | 109.96711 | 109.9671069 | 109.9671069 | 109.9671069 | 108.8272261 | 105.3191189 | 101.9440599 | 98.6962933 | 95.57034386 |
| 181219A00005 | 12/19/2018 | 3.06 | 12/19/2023 | 12/19/2018 | 109.67732 | 109.6773173 | 109.6773173 | 109.6773173 | 108.5342218 | 105.0317375 | 101.6623518 | 98.42029395 | 95.30007524 |
| 181226A00033 | 12/26/2018 | 2.87 | 12/28/2020 | 12/26/2018 | 101.31898 | 101.3189816 | 101.3189816 | 101.3189816 | 101.2257209 | 100.7240254 | 100.2272959 | 99.73545911 | 99.24844293 |
| 181228A00008 | 12/28/2018 | 2.9 | 12/28/2021 | 12/28/2018 | 103.95652 | 103.9565156 | 103.9565156 | 103.9565156 | 103.6709385 | 102.175545 | 100.7094138 | 99.27176089 | 97.86182993 |
| 190102A00037 | 1/2/2019 | 2.8 | 7/2/2021 | 1/2/2019 | 102.56895 | 102.5689474 | 102.5689474 | 102.5689474 | 102.3615173 | 101.3465412 | 100.3516599 | 99.37628099 | 98.41983517 |
| 190104A00027 | 1/4/2019 | 2.76 | 1/4/2021 | 1/4/2019 | 101.31261 | 101.3126076 | 101.3126076 | 101.3126076 | 101.2152625 | 100.6943532 | 100.1787991 | 99.66851789 | 99.16342889 |
| 190107A00034 | 1/7/2019 | 2.8 | 4/15/2021 | 1/7/2019 | 102.03156 | 102.0315562 | 102.0315562 | 102.0315562 | 101.8734587 | 101.0735019 | 100.2860986 | 99.5109547 | 98.74778528 |
| 190110A00013 | 1/10/2019 | 2.97 | 1/17/2024 | 1/10/2019 | 109.57582 | 109.5758207 | 109.5758207 | 109.5758207 | 108.38087 | 104.8048059 | 101.3672251 | 98.06200475 | 94.88332793 |
| 181211A00018 | 12/11/2018 | 3.14 | 12/11/2023 | 12/11/2018 | 109.89472 | 109.8947152 | 109.8947152 | 109.8947152 | 108.7648838 | 105.2793991 | 101.9255447 | 98.69764891 | 95.59031546 |
| 181212A00019 | 12/12/2018 | 3.19 | 12/12/2023 | 12/12/2018 | 110.07662 | 110.0766241 | 110.0766241 | 110.0766241 | 108.9442286 | 105.4530082 | 102.0937021 | 98.86062249 | 95.74835823 |
| 181213A00025 | 12/13/2018 | 3.05 | 12/11/2020 | 12/13/2018 | 101.2725 | 101.272495 | 101.272495 | 101.272495 | 101.1894372 | 100.7346456 | 100.283947 | 99.83728628 | 99.39460916 |
| 181214A00023 | 12/14/2018 | 3.07 | 12/14/2021 | 12/14/2018 | 104.12057 | 104.1205682 | 104.1205682 | 104.1205682 | 103.8456539 | 102.3858015 | 100.9538358 | 99.54902681 | 98.17066953 |
| 181218A00077 | 12/18/2018 | 3.09 | 12/18/2023 | 12/18/2018 | 109.77464 | 109.7746447 | 109.7746447 | 109.7746447 | 108.6328999 | 105.131321 | 101.7626909 | 98.52125007 | 95.40152026 |
| 181220A00009 | 12/20/2018 | 2.95 | 12/21/2020 | 12/20/2018 | 101.30659 | 101.3065855 | 101.3065855 | 101.3065855 | 101.2175174 | 100.7350848 | 100.2572544 | 99.78396033 | 99.31513817 |
| 181224A00038 | 12/24/2018 | 3.04 | 12/22/2023 | 12/24/2018 | 109.62998 | 109.6299762 | 109.6299762 | 109.6299762 | 108.4817642 | 104.9723293 | 101.5965617 | 98.34865266 | 95.22307795 |
| 190102A00058 | 1/2/2019 | 2.91 | 1/2/2024 | 1/2/2019 | 109.25301 | 109.2530104 | 109.2530104 | 109.2530104 | 108.0868559 | 104.5555164 | 101.1597964 | 97.89375355 | 94.75173929 |
| 190103A00005 | 1/3/2019 | 2.61 | 1/4/2021 | 1/3/2019 | 101.30113 | 101.3011322 | 101.3011322 | 101.3011322 | 101.2036372 | 100.6819496 | 100.1656361 | 99.65461371 | 99.14880142 |
| 190107A00010 | 1/7/2019 | 2.66 | 1/9/2023 | 1/7/2019 | 106.50628 | 106.5062797 | 106.5062797 | 106.5062797 | 105.8602304 | 103.314209 | 100.8429243 | 98.44374105 | 96.11413448 |
| 190107A00019 | 1/7/2019 | 2.92 | 1/5/2024 | 1/7/2019 | 109.31008 | 109.3100816 | 109.3100816 | 109.3100816 | 108.1382031 | 104.5980531 | 101.1940888 | 97.9203324 | 94.77110187 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190110A00002 | 1/10/2019 | 2.93 | 1/10/2023 | 1/10/2019 | 106.73569 | 106.73569 | 106.73569 | 106.73569 | 106.0907395 | 103.5489684 | 101.0816492 | 98.68616132 | 96.35999329 |
| 190110A00009 | 1/10/2019 | 2.97 | 1/16/2024 | 1/10/2019 | 109.56846 | 109.568457 | 109.568457 | 109.568457 | 108.3753627 | 104.8020306 | 101.3669971 | 98.06415101 | 94.88768658 |
| 190110A00075 | 1/10/2019 | 2.67 | 4/7/2021 | 1/10/2019 | 101.99056 | 101.9905639 | 101.9905639 | 101.9905639 | 101.8378314 | 101.0583458 | 100.2907788 | 99.53485819 | 98.79032042 |
| 190110A00087 | 1/10/2019 | 2.89 | 8/7/2020 | 1/10/2019 | 100.27432 | 100.2743227 | 100.2743227 | 100.2743227 | 100.2593901 | 100.1540233 | 100.0488875 | 99.94398222 | 99.83930651 |
| 190115A00028 | 1/15/2019 | 2.86 | 11/8/2021 | 1/15/2019 | 103.53984 | 103.5398388 | 103.5398388 | 103.5398388 | 103.2921576 | 101.9341888 | 100.6005574 | 99.29066504 | 98.00393245 |
| 190122A00042 | 1/22/2019 | 2.79 | 1/23/2023 | 1/22/2019 | 106.94272 | 106.9427164 | 106.9427164 | 106.9427164 | 106.281079 | 103.6922034 | 101.1800706 | 98.74194181 | 96.37519479 |
| 190123A00005 | 1/23/2019 | 2.94 | 1/24/2022 | 1/23/2019 | 104.21558 | 104.2155812 | 104.2155812 | 104.2155812 | 103.9079009 | 102.3385896 | 100.8008577 | 99.29382156 | 97.81663002 |
| 190123A00033 | 1/23/2019 | 2.8 | 1/23/2023 | 1/23/2019 | 106.9687 | 106.9687028 | 106.9687028 | 106.9687028 | 106.3069917 | 103.717777 | 101.2053128 | 98.76686008 | 96.39979633 |
| 190123A00035 | 1/23/2019 | 3.18 | 1/22/2027 | 1/23/2019 | 120.30377 | 120.3037652 | 120.3037652 | 120.3037652 | 115.4712023 | 108.7801012 | 102.5291595 | 96.68701338 | 91.22469386 |
| 190131A00053 | 1/31/2019 | 2.67 | 1/31/2023 | 1/31/2019 | 106.68745 | 106.6874515 | 106.6874515 | 106.6874515 | 106.018336 | 103.411566 | 100.8825471 | 98.42848509 | 96.0467056 |
| 190205A00013 | 2/5/2019 | 2.85 | 2/5/2021 | 2/5/2019 | 101.58466 | 101.5846597 | 101.5846597 | 101.5846597 | 101.4688581 | 100.859335 | 100.257126 | 99.6620999 | 99.07412876 |
| 190215A00004 | 2/15/2019 | 2.84 | 2/15/2023 | 2/15/2019 | 106.75727 | 106.7572702 | 106.7572702 | 106.7572702 | 106.0747686 | 103.4335818 | 100.871947 | 98.38697116 | 95.97588712 |
| 190215A00006 | 2/15/2019 | 2.89 | 2/15/2024 | 2/15/2019 | 109.4957 | 109.4957038 | 109.4957038 | 109.4957038 | 108.247486 | 104.5949161 | 101.086308 | 97.71517843 | 94.47537546 |
| 181211A00020 | 12/11/2018 | 3.04 | 12/11/2020 | 12/11/2018 | 101.26794 | 101.2679426 | 101.2679426 | 101.2679426 | 101.1848869 | 100.7301076 | 100.2794212 | 99.83277259 | 99.39010752 |
| 181211A00043 | 12/11/2018 | 3.14 | 12/11/2023 | 12/11/2018 | 109.89472 | 109.8947152 | 109.8947152 | 109.8947152 | 108.7648838 | 105.2793991 | 101.9255447 | 98.69764891 | 95.59031546 |
| 181219A00022 | 12/19/2018 | 2.94 | 12/18/2020 | 12/19/2018 | 101.2793 | 101.2793005 | 101.2793005 | 101.2793005 | 101.1920403 | 100.717929 | 100.2482657 | 99.78298777 | 99.32203383 |
| 181220A00020 | 12/20/2018 | 2.78 | 12/20/2021 | 12/20/2018 | 103.97407 | 103.9740673 | 103.9740673 | 103.9740673 | 103.6939229 | 102.2153976 | 100.7654739 | 99.34339405 | 97.94842662 |
| 181221A00024 | 12/21/2018 | 2.96 | 12/28/2020 | 12/21/2018 | 101.3642 | 101.364199 | 101.364199 | 101.364199 | 101.2709157 | 100.7690882 | 100.2722276 | 99.78026065 | 99.29311525 |
| 181226A00061 | 12/26/2018 | 2.95 | 12/27/2022 | 12/26/2018 | 106.68418 | 106.6841848 | 106.6841848 | 106.6841848 | 106.0534924 | 103.5493269 | 101.1176795 | 98.7560309 | 96.46196515 |
| 181227A00027 | 12/27/2018 | 3.24 | 12/26/2025 | 12/27/2018 | 116.20356 | 116.2035646 | 116.2035646 | 116.2035646 | 113.1479797 | 107.5899148 | 102.344185 | 97.39157076 | 92.71413303 |
| 190102A00004 | 1/2/2019 | 2.8 | 2/24/2021 | 1/2/2019 | 101.68697 | 101.6869676 | 101.6869676 | 101.6869676 | 101.5602843 | 100.8983327 | 100.2449973 | 99.60011085 | 98.96351015 |
| 190107A00029 | 1/7/2019 | 2.59 | 1/7/2021 | 1/7/2019 | 101.31129 | 101.3112909 | 101.3112909 | 101.3112909 | 101.212068 | 100.6820956 | 100.1576729 | 99.63871271 | 99.12512997 |
| 190107A00036 | 1/7/2019 | 2.84 | 4/15/2022 | 1/7/2019 | 104.60877 | 104.6087702 | 104.6087702 | 104.6087702 | 104.2285105 | 102.4319354 | 100.6750514 | 98.95668923 | 97.27572422 |
| 190108A00002 | 1/8/2019 | 2.89 | 1/8/2021 | 1/8/2019 | 101.40982 | 101.4098248 | 101.4098248 | 101.4098248 | 101.3101353 | 100.7779422 | 100.2513398 | 99.73024039 | 99.21455784 |
| 190108A00039 | 1/8/2019 | 3.04 | 4/30/2024 | 1/8/2019 | 110.60956 | 110.6095596 | 110.6095596 | 110.6095596 | 109.2103448 | 105.3381115 | 101.6256374 | 98.06551696 | 94.65072557 |
| 190109A00023 | 1/9/2019 | 2.92 | 10/9/2020 | 1/9/2019 | 100.74205 | 100.7420489 | 100.7420489 | 100.7420489 | 100.6962134 | 100.4161881 | 100.1377274 | 99.86081829 | 99.58544772 |
| 190110A00015 | 1/10/2019 | 2.88 | 1/18/2022 | 1/10/2019 | 104.07719 | 104.077186 | 104.077186 | 104.077186 | 103.7745584 | 102.222338 | 100.7011753 | 99.21020937 | 97.74861048 |
| 190110A00022 | 1/10/2019 | 2.86 | 5/10/2021 | 1/10/2019 | 102.25934 | 102.2593422 | 102.2593422 | 102.2593422 | 102.0831674 | 101.2139902 | 100.3596017 | 99.51962655 | 98.69370215 |
| 190110A00071 | 1/10/2019 | 2.67 | 2/8/2021 | 1/10/2019 | 101.58027 | 101.5802696 | 101.5802696 | 101.5802696 | 101.4625516 | 100.8437392 | 100.2324702 | 99.62860725 | 99.03201618 |
| 190114A00061 | 1/14/2019 | 2.98 | 1/31/2024 | 1/14/2019 | 109.7151 | 109.7151045 | 109.7151045 | 109.7151045 | 108.4940005 | 104.8790629 | 101.4052278 | 98.06620402 | 94.85601777 |
| 190115A00063 | 1/15/2019 | 2.96 | 1/16/2024 | 1/15/2019 | 109.53268 | 109.5326798 | 109.5326798 | 109.5326798 | 108.3397473 | 104.7670486 | 101.3326305 | 98.03038241 | 94.85449922 |
| 190117A00002 | 1/17/2019 | 2.87 | 1/7/2021 | 1/17/2019 | 101.39188 | 101.391877 | 101.391877 | 101.391877 | 101.2927703 | 100.7633792 | 100.2395199 | 99.72110594 | 99.20805261 |
| 190117A00004 | 1/17/2019 | 2.9 | 1/18/2022 | 1/17/2019 | 104.10861 | 104.1086115 | 104.1086115 | 104.1086115 | 103.8059356 | 102.2534597 | 100.7320462 | 99.24083376 | 97.77899267 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190118A00023 | 1/18/2019 | 2.9 | 1/19/2021 | 1/18/2019 | 101.4907 | 101.4907034 | 101.4907034 | 101.4907034 | 101.3846784 | 100.8220984 | 100.2657634 | 99.71556975 | 99.17141596 |
| 190122A00046 | 1/22/2019 | 3.29 | 1/22/2029 | 1/22/2019 | 127.41475 | 127.4147506 | 127.4147506 | 127.4147506 | 119.0368274 | 110.3502546 | 102.3832749 | 95.0720694 | 88.35880232 |
| 190131A00019 | 1/31/2019 | 3.44 | 1/30/2034 | 1/31/2019 | 145.40796 | 145.4079644 | 145.4079644 | 138.9289623 | 124.2568735 | 111.0097758 | 99.39277458 | 89.19316069 | 80.22713872 |
| 190211A00016 | 2/11/2019 | 3.01 | 2/11/2025 | 2/11/2019 | 112.58209 | 112.5820851 | 112.5820851 | 112.5820851 | 110.5190009 | 105.8617824 | 101.4300768 | 97.21174287 | 93.19536027 |
| 180913A00029 | 9/13/2018 | 3.11 | 9/13/2023 | 9/13/2018 | 109.10153 | 109.1015344 | 109.1015344 | 109.1015344 | 108.1254255 | 104.889193 | 101.7675706 | 98.75580728 | 95.84938143 |
| 180914A00026 | 9/14/2018 | 3.15 | 9/14/2023 | 9/14/2018 | 109.23874 | 109.2387353 | 109.2387353 | 109.2387353 | 108.2604797 | 105.0193373 | 101.8930416 | 98.8768284 | 95.96616397 |
| 180914A00029 | 9/14/2018 | 3.48 | 9/14/2028 | 9/14/2018 | 126.09971 | 126.0997069 | 126.0997069 | 126.0997069 | 118.4698569 | 110.2039179 | 102.5949865 | 95.58698431 | 89.12890971 |
| 180919A00018 | 9/19/2018 | 3.12 | 6/20/2022 | 9/19/2018 | 105.63085 | 105.630854 | 105.630854 | 105.630854 | 105.1845273 | 103.2006395 | 101.2644778 | 99.374598 | 97.52960976 |
| 180920A00014 | 9/20/2018 | 3.59 | 9/20/2028 | 9/20/2018 | 127.05737 | 127.0573749 | 127.0573749 | 127.0573749 | 119.3771453 | 111.0600955 | 103.404479 | 96.35377712 | 89.85659517 |
| 180924A00021 | 9/24/2018 | 2.88 | 9/24/2020 | 9/24/2018 | 100.65982 | 100.6598218 | 100.6598218 | 100.6598218 | 100.6220011 | 100.3830916 | 100.1453238 | 99.9086897 | 99.67318106 |
| 180927A00017 | 9/27/2018 | 3 | 9/29/2020 | 9/27/2018 | 100.68877 | 100.6887718 | 100.6887718 | 100.6887718 | 100.648514 | 100.3961722 | 100.1450912 | 99.89526167 | 99.64667422 |
| 181001A00020 | 10/1/2018 | 3.16 | 10/3/2022 | 10/1/2018 | 106.54112 | 106.5411198 | 106.5411198 | 106.5411198 | 105.9920299 | 103.7162911 | 101.500922 | 99.34388209 | 97.24321753 |
| 181002A00018 | 10/2/2018 | 3.1 | 10/4/2021 | 10/2/2018 | 103.60981 | 103.60981 | 103.60981 | 103.60981 | 103.3804859 | 102.1048386 | 100.8592435 | 99.64264122 | 98.45402182 |
| 181003A00021 | 10/3/2018 | 3.1 | 4/5/2021 | 10/3/2018 | 102.20139 | 102.2013892 | 102.2013892 | 102.2013892 | 102.0501948 | 101.2767192 | 100.5149604 | 99.76465346 | 99.02554143 |
| 181005A00037 | 10/9/2018 | 3.4 | 10/3/2025 | 10/9/2018 | 117.45456 | 117.4545606 | 117.4545606 | 117.4545606 | 114.6623231 | 109.2487868 | 104.1282443 | 99.28321019 | 94.69734047 |
| 181016A00011 | 10/16/2018 | 3.06 | 10/15/2021 | 10/16/2018 | 103.85369 | 103.8536945 | 103.8536945 | 103.8536945 | 103.6182191 | 102.3126979 | 101.0347426 | 99.78348306 | 98.55808592 |
| 181017A00023 | 10/17/2018 | 3.07 | 10/14/2020 | 10/17/2018 | 100.82295 | 100.8229492 | 100.8229492 | 100.8229492 | 100.7742773 | 100.4803126 | 100.1880729 | 99.89754295 | 99.60870777 |
| 181023A00036 | 10/23/2018 | 2.98 | 10/23/2020 | 10/23/2018 | 100.91424 | 100.9142381 | 100.9142381 | 100.9142381 | 100.8603797 | 100.5408669 | 100.2233871 | 99.90792096 | 99.59444929 |
| 181026A00002 | 10/26/2018 | 3.28 | 10/26/2023 | 10/26/2018 | 110.00444 | 110.0044431 | 110.0044431 | 110.0044431 | 108.9538039 | 105.5888207 | 102.3465928 | 99.2219905 | 96.21012686 |
| 181029A00081 | 10/29/2018 | 3.27 | 4/28/2023 | 10/29/2018 | 108.48842 | 108.4884244 | 108.4884244 | 108.4884244 | 107.7170988 | 104.8563552 | 102.0868873 | 99.40529691 | 96.80833151 |
| 181101A00020 | 11/1/2018 | 3.26 | 11/1/2021 | 11/1/2018 | 104.03229 | 104.0322902 | 104.0322902 | 104.0322902 | 103.7888562 | 102.4465741 | 101.1280396 | 99.83267617 | 98.55992527 |
| 181107A00008 | 11/7/2018 | 3.42 | 11/7/2023 | 11/7/2018 | 110.57685 | 110.5768463 | 110.5768463 | 110.5768463 | 109.5033941 | 106.0968564 | 102.8156079 | 99.65438984 | 96.60819212 |
| 181108A00025 | 11/8/2018 | 3.44 | 7/31/2023 | 11/8/2018 | 109.78783 | 109.7878288 | 109.7878288 | 109.7878288 | 108.8787805 | 105.7485768 | 102.7258798 | 99.80637541 | 96.98594956 |
| 181109A00023 | 11/9/2018 | 3.39 | 11/9/2022 | 11/9/2018 | 107.38245 | 107.382446 | 107.382446 | 107.382446 | 106.7963837 | 104.4119369 | 102.0930926 | 99.83768671 | 97.64363937 |
| 181114A00021 | 11/14/2018 | 3.17 | 11/14/2023 | 11/14/2018 | 110.42138 | 110.4213776 | 110.4213776 | 110.4213776 | 109.3306804 | 105.8922513 | 102.5813436 | 99.39256219 | 96.32076901 |
| 181121A00014 | 11/21/2018 | 3.18 | 11/19/2021 | 11/21/2018 | 104.08186 | 104.0818639 | 104.0818639 | 104.0818639 | 103.825685 | 102.4334133 | 101.0665896 | 99.72457551 | 98.40675393 |
| 181123A00016 | 11/23/2018 | 3.19 | 11/23/2022 | 11/23/2018 | 107.01688 | 107.0168807 | 107.0168807 | 107.0168807 | 106.4184044 | 104.0001973 | 101.649544 | 99.36418218 | 97.1419387 |
| 181123A00021 | 11/23/2018 | 3.25 | 11/22/2023 | 11/23/2018 | 110.123 | 110.1230046 | 110.1230046 | 110.1230046 | 109.0255481 | 105.5862524 | 102.2749692 | 99.08626272 | 96.01495698 |
| 190329A00017 | 3/29/2019 | 2.59 | 3/29/2023 | 3/29/2019 | 106.3583 | 106.3583008 | 106.3583008 | 106.3583008 | 105.6301419 | 102.8805473 | 100.2166819 | 97.63530723 | 95.13333258 |
| 190410A00005 | 4/10/2019 | 2.49 | 10/13/2020 | 4/10/2019 | 100.69184 | 100.6918389 | 100.6918389 | 100.6918389 | 100.6436835 | 100.3522185 | 100.0624542 | 99.77437567 | 99.48796813 |
| 190423A00049 | 4/23/2019 | 2.6 | 4/23/2021 | 4/23/2019 | 101.92285 | 101.9228489 | 101.9228489 | 101.9228489 | 101.7592013 | 100.937914 | 100.1298624 | 99.33472842 | 98.55220404 |
| 190424A00004 | 4/24/2019 | 2.55 | 4/23/2021 | 4/24/2019 | 101.88165 | 101.8816486 | 101.8816486 | 101.8816486 | 101.7180355 | 100.8969338 | 100.0890657 | 99.29411322 | 98.51176828 |
| 190424A00022 | 4/24/2019 | 2.62 | 4/24/2023 | 4/24/2019 | 106.60763 | 106.6076347 | 106.6076347 | 106.6076347 | 105.8472245 | 103.0240994 | 100.2909498 | 97.64441628 | 95.0812848 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190430A00013 | 4/30/2019 | 2.52 | 4/30/2021 | 4/30/2019 | 101.90058 | 101.9005792 | 101.9005792 | 101.9005792 | 101.7320203 | 100.8917693 | 100.0653617 | 99.25245769 | 98.45272851 |
| 190502A00027 | 5/2/2019 | 2.42 | 5/2/2022 | 5/2/2019 | 104.28462 | 104.2846215 | 104.2846215 | 104.2846215 | 103.8874902 | 102.041685 | 100.2376588 | 98.47422507 | 96.75023816 |
| 190507A00023 | 5/7/2019 | 2.52 | 5/7/2021 | 5/7/2019 | 101.94439 | 101.9443879 | 101.9443879 | 101.9443879 | 101.7706817 | 100.911163 | 100.0661362 | 99.235237 | 98.41811319 |
| 190509A00030 | 5/9/2019 | 2.48 | 11/9/2021 | 5/9/2019 | 103.02343 | 103.0234326 | 103.0234326 | 103.0234326 | 102.775753 | 101.4187647 | 100.0861433 | 98.77728892 | 97.49162073 |
| 190510A00004 | 5/10/2019 | 2.54 | 11/10/2020 | 5/10/2019 | 100.84035 | 100.8403454 | 100.8403454 | 100.8403454 | 100.7760869 | 100.4076855 | 100.0419819 | 99.67894643 | 99.31854991 |
| 190514A00021 | 5/14/2019 | 2.72 | 11/14/2025 | 5/14/2019 | 113.05517 | 113.0551742 | 113.0551742 | 113.0551742 | 110.1818632 | 104.8113418 | 99.73794857 | 94.94372134 | 90.4118721 |
| 190515A00011 | 5/15/2019 | 2.38 | 5/17/2021 | 5/15/2019 | 101.8823 | 101.8823006 | 101.8823006 | 101.8823006 | 101.7013558 | 100.8149277 | 99.94392252 | 99.08794022 | 98.2465944 |
| 190516A00027 | 5/16/2019 | 2.43 | 5/17/2021 | 5/16/2019 | 101.92683 | 101.9268262 | 101.9268262 | 101.9268262 | 101.7458409 | 100.8591975 | 99.98797978 | 99.13178746 | 98.29023413 |
| 190520A00036 | 5/20/2019 | 2.43 | 11/19/2021 | 5/20/2019 | 103.02778 | 103.0277845 | 103.0277845 | 103.0277845 | 102.773065 | 101.3885251 | 100.0293 | 98.69475511 | 97.38427677 |
| 190522A00017 | 5/23/2019 | 2.53 | 3/1/2023 | 5/23/2019 | 106.01924 | 106.0192449 | 106.0192449 | 106.0192449 | 105.3238836 | 102.6522446 | 100.0620823 | 97.5503938 | 95.11430897 |
| 190523A00017 | 5/23/2019 | 2.51 | 3/15/2024 | 5/23/2019 | 108.2809 | 108.2809026 | 108.2809026 | 108.2809026 | 106.9834704 | 103.2758623 | 99.7172727 | 96.30085872 | 93.02013477 |
| 190523A00020 | 5/23/2019 | 2.5 | 2/9/2024 | 5/23/2019 | 108.03215 | 108.0321533 | 108.0321533 | 108.0321533 | 106.8019959 | 103.1924063 | 99.72482368 | 96.3928721 | 93.1904998 |
| 190528A00007 | 5/28/2019 | 2.44 | 11/15/2023 | 5/28/2019 | 107.30632 | 107.3063226 | 107.3063226 | 107.3063226 | 106.2327174 | 102.8598538 | 99.61232366 | 96.48482442 | 93.4723057 |
| 190529A00002 | 5/29/2019 | 2.32 | 5/28/2021 | 5/29/2019 | 101.89162 | 101.8916172 | 101.8916172 | 101.8916172 | 101.7026472 | 100.7862878 | 99.88639554 | 99.00252977 | 98.13426527 |
| 190529A00016 | 5/29/2019 | 2.32 | 5/28/2021 | 5/29/2019 | 101.89162 | 101.8916172 | 101.8916172 | 101.8916172 | 101.7026472 | 100.7862878 | 99.88639554 | 99.00252977 | 98.13426527 |
| 190529A00022 | 5/29/2019 | 2.32 | 5/28/2021 | 5/29/2019 | 101.89162 | 101.8916172 | 101.8916172 | 101.8916172 | 101.7026472 | 100.7862878 | 99.88639554 | 99.00252977 | 98.13426527 |
| 190530A00009 | 5/30/2019 | 2.25 | 5/30/2024 | 5/30/2019 | 108.44665 | 108.4466542 | 108.4466542 | 108.4466542 | 106.9889765 | 103.0619617 | 99.30108346 | 95.69846025 | 92.24662537 |
| 190530A00021 | 5/30/2019 | 2.21 | 5/27/2022 | 5/30/2019 | 104.03871 | 104.0387141 | 104.0387141 | 104.0387141 | 103.6176963 | 101.7082226 | 99.84339969 | 98.02191681 | 96.24251055 |
| 190530A00030 | 5/30/2019 | 2.36 | 5/28/2021 | 5/30/2019 | 101.92846 | 101.9284569 | 101.9284569 | 101.9284569 | 101.7394522 | 100.8229094 | 99.92283619 | 99.03879169 | 98.17035065 |
| 181210A00015 | 12/10/2018 | 3.12 | 12/11/2023 | 12/10/2018 | 109.82514 | 109.8251398 | 109.8251398 | 109.8251398 | 108.695609 | 105.2113235 | 101.858635 | 98.63187283 | 95.52564187 |
| 181212A00027 | 12/12/2018 | 2.99 | 12/12/2023 | 12/12/2018 | 110.02907 | 110.029065 | 110.029065 | 110.029065 | 108.8907065 | 105.3841453 | 102.010464 | 98.76391856 | 95.63904491 |
| 181226A00045 | 12/26/2018 | 2.87 | 12/28/2020 | 12/26/2018 | 101.31898 | 101.3189816 | 101.3189816 | 101.3189816 | 101.2257209 | 100.7240254 | 100.2272959 | 99.73545911 | 99.24844293 |
| 181226A00059 | 12/26/2018 | 2.87 | 12/28/2020 | 12/26/2018 | 101.31898 | 101.3189816 | 101.3189816 | 101.3189816 | 101.2257209 | 100.7240254 | 100.2272959 | 99.73545911 | 99.24844293 |
| 181226A00060 | 12/26/2018 | 2.9 | 12/27/2021 | 12/26/2018 | 103.94927 | 103.9492712 | 103.9492712 | 103.9492712 | 103.6644864 | 102.171793 | 100.7082597 | 99.27310644 | 97.86558069 |
| 181226A00062 | 12/26/2018 | 3.02 | 12/26/2023 | 12/26/2018 | 109.58981 | 109.5898085 | 109.5898085 | 109.5898085 | 108.4346778 | 104.9155867 | 101.5309338 | 98.27485897 | 95.14179024 |
| 181227A00022 | 12/27/2019 | 2.91 | 12/27/2022 | 12/27/2019 | 106.58346 | 106.5834629 | 106.5834629 | 106.5834629 | 105.9530445 | 103.4501543 | 101.0197538 | 98.65932454 | 96.36645154 |
| 190102A00003 | 1/2/2019 | 2.8 | 1/27/2021 | 1/2/2019 | 101.4909 | 101.4909045 | 101.4909045 | 101.4909045 | 101.3802982 | 100.7957786 | 100.2179903 | 99.64681775 | 99.08214765 |
| 190102A00043 | 1/2/2019 | 2.79 | 1/4/2021 | 1/2/2019 | 101.32826 | 101.3282627 | 101.3282627 | 101.3282627 | 101.2309093 | 100.7099528 | 100.1943517 | 99.68402389 | 99.17888863 |
| 190104A00003 | 1/4/2019 | 2.81 | 1/4/2022 | 1/4/2019 | 103.86929 | 103.8692864 | 103.8692864 | 103.8692864 | 103.5782666 | 102.0649749 | 100.581561 | 99.12721503 | 97.70115609 |
| 190104A00021 | 1/4/2019 | 2.58 | 1/4/2021 | 1/4/2019 | 101.28547 | 101.2854712 | 101.2854712 | 101.2854712 | 101.1879843 | 100.6663441 | 100.1500776 | 99.63910192 | 99.13333597 |
| 190110A00016 | 1/10/2019 | 2.88 | 1/25/2022 | 1/10/2019 | 104.1275 | 104.1274965 | 104.1274965 | 104.1274965 | 103.819147 | 102.2478998 | 100.7083031 | 99.19947001 | 97.72054629 |
| 190115A00025 | 1/15/2019 | 2.96 | 1/12/2024 | 1/15/2019 | 109.50333 | 109.5033347 | 109.5033347 | 109.5033347 | 108.3178273 | 104.7560553 | 101.3318259 | 98.03907614 | 94.87204486 |
| 190122A00041 | 1/22/2019 | 2.71 | 1/22/2021 | 1/22/2019 | 101.48293 | 101.4829282 | 101.4829282 | 101.4829282 | 101.3749999 | 100.8032379 | 100.2379261 | 99.67895588 | 99.12622066 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190128A00035 | 1/28/2019 | 3.04 | 1/26/2024 | 1/28/2019 | 109.89446 | 109.8944587 | 109.8944587 | 109.8944587 | 108.6816482 | 105.0765044 | 101.6116425 | 98.28082736 | 95.07813724 |
| 190131A00007 | 1/31/2019 | 2.67 | 1/31/2023 | 1/31/2019 | 106.68745 | 106.6874515 | 106.6874515 | 106.6874515 | 106.018336 | 103.411566 | 100.8825471 | 98.42848509 | 96.0467056 |
| 190131A00014 | 1/31/2019 | 2.79 | 1/29/2021 | 1/31/2019 | 101.49913 | 101.4991288 | 101.4991288 | 101.4991288 | 101.3873729 | 100.7973441 | 100.21417 | 99.63773165 | 99.06791299 |
| 190208A00005 | 2/8/2019 | 2.63 | 2/8/2023 | 2/8/2019 | 106.63802 | 106.6380232 | 106.6380232 | 106.6380232 | 105.9604184 | 103.3308456 | 100.7802343 | 98.30572482 | 95.90458129 |
| 190211A00017 | 2/11/2019 | 3.12 | 2/11/2026 | 2/11/2019 | 115.90183 | 115.9018336 | 115.9018336 | 115.9018336 | 112.6700269 | 107.0015114 | 101.6580313 | 96.6191911 | 91.86598261 |
| 190215A00005 | 2/15/2019 | 2.89 | 2/15/2024 | 2/15/2019 | 109.4957 | 109.4957038 | 109.4957038 | 109.4957038 | 108.247486 | 104.5949161 | 101.086308 | 97.71517843 | 94.47537546 |
| 190215A00046 | 2/15/2019 | 2.7 | 2/15/2024 | 2/15/2019 | 109.48037 | 109.4803747 | 109.4803747 | 109.4803747 | 108.225124 | 104.5553656 | 101.0306682 | 97.6444827 | 94.39059506 |
| 190222A00021 | 2/22/2019 | 2.95 | 8/21/2024 | 2/22/2019 | 111.0856 | 111.0855973 | 111.0855973 | 111.0855973 | 109.4448686 | 105.2700456 | 101.2793415 | 97.46362217 | 93.81425936 |
| 190314A00018 | 3/14/2019 | 2.53 | 3/14/2022 | 3/14/2019 | 104.16192 | 104.161923 | 104.161923 | 104.161923 | 103.8108144 | 102.0988509 | 100.4233656 | 98.78325761 | 97.17747051 |
| 190315A00014 | 3/15/2019 | 2.74 | 3/15/2024 | 3/15/2019 | 109.14106 | 109.1410593 | 109.1410593 | 109.1410593 | 107.8394459 | 104.11595 | 100.5419411 | 97.11055857 | 93.81530001 |
| 190114A00030 | 1/14/2019 | 2.85 | 1/14/2021 | 1/14/2019 | 101.43191 | 101.4319103 | 101.4319103 | 101.4319103 | 101.3287698 | 100.7800322 | 100.2372405 | 99.70029808 | 99.16911074 |
| 190114A00042 | 1/14/2019 | 2.92 | 1/13/2023 | 1/14/2019 | 106.73187 | 106.7318679 | 106.7318679 | 106.7318679 | 106.0838679 | 103.5342177 | 101.0594159 | 98.65682079 | 96.32390123 |
| 190115A00029 | 1/15/2019 | 2.86 | 11/8/2021 | 1/15/2019 | 103.53984 | 103.5398388 | 103.5398388 | 103.5398388 | 103.2921576 | 101.9341888 | 100.6005574 | 99.29066504 | 98.00393245 |
| 190118A00020 | 1/18/2019 | 2.89 | 7/15/2020 | 1/18/2019 | 100.10748 | 100.1074835 | 100.1074835 | 100.1074835 | 100.1017814 | 100.060186 | 100.0186423 | 99.97715019 | 99.93570953 |
| 190122A00043 | 1/22/2019 | 2.96 | 1/22/2025 | 1/22/2019 | 113.12167 | 113.12167 | 113.12167 | 113.12167 | 111.0906447 | 106.4482962 | 102.0290587 | 97.82101187 | 93.81293695 |
| 190129A00028 | 1/30/2019 | 2.92 | 2/1/2022 | 1/30/2019 | 104.24212 | 104.2421205 | 104.2421205 | 104.2421205 | 103.9278918 | 102.3368002 | 100.7779788 | 99.25051357 | 97.75352482 |
| 190130A00020 | 1/30/2019 | 2.97 | 4/17/2023 | 1/30/2019 | 107.55127 | 107.5512735 | 107.5512735 | 107.5512735 | 106.7963837 | 103.9788181 | 101.2504123 | 98.60782735 | 96.04787054 |
| 190131A00036 | 1/31/2019 | 2.69 | 7/31/2023 | 1/31/2019 | 108.02777 | 108.0277661 | 108.0277661 | 108.0277661 | 107.1206436 | 104.0042387 | 100.9953987 | 98.08979226 | 95.28328929 |
| 190211A00010 | 2/11/2019 | 2.79 | 2/11/2021 | 2/11/2019 | 101.58981 | 101.5898073 | 101.5898073 | 101.5898073 | 101.4705856 | 100.8445948 | 100.2263228 | 99.61562737 | 99.01236973 |
| 190212A00017 | 2/12/2019 | 2.86 | 6/30/2023 | 2/12/2019 | 107.76307 | 107.7630674 | 107.7630674 | 107.7630674 | 106.9081196 | 103.8904431 | 100.9745986 | 98.15658503 | 95.43258234 |
| 190221A00002 | 2/21/2019 | 2.81 | 2/22/2022 | 2/21/2019 | 104.2101 | 104.2101021 | 104.2101021 | 104.2101021 | 103.8778487 | 102.2253096 | 100.6070951 | 99.02220005 | 97.46965887 |
| 190227A00002 | 2/27/2019 | 2.61 | 2/28/2022 | 2/27/2019 | 104.20323 | 104.2032254 | 104.2032254 | 104.2032254 | 103.8647845 | 102.1897359 | 100.5497953 | 98.94392368 | 97.37112311 |
| 190228A00037 | 2/28/2019 | 2.85 | 2/28/2023 | 2/28/2019 | 106.87441 | 106.8744123 | 106.8744123 | 106.8744123 | 106.1776455 | 103.4970926 | 100.8981382 | 98.37777916 | 95.93314471 |
| 190313A00018 | 3/13/2019 | 2.68 | 3/12/2021 | 3/13/2019 | 101.7148 | 101.7148001 | 101.7148001 | 101.7148001 | 101.5787309 | 100.8728913 | 100.1768538 | 99.49041496 | 98.81337713 |
| 190318A00008 | 3/18/2019 | 2.76 | 3/18/2024 | 3/18/2019 | 109.23621 | 109.2362054 | 109.2362054 | 109.2362054 | 107.9283568 | 104.195367 | 100.6125021 | 97.17285967 | 93.86989809 |
| 190318A00021 | 3/18/2019 | 2.76 | 3/18/2024 | 3/18/2019 | 109.23621 | 109.2362054 | 109.2362054 | 109.2362054 | 107.9283568 | 104.195367 | 100.6125021 | 97.17285967 | 93.86989809 |
| 190321A00044 | 3/21/2019 | 2.45 | 3/21/2022 | 3/21/2019 | 104.06913 | 104.0691303 | 104.0691303 | 104.0691303 | 103.7118175 | 101.9820728 | 100.2894893 | 98.63293486 | 97.01132354 |
| 190322A00022 | 3/22/2019 | 2.56 | 7/22/2021 | 3/22/2019 | 102.45143 | 102.451431 | 102.451431 | 102.451431 | 102.2395051 | 101.1707034 | 100.1242046 | 99.09931596 | 98.09537298 |
| 190326A00021 | 3/26/2019 | 2.52 | 3/26/2021 | 3/26/2019 | 101.68962 | 101.6896212 | 101.6896212 | 101.6896212 | 101.5453034 | 100.8013062 | 100.0681915 | 99.34572163 | 98.63366604 |
| 190327A00011 | 3/27/2019 | 2.51 | 9/28/2020 | 3/27/2019 | 100.55878 | 100.5587779 | 100.5587779 | 100.5587779 | 100.5190522 | 100.2696859 | 100.0215541 | 99.77464771 | 99.52895776 |
| 190327A00032 | 3/27/2019 | 2.53 | 1/26/2024 | 3/27/2019 | 108.05581 | 108.0558083 | 108.0558083 | 108.0558083 | 106.8514109 | 103.2790577 | 99.84604625 | 96.54617593 | 93.37355823 |
| 190328A00009 | 3/28/2019 | 2.33 | 3/28/2022 | 3/28/2019 | 103.90264 | 103.9026437 | 103.9026437 | 103.9026437 | 103.5392615 | 101.7924352 | 100.083447 | 98.41113313 | 96.77437842 |
| 190328A00079 | 3/28/2019 | 2.37 | 3/28/2024 | 3/28/2019 | 108.52994 | 108.5299386 | 108.5299386 | 108.5299386 | 107.1985932 | 103.4346944 | 99.82367892 | 96.35845144 | 93.03229152 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190401A00009 | 4/1/2019 | 2.39 | 4/1/2022 | 4/1/2019 | 104.03373 | 104.033726 | 104.033726 | 104.033726 | 103.6664427 | 101.9077223 | 100.1872745 | 98.5039214 | 96.85653402 |
| 190219A00020 | 2/19/2019 | 2.88 | 2/16/2024 | 2/19/2019 | 109.46616 | 109.4661618 | 109.4661618 | 109.4661618 | 108.216209 | 104.561407 | 101.0507503 | 97.67774336 | 94.43622237 |
| 190219A00026 | 2/19/2019 | 2.8 | 2/22/2022 | 2/19/2019 | 104.19342 | 104.1934218 | 104.1934218 | 104.1934218 | 103.8611957 | 102.2087999 | 100.590726 | 99.00596922 | 97.4535638 |
| 190220A00007 | 2/20/2019 | 2.87 | 2/20/2024 | 2/20/2019 | 109.45766 | 109.4576611 | 109.4576611 | 109.4576611 | 108.2002557 | 104.5345451 | 101.0137736 | 97.63139294 | 94.38119021 |
| 190225A00026 | 2/25/2019 | 3.43 | 2/27/2034 | 2/25/2019 | 145.52386 | 145.5238625 | 145.5238625 | 138.9149156 | 124.1617347 | 110.8557889 | 99.19575033 | 88.96575028 | 79.97941063 |
| 190308A00007 | 3/8/2019 | 2.8 | 3/8/2024 | 3/8/2019 | 109.3172 | 109.3171963 | 109.3171963 | 109.3171963 | 108.0282047 | 104.3195287 | 100.7590715 | 97.34006195 | 94.05608063 |
| 190313A00019 | 3/13/2019 | 2.73 | 7/15/2022 | 3/13/2019 | 105.02136 | 105.0213642 | 105.0213642 | 105.0213642 | 104.5517169 | 102.5071375 | 100.5130653 | 98.56792387 | 96.67019764 |
| 190313A00029 | 3/13/2019 | 2.56 | 3/13/2023 | 3/13/2019 | 106.6756 | 106.6756035 | 106.6756035 | 106.6756035 | 105.961455 | 103.2384803 | 100.5995146 | 98.04142184 | 95.56120662 |
| 190321A00020 | 3/21/2019 | 2.62 | 3/22/2021 | 3/21/2019 | 101.738 | 101.7380009 | 101.7380009 | 101.7380009 | 101.5960082 | 100.8627382 | 100.140041 | 99.42768881 | 98.72546059 |
| 190327A00031 | 3/27/2019 | 2.53 | 3/27/2024 | 3/27/2019 | 108.42952 | 108.4295176 | 108.4295176 | 108.4295176 | 107.1083375 | 103.3671839 | 99.77747441 | 96.33220216 | 93.02472938 |
| 190328A00007 | 3/28/2019 | 2.38 | 3/26/2021 | 3/28/2019 | 101.68901 | 101.6890113 | 101.6890113 | 101.6890113 | 101.5444219 | 100.7990621 | 100.0646242 | 99.34086932 | 98.62756562 |
| 190328A00011 | 3/28/2019 | 2.37 | 3/28/2024 | 3/28/2019 | 108.52994 | 108.5299386 | 108.5299386 | 108.5299386 | 107.1985932 | 103.4346944 | 99.82367892 | 96.35845144 | 93.03229152 |
| 190328A00030 | 4/25/2019 | 2.48 | 4/26/2021 | 4/25/2019 | 101.84234 | 101.8423429 | 101.8423429 | 101.8423429 | 101.6766497 | 100.8475552 | 100.0319523 | 99.2295139 | 98.43992305 |
| 190328A00031 | 4/25/2019 | 2.56 | 4/25/2024 | 4/25/2019 | 108.72278 | 108.7227806 | 108.7227806 | 108.7227806 | 107.343119 | 103.5200551 | 99.85460873 | 96.33946659 | 92.96769347 |
| 190329A00016 | 3/29/2019 | 2.56 | 3/29/2022 | 3/29/2019 | 104.01308 | 104.0130832 | 104.0130832 | 104.0130832 | 103.6497613 | 101.9045985 | 100.1971914 | 98.5263796 | 96.89105087 |
| 190404A00023 | 4/5/2019 | 2.62 | 5/16/2022 | 4/5/2019 | 104.42842 | 104.4284209 | 104.4284209 | 104.4284209 | 104.0187441 | 102.140426 | 100.3053008 | 98.51212136 | 96.75968451 |
| 190408A00004 | 4/8/2019 | 2.6 | 10/8/2021 | 4/8/2019 | 102.99652 | 102.9965156 | 102.9965156 | 102.9965156 | 102.7660703 | 101.4855136 | 100.2339779 | 99.01047628 | 97.81406639 |
| 190409A00009 | 4/9/2019 | 2.57 | 4/9/2021 | 4/9/2019 | 101.8167 | 101.8166994 | 101.8166994 | 101.8166994 | 101.6629845 | 100.8802313 | 100.1095144 | 99.35055767 | 98.60309326 |
| 190416A00026 | 4/16/2019 | 2.63 | 10/14/2021 | 4/16/2019 | 103.07436 | 103.0743615 | 103.0743615 | 103.0743615 | 102.8409597 | 101.546328 | 100.2792891 | 99.03896248 | 97.82450545 |
| 190426A00012 | 5/1/2019 | 2.57 | 7/15/2022 | 5/1/2019 | 104.6913 | 104.6913047 | 104.6913047 | 104.6913047 | 104.2223513 | 102.1812329 | 100.1905532 | 98.24873767 | 96.35427264 |
| 190430A00002 | 4/30/2019 | 2.4 | 11/2/2022 | 4/30/2019 | 105.41094 | 105.4109382 | 105.4109382 | 105.4109382 | 104.8341558 | 102.483652 | 100.1976376 | 97.97399523 | 95.81068892 |
| 190507A00014 | 5/7/2019 | 2.6 | 5/7/2024 | 5/7/2019 | 108.95284 | 108.9528418 | 108.9528418 | 108.9528418 | 107.5479282 | 103.6893838 | 99.99110721 | 96.4456278 | 93.04586128 |
| 190510A00005 | 5/10/2019 | 2.47 | 5/10/2021 | 5/10/2019 | 101.91961 | 101.9196074 | 101.9196074 | 101.9196074 | 101.7437341 | 100.8761665 | 100.0233684 | 99.18496485 | 98.36059352 |
| 190513A00076 | 5/13/2019 | 2.42 | 11/12/2021 | 5/13/2019 | 102.95845 | 102.9584487 | 102.9584487 | 102.9584487 | 102.7087596 | 101.3440498 | 100.0039792 | 98.68793806 | 97.39533609 |
| 190514A00013 | 5/14/2019 | 2.49 | 11/16/2020 | 5/14/2019 | 100.86263 | 100.8626323 | 100.8626323 | 100.8626323 | 100.7947494 | 100.4097486 | 100.0276946 | 99.64855345 | 99.27229192 |
| 190214A00004 | 2/14/2019 | 2.6 | 2/14/2022 | 2/14/2019 | 104.09044 | 104.0904436 | 104.0904436 | 104.0904436 | 103.764277 | 102.1314488 | 100.5323088 | 98.96588066 | 97.43122579 |
| 190214A00006 | 2/14/2019 | 2.67 | 2/14/2024 | 2/14/2019 | 109.36316 | 109.3631638 | 109.3631638 | 109.3631638 | 108.1103532 | 104.4455099 | 100.9254648 | 97.54368432 | 94.29396907 |
| 190215A00017 | 2/15/2019 | 2.89 | 2/15/2024 | 2/15/2019 | 109.4957 | 109.4957038 | 109.4957038 | 109.4957038 | 108.247486 | 104.5949161 | 101.086308 | 97.71517843 | 94.47537546 |
| 190226A00006 | 2/26/2019 | 2.64 | 2/26/2024 | 2/26/2019 | 109.33656 | 109.336561 | 109.336561 | 109.336561 | 108.0612237 | 104.3634343 | 100.8128503 | 97.40277762 | 94.12686795 |
| 190326A00002 | 3/26/2019 | 2.56 | 9/26/2022 | 3/26/2019 | 105.12721 | 105.1272108 | 105.1272108 | 105.1272108 | 104.5880386 | 102.3473712 | 100.1658244 | 98.04139889 | 95.97218109 |
| 190327A00006 | 3/27/2019 | 2.53 | 3/27/2024 | 3/27/2019 | 108.42952 | 108.4295176 | 108.4295176 | 108.4295176 | 107.1083375 | 103.3671839 | 99.77747441 | 96.33220216 | 93.02472938 |
| 190328A00003 | 3/28/2019 | 2.64 | 9/30/2024 | 3/28/2019 | 110.04794 | 110.0479403 | 110.0479403 | 110.0479403 | 108.323835 | 104.0659361 | 100.0003041 | 96.11717491 | 92.40733959 |
| 190328A00022 | 3/28/2019 | 2.53 | 11/20/2020 | 3/28/2019 | 100.90326 | 100.9032612 | 100.9032612 | 100.9032612 | 100.8329572 | 100.4368599 | 100.0438781 | 99.65397497 | 99.2671145 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190328A00083 | 3/28/2019 | 2.37 | 3/28/2024 | 3/28/2019 | 108.52994 | 108.5299386 | 108.5299386 | 108.5299386 | 107.1985932 | 103.4346944 | 99.82367892 | 96.35845144 | 93.03229152 |
| 190329A00034 | 3/29/2019 | 2.56 | 3/29/2022 | 3/29/2019 | 104.01308 | 104.0130832 | 104.0130832 | 104.0130832 | 103.6497613 | 101.9045985 | 100.1971914 | 98.5263796 | 96.89105087 |
| 190403A00006 | 4/3/2019 | 2.48 | 4/3/2024 | 4/3/2019 | 108.98586 | 108.9858575 | 108.9858575 | 108.9858575 | 107.6404584 | 103.8522351 | 100.2183742 | 96.7317001 | 93.38541637 |
| 190403A00024 | 4/3/2019 | 2.61 | 7/29/2022 | 4/3/2019 | 104.86347 | 104.8634661 | 104.8634661 | 104.8634661 | 104.3804931 | 102.3005903 | 100.2726843 | 98.29512634 | 96.36633297 |
| 190426A00008 | 4/26/2019 | 2.57 | 4/26/2022 | 4/26/2019 | 104.18862 | 104.1886237 | 104.1886237 | 104.1886237 | 103.7987617 | 101.9761076 | 100.1942982 | 98.45216675 | 96.74858766 |
| 190429A00004 | 4/29/2019 | 2.65 | 4/15/2024 | 4/29/2019 | 109.00497 | 109.0049684 | 109.0049684 | 109.0049684 | 107.6436131 | 103.8416659 | 100.1953963 | 96.69758456 | 93.34138755 |
| 190509A00019 | 5/9/2019 | 2.5 | 10/12/2021 | 5/9/2019 | 102.89227 | 102.8922673 | 102.8922673 | 102.8922673 | 102.6600535 | 101.3711806 | 100.1103578 | 98.87666948 | 97.66924008 |
| 190515A00024 | 5/15/2019 | 2.38 | 5/17/2021 | 5/15/2019 | 101.8823 | 101.8823006 | 101.8823006 | 101.8823006 | 101.7013558 | 100.8149277 | 99.94392252 | 99.08794022 | 98.2465944 |
| 190515A00059 | 5/15/2019 | 2.38 | 5/14/2021 | 5/15/2019 | 101.86469 | 101.864689 | 101.864689 | 101.864689 | 101.6859474 | 100.8077607 | 99.94471407 | 99.09641841 | 98.2624977 |
| 190521A00068 | 5/21/2019 | 2.47 | 9/15/2021 | 5/21/2019 | 102.68931 | 102.6893053 | 102.6893053 | 102.6893053 | 102.4665422 | 101.2467762 | 100.0559803 | 98.89313159 | 97.75725444 |
| 190522A00003 | 5/22/2019 | 2.55 | 5/22/2024 | 5/22/2019 | 108.85162 | 108.8516242 | 108.8516242 | 108.8516242 | 107.4168172 | 103.5219494 | 99.79044575 | 96.21461732 | 92.78717661 |
| 190523A00014 | 5/23/2019 | 2.5 | 11/15/2023 | 5/23/2019 | 107.51076 | 107.5107602 | 107.5107602 | 107.5107602 | 106.4363003 | 103.0599817 | 99.80909161 | 96.6783239 | 93.66262496 |
| 190523A00016 | 5/23/2019 | 2.48 | 2/15/2023 | 5/23/2019 | 105.80116 | 105.8011626 | 105.8011626 | 105.8011626 | 105.1214524 | 102.4930025 | 99.94381134 | 97.4709952 | 95.07179565 |
| 190524A00004 | 5/24/2019 | 2.27 | 5/24/2021 | 5/24/2019 | 101.95913 | 101.9591301 | 101.9591301 | 101.9591301 | 101.7726097 | 100.8648946 | 99.97333168 | 99.09749254 | 98.2369639 |
| 190528A00015 | 5/28/2019 | 2.42 | 5/27/2022 | 5/28/2019 | 104.11395 | 104.1139484 | 104.1139484 | 104.1139484 | 103.6942104 | 101.7900451 | 99.93029981 | 98.11367355 | 96.33891206 |
| 190528A00042 | 5/28/2019 | 2.38 | 11/29/2021 | 5/28/2019 | 103.01561 | 103.0156131 | 103.0156131 | 103.0156131 | 102.7539206 | 101.3422003 | 99.95674758 | 98.5968928 | 97.26198864 |
| 181126A00047 | 11/26/2018 | 3.19 | 11/26/2021 | 11/26/2018 | 104.15228 | 104.152276 | 104.152276 | 104.152276 | 103.8910876 | 102.4791051 | 101.0932482 | 99.7328538 | 98.39728098 |
| 181127A00027 | 11/27/2018 | 3.25 | 11/28/2022 | 11/27/2018 | 107.20301 | 107.2030142 | 107.2030142 | 107.2030142 | 106.5992923 | 104.16519 | 101.7994284 | 99.49970694 | 97.26381618 |
| 181129A00027 | 11/29/2018 | 3.16 | 11/29/2021 | 11/29/2018 | 104.13344 | 104.1334366 | 104.1334366 | 104.1334366 | 103.8701704 | 102.4501083 | 101.0564581 | 99.68854614 | 98.34572131 |
| 181211A00031 | 12/11/2018 | 2.95 | 12/11/2023 | 12/11/2018 | 109.88152 | 109.8815236 | 109.8815236 | 109.8815236 | 108.7455961 | 105.2442041 | 101.8754225 | 98.63352263 | 95.51305505 |
| 181217A00010 | 12/17/2018 | 3.11 | 12/15/2023 | 12/17/2018 | 109.82135 | 109.8213537 | 109.8213537 | 109.8213537 | 108.6847333 | 105.1901288 | 101.8279052 | 98.5923408 | 95.47799255 |
| 181218A00072 | 12/18/2018 | 3.04 | 12/19/2022 | 12/18/2018 | 106.85016 | 106.8501626 | 106.8501626 | 106.8501626 | 106.2268464 | 103.7416074 | 101.3277315 | 98.98276053 | 96.70433638 |
| 181219A00006 | 12/19/2018 | 3.06 | 12/19/2023 | 12/19/2018 | 109.67732 | 109.6773173 | 109.6773173 | 109.6773173 | 108.5342218 | 105.0317375 | 101.6623518 | 98.42029395 | 95.30007524 |
| 181220A00027 | 12/20/2018 | 2.97 | 2/28/2022 | 12/20/2018 | 104.5211 | 104.5210987 | 104.5210987 | 104.5210987 | 104.1831759 | 102.5103544 | 100.8725067 | 99.2685998 | 97.6976416 |
| 181221A00018 | 12/21/2018 | 2.98 | 12/21/2021 | 12/21/2018 | 104.02531 | 104.0253133 | 104.0253133 | 104.0253133 | 103.745107 | 102.2676907 | 100.8188401 | 99.39779844 | 98.00383549 |
| 181226A00024 | 12/26/2018 | 2.9 | 12/27/2021 | 12/26/2018 | 103.94927 | 103.9492712 | 103.9492712 | 103.9492712 | 103.6644864 | 102.171793 | 100.7082597 | 99.27310644 | 97.86558069 |
| 190103A00010 | 1/3/2019 | 2.7 | 1/3/2024 | 1/3/2019 | 109.17344 | 109.1734421 | 109.1734421 | 109.1734421 | 107.999353 | 104.4502503 | 101.037934 | 97.75639136 | 94.59990796 |
| 190107A00006 | 1/7/2019 | 2.82 | 3/29/2021 | 1/7/2019 | 101.93491 | 101.9349113 | 101.9349113 | 101.9349113 | 101.788637 | 101.0354303 | 100.2933519 | 99.56215659 | 98.84160628 |
| 190107A00021 | 1/7/2019 | 2.79 | 1/7/2021 | 1/7/2019 | 101.34946 | 101.3494646 | 101.3494646 | 101.3494646 | 101.2503805 | 100.7211194 | 100.1973892 | 99.67910327 | 99.16617707 |
| 190107A00024 | 1/7/2019 | 2.91 | 1/5/2024 | 1/7/2019 | 109.27461 | 109.2746067 | 109.2746067 | 109.2746067 | 108.1028863 | 104.5633593 | 101.1600004 | 97.88683235 | 94.73817379 |
| 190110A00004 | 1/10/2019 | 3.09 | 1/10/2025 | 1/10/2019 | 112.71075 | 112.7107514 | 112.7107514 | 112.7107514 | 110.727183 | 106.1514867 | 101.7938379 | 97.64268232 | 93.68713947 |
| 190110A00005 | 1/10/2019 | 3.2 | 1/9/2026 | 1/10/2019 | 116.09355 | 116.0935517 | 116.0935517 | 116.0935517 | 112.9864275 | 107.3967749 | 102.1231612 | 97.14602263 | 92.44710672 |
| 190110A00010 | 1/10/2019 | 2.97 | 1/16/2024 | 1/10/2019 | 109.56846 | 109.568457 | 109.568457 | 109.568457 | 108.3753627 | 104.8020306 | 101.3669971 | 98.06415101 | 94.88768658 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190110A00073 | 1/10/2019 | 2.68 | 8/6/2021 | 1/10/2019 | 102.85846 | 102.8584584 | 102.8584584 | 102.8584584 | 102.6425091 | 101.527846 | 100.4373476 | 99.37023427 | 98.32575959 |
| 190110A00078 | 1/10/2019 | 2.69 | 12/7/2021 | 1/10/2019 | 103.74692 | 103.7469225 | 103.7469225 | 103.7469225 | 103.4773145 | 102.0350801 | 100.6201176 | 99.23172037 | 97.86920572 |
| 190110A00079 | 1/10/2019 | 2.68 | 10/7/2021 | 1/10/2019 | 103.299 | 103.2990045 | 103.2990045 | 103.2990045 | 103.0680789 | 101.7845273 | 100.5303979 | 99.30467925 | 98.10640624 |
| 190110A00090 | 1/10/2019 | 2.88 | 10/7/2020 | 1/10/2019 | 100.71635 | 100.7163517 | 100.7163517 | 100.7163517 | 100.6716486 | 100.3971862 | 100.1242254 | 99.85275398 | 99.58275968 |
| 190115A00034 | 1/15/2019 | 2.91 | 1/17/2023 | 1/15/2019 | 106.7351 | 106.7351009 | 106.7351009 | 106.7351009 | 106.0830129 | 103.5227552 | 101.0378786 | 98.62571322 | 96.28370149 |
| 190131A00027 | 1/31/2019 | 2.86 | 1/31/2023 | 1/31/2019 | 106.70546 | 106.7054631 | 106.7054631 | 106.7054631 | 106.0391921 | 103.4423856 | 100.9228281 | 98.4777503 | 96.10450116 |
| 190131A00048 | 1/31/2019 | 2.8 | 7/31/2020 | 1/31/2019 | 100.21605 | 100.2160519 | 100.2160519 | 100.2160519 | 100.204267 | 100.1183206 | 100.0325192 | 99.9468623 | 99.86134964 |
| 180927A00015 | 9/27/2018 | 3.02 | 9/27/2022 | 9/27/2018 | 106.5918 | 106.5917963 | 106.5917963 | 106.5917963 | 106.0460549 | 103.7776606 | 101.5692357 | 99.41874706 | 97.32424884 |
| 180927A00029 | 9/27/2018 | 3.01 | 10/27/2020 | 9/27/2018 | 100.90735 | 100.9073459 | 100.9073459 | 100.9073459 | 100.8513313 | 100.5213411 | 100.1935099 | 99.86781657 | 99.54424036 |
| 180928A00033 | 9/28/2018 | 2.87 | 9/28/2020 | 9/28/2018 | 100.68798 | 100.6879774 | 100.6879774 | 100.6879774 | 100.6481496 | 100.3981391 | 100.1493712 | 99.90183659 | 99.65552612 |
| 181001A00019 | 10/1/2018 | 3.02 | 10/1/2020 | 10/1/2018 | 100.70906 | 100.7090596 | 100.7090596 | 100.7090596 | 100.6677349 | 100.4098408 | 100.1532635 | 99.89799288 | 99.64401905 |
| 181005A00017 | 10/5/2018 | 3.27 | 4/11/2023 | 10/5/2018 | 108.34937 | 108.3493656 | 108.3493656 | 108.3493656 | 107.5992895 | 104.7867929 | 102.0627531 | 99.42384785 | 96.86690297 |
| 181010A00023 | 10/10/2018 | 3.41 | 4/1/2024 | 10/10/2018 | 111.79237 | 111.7923731 | 111.7923731 | 111.7923731 | 110.4448607 | 106.6279571 | 102.9653605 | 99.44992913 | 96.07489784 |
| 181016A00084 | 10/16/2018 | 3.21 | 10/17/2022 | 10/16/2018 | 106.76805 | 106.76805 | 106.76805 | 106.76805 | 106.2052617 | 103.8897898 | 101.6365898 | 99.44359397 | 97.30881823 |
| 181114A00012 | 11/14/2018 | 3.13 | 11/14/2022 | 11/14/2018 | 107.2422 | 107.2422011 | 107.2422011 | 107.2422011 | 106.6492946 | 104.2439083 | 101.9052364 | 99.63106073 | 97.41925015 |
| 181121A00013 | 11/21/2018 | 3.11 | 11/20/2020 | 11/21/2018 | 101.13351 | 101.133508 | 101.133508 | 101.133508 | 101.0631123 | 100.6664589 | 100.2729242 | 99.88247147 | 99.49506452 |
| 181123A00013 | 11/23/2018 | 3.14 | 11/23/2021 | 11/23/2018 | 104.0573 | 104.0572974 | 104.0572974 | 104.0572974 | 103.7983462 | 102.3952892 | 101.0180582 | 99.66600116 | 98.33848745 |
| 181126A00046 | 11/26/2018 | 3.13 | 11/25/2020 | 11/26/2018 | 101.18126 | 101.1812641 | 101.1812641 | 101.1812641 | 101.1078403 | 100.697311 | 100.2901148 | 99.88621121 | 99.48556044 |
| 181204A00023 | 12/4/2018 | 3.16 | 12/3/2021 | 12/4/2018 | 104.16538 | 104.1653789 | 104.1653789 | 104.1653789 | 103.8990158 | 102.4680081 | 101.0638057 | 99.68572016 | 98.33308626 |
| 181206A00009 | 12/6/2018 | 3.03 | 12/4/2020 | 12/6/2018 | 101.20944 | 101.2094381 | 101.2094381 | 101.2094381 | 101.1305993 | 100.6952343 | 100.263615 | 99.835693 | 99.41142106 |
| 181214A00016 | 12/14/2018 | 3.03 | 12/14/2020 | 12/14/2018 | 101.28651 | 101.2865126 | 101.2865126 | 101.2865126 | 101.2016528 | 100.7385728 | 100.2797368 | 99.82508633 | 99.3745643 |
| 181219A00023 | 12/19/2018 | 2.97 | 12/20/2021 | 12/19/2018 | 104.00294 | 104.002937 | 104.002937 | 104.002937 | 103.7235454 | 102.2489491 | 100.802815 | 99.38439054 | 97.99294919 |
| 181226A00036 | 12/26/2018 | 3.02 | 12/26/2023 | 12/26/2018 | 109.58981 | 109.5898085 | 109.5898085 | 109.5898085 | 108.4346778 | 104.9155867 | 101.5309338 | 98.27485897 | 95.14179024 |
| 190104A00012 | 1/4/2019 | 2.76 | 1/4/2021 | 1/4/2019 | 101.31261 | 101.3126076 | 101.3126076 | 101.3126076 | 101.2152625 | 100.6943532 | 100.1787991 | 99.66851789 | 99.16342889 |
| 190104A00033 | 1/4/2019 | 3.37 | 1/31/2029 | 1/4/2019 | 126.34883 | 126.348832 | 126.348832 | 126.348832 | 118.0555856 | 109.466387 | 101.5881612 | 94.35787354 | 87.71839822 |
| 190107A00022 | 1/7/2019 | 2.83 | 1/7/2022 | 1/7/2019 | 103.92108 | 103.9210843 | 103.9210843 | 103.9210843 | 103.6275665 | 102.105876 | 100.6143146 | 99.15206186 | 97.71832634 |
| 190107A00023 | 1/7/2019 | 2.87 | 1/6/2023 | 1/7/2019 | 106.55385 | 106.5538508 | 106.5538508 | 106.5538508 | 105.9134835 | 103.3846149 | 100.929618 | 98.54590163 | 96.23098206 |
| 190110A00003 | 1/10/2019 | 2.97 | 1/10/2024 | 1/10/2019 | 109.52427 | 109.5242745 | 109.5242745 | 109.5242745 | 108.3423202 | 104.7853852 | 101.3656423 | 98.07705173 | 94.91387365 |
| 190110A00006 | 1/10/2019 | 2.73 | 11/15/2022 | 1/10/2019 | 106.28752 | 106.2875165 | 106.2875165 | 106.2875165 | 105.6960986 | 103.2995572 | 100.9696266 | 98.70408896 | 96.50081349 |
| 190110A00028 | 1/10/2019 | 2.78 | 1/10/2024 | 1/10/2019 | 109.50929 | 109.5092874 | 109.5092874 | 109.5092874 | 108.3208304 | 104.7474489 | 101.3122924 | 98.00925995 | 94.8325547 |
| 190110A00077 | 1/10/2019 | 2.68 | 12/8/2020 | 1/10/2019 | 101.14552 | 101.1455188 | 101.1455188 | 101.1455188 | 101.0641782 | 100.6172497 | 100.1742784 | 99.73521193 | 99.29999858 |
| 190315A00026 | 3/15/2019 | 2.66 | 1/19/2021 | 3/15/2019 | 101.35548 | 101.355482 | 101.355482 | 101.355482 | 101.2495336 | 100.6873907 | 100.1314893 | 99.58172572 | 99.03799865 |
| 190320A00005 | 3/20/2019 | 2.75 | 3/20/2024 | 3/20/2019 | 109.21224 | 109.2122365 | 109.2122365 | 109.2122365 | 107.9006575 | 104.1629562 | 100.5757582 | 97.13213454 | 93.82551932 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190326A00003 | 3/26/2019 | 2.57 | 3/27/2023 | 3/26/2019 | 106.29031 | 106.2903078 | 106.2903078 | 106.2903078 | 105.5646268 | 102.8212038 | 100.1631881 | 97.58735921 | 95.09064272 |
| 190327A00013 | 3/27/2019 | 2.53 | 3/27/2024 | 3/27/2019 | 108.42952 | 108.4295176 | 108.4295176 | 108.4295176 | 107.1083375 | 103.3671839 | 99.77747441 | 96.33220216 | 93.02472938 |
| 190328A00023 | 3/28/2019 | 2.51 | 2/24/2021 | 3/28/2019 | 101.49462 | 101.4946237 | 101.4946237 | 101.4946237 | 101.3680688 | 100.7068325 | 100.0542058 | 99.41002148 | 98.77411649 |
| 190402A00014 | 4/2/2019 | 2.64 | 4/2/2024 | 4/2/2019 | 108.88319 | 108.8831892 | 108.8831892 | 108.8831892 | 107.5481338 | 103.7829462 | 100.1706548 | 96.70416963 | 93.37677484 |
| 190404A00024 | 4/5/2019 | 2.61 | 2/15/2022 | 4/5/2019 | 103.832 | 103.8320047 | 103.8320047 | 103.8320047 | 103.5063851 | 101.8776119 | 100.282411 | 98.71980991 | 97.18887355 |
| 190409A00020 | 4/9/2019 | 2.41 | 4/8/2022 | 4/9/2019 | 104.11367 | 104.1136677 | 104.1136677 | 104.1136677 | 103.7396159 | 101.9609676 | 100.2213749 | 98.51966081 | 96.85469549 |
| 190409A00033 | 4/9/2019 | 2.62 | 6/9/2023 | 4/9/2019 | 106.90231 | 106.9023109 | 106.9023109 | 106.9023109 | 106.0801826 | 103.1317447 | 100.2810595 | 97.52435792 | 94.85803749 |
| 190409A00041 | 4/9/2019 | 2.57 | 4/5/2021 | 4/9/2019 | 101.79109 | 101.7910898 | 101.7910898 | 101.7910898 | 101.6402159 | 100.8684883 | 100.1084587 | 99.35986263 | 98.62244341 |
| 190411A00019 | 5/1/2019 | 2.63 | 5/2/2022 | 5/1/2019 | 104.33781 | 104.3378125 | 104.3378125 | 104.3378125 | 103.9419705 | 102.101743 | 100.3030645 | 98.54475741 | 96.82568523 |
| 190412A00014 | 4/12/2019 | 2.63 | 4/12/2021 | 4/12/2019 | 101.88352 | 101.8835198 | 101.8835198 | 101.8835198 | 101.7276361 | 100.9364077 | 100.1574732 | 99.39054736 | 98.63535397 |
| 190424A00019 | 4/24/2019 | 2.67 | 4/24/2024 | 4/24/2019 | 109.14004 | 109.1400378 | 109.1400378 | 109.1400378 | 107.7602195 | 103.9318751 | 100.2611765 | 96.74081141 | 93.36384578 |
| 190424A00023 | 4/24/2019 | 2.43 | 4/24/2023 | 4/24/2019 | 106.5889 | 106.5889048 | 106.5889048 | 106.5889048 | 105.82504 | 102.9905153 | 100.2465745 | 97.58982701 | 95.01702946 |
| 190426A00009 | 4/26/2019 | 2.63 | 4/26/2024 | 4/26/2019 | 108.99885 | 108.9988473 | 108.9988473 | 108.9988473 | 107.6158015 | 103.7848464 | 100.1118779 | 96.58956671 | 93.21096181 |
| 190430A00001 | 4/30/2019 | 2.47 | 5/2/2024 | 4/30/2019 | 109.13624 | 109.1362443 | 109.1362443 | 109.1362443 | 107.7321912 | 103.8638226 | 100.1560448 | 96.60137821 | 93.19272939 |
| 190507A00006 | 5/7/2019 | 2.57 | 5/8/2023 | 5/7/2019 | 106.55321 | 106.5532059 | 106.5532059 | 106.5532059 | 105.7751829 | 102.9158254 | 100.1487072 | 97.47037004 | 94.87750428 |
| 190507A00027 | 5/7/2019 | 2.59 | 5/7/2024 | 5/7/2019 | 108.91399 | 108.9139883 | 108.9139883 | 108.9139883 | 107.509276 | 103.6514759 | 99.95392098 | 96.40914152 | 93.01005406 |
| 190514A00073 | 5/14/2019 | 2.53 | 5/14/2024 | 5/14/2019 | 108.72391 | 108.7239057 | 108.7239057 | 108.7239057 | 107.3059849 | 103.4339712 | 99.72356067 | 96.16718537 | 92.75767055 |
| 190517A00005 | 5/17/2019 | 2.31 | 5/17/2024 | 5/17/2019 | 108.60557 | 108.605572 | 108.605572 | 108.605572 | 107.173597 | 103.2768304 | 99.54352213 | 95.96598242 | 92.53692272 |
| 190520A00025 | 5/20/2019 | 2.32 | 5/20/2021 | 5/20/2019 | 101.9802 | 101.9802007 | 101.9802007 | 101.9802007 | 101.7965851 | 100.899669 | 100.0185254 | 99.15274091 | 98.30191632 |
| 190523A00009 | 5/23/2019 | 2.43 | 5/21/2021 | 5/23/2019 | 101.95086 | 101.9508625 | 101.9508625 | 101.9508625 | 101.7669388 | 100.8693041 | 99.9874741 | 99.12103401 | 98.26958337 |
| 190523A00015 | 5/23/2019 | 2.51 | 4/1/2024 | 5/23/2019 | 108.38452 | 108.3845182 | 108.3845182 | 108.3845182 | 107.0539137 | 103.3006995 | 99.69989617 | 96.24443414 | 92.92761697 |
| 190524A00005 | 5/24/2019 | 2.34 | 11/24/2020 | 5/24/2019 | 100.90715 | 100.907148 | 100.907148 | 100.907148 | 100.8343185 | 100.4265628 | 100.0221066 | 99.62090995 | 99.22293354 |
| 190531A00009 | 6/5/2019 | 2.1 | 6/3/2022 | 6/5/2019 | 103.86475 | 103.8647495 | 103.8647495 | 103.8647495 | 103.4372025 | 101.5107402 | 99.6297504 | 97.79288565 | 95.99884763 |
| 190604A00033 | 6/4/2019 | 2.23 | 6/4/2021 | 6/4/2019 | 101.84681 | 101.8468097 | 101.8468097 | 101.8468097 | 101.653676 | 100.7185144 | 99.80050772 | 98.89918731 | 98.01410135 |
| 190604A00048 | 6/4/2019 | 2.23 | 6/4/2021 | 6/4/2019 | 101.84681 | 101.8468097 | 101.8468097 | 101.8468097 | 101.653676 | 100.7185144 | 99.80050772 | 98.89918731 | 98.01410135 |
| 190606A00027 | 6/6/2019 | 2.51 | 6/5/2026 | 6/6/2019 | 113.14024 | 113.1402428 | 113.1402428 | 113.1402428 | 109.4753739 | 103.6029617 | 98.0855225 | 92.89976656 | 88.02404636 |
| 190607A00011 | 6/7/2019 | 1.94 | 6/7/2021 | 6/7/2019 | 101.7294 | 101.7294031 | 101.7294031 | 101.7294031 | 101.5344434 | 100.589738 | 99.66255096 | 98.75239842 | 97.85881422 |
| 190610A00018 | 6/10/2019 | 2.52 | 6/10/2026 | 6/10/2019 | 113.22998 | 113.2299793 | 113.2299793 | 113.2299793 | 109.5428785 | 103.655707 | 98.1251496 | 92.92775777 | 88.04174014 |
| 190611A00006 | 6/11/2019 | 2.26 | 6/11/2021 | 6/11/2019 | 101.91361 | 101.9136089 | 101.9136089 | 101.9136089 | 101.7168765 | 100.7623461 | 99.82568567 | 98.90639672 | 98.00399922 |
| 190611A00047 | 6/11/2019 | 2.26 | 6/11/2021 | 6/11/2019 | 101.91361 | 101.9136089 | 101.9136089 | 101.9136089 | 101.7168765 | 100.7623461 | 99.82568567 | 98.90639672 | 98.00399922 |
| 190618A00002 | 6/18/2019 | 2.11 | 6/18/2025 | 6/18/2019 | 110.00458 | 110.0045763 | 110.0045763 | 110.0045763 | 107.6060815 | 102.6532783 | 97.95831581 | 93.50644977 | 89.28385372 |
| 190620A00027 | 6/20/2019 | 2.14 | 6/20/2024 | 6/20/2019 | 107.38844 | 107.3884428 | 107.3884428 | 107.3884428 | 105.901761 | 101.9603467 | 98.18778823 | 94.57597392 | 91.1172249 |
| 190620A00044 | 6/20/2019 | 2.04 | 6/20/2022 | 6/20/2019 | 103.47749 | 103.4774926 | 103.4774926 | 103.4774926 | 103.0355046 | 101.073484 | 99.15876395 | 97.28991234 | 95.46555044 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190625A00013 | 6/25/2019 | 2.01 | 6/24/2022 | 6/25/2019 | 103.43656 | 103.4365627 | 103.4365627 | 103.4365627 | 102.990721 | 101.0183319 | 99.09375073 | 97.21552215 | 95.38224537 |
| 190626A00009 | 6/26/2019 | 2.08 | 6/25/2021 | 6/26/2019 | 101.80111 | 101.8011129 | 101.8011129 | 101.8011129 | 101.5974635 | 100.6056614 | 99.63315726 | 98.67939203 | 97.74382815 |
| 190626A00019 | 6/26/2019 | 2.1 | 6/24/2022 | 6/26/2019 | 103.617 | 103.6170035 | 103.6170035 | 103.6170035 | 103.1707958 | 101.196565 | 99.27017799 | 97.39017855 | 95.55516485 |
| 190627A00052 | 6/27/2019 | 2.1 | 6/27/2022 | 6/27/2019 | 103.63191 | 103.6319134 | 103.6319134 | 103.6319134 | 103.182722 | 101.2002464 | 99.26600596 | 97.37852649 | 95.53638925 |
| 190703A00022 | 7/3/2019 | 2.08 | 7/5/2022 | 7/3/2019 | 103.6311 | 103.6310958 | 103.6310958 | 103.6310958 | 103.1740914 | 101.1703806 | 99.21582179 | 97.30889791 | 95.44814946 |
| 190708A00001 | 7/8/2019 | 1.99 | 7/8/2022 | 7/8/2019 | 103.83163 | 103.8316322 | 103.8316322 | 103.8316322 | 103.3695714 | 101.3489068 | 99.37804922 | 97.45545236 | 95.5796292 |
| 190711A00016 | 7/11/2019 | 2.17 | 7/11/2022 | 7/11/2019 | 103.8454 | 103.8454013 | 103.8454013 | 103.8454013 | 103.3821168 | 101.3603925 | 99.38850263 | 97.46489835 | 95.58809013 |
| 190722A00027 | 7/22/2019 | 2.25 | 7/22/2020 | 7/22/2019 | 100.11913 | 100.1191334 | 100.1191334 | 100.1191334 | 100.1107745 | 100.0498053 | 99.98892358 | 99.92812928 | 99.86742219 |
| 190724A00005 | 7/24/2019 | 2.12 | 7/26/2021 | 7/24/2019 | 101.99967 | 101.9996679 | 101.9996679 | 101.9996679 | 101.7873223 | 100.7102519 | 99.65589593 | 98.6235418 | 97.61250634 |
| 190729A00006 | 7/29/2019 | 2.14 | 7/29/2022 | 7/29/2019 | 103.87575 | 103.8757522 | 103.8757522 | 103.8757522 | 103.3949039 | 101.3255377 | 99.30795735 | 97.34052033 | 95.4216489 |
| 190730A00007 | 7/30/2019 | 2.19 | 7/30/2024 | 7/30/2019 | 107.797 | 107.7969983 | 107.7969983 | 107.7969983 | 106.2235401 | 102.1719127 | 98.29769227 | 94.59216203 | 91.04708196 |
| 190802A00016 | 8/2/2019 | 2.01 | 7/12/2023 | 8/2/2019 | 105.24635 | 105.2463498 | 105.2463498 | 105.2463498 | 104.3822466 | 101.3715034 | 98.46348788 | 95.65412241 | 92.93951577 |
| 190802A00032 | 8/2/2019 | 2.01 | 8/2/2024 | 8/2/2019 | 107.07029 | 107.0702885 | 107.0702885 | 107.0702885 | 105.4945089 | 101.4500132 | 97.58306898 | 93.88493395 | 90.34734509 |
| 190401A00010 | 4/1/2019 | 2.62 | 4/1/2024 | 4/1/2019 | 108.80103 | 108.8010338 | 108.8010338 | 108.8010338 | 107.4683628 | 103.7073643 | 100.0990085 | 96.63621686 | 93.31228463 |
| 190402A00010 | 4/2/2019 | 2.4 | 4/6/2022 | 4/2/2019 | 104.08308 | 104.083078 | 104.083078 | 104.083078 | 103.7109739 | 101.9380903 | 100.2040366 | 98.50763557 | 96.84775768 |
| 190408A00047 | 4/8/2019 | 2.43 | 4/7/2023 | 4/8/2019 | 106.4802 | 106.4802032 | 106.4802032 | 106.4802032 | 105.7375006 | 102.9507 | 100.2516779 | 97.63711901 | 95.10385716 |
| 190409A00031 | 4/9/2019 | 2.64 | 4/9/2024 | 4/9/2019 | 108.92817 | 108.9281666 | 108.9281666 | 108.9281666 | 107.5790521 | 103.7944547 | 100.1642367 | 96.68123903 | 93.33867814 |
| 190426A00011 | 5/1/2019 | 2.56 | 3/15/2022 | 5/1/2019 | 103.92489 | 103.9248919 | 103.9248919 | 103.9248919 | 103.5743807 | 101.8670126 | 100.1959906 | 98.56021809 | 96.95864308 |
| 190430A00003 | 4/30/2019 | 2.43 | 8/2/2023 | 4/30/2019 | 107.22889 | 107.2288935 | 107.2288935 | 107.2288935 | 106.3215507 | 103.2123048 | 100.2106284 | 97.31218142 | 94.51282624 |
| 190430A00021 | 4/30/2019 | 2.52 | 10/29/2021 | 4/30/2019 | 103.01063 | 103.0106293 | 103.0106293 | 103.0106293 | 102.7702156 | 101.4424202 | 100.1386309 | 98.85824079 | 97.60066319 |
| 190506A00011 | 5/6/2019 | 2.45 | 11/6/2020 | 5/6/2019 | 100.83562 | 100.835621 | 100.835621 | 100.835621 | 100.7736643 | 100.4156808 | 100.0602444 | 99.70732799 | 99.35690477 |
| 190508A00008 | 5/8/2019 | 2.36 | 5/9/2022 | 5/8/2019 | 104.21644 | 104.2164433 | 104.2164433 | 104.2164433 | 103.8126147 | 101.9489399 | 100.1278406 | 98.34809609 | 96.6085283 |
| 190509A00029 | 5/9/2019 | 2.34 | 6/9/2022 | 5/9/2019 | 104.36976 | 104.369759 | 104.369759 | 104.369759 | 103.9352618 | 101.9874105 | 100.0858961 | 98.22933399 | 96.41639054 |
| 190514A00014 | 5/14/2019 | 2.43 | 5/14/2021 | 5/14/2019 | 101.9088 | 101.908799 | 101.908799 | 101.908799 | 101.7300177 | 100.8516195 | 99.988364 | 99.13986197 | 98.30573735 |
| 190514A00056 | 5/14/2019 | 2.32 | 5/15/2023 | 5/14/2019 | 106.40338 | 106.4033764 | 106.4033764 | 106.4033764 | 105.6129737 | 102.7255467 | 99.93209822 | 97.22907421 | 94.61307472 |
| 190516A00006 | 5/16/2019 | 2.43 | 5/13/2021 | 5/16/2019 | 101.90279 | 101.9027899 | 101.9027899 | 101.9027899 | 101.7247433 | 100.8490938 | 99.98849302 | 99.14255528 | 98.31090798 |
| 190521A00047 | 5/21/2019 | 2.54 | 5/19/2023 | 5/21/2019 | 106.53489 | 106.5348928 | 106.5348928 | 106.5348928 | 105.7425096 | 102.8548 | 100.0611309 | 97.35794259 | 94.74183004 |
| 190523A00007 | 5/23/2019 | 2.28 | 5/23/2022 | 5/23/2019 | 104.1499 | 104.1499006 | 104.1499006 | 104.1499006 | 103.7325614 | 101.8325467 | 99.97673153 | 98.16382518 | 96.39258306 |
| 190523A00022 | 5/23/2019 | 2.47 | 10/12/2022 | 5/23/2019 | 105.01952 | 105.0195175 | 105.0195175 | 105.0195175 | 104.465672 | 102.1838375 | 99.96318249 | 97.8016615 | 95.69731324 |
| 190528A00002 | 5/28/2019 | 2.45 | 11/30/2020 | 5/28/2019 | 100.93227 | 100.932268 | 100.932268 | 100.932268 | 100.8559418 | 100.4322908 | 100.0121865 | 99.59558443 | 99.18244108 |
| 190528A00003 | 5/28/2019 | 2.42 | 5/31/2022 | 5/28/2019 | 104.13759 | 104.1375866 | 104.1375866 | 104.1375866 | 103.7139275 | 101.7990281 | 99.92902374 | 98.10259278 | 96.31846143 |
| 190528A00009 | 5/28/2019 | 2.45 | 5/15/2024 | 5/28/2019 | 108.41747 | 108.4174686 | 108.4174686 | 108.4174686 | 106.9991244 | 103.1304636 | 99.42343624 | 95.87046657 | 92.46437281 |
| 190529A00013 | 5/29/2019 | 2.38 | 5/29/2024 | 5/29/2019 | 108.22427 | 108.2242709 | 108.2242709 | 108.2242709 | 106.7786181 | 102.8781217 | 99.14209592 | 95.56276192 | 92.13274931 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190529A00020 | 5/29/2019 | 2.38 | 5/29/2024 | 5/29/2019 | 108.22427 | 108.2242709 | 108.2242709 | 108.2242709 | 106.7786181 | 102.8781217 | 99.14209592 | 95.56276192 | 92.13274931 |
| 190529A00050 | 5/29/2019 | 2.31 | 11/29/2021 | 5/29/2019 | 102.9153 | 102.9152956 | 102.9152956 | 102.9152956 | 102.6537443 | 101.2427727 | 99.85805561 | 98.49892391 | 97.16473058 |
| 190529A00069 | 5/29/2019 | 2.34 | 11/29/2021 | 5/29/2019 | 102.95829 | 102.9582888 | 102.9582888 | 102.9582888 | 102.696677 | 101.2853845 | 99.90035217 | 98.54091057 | 97.20641261 |
| 190530A00007 | 5/30/2019 | 2.35 | 11/30/2021 | 5/30/2019 | 102.97835 | 102.9783474 | 102.9783474 | 102.9783474 | 102.7160091 | 101.3018426 | 99.91403421 | 98.55191107 | 97.21482258 |
| 190529A00012 | 5/29/2019 | 2.34 | 11/29/2021 | 5/29/2019 | 102.95829 | 102.9582888 | 102.9582888 | 102.9582888 | 102.696677 | 101.2853845 | 99.90035217 | 98.54091057 | 97.20641261 |
| 190530A00024 | 5/30/2019 | 2.25 | 5/30/2024 | 5/30/2019 | 108.44665 | 108.4466542 | 108.4466542 | 108.4466542 | 106.9889765 | 103.0619617 | 99.30108346 | 95.69846025 | 92.24662537 |
| 190530A00034 | 5/30/2019 | 2.44 | 5/30/2024 | 5/30/2019 | 108.46692 | 108.4669183 | 108.4669183 | 108.4669183 | 107.0179511 | 103.1101994 | 99.367275 | 95.78137861 | 92.34512053 |
| 190530A00074 | 5/30/2019 | 2.4 | 5/31/2022 | 5/30/2019 | 104.09881 | 104.0988102 | 104.0988102 | 104.0988102 | 103.6752264 | 101.7607105 | 99.89108211 | 98.06502002 | 96.28125061 |
| 190531A00035 | 5/31/2019 | 2.29 | 5/31/2022 | 5/31/2019 | 103.88554 | 103.8855396 | 103.8855396 | 103.8855396 | 103.4623707 | 101.5499634 | 99.68240313 | 97.85836988 | 96.0765911 |
| 190531A00037 | 5/31/2019 | 2.61 | 5/31/2029 | 5/31/2019 | 122.41981 | 122.4198063 | 122.4198063 | 122.4198063 | 113.5377246 | 104.7627334 | 96.74706671 | 89.42078933 | 82.72074609 |
| 190603A00002 | 6/3/2019 | 2.03 | 6/2/2023 | 6/3/2019 | 105.65517 | 105.6551729 | 105.6551729 | 105.6551729 | 104.8433442 | 101.9197482 | 99.0928804 | 96.35902404 | 93.71462599 |
| 190603A00041 | 6/3/2019 | 2.01 | 6/3/2021 | 6/3/2019 | 101.77489 | 101.7748902 | 101.7748902 | 101.7748902 | 101.5819101 | 100.6478709 | 99.73094697 | 98.83067131 | 97.94659377 |
| 190604A00031 | 6/4/2019 | 2.25 | 6/5/2023 | 6/4/2019 | 105.782 | 105.7819961 | 105.7819961 | 105.7819961 | 104.9693431 | 102.0481818 | 99.2236549 | 96.49204809 | 93.84981076 |
| 190605A00004 | 6/5/2019 | 2.11 | 1/12/2022 | 6/5/2019 | 102.83696 | 102.8369557 | 102.8369557 | 102.8369557 | 102.541057 | 101.0147854 | 99.51889888 | 98.05256316 | 96.61497388 |
| 190605A00055 | 6/5/2019 | 2.11 | 6/6/2022 | 6/5/2019 | 103.56671 | 103.5667073 | 103.5667073 | 103.5667073 | 103.1382433 | 101.2127619 | 99.33282557 | 97.4970819 | 95.70422777 |
| 190606A00009 | 6/6/2019 | 2 | 6/4/2021 | 6/6/2019 | 101.77072 | 101.7707223 | 101.7707223 | 101.7707223 | 101.5772402 | 100.6404969 | 99.72096998 | 98.81818815 | 97.93169729 |
| 190606A00023 | 6/6/2019 | 2.23 | 6/6/2024 | 6/6/2019 | 107.67484 | 107.6748387 | 107.6748387 | 107.6748387 | 106.2156203 | 102.305072 | 98.56042291 | 94.97378119 | 91.53767172 |
| 190606A00025 | 6/6/2019 | 2.18 | 6/4/2021 | 6/6/2019 | 101.79979 | 101.7997904 | 101.7997904 | 101.7997904 | 101.6067021 | 100.671779 | 99.75400787 | 98.85291997 | 97.96806359 |
| 190607A00003 | 6/7/2019 | 1.92 | 6/7/2022 | 6/7/2019 | 103.53362 | 103.5336224 | 103.5336224 | 103.5336224 | 103.1027627 | 101.1687303 | 99.28061669 | 97.43705351 | 95.63672238 |
| 190607A00005 | 6/7/2019 | 1.92 | 6/7/2022 | 6/7/2019 | 103.53362 | 103.5336224 | 103.5336224 | 103.5336224 | 103.1027627 | 101.1687303 | 99.28061669 | 97.43705351 | 95.63672238 |
| 190607A00018 | 6/7/2019 | 2.19 | 6/7/2024 | 6/7/2019 | 107.52132 | 107.5213172 | 107.5213172 | 107.5213172 | 106.0608501 | 102.1506936 | 98.40656649 | 94.82056447 | 91.38520099 |
| 190613A00022 | 6/13/2019 | 2.2 | 6/14/2021 | 6/13/2019 | 101.87206 | 101.8720614 | 101.8720614 | 101.8720614 | 101.6738562 | 100.7113913 | 99.76710002 | 98.8404712 | 97.93101257 |
| 190617A00004 | 6/17/2019 | 2.2 | 6/15/2021 | 6/17/2019 | 101.87741 | 101.8774077 | 101.8774077 | 101.8774077 | 101.6786927 | 100.713484 | 99.76655169 | 98.83738033 | 97.92547358 |
| 190619A00007 | 6/19/2019 | 2.21 | 6/20/2022 | 6/19/2019 | 103.81645 | 103.8164477 | 103.8164477 | 103.8164477 | 103.3737767 | 101.4083141 | 99.4902189 | 97.6180573 | 95.79044867 |
| 190619A00009 | 6/19/2019 | 2.26 | 6/19/2024 | 6/19/2019 | 107.8638 | 107.8638 | 107.8638 | 107.8638 | 106.3765954 | 102.4284128 | 98.64915312 | 95.03070956 | 91.56540741 |
| 190620A00055 | 6/25/2019 | 2.08 | 4/17/2023 | 6/25/2019 | 105.038 | 105.0379983 | 105.0379983 | 105.0379983 | 104.2910809 | 101.5090135 | 98.81525456 | 96.20649237 | 93.67956071 |
| 190621A00015 | 6/21/2019 | 2.2 | 6/21/2024 | 6/21/2019 | 107.63403 | 107.6340256 | 107.6340256 | 107.6340256 | 106.1439304 | 102.195067 | 98.41543472 | 94.79689974 | 91.33176233 |
| 190621A00023 | 6/21/2019 | 1.93 | 6/21/2022 | 6/21/2019 | 103.62345 | 103.6234486 | 103.6234486 | 103.6234486 | 103.1785475 | 101.205608 | 99.28040726 | 97.40149468 | 95.5674739 |
| 190201A00009 | 2/1/2019 | 2.8 | 2/4/2022 | 2/1/2019 | 104.06956 | 104.0695649 | 104.0695649 | 104.0695649 | 103.7530257 | 102.1545469 | 100.5886023 | 99.05426586 | 97.55064641 |
| 190201A00011 | 2/1/2019 | 2.8 | 2/4/2022 | 2/1/2019 | 104.06956 | 104.0695649 | 104.0695649 | 104.0695649 | 103.7530257 | 102.1545469 | 100.5886023 | 99.05426586 | 97.55064641 |
| 190208A00008 | 2/8/2019 | 2.86 | 2/8/2024 | 2/8/2019 | 109.33687 | 109.3368677 | 109.3368677 | 109.3368677 | 108.1025088 | 104.4721807 | 100.9843409 | 97.63260123 | 94.41089802 |
| 190211A00002 | 2/11/2019 | 2.88 | 2/12/2024 | 2/11/2019 | 109.43792 | 109.4379238 | 109.4379238 | 109.4379238 | 108.1955981 | 104.5523757 | 101.0524878 | 97.68949195 | 94.45727399 |
| 190211A00011 | 2/11/2019 | 2.8 | 2/11/2022 | 2/11/2019 | 104.11773 | 104.1177312 | 104.1177312 | 104.1177312 | 103.7950906 | 102.1756367 | 100.5894058 | 99.03544132 | 97.51282361 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190214A00013 | 2/14/2019 | 2.64 | 2/14/2023 | 2/14/2019 | 106.70617 | 106.7061714 | 106.7061714 | 106.7061714 | 106.0218974 | 103.3738409 | 100.8056925 | 98.3145419 | 95.89760557 |
| 190222A00029 | 2/22/2019 | 2.62 | 2/22/2021 | 2/22/2019 | 101.64611 | 101.6461116 | 101.6461116 | 101.6461116 | 101.5203648 | 100.8628755 | 100.2138931 | 99.57325315 | 98.94079556 |
| 190225A00039 | 2/25/2019 | 2.62 | 2/25/2022 | 2/25/2019 | 104.19938 | 104.1993765 | 104.1993765 | 104.1993765 | 103.863529 | 102.1973393 | 100.5659544 | 98.96834882 | 97.40353738 |
| 190228A00035 | 2/28/2019 | 2.8 | 2/26/2021 | 2/28/2019 | 101.70095 | 101.7009505 | 101.7009505 | 101.7009505 | 101.5731201 | 100.9056416 | 100.2469198 | 99.59678297 | 98.9550643 |
| 190228A00036 | 2/28/2019 | 2.81 | 2/28/2022 | 2/28/2019 | 104.25156 | 104.251559 | 104.251559 | 104.251559 | 103.914082 | 102.243596 | 100.6080415 | 99.00638687 | 97.43764093 |
| 190301A00012 | 3/1/2019 | 3.41 | 3/1/2029 | 3/1/2019 | 126.93419 | 126.9341908 | 126.9341908 | 126.9341908 | 118.4857431 | 109.802153 | 101.8430498 | 94.54368903 | 87.8454448 |
| 190311A00003 | 3/11/2019 | 2.68 | 9/10/2021 | 3/11/2019 | 102.91346 | 102.9134573 | 102.9134573 | 102.9134573 | 102.6915828 | 101.4839529 | 100.3046767 | 99.15276406 | 98.02727037 |
| 190314A00027 | 3/22/2019 | 2.92 | 3/21/2025 | 3/22/2019 | 112.43444 | 112.434438 | 112.434438 | 112.434438 | 110.2745066 | 105.5199453 | 101.0001618 | 96.70226646 | 92.61415137 |
| 190318A00024 | 3/18/2019 | 2.57 | 3/18/2024 | 3/18/2019 | 109.21979 | 109.2197893 | 109.2197893 | 109.2197893 | 107.9044184 | 104.1535948 | 100.5540571 | 97.09883157 | 93.78131031 |
| 190319A00008 | 3/19/2019 | 2.72 | 3/21/2022 | 3/19/2019 | 104.24151 | 104.2415136 | 104.2415136 | 104.2415136 | 103.8850324 | 102.1589671 | 100.4698944 | 98.81668934 | 97.19827303 |
| 190321A00003 | 3/21/2019 | 2.67 | 3/21/2024 | 3/21/2019 | 108.91849 | 108.918489 | 108.918489 | 108.918489 | 107.6064248 | 103.8715951 | 100.2873033 | 96.84661321 | 93.54295225 |
| 190321A00029 | 3/21/2019 | 2.62 | 3/22/2021 | 3/21/2019 | 101.738 | 101.7380009 | 101.7380009 | 101.7380009 | 101.5960082 | 100.8627382 | 100.140041 | 99.42768881 | 98.72546059 |
| 190328A00033 | 4/25/2019 | 2.56 | 4/25/2024 | 4/25/2019 | 108.72278 | 108.7227806 | 108.7227806 | 108.7227806 | 107.343119 | 103.5200551 | 99.85460873 | 96.33946659 | 92.96769347 |
| 190328A00053 | 3/28/2019 | 2.33 | 3/28/2022 | 3/28/2019 | 103.90264 | 103.9026437 | 103.9026437 | 103.9026437 | 103.5392615 | 101.7924352 | 100.083447 | 98.41113313 | 96.77437842 |
| 190329A00018 | 3/29/2019 | 2.6 | 3/29/2024 | 3/29/2019 | 108.7063 | 108.7063004 | 108.7063004 | 108.7063004 | 107.3799166 | 103.6284751 | 100.0290235 | 96.57452221 | 93.25830274 |
| 190401A00006 | 4/1/2019 | 2.58 | 4/1/2022 | 4/1/2019 | 104.06741 | 104.0674141 | 104.0674141 | 104.0674141 | 103.7012452 | 101.9475712 | 100.2319713 | 98.55327616 | 96.91036451 |
| 190401A00007 | 4/1/2019 | 2.6 | 4/3/2023 | 4/1/2019 | 106.41775 | 106.4177454 | 106.4177454 | 106.4177454 | 105.6834806 | 102.9197184 | 100.2424827 | 97.64850545 | 95.13466678 |
| 190401A00023 | 4/1/2019 | 2.54 | 4/1/2021 | 4/1/2019 | 101.74259 | 101.7425884 | 101.7425884 | 101.7425884 | 101.5945733 | 100.83397 | 100.0847276 | 99.34659317 | 98.61932116 |
| 190402A00004 | 4/2/2019 | 2.9 | 4/2/2029 | 4/2/2019 | 124.57829 | 124.5782906 | 124.5782906 | 124.5782906 | 115.9302488 | 107.1959773 | 99.20270716 | 91.88330934 | 85.17707814 |
| 190514A00015 | 5/14/2019 | 2.43 | 5/14/2021 | 5/14/2019 | 101.9088 | 101.908799 | 101.908799 | 101.908799 | 101.7300177 | 100.8516195 | 99.988364 | 99.13986197 | 98.30573735 |
| 190515A00055 | 5/15/2019 | 2.26 | 5/15/2023 | 5/15/2019 | 106.22885 | 106.2288532 | 106.2288532 | 106.2288532 | 105.4390267 | 102.5541355 | 99.76316064 | 97.06255021 | 94.44890617 |
| 190515A00057 | 5/15/2019 | 2.25 | 5/16/2022 | 5/15/2019 | 104.05091 | 104.05091 | 104.05091 | 104.05091 | 103.6405754 | 101.7600048 | 99.92279423 | 98.1276888 | 96.37347815 |
| 190516A00010 | 5/16/2019 | 2.43 | 5/17/2021 | 5/16/2019 | 101.92683 | 101.9268262 | 101.9268262 | 101.9268262 | 101.7458409 | 100.8591975 | 99.98797978 | 99.13178746 | 98.29023413 |
| 190517A00019 | 5/17/2019 | 2.41 | 5/17/2021 | 5/17/2019 | 101.90902 | 101.9090159 | 101.9090159 | 101.9090159 | 101.7280468 | 100.8414896 | 99.97035687 | 99.11424856 | 98.27277824 |
| 190520A00024 | 5/20/2019 | 2.32 | 5/20/2021 | 5/20/2019 | 101.9802 | 101.9802007 | 101.9802007 | 101.9802007 | 101.7965851 | 100.899669 | 100.0185254 | 99.15274091 | 98.30191632 |
| 190521A00044 | 5/21/2019 | 2.47 | 5/17/2021 | 5/21/2019 | 101.96245 | 101.9624466 | 101.9624466 | 101.9624466 | 101.7814289 | 100.8946134 | 100.0232256 | 99.16686524 | 98.32514592 |
| 190522A00019 | 5/23/2019 | 2.55 | 5/15/2024 | 5/23/2019 | 108.8082 | 108.8082006 | 108.8082006 | 108.8082006 | 107.3878116 | 103.5116251 | 99.79730165 | 96.23725658 | 92.82429964 |
| 190522A00021 | 5/23/2019 | 2.47 | 10/15/2021 | 5/23/2019 | 102.87151 | 102.871515 | 102.871515 | 102.871515 | 102.6379015 | 101.342407 | 100.0742423 | 98.83254577 | 97.61649192 |
| 190523A00008 | 5/23/2019 | 2.29 | 5/23/2023 | 5/23/2019 | 106.36425 | 106.3642492 | 106.3642492 | 106.3642492 | 105.5634268 | 102.6556511 | 99.84317046 | 97.12235611 | 94.48973773 |
| 190524A00002 | 5/24/2019 | 2.39 | 5/24/2021 | 5/24/2019 | 101.93249 | 101.9324935 | 101.9324935 | 101.9324935 | 101.7464 | 100.8407026 | 99.95109363 | 99.07714703 | 98.21845183 |
| 190524A00013 | 5/24/2019 | 2.39 | 5/24/2021 | 5/24/2019 | 101.93249 | 101.9324935 | 101.9324935 | 101.9324935 | 101.7464 | 100.8407026 | 99.95109363 | 99.07714703 | 98.21845183 |
| 190524A00015 | 5/24/2019 | 2.24 | 5/24/2022 | 5/24/2019 | 104.07899 | 104.0789884 | 104.0789884 | 104.0789884 | 103.6608123 | 101.7588547 | 99.90120111 | 98.08655614 | 96.31367072 |
| 190524A00026 | 5/28/2019 | 2.45 | 6/15/2023 | 5/28/2019 | 106.43295 | 106.4329475 | 106.4329475 | 106.4329475 | 105.6039076 | 102.6463741 | 99.78748542 | 97.02341558 | 94.35050915 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190529A00005 | 5/29/2019 | 2.31 | 11/29/2021 | 5/29/2019 | 102.9153 | 102.9152956 | 102.9152956 | 102.9152956 | 102.6537443 | 101.2427727 | 99.85805561 | 98.49892391 | 97.16473058 |
| 190529A00028 | 5/29/2019 | 2.38 | 5/29/2024 | 5/29/2019 | 108.22427 | 108.2242709 | 108.2242709 | 108.2242709 | 106.7786181 | 102.8781217 | 99.14209592 | 95.56276192 | 92.13274931 |
| 190529A00049 | 5/29/2019 | 2.32 | 6/29/2021 | 5/29/2019 | 102.06336 | 102.0633575 | 102.0633575 | 102.0633575 | 101.8574213 | 100.8533573 | 99.86902699 | 98.90385325 | 97.95728109 |
| 190529A00080 | 5/29/2019 | 2.31 | 11/29/2021 | 5/29/2019 | 102.9153 | 102.9152956 | 102.9152956 | 102.9152956 | 102.6537443 | 101.2427727 | 99.85805561 | 98.49892391 | 97.16473058 |
| 190530A00026 | 5/30/2019 | 2.36 | 5/26/2021 | 5/30/2019 | 101.91683 | 101.9168266 | 101.9168266 | 101.9168266 | 101.7292901 | 100.818237 | 99.92346166 | 99.04453082 | 98.18102638 |
| 190530A00047 | 5/30/2019 | 2.36 | 5/28/2021 | 5/30/2019 | 101.92846 | 101.9284569 | 101.9284569 | 101.9284569 | 101.7394522 | 100.8229094 | 99.92283619 | 99.03879169 | 98.17035065 |
| 190603A00003 | 6/3/2019 | 2.05 | 6/3/2024 | 6/3/2019 | 107.67547 | 107.6754654 | 107.6754654 | 107.6754654 | 106.2135914 | 102.2911639 | 98.53529576 | 94.93806001 | 91.49194816 |
| 190603A00005 | 6/3/2019 | 2.25 | 6/3/2024 | 6/3/2019 | 107.73814 | 107.7381378 | 107.7381378 | 107.7381378 | 106.2848045 | 102.3808558 | 98.64217624 | 95.06092056 | 91.62965692 |
| 190603A00019 | 6/3/2019 | 2.19 | 6/3/2021 | 6/3/2019 | 101.80388 | 101.8038757 | 101.8038757 | 101.8038757 | 101.6112882 | 100.6790625 | 99.76388816 | 98.86530055 | 97.98285195 |
| 190603A00032 | 6/3/2019 | 1.98 | 6/3/2022 | 6/3/2019 | 103.6307 | 103.6306985 | 103.6306985 | 103.6306985 | 103.2036103 | 101.2794768 | 99.40077098 | 97.56614659 | 95.77430657 |
| 190524A00014 | 5/24/2019 | 2.24 | 5/24/2022 | 5/24/2019 | 104.07899 | 104.0789884 | 104.0789884 | 104.0789884 | 103.6608123 | 101.7588547 | 99.90120111 | 98.08655614 | 96.31367072 |
| 190524A00044 | 5/24/2019 | 2.27 | 5/24/2021 | 5/24/2019 | 101.95913 | 101.9591301 | 101.9591301 | 101.9591301 | 101.7726097 | 100.8648946 | 99.97333168 | 99.09749254 | 98.2369639 |
| 190529A00006 | 5/29/2019 | 2.32 | 5/28/2021 | 5/29/2019 | 101.89162 | 101.8916172 | 101.8916172 | 101.8916172 | 101.7026472 | 100.7862878 | 99.88639554 | 99.00252977 | 98.13426527 |
| 190529A00011 | 5/29/2019 | 2.36 | 5/30/2023 | 5/29/2019 | 106.07342 | 106.0734169 | 106.0734169 | 106.0734169 | 105.268174 | 102.3586716 | 99.54486465 | 96.82309594 | 94.18986841 |
| 190529A00089 | 5/29/2019 | 2.38 | 5/29/2024 | 5/29/2019 | 108.22427 | 108.2242709 | 108.2242709 | 108.2242709 | 106.7786181 | 102.8781217 | 99.14209592 | 95.56276192 | 92.13274931 |
| 190530A00025 | 5/30/2019 | 2.36 | 6/1/2021 | 5/30/2019 | 101.95169 | 101.9516911 | 101.9516911 | 101.9516911 | 101.7599722 | 100.8324403 | 99.92176761 | 99.02749784 | 98.14919096 |
| 190530A00042 | 5/30/2019 | 2.3 | 11/30/2020 | 5/30/2019 | 100.92713 | 100.9271311 | 100.9271311 | 100.9271311 | 100.8506805 | 100.4263572 | 100.0055947 | 99.58834855 | 99.17457478 |
| 190531A00013 | 5/31/2019 | 2.31 | 12/6/2022 | 5/31/2019 | 104.9557 | 104.955704 | 104.955704 | 104.955704 | 104.3501171 | 101.9225633 | 99.56392272 | 97.27185294 | 95.04410539 |
| 190531A00038 | 5/31/2019 | 2.82 | 5/31/2034 | 5/31/2019 | 137.82463 | 137.8246315 | 137.8246315 | 130.8503002 | 116.3030684 | 103.3100414 | 91.96755816 | 82.05447679 | 73.38042609 |
| 190603A00031 | 6/3/2019 | 1.98 | 6/3/2022 | 6/3/2019 | 103.6307 | 103.6306985 | 103.6306985 | 103.6306985 | 103.2036103 | 101.2794768 | 99.40077098 | 97.56614659 | 95.77430657 |
| 190603A00040 | 6/3/2019 | 2.11 | 6/3/2022 | 6/3/2019 | 103.55163 | 103.5516293 | 103.5516293 | 103.5516293 | 103.1261522 | 101.2089322 | 99.33687465 | 97.50864415 | 95.72295387 |
| 190604A00030 | 6/4/2019 | 2.2 | 6/3/2022 | 6/4/2019 | 103.72687 | 103.7268691 | 103.7268691 | 103.7268691 | 103.3010492 | 101.3820894 | 99.50832542 | 97.67842102 | 95.89108843 |
| 190605A00005 | 6/5/2019 | 2.01 | 6/5/2024 | 6/5/2019 | 107.52696 | 107.5269636 | 107.5269636 | 107.5269636 | 106.0617036 | 102.1369174 | 98.37905066 | 94.78014721 | 91.33267191 |
| 190605A00017 | 6/5/2019 | 2.12 | 6/4/2021 | 6/5/2019 | 101.74337 | 101.7433673 | 101.7433673 | 101.7433673 | 101.5503333 | 100.6156966 | 99.69820804 | 98.79739916 | 97.91281827 |
| 190605A00058 | 6/5/2019 | 2.14 | 12/5/2022 | 6/5/2019 | 104.53238 | 104.5323793 | 104.5323793 | 104.5323793 | 103.9288799 | 101.509173 | 99.15811766 | 96.87338238 | 94.65272914 |
| 190620A00056 | 6/25/2019 | 2.07 | 1/17/2023 | 6/25/2019 | 104.57132 | 104.5713176 | 104.5713176 | 104.5713176 | 103.9252954 | 101.3930359 | 98.93552565 | 96.5501144 | 94.23426329 |
| 190621A00061 | 6/21/2019 | 2.12 | 6/21/2021 | 6/21/2019 | 101.82067 | 101.8206668 | 101.8206668 | 101.8206668 | 101.6190129 | 100.6379552 | 99.67578262 | 98.73195378 | 97.8059478 |
| 190624A00026 | 6/24/2019 | 2.08 | 6/24/2022 | 6/24/2019 | 103.57691 | 103.5769056 | 103.5769056 | 103.5769056 | 103.1307792 | 101.1569576 | 99.23097193 | 97.35136602 | 95.5167383 |
| 190625A00012 | 6/25/2019 | 2.12 | 6/25/2024 | 6/25/2019 | 107.3333 | 107.3332953 | 107.3332953 | 107.3332953 | 105.8365655 | 101.8832373 | 98.0998541 | 94.47822404 | 91.0105936 |
| 190626A00004 | 6/26/2019 | 2.15 | 6/26/2024 | 6/26/2019 | 107.45897 | 107.4589686 | 107.4589686 | 107.4589686 | 105.9594781 | 102.001062 | 98.21289367 | 94.58676168 | 91.11489439 |
| 190626A00010 | 6/26/2019 | 2.1 | 6/26/2023 | 6/26/2019 | 105.44223 | 105.4422251 | 105.4422251 | 105.4422251 | 104.6010416 | 101.6290165 | 98.75722583 | 95.9817404 | 93.29880808 |
| 190626A00033 | 6/26/2019 | 2.08 | 6/22/2021 | 6/26/2019 | 101.78616 | 101.7861555 | 101.7861555 | 101.7861555 | 101.5840327 | 100.600446 | 99.63584515 | 98.68968461 | 97.76143937 |
| 190703A00015 | 7/3/2019 | 2.02 | 1/6/2021 | 7/3/2019 | 101.0037 | 101.0036997 | 101.0036997 | 101.0036997 | 100.9052138 | 100.3789324 | 99.85813479 | 99.34273562 | 98.83265115 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190708A00011 | 7/8/2019 | 2.2 | 7/8/2024 | 7/8/2019 | 107.72288 | 107.7228782 | 107.7228782 | 107.7228782 | 106.1966229 | 102.2022533 | 98.38079818 | 94.72386021 | 91.22349522 |
| 190111A00013 | 1/11/2019 | 2.87 | 1/7/2022 | 1/11/2019 | 103.98272 | 103.9827186 | 103.9827186 | 103.9827186 | 103.6891079 | 102.1669255 | 100.6748809 | 99.21215333 | 97.7779512 |
| 190111A00026 | 1/11/2019 | 3.48 | 1/11/2034 | 1/11/2019 | 145.78014 | 145.7801417 | 145.7801417 | 139.3904705 | 124.7442266 | 111.5067628 | 99.89202793 | 89.6890015 | 80.71525364 |
| 190114A00045 | 1/14/2019 | 2.84 | 1/14/2021 | 1/14/2019 | 101.42641 | 101.4264146 | 101.4264146 | 101.4264146 | 101.3232772 | 100.774557 | 100.2317824 | 99.69485719 | 99.16368684 |
| 190123A00036 | 1/23/2019 | 3.32 | 1/23/2029 | 1/23/2019 | 127.68287 | 127.6828749 | 127.6828749 | 127.6828749 | 119.293199 | 110.5935318 | 102.6144856 | 95.29214551 | 88.56858984 |
| 190129A00061 | 1/30/2019 | 2.92 | 2/1/2022 | 1/30/2019 | 104.24212 | 104.2421205 | 104.2421205 | 104.2421205 | 103.9278918 | 102.3368002 | 100.7779788 | 99.25051357 | 97.75352482 |
| 190130A00007 | 1/30/2019 | 2.89 | 5/14/2021 | 1/30/2019 | 102.31461 | 102.3146103 | 102.3146103 | 102.3146103 | 102.1354638 | 101.2551205 | 100.3899434 | 99.53954279 | 98.70354222 |
| 190130A00011 | 1/30/2019 | 2.88 | 1/29/2021 | 1/30/2019 | 101.55233 | 101.552333 | 101.552333 | 101.552333 | 101.4405456 | 100.8503382 | 100.266987 | 99.69037312 | 99.1203803 |
| 190131A00011 | 1/31/2019 | 3.13 | 1/30/2026 | 1/31/2019 | 115.86661 | 115.8666116 | 115.8666116 | 115.8666116 | 112.6819962 | 107.0467469 | 101.7329251 | 96.72046576 | 91.99066126 |
| 190131A00049 | 1/31/2019 | 2.79 | 1/29/2021 | 1/31/2019 | 101.49913 | 101.4991288 | 101.4991288 | 101.4991288 | 101.3873729 | 100.7973441 | 100.21417 | 99.63773165 | 99.06791299 |
| 190201A00013 | 2/1/2019 | 2.89 | 2/1/2024 | 2/1/2019 | 109.39649 | 109.3964869 | 109.3964869 | 109.3964869 | 108.1749744 | 104.5629669 | 101.0920951 | 97.75606091 | 94.54888418 |
| 190205A00047 | 2/5/2019 | 2.85 | 2/5/2021 | 2/5/2019 | 101.58466 | 101.5846597 | 101.5846597 | 101.5846597 | 101.4688581 | 100.859335 | 100.257126 | 99.6620999 | 99.07412876 |
| 190206A00013 | 2/6/2019 | 2.68 | 2/6/2023 | 2/6/2019 | 106.75604 | 106.7560427 | 106.7560427 | 106.7560427 | 106.080254 | 103.4549804 | 100.9083967 | 98.43765885 | 96.04004542 |
| 190208A00010 | 2/8/2019 | 2.77 | 2/8/2021 | 2/8/2019 | 101.55654 | 101.5565386 | 101.5565386 | 101.5565386 | 101.4390459 | 100.821395 | 100.211259 | 99.60850116 | 99.01298825 |
| 190212A00024 | 2/12/2019 | 2.79 | 2/12/2021 | 2/12/2019 | 101.59677 | 101.5967709 | 101.5967709 | 101.5967709 | 101.4769756 | 100.8482195 | 100.2272505 | 99.6139242 | 99.00810019 |
| 190214A00012 | 2/14/2019 | 2.6 | 2/14/2022 | 2/14/2019 | 104.09044 | 104.0904436 | 104.0904436 | 104.0904436 | 103.764277 | 102.1314488 | 100.5323088 | 98.96588066 | 97.43122579 |
| 190219A00045 | 2/19/2019 | 2.8 | 2/28/2022 | 2/19/2019 | 104.23471 | 104.2347128 | 104.2347128 | 104.2347128 | 103.8972636 | 102.2269236 | 100.5915125 | 98.98999857 | 97.42139088 |
| 190222A00031 | 2/22/2019 | 2.63 | 8/21/2020 | 2/22/2019 | 100.36303 | 100.3630333 | 100.3630333 | 100.3630333 | 100.3417715 | 100.1973495 | 100.0533571 | 99.90979259 | 99.76665393 |
| 190301A00009 | 3/1/2019 | 2.83 | 3/1/2022 | 3/1/2019 | 104.2923 | 104.2922969 | 104.2922969 | 104.2922969 | 103.9538459 | 102.2803519 | 100.6418928 | 99.03743216 | 97.46597475 |
| 190305A00010 | 3/5/2019 | 2.84 | 3/7/2022 | 3/5/2019 | 104.35161 | 104.3516091 | 104.3516091 | 104.3516091 | 104.0076208 | 102.3176846 | 100.663377 | 99.04363499 | 97.45743821 |
| 190308A00003 | 3/8/2019 | 2.69 | 3/8/2021 | 3/8/2019 | 101.69484 | 101.694837 | 101.694837 | 101.694837 | 101.5611458 | 100.8663272 | 100.1810061 | 99.50498841 | 98.83808561 |
| 190313A00017 | 3/13/2019 | 2.73 | 7/15/2022 | 3/13/2019 | 105.02136 | 105.0213642 | 105.0213642 | 105.0213642 | 104.5517169 | 102.5071375 | 100.5130653 | 98.56792387 | 96.67019764 |
| 190318A00015 | 3/18/2019 | 2.66 | 3/18/2021 | 3/18/2019 | 101.74071 | 101.7407078 | 101.7407078 | 101.7407078 | 101.6010753 | 100.8787261 | 100.1666402 | 99.46459976 | 98.77239304 |
| 190319A00013 | 3/19/2019 | 2.72 | 3/18/2022 | 3/19/2019 | 104.22129 | 104.221289 | 104.221289 | 104.221289 | 103.8675579 | 102.1496158 | 100.4683647 | 98.82269335 | 97.21153569 |
| 190321A00004 | 3/21/2019 | 2.62 | 3/22/2021 | 3/21/2019 | 101.738 | 101.7380009 | 101.7380009 | 101.7380009 | 101.5960082 | 100.8627382 | 100.140041 | 99.42768881 | 98.72546059 |
| 190701A00028 | 7/1/2019 | 2.11 | 7/1/2021 | 7/1/2019 | 101.86151 | 101.861506 | 101.861506 | 101.861506 | 101.6550458 | 100.6466438 | 99.65817414 | 98.68905039 | 97.7387091 |
| 190703A00014 | 7/3/2019 | 2.23 | 10/5/2020 | 7/3/2019 | 100.52682 | 100.5268176 | 100.5268176 | 100.5268176 | 100.4832919 | 100.214684 | 99.94751415 | 99.68177084 | 99.41744262 |
| 190708A00021 | 7/8/2019 | 1.99 | 7/8/2022 | 7/8/2019 | 103.83163 | 103.8316322 | 103.8316322 | 103.8316322 | 103.3695714 | 101.3489068 | 99.37804922 | 97.45545236 | 95.5796292 |
| 190711A00026 | 7/11/2019 | 2.17 | 7/11/2022 | 7/11/2019 | 103.8454 | 103.8454013 | 103.8454013 | 103.8454013 | 103.3821168 | 101.3603925 | 99.38850263 | 97.46489835 | 95.58809013 |
| 190711A00028 | 7/11/2019 | 2.22 | 7/11/2024 | 7/11/2019 | 107.81987 | 107.819873 | 107.819873 | 107.819873 | 106.2866916 | 102.2827683 | 98.45242337 | 94.7872141 | 91.27915427 |
| 190712A00018 | 7/12/2019 | 2.25 | 7/12/2024 | 7/12/2019 | 107.94716 | 107.9471631 | 107.9471631 | 107.9471631 | 106.4111401 | 102.4021313 | 98.56698231 | 94.89723287 | 91.3848805 |
| 190719A00003 | 7/19/2019 | 2.07 | 7/20/2020 | 7/19/2019 | 100.10853 | 100.108526 | 100.108526 | 100.108526 | 100.1009128 | 100.0453813 | 99.98992775 | 99.93455181 | 99.87925336 |
| 190724A00021 | 7/24/2019 | 2.33 | 7/23/2027 | 7/24/2019 | 115.77507 | 115.7750654 | 115.7750654 | 115.7750654 | 110.1785063 | 103.1965995 | 96.70861207 | 90.67699701 | 85.06724748 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190805A00048 | 8/5/2019 | 1.88 | 8/5/2022 | 8/5/2019 | 103.36007 | 103.3600676 | 103.3600676 | 103.3600676 | 102.8736747 | 100.7914516 | 98.76167996 | 96.78268297 | 94.85285054 |
| 190805A00050 | 8/5/2019 | 1.91 | 8/5/2024 | 8/5/2019 | 106.6712 | 106.6712039 | 106.6712039 | 106.6712039 | 105.0911893 | 101.0472272 | 97.18117363 | 93.48425213 | 89.94816838 |
| 190807A00020 | 8/7/2019 | 1.57 | 2/7/2024 | 8/7/2019 | 105.29862 | 105.2986237 | 105.2986237 | 105.2986237 | 104.0779741 | 100.5059862 | 97.07527133 | 93.77946748 | 90.61253696 |
| 190807A00054 | 8/7/2019 | 1.66 | 8/6/2021 | 8/7/2019 | 101.72027 | 101.7202672 | 101.7202672 | 101.7202672 | 101.5056177 | 100.397715 | 99.31387461 | 98.25331963 | 97.21530614 |
| 190808A00050 | 8/8/2019 | 1.7 | 8/8/2024 | 8/8/2019 | 106.57329 | 106.5732865 | 106.5732865 | 106.5732865 | 104.9772272 | 100.9066122 | 97.01592929 | 93.29626417 | 89.73919449 |
| 190808A00052 | 8/8/2019 | 1.7 | 8/8/2024 | 8/8/2019 | 106.57329 | 106.5732865 | 106.5732865 | 106.5732865 | 104.9772272 | 100.9066122 | 97.01592929 | 93.29626417 | 89.73919449 |
| 190814A00010 | 8/14/2019 | 1.84 | 4/5/2023 | 8/14/2019 | 104.30937 | 104.3093655 | 104.3093655 | 104.3093655 | 103.5792466 | 100.8395242 | 98.18594743 | 95.61526263 | 93.12436294 |
| 190815A00004 | 8/15/2019 | 1.82 | 8/15/2022 | 8/15/2019 | 103.27503 | 103.275031 | 103.275031 | 103.275031 | 102.7794048 | 100.6718979 | 98.61794964 | 96.61582889 | 94.66387453 |
| 190816A00020 | 8/16/2019 | 1.79 | 8/16/2024 | 8/16/2019 | 106.22057 | 106.2205721 | 106.2205721 | 106.2205721 | 104.6192667 | 100.5568347 | 96.6742785 | 92.96266932 | 89.41357218 |
| 190816A00022 | 8/16/2019 | 1.77 | 8/16/2024 | 8/16/2019 | 106.13732 | 106.1373213 | 106.1373213 | 106.1373213 | 104.536502 | 100.4757732 | 96.59486572 | 92.88485273 | 89.33730147 |
| 190816A00033 | 8/16/2019 | 1.77 | 8/16/2024 | 8/16/2019 | 106.13732 | 106.1373213 | 106.1373213 | 106.1373213 | 104.536502 | 100.4757732 | 96.59486572 | 92.88485273 | 89.33730147 |
| 190816A00035 | 8/16/2019 | 1.77 | 8/16/2023 | 8/16/2019 | 104.6543 | 104.6542962 | 104.6542962 | 104.6542962 | 103.7392297 | 100.6474228 | 97.66363828 | 94.78347792 | 92.00275077 |
| 190819A00007 | 8/19/2019 | 1.62 | 8/19/2024 | 8/19/2019 | 106.28651 | 106.2865064 | 106.2865064 | 106.2865064 | 104.6680081 | 100.5753827 | 96.66478993 | 92.92715636 | 89.35391268 |
| 190819A00022 | 8/19/2019 | 1.8 | 8/19/2024 | 8/19/2019 | 106.27462 | 106.2746213 | 106.2746213 | 106.2746213 | 104.6664871 | 100.59542 | 96.70488302 | 92.98590066 | 89.42999498 |
| 190820A00054 | 8/20/2019 | 1.76 | 8/18/2022 | 8/20/2019 | 103.15829 | 103.1582923 | 103.1582923 | 103.1582923 | 102.6601013 | 100.5460169 | 98.48580522 | 96.47771959 | 94.52008392 |
| 190821A00017 | 8/21/2019 | 1.8 | 8/21/2024 | 8/21/2019 | 106.2829 | 106.2829039 | 106.2829039 | 106.2829039 | 104.6703797 | 100.5941247 | 96.69881844 | 92.97545498 | 89.41552831 |
| 190604A00047 | 6/4/2019 | 2.31 | 12/4/2020 | 6/4/2019 | 100.89565 | 100.8956465 | 100.8956465 | 100.8956465 | 100.8169441 | 100.3823939 | 99.95158414 | 99.5244667 | 99.10099426 |
| 190605A00012 | 6/5/2019 | 1.92 | 6/6/2022 | 6/5/2019 | 103.52864 | 103.528635 | 103.528635 | 103.528635 | 103.0987756 | 101.1675088 | 99.28203215 | 97.44098308 | 95.64304867 |
| 190605A00020 | 6/5/2019 | 2.19 | 2/5/2024 | 6/5/2019 | 106.88196 | 106.8819626 | 106.8819626 | 106.8819626 | 105.6645997 | 102.086678 | 98.64937931 | 95.34640163 | 92.17176265 |
| 190607A00009 | 6/7/2019 | 2.14 | 6/7/2022 | 6/7/2019 | 103.63048 | 103.630478 | 103.630478 | 103.630478 | 103.2009026 | 101.2720813 | 99.38894425 | 97.55013292 | 95.75433849 |
| 190610A00017 | 6/10/2019 | 2.29 | 6/10/2024 | 6/10/2019 | 107.93475 | 107.9347475 | 107.9347475 | 107.9347475 | 106.4658296 | 102.5397478 | 98.78061538 | 95.18046988 | 91.73177053 |
| 190614A00018 | 6/14/2019 | 2.21 | 6/14/2021 | 6/14/2019 | 101.88174 | 101.8817423 | 101.8817423 | 101.8817423 | 101.6835274 | 100.721012 | 99.77667098 | 98.849993 | 97.94048585 |
| 190620A00057 | 6/25/2019 | 2.09 | 5/15/2023 | 6/25/2019 | 105.20466 | 105.2046585 | 105.2046585 | 105.2046585 | 104.4218975 | 101.5638669 | 98.79874656 | 96.12302945 | 93.53336016 |
| 190621A00019 | 6/21/2019 | 2.12 | 6/21/2021 | 6/21/2019 | 101.82067 | 101.8206668 | 101.8206668 | 101.8206668 | 101.6190129 | 100.6379552 | 99.67578262 | 98.73195378 | 97.8059478 |
| 190621A00021 | 6/21/2019 | 2.12 | 6/21/2022 | 6/21/2019 | 103.64203 | 103.642026 | 103.642026 | 103.642026 | 103.1987217 | 101.2323311 | 99.31340228 | 97.44049644 | 95.61222835 |
| 190621A00040 | 6/21/2019 | 2.12 | 6/21/2021 | 6/21/2019 | 101.82067 | 101.8206668 | 101.8206668 | 101.8206668 | 101.6190129 | 100.6379552 | 99.67578262 | 98.73195378 | 97.8059478 |
| 190625A00008 | 6/25/2019 | 2.04 | 6/27/2022 | 6/25/2019 | 103.51112 | 103.5111225 | 103.5111225 | 103.5111225 | 103.0621774 | 101.0809394 | 99.14791223 | 97.26162258 | 95.42065231 |
| 190625A00016 | 6/25/2019 | 2.13 | 6/25/2024 | 6/25/2019 | 107.37349 | 107.3734939 | 107.3734939 | 107.3734939 | 105.8765433 | 101.9224195 | 98.13826568 | 94.51588879 | 91.04753443 |
| 190701A00024 | 7/1/2019 | 2.24 | 7/1/2020 | 7/1/2019 | 100.0052 | 100.0051991 | 100.0051991 | 100.0051991 | 100.0048194 | 100.0020485 | 99.99927993 | 99.99651374 | 99.9937499 |
| 190702A00002 | 7/2/2019 | 2.16 | 7/2/2024 | 7/2/2019 | 107.52988 | 107.5298765 | 107.5298765 | 107.5298765 | 106.0174606 | 102.0421656 | 98.23846264 | 94.5980444 | 91.11305036 |
| 190703A00021 | 7/3/2019 | 2.11 | 7/2/2021 | 7/3/2019 | 101.8666 | 101.8665987 | 101.8665987 | 101.8665987 | 101.6599034 | 100.6487557 | 99.65764982 | 98.68599454 | 97.73322176 |
| 190716A00046 | 7/16/2019 | 2.19 | 7/18/2022 | 7/16/2019 | 103.92314 | 103.9231448 | 103.9231448 | 103.9231448 | 103.4528886 | 101.4119324 | 99.42157822 | 97.48024063 | 95.58639575 |
| 190717A00007 | 7/17/2019 | 2.18 | 10/14/2022 | 7/17/2019 | 104.36049 | 104.3604869 | 104.3604869 | 104.3604869 | 103.8063814 | 101.5269965 | 99.30889163 | 97.15002252 | 95.04842839 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190726A00005 | 7/26/2019 | 1.97 | 7/26/2022 | 7/26/2019 | 103.88314 | 103.8831351 | 103.8831351 | 103.8831351 | 103.403369 | 101.3345738 | 99.3175485 | 97.35065293 | 95.43231125 |
| 190729A00009 | 7/29/2019 | 2.19 | 7/29/2024 | 7/29/2019 | 107.79179 | 107.7917852 | 107.7917852 | 107.7917852 | 106.2204822 | 102.1714904 | 98.29969894 | 94.59640576 | 91.05338446 |
| 190729A00017 | 7/29/2019 | 1.97 | 7/29/2021 | 7/29/2019 | 102.02505 | 102.0250527 | 102.0250527 | 102.0250527 | 101.8114795 | 100.7235586 | 99.65878866 | 98.61643707 | 97.59580185 |
| 190801A00007 | 8/1/2019 | 2.17 | 8/2/2021 | 8/1/2019 | 102.0907 | 102.0906953 | 102.0906953 | 102.0906953 | 101.8767802 | 100.7801758 | 99.70709402 | 98.65678446 | 97.62852828 |
| 190802A00029 | 8/2/2019 | 2 | 8/2/2022 | 8/2/2019 | 103.60041 | 103.6004139 | 103.6004139 | 103.6004139 | 103.1163281 | 101.0393968 | 99.01463347 | 97.04037604 | 95.1150283 |
| 190805A00037 | 8/5/2019 | 2.17 | 8/6/2029 | 8/5/2019 | 118.83823 | 118.838234 | 118.838234 | 118.838234 | 109.7218683 | 100.9538298 | 92.96246848 | 85.6747683 | 79.02493178 |
| 190806A00027 | 8/6/2019 | 1.71 | 8/7/2023 | 8/6/2019 | 104.99924 | 104.9992367 | 104.9992367 | 104.9992367 | 104.0922711 | 101.0047511 | 98.02471155 | 95.14779457 | 92.36984649 |
| 190404A00003 | 4/4/2019 | 2.47 | 4/4/2024 | 4/4/2019 | 108.9543 | 108.9543036 | 108.9543036 | 108.9543036 | 107.6070686 | 103.816762 | 100.1810104 | 96.69262896 | 93.34481219 |
| 190416A00019 | 4/16/2019 | 2.7 | 4/14/2023 | 4/16/2019 | 106.76899 | 106.7689893 | 106.7689893 | 106.7689893 | 106.0202331 | 103.2218232 | 100.5118233 | 97.8869158 | 95.34392953 |
| 190422A00084 | 4/22/2019 | 2.6 | 4/22/2021 | 4/22/2019 | 101.91639 | 101.9163915 | 101.9163915 | 101.9163915 | 101.7534539 | 100.9349205 | 100.1295362 | 99.33698571 | 98.5569641 |
| 190426A00016 | 5/1/2019 | 2.58 | 4/14/2023 | 5/1/2019 | 106.43111 | 106.4311122 | 106.4311122 | 106.4311122 | 105.6834235 | 102.8897725 | 100.1844177 | 97.56404496 | 95.02548673 |
| 190426A00033 | 6/27/2019 | 2.55 | 6/27/2022 | 6/27/2019 | 104.53784 | 104.5378449 | 104.5378449 | 104.5378449 | 104.0868069 | 102.0950496 | 100.151709 | 98.25530578 | 96.4044163 |
| 190501A00003 | 5/1/2019 | 2.61 | 5/1/2024 | 5/1/2019 | 108.95349 | 108.9534875 | 108.9534875 | 108.9534875 | 107.5607512 | 103.7175318 | 100.0333253 | 96.50074829 | 93.11279774 |
| 190510A00009 | 5/10/2019 | 2.47 | 11/10/2021 | 5/10/2019 | 103.01569 | 103.0156864 | 103.0156864 | 103.0156864 | 102.7673178 | 101.4076544 | 100.0724502 | 98.76110206 | 97.47302597 |
| 190514A00023 | 5/14/2019 | 2.43 | 5/14/2021 | 5/14/2019 | 101.9088 | 101.908799 | 101.908799 | 101.908799 | 101.7300177 | 100.8516195 | 99.988364 | 99.13986197 | 98.30573735 |
| 190514A00024 | 5/14/2019 | 2.34 | 5/14/2024 | 5/14/2019 | 108.70493 | 108.7049312 | 108.7049312 | 108.7049312 | 107.2785657 | 103.3875862 | 99.65948651 | 96.08661908 | 92.66173479 |
| 190515A00008 | 5/15/2019 | 2.41 | 11/15/2021 | 5/15/2019 | 102.9761 | 102.9761038 | 102.9761038 | 102.9761038 | 102.7242526 | 101.3510065 | 100.0026908 | 98.67868512 | 97.37838907 |
| 190515A00013 | 5/15/2019 | 2.45 | 11/16/2020 | 5/15/2019 | 100.8472 | 100.8471972 | 100.8471972 | 100.8471972 | 100.7793203 | 100.394356 | 100.0123382 | 99.63323313 | 99.25700747 |
| 190515A00014 | 5/15/2019 | 2.26 | 5/14/2021 | 5/15/2019 | 101.89054 | 101.8905437 | 101.8905437 | 101.8905437 | 101.711397 | 100.8312746 | 99.96635239 | 99.11623887 | 98.28055596 |
| 190515A00046 | 5/15/2019 | 2.4 | 5/14/2021 | 5/15/2019 | 101.88233 | 101.882333 | 101.882333 | 101.882333 | 101.7035755 | 100.8253042 | 99.96217405 | 99.11379583 | 98.27979356 |
| 190516A00012 | 5/16/2019 | 2.43 | 11/16/2021 | 5/16/2019 | 103.00994 | 103.0099395 | 103.0099395 | 103.0099395 | 102.7573425 | 101.3811204 | 100.0299272 | 98.70313888 | 97.40015173 |
| 190521A00025 | 5/21/2019 | 2.47 | 5/21/2021 | 5/21/2019 | 101.98693 | 101.9869263 | 101.9869263 | 101.9869263 | 101.8029693 | 100.9051584 | 100.0231544 | 99.15654238 | 98.30492191 |
| 190521A00026 | 5/21/2019 | 2.54 | 5/19/2023 | 5/21/2019 | 106.53489 | 106.5348928 | 106.5348928 | 106.5348928 | 105.7425096 | 102.8548 | 100.0611309 | 97.35794259 | 94.74183004 |
| 190523A00006 | 5/23/2019 | 2.31 | 5/24/2021 | 5/23/2019 | 101.99555 | 101.9955531 | 101.9955531 | 101.9955531 | 101.8089988 | 100.901104 | 100.0093636 | 99.1333492 | 98.27264746 |
| 190523A00024 | 5/23/2019 | 2.47 | 10/31/2022 | 5/23/2019 | 105.13375 | 105.1337511 | 105.1337511 | 105.1337511 | 104.5619071 | 102.2288555 | 99.95953179 | 97.7518529 | 95.60381578 |
| 190523A00034 | 5/23/2019 | 2.31 | 5/21/2021 | 5/23/2019 | 101.97729 | 101.9772927 | 101.9772927 | 101.9772927 | 101.7929486 | 100.8933206 | 100.0095599 | 99.14124946 | 98.28798653 |
| 190524A00032 | 5/24/2019 | 2.45 | 5/24/2023 | 5/24/2019 | 106.30254 | 106.3025437 | 106.3025437 | 106.3025437 | 105.5043838 | 102.6070755 | 99.80455073 | 97.09320593 | 94.4695946 |
| 190528A00005 | 5/28/2019 | 2.42 | 6/15/2023 | 5/28/2019 | 106.34336 | 106.3433566 | 106.3433566 | 106.3433566 | 105.514624 | 102.5584254 | 99.70083823 | 96.93803774 | 94.26636953 |
| 190528A00039 | 5/28/2019 | 2.38 | 11/29/2021 | 5/28/2019 | 103.01561 | 103.0156131 | 103.0156131 | 103.0156131 | 102.7539206 | 101.3422003 | 99.95674758 | 98.5968928 | 97.26198864 |
| 190529A00009 | 5/29/2019 | 2.35 | 5/31/2022 | 5/29/2019 | 104.00187 | 104.001869 | 104.001869 | 104.001869 | 103.5784738 | 101.6649163 | 99.79622803 | 97.97108814 | 96.18822356 |
| 190529A00032 | 5/29/2019 | 2.38 | 5/29/2024 | 5/29/2019 | 108.22427 | 108.2242709 | 108.2242709 | 108.2242709 | 106.7786181 | 102.8781217 | 99.14209592 | 95.56276192 | 92.13274931 |
| 190530A00031 | 5/30/2019 | 2.21 | 5/31/2022 | 5/30/2019 | 104.06192 | 104.0619234 | 104.0619234 | 104.0619234 | 103.6369673 | 101.7167169 | 99.84159498 | 98.01027035 | 96.22145981 |
| 190531A00007 | 6/5/2019 | 2.14 | 6/4/2021 | 6/5/2019 | 101.90248 | 101.9024757 | 101.9024757 | 101.9024757 | 101.7088665 | 100.7714535 | 99.85126555 | 98.94783113 | 98.06069593 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190603A00033 | 6/3/2019 | 2.05 | 6/3/2024 | 6/3/2019 | 107.67547 | 107.6754654 | 107.6754654 | 107.6754654 | 106.2135914 | 102.2911639 | 98.53529576 | 94.93806001 | 91.49194816 |
| 190603A00046 | 6/3/2019 | 2.17 | 6/3/2022 | 6/3/2019 | 103.66846 | 103.6684558 | 103.6684558 | 103.6684558 | 103.2427502 | 101.3243703 | 99.45117516 | 97.62182873 | 95.83504358 |
| 190604A00007 | 6/4/2019 | 2.23 | 7/8/2021 | 6/4/2019 | 102.0213 | 102.0212963 | 102.0212963 | 102.0212963 | 101.8130593 | 100.7847522 | 99.77715709 | 98.78965275 | 97.82164275 |
| 190612A00011 | 6/12/2019 | 2.2 | 6/30/2022 | 6/12/2019 | 103.84897 | 103.8489711 | 103.8489711 | 103.8489711 | 103.3963827 | 101.4035878 | 99.45946056 | 97.56250784 | 95.71129274 |
| 190614A00005 | 6/14/2019 | 1.99 | 6/14/2022 | 6/14/2019 | 103.7072 | 103.7071975 | 103.7071975 | 103.7071975 | 103.2690597 | 101.3142716 | 99.40633407 | 97.54383711 | 95.72542296 |
| 190617A00027 | 6/17/2019 | 2.21 | 6/16/2023 | 6/17/2019 | 105.72148 | 105.7214779 | 105.7214779 | 105.7214779 | 104.8934639 | 101.9438663 | 99.09282645 | 96.33651689 | 93.67128073 |
| 190621A00041 | 6/21/2019 | 2.12 | 6/21/2022 | 6/21/2019 | 103.64203 | 103.642026 | 103.642026 | 103.642026 | 103.1987217 | 101.2323311 | 99.31340228 | 97.44049644 | 95.61222835 |
| 190625A00007 | 6/25/2019 | 2.06 | 6/25/2021 | 6/25/2019 | 101.78114 | 101.7811427 | 101.7811427 | 101.7811427 | 101.5775138 | 100.5858188 | 99.61342018 | 98.65975908 | 97.72429794 |
| 190625A00027 | 6/25/2019 | 2.04 | 6/24/2022 | 6/25/2019 | 103.49671 | 103.4967097 | 103.4967097 | 103.4967097 | 103.050746 | 101.077743 | 99.15255981 | 97.27374095 | 95.4398852 |
| 190627A00009 | 6/27/2019 | 1.93 | 6/27/2023 | 6/27/2019 | 105.48454 | 105.4845445 | 105.4845445 | 105.4845445 | 104.637704 | 101.6496216 | 98.76267449 | 95.97288502 | 93.27645516 |
| 190627A00038 | 6/27/2019 | 2.12 | 6/27/2023 | 6/27/2019 | 105.50757 | 105.5075681 | 105.5075681 | 105.5075681 | 104.6647446 | 101.6890784 | 98.81385004 | 96.03511908 | 93.34912258 |
| 190628A00024 | 6/28/2019 | 2.09 | 6/28/2022 | 6/28/2019 | 103.61672 | 103.6167239 | 103.6167239 | 103.6167239 | 103.1665792 | 101.1815625 | 99.24490763 | 97.35513451 | 95.51081888 |
| 190701A00006 | 7/1/2019 | 2.11 | 7/1/2021 | 7/1/2019 | 101.86151 | 101.861506 | 101.861506 | 101.861506 | 101.6550458 | 100.6466438 | 99.65817414 | 98.68905039 | 97.7387091 |
| 190701A00023 | 7/1/2019 | 1.95 | 7/1/2024 | 7/1/2019 | 107.41973 | 107.419734 | 107.419734 | 107.419734 | 105.900673 | 101.9097916 | 98.09162625 | 94.4377976 | 90.94037779 |
| 190711A00022 | 7/11/2019 | 2 | 7/11/2023 | 7/11/2019 | 105.76944 | 105.7694385 | 105.7694385 | 105.7694385 | 104.9007287 | 101.8715738 | 98.94592042 | 96.11965445 | 93.38884993 |
| 190731A00028 | 7/31/2019 | 1.93 | 7/29/2022 | 7/31/2019 | 103.81432 | 103.8143199 | 103.8143199 | 103.8143199 | 103.3317708 | 101.2557889 | 99.23189176 | 97.25842366 | 95.33379423 |
| 190805A00008 | 8/5/2019 | 1.88 | 8/4/2023 | 8/5/2019 | 104.94908 | 104.9490807 | 104.9490807 | 104.9490807 | 104.0514679 | 100.9859459 | 98.02664068 | 95.16926542 | 92.40973304 |
| 190807A00023 | 8/7/2019 | 1.77 | 8/7/2024 | 8/7/2019 | 106.10079 | 106.1007909 | 106.1007909 | 106.1007909 | 104.5197213 | 100.4823255 | 96.62287829 | 92.9325882 | 89.40314765 |
| 190809A00013 | 8/9/2019 | 1.91 | 8/10/2020 | 8/9/2019 | 100.20425 | 100.2042524 | 100.2042524 | 100.2042524 | 100.1879556 | 100.0741635 | 99.9606444 | 99.84739726 | 99.73442107 |
| 190809A00020 | 8/9/2019 | 2.44 | 8/9/2034 | 8/9/2019 | 132.94807 | 132.9480663 | 132.9480663 | 125.7048114 | 111.2742872 | 98.47044603 | 87.32419876 | 77.60998282 | 69.13406447 |
| 190813A00016 | 8/13/2019 | 1.88 | 8/13/2024 | 8/13/2019 | 106.58212 | 106.5821185 | 106.5821185 | 106.5821185 | 104.9852226 | 100.9229377 | 97.04014753 | 93.32795865 | 89.77796858 |
| 190813A00020 | 8/13/2019 | 1.89 | 8/12/2022 | 8/13/2019 | 103.41218 | 103.4121778 | 103.4121778 | 103.4121778 | 102.9190744 | 100.8179354 | 98.770046 | 96.77369083 | 94.82722346 |
| 190321A00038 | 3/21/2019 | 2.64 | 9/21/2020 | 3/21/2019 | 100.54541 | 100.5454075 | 100.5454075 | 100.5454075 | 100.509177 | 100.2791342 | 100.0501523 | 99.82222402 | 99.59534201 |
| 190326A00024 | 3/26/2019 | 2.59 | 3/26/2024 | 3/26/2019 | 108.64957 | 108.6495675 | 108.6495675 | 108.6495675 | 107.3292216 | 103.5865369 | 99.99522189 | 96.54827849 | 93.23907705 |
| 190326A00032 | 3/26/2019 | 2.4 | 3/26/2024 | 3/26/2019 | 108.63096 | 108.6309638 | 108.6309638 | 108.6309638 | 107.3029885 | 103.5423772 | 99.93430907 | 96.47171396 | 93.14789471 |
| 190327A00024 | 3/27/2019 | 2.48 | 3/25/2022 | 3/27/2019 | 103.84759 | 103.8475878 | 103.8475878 | 103.8475878 | 103.4881683 | 101.7550625 | 100.0592836 | 98.3996904 | 96.77518867 |
| 190327A00041 | 3/27/2019 | 2.44 | 3/26/2021 | 3/27/2019 | 101.62991 | 101.6299069 | 101.6299069 | 101.6299069 | 101.4856339 | 100.7418829 | 100.0090117 | 99.28678292 | 98.57496595 |
| 190328A00025 | 3/28/2019 | 2.51 | 7/23/2021 | 3/28/2019 | 102.40397 | 102.4039673 | 102.4039673 | 102.4039673 | 102.1918633 | 101.1206138 | 100.0717756 | 99.04465077 | 98.03857 |
| 190401A00005 | 4/1/2019 | 2.54 | 4/1/2021 | 4/1/2019 | 101.74259 | 101.7425884 | 101.7425884 | 101.7425884 | 101.5945733 | 100.83397 | 100.0847276 | 99.34659317 | 98.61932116 |
| 190401A00008 | 4/1/2019 | 2.62 | 4/1/2024 | 4/1/2019 | 108.80103 | 108.8010338 | 108.8010338 | 108.8010338 | 107.4683628 | 103.7073643 | 100.0990085 | 96.63621686 | 93.31228463 |
| 190411A00017 | 4/15/2019 | 2.65 | 4/15/2024 | 4/15/2019 | 109.00497 | 109.0049684 | 109.0049684 | 109.0049684 | 107.6436131 | 103.8416659 | 100.1953963 | 96.69758456 | 93.34138755 |
| 190411A00029 | 4/11/2019 | 2.46 | 4/11/2024 | 4/11/2019 | 108.96151 | 108.9615112 | 108.9615112 | 108.9615112 | 107.6002893 | 103.7911295 | 100.1380034 | 96.63365702 | 93.2712166 |
| 190416A00018 | 4/16/2019 | 2.63 | 4/16/2021 | 4/16/2019 | 101.90179 | 101.9017852 | 101.9017852 | 101.9017852 | 101.7430881 | 100.9409754 | 100.1514953 | 99.37435082 | 98.60925436 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190422A00008 | 4/22/2019 | 2.6 | 4/22/2021 | 4/22/2019 | 101.91639 | 101.9163915 | 101.9163915 | 101.9163915 | 101.7534539 | 100.9349205 | 100.1295362 | 99.33698571 | 98.5569641 |
| 190424A00007 | 4/24/2019 | 2.66 | 4/24/2024 | 4/24/2019 | 109.10154 | 109.1015411 | 109.1015411 | 109.1015411 | 107.7219193 | 103.8943059 | 100.2243162 | 96.70463889 | 93.32834062 |
| 190426A00032 | 6/27/2019 | 2.55 | 6/27/2022 | 6/27/2019 | 104.53784 | 104.5378449 | 104.5378449 | 104.5378449 | 104.0868069 | 102.0950496 | 100.151709 | 98.25530578 | 96.4044163 |
| 190429A00003 | 4/29/2019 | 2.62 | 10/13/2023 | 4/29/2019 | 107.70864 | 107.7086363 | 107.7086363 | 107.7086363 | 106.6889413 | 103.3958125 | 100.2220577 | 97.16267189 | 94.21289129 |
| 190501A00028 | 5/1/2019 | 2.42 | 5/1/2024 | 5/1/2019 | 108.93561 | 108.9356113 | 108.9356113 | 108.9356113 | 107.5346424 | 103.6726927 | 99.97100621 | 96.42212241 | 93.01896586 |
| 190503A00009 | 5/3/2019 | 2.57 | 5/3/2021 | 5/3/2019 | 101.96194 | 101.9619402 | 101.9619402 | 101.9619402 | 101.7911384 | 100.9424314 | 100.1078472 | 99.28703547 | 98.47965746 |
| 190506A00027 | 5/6/2019 | 2.38 | 5/6/2022 | 5/6/2019 | 104.23525 | 104.2352457 | 104.2352457 | 104.2352457 | 103.8343061 | 101.978386 | 100.1646974 | 98.39203437 | 96.65923285 |
| 190507A00004 | 5/7/2019 | 2.88 | 5/7/2029 | 5/7/2019 | 124.66711 | 124.6671111 | 124.6671111 | 124.6671111 | 115.842723 | 107.0259466 | 98.96465815 | 91.58984709 | 84.83914265 |
| 190510A00018 | 5/10/2019 | 2.54 | 5/10/2023 | 5/10/2019 | 106.47914 | 106.4791426 | 106.4791426 | 106.4791426 | 105.698739 | 102.8352434 | 100.0642887 | 97.38239907 | 94.78624839 |
| 190514A00022 | 5/14/2019 | 2.49 | 11/16/2020 | 5/14/2019 | 100.86263 | 100.8626323 | 100.8626323 | 100.8626323 | 100.7947494 | 100.4097486 | 100.0276946 | 99.64855345 | 99.27229192 |
| 190514A00025 | 5/14/2019 | 2.43 | 5/14/2021 | 5/14/2019 | 101.9088 | 101.908799 | 101.908799 | 101.908799 | 101.7300177 | 100.8516195 | 99.988364 | 99.13986197 | 98.30573735 |
| 190514A00045 | 5/14/2019 | 2.49 | 5/13/2022 | 5/14/2019 | 104.14444 | 104.144442 | 104.144442 | 104.144442 | 103.7382918 | 101.8709596 | 100.0464065 | 98.26340226 | 96.52075992 |
| 190515A00002 | 5/15/2019 | 2.44 | 5/16/2022 | 5/15/2019 | 104.08689 | 104.0868911 | 104.0868911 | 104.0868911 | 103.677862 | 101.8028542 | 99.97097639 | 98.18098324 | 96.43167332 |
| 190805A00029 | 8/5/2019 | 1.93 | 8/5/2022 | 8/5/2019 | 103.46611 | 103.4661095 | 103.4661095 | 103.4661095 | 102.9794858 | 100.8961214 | 98.86523148 | 96.88513847 | 94.95423166 |
| 190807A00005 | 8/7/2019 | 1.77 | 8/7/2024 | 8/7/2019 | 106.10079 | 106.1007909 | 106.1007909 | 106.1007909 | 104.5197213 | 100.4823255 | 96.62287829 | 92.9325882 | 89.40314765 |
| 190808A00011 | 8/8/2019 | 1.86 | 8/8/2023 | 8/8/2019 | 104.90388 | 104.903876 | 104.903876 | 104.903876 | 104.0002447 | 100.9251177 | 97.95682925 | 95.09105479 | 92.32367211 |
| 190808A00023 | 8/8/2019 | 1.68 | 11/8/2023 | 8/8/2019 | 105.30695 | 105.3069526 | 105.3069526 | 105.3069526 | 104.2479572 | 100.9120289 | 97.7000771 | 94.60686507 | 91.62740489 |
| 190809A00005 | 8/9/2019 | 1.88 | 7/11/2022 | 8/9/2019 | 103.25037 | 103.2503705 | 103.2503705 | 103.2503705 | 102.7883286 | 100.7728121 | 98.8070075 | 96.88936937 | 95.01841159 |
| 190809A00010 | 8/9/2019 | 1.88 | 8/8/2024 | 8/9/2019 | 106.56032 | 106.560315 | 106.560315 | 106.560315 | 104.974416 | 100.9251552 | 97.05434681 | 93.3531724 | 89.81329918 |
| 190813A00022 | 8/13/2019 | 1.88 | 8/13/2024 | 8/13/2019 | 106.58212 | 106.5821185 | 106.5821185 | 106.5821185 | 104.9852226 | 100.9229377 | 97.04014753 | 93.32795865 | 89.77796858 |
| 190815A00012 | 8/15/2019 | 1.81 | 8/15/2024 | 8/15/2019 | 106.29965 | 106.2996542 | 106.2996542 | 106.2996542 | 104.7000585 | 100.6385192 | 96.75670172 | 93.04568995 | 89.49706087 |
| 190816A00013 | 8/16/2019 | 2.2 | 8/16/2029 | 8/16/2019 | 117.29672 | 117.2967214 | 117.2967214 | 117.2967214 | 108.2915732 | 99.64851358 | 91.77105119 | 84.58719902 | 78.03208846 |
| 190816A00031 | 8/16/2019 | 1.77 | 8/16/2024 | 8/16/2019 | 106.13732 | 106.1373213 | 106.1373213 | 106.1373213 | 104.536502 | 100.4757732 | 96.59486572 | 92.88485273 | 89.33730147 |
| 190819A00026 | 8/19/2019 | 1.62 | 8/19/2024 | 8/19/2019 | 106.28651 | 106.2865064 | 106.2865064 | 106.2865064 | 104.6680081 | 100.5753827 | 96.66478993 | 92.92715636 | 89.35391268 |
| 190822A00016 | 8/22/2019 | 1.84 | 8/22/2022 | 8/22/2019 | 103.34794 | 103.3479361 | 103.3479361 | 103.3479361 | 102.845557 | 100.7189264 | 98.64666621 | 96.62700621 | 94.65824818 |
| 190826A00006 | 8/26/2019 | 1.72 | 8/26/2024 | 8/26/2019 | 105.96841 | 105.9684128 | 105.9684128 | 105.9684128 | 104.3468945 | 100.2645748 | 96.36402961 | 92.63618607 | 89.0724763 |
| 190829A00011 | 8/30/2019 | 1.98 | 12/15/2020 | 8/30/2019 | 100.80457 | 100.8045654 | 100.8045654 | 100.8045654 | 100.7193327 | 100.2548316 | 99.79461599 | 99.33862663 | 98.88680539 |
| 190830A00023 | 8/30/2019 | 1.78 | 9/15/2022 | 8/30/2019 | 103.31612 | 103.3161184 | 103.3161184 | 103.3161184 | 102.7914285 | 100.6011338 | 98.46812273 | 96.39048003 | 94.36637101 |
| 190906A00012 | 9/6/2019 | 1.76 | 9/6/2024 | 9/6/2019 | 106.18019 | 106.1801936 | 106.1801936 | 106.1801936 | 104.5332246 | 100.4185284 | 96.48810417 | 92.73269862 | 89.1435772 |
| 190909A00029 | 9/9/2019 | 1.83 | 9/8/2023 | 9/9/2019 | 104.94093 | 104.940929 | 104.940929 | 104.940929 | 103.9888505 | 100.8327533 | 97.78862244 | 94.85182247 | 92.01794108 |
| 190909A00030 | 9/9/2019 | 1.83 | 9/9/2024 | 9/9/2019 | 106.48819 | 106.4881912 | 106.4881912 | 106.4881912 | 104.8326987 | 100.7038642 | 96.76017125 | 92.99230837 | 89.39148726 |
| 190910A00017 | 9/16/2019 | 1.86 | 9/16/2024 | 9/16/2019 | 106.64499 | 106.6449895 | 106.6449895 | 106.6449895 | 104.9729639 | 100.8227788 | 96.85939164 | 93.07337048 | 89.45581542 |
| 190910A00027 | 9/10/2019 | 1.86 | 9/9/2022 | 9/10/2019 | 103.46901 | 103.469013 | 103.469013 | 103.469013 | 102.9495336 | 100.7737024 | 98.65443125 | 96.58984182 | 94.57813437 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190917A00029 | 9/17/2019 | 2.02 | 12/6/2022 | 9/17/2019 | 104.24226 | 104.2422607 | 104.2422607 | 104.2422607 | 103.638556 | 101.2198387 | 98.869841 | 96.58622645 | 94.36675209 |
| 190919A00007 | 9/19/2019 | 2.04 | 9/19/2024 | 9/19/2019 | 107.42387 | 107.4238675 | 107.4238675 | 107.4238675 | 105.7404324 | 101.5662222 | 97.58000776 | 93.77228523 | 90.13408774 |
| 190923A00020 | 9/23/2019 | 2.05 | 9/24/2029 | 9/23/2019 | 117.99637 | 117.9963652 | 117.9963652 | 117.9963652 | 108.6565332 | 99.82079879 | 91.77894599 | 84.45535094 | 77.78196382 |
| 190925A00011 | 9/25/2019 | 1.89 | 9/25/2024 | 9/25/2019 | 106.81166 | 106.8116612 | 106.8116612 | 106.8116612 | 105.1185804 | 100.9416609 | 96.95365637 | 93.14497936 | 89.50658633 |
| 190821A00021 | 8/21/2019 | 1.79 | 8/18/2022 | 8/21/2019 | 103.22299 | 103.2229938 | 103.2229938 | 103.2229938 | 102.7246589 | 100.6098668 | 98.548962 | 96.54019711 | 94.58189571 |
| 190822A00002 | 8/22/2019 | 1.89 | 8/20/2021 | 8/22/2019 | 101.86233 | 101.8623298 | 101.8623298 | 101.8623298 | 101.6458011 | 100.5017386 | 99.38332209 | 98.28969677 | 97.22004536 |
| 190826A00004 | 8/26/2019 | 1.74 | 8/26/2022 | 8/26/2019 | 103.14716 | 103.1471634 | 103.1471634 | 103.1471634 | 102.6414713 | 100.5065892 | 98.42649004 | 96.39938237 | 94.42354819 |
| 190826A00028 | 8/26/2019 | 1.56 | 8/26/2022 | 8/26/2019 | 103.14724 | 103.1472411 | 103.1472411 | 103.1472411 | 102.639575 | 100.4970432 | 98.40962931 | 96.37552709 | 94.39300427 |
| 190827A00001 | 8/27/2019 | 1.74 | 8/27/2024 | 8/27/2019 | 106.05619 | 106.0561889 | 106.0561889 | 106.0561889 | 104.431984 | 100.3453532 | 96.44076233 | 92.70912102 | 89.14184509 |
| 190827A00022 | 8/27/2019 | 1.83 | 8/27/2021 | 8/27/2019 | 101.82333 | 101.8233294 | 101.8233294 | 101.8233294 | 101.6057324 | 100.4429564 | 99.3066678 | 98.19596996 | 97.11000616 |
| 190827A00039 | 8/27/2019 | 1.78 | 8/26/2022 | 8/27/2019 | 103.23432 | 103.2343151 | 103.2343151 | 103.2343151 | 102.7284267 | 100.5925825 | 98.51154085 | 96.48350976 | 94.50677068 |
| 190828A00009 | 8/28/2019 | 1.71 | 8/28/2024 | 8/28/2019 | 105.9343 | 105.9343019 | 105.9343019 | 105.9343019 | 104.3086502 | 100.2220282 | 96.31757218 | 92.58617997 | 89.0192565 |
| 190829A00029 | 8/29/2019 | 1.75 | 7/14/2023 | 8/29/2019 | 104.45861 | 104.4586061 | 104.4586061 | 104.4586061 | 103.5943184 | 100.5904408 | 97.68929535 | 94.8867965 | 92.1790458 |
| 190903A00004 | 9/3/2019 | 1.77 | 9/6/2022 | 9/3/2019 | 103.25728 | 103.257278 | 103.257278 | 103.257278 | 102.7410683 | 100.5757055 | 98.46647606 | 96.41152225 | 94.40906344 |
| 190910A00013 | 9/10/2019 | 1.9 | 9/9/2022 | 9/10/2019 | 103.55771 | 103.55771 | 103.55771 | 103.55771 | 103.0380261 | 100.8611992 | 98.74095285 | 96.67540813 | 94.66276471 |
| 190912A00026 | 9/12/2019 | 1.94 | 9/12/2022 | 9/12/2019 | 103.65998 | 103.659981 | 103.659981 | 103.659981 | 103.1372757 | 100.9511957 | 98.8220992 | 96.74808763 | 94.72734203 |
| 190912A00031 | 9/12/2019 | 1.75 | 9/12/2024 | 9/12/2019 | 106.939 | 106.9389962 | 106.9389962 | 106.9389962 | 105.2633188 | 101.0954552 | 97.11525475 | 93.3132411 | 89.68047257 |
| 190913A00014 | 9/13/2019 | 2.08 | 9/13/2024 | 9/13/2019 | 107.56481 | 107.56481 | 107.56481 | 107.56481 | 105.8939187 | 101.7323362 | 97.75750967 | 93.96003154 | 90.33102381 |
| 190913A00025 | 9/13/2019 | 2.04 | 3/15/2022 | 9/13/2019 | 103.02733 | 103.0273308 | 103.0273308 | 103.0273308 | 102.6783457 | 100.9789383 | 99.31573171 | 97.68763343 | 96.09359529 |
| 190919A00017 | 9/19/2019 | 1.8 | 9/19/2022 | 9/19/2019 | 103.78294 | 103.7829418 | 103.7829418 | 103.7829418 | 103.2513477 | 101.0369461 | 98.88080539 | 96.78096484 | 94.73554702 |
| 190920A00021 | 9/20/2019 | 1.96 | 9/18/2026 | 9/20/2019 | 111.57309 | 111.5730911 | 111.5730911 | 111.5730911 | 107.4350368 | 101.3158006 | 95.58447349 | 90.21443714 | 85.18103835 |
| 190923A00012 | 9/23/2019 | 2.43 | 9/25/2034 | 9/23/2019 | 133.10282 | 133.102819 | 133.102819 | 125.6474394 | 111.1024828 | 98.21725612 | 87.01340429 | 77.26035091 | 68.76030583 |
| 190923A00081 | 9/23/2019 | 1.96 | 9/20/2024 | 9/23/2019 | 107.08796 | 107.0879563 | 107.0879563 | 107.0879563 | 105.4043314 | 101.2345524 | 97.25276271 | 93.44945111 | 89.81564421 |
| 190924A00010 | 9/24/2019 | 1.95 | 9/24/2021 | 9/24/2019 | 102.09362 | 102.0936165 | 102.0936165 | 102.0936165 | 101.8695097 | 100.6292595 | 99.41907373 | 98.23786968 | 97.08461607 |
| 190930A00011 | 9/30/2019 | 1.89 | 10/24/2022 | 9/30/2019 | 103.73356 | 103.7335559 | 103.7335559 | 103.7335559 | 103.1717021 | 100.8735658 | 98.63787224 | 96.46256277 | 94.34566003 |
| 190930A00069 | 9/30/2019 | 1.9 | 9/29/2023 | 9/30/2019 | 105.25877 | 105.2587727 | 105.2587727 | 105.2587727 | 104.271937 | 101.0550982 | 97.95406574 | 94.96396856 | 92.08017447 |
| 190930A00077 | 9/30/2019 | 2.23 | 9/28/2029 | 9/30/2019 | 117.79389 | 117.7938932 | 117.7938932 | 117.7938932 | 108.5607224 | 99.80703286 | 91.83711101 | 84.57646578 | 77.95805338 |
| 191002A00006 | 10/2/2019 | 1.84 | 10/2/2024 | 10/2/2019 | 106.62767 | 106.6276653 | 106.6276653 | 106.6276653 | 104.9200191 | 100.7290725 | 96.72847215 | 92.90852668 | 89.26009589 |
| 190807A00014 | 8/7/2019 | 1.75 | 8/7/2023 | 8/7/2019 | 104.55501 | 104.5550112 | 104.5550112 | 104.5550112 | 103.6542083 | 100.5870976 | 97.62652498 | 94.76818006 | 92.00795421 |
| 190807A00022 | 8/7/2019 | 1.76 | 1/17/2023 | 8/7/2019 | 103.77278 | 103.7727785 | 103.7727785 | 103.7727785 | 103.1289949 | 100.6070681 | 98.1596573 | 95.7841196 | 93.477923 |
| 190807A00036 | 8/7/2019 | 1.75 | 8/7/2023 | 8/7/2019 | 104.55501 | 104.5550112 | 104.5550112 | 104.5550112 | 103.6542083 | 100.5870976 | 97.62652498 | 94.76818006 | 92.00795421 |
| 190807A00060 | 8/7/2019 | 1.95 | 2/8/2021 | 8/7/2019 | 101.04905 | 101.0490504 | 101.0490504 | 101.0490504 | 100.9318737 | 100.3160008 | 99.70762725 | 99.10661672 | 98.51283605 |
| 190808A00012 | 8/8/2019 | 1.89 | 8/8/2024 | 8/8/2019 | 106.60172 | 106.6017209 | 106.6017209 | 106.6017209 | 105.0155824 | 100.9654788 | 97.09385442 | 93.39188992 | 89.8512514 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190809A00012 | 8/9/2019 | 1.69 | 8/9/2024 | 8/9/2019 | 106.53607 | 106.5360739 | 106.5360739 | 106.5360739 | 104.9380371 | 100.8656438 | 96.9733659 | 93.25227492 | 89.69393553 |
| 190814A00003 | 8/14/2019 | 2.01 | 8/14/2029 | 8/14/2019 | 117.41064 | 117.4106443 | 117.4106443 | 117.4106443 | 108.2953596 | 99.57144286 | 91.62349146 | 84.37833352 | 77.77005007 |
| 190814A00005 | 8/14/2019 | 1.65 | 8/14/2024 | 8/14/2019 | 106.39091 | 106.39091 | 106.39091 | 106.39091 | 104.7827558 | 100.7006521 | 96.79960799 | 93.07062326 | 89.50519621 |
| 190815A00008 | 8/15/2019 | 1.82 | 8/15/2022 | 8/15/2019 | 103.27503 | 103.275031 | 103.275031 | 103.275031 | 102.7794048 | 100.6718979 | 98.61794964 | 96.61582889 | 94.66387453 |
| 190816A00014 | 8/16/2019 | 1.77 | 8/16/2024 | 8/16/2019 | 106.13732 | 106.1373213 | 106.1373213 | 106.1373213 | 104.536502 | 100.4757732 | 96.59486572 | 92.88485273 | 89.33730147 |
| 190816A00039 | 8/16/2019 | 1.91 | 2/16/2021 | 8/16/2019 | 101.06048 | 101.0604826 | 101.0604826 | 101.0604826 | 100.938757 | 100.3009809 | 99.67124755 | 99.04940536 | 98.43530665 |
| 190819A00001 | 8/19/2019 | 1.82 | 8/19/2021 | 8/19/2019 | 101.77729 | 101.7772904 | 101.7772904 | 101.7772904 | 101.5610206 | 100.4201863 | 99.30486976 | 98.21422221 | 97.14743221 |
| 190819A00020 | 8/19/2019 | 1.79 | 8/19/2022 | 8/19/2019 | 103.22713 | 103.2271324 | 103.2271324 | 103.2271324 | 102.7278471 | 100.6103929 | 98.54694046 | 96.53573695 | 94.57510066 |
| 190819A00027 | 8/19/2019 | 2.03 | 8/19/2020 | 8/19/2019 | 100.24288 | 100.2428751 | 100.2428751 | 100.2428751 | 100.222567 | 100.0840603 | 99.94594971 | 99.80823367 | 99.6709104 |
| 190820A00012 | 8/20/2019 | 1.76 | 8/19/2022 | 8/20/2019 | 103.16235 | 103.1623481 | 103.1623481 | 103.1623481 | 102.6632072 | 100.5464623 | 98.48370476 | 96.47318218 | 94.51321324 |
| 190820A00019 | 8/20/2019 | 1.76 | 8/21/2023 | 8/20/2019 | 104.64294 | 104.6429446 | 104.6429446 | 104.6429446 | 103.7202023 | 100.6157249 | 97.62007221 | 94.72879738 | 91.93766426 |
| 190820A00020 | 8/20/2019 | 1.76 | 8/20/2024 | 8/20/2019 | 106.11182 | 106.1118221 | 106.1118221 | 106.1118221 | 104.5024722 | 100.4322351 | 96.54262725 | 92.8246625 | 89.26985306 |
| 190820A00030 | 8/20/2019 | 1.76 | 4/16/2024 | 8/20/2019 | 105.60477 | 105.6047727 | 105.6047727 | 105.6047727 | 104.2586261 | 100.5182437 | 96.93182067 | 93.49220123 | 90.19260281 |
| 190821A00009 | 8/21/2019 | 1.79 | 8/22/2022 | 8/21/2019 | 103.23955 | 103.2395484 | 103.2395484 | 103.2395484 | 102.7374119 | 100.6119723 | 98.54087881 | 96.522362 | 94.55472431 |
| 190821A00027 | 8/21/2019 | 1.79 | 8/22/2022 | 8/21/2019 | 103.23955 | 103.2395484 | 103.2395484 | 103.2395484 | 102.7374119 | 100.6119723 | 98.54087881 | 96.522362 | 94.55472431 |
| 190823A00002 | 8/23/2019 | 1.89 | 8/24/2020 | 8/23/2019 | 100.27094 | 100.2709369 | 100.2709369 | 100.2709369 | 100.2483445 | 100.0957331 | 99.94359696 | 99.79193388 | 99.64074163 |
| 190826A00030 | 8/26/2019 | 1.72 | 8/26/2026 | 8/26/2019 | 109.96331 | 109.9633107 | 109.9633107 | 109.9633107 | 105.9475441 | 99.93182512 | 94.29489267 | 89.01095438 | 84.05610583 |
| 190826A00057 | 8/26/2019 | 1.87 | 8/26/2025 | 8/26/2019 | 108.11731 | 108.1173094 | 108.1173094 | 108.1173094 | 105.5532236 | 100.5078618 | 95.73331203 | 91.21362437 | 86.93387349 |
| 190828A00019 | 8/28/2019 | 2 | 3/28/2028 | 8/28/2019 | 113.15059 | 113.1505864 | 113.1505864 | 113.1505864 | 106.5712996 | 99.17491501 | 92.34644999 | 86.03931292 | 80.21096721 |
| 190529A00059 | 5/29/2019 | 2.32 | 5/28/2021 | 5/29/2019 | 101.89162 | 101.8916172 | 101.8916172 | 101.8916172 | 101.7026472 | 100.7862878 | 99.88639554 | 99.00252977 | 98.13426527 |
| 190529A00062 | 5/29/2019 | 2.32 | 5/28/2021 | 5/29/2019 | 101.89162 | 101.8916172 | 101.8916172 | 101.8916172 | 101.7026472 | 100.7862878 | 99.88639554 | 99.00252977 | 98.13426527 |
| 190530A00002 | 5/30/2019 | 2.24 | 5/28/2021 | 5/30/2019 | 101.95538 | 101.9553832 | 101.9553832 | 101.9553832 | 101.7659428 | 100.8473492 | 99.94529049 | 99.05932337 | 98.18902023 |
| 190530A00005 | 5/30/2019 | 2.36 | 5/28/2021 | 5/30/2019 | 101.92846 | 101.9284569 | 101.9284569 | 101.9284569 | 101.7394522 | 100.8229094 | 99.92283619 | 99.03879169 | 98.17035065 |
| 190530A00045 | 5/30/2019 | 2.44 | 5/30/2024 | 5/30/2019 | 108.46692 | 108.4669183 | 108.4669183 | 108.4669183 | 107.0179511 | 103.1101994 | 99.367275 | 95.78137861 | 92.34512053 |
| 190531A00003 | 5/31/2019 | 2.31 | 10/29/2021 | 5/31/2019 | 102.72771 | 102.7277087 | 102.7277087 | 102.7277087 | 102.4876721 | 101.1618715 | 99.86004279 | 98.58158012 | 97.32589765 |
| 190603A00048 | 6/3/2019 | 2.24 | 6/3/2024 | 6/3/2019 | 107.69854 | 107.698543 | 107.698543 | 107.698543 | 106.2454217 | 102.3422452 | 98.6043141 | 95.02378401 | 91.59322397 |
| 190604A00009 | 6/4/2019 | 2.23 | 6/4/2021 | 6/4/2019 | 101.84681 | 101.8468097 | 101.8468097 | 101.8468097 | 101.653676 | 100.7185144 | 99.80050772 | 98.89918731 | 98.01410135 |
| 190605A00035 | 6/5/2019 | 2.18 | 6/5/2023 | 6/5/2019 | 105.57488 | 105.5748776 | 105.5748776 | 105.5748776 | 104.7629257 | 101.8448228 | 99.02327857 | 96.29458113 | 93.65518228 |
| 190606A00028 | 6/6/2019 | 2.74 | 6/6/2029 | 6/6/2019 | 121.75979 | 121.7597861 | 121.7597861 | 121.7597861 | 112.9772985 | 104.2951377 | 96.36269664 | 89.11100775 | 82.47778393 |
| 190611A00015 | 6/11/2019 | 2.32 | 6/11/2024 | 6/11/2019 | 108.05965 | 108.0596522 | 108.0596522 | 108.0596522 | 106.5879838 | 102.6568402 | 98.8929454 | 95.2883179 | 91.83539907 |
| 190620A00010 | 6/20/2019 | 2.04 | 6/20/2022 | 6/20/2019 | 103.47749 | 103.4774926 | 103.4774926 | 103.4774926 | 103.0355046 | 101.073484 | 99.15876395 | 97.28991234 | 95.46555044 |
| 190620A00024 | 6/20/2019 | 2.05 | 6/21/2021 | 6/20/2019 | 101.75155 | 101.7515468 | 101.7515468 | 101.7515468 | 101.5499631 | 100.5692722 | 99.60746154 | 98.66398976 | 97.73833612 |
| 190624A00008 | 6/24/2019 | 2.08 | 6/24/2022 | 6/24/2019 | 103.57691 | 103.5769056 | 103.5769056 | 103.5769056 | 103.1307792 | 101.1569576 | 99.23097193 | 97.35136602 | 95.5167383 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190624A00052 | 6/24/2019 | 1.89 | 6/24/2022 | 6/24/2019 | 103.55815 | 103.5581491 | 103.5581491 | 103.5581491 | 103.1104112 | 101.1300024 | 99.19770893 | 97.31206294 | 95.47165148 |
| 190625A00017 | 6/25/2019 | 2.02 | 12/15/2022 | 6/25/2019 | 104.28518 | 104.2851777 | 104.2851777 | 104.2851777 | 103.672635 | 101.2299952 | 98.85741335 | 96.5524839 | 94.31289875 |
| 190625A00024 | 6/25/2019 | 2.26 | 6/25/2025 | 6/25/2019 | 109.80865 | 109.8086503 | 109.8086503 | 109.8086503 | 107.4112331 | 102.4759662 | 97.79777054 | 93.36193012 | 89.15464617 |
| 190626A00015 | 6/26/2019 | 2.15 | 6/26/2024 | 6/26/2019 | 107.45897 | 107.4589686 | 107.4589686 | 107.4589686 | 105.9594781 | 102.001062 | 98.21289367 | 94.58676168 | 91.11489439 |
| 190701A00008 | 7/3/2019 | 2.1 | 7/3/2023 | 7/3/2019 | 105.47699 | 105.4769882 | 105.4769882 | 105.4769882 | 104.6255411 | 101.6345918 | 98.74506708 | 95.95296788 | 93.25447658 |
| 190701A00017 | 7/1/2019 | 1.9 | 7/1/2022 | 7/1/2019 | 103.61277 | 103.6127697 | 103.6127697 | 103.6127697 | 103.1580061 | 101.1581291 | 99.20726725 | 97.30391127 | 95.44660908 |
| 190703A00004 | 7/3/2019 | 2.08 | 7/5/2022 | 7/3/2019 | 103.6311 | 103.6310958 | 103.6310958 | 103.6310958 | 103.1740914 | 101.1703806 | 99.21582179 | 97.30889791 | 95.44814946 |
| 190712A00001 | 7/12/2019 | 2.05 | 7/12/2024 | 7/12/2019 | 107.88364 | 107.8836441 | 107.8836441 | 107.8836441 | 106.3383815 | 102.3100666 | 98.45698876 | 94.77059838 | 91.24280954 |
| 190712A00009 | 7/12/2019 | 2.19 | 7/12/2023 | 7/12/2019 | 105.79727 | 105.797273 | 105.797273 | 105.797273 | 104.9312119 | 101.9120654 | 98.9958599 | 96.17851071 | 93.4561197 |
| 190715A00022 | 7/15/2019 | 2.27 | 7/15/2020 | 7/15/2019 | 100.08166 | 100.0816568 | 100.0816568 | 100.0816568 | 100.0759576 | 100.0343837 | 99.99286145 | 99.9513907 | 99.9099714 |
| 190815A00015 | 8/15/2019 | 1.82 | 8/15/2022 | 8/15/2019 | 103.27503 | 103.275031 | 103.275031 | 103.275031 | 102.7794048 | 100.6718979 | 98.61794964 | 96.61582889 | 94.66387453 |
| 190816A00025 | 8/16/2019 | 1.89 | 3/16/2021 | 8/16/2019 | 101.17395 | 101.173951 | 101.173951 | 101.173951 | 101.0359104 | 100.3212916 | 99.61675956 | 98.92210158 | 98.23711109 |
| 190820A00021 | 8/20/2019 | 2.13 | 8/20/2029 | 8/20/2019 | 116.67737 | 116.6773738 | 116.6773738 | 116.6773738 | 107.6704602 | 99.04557867 | 91.18616256 | 84.0201323 | 77.48254505 |
| 190820A00038 | 8/20/2019 | 1.76 | 8/20/2024 | 8/20/2019 | 106.11182 | 106.1118221 | 106.1118221 | 106.1118221 | 104.5024722 | 100.4322351 | 96.54262725 | 92.8246625 | 89.26985306 |
| 190821A00028 | 8/21/2019 | 1.8 | 8/21/2023 | 8/21/2019 | 104.76977 | 104.7697749 | 104.7697749 | 104.7697749 | 103.8465578 | 100.7400795 | 97.74247792 | 94.84930461 | 92.05632164 |
| 190826A00029 | 8/26/2019 | 1.53 | 8/26/2024 | 8/26/2019 | 105.93706 | 105.9370632 | 105.9370632 | 105.9370632 | 104.3053045 | 100.2021815 | 96.28232136 | 92.53655303 | 88.95621725 |
| 190826A00034 | 8/26/2019 | 1.9 | 8/24/2029 | 8/26/2019 | 116.44715 | 116.4471478 | 116.4471478 | 116.4471478 | 107.3098214 | 98.60631683 | 90.6800602 | 83.45752354 | 76.87248837 |
| 190826A00063 | 8/26/2019 | 2.05 | 8/28/2028 | 8/26/2019 | 114.26254 | 114.2625395 | 114.2625395 | 114.2625395 | 106.984569 | 99.21395258 | 92.06799642 | 85.49319231 | 79.44087717 |
| 190828A00020 | 8/28/2019 | 1.95 | 5/28/2027 | 8/28/2019 | 111.40029 | 111.4002916 | 111.4002916 | 111.4002916 | 106.1826571 | 99.52888183 | 93.33749891 | 87.57404077 | 82.20677281 |
| 190829A00031 | 8/29/2019 | 1.54 | 8/29/2024 | 8/29/2019 | 105.99093 | 105.9909274 | 105.9909274 | 105.9909274 | 104.3522868 | 100.2404777 | 96.31259568 | 92.55942216 | 88.9722539 |
| 190829A00045 | 8/29/2019 | 1.9 | 8/28/2026 | 8/29/2019 | 109.86973 | 109.8697278 | 109.8697278 | 109.8697278 | 105.8848255 | 99.91008316 | 94.31044913 | 89.06043746 | 84.13642415 |
| 190829A00050 | 8/29/2019 | 1.73 | 8/29/2024 | 8/29/2019 | 106.02216 | 106.022161 | 106.022161 | 106.022161 | 104.3938215 | 100.3028871 | 96.39438462 | 92.65919409 | 89.0887042 |
| 190904A00001 | 9/4/2019 | 1.5 | 9/4/2024 | 9/4/2019 | 105.84526 | 105.8452593 | 105.8452593 | 105.8452593 | 104.1941358 | 100.0698901 | 96.13078079 | 92.367496 | 88.77124649 |
| 190905A00003 | 9/5/2019 | 1.76 | 9/5/2024 | 9/5/2019 | 106.17619 | 106.1761897 | 106.1761897 | 106.1761897 | 104.5314698 | 100.4194379 | 96.49145493 | 92.73828419 | 89.1512065 |
| 190910A00030 | 9/10/2019 | 1.86 | 9/10/2024 | 9/10/2019 | 106.61932 | 106.6193205 | 106.6193205 | 106.6193205 | 104.9608131 | 100.8266698 | 96.8779776 | 93.10540489 | 89.50014464 |
| 190913A00011 | 9/13/2019 | 2.02 | 9/13/2022 | 9/13/2019 | 103.84278 | 103.8427825 | 103.8427825 | 103.8427825 | 103.3187246 | 101.1278817 | 98.99419153 | 96.915748 | 94.89072493 |
| 190916A00009 | 9/16/2019 | 2.04 | 9/16/2022 | 9/16/2019 | 103.90175 | 103.9017535 | 103.9017535 | 103.9017535 | 103.3747712 | 101.175152 | 99.03308066 | 96.94663141 | 94.91395968 |
| 190924A00026 | 9/24/2019 | 1.9 | 7/22/2022 | 9/24/2019 | 103.34028 | 103.3402835 | 103.3402835 | 103.3402835 | 102.8673776 | 100.8220674 | 98.82766877 | 96.88257912 | 94.98525835 |
| 190924A00033 | 9/24/2019 | 1.84 | 9/30/2022 | 9/24/2019 | 103.51389 | 103.5138909 | 103.5138909 | 103.5138909 | 102.9748314 | 100.7418588 | 98.56813612 | 96.45164965 | 94.3904721 |
| 190925A00018 | 9/25/2019 | 1.7 | 9/25/2024 | 9/25/2019 | 106.78311 | 106.7831065 | 106.7831065 | 106.7831065 | 105.0791456 | 100.8806314 | 96.87259666 | 93.04534931 | 89.3897485 |
| 191001A00006 | 10/1/2019 | 1.83 | 6/18/2024 | 10/1/2019 | 106.13814 | 106.1381421 | 106.1381421 | 106.1381421 | 104.662415 | 100.7508358 | 97.00689826 | 93.42255352 | 89.99018158 |
| 191001A00023 | 10/1/2019 | 1.85 | 9/27/2024 | 10/1/2019 | 106.64927 | 106.6492728 | 106.6492728 | 106.6492728 | 104.9527338 | 100.7740595 | 96.78463511 | 92.97484387 | 89.33561557 |
| 191002A00015 | 10/2/2019 | 1.78 | 10/3/2022 | 10/2/2019 | 103.3897 | 103.3896956 | 103.3896956 | 103.3896956 | 102.8481503 | 100.6087813 | 98.4290204 | 96.30684973 | 94.24033714 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191003A00019 | 10/3/2019 | 1.71 | 9/27/2024 | 10/3/2019 | 106.05039 | 106.0503896 | 106.0503896 | 106.0503896 | 104.35752 | 100.191421 | 96.21415968 | 92.41613614 | 88.78829636 |
| 190515A00003 | 5/15/2019 | 2.45 | 11/16/2020 | 5/15/2019 | 100.8472 | 100.8471972 | 100.8471972 | 100.8471972 | 100.7793203 | 100.394356 | 100.0123382 | 99.63323313 | 99.25700747 |
| 190515A00015 | 5/15/2019 | 2.25 | 5/16/2022 | 5/15/2019 | 104.05091 | 104.05091 | 104.05091 | 104.05091 | 103.6405754 | 101.7600048 | 99.92279423 | 98.1276888 | 96.37347815 |
| 190515A00044 | 5/15/2019 | 2.38 | 5/17/2021 | 5/15/2019 | 101.8823 | 101.8823006 | 101.8823006 | 101.8823006 | 101.7013558 | 100.8149277 | 99.94392252 | 99.08794022 | 98.2465944 |
| 190517A00017 | 5/17/2019 | 2.33 | 2/22/2021 | 5/17/2019 | 101.45528 | 101.4552786 | 101.4552786 | 101.4552786 | 101.3296584 | 100.672875 | 100.024592 | 99.38464512 | 98.75287422 |
| 190520A00034 | 5/20/2019 | 2.44 | 5/20/2021 | 5/20/2019 | 101.95384 | 101.9538417 | 101.9538417 | 101.9538417 | 101.7706443 | 100.8757134 | 99.99649273 | 99.1325712 | 98.28355186 |
| 190520A00054 | 5/20/2019 | 2.46 | 5/20/2021 | 5/20/2019 | 101.97182 | 101.9718181 | 101.9718181 | 101.9718181 | 101.7886042 | 100.8935857 | 100.0142786 | 99.15027157 | 98.30116779 |
| 190521A00005 | 5/21/2019 | 2.56 | 5/21/2024 | 5/21/2019 | 108.88466 | 108.8846587 | 108.8846587 | 108.8846587 | 107.4517044 | 103.5587459 | 99.82896 | 96.25467174 | 92.82860674 |
| 190521A00027 | 5/21/2019 | 2.56 | 5/21/2024 | 5/21/2019 | 108.88466 | 108.8846587 | 108.8846587 | 108.8846587 | 107.4517044 | 103.5587459 | 99.82896 | 96.25467174 | 92.82860674 |
| 190521A00028 | 5/21/2019 | 2.47 | 11/22/2021 | 5/21/2019 | 103.10218 | 103.1021791 | 103.1021791 | 103.1021791 | 102.8452586 | 101.4519854 | 100.0843212 | 98.74162092 | 97.42326046 |
| 190521A00043 | 5/21/2019 | 2.54 | 5/22/2023 | 5/21/2019 | 106.55348 | 106.5534763 | 106.5534763 | 106.5534763 | 105.7571006 | 102.861323 | 100.0600881 | 97.34980807 | 94.7270512 |
| 190523A00023 | 5/23/2019 | 2.48 | 3/22/2023 | 5/23/2019 | 106.0112 | 106.0112004 | 106.0112004 | 106.0112004 | 105.2920455 | 102.5655515 | 99.92362816 | 97.36309954 | 94.88093343 |
| 190524A00031 | 5/24/2019 | 2.43 | 5/24/2022 | 5/24/2019 | 104.11541 | 104.1154146 | 104.1154146 | 104.1154146 | 103.6985796 | 101.8022766 | 99.95004188 | 98.14058971 | 96.37268031 |
| 190528A00006 | 5/28/2019 | 2.43 | 9/15/2023 | 5/28/2019 | 106.91411 | 106.9141096 | 106.9141096 | 106.9141096 | 105.9432268 | 102.736816 | 99.64443977 | 96.66135736 | 93.78305743 |
| 190529A00031 | 5/29/2019 | 2.36 | 5/30/2023 | 5/29/2019 | 106.07342 | 106.0734169 | 106.0734169 | 106.0734169 | 105.268174 | 102.3586716 | 99.54486465 | 96.82309594 | 94.18986841 |
| 190529A00034 | 5/29/2019 | 2.32 | 5/28/2021 | 5/29/2019 | 101.89162 | 101.8916172 | 101.8916172 | 101.8916172 | 101.7026472 | 100.7862878 | 99.88639554 | 99.00252977 | 98.13426527 |
| 190529A00060 | 5/29/2019 | 2.31 | 11/29/2021 | 5/29/2019 | 102.9153 | 102.9152956 | 102.9152956 | 102.9152956 | 102.6537443 | 101.2427727 | 99.85805561 | 98.49892391 | 97.16473058 |
| 190529A00067 | 5/29/2019 | 2.32 | 6/1/2021 | 5/29/2019 | 101.91441 | 101.9144081 | 101.9144081 | 101.9144081 | 101.7227248 | 100.7953804 | 99.88489291 | 98.99080596 | 98.11267961 |
| 190529A00079 | 5/29/2019 | 2.32 | 5/28/2021 | 5/29/2019 | 101.89162 | 101.8916172 | 101.8916172 | 101.8916172 | 101.7026472 | 100.7862878 | 99.88639554 | 99.00252977 | 98.13426527 |
| 190530A00003 | 5/30/2019 | 2.21 | 5/27/2022 | 5/30/2019 | 104.03871 | 104.0387141 | 104.0387141 | 104.0387141 | 103.6176963 | 101.7082226 | 99.84339969 | 98.02191681 | 96.24251055 |
| 190530A00004 | 5/30/2019 | 2.24 | 5/30/2023 | 5/30/2019 | 106.25886 | 106.2588553 | 106.2588553 | 106.2588553 | 105.4491614 | 102.5246548 | 99.69657562 | 96.9612297 | 94.31508537 |
| 190531A00047 | 5/31/2019 | 2.32 | 5/28/2021 | 5/31/2019 | 101.89162 | 101.8916172 | 101.8916172 | 101.8916172 | 101.7026472 | 100.7862878 | 99.88639554 | 99.00252977 | 98.13426527 |
| 190603A00009 | 6/3/2019 | 2.17 | 7/6/2022 | 6/3/2019 | 103.81946 | 103.8194584 | 103.8194584 | 103.8194584 | 103.3610918 | 101.3527982 | 99.39380105 | 97.48257714 | 95.61766113 |
| 190603A00050 | 6/3/2019 | 2.19 | 6/3/2021 | 6/3/2019 | 101.80388 | 101.8038757 | 101.8038757 | 101.8038757 | 101.6112882 | 100.6790625 | 99.76388816 | 98.86530055 | 97.98285195 |
| 190604A00008 | 6/4/2019 | 2.23 | 6/4/2021 | 6/4/2019 | 101.84681 | 101.8468097 | 101.8468097 | 101.8468097 | 101.653676 | 100.7185144 | 99.80050772 | 98.89918731 | 98.01410135 |
| 191002A00017 | 10/2/2019 | 1.84 | 10/2/2024 | 10/2/2019 | 106.62767 | 106.6276653 | 106.6276653 | 106.6276653 | 104.9200191 | 100.7290725 | 96.72847215 | 92.90852668 | 89.26009589 |
| 191003A00014 | 10/3/2019 | 1.71 | 9/20/2024 | 10/3/2019 | 106.02332 | 106.0233215 | 106.0233215 | 106.0233215 | 104.3461685 | 100.19865 | 96.23839373 | 92.45591813 | 88.84227827 |
| 191003A00020 | 10/3/2019 | 1.72 | 10/3/2022 | 10/3/2019 | 103.25268 | 103.2526771 | 103.2526771 | 103.2526771 | 102.7114599 | 100.4736722 | 98.29545946 | 96.17480484 | 94.10977712 |
| 191004A00003 | 10/4/2019 | 1.89 | 10/5/2026 | 10/4/2019 | 109.97162 | 109.9716181 | 109.9716181 | 109.9716181 | 105.8194922 | 99.75223738 | 94.07159166 | 88.75091859 | 83.76555406 |
| 191004A00005 | 10/4/2019 | 1.54 | 10/4/2024 | 10/4/2019 | 106.13225 | 106.1322454 | 106.1322454 | 106.1322454 | 104.4118646 | 100.2040126 | 96.18820875 | 92.35464426 | 88.69406892 |
| 191007A00027 | 10/7/2019 | 1.69 | 10/7/2022 | 10/7/2019 | 103.19961 | 103.1996105 | 103.1996105 | 103.1996105 | 102.654815 | 100.4072211 | 98.21970816 | 96.09025278 | 94.01691641 |
| 191008A00006 | 10/8/2019 | 1.73 | 10/8/2021 | 10/8/2019 | 101.87489 | 101.8748942 | 101.8748942 | 101.8748942 | 101.6458917 | 100.3729382 | 99.12887597 | 97.91272182 | 96.72353699 |
| 191009A00017 | 10/9/2019 | 1.76 | 10/4/2024 | 10/9/2019 | 106.29241 | 106.2924082 | 106.2924082 | 106.2924082 | 104.5822671 | 100.3933978 | 96.39508419 | 92.57761985 | 88.93184984 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191009A00026 | 10/9/2019 | 1.74 | 10/7/2022 | 10/9/2019 | 103.31434 | 103.3143442 | 103.3143442 | 103.3143442 | 102.7692723 | 100.5203481 | 98.33153272 | 96.20080205 | 94.12621671 |
| 191015A00026 | 10/15/2019 | 1.69 | 10/15/2021 | 10/15/2019 | 102.05895 | 102.0589548 | 102.0589548 | 102.0589548 | 101.8258214 | 100.5326578 | 99.26684893 | 98.02753039 | 96.81387461 |
| 191017A00022 | 10/17/2019 | 2.25 | 7/17/2028 | 10/17/2019 | 115.67584 | 115.675842 | 115.675842 | 115.675842 | 108.5529439 | 100.8186468 | 93.69733925 | 87.1371734 | 81.09093866 |
| 191021A00002 | 10/21/2019 | 1.9 | 10/21/2020 | 10/21/2019 | 100.51334 | 100.5133443 | 100.5133443 | 100.5133443 | 100.4608285 | 100.1481588 | 99.83744162 | 99.52865863 | 99.22179177 |
| 191021A00021 | 10/21/2019 | 2.22 | 12/21/2027 | 10/21/2019 | 114.34923 | 114.349235 | 114.349235 | 114.349235 | 108.1739554 | 100.9531935 | 94.26894952 | 88.07855375 | 82.34293558 |
| 191025A00002 | 10/25/2019 | 1.75 | 10/26/2020 | 10/25/2019 | 100.53502 | 100.5350237 | 100.5350237 | 100.5350237 | 100.4795999 | 100.1525894 | 99.8277102 | 99.50494144 | 99.18426257 |
| 191031A00019 | 10/31/2019 | 1.88 | 10/31/2022 | 10/31/2019 | 103.74083 | 103.7408343 | 103.7408343 | 103.7408343 | 103.1724717 | 100.8560082 | 98.60291834 | 96.4111297 | 94.27864938 |
| 191101A00002 | 11/1/2019 | 1.85 | 11/1/2022 | 11/1/2019 | 103.67428 | 103.6742822 | 103.6742822 | 103.6742822 | 103.1051448 | 100.7867879 | 98.53193011 | 96.33849261 | 94.20447637 |
| 191105A00007 | 11/5/2019 | 1.98 | 11/5/2026 | 11/5/2019 | 111.94521 | 111.9452068 | 111.9452068 | 111.9452068 | 107.5873292 | 101.3434295 | 95.50269271 | 90.03706876 | 84.92059249 |
| 191106A00022 | 11/6/2019 | 2.34 | 1/2/2030 | 11/6/2019 | 119.33846 | 119.3384562 | 119.3384562 | 119.1497768 | 109.567762 | 100.5522578 | 92.36319839 | 84.92021939 | 78.15115945 |
| 191115A00015 | 11/18/2019 | 2.61 | 11/18/2024 | 11/18/2019 | 110.2305 | 110.2305 | 110.2305 | 110.2305 | 108.391261 | 104.00392 | 99.82026274 | 95.82979509 | 92.02261666 |
| 191115A00030 | 11/15/2019 | 2.35 | 11/9/2029 | 11/15/2019 | 119.13548 | 119.1354768 | 119.1354768 | 119.0833675 | 109.6494426 | 100.7521959 | 92.65902789 | 85.29285636 | 78.58435495 |
| 191120A00031 | 11/20/2019 | 1.69 | 11/21/2022 | 11/20/2019 | 103.80975 | 103.8097495 | 103.8097495 | 103.8097495 | 103.2190084 | 100.8363551 | 98.52053792 | 96.26931506 | 94.08053322 |
| 191121A00004 | 11/21/2019 | 1.77 | 11/21/2024 | 11/21/2019 | 107.34351 | 107.3435092 | 107.3435092 | 107.3435092 | 105.5037204 | 101.1476846 | 96.99567198 | 93.03710453 | 89.26200604 |
| 191122A00020 | 11/26/2019 | 3.2 | 11/23/2037 | 11/26/2019 | 149.73504 | 149.7350375 | 149.7350375 | 137.9736889 | 120.0637426 | 104.5708368 | 91.422065 | 80.24165906 | 70.71630269 |
| 191206A00019 | 12/6/2019 | 1.96 | 11/15/2023 | 12/6/2019 | 105.67082 | 105.6708217 | 105.6708217 | 105.6708217 | 104.6040549 | 101.2588302 | 98.03817999 | 94.93682862 | 91.94975161 |
| 190905A00035 | 9/5/2019 | 1.82 | 9/7/2021 | 9/5/2019 | 101.85859 | 101.8585914 | 101.8585914 | 101.8585914 | 101.6386996 | 100.4459371 | 99.2810366 | 98.14303092 | 97.03099714 |
| 190906A00004 | 9/6/2019 | 1.78 | 9/6/2022 | 9/6/2019 | 103.27937 | 103.2793695 | 103.2793695 | 103.2793695 | 102.7631091 | 100.5974991 | 98.48802773 | 96.43283682 | 94.4301457 |
| 190910A00009 | 9/10/2019 | 1.86 | 9/10/2020 | 9/10/2019 | 100.34856 | 100.3485642 | 100.3485642 | 100.3485642 | 100.3178156 | 100.1180877 | 99.91916711 | 99.72104891 | 99.52372817 |
| 190912A00028 | 9/12/2019 | 1.94 | 9/12/2024 | 9/12/2019 | 106.9668 | 106.9668047 | 106.9668047 | 106.9668047 | 105.3017493 | 101.1552059 | 97.19479147 | 93.41113161 | 89.79537947 |
| 190912A00033 | 9/12/2019 | 1.77 | 9/12/2023 | 9/12/2019 | 105.35231 | 105.3523121 | 105.3523121 | 105.3523121 | 104.3873179 | 101.1998481 | 98.12603901 | 95.16116019 | 92.30071008 |
| 190913A00012 | 9/13/2019 | 2.04 | 9/13/2023 | 9/13/2019 | 105.64112 | 105.6411186 | 105.6411186 | 105.6411186 | 104.6783577 | 101.4977602 | 98.43030261 | 95.47128491 | 92.61623416 |
| 190916A00008 | 9/16/2019 | 2.05 | 9/16/2021 | 9/16/2019 | 102.17947 | 102.1794696 | 102.1794696 | 102.1794696 | 101.9571047 | 100.7379319 | 99.54780297 | 98.38568949 | 97.25061113 |
| 190917A00022 | 9/17/2019 | 2.02 | 9/16/2022 | 9/17/2019 | 103.85702 | 103.8570187 | 103.8570187 | 103.8570187 | 103.3301408 | 101.1310279 | 98.98945243 | 96.90348888 | 94.87129298 |
| 190920A00018 | 9/20/2019 | 1.98 | 9/20/2022 | 9/20/2019 | 103.78609 | 103.7860895 | 103.7860895 | 103.7860895 | 103.2556627 | 101.0465482 | 98.89546454 | 96.80046118 | 94.75967008 |
| 190926A00007 | 9/26/2019 | 1.88 | 9/26/2022 | 9/26/2019 | 103.58747 | 103.5874674 | 103.5874674 | 103.5874674 | 103.0519414 | 100.8289028 | 98.66461729 | 96.5570965 | 94.50443723 |
| 190926A00015 | 9/26/2019 | 2.32 | 11/26/2030 | 9/26/2019 | 120.92702 | 120.9270246 | 120.9270246 | 119.7554654 | 109.2707124 | 99.53379594 | 90.76326616 | 82.85772634 | 75.72690394 |
| 190926A00017 | 9/26/2019 | 2.23 | 9/26/2029 | 9/26/2019 | 117.78353 | 117.7835285 | 117.7835285 | 117.7835285 | 108.5606248 | 99.81156442 | 91.84544656 | 84.58789713 | 77.97197372 |
| 190930A00008 | 9/30/2019 | 1.9 | 10/10/2023 | 9/30/2019 | 105.30744 | 105.3074408 | 105.3074408 | 105.3074408 | 104.3023194 | 101.0564175 | 97.92829136 | 94.91299329 | 92.00581497 |
| 191003A00033 | 10/3/2019 | 1.54 | 10/3/2022 | 10/3/2019 | 103.25313 | 103.2531252 | 103.2531252 | 103.2531252 | 102.7097322 | 100.4637173 | 98.27764917 | 96.14949355 | 94.07730311 |
| 191004A00001 | 10/4/2019 | 2.47 | 10/4/2034 | 10/4/2019 | 130.6319 | 130.6318991 | 130.6318991 | 123.3414772 | 109.1377845 | 96.54218758 | 85.5871419 | 76.04792871 | 67.73175139 |
| 191009A00028 | 10/9/2019 | 1.76 | 10/9/2024 | 10/9/2019 | 106.31256 | 106.3125555 | 106.3125555 | 106.3125555 | 104.5908903 | 100.3891414 | 96.37906818 | 92.55090159 | 88.89542625 |
| 191010A00013 | 10/10/2019 | 1.59 | 10/7/2022 | 10/10/2019 | 103.38388 | 103.3838756 | 103.3838756 | 103.3838756 | 102.8364397 | 100.5784253 | 98.38091234 | 96.24185883 | 94.15930854 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191015A00013 | 10/15/2019 | 1.72 | 10/15/2024 | 10/15/2019 | 106.95746 | 106.9574618 | 106.9574618 | 106.9574618 | 105.2066097 | 100.9535766 | 96.89563652 | 93.02281751 | 89.32571227 |
| 191017A00026 | 10/17/2019 | 2.3 | 7/17/2029 | 10/17/2019 | 118.04772 | 118.0477232 | 118.0477232 | 118.0477232 | 109.1684672 | 100.5552205 | 92.69820633 | 85.52688344 | 78.97763242 |
| 191021A00033 | 10/22/2019 | 1.9 | 7/18/2022 | 10/22/2019 | 103.32251 | 103.3225102 | 103.3225102 | 103.3225102 | 102.8535233 | 100.8188891 | 98.8347315 | 96.89946859 | 95.01157997 |
| 191025A00013 | 10/25/2019 | 1.98 | 10/25/2024 | 10/25/2019 | 107.33502 | 107.3350207 | 107.3350207 | 107.3350207 | 105.5704344 | 101.3070498 | 97.23962496 | 93.35815938 | 89.65321438 |
| 191101A00006 | 11/1/2019 | 1.69 | 11/2/2020 | 11/1/2019 | 100.54593 | 100.5459257 | 100.5459257 | 100.5459257 | 100.4864811 | 100.1401579 | 99.79621823 | 99.45463745 | 99.11539135 |
| 191104A00009 | 11/4/2019 | 1.91 | 11/6/2023 | 11/4/2019 | 105.46062 | 105.4606199 | 105.4606199 | 105.4606199 | 104.4100425 | 101.0920619 | 97.8968308 | 94.81918583 | 91.85420782 |
| 191104A00018 | 11/5/2019 | 1.96 | 11/5/2024 | 11/5/2019 | 107.29815 | 107.2981496 | 107.2981496 | 107.2981496 | 105.5083856 | 101.2179571 | 97.1259889 | 93.2223143 | 89.49733774 |
| 190715A00027 | 7/15/2019 | 1.99 | 7/15/2021 | 7/15/2019 | 101.97416 | 101.9741564 | 101.9741564 | 101.9741564 | 101.7638607 | 100.7143547 | 99.68642023 | 98.67939729 | 97.69265267 |
| 190715A00028 | 7/17/2019 | 2.17 | 1/18/2022 | 7/17/2019 | 102.96158 | 102.9615807 | 102.9615807 | 102.9615807 | 102.6606707 | 101.1175166 | 99.60525972 | 98.12304354 | 96.67004267 |
| 190719A00012 | 7/19/2019 | 2.07 | 7/20/2020 | 7/19/2019 | 100.10853 | 100.108526 | 100.108526 | 100.108526 | 100.1009128 | 100.0453813 | 99.98992775 | 99.93455181 | 99.87925336 |
| 190724A00024 | 7/24/2019 | 2.49 | 7/24/2029 | 7/24/2019 | 121.69187 | 121.6918712 | 121.6918712 | 121.6918712 | 112.5588983 | 103.69703 | 95.61436959 | 88.23805089 | 81.50237924 |
| 190729A00007 | 7/29/2019 | 2.17 | 7/28/2023 | 7/29/2019 | 105.81883 | 105.8188288 | 105.8188288 | 105.8188288 | 104.9287275 | 101.8678028 | 98.91233119 | 96.05808007 | 93.30101295 |
| 190729A00019 | 7/29/2019 | 2.16 | 7/29/2021 | 7/29/2019 | 102.05874 | 102.0587364 | 102.0587364 | 102.0587364 | 101.8456371 | 100.7600847 | 99.69759019 | 98.65742506 | 97.63889125 |
| 190731A00004 | 7/31/2019 | 2.18 | 7/31/2024 | 7/31/2019 | 107.76102 | 107.7610239 | 107.7610239 | 107.7610239 | 106.1856443 | 102.1322117 | 98.25636576 | 94.5493759 | 91.00298951 |
| 190802A00004 | 8/2/2019 | 2 | 8/2/2022 | 8/2/2019 | 103.60041 | 103.6004139 | 103.6004139 | 103.6004139 | 103.1163281 | 101.0393968 | 99.01463347 | 97.04037604 | 95.1150283 |
| 190806A00007 | 8/6/2019 | 1.88 | 8/5/2022 | 8/6/2019 | 103.36007 | 103.3600676 | 103.3600676 | 103.3600676 | 102.8736747 | 100.7914516 | 98.76167996 | 96.78268297 | 94.85285054 |
| 190807A00012 | 8/7/2019 | 1.76 | 2/7/2023 | 8/7/2019 | 103.85724 | 103.8572364 | 103.8572364 | 103.8572364 | 103.1916821 | 100.612115 | 98.10999827 | 95.68253222 | 93.32703797 |
| 190807A00045 | 8/7/2019 | 1.77 | 8/7/2024 | 8/7/2019 | 106.10079 | 106.1007909 | 106.1007909 | 106.1007909 | 104.5197213 | 100.4823255 | 96.62287829 | 92.9325882 | 89.40314765 |
| 190808A00024 | 8/8/2019 | 1.69 | 2/8/2024 | 8/8/2019 | 105.74098 | 105.7409819 | 105.7409819 | 105.7409819 | 104.5164031 | 100.9336916 | 97.4926817 | 94.18698965 | 91.01055739 |
| 190809A00001 | 8/9/2019 | 1.88 | 8/9/2022 | 8/9/2019 | 103.37762 | 103.3776153 | 103.3776153 | 103.3776153 | 102.8874147 | 100.7945143 | 98.75451789 | 96.76572687 | 94.82651045 |
| 190809A00022 | 8/9/2019 | 1.88 | 8/9/2024 | 8/9/2019 | 106.56468 | 106.5646757 | 106.5646757 | 106.5646757 | 104.9765771 | 100.9247111 | 97.05150561 | 93.34812739 | 89.8062297 |
| 190813A00008 | 8/13/2019 | 1.88 | 8/13/2024 | 8/13/2019 | 106.58212 | 106.5821185 | 106.5821185 | 106.5821185 | 104.9852226 | 100.9229377 | 97.04014753 | 93.32795865 | 89.77796858 |
| 190814A00006 | 8/14/2019 | 1.84 | 8/14/2023 | 8/14/2019 | 104.86676 | 104.8667587 | 104.8667587 | 104.8667587 | 103.9539919 | 100.8639943 | 97.88178369 | 95.00297822 | 92.22340216 |
| 190814A00009 | 8/14/2019 | 1.84 | 8/14/2024 | 8/14/2019 | 106.4202 | 106.4201971 | 106.4201971 | 106.4201971 | 104.8220708 | 100.7605795 | 96.87868291 | 93.16747691 | 89.61854923 |
| 190814A00015 | 8/14/2019 | 1.84 | 8/14/2024 | 8/14/2019 | 106.4202 | 106.4201971 | 106.4201971 | 106.4201971 | 104.8220708 | 100.7605795 | 96.87868291 | 93.16747691 | 89.61854923 |
| 190815A00025 | 8/15/2019 | 1.97 | 8/15/2029 | 8/15/2019 | 117.04756 | 117.0475553 | 117.0475553 | 117.0475553 | 107.9378039 | 99.2273078 | 91.29219111 | 84.05929921 | 77.4627317 |
| 190816A00007 | 8/16/2019 | 1.77 | 8/16/2023 | 8/16/2019 | 104.6543 | 104.6542962 | 104.6542962 | 104.6542962 | 103.7392297 | 100.6474228 | 97.66363828 | 94.78347792 | 92.00275077 |
| 190816A00016 | 8/16/2019 | 2.2 | 8/16/2029 | 8/16/2019 | 117.29672 | 117.2967214 | 117.2967214 | 117.2967214 | 108.2915732 | 99.64851358 | 91.77105119 | 84.58719902 | 78.03208846 |
| 190819A00004 | 8/20/2019 | 1.81 | 5/24/2024 | 8/20/2019 | 105.95433 | 105.9543308 | 105.9543308 | 105.9543308 | 104.5307949 | 100.6869703 | 97.00521123 | 93.47786597 | 90.0976833 |
| 190820A00005 | 8/21/2019 | 1.76 | 2/27/2023 | 8/21/2019 | 103.93651 | 103.9365144 | 103.9365144 | 103.9365144 | 103.2495317 | 100.611466 | 98.05392524 | 95.57394351 | 93.16868583 |
| 190829A00015 | 8/30/2019 | 2.06 | 8/30/2022 | 8/30/2019 | 103.86391 | 103.8639136 | 103.8639136 | 103.8639136 | 103.3528346 | 101.199552 | 99.10167423 | 97.05738277 | 95.06493381 |
| 191003A00022 | 10/3/2019 | 1.72 | 2/3/2023 | 10/3/2019 | 103.73647 | 103.7364697 | 103.7364697 | 103.7364697 | 103.0755037 | 100.5090268 | 98.01936143 | 95.60374169 | 93.25952019 |
| 191004A00012 | 10/4/2019 | 1.78 | 10/4/2024 | 10/4/2019 | 106.37835 | 106.3783469 | 106.3783469 | 106.3783469 | 104.667675 | 100.4769935 | 96.47692725 | 92.65776747 | 89.01035684 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191011A00013 | 10/11/2019 | 1.88 | 10/11/2022 | 10/11/2019 | 103.65314 | 103.6531376 | 103.6531376 | 103.6531376 | 103.1035381 | 100.840247 | 98.63766885 | 96.49377002 | 94.40660081 |
| 191015A00029 | 10/15/2019 | 1.91 | 10/15/2024 | 10/15/2019 | 106.9858 | 106.9857965 | 106.9857965 | 106.9857965 | 105.2462458 | 101.0152697 | 96.97777283 | 93.12389186 | 89.44432023 |
| 191023A00006 | 10/23/2019 | 1.95 | 10/23/2024 | 10/23/2019 | 107.19528 | 107.1952842 | 107.1952842 | 107.1952842 | 105.4361488 | 101.1807412 | 97.1207463 | 93.24619337 | 89.54767224 |
| 191024A00016 | 10/25/2019 | 1.91 | 2/16/2021 | 10/25/2019 | 101.06048 | 101.0604826 | 101.0604826 | 101.0604826 | 100.938757 | 100.3009809 | 99.67124755 | 99.04940536 | 98.43530665 |
| 191106A00012 | 11/6/2019 | 2.02 | 10/11/2024 | 11/6/2019 | 107.44281 | 107.4428073 | 107.4428073 | 107.4428073 | 105.7095462 | 101.478881 | 97.44112495 | 93.58645147 | 89.90558993 |
| 191114A00009 | 11/18/2019 | 1.94 | 8/16/2023 | 11/18/2019 | 105.19099 | 105.1909863 | 105.1909863 | 105.1909863 | 104.2739233 | 101.1736842 | 98.18168639 | 95.29352426 | 92.50499965 |
| 191121A00009 | 11/21/2019 | 2.55 | 11/21/2036 | 11/21/2019 | 140.04649 | 140.0464907 | 140.0464907 | 129.4455135 | 112.7274184 | 98.23449807 | 85.86643655 | 75.29567024 | 66.24686165 |
| 191206A00008 | 12/6/2019 | 2.44 | 12/6/2030 | 12/6/2019 | 122.23109 | 122.2310896 | 122.2310896 | 121.0238494 | 110.4658313 | 100.6478746 | 91.80491163 | 83.83449453 | 76.6454353 |
| 191209A00009 | 12/9/2019 | 1.91 | 12/9/2021 | 12/9/2019 | 102.38736 | 102.3873644 | 102.3873644 | 102.3873644 | 102.1188504 | 100.6854269 | 99.27916547 | 97.89936149 | 96.54533425 |
| 191223A00043 | 12/23/2019 | 1.77 | 3/23/2021 | 12/23/2019 | 101.21966 | 101.2196612 | 101.2196612 | 101.2196612 | 101.0771962 | 100.3419682 | 99.61740743 | 98.90328306 | 98.19937074 |
| 191223A00056 | 12/23/2019 | 2.46 | 12/14/2029 | 12/23/2019 | 120.36839 | 120.368394 | 120.368394 | 120.228935 | 110.6642216 | 101.6414046 | 93.44035191 | 85.98161316 | 79.19380332 |
| 200108A00021 | 1/13/2020 | 1.97 | 1/13/2025 | 1/13/2020 | 107.61222 | 107.6122239 | 107.6122239 | 107.6122239 | 105.6564165 | 101.1871471 | 96.93265566 | 92.88150534 | 89.02292869 |
| 200109A00012 | 1/14/2020 | 1.94 | 12/15/2022 | 1/14/2020 | 104.08638 | 104.0863807 | 104.0863807 | 104.0863807 | 103.4743695 | 101.0342158 | 98.66406513 | 96.36151378 | 94.12425518 |
| 200114A00006 | 1/15/2020 | 1.99 | 1/15/2025 | 1/15/2020 | 107.71293 | 107.7129344 | 107.7129344 | 107.7129344 | 105.7515157 | 101.2750159 | 97.01381634 | 92.95644242 | 89.09209155 |
| 200115A00015 | 1/17/2020 | 1.88 | 1/17/2023 | 1/17/2020 | 104.08189 | 104.0818904 | 104.0818904 | 104.0818904 | 103.4372403 | 100.9113137 | 98.45999343 | 96.08063371 | 93.77069989 |
| 200116A00005 | 1/16/2020 | 1.92 | 7/16/2021 | 1/16/2020 | 101.73713 | 101.7371297 | 101.7371297 | 101.7371297 | 101.527363 | 100.4789215 | 99.45205426 | 98.4461006 | 97.46042649 |
| 200117A00002 | 1/17/2020 | 1.72 | 1/19/2021 | 1/17/2020 | 100.90329 | 100.903293 | 100.903293 | 100.903293 | 100.7974155 | 100.2357764 | 99.68039057 | 99.131154 | 98.58796476 |
| 200122A00034 | 1/22/2020 | 1.87 | 1/22/2024 | 1/22/2020 | 105.65901 | 105.6590146 | 105.6590146 | 105.6590146 | 104.4727856 | 100.9533711 | 97.57135503 | 94.32062893 | 91.19539098 |
| 200130A00028 | 1/30/2020 | 1.54 | 2/7/2023 | 1/30/2020 | 103.75331 | 103.7533051 | 103.7533051 | 103.7533051 | 103.0851294 | 100.4967042 | 97.98620976 | 95.55082229 | 93.18783993 |
| 200131A00005 | 1/31/2020 | 1.64 | 2/1/2021 | 1/31/2020 | 100.91315 | 100.9131463 | 100.9131463 | 100.9131463 | 100.799826 | 100.2025252 | 99.61227856 | 99.0289617 | 98.45245323 |
| 200131A00038 | 1/31/2020 | 1.73 | 1/30/2025 | 1/31/2020 | 106.58134 | 106.5813448 | 106.5813448 | 106.5813448 | 104.5910536 | 100.1028401 | 95.83238241 | 91.76798296 | 87.89863516 |
| 200203A00006 | 2/3/2020 | 1.76 | 2/3/2025 | 2/3/2020 | 106.73565 | 106.7356478 | 106.7356478 | 106.7356478 | 104.7343082 | 100.2319333 | 95.94840574 | 91.87194625 | 87.99147285 |
| 190926A00006 | 9/26/2019 | 1.7 | 9/26/2022 | 9/26/2019 | 103.58861 | 103.5886104 | 103.5886104 | 103.5886104 | 103.0509423 | 100.8197651 | 98.64770609 | 96.5327603 | 94.47300855 |
| 190927A00036 | 9/27/2019 | 1.94 | 9/6/2024 | 9/27/2019 | 106.93982 | 106.9398194 | 106.9398194 | 106.9398194 | 105.2883065 | 101.1578644 | 97.2122049 | 93.44205391 | 89.83865708 |
| 190930A00041 | 9/30/2019 | 1.94 | 10/25/2021 | 9/30/2019 | 102.21086 | 102.2108635 | 102.2108635 | 102.2108635 | 101.9734097 | 100.6602214 | 99.37189301 | 98.10774654 | 96.86712888 |
| 191002A00013 | 10/2/2019 | 1.78 | 10/3/2022 | 10/2/2019 | 103.3897 | 103.3896956 | 103.3896956 | 103.3896956 | 102.8481503 | 100.6087813 | 98.4290204 | 96.30684973 | 94.24033714 |
| 191007A00018 | 10/8/2019 | 1.77 | 7/16/2021 | 10/8/2019 | 101.57863 | 101.5786295 | 101.5786295 | 101.5786295 | 101.3690348 | 100.3214883 | 99.29550318 | 98.2904191 | 97.30560233 |
| 191010A00012 | 10/10/2019 | 1.61 | 10/8/2021 | 10/10/2019 | 101.92516 | 101.9251556 | 101.9251556 | 101.9251556 | 101.6955223 | 100.4190314 | 99.17156265 | 97.95212696 | 96.75977998 |
| 191018A00006 | 10/18/2019 | 1.89 | 6/1/2022 | 10/18/2019 | 103.11443 | 103.1144286 | 103.1144286 | 103.1144286 | 102.6917754 | 100.784293 | 98.9216374 | 97.10248694 | 95.32556771 |
| 191025A00005 | 10/28/2019 | 1.98 | 10/28/2024 | 10/28/2019 | 107.34892 | 107.3489191 | 107.3489191 | 107.3489191 | 105.5773922 | 101.3062188 | 97.23168773 | 93.34375975 | 89.63295868 |
| 191025A00010 | 10/25/2019 | 2.24 | 7/25/2028 | 10/25/2019 | 115.63727 | 115.6372658 | 115.6372658 | 115.6372658 | 108.4796166 | 100.7294951 | 93.59507019 | 87.02414903 | 80.96921717 |
| 191104A00019 | 11/5/2019 | 1.9 | 2/1/2022 | 11/5/2019 | 102.59994 | 102.599936 | 102.599936 | 102.599936 | 102.2882971 | 100.7108481 | 99.16542616 | 97.65112398 | 96.16706825 |
| 191104A00024 | 11/4/2019 | 2.26 | 8/3/2029 | 11/4/2019 | 117.77574 | 117.7757396 | 117.7757396 | 117.7757396 | 108.8209758 | 100.1842795 | 92.30951374 | 85.12529298 | 78.5672663 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191120A00002 | 11/20/2019 | 1.73 | 11/20/2020 | 11/20/2019 | 100.64026 | 100.6402597 | 100.6402597 | 100.6402597 | 100.5699459 | 100.1738524 | 99.7808836 | 99.39100249 | 99.00417268 |
| 191121A00010 | 11/21/2019 | 2.59 | 11/20/2037 | 11/21/2019 | 143.15382 | 143.1538177 | 143.1538177 | 131.2727601 | 113.5501084 | 98.33307272 | 85.45630524 | 74.54107986 | 65.27202311 |
| 191122A00018 | 11/26/2019 | 3.11 | 11/22/2039 | 11/26/2019 | 153.5516 | 153.5516045 | 153.5516045 | 138.9685292 | 119.2736825 | 102.5809846 | 88.64994626 | 76.99614172 | 67.22314099 |
| 191126A00023 | 11/26/2019 | 1.81 | 5/27/2025 | 11/26/2019 | 108.3948 | 108.3947973 | 108.3947973 | 108.3947973 | 106.070135 | 101.2124041 | 96.6051855 | 92.2343065 | 88.08646669 |
| 191210A00009 | 12/10/2019 | 1.92 | 12/10/2020 | 12/10/2019 | 100.75344 | 100.7534446 | 100.7534446 | 100.7534446 | 100.6712208 | 100.2205742 | 99.77396153 | 99.33132883 | 98.89262294 |
| 191212A00028 | 12/13/2019 | 1.93 | 1/17/2023 | 12/13/2019 | 104.21069 | 104.2106871 | 104.2106871 | 104.2106871 | 103.5656759 | 101.0380827 | 98.58513349 | 96.20418126 | 93.89269026 |
| 191218A00013 | 12/18/2019 | 1.94 | 12/19/2022 | 12/18/2019 | 104.10457 | 104.1045729 | 104.1045729 | 104.1045729 | 103.4886397 | 101.0378796 | 98.65772015 | 96.34572647 | 94.09956285 |
| 191223A00009 | 12/23/2019 | 1.95 | 12/23/2022 | 12/23/2019 | 104.14784 | 104.1478354 | 104.1478354 | 104.1478354 | 103.5279129 | 101.0662329 | 98.67576019 | 96.35402844 | 94.0986723 |
| 200108A00018 | 1/8/2020 | 1.68 | 1/18/2022 | 1/8/2020 | 102.45744 | 102.4574397 | 102.4574397 | 102.4574397 | 102.1564197 | 100.6129204 | 99.10040408 | 97.61800993 | 96.16490877 |
| 200109A00014 | 1/14/2020 | 1.93 | 8/15/2022 | 1/14/2020 | 103.51136 | 103.511359 | 103.511359 | 103.511359 | 103.0152096 | 100.9051277 | 98.84865645 | 96.84406337 | 94.88968584 |
| 200110A00013 | 1/10/2020 | 1.76 | 1/10/2024 | 1/10/2020 | 105.86504 | 105.8650367 | 105.8650367 | 105.8650367 | 104.6929789 | 101.1840137 | 97.81143952 | 94.56922269 | 91.45163057 |
| 200127A00019 | 1/27/2020 | 1.8 | 1/27/2025 | 1/27/2020 | 106.89237 | 106.8923697 | 106.8923697 | 106.8923697 | 104.9072351 | 100.419411 | 96.14891855 | 92.08410186 | 88.21399259 |
| 200127A00030 | 1/27/2020 | 1.8 | 1/27/2025 | 1/27/2020 | 106.89237 | 106.8923697 | 106.8923697 | 106.8923697 | 104.9072351 | 100.419411 | 96.14891855 | 92.08410186 | 88.21399259 |
| 191212A00026 | 12/13/2019 | 1.92 | 6/16/2022 | 12/13/2019 | 103.22034 | 103.2203387 | 103.2203387 | 103.2203387 | 102.7828029 | 100.8341713 | 98.9322764 | 97.07571091 | 95.26311957 |
| 191226A00019 | 12/26/2019 | 2.4 | 12/22/2028 | 12/26/2019 | 117.78173 | 117.7817283 | 117.7817283 | 117.7817283 | 109.8932796 | 101.7342043 | 94.25092608 | 87.38380307 | 81.07874518 |
| 200113A00003 | 1/13/2020 | 1.72 | 1/13/2022 | 1/13/2020 | 102.49815 | 102.4981471 | 102.4981471 | 102.4981471 | 102.2010928 | 100.6705187 | 99.17051917 | 97.70025156 | 96.25890378 |
| 200115A00022 | 1/15/2020 | 1.88 | 10/14/2022 | 1/15/2020 | 103.66629 | 103.666292 | 103.666292 | 103.666292 | 103.1138776 | 100.8426066 | 98.63244454 | 96.48135205 | 94.38737331 |
| 200115A00024 | 1/15/2020 | 1.88 | 1/17/2023 | 1/15/2020 | 104.08189 | 104.0818904 | 104.0818904 | 104.0818904 | 103.4372403 | 100.9113137 | 98.45999343 | 96.08063371 | 93.77069989 |
| 200117A00026 | 1/17/2020 | 1.69 | 1/18/2022 | 1/17/2020 | 102.47317 | 102.4731742 | 102.4731742 | 102.4731742 | 102.17213 | 100.6285026 | 99.11586035 | 97.63334254 | 96.18011987 |
| 200121A00008 | 1/24/2020 | 1.84 | 1/20/2022 | 1/24/2020 | 102.45168 | 102.451683 | 102.451683 | 102.451683 | 102.1499541 | 100.6056661 | 99.09236776 | 97.60919705 | 96.15532366 |
| 200123A00005 | 1/23/2020 | 1.81 | 1/24/2022 | 1/23/2020 | 102.42129 | 102.4212933 | 102.4212933 | 102.4212933 | 102.1164041 | 100.5618135 | 99.03854086 | 97.54570969 | 96.08247589 |
| 200123A00013 | 1/27/2020 | 1.89 | 1/27/2025 | 1/27/2020 | 107.30737 | 107.3073653 | 107.3073653 | 107.3073653 | 105.3193177 | 100.8221339 | 96.54260774 | 92.46906937 | 88.59053699 |
| 200129A00008 | 1/29/2020 | 1.76 | 1/31/2022 | 1/29/2020 | 102.37053 | 102.3705322 | 102.3705322 | 102.3705322 | 102.0601109 | 100.487485 | 98.9467564 | 97.43702317 | 95.95741684 |
| 200129A00010 | 1/29/2020 | 1.76 | 1/31/2022 | 1/29/2020 | 102.37053 | 102.3705322 | 102.3705322 | 102.3705322 | 102.0601109 | 100.487485 | 98.9467564 | 97.43702317 | 95.95741684 |
| 200130A00016 | 1/30/2020 | 1.58 | 1/30/2025 | 1/30/2020 | 106.78166 | 106.7816614 | 106.7816614 | 106.7816614 | 104.7752775 | 100.2560064 | 95.95666504 | 91.86540767 | 87.97109029 |
| 200131A00032 | 1/31/2020 | 2.1 | 1/31/2030 | 1/31/2020 | 117.19796 | 117.1979555 | 117.1979555 | 116.9323549 | 107.3435775 | 98.36511078 | 90.21815557 | 82.82117257 | 76.10101006 |
| 200131A00048 | 1/31/2020 | 1.69 | 1/31/2024 | 1/31/2020 | 105.04668 | 105.0466751 | 105.0466751 | 105.0466751 | 103.8470624 | 100.315678 | 96.92299375 | 93.66280712 | 90.52922905 |
| 200203A00051 | 2/3/2020 | 1.58 | 11/3/2021 | 2/3/2020 | 101.99194 | 101.991943 | 101.991943 | 101.991943 | 101.7491976 | 100.4123225 | 99.09924801 | 97.80939375 | 96.54219775 |
| 200204A00015 | 2/4/2020 | 1.72 | 2/6/2023 | 2/4/2020 | 103.74803 | 103.7480304 | 103.7480304 | 103.7480304 | 103.0838512 | 100.5086006 | 98.01061641 | 95.58710828 | 93.23540592 |
| 200207A00015 | 2/7/2020 | 1.73 | 2/7/2022 | 2/7/2020 | 102.34978 | 102.3497768 | 102.3497768 | 102.3497768 | 102.0333986 | 100.4405326 | 98.88023385 | 97.35157058 | 95.85364632 |
| 200210A00021 | 2/10/2020 | 1.76 | 2/10/2025 | 2/10/2020 | 106.76301 | 106.7630103 | 106.7630103 | 106.7630103 | 104.743953 | 100.2218275 | 95.92031963 | 91.82751062 | 87.93219043 |
| 200214A00014 | 2/18/2020 | 1.8 | 2/18/2025 | 2/18/2020 | 106.98113 | 106.9811342 | 106.9811342 | 106.9811342 | 104.9404913 | 100.3915437 | 96.06539574 | 91.94996151 | 88.03387722 |
| 200219A00015 | 2/19/2020 | 1.77 | 2/19/2027 | 2/19/2020 | 111.07985 | 111.0798516 | 111.0798516 | 111.0798516 | 106.2540288 | 99.78635385 | 93.75418456 | 88.12596686 | 82.87259093 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200220A00007 | 2/20/2020 | 1.72 | 2/21/2023 | 2/20/2020 | 103.80584 | 103.8058351 | 103.8058351 | 103.8058351 | 103.1255943 | 100.5065022 | 97.96697272 | 95.50409153 | 93.11507196 |
| 200221A00001 | 2/21/2020 | 1.57 | 2/22/2021 | 2/21/2020 | 100.95516 | 100.9551647 | 100.9551647 | 100.9551647 | 100.8298762 | 100.1749428 | 99.52849278 | 98.89036202 | 98.26039071 |
| 200221A00003 | 2/25/2020 | 1.69 | 2/25/2025 | 2/25/2020 | 106.49331 | 106.4933134 | 106.4933134 | 106.4933134 | 104.4386865 | 99.88181172 | 95.54910551 | 91.42835888 | 87.50809524 |
| 200224A00017 | 2/24/2020 | 1.59 | 2/24/2025 | 2/24/2020 | 106.02082 | 106.0208236 | 106.0208236 | 106.0208236 | 103.9721141 | 99.42878763 | 95.10899537 | 91.00056525 | 87.09205506 |
| 191104A00025 | 11/4/2019 | 2.33 | 8/2/2030 | 11/4/2019 | 120.39886 | 120.3988605 | 120.3988605 | 119.6100207 | 109.43897 | 99.95013017 | 91.37769201 | 83.62795931 | 76.61727143 |
| 191106A00004 | 11/6/2019 | 2.01 | 11/6/2024 | 11/6/2019 | 107.52207 | 107.5220702 | 107.5220702 | 107.5220702 | 105.7285298 | 101.4307145 | 97.33175732 | 93.42146655 | 89.6902235 |
| 191108A00014 | 11/8/2019 | 2.25 | 11/8/2029 | 11/8/2019 | 120.12338 | 120.1233819 | 120.1233819 | 120.072728 | 110.4872077 | 101.4653577 | 93.26148626 | 85.79698228 | 79.0011623 |
| 191113A00020 | 11/13/2019 | 1.88 | 11/13/2020 | 11/13/2019 | 100.61006 | 100.6100601 | 100.6100601 | 100.6100601 | 100.5440848 | 100.1679652 | 99.79466369 | 99.42414852 | 99.05638852 |
| 191126A00026 | 11/26/2019 | 1.91 | 11/25/2026 | 11/26/2019 | 111.5947 | 111.5946959 | 111.5946959 | 111.5946959 | 107.1513253 | 100.8704121 | 94.99857325 | 89.50711055 | 84.36947659 |
| 191210A00011 | 12/10/2019 | 1.92 | 12/12/2022 | 12/10/2019 | 104.0232 | 104.0232029 | 104.0232029 | 104.0232029 | 103.4142651 | 100.9826854 | 98.62064844 | 96.32577387 | 94.09577741 |
| 191212A00019 | 12/13/2019 | 1.93 | 12/19/2022 | 12/13/2019 | 104.07961 | 104.079613 | 104.079613 | 104.079613 | 103.4637469 | 101.0133003 | 98.63344732 | 96.32175343 | 94.07588309 |
| 191218A00014 | 12/18/2019 | 2.04 | 12/18/2024 | 12/18/2019 | 107.80841 | 107.8084079 | 107.8084079 | 107.8084079 | 105.9143525 | 101.5052902 | 97.30517959 | 93.30304802 | 89.4885555 |
| 191219A00047 | 12/19/2019 | 1.76 | 12/17/2021 | 12/19/2019 | 102.43748 | 102.4374845 | 102.4374845 | 102.4374845 | 102.1619354 | 100.7032449 | 99.27264702 | 97.86940147 | 96.4927935 |
| 191226A00020 | 12/26/2019 | 2.44 | 12/21/2029 | 12/26/2019 | 120.21972 | 120.2197161 | 120.2197161 | 120.0621672 | 110.483805 | 101.4534816 | 93.24731768 | 85.78547375 | 78.99623092 |
| 200106A00019 | 1/6/2020 | 1.89 | 7/16/2024 | 1/6/2020 | 106.50078 | 106.5007759 | 106.5007759 | 106.5007759 | 104.9643846 | 100.9742338 | 97.15783371 | 93.50670302 | 90.01282076 |
| 200115A00014 | 1/17/2020 | 1.88 | 9/15/2022 | 1/17/2020 | 103.53952 | 103.5395163 | 103.5395163 | 103.5395163 | 103.0143064 | 100.8214859 | 98.68600143 | 96.60593597 | 94.5794534 |
| 200115A00018 | 1/15/2020 | 1.9 | 1/16/2024 | 1/15/2020 | 105.7403 | 105.7403006 | 105.7403006 | 105.7403006 | 104.5645097 | 101.0589567 | 97.68977047 | 94.45091071 | 91.33663928 |
| 200122A00003 | 1/22/2020 | 1.88 | 1/22/2021 | 1/22/2020 | 100.92956 | 100.9295613 | 100.9295613 | 100.9295613 | 100.8221403 | 100.2531661 | 99.69060325 | 99.13434397 | 98.58428262 |
| 200122A00010 | 1/22/2020 | 1.84 | 1/24/2022 | 1/22/2020 | 102.46893 | 102.4689293 | 102.4689293 | 102.4689293 | 102.1639659 | 100.6089846 | 99.08532803 | 97.59211974 | 96.12851538 |
| 200127A00013 | 1/27/2020 | 1.56 | 1/27/2023 | 1/27/2020 | 103.76238 | 103.7623784 | 103.7623784 | 103.7623784 | 103.1057002 | 100.5478646 | 98.06636433 | 95.65846152 | 93.321535 |
| 200130A00048 | 1/30/2020 | 1.74 | 1/31/2022 | 1/30/2020 | 102.33839 | 102.3383877 | 102.3383877 | 102.3383877 | 102.0280171 | 100.4556577 | 98.91519102 | 97.40571502 | 95.92636142 |
| 200131A00006 | 1/31/2020 | 1.52 | 1/31/2022 | 1/31/2020 | 102.25628 | 102.2562782 | 102.2562782 | 102.2562782 | 101.9451066 | 100.3688441 | 98.82462707 | 97.31154746 | 95.82873116 |
| 200207A00004 | 2/7/2020 | 1.53 | 2/7/2023 | 2/7/2020 | 103.7269 | 103.7269034 | 103.7269034 | 103.7269034 | 103.058804 | 100.4707286 | 97.96057594 | 95.52552244 | 93.16286653 |
| 200207A00006 | 2/7/2020 | 1.76 | 2/8/2021 | 2/7/2020 | 100.93146 | 100.9314617 | 100.9314617 | 100.9314617 | 100.8143582 | 100.1988972 | 99.5909321 | 98.99032642 | 98.39694713 |
| 200207A00009 | 2/7/2020 | 1.58 | 2/7/2025 | 2/7/2020 | 106.81376 | 106.813764 | 106.813764 | 106.813764 | 104.7869613 | 100.2451211 | 95.92522936 | 91.81528163 | 87.90398779 |
| 200214A00007 | 2/14/2020 | 1.59 | 2/14/2025 | 2/14/2020 | 106.88864 | 106.8886352 | 106.8886352 | 106.8886352 | 104.8435852 | 100.2807072 | 95.94161264 | 91.81415344 | 87.88690741 |
| 200214A00016 | 2/14/2020 | 1.57 | 2/14/2024 | 2/14/2020 | 105.32661 | 105.3266094 | 105.3266094 | 105.3266094 | 104.0927715 | 100.5011216 | 97.05214321 | 93.73938189 | 90.55671401 |
| 200218A00023 | 2/18/2020 | 1.55 | 2/21/2023 | 2/18/2020 | 103.8348 | 103.834798 | 103.834798 | 103.834798 | 103.1514526 | 100.5214769 | 97.97160299 | 95.49888973 | 93.10052527 |
| 190830A00002 | 8/30/2019 | 1.93 | 8/28/2026 | 8/30/2019 | 110.05543 | 110.0554253 | 110.0554253 | 110.0554253 | 106.0681874 | 100.0879118 | 94.48299121 | 89.22792651 | 84.29908115 |
| 190904A00007 | 9/4/2019 | 1.69 | 9/1/2023 | 9/4/2019 | 104.46333 | 104.4633265 | 104.4633265 | 104.4633265 | 103.5242392 | 100.3942984 | 97.37490319 | 94.46150075 | 91.64975579 |
| 190904A00019 | 9/4/2019 | 1.69 | 9/4/2024 | 9/4/2019 | 105.87716 | 105.8771598 | 105.8771598 | 105.8771598 | 104.2364497 | 100.1331901 | 96.21355857 | 92.4683432 | 88.88884773 |
| 190904A00020 | 9/4/2019 | 1.69 | 9/1/2023 | 9/4/2019 | 104.46333 | 104.4633265 | 104.4633265 | 104.4633265 | 103.5242392 | 100.3942984 | 97.37490319 | 94.46150075 | 91.64975579 |
| 190905A00002 | 9/5/2019 | 1.78 | 9/6/2022 | 9/5/2019 | 103.27937 | 103.2793695 | 103.2793695 | 103.2793695 | 102.7631091 | 100.5974991 | 98.48802773 | 96.43283682 | 94.4301457 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190909A00025 | 9/9/2019 | 1.88 | 9/9/2024 | 9/9/2019 | 106.69961 | 106.6996097 | 106.6996097 | 106.6996097 | 105.0428481 | 100.9096231 | 96.96168205 | 93.18970793 | 89.58490683 |
| 190910A00004 | 9/11/2019 | 1.86 | 9/11/2024 | 9/11/2019 | 106.6236 | 106.6235986 | 106.6235986 | 106.6235986 | 104.962838 | 100.8260205 | 96.87487817 | 93.10006285 | 89.49275203 |
| 190917A00044 | 9/17/2019 | 1.86 | 9/17/2021 | 9/17/2019 | 102.14639 | 102.1463923 | 102.1463923 | 102.1463923 | 101.9232943 | 100.6986158 | 99.50322898 | 98.33609292 | 97.1962154 |
| 190918A00007 | 9/20/2019 | 1.95 | 12/15/2022 | 9/20/2019 | 104.11123 | 104.1112304 | 104.1112304 | 104.1112304 | 103.4991527 | 101.0586882 | 98.68823366 | 96.38538504 | 94.14783563 |
| 190923A00017 | 9/23/2019 | 1.74 | 9/23/2024 | 9/23/2019 | 106.94571 | 106.9457077 | 106.9457077 | 106.9457077 | 105.2452465 | 101.0485284 | 97.04195098 | 93.2158514 | 89.56111595 |
| 190924A00035 | 9/24/2019 | 1.88 | 9/13/2024 | 9/24/2019 | 106.71694 | 106.7169418 | 106.7169418 | 106.7169418 | 105.0511636 | 100.9072331 | 96.94948401 | 93.16853227 | 89.55552226 |
| 190925A00004 | 9/25/2019 | 1.7 | 9/24/2024 | 9/25/2019 | 106.77874 | 106.7787406 | 106.7787406 | 106.7787406 | 105.0770539 | 100.8812374 | 96.87567191 | 93.0506824 | 89.39714387 |
| 190925A00019 | 9/27/2019 | 1.93 | 9/27/2023 | 9/27/2019 | 105.34815 | 105.348146 | 105.348146 | 105.348146 | 104.3641517 | 101.1511522 | 98.05364248 | 95.06677227 | 92.1859289 |
| 190926A00019 | 9/26/2019 | 1.94 | 9/26/2024 | 9/26/2019 | 107.02977 | 107.0297714 | 107.0297714 | 107.0297714 | 105.3331292 | 101.14905 | 97.15425918 | 93.33914604 | 89.69464567 |
| 190930A00014 | 9/30/2019 | 1.89 | 9/30/2022 | 9/30/2019 | 103.62766 | 103.6276592 | 103.6276592 | 103.6276592 | 103.0883287 | 100.8540477 | 98.67904408 | 96.56130317 | 94.49889692 |
| 191002A00005 | 10/2/2019 | 1.83 | 10/2/2020 | 10/2/2019 | 100.44704 | 100.4470411 | 100.4470411 | 100.4470411 | 100.40515 | 100.1445009 | 99.88520487 | 99.62725129 | 99.37062977 |
| 191002A00014 | 10/2/2019 | 1.78 | 10/3/2022 | 10/2/2019 | 103.3897 | 103.3896956 | 103.3896956 | 103.3896956 | 102.8481503 | 100.6087813 | 98.4290204 | 96.30684973 | 94.24033714 |
| 191007A00029 | 10/7/2019 | 1.88 | 10/9/2029 | 10/7/2019 | 116.48505 | 116.485052 | 116.485052 | 116.4761189 | 107.1138653 | 98.31231125 | 90.30649638 | 83.02026719 | 76.38512366 |
| 191008A00018 | 10/8/2019 | 1.74 | 10/11/2022 | 10/8/2019 | 103.33034 | 103.3303385 | 103.3303385 | 103.3303385 | 102.7815217 | 100.5219907 | 98.32309351 | 96.18279878 | 94.09915913 |
| 191008A00022 | 10/8/2019 | 1.55 | 10/8/2021 | 10/8/2019 | 101.84772 | 101.8477187 | 101.8477187 | 101.8477187 | 101.6181852 | 100.3422202 | 99.09526836 | 97.87634086 | 96.6844936 |
| 191009A00006 | 10/9/2019 | 1.53 | 10/7/2022 | 10/9/2019 | 103.2459 | 103.2459041 | 103.2459041 | 103.2459041 | 102.6988014 | 100.4423906 | 98.24644755 | 96.10893116 | 94.02788622 |
| 191010A00011 | 10/10/2019 | 1.6 | 10/10/2023 | 10/10/2019 | 104.91612 | 104.9161208 | 104.9161208 | 104.9161208 | 103.9072823 | 100.6531207 | 97.51742648 | 94.49520925 | 91.5817208 |
| 191017A00003 | 10/17/2019 | 1.9 | 12/10/2021 | 10/17/2019 | 102.37726 | 102.3772626 | 102.3772626 | 102.3772626 | 102.1079845 | 100.6720088 | 99.26329229 | 97.88112658 | 96.52482739 |
| 191018A00005 | 10/18/2019 | 1.89 | 5/2/2022 | 10/18/2019 | 102.9625 | 102.9624953 | 102.9624953 | 102.9624953 | 102.5691967 | 100.7420375 | 98.95618146 | 97.21045817 | 95.50373756 |
| 200203A00011 | 2/3/2020 | 1.7 | 2/15/2023 | 2/3/2020 | 103.7296 | 103.7295959 | 103.7295959 | 103.7295959 | 103.055934 | 100.4550807 | 97.93285083 | 95.48638064 | 93.11293078 |
| 200204A00001 | 2/4/2020 | 1.79 | 2/4/2025 | 2/4/2020 | 106.87855 | 106.8785458 | 106.8785458 | 106.8785458 | 104.8736905 | 100.3653443 | 96.07620813 | 91.99447791 | 88.10904895 |
| 200204A00012 | 2/4/2020 | 1.98 | 2/4/2027 | 2/4/2020 | 111.09487 | 111.0948715 | 111.0948715 | 111.0948715 | 106.3850712 | 100.0029444 | 94.04637809 | 88.48480511 | 83.29000564 |
| 200214A00015 | 2/18/2020 | 1.76 | 8/6/2024 | 2/18/2020 | 106.05538 | 106.0553809 | 106.0553809 | 106.0553809 | 104.4767448 | 100.4427834 | 96.58653622 | 92.89922794 | 89.37256581 |
| 200219A00007 | 2/19/2020 | 1.81 | 8/19/2021 | 2/19/2020 | 101.76578 | 101.7657823 | 101.7657823 | 101.7657823 | 101.549526 | 100.4087619 | 99.29351456 | 98.20293512 | 97.1362122 |
| 200221A00031 | 2/21/2020 | 1.69 | 2/21/2025 | 2/21/2020 | 106.47844 | 106.4784437 | 106.4784437 | 106.4784437 | 104.4339182 | 99.8882767 | 95.5657845 | 91.45431348 | 87.5424614 |
| 200224A00001 | 2/24/2020 | 1.59 | 2/24/2025 | 2/24/2020 | 106.02082 | 106.0208236 | 106.0208236 | 106.0208236 | 103.9721141 | 99.42878763 | 95.10899537 | 91.00056525 | 87.09205506 |
| 200224A00016 | 2/24/2020 | 1.56 | 2/24/2023 | 2/24/2020 | 103.38849 | 103.3884915 | 103.3884915 | 103.3884915 | 102.7063069 | 100.0842162 | 97.54201806 | 95.07677734 | 92.68568778 |
| 200224A00021 | 2/24/2020 | 1.58 | 9/24/2024 | 2/24/2020 | 105.48375 | 105.4837528 | 105.4837528 | 105.4837528 | 103.8010076 | 99.65450383 | 95.69578088 | 91.91530545 | 88.30408519 |
| 200225A00045 | 2/25/2020 | 1.54 | 2/24/2023 | 2/25/2020 | 103.33488 | 103.3348784 | 103.3348784 | 103.3348784 | 102.6528523 | 100.0314821 | 97.48998778 | 95.02543473 | 92.63501718 |
| 200226A00014 | 2/26/2020 | 1.53 | 2/27/2023 | 2/26/2020 | 103.31806 | 103.3180625 | 103.3180625 | 103.3180625 | 102.632915 | 100.0031849 | 97.45378615 | 94.98175902 | 92.5842744 |
| 200226A00019 | 2/26/2020 | 1.38 | 2/26/2025 | 2/26/2020 | 105.94706 | 105.9470594 | 105.9470594 | 105.9470594 | 103.878515 | 99.30420234 | 94.95596419 | 90.82144214 | 86.88902175 |
| 200227A00004 | 2/27/2020 | 1.65 | 2/27/2030 | 2/27/2020 | 114.92524 | 114.9252374 | 114.9252374 | 114.5870233 | 104.8672599 | 95.84447574 | 87.67052017 | 80.26112573 | 73.54078929 |
| 200228A00012 | 3/3/2020 | 1.4 | 3/3/2025 | 3/3/2020 | 105.15089 | 105.1508855 | 105.1508855 | 105.1508855 | 103.0908897 | 98.54936682 | 94.23237458 | 90.12763472 | 86.2236085 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200228A00030 | 2/28/2020 | 1.32 | 2/28/2023 | 2/28/2020 | 102.75614 | 102.7561432 | 102.7561432 | 102.7561432 | 102.0716111 | 99.44660827 | 96.90191393 | 94.43456554 | 92.04173147 |
| 200228A00060 | 2/28/2020 | 1.31 | 2/28/2022 | 2/28/2020 | 101.72462 | 101.7246242 | 101.7246242 | 101.7246242 | 101.3913265 | 99.74273601 | 98.128681 | 96.54814069 | 95.00013461 |
| 200228A00063 | 2/28/2020 | 1.32 | 2/28/2023 | 2/28/2020 | 102.75614 | 102.7561432 | 102.7561432 | 102.7561432 | 102.0716111 | 99.44660827 | 96.90191393 | 94.43456554 | 92.04173147 |
| 200302A00008 | 3/2/2020 | 1.2 | 3/9/2023 | 3/2/2020 | 102.45569 | 102.4556946 | 102.4556946 | 102.4556946 | 101.7619774 | 99.11788149 | 96.5553022 | 94.0712072 | 91.66269956 |
| 200302A00011 | 3/2/2020 | 1.31 | 2/27/2025 | 3/2/2020 | 104.71629 | 104.7162921 | 104.7162921 | 104.7162921 | 102.6695695 | 98.14803218 | 93.84972559 | 89.76246375 | 85.8747931 |
| 200302A00034 | 3/2/2020 | 1.25 | 3/1/2024 | 3/2/2020 | 103.53184 | 103.5318394 | 103.5318394 | 103.5318394 | 102.2839698 | 98.69918397 | 95.25816375 | 91.95434638 | 88.78150884 |
| 200303A00010 | 3/3/2020 | 1.34 | 3/3/2025 | 3/3/2020 | 104.86847 | 104.8684722 | 104.8684722 | 104.8684722 | 102.8105352 | 98.27550773 | 93.96478073 | 89.86608609 | 85.96789466 |
| 200304A00008 | 3/4/2020 | 1.03 | 11/15/2021 | 3/4/2020 | 101.05187 | 101.0518702 | 101.0518702 | 101.0518702 | 100.8026649 | 99.4434322 | 98.10888904 | 96.79842162 | 95.51143598 |
| 200304A00053 | 3/6/2020 | 2.33 | 3/6/2025 | 3/6/2020 | 109.54496 | 109.544961 | 109.544961 | 109.544961 | 107.4451891 | 102.7951202 | 98.37387127 | 94.16894919 | 90.16861308 |
| 200304A00054 | 3/6/2020 | 2.35 | 3/8/2027 | 3/6/2020 | 113.72272 | 113.7227248 | 113.7227248 | 113.7227248 | 108.8304332 | 102.2856173 | 96.18087147 | 90.48427341 | 85.16637988 |
| 200129A00017 | 2/3/2020 | 1.75 | 8/15/2022 | 2/3/2020 | 103.12464 | 103.1246404 | 103.1246404 | 103.1246404 | 102.6293472 | 100.523479 | 98.47113622 | 96.47058877 | 94.52017642 |
| 200130A00012 | 1/30/2020 | 1.72 | 1/30/2023 | 1/30/2020 | 103.72097 | 103.7209691 | 103.7209691 | 103.7209691 | 103.0642357 | 100.5091866 | 98.03036141 | 95.62502572 | 93.29056173 |
| 200130A00021 | 1/30/2020 | 1.54 | 1/30/2023 | 1/30/2020 | 103.72201 | 103.7220114 | 103.7220114 | 103.7220114 | 103.0624079 | 100.497259 | 98.00883617 | 95.59438043 | 93.2512507 |
| 200131A00007 | 1/31/2020 | 1.68 | 1/31/2023 | 1/31/2020 | 103.62033 | 103.6203282 | 103.6203282 | 103.6203282 | 102.9628745 | 100.4065453 | 97.9265429 | 95.52012669 | 93.18467309 |
| 200131A00010 | 2/3/2020 | 1.68 | 2/3/2023 | 2/3/2020 | 103.63156 | 103.6315582 | 103.6315582 | 103.6315582 | 102.9708933 | 100.4057972 | 97.91748101 | 95.50317994 | 93.16024752 |
| 200131A00017 | 1/31/2020 | 1.51 | 1/31/2024 | 1/31/2020 | 105.05279 | 105.0527855 | 105.0527855 | 105.0527855 | 103.8463326 | 100.2979266 | 96.88928962 | 93.61415547 | 90.46657558 |
| 200203A00001 | 2/3/2020 | 1.7 | 2/3/2023 | 2/3/2020 | 103.68401 | 103.6840139 | 103.6840139 | 103.6840139 | 103.0231985 | 100.457412 | 97.96842122 | 95.55346081 | 93.20988386 |
| 200207A00017 | 2/7/2020 | 1.96 | 2/8/2027 | 2/7/2020 | 110.98008 | 110.980075 | 110.980075 | 110.980075 | 106.2540612 | 99.86552747 | 93.90371241 | 88.33791693 | 83.13980348 |
| 200214A00020 | 2/18/2020 | 1.78 | 1/15/2025 | 2/18/2020 | 106.75151 | 106.7515125 | 106.7515125 | 106.7515125 | 104.7967554 | 100.3417933 | 96.10138565 | 92.06408971 | 88.21913352 |
| 200218A00004 | 2/18/2020 | 1.73 | 2/21/2023 | 2/18/2020 | 103.83256 | 103.832559 | 103.832559 | 103.832559 | 103.1522395 | 100.5327893 | 97.99290999 | 95.52968699 | 93.14033338 |
| 200218A00024 | 2/20/2020 | 1.73 | 7/17/2023 | 2/20/2020 | 104.40917 | 104.4091686 | 104.4091686 | 104.4091686 | 103.5405824 | 100.5297393 | 97.62207447 | 94.81347555 | 92.10001906 |
| 200224A00007 | 2/24/2020 | 1.59 | 2/24/2025 | 2/24/2020 | 106.02082 | 106.0208236 | 106.0208236 | 106.0208236 | 103.9721141 | 99.42878763 | 95.10899537 | 91.00056525 | 87.09205506 |
| 200224A00046 | 2/24/2020 | 1.59 | 2/24/2025 | 2/24/2020 | 106.02082 | 106.0208236 | 106.0208236 | 106.0208236 | 103.9721141 | 99.42878763 | 95.10899537 | 91.00056525 | 87.09205506 |
| 200225A00050 | 2/25/2020 | 1.57 | 2/25/2025 | 2/25/2020 | 105.93046 | 105.930458 | 105.930458 | 105.930458 | 103.8799085 | 99.33593683 | 95.01567782 | 90.90694249 | 86.99827323 |
| 200226A00006 | 2/26/2020 | 1.57 | 2/26/2025 | 2/26/2020 | 105.93385 | 105.9338469 | 105.9338469 | 105.9338469 | 103.8807791 | 99.33401438 | 95.01121682 | 90.90017714 | 86.98941914 |
| 200226A00012 | 2/26/2020 | 1.54 | 2/28/2022 | 2/26/2020 | 102.11209 | 102.1120875 | 102.1120875 | 102.1120875 | 101.778149 | 100.1262012 | 98.50884962 | 96.92507177 | 95.37388558 |
| 200227A00016 | 2/27/2020 | 1.47 | 2/27/2025 | 2/27/2020 | 105.46764 | 105.4676421 | 105.4676421 | 105.4676421 | 103.415465 | 98.87668458 | 94.56174469 | 90.45843262 | 86.55526939 |
| 200227A00023 | 2/27/2020 | 1.47 | 2/27/2025 | 2/27/2020 | 105.46764 | 105.4676421 | 105.4676421 | 105.4676421 | 103.415465 | 98.87668458 | 94.56174469 | 90.45843262 | 86.55526939 |
| 200227A00027 | 2/27/2020 | 1.47 | 2/27/2025 | 2/27/2020 | 105.46764 | 105.4676421 | 105.4676421 | 105.4676421 | 103.415465 | 98.87668458 | 94.56174469 | 90.45843262 | 86.55526939 |
| 200227A00030 | 2/27/2020 | 1.59 | 2/27/2026 | 2/27/2020 | 107.31236 | 107.3123592 | 107.3123592 | 107.3123592 | 104.1085992 | 98.63340455 | 93.4782452 | 88.62277522 | 84.04804795 |
| 200228A00023 | 2/28/2020 | 1.31 | 2/28/2022 | 2/28/2020 | 101.72462 | 101.7246242 | 101.7246242 | 101.7246242 | 101.3913265 | 99.74273601 | 98.128681 | 96.54814069 | 95.00013461 |
| 200228A00043 | 2/28/2020 | 1.21 | 2/28/2025 | 2/28/2020 | 105.1516 | 105.1515976 | 105.1515976 | 105.1515976 | 103.0838202 | 98.52235322 | 94.18681995 | 90.06484984 | 86.14481811 |
| 200302A00036 | 3/2/2020 | 1.45 | 3/2/2026 | 3/2/2020 | 106.52459 | 106.5245851 | 106.5245851 | 106.5245851 | 103.3175006 | 97.85678188 | 92.71602918 | 87.87486343 | 83.31430949 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200303A00012 | 3/3/2020 | 1.71 | 3/1/2030 | 3/3/2020 | 113.56822 | 113.5682207 | 113.5682207 | 113.231505 | 103.6790029 | 94.7996503 | 86.75357673 | 79.45822272 | 72.83959979 |
| 190604A00028 | 6/4/2019 | 2.2 | 6/3/2022 | 6/4/2019 | 103.72687 | 103.7268691 | 103.7268691 | 103.7268691 | 103.3010492 | 101.3820894 | 99.50832542 | 97.67842102 | 95.89108843 |
| 190605A00034 | 6/5/2019 | 2.11 | 6/6/2022 | 6/5/2019 | 103.56671 | 103.5667073 | 103.5667073 | 103.5667073 | 103.1382433 | 101.2127619 | 99.33282557 | 97.4970819 | 95.70422777 |
| 190606A00026 | 6/6/2019 | 2.23 | 6/6/2023 | 6/6/2019 | 105.72813 | 105.7281322 | 105.7281322 | 105.7281322 | 104.9142459 | 101.9912118 | 99.16496869 | 96.43179252 | 93.78812367 |
| 190606A00029 | 6/6/2019 | 2.96 | 6/6/2034 | 6/6/2019 | 136.71941 | 136.7194082 | 136.7194082 | 129.8912547 | 115.6067442 | 102.8195823 | 91.65007103 | 81.88202498 | 73.32928329 |
| 190607A00012 | 6/7/2019 | 2.13 | 6/7/2022 | 6/7/2019 | 103.6109 | 103.6108964 | 103.6108964 | 103.6108964 | 103.1813596 | 101.2527339 | 99.36978848 | 97.5311652 | 95.73555525 |
| 190607A00023 | 6/7/2019 | 1.92 | 6/7/2022 | 6/7/2019 | 103.53362 | 103.5336224 | 103.5336224 | 103.5336224 | 103.1027627 | 101.1687303 | 99.28061669 | 97.43705351 | 95.63672238 |
| 190610A00016 | 6/10/2019 | 2.21 | 6/10/2022 | 6/10/2019 | 103.78346 | 103.7834554 | 103.7834554 | 103.7834554 | 103.3506197 | 101.4121545 | 99.51978459 | 97.67213358 | 95.86787549 |
| 190611A00007 | 6/11/2019 | 2.25 | 6/10/2022 | 6/11/2019 | 103.86211 | 103.862113 | 103.862113 | 103.862113 | 103.4291215 | 101.4898679 | 99.59672479 | 97.74831538 | 95.94331328 |
| 190613A00011 | 6/13/2019 | 2.26 | 6/13/2024 | 6/13/2019 | 107.83152 | 107.8315245 | 107.8315245 | 107.8315245 | 106.3569398 | 102.4250483 | 98.66071459 | 95.05593019 | 91.60311162 |
| 190619A00024 | 6/19/2019 | 2.21 | 7/19/2022 | 6/19/2019 | 103.96987 | 103.9698669 | 103.9698669 | 103.9698669 | 103.4985394 | 101.4544605 | 99.46110122 | 97.5168708 | 95.62024014 |
| 190620A00025 | 6/20/2019 | 2.04 | 6/20/2022 | 6/20/2019 | 103.47749 | 103.4774926 | 103.4774926 | 103.4774926 | 103.0355046 | 101.073484 | 99.15876395 | 97.28991234 | 95.46555044 |
| 190620A00026 | 6/20/2019 | 2.09 | 6/20/2023 | 6/20/2019 | 105.38249 | 105.3824936 | 105.3824936 | 105.3824936 | 104.5499926 | 101.5948125 | 98.73877459 | 95.97801363 | 93.30883751 |
| 190624A00036 | 6/24/2019 | 1.95 | 12/28/2020 | 6/24/2019 | 100.92096 | 100.9209581 | 100.9209581 | 100.9209581 | 100.8277494 | 100.3264402 | 99.83010664 | 99.33867486 | 98.85207251 |
| 190625A00003 | 6/25/2019 | 2.03 | 6/27/2022 | 6/25/2019 | 103.49099 | 103.4909907 | 103.4909907 | 103.4909907 | 103.0420866 | 101.0610548 | 99.12822994 | 97.2421386 | 95.40136282 |
| 190625A00023 | 6/25/2019 | 2.47 | 6/25/2027 | 6/25/2019 | 115.1699 | 115.1698995 | 115.1698995 | 115.1698995 | 109.7669205 | 102.9231769 | 96.55748698 | 90.63393532 | 85.11948035 |
| 190627A00010 | 6/27/2019 | 1.97 | 6/27/2024 | 6/27/2019 | 107.48029 | 107.4802916 | 107.4802916 | 107.4802916 | 105.9693045 | 101.9876389 | 98.17784287 | 94.53159973 | 91.04103983 |
| 190627A00037 | 6/27/2019 | 1.93 | 6/27/2023 | 6/27/2019 | 105.48454 | 105.4845445 | 105.4845445 | 105.4845445 | 104.637704 | 101.6496216 | 98.76267449 | 95.97288502 | 93.27645516 |
| 190628A00004 | 6/28/2019 | 2.12 | 6/28/2023 | 6/28/2019 | 105.51258 | 105.5125782 | 105.5125782 | 105.5125782 | 104.6683247 | 101.689925 | 98.81214416 | 96.0310308 | 93.34281206 |
| 190701A00009 | 7/3/2019 | 2.14 | 7/2/2024 | 7/3/2019 | 107.4491 | 107.4490951 | 107.4490951 | 107.4490951 | 105.9371266 | 101.9634374 | 98.16128993 | 94.52237889 | 91.03884564 |
| 190703A00019 | 7/3/2019 | 2.08 | 7/5/2022 | 7/3/2019 | 103.6311 | 103.6310958 | 103.6310958 | 103.6310958 | 103.1740914 | 101.1703806 | 99.21582179 | 97.30889791 | 95.44814946 |
| 190709A00018 | 7/9/2019 | 2.24 | 7/9/2024 | 7/9/2019 | 107.89045 | 107.8904492 | 107.8904492 | 107.8904492 | 106.3611301 | 102.3608757 | 98.5338418 | 94.87161262 | 91.36622676 |
| 190710A00012 | 7/10/2019 | 2.18 | 7/10/2023 | 7/10/2019 | 105.75627 | 105.756265 | 105.756265 | 105.756265 | 104.8933463 | 101.8800108 | 98.96928976 | 96.1571173 | 93.43961286 |
| 190711A00020 | 7/11/2019 | 1.98 | 7/11/2022 | 7/11/2019 | 103.82665 | 103.8266497 | 103.8266497 | 103.8266497 | 103.3616657 | 101.3331166 | 99.35469582 | 97.42484167 | 95.54205258 |
| 190715A00010 | 7/15/2019 | 2.23 | 7/15/2024 | 7/15/2019 | 107.8818 | 107.8817994 | 107.8817994 | 107.8817994 | 106.3397583 | 102.3244414 | 98.48354769 | 94.80857545 | 91.29148384 |
| 200225A00004 | 2/25/2020 | 1.54 | 2/26/2024 | 2/25/2020 | 104.59166 | 104.5916641 | 104.5916641 | 104.5916641 | 103.3461594 | 99.75260784 | 96.30260666 | 92.98962443 | 89.80746664 |
| 200225A00006 | 2/25/2020 | 1.57 | 2/25/2022 | 2/25/2020 | 102.15218 | 102.1521808 | 102.1521808 | 102.1521808 | 101.8207358 | 100.1771529 | 98.56787365 | 96.99188862 | 95.44822814 |
| 200225A00012 | 2/25/2020 | 1.57 | 2/25/2025 | 2/25/2020 | 105.93046 | 105.930458 | 105.930458 | 105.930458 | 103.8799085 | 99.33593683 | 95.01567782 | 90.90694249 | 86.99827323 |
| 200225A00014 | 2/25/2020 | 1.57 | 2/25/2022 | 2/25/2020 | 102.15218 | 102.1521808 | 102.1521808 | 102.1521808 | 101.8207358 | 100.1771529 | 98.56787365 | 96.99188862 | 95.44822814 |
| 200226A00009 | 2/26/2020 | 1.75 | 2/26/2030 | 2/26/2020 | 115.89535 | 115.8953452 | 115.8953452 | 115.5595527 | 105.8111052 | 96.7469744 | 88.53410743 | 81.08807947 | 74.33324016 |
| 200227A00009 | 2/27/2020 | 1.47 | 2/27/2025 | 2/27/2020 | 105.46764 | 105.4676421 | 105.4676421 | 105.4676421 | 103.415465 | 98.87668458 | 94.56174469 | 90.45843262 | 86.55526939 |
| 200227A00012 | 2/27/2020 | 1.41 | 2/27/2023 | 2/27/2020 | 102.99539 | 102.9953919 | 102.9953919 | 102.9953919 | 102.311202 | 99.68582085 | 97.1406701 | 94.67279321 | 92.2793641 |
| 200228A00041 | 2/28/2020 | 1.14 | 2/28/2023 | 2/28/2020 | 102.75603 | 102.7560322 | 102.7560322 | 102.7560322 | 102.0684401 | 99.43284638 | 96.8780989 | 94.40120813 | 91.99931701 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200228A00059 | 2/28/2020 | 1.79 | 2/28/2030 | 2/28/2020 | 114.33713 | 114.337133 | 114.337133 | 114.003148 | 104.4282862 | 95.51647632 | 87.43981831 | 80.11563649 | 73.46983303 |
| 200302A00031 | 3/2/2020 | 1.02 | 11/18/2022 | 3/2/2020 | 102.17808 | 102.178079 | 102.178079 | 102.178079 | 101.5943792 | 99.23969416 | 96.95097575 | 94.72601706 | 92.56269799 |
| 200302A00054 | 3/2/2020 | 1.31 | 3/3/2025 | 3/2/2020 | 104.72727 | 104.7272655 | 104.7272655 | 104.7272655 | 102.670358 | 98.13857819 | 93.8309838 | 89.73531177 | 85.84003775 |
| 200303A00004 | 3/3/2020 | 1.06 | 3/3/2022 | 3/3/2020 | 101.59604 | 101.596038 | 101.596038 | 101.596038 | 101.2592126 | 99.59891746 | 97.9736101 | 96.38224982 | 94.8238374 |
| 200303A00018 | 3/3/2020 | 1.27 | 3/3/2025 | 3/3/2020 | 104.53899 | 104.5389899 | 104.5389899 | 104.5389899 | 102.4834551 | 97.95600547 | 93.65258789 | 89.56094601 | 85.66956186 |
| 200306A00001 | 3/6/2020 | 1.11 | 3/6/2026 | 3/6/2020 | 104.59482 | 104.5948151 | 104.5948151 | 104.5948151 | 101.3925555 | 95.97586714 | 90.8780043 | 86.07859757 | 81.55868452 |
| 200306A00037 | 3/6/2020 | 1.11 | 3/6/2026 | 3/6/2020 | 104.59482 | 104.5948151 | 104.5948151 | 104.5948151 | 101.3925555 | 95.97586714 | 90.8780043 | 86.07859757 | 81.55868452 |
| 200309A00004 | 3/9/2020 | 0.71 | 3/8/2024 | 3/9/2020 | 102.20819 | 102.2081852 | 102.2081852 | 102.2081852 | 100.9461163 | 97.35053161 | 93.90045888 | 90.58920247 | 87.4104163 |
| 200309A00041 | 3/9/2020 | 0.73 | 3/9/2022 | 3/9/2020 | 100.75872 | 100.7587174 | 100.7587174 | 100.7587174 | 100.4189598 | 98.75529426 | 97.12687897 | 95.53265818 | 93.97161854 |
| 200310A00042 | 3/10/2020 | 1.41 | 3/11/2030 | 3/10/2020 | 110.69965 | 110.6996544 | 110.6996544 | 110.3352989 | 100.8512851 | 92.08139624 | 84.14018948 | 76.94517569 | 70.42246222 |
| 200311A00016 | 3/11/2020 | 0.87 | 5/11/2021 | 3/11/2020 | 100.52751 | 100.5275101 | 100.5275101 | 100.5275101 | 100.3521468 | 99.48847329 | 98.63958325 | 97.80509967 | 96.98465836 |
| 200312A00016 | 3/16/2020 | 1.09 | 2/15/2023 | 3/16/2020 | 102.10952 | 102.1095246 | 102.1095246 | 102.1095246 | 101.4405927 | 98.86132129 | 96.36017658 | 93.93431027 | 91.580998 |
| 200316A00013 | 3/16/2020 | 1 | 4/15/2022 | 3/16/2020 | 101.27547 | 101.2754729 | 101.2754729 | 101.2754729 | 100.9011999 | 99.13555837 | 97.4090325 | 95.72046928 | 94.06875955 |
| 200316A00064 | 3/16/2020 | 0.99 | 3/16/2022 | 3/16/2020 | 101.21691 | 101.2169082 | 101.2169082 | 101.2169082 | 100.870105 | 99.18414575 | 97.53419213 | 95.91915539 | 94.33799104 |
| 200317A00065 | 3/19/2020 | 2.05 | 3/19/2025 | 3/19/2020 | 108.287 | 108.2870009 | 108.2870009 | 108.2870009 | 106.1630346 | 101.5097635 | 97.08735356 | 92.88310643 | 88.88509433 |
| 200326A00028 | 3/26/2020 | 1.54 | 3/26/2025 | 3/26/2020 | 105.88791 | 105.8879102 | 105.8879102 | 105.8879102 | 103.7639025 | 99.14920968 | 94.76503687 | 90.59863837 | 86.63804583 |
| 191024A00017 | 10/25/2019 | 1.9 | 7/15/2021 | 10/25/2019 | 101.71149 | 101.7114851 | 101.7114851 | 101.7114851 | 101.5019751 | 100.4563906 | 99.43226732 | 98.42894959 | 97.44580826 |
| 191025A00009 | 10/25/2019 | 2.26 | 5/25/2029 | 10/25/2019 | 117.40597 | 117.4059734 | 117.4059734 | 117.4059734 | 108.8018319 | 100.3263963 | 92.58482078 | 85.50961108 | 79.03980122 |
| 191104A00023 | 11/4/2019 | 2.24 | 8/4/2028 | 11/4/2019 | 115.68982 | 115.689817 | 115.689817 | 115.689817 | 108.4863609 | 100.7126266 | 93.55820304 | 86.97044801 | 80.90145096 |
| 191105A00018 | 11/5/2019 | 1.78 | 11/6/2023 | 11/5/2019 | 105.63762 | 105.6376221 | 105.6376221 | 105.6376221 | 104.5806834 | 101.2444938 | 98.03204657 | 94.938124 | 91.95775575 |
| 191114A00008 | 11/18/2019 | 1.93 | 4/17/2023 | 11/18/2019 | 104.61441 | 104.6144126 | 104.6144126 | 104.6144126 | 103.8688388 | 101.0927543 | 98.40483471 | 95.80177299 | 93.28040736 |
| 191114A00020 | 11/18/2019 | 1.91 | 2/15/2022 | 11/18/2019 | 102.67792 | 102.677925 | 102.677925 | 102.677925 | 102.354173 | 100.7352079 | 99.1496389 | 97.59649845 | 96.07485612 |
| 191120A00006 | 11/20/2019 | 2.67 | 11/20/2035 | 11/20/2019 | 136.04639 | 136.0463887 | 136.0463887 | 127.034924 | 111.6248095 | 98.09504003 | 86.43725732 | 76.37869751 | 67.68777 |
| 191120A00010 | 11/20/2019 | 1.88 | 1/20/2022 | 11/20/2019 | 102.51476 | 102.5147552 | 102.5147552 | 102.5147552 | 102.2129288 | 100.6681267 | 99.15432321 | 97.67065626 | 96.21629524 |
| 191122A00006 | 11/22/2019 | 1.74 | 11/22/2023 | 11/22/2019 | 105.5736 | 105.5735971 | 105.5735971 | 105.5735971 | 104.4894905 | 101.1119339 | 97.86119855 | 94.73187114 | 91.7187981 |
| 191126A00015 | 11/27/2019 | 1.88 | 10/14/2022 | 11/27/2019 | 103.66629 | 103.666292 | 103.666292 | 103.666292 | 103.1138776 | 100.8426066 | 98.63244454 | 96.48135205 | 94.38737331 |
| 191202A00005 | 12/2/2019 | 2.03 | 12/2/2024 | 12/2/2019 | 107.73317 | 107.7331652 | 107.7331652 | 107.7331652 | 105.8772669 | 101.5082398 | 97.34441561 | 93.37511774 | 89.59027902 |
| 191206A00013 | 12/6/2019 | 3.05 | 12/6/2044 | 12/6/2019 | 165.51772 | 165.5177181 | 165.5177181 | 139.9373282 | 116.277508 | 97.15871517 | 81.84357231 | 69.52670825 | 59.57914898 |
| 191206A00021 | 12/6/2019 | 2.02 | 12/6/2024 | 12/6/2019 | 107.70754 | 107.7075381 | 107.7075381 | 107.7075381 | 105.8422142 | 101.4638106 | 97.29153615 | 93.31464044 | 89.52298821 |
| 191206A00044 | 12/10/2019 | 2.01 | 10/31/2024 | 12/10/2019 | 107.49395 | 107.4939474 | 107.4939474 | 107.4939474 | 105.7146433 | 101.4328741 | 97.348524 | 93.45151084 | 89.73231717 |
| 191220A00001 | 12/20/2019 | 2.62 | 12/19/2031 | 12/20/2019 | 126.45455 | 126.4545521 | 126.4545521 | 123.7698405 | 112.1011733 | 101.3759962 | 91.80466066 | 83.25596185 | 75.61426297 |
| 191223A00008 | 12/23/2019 | 1.93 | 12/23/2021 | 12/23/2019 | 102.4659 | 102.465897 | 102.465897 | 102.465897 | 102.1864185 | 100.7158453 | 99.27382658 | 97.85960393 | 96.47244513 |
| 191223A00055 | 12/23/2019 | 2.46 | 12/7/2029 | 12/23/2019 | 120.32762 | 120.3276152 | 120.3276152 | 120.2062559 | 110.6610989 | 101.6541313 | 93.46599812 | 86.01767786 | 79.23815581 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191230A00012 | 12/30/2019 | 1.77 | 12/1/2023 | 12/30/2019 | 105.7178 | 105.7178011 | 105.7178011 | 105.7178011 | 104.617602 | 101.2138193 | 97.93868649 | 94.78667525 | 91.75252436 |
| 200108A00017 | 1/8/2020 | 2.55 | 1/8/2035 | 1/8/2020 | 135.51857 | 135.5185685 | 135.5185685 | 127.5699814 | 112.6510334 | 99.4586289 | 88.0132773 | 78.07161114 | 69.42540792 |
| 200110A00005 | 1/10/2020 | 1.7 | 1/10/2022 | 1/10/2020 | 102.45378 | 102.4537832 | 102.4537832 | 102.4537832 | 102.1592138 | 100.6369533 | 99.14501423 | 97.68256484 | 96.24880359 |
| 200122A00028 | 1/22/2020 | 1.84 | 1/21/2022 | 1/22/2020 | 102.45599 | 102.4559946 | 102.4559946 | 102.4559946 | 102.153457 | 100.6064955 | 99.09060711 | 97.60492637 | 96.14861941 |
| 200123A00049 | 1/23/2020 | 1.63 | 1/23/2023 | 1/23/2020 | 103.92829 | 103.9282924 | 103.9282924 | 103.9282924 | 103.2751989 | 100.7256615 | 98.25197327 | 95.85142337 | 93.52141604 |
| 200129A00018 | 2/3/2020 | 1.74 | 12/15/2022 | 2/3/2020 | 103.58939 | 103.5893882 | 103.5893882 | 103.5893882 | 102.9787057 | 100.5447671 | 98.18069458 | 95.88408847 | 93.65264628 |
| 200130A00005 | 1/30/2020 | 1.73 | 1/30/2024 | 1/30/2020 | 105.18748 | 105.1874768 | 105.1874768 | 105.1874768 | 103.9890146 | 100.4576529 | 97.06488439 | 93.80451569 | 90.6706661 |
| 190710A00022 | 7/10/2019 | 2.22 | 7/10/2024 | 7/10/2019 | 107.81458 | 107.8145783 | 107.8145783 | 107.8145783 | 106.2835547 | 102.2822761 | 98.45437152 | 94.79141255 | 91.28542641 |
| 190711A00027 | 7/11/2019 | 2.19 | 7/11/2023 | 7/11/2019 | 105.79204 | 105.7920449 | 105.7920449 | 105.7920449 | 104.9275008 | 101.9110271 | 98.99733699 | 96.18235494 | 93.46219144 |
| 190717A00008 | 7/17/2019 | 2.22 | 7/17/2024 | 7/17/2019 | 107.85164 | 107.8516415 | 107.8516415 | 107.8516415 | 106.3055148 | 102.2857278 | 98.44074855 | 94.76204719 | 91.24155699 |
| 190719A00002 | 7/19/2019 | 2.12 | 4/21/2022 | 7/19/2019 | 103.3346 | 103.3346023 | 103.3346023 | 103.3346023 | 102.9509969 | 101.149957 | 99.38905314 | 97.6671226 | 95.98304538 |
| 190724A00022 | 7/24/2019 | 1.94 | 7/23/2021 | 7/24/2019 | 101.96189 | 101.9618873 | 101.9618873 | 101.9618873 | 101.7497642 | 100.6785409 | 99.62978484 | 98.60279492 | 97.59689899 |
| 190724A00046 | 7/24/2019 | 2.12 | 7/23/2021 | 7/24/2019 | 101.98431 | 101.9843064 | 101.9843064 | 101.9843064 | 101.7726657 | 100.7038246 | 99.65735957 | 98.63257361 | 97.62879827 |
| 190805A00021 | 8/5/2019 | 1.89 | 1/16/2024 | 8/5/2019 | 105.70452 | 105.7045235 | 105.7045235 | 105.7045235 | 104.5288942 | 101.0239747 | 97.65540387 | 94.41714211 | 91.30345192 |
| 190805A00049 | 8/5/2019 | 1.88 | 8/4/2023 | 8/5/2019 | 104.94908 | 104.9490807 | 104.9490807 | 104.9490807 | 104.0514679 | 100.9859459 | 98.02664068 | 95.16926542 | 92.40973304 |
| 190807A00017 | 8/7/2019 | 1.76 | 3/12/2024 | 8/7/2019 | 105.46393 | 105.4639339 | 105.4639339 | 105.4639339 | 104.1859016 | 100.5379181 | 97.03684166 | 93.67592669 | 90.4487796 |
| 190807A00021 | 8/7/2019 | 2 | 8/7/2026 | 8/7/2019 | 110.39143 | 110.3914344 | 110.3914344 | 110.3914344 | 106.4907769 | 100.5491587 | 94.97735916 | 89.7504523 | 84.84531834 |
| 190807A00039 | 8/7/2019 | 2.02 | 8/7/2020 | 8/7/2019 | 100.18252 | 100.1825165 | 100.1825165 | 100.1825165 | 100.1675969 | 100.0623228 | 99.95727966 | 99.85246671 | 99.74788319 |
| 190808A00009 | 8/8/2019 | 1.89 | 8/8/2024 | 8/8/2019 | 106.60172 | 106.6017209 | 106.6017209 | 106.6017209 | 105.0155824 | 100.9654788 | 97.09385442 | 93.39188992 | 89.8512514 |
| 190808A00015 | 8/8/2019 | 1.92 | 8/9/2021 | 8/8/2019 | 101.84672 | 101.846717 | 101.846717 | 101.846717 | 101.63196 | 100.5178026 | 99.4279747 | 98.36168621 | 97.31818079 |
| 190808A00049 | 8/8/2019 | 1.89 | 8/8/2024 | 8/8/2019 | 106.60172 | 106.6017209 | 106.6017209 | 106.6017209 | 105.0155824 | 100.9654788 | 97.09385442 | 93.39188992 | 89.8512514 |
| 190809A00008 | 8/9/2019 | 1.87 | 8/3/2023 | 8/9/2019 | 104.91349 | 104.9134946 | 104.9134946 | 104.9134946 | 104.0175584 | 100.9551678 | 97.99882007 | 95.14423838 | 92.38734506 |
| 190809A00015 | 8/9/2019 | 1.88 | 8/9/2022 | 8/9/2019 | 103.37762 | 103.3776153 | 103.3776153 | 103.3776153 | 102.8874147 | 100.7945143 | 98.75451789 | 96.76572687 | 94.82651045 |
| 190815A00007 | 8/15/2019 | 1.81 | 7/6/2023 | 8/15/2019 | 104.60912 | 104.6091195 | 104.6091195 | 104.6091195 | 103.7562395 | 100.7706852 | 97.88668546 | 95.10022526 | 92.40747225 |
| 190815A00032 | 8/15/2019 | 1.83 | 8/13/2021 | 8/15/2019 | 101.7629 | 101.7629007 | 101.7629007 | 101.7629007 | 101.5476028 | 100.4231071 | 99.3234095 | 98.24769673 | 97.19519067 |
| 190816A00021 | 8/16/2019 | 1.77 | 8/16/2023 | 8/16/2019 | 104.6543 | 104.6542962 | 104.6542962 | 104.6542962 | 103.7392297 | 100.6474228 | 97.66363828 | 94.78347792 | 92.00275077 |
| 190816A00036 | 8/16/2019 | 1.77 | 8/16/2024 | 8/16/2019 | 106.13732 | 106.1373213 | 106.1373213 | 106.1373213 | 104.536502 | 100.4757732 | 96.59486572 | 92.88485273 | 89.33730147 |
| 190819A00030 | 8/19/2019 | 2.01 | 8/20/2029 | 8/19/2019 | 117.44186 | 117.4418591 | 117.4418591 | 117.4418591 | 108.2955365 | 99.5577803 | 91.5983992 | 84.34388632 | 77.72803165 |
| 190821A00016 | 8/21/2019 | 1.79 | 8/22/2022 | 8/21/2019 | 103.23955 | 103.2395484 | 103.2395484 | 103.2395484 | 102.7374119 | 100.6119723 | 98.54087881 | 96.522362 | 94.55472431 |
| 190823A00005 | 8/23/2019 | 1.62 | 8/23/2024 | 8/23/2019 | 106.30313 | 106.3031302 | 106.3031302 | 106.3031302 | 104.6757723 | 100.5726808 | 96.65246861 | 92.90600065 | 89.32465075 |
| 190826A00025 | 8/26/2019 | 1.76 | 11/26/2024 | 8/26/2019 | 106.50526 | 106.5052562 | 106.5052562 | 106.5052562 | 104.6715673 | 100.3445025 | 96.22030803 | 92.28845668 | 88.53902055 |
| 200305A00002 | 3/5/2020 | 1.14 | 3/5/2025 | 3/5/2020 | 103.93169 | 103.9316923 | 103.9316923 | 103.9316923 | 101.8755138 | 97.35718679 | 93.0628599 | 88.98026081 | 85.09785752 |
| 200305A00009 | 3/10/2020 | 1.04 | 10/18/2023 | 3/10/2020 | 102.4788 | 102.4787957 | 102.4787957 | 102.4787957 | 101.471895 | 98.25228485 | 95.15061328 | 92.16192399 | 89.28149815 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200305A00011 | 3/5/2020 | 0.95 | 3/7/2022 | 3/5/2020 | 101.13111 | 101.1311073 | 101.1311073 | 101.1311073 | 100.792516 | 99.13079629 | 97.50419269 | 95.91165654 | 94.35218119 |
| 200305A00036 | 3/5/2020 | 1.36 | 3/5/2027 | 3/5/2020 | 107.06853 | 107.0685326 | 107.0685326 | 107.0685326 | 102.2894466 | 95.96507931 | 90.06964627 | 84.57191219 | 79.44307191 |
| 200306A00014 | 3/6/2020 | 1.38 | 3/6/2030 | 3/6/2020 | 110.39445 | 110.3944461 | 110.3944461 | 110.0440487 | 100.582015 | 91.8351826 | 83.91421032 | 76.73697019 | 70.22988389 |
| 200306A00099 | 3/10/2020 | 1.92 | 3/10/2031 | 3/10/2020 | 117.22196 | 117.2219634 | 117.2219634 | 115.6852449 | 105.0799068 | 95.32586803 | 86.5694424 | 78.70312247 | 71.63149986 |
| 200306A00100 | 3/10/2020 | 1.82 | 3/10/2031 | 3/10/2020 | 116.15516 | 116.1551553 | 116.1551553 | 114.6194985 | 104.0551979 | 94.35316529 | 85.64500956 | 77.82353742 | 70.79362535 |
| 200309A00064 | 3/9/2020 | 0.55 | 3/9/2022 | 3/9/2020 | 100.73858 | 100.7385785 | 100.7385785 | 100.7385785 | 100.3977878 | 98.72927963 | 97.09620564 | 95.49750254 | 93.93214989 |
| 200310A00019 | 3/10/2020 | 0.95 | 3/10/2023 | 3/10/2020 | 101.77839 | 101.7783933 | 101.7783933 | 101.7783933 | 101.0855973 | 98.44815808 | 95.89216498 | 93.41458447 | 91.01251855 |
| 200311A00058 | 3/16/2020 | 1.1 | 10/14/2022 | 3/16/2020 | 101.86139 | 101.8613851 | 101.8613851 | 101.8613851 | 101.3133677 | 99.0631931 | 96.87368212 | 94.74280882 | 92.66863009 |
| 200313A00022 | 3/13/2020 | 1.11 | 3/8/2022 | 3/13/2020 | 101.40603 | 101.4060342 | 101.4060342 | 101.4060342 | 101.066085 | 99.39934335 | 97.76785839 | 96.1705759 | 94.60648388 |
| 200325A00029 | 3/25/2020 | 1.15 | 3/24/2023 | 3/25/2020 | 102.8517 | 102.8516984 | 102.8516984 | 102.8516984 | 102.1367424 | 99.43765517 | 96.82297372 | 94.2895094 | 91.83421862 |
| 200325A00030 | 3/25/2020 | 1.5 | 3/25/2025 | 3/25/2020 | 106.6159 | 106.6158953 | 106.6158953 | 106.6158953 | 104.4728709 | 99.81568806 | 95.39157534 | 91.18762314 | 87.1917106 |
| 200326A00026 | 3/26/2020 | 1.32 | 3/26/2024 | 3/26/2020 | 103.86164 | 103.861635 | 103.861635 | 103.861635 | 102.5648735 | 98.91130347 | 95.40645884 | 92.0434418 | 88.81571835 |
| 200326A00030 | 3/26/2020 | 1.13 | 3/24/2023 | 3/26/2020 | 102.30024 | 102.300238 | 102.300238 | 102.300238 | 101.5902114 | 98.90972868 | 96.31290484 | 93.79658589 | 91.35776101 |
| 200327A00026 | 3/27/2020 | 0.57 | 3/29/2021 | 3/27/2020 | 100.34098 | 100.3409796 | 100.3409796 | 100.3409796 | 100.1956409 | 99.44768637 | 98.71083103 | 97.98482952 | 97.26944366 |
| 200402A00021 | 4/2/2020 | 0.77 | 10/2/2024 | 4/2/2020 | 102.80706 | 102.8070645 | 102.8070645 | 102.8070645 | 101.1118432 | 96.97925667 | 93.0359578 | 89.27225832 | 85.67902325 |
| 200407A00002 | 4/8/2020 | 1.82 | 4/8/2024 | 4/8/2020 | 105.80104 | 105.8010449 | 105.8010449 | 105.8010449 | 104.4695572 | 100.7463426 | 97.17554339 | 93.75007735 | 90.46323423 |
| 200408A00021 | 4/8/2020 | 0.99 | 4/4/2025 | 4/8/2020 | 104.19764 | 104.197641 | 104.197641 | 104.197641 | 102.0468887 | 97.42143494 | 93.02944664 | 88.85792194 | 84.89465574 |
| 200415A00035 | 4/17/2020 | 2.16 | 4/16/2025 | 4/17/2020 | 108.95166 | 108.9516648 | 108.9516648 | 108.9516648 | 106.7498214 | 102.0104853 | 97.50944313 | 93.23347644 | 89.1701698 |
| 200420A00047 | 4/20/2020 | 0.77 | 4/20/2023 | 4/20/2020 | 101.34257 | 101.3425662 | 101.3425662 | 101.3425662 | 100.6037882 | 97.86602609 | 95.21579751 | 92.64981858 | 90.16494877 |
| 200424A00006 | 4/24/2020 | 0.6 | 4/24/2023 | 4/24/2020 | 101.37232 | 101.3723248 | 101.3723248 | 101.3723248 | 100.6252066 | 97.86502914 | 95.19363935 | 92.6077051 | 90.10403878 |
| 200428A00011 | 4/30/2020 | 1.95 | 4/29/2025 | 4/30/2020 | 107.99627 | 107.9962693 | 107.9962693 | 107.9962693 | 105.7676732 | 101.0178552 | 96.50879943 | 92.22710807 | 88.16019446 |
| 200429A00003 | 4/29/2020 | 0.74 | 4/28/2023 | 4/29/2020 | 101.2673 | 101.2672952 | 101.2672952 | 101.2672952 | 100.5192074 | 97.76148823 | 95.09255474 | 92.50908956 | 90.00791751 |
| 200219A00006 | 2/19/2020 | 1.76 | 2/18/2022 | 2/19/2020 | 102.44264 | 102.4426404 | 102.4426404 | 102.4426404 | 102.1167031 | 100.4909973 | 98.89894667 | 97.33957139 | 95.81192968 |
| 200224A00002 | 2/24/2020 | 1.56 | 2/24/2023 | 2/24/2020 | 103.38849 | 103.3884915 | 103.3884915 | 103.3884915 | 102.7063069 | 100.0842162 | 97.54201806 | 95.07677734 | 92.68568778 |
| 200224A00004 | 2/24/2020 | 1.68 | 2/24/2021 | 2/24/2020 | 100.94412 | 100.9441222 | 100.9441222 | 100.9441222 | 100.8179347 | 100.1587457 | 99.50814733 | 98.86597261 | 98.23205879 |
| 200224A00015 | 2/24/2020 | 1.57 | 1/10/2024 | 2/24/2020 | 104.53856 | 104.5385556 | 104.5385556 | 104.5385556 | 103.378968 | 99.9099173 | 96.57556283 | 93.36995583 | 90.28744381 |
| 200224A00020 | 2/24/2020 | 1.59 | 2/24/2025 | 2/24/2020 | 106.02082 | 106.0208236 | 106.0208236 | 106.0208236 | 103.9721141 | 99.42878763 | 95.10899537 | 91.00056525 | 87.09205506 |
| 200224A00035 | 2/24/2020 | 1.59 | 2/24/2025 | 2/24/2020 | 106.02082 | 106.0208236 | 106.0208236 | 106.0208236 | 103.9721141 | 99.42878763 | 95.10899537 | 91.00056525 | 87.09205506 |
| 200226A00005 | 2/26/2020 | 1.53 | 2/27/2023 | 2/26/2020 | 103.31806 | 103.3180625 | 103.3180625 | 103.3180625 | 102.632915 | 100.0031849 | 97.45378615 | 94.98175902 | 92.5842744 |
| 200226A00013 | 2/26/2020 | 1.35 | 2/26/2024 | 2/26/2020 | 104.55997 | 104.559973 | 104.559973 | 104.559973 | 103.3074172 | 99.69698234 | 96.23119679 | 92.90346232 | 89.70752198 |
| 200227A00052 | 2/27/2020 | 1.41 | 2/27/2023 | 2/27/2020 | 102.99539 | 102.9953919 | 102.9953919 | 102.9953919 | 102.311202 | 99.68582085 | 97.1406701 | 94.67279321 | 92.2793641 |
| 200228A00013 | 3/3/2020 | 1.33 | 1/14/2022 | 3/3/2020 | 101.6301 | 101.6301043 | 101.6301043 | 101.6301043 | 101.3344439 | 99.81262559 | 98.32118456 | 96.85928394 | 95.42611714 |
| 200228A00020 | 2/28/2020 | 1.32 | 2/24/2023 | 2/28/2020 | 102.74513 | 102.7451344 | 102.7451344 | 102.7451344 | 102.0648514 | 99.45140687 | 96.91765476 | 94.46066604 | 92.07764053 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200228A00061 | 2/28/2020 | 1.13 | 7/20/2022 | 2/28/2020 | 102.10456 | 102.104562 | 102.104562 | 102.104562 | 101.6344399 | 99.60031074 | 97.61692111 | 95.6826731 | 93.79603107 |
| 200228A00062 | 2/28/2020 | 1.32 | 2/28/2023 | 2/28/2020 | 102.75614 | 102.7561432 | 102.7561432 | 102.7561432 | 102.0716111 | 99.44660827 | 96.90191393 | 94.43456554 | 92.04173147 |
| 200228A00064 | 2/28/2020 | 1.35 | 2/28/2024 | 2/28/2020 | 103.89621 | 103.8962065 | 103.8962065 | 103.8962065 | 102.6503279 | 99.06407744 | 95.62140114 | 92.31575503 | 89.14093336 |
| 200302A00035 | 3/2/2020 | 1.22 | 7/3/2023 | 3/2/2020 | 102.80538 | 102.8053832 | 102.8053832 | 102.8053832 | 101.9633171 | 99.01279819 | 96.16268319 | 93.40900722 | 90.74798531 |
| 200304A00007 | 3/4/2020 | 1.01 | 3/15/2022 | 3/4/2020 | 101.24947 | 101.2494695 | 101.2494695 | 101.2494695 | 100.9035072 | 99.21986814 | 97.57214206 | 95.95924457 | 94.38013526 |
| 200304A00010 | 3/4/2020 | 1.2 | 3/4/2027 | 3/4/2020 | 107.29425 | 107.2942483 | 107.2942483 | 107.2942483 | 102.4664725 | 96.0887364 | 90.14497415 | 84.60350343 | 79.43511247 |
| 200304A00040 | 3/4/2020 | 1.12 | 3/1/2024 | 3/4/2020 | 103.05066 | 103.0506628 | 103.0506628 | 103.0506628 | 101.8050918 | 98.22910526 | 94.79662694 | 91.50110372 | 88.33632175 |
| 200305A00008 | 3/10/2020 | 1.01 | 6/19/2023 | 3/10/2020 | 102.1404 | 102.1404003 | 102.1404003 | 102.1404003 | 101.3204918 | 98.41644576 | 95.61015143 | 92.89779438 | 90.27573093 |
| 200305A00029 | 3/5/2020 | 1.14 | 3/5/2025 | 3/5/2020 | 103.93169 | 103.9316923 | 103.9316923 | 103.9316923 | 101.8755138 | 97.35718679 | 93.0628599 | 88.98026081 | 85.09785752 |
| 200306A00039 | 3/6/2020 | 0.88 | 3/6/2023 | 3/6/2020 | 101.58155 | 101.5815501 | 101.5815501 | 101.5815501 | 100.8938108 | 98.26928999 | 95.72557403 | 93.25966367 | 90.86869319 |
| 200309A00021 | 3/9/2020 | 1.05 | 3/9/2026 | 3/9/2020 | 104.25819 | 104.2581915 | 104.2581915 | 104.2581915 | 101.0478356 | 95.63356619 | 90.53853959 | 85.74232908 | 81.22592102 |
| 200310A00073 | 3/12/2020 | 2.12 | 3/11/2027 | 3/12/2020 | 112.19366 | 112.1936627 | 112.1936627 | 112.1936627 | 107.310895 | 100.8084206 | 94.74459454 | 89.08752866 | 83.80781535 |
| 200312A00017 | 3/16/2020 | 1.09 | 2/15/2023 | 3/16/2020 | 102.10952 | 102.1095246 | 102.1095246 | 102.1095246 | 101.4405927 | 98.86132129 | 96.36017658 | 93.93431027 | 91.580998 |
| 190715A00024 | 7/15/2019 | 2.17 | 7/15/2021 | 7/15/2019 | 101.99604 | 101.9960377 | 101.9960377 | 101.9960377 | 101.7862196 | 100.7390323 | 99.71332905 | 98.7084538 | 97.72377681 |
| 190715A00029 | 7/17/2019 | 2.16 | 4/18/2022 | 7/17/2019 | 103.39231 | 103.3923138 | 103.3923138 | 103.3923138 | 103.0114211 | 101.2179866 | 99.46436503 | 97.74939339 | 96.07195202 |
| 190724A00023 | 7/24/2019 | 2.13 | 7/24/2025 | 7/24/2019 | 110.30507 | 110.3050664 | 110.3050664 | 110.3050664 | 107.8011069 | 102.7502488 | 97.96670698 | 93.43493965 | 89.14038988 |
| 190726A00017 | 7/26/2019 | 2.44 | 7/24/2026 | 7/26/2019 | 113.00816 | 113.0081607 | 113.0081607 | 113.0081607 | 109.1358311 | 103.1498763 | 97.53317083 | 92.26100008 | 87.31042853 |
| 190729A00008 | 7/29/2019 | 2.18 | 1/29/2024 | 7/29/2019 | 106.80957 | 106.8095688 | 106.8095688 | 106.8095688 | 105.605455 | 102.0476432 | 98.62907759 | 95.34354579 | 92.18514871 |
| 190802A00003 | 8/2/2019 | 2.01 | 8/2/2024 | 8/2/2019 | 107.07029 | 107.0702885 | 107.0702885 | 107.0702885 | 105.4945089 | 101.4500132 | 97.58306898 | 93.88493395 | 90.34734509 |
| 190802A00015 | 8/2/2019 | 2 | 2/15/2023 | 8/2/2019 | 104.52635 | 104.5263523 | 104.5263523 | 104.5263523 | 103.8503642 | 101.2388967 | 98.70629718 | 96.24969393 | 93.86634034 |
| 190805A00004 | 8/5/2019 | 1.7 | 8/5/2022 | 8/5/2019 | 103.36075 | 103.3607459 | 103.3607459 | 103.3607459 | 102.8724852 | 100.7828978 | 98.74607953 | 96.76033956 | 94.82405453 |
| 190805A00007 | 8/5/2019 | 1.88 | 8/5/2022 | 8/5/2019 | 103.36007 | 103.3600676 | 103.3600676 | 103.3600676 | 102.8736747 | 100.7914516 | 98.76167996 | 96.78268297 | 94.85285054 |
| 190805A00011 | 8/5/2019 | 1.91 | 8/5/2024 | 8/5/2019 | 106.6712 | 106.6712039 | 106.6712039 | 106.6712039 | 105.0911893 | 101.0472272 | 97.18117363 | 93.48425213 | 89.94816839 |
| 190806A00026 | 8/6/2019 | 1.71 | 8/7/2023 | 8/6/2019 | 104.99924 | 104.9992367 | 104.9992367 | 104.9992367 | 104.0922711 | 101.0047511 | 98.02471155 | 95.14779457 | 92.36984649 |
| 190807A00027 | 8/7/2019 | 1.77 | 8/7/2024 | 8/7/2019 | 106.10079 | 106.1007909 | 106.1007909 | 106.1007909 | 104.5197213 | 100.4823255 | 96.62287829 | 92.9325882 | 89.40314765 |
| 190808A00025 | 8/8/2019 | 1.7 | 8/8/2024 | 8/8/2019 | 106.57329 | 106.5732865 | 106.5732865 | 106.5732865 | 104.9772272 | 100.9066122 | 97.01592929 | 93.29626417 | 89.73919449 |
| 190808A00041 | 8/8/2019 | 1.74 | 8/6/2021 | 8/8/2019 | 101.80954 | 101.8095371 | 101.8095371 | 101.8095371 | 101.5947857 | 100.4863527 | 99.40199014 | 98.34092078 | 97.30240053 |
| 190809A00024 | 8/9/2019 | 2.07 | 8/10/2020 | 8/9/2019 | 100.20372 | 100.203718 | 100.203718 | 100.203718 | 100.1874492 | 100.0738507 | 99.96052256 | 99.84746379 | 99.7346734 |
| 190812A00003 | 8/12/2019 | 1.67 | 8/12/2024 | 8/12/2019 | 106.46578 | 106.4657772 | 106.4657772 | 106.4657772 | 104.8615704 | 100.7830038 | 96.88512989 | 93.15897677 | 89.59606892 |
| 190812A00008 | 8/12/2019 | 1.67 | 8/12/2022 | 8/12/2019 | 103.32713 | 103.3271275 | 103.3271275 | 103.3271275 | 102.8323095 | 100.7246397 | 98.67052428 | 96.66823396 | 94.71610928 |
| 190813A00007 | 8/13/2019 | 1.89 | 8/15/2022 | 8/13/2019 | 103.42542 | 103.4254215 | 103.4254215 | 103.4254215 | 102.9294624 | 100.8203169 | 98.76476306 | 96.76106902 | 94.80757264 |
| 190814A00008 | 8/14/2019 | 1.84 | 8/14/2024 | 8/14/2019 | 106.4202 | 106.4201971 | 106.4201971 | 106.4201971 | 104.8220708 | 100.7605795 | 96.87868291 | 93.16747691 | 89.61854923 |
| 190816A00006 | 8/16/2019 | 1.77 | 8/16/2024 | 8/16/2019 | 106.13732 | 106.1373213 | 106.1373213 | 106.1373213 | 104.536502 | 100.4757732 | 96.59486572 | 92.88485273 | 89.33730147 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190816A00009 | 8/16/2019 | 2.01 | 8/17/2020 | 8/16/2019 | 100.2305 | 100.2304956 | 100.2304956 | 100.2304956 | 100.2110857 | 100.0781172 | 99.94551596 | 99.8132803 | 99.68140874 |
| 190816A00015 | 8/16/2019 | 2.2 | 8/16/2029 | 8/16/2019 | 117.29672 | 117.2967214 | 117.2967214 | 117.2967214 | 108.2915732 | 99.64851358 | 91.77105119 | 84.58719902 | 78.03208846 |
| 190819A00005 | 8/19/2019 | 1.62 | 8/21/2023 | 8/19/2019 | 104.77478 | 104.7747814 | 104.7747814 | 104.7747814 | 103.8468614 | 100.7265756 | 97.71595226 | 94.81049984 | 92.00593987 |
| 190820A00008 | 8/20/2019 | 1.76 | 8/20/2024 | 8/20/2019 | 106.11182 | 106.1118221 | 106.1118221 | 106.1118221 | 104.5024722 | 100.4322351 | 96.54262725 | 92.8246625 | 89.26985306 |
| 200304A00034 | 3/4/2020 | 1.12 | 3/4/2024 | 3/4/2020 | 103.0575 | 103.0574987 | 103.0574987 | 103.0574987 | 101.8062282 | 98.22260882 | 94.78306974 | 91.48101888 | 88.31020624 |
| 200304A00038 | 3/4/2020 | 1.01 | 3/1/2022 | 3/4/2020 | 101.22125 | 101.2212527 | 101.2212527 | 101.2212527 | 100.8878907 | 99.24104965 | 97.62876108 | 96.05000204 | 94.50379011 |
| 200305A00007 | 3/5/2020 | 1.14 | 3/5/2025 | 3/5/2020 | 103.93169 | 103.9316923 | 103.9316923 | 103.9316923 | 101.8755138 | 97.35718679 | 93.0628599 | 88.98026081 | 85.09785752 |
| 200305A00040 | 3/10/2020 | 0.99 | 3/10/2023 | 3/10/2020 | 101.88716 | 101.8871625 | 101.8871625 | 101.8871625 | 101.1940388 | 98.5551177 | 95.99767744 | 93.51868331 | 91.11523626 |
| 200306A00046 | 3/6/2020 | 1.01 | 3/3/2025 | 3/6/2020 | 103.3152 | 103.3151987 | 103.3151987 | 103.3151987 | 101.2685858 | 96.76928276 | 92.49301452 | 88.42756859 | 84.56146858 |
| 200309A00020 | 3/9/2020 | 0.96 | 3/10/2025 | 3/9/2020 | 103.0925 | 103.0924985 | 103.0924985 | 103.0924985 | 101.0298101 | 96.51875258 | 92.23216589 | 88.15771321 | 84.2838044 |
| 200309A00046 | 3/9/2020 | 0.78 | 3/11/2025 | 3/9/2020 | 103.14222 | 103.1422228 | 103.1422228 | 103.1422228 | 101.0609901 | 96.51900746 | 92.20388897 | 88.1031257 | 84.20496818 |
| 200310A00025 | 3/10/2020 | 0.87 | 3/11/2024 | 3/10/2020 | 102.81175 | 102.8117495 | 102.8117495 | 102.8117495 | 101.5410556 | 97.92679339 | 94.45894679 | 91.13076824 | 87.93586315 |
| 200310A00037 | 3/10/2020 | 0.84 | 3/7/2022 | 3/10/2020 | 100.94367 | 100.9436707 | 100.9436707 | 100.9436707 | 100.6053935 | 98.94531602 | 97.32032482 | 95.72937208 | 94.17145194 |
| 200311A00022 | 3/11/2020 | 1.23 | 3/11/2026 | 3/11/2020 | 106.39962 | 106.3996229 | 106.3996229 | 106.3996229 | 103.129483 | 97.61373397 | 92.42363954 | 87.53831776 | 82.93833507 |
| 200311A00040 | 3/12/2020 | 1.3 | 3/11/2025 | 3/12/2020 | 104.70209 | 104.7020922 | 104.7020922 | 104.7020922 | 102.6250383 | 98.07438532 | 93.74975711 | 89.6387396 | 85.72966993 |
| 200313A00032 | 3/18/2020 | 1.46 | 3/18/2025 | 3/18/2020 | 105.48092 | 105.4809226 | 105.4809226 | 105.4809226 | 103.3803169 | 98.79459735 | 94.43718005 | 90.29548871 | 86.35771072 |
| 200317A00026 | 3/17/2020 | 1.22 | 3/15/2024 | 3/17/2020 | 103.45655 | 103.4565451 | 103.4565451 | 103.4565451 | 102.1825642 | 98.56406591 | 95.09195872 | 91.75949873 | 88.56029494 |
| 200319A00024 | 3/19/2020 | 1.12 | 3/15/2022 | 3/19/2020 | 101.43934 | 101.4393382 | 101.4393382 | 101.4393382 | 101.0930531 | 99.40773 | 97.75835066 | 96.14382979 | 94.56312614 |
| 200324A00020 | 3/24/2020 | 1.23 | 3/24/2022 | 3/24/2020 | 101.65282 | 101.652819 | 101.652819 | 101.652819 | 101.2980936 | 99.58735325 | 97.91347782 | 96.27534079 | 94.67186195 |
| 200327A00074 | 3/31/2020 | 1.76 | 3/29/2024 | 3/31/2020 | 105.53256 | 105.5325569 | 105.5325569 | 105.5325569 | 104.2218618 | 100.5296115 | 96.98759168 | 93.5888295 | 90.32672028 |
| 200330A00045 | 3/30/2020 | 1.47 | 3/30/2027 | 3/30/2020 | 107.88559 | 107.8855934 | 107.8855934 | 107.8855934 | 102.9837443 | 96.57791568 | 90.60990506 | 85.04756873 | 79.86128593 |
| 200401A00020 | 4/1/2020 | 0.72 | 3/29/2022 | 4/1/2020 | 100.7659 | 100.7659041 | 100.7659041 | 100.7659041 | 100.4082372 | 98.6924639 | 97.01390487 | 95.37141504 | 93.76389683 |
| 200406A00006 | 4/6/2020 | 1.13 | 4/7/2025 | 4/6/2020 | 103.95934 | 103.9593395 | 103.9593395 | 103.9593395 | 101.8189505 | 97.21965275 | 92.85216426 | 88.70360232 | 84.76187086 |
| 200406A00020 | 4/6/2020 | 0.65 | 4/6/2022 | 4/6/2020 | 100.95114 | 100.9511393 | 100.9511393 | 100.9511393 | 100.5845826 | 98.84044886 | 97.13461208 | 95.46591023 | 93.83322812 |
| 200413A00023 | 4/13/2020 | 0.74 | 2/7/2022 | 4/13/2020 | 100.73947 | 100.7394718 | 100.7394718 | 100.7394718 | 100.4256619 | 98.84630739 | 97.29927853 | 95.78365022 | 94.29853244 |
| 200415A00019 | 4/15/2020 | 0.68 | 4/15/2022 | 4/15/2020 | 100.69577 | 100.6957691 | 100.6957691 | 100.6957691 | 100.3225373 | 98.56227541 | 96.84102921 | 95.15764841 | 93.51102656 |
| 200428A00013 | 4/30/2020 | 1.49 | 4/29/2024 | 4/30/2020 | 104.61377 | 104.6137742 | 104.6137742 | 104.6137742 | 103.2473133 | 99.4919702 | 95.89272032 | 92.44230114 | 89.13382474 |
| 200429A00009 | 4/29/2020 | 0.78 | 4/29/2025 | 4/29/2020 | 103.23172 | 103.2317238 | 103.2317238 | 103.2317238 | 101.0230274 | 96.35760221 | 91.93109534 | 87.73012989 | 83.74214235 |
| 200331A00060 | 3/31/2020 | 1.09 | 3/31/2025 | 3/31/2020 | 103.75229 | 103.7522929 | 103.7522929 | 103.7522929 | 101.6315897 | 97.05457883 | 92.70747567 | 88.57751709 | 84.6527213 |
| 200401A00025 | 4/1/2020 | 0.54 | 4/1/2022 | 4/1/2020 | 100.74846 | 100.7484572 | 100.7484572 | 100.7484572 | 100.3869388 | 98.65814859 | 96.9670779 | 95.31256453 | 93.69349446 |
| 200413A00032 | 4/13/2020 | 0.82 | 4/13/2023 | 4/13/2020 | 101.47415 | 101.4741504 | 101.4741504 | 101.4741504 | 100.7433176 | 98.02211732 | 95.3873835 | 92.83586005 | 90.36443537 |
| 200414A00016 | 4/16/2020 | 1.64 | 4/15/2024 | 4/16/2020 | 105.14177 | 105.1417698 | 105.1417698 | 105.1417698 | 103.7999151 | 100.0708764 | 96.4953276 | 93.06613285 | 89.7765287 |
| 200429A00044 | 5/1/2020 | 1.86 | 4/30/2025 | 5/1/2020 | 107.56285 | 107.5628527 | 107.5628527 | 107.5628527 | 105.3350005 | 100.5929395 | 96.0915184 | 91.81733979 | 87.75781698 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200429A00050 | 5/1/2020 | 2.61 | 4/30/2025 | 5/1/2020 | 111.21207 | 111.2120707 | 111.2120707 | 111.2120707 | 108.9559194 | 104.1272384 | 99.54235114 | 95.18771823 | 91.05061853 |
| 200429A00052 | 5/1/2020 | 1.43 | 4/30/2024 | 5/1/2020 | 104.38507 | 104.3850745 | 104.3850745 | 104.3850745 | 103.0178423 | 99.26427332 | 95.66687329 | 92.2183748 | 88.91188499 |
| 200430A00006 | 4/30/2020 | 0.61 | 4/29/2022 | 4/30/2020 | 100.58095 | 100.5809465 | 100.5809465 | 100.5809465 | 100.1948974 | 98.39821172 | 96.64206687 | 94.92531397 | 93.24684393 |
| 200430A00008 | 4/30/2020 | 0.94 | 4/30/2025 | 4/30/2020 | 103.08648 | 103.0864785 | 103.0864785 | 103.0864785 | 100.8933399 | 96.25753278 | 91.8584969 | 87.6830089 | 83.71864709 |
| 200506A00002 | 5/8/2020 | 0.97 | 5/5/2025 | 5/8/2020 | 103.24161 | 103.2416108 | 103.2416108 | 103.2416108 | 101.0340719 | 96.38264418 | 91.96934691 | 87.7808479 | 83.80462538 |
| 200511A00015 | 5/11/2020 | 0.6 | 2/1/2023 | 5/11/2020 | 100.79741 | 100.7974126 | 100.7974126 | 100.7974126 | 100.1469789 | 97.62485187 | 95.17835613 | 92.80476928 | 90.50148547 |
| 200511A00017 | 5/11/2020 | 0.83 | 2/3/2025 | 5/11/2020 | 102.42953 | 102.4295336 | 102.4295336 | 102.4295336 | 100.4586516 | 96.05377933 | 91.86434602 | 87.87872036 | 84.08596097 |
| 200527A00022 | 5/27/2020 | 0.53 | 5/27/2022 | 5/27/2020 | 100.47046 | 100.4704555 | 100.4704555 | 100.4704555 | 100.0577578 | 98.18942803 | 96.36483238 | 94.58268924 | 92.84176302 |
| 200529A00009 | 5/29/2020 | 0.42 | 5/30/2023 | 5/29/2020 | 100.88941 | 100.8894144 | 100.8894144 | 100.8894144 | 100.0977972 | 97.25235182 | 94.5013772 | 91.84124378 | 89.26848167 |
| 200604A00004 | 6/4/2020 | 0.76 | 6/4/2024 | 6/4/2020 | 101.83978 | 101.8397766 | 101.8397766 | 101.8397766 | 100.415976 | 96.62453628 | 92.99503732 | 89.51975674 | 86.19138011 |
| 200604A00010 | 6/4/2020 | 0.89 | 6/4/2025 | 6/4/2020 | 102.89957 | 102.8995745 | 102.8995745 | 102.8995745 | 100.6154433 | 95.90050111 | 91.43083557 | 87.192497 | 83.17239742 |
| 200605A00007 | 6/5/2020 | 0.52 | 6/5/2023 | 6/5/2020 | 101.19109 | 101.1910883 | 101.1910883 | 101.1910883 | 100.3901366 | 97.52457426 | 94.75463089 | 92.07661274 | 89.48698956 |
| 200615A00019 | 6/17/2020 | 1.34 | 6/16/2025 | 6/17/2020 | 105.16599 | 105.1659946 | 105.1659946 | 105.1659946 | 102.8311196 | 98.03163081 | 93.48259843 | 89.16970778 | 85.0795337 |
| 190826A00056 | 8/26/2019 | 1.72 | 8/26/2024 | 8/26/2019 | 105.96841 | 105.9684128 | 105.9684128 | 105.9684128 | 104.3468945 | 100.2645748 | 96.36402961 | 92.63618607 | 89.0724763 |
| 190828A00008 | 8/28/2019 | 1.75 | 8/29/2022 | 8/28/2019 | 103.18104 | 103.1810366 | 103.1810366 | 103.1810366 | 102.6724466 | 100.52935 | 98.44138819 | 96.40675285 | 94.4237098 |
| 190828A00031 | 8/28/2019 | 1.71 | 8/28/2024 | 8/28/2019 | 105.9343 | 105.9343019 | 105.9343019 | 105.9343019 | 104.3086502 | 100.2220282 | 96.31757218 | 92.58617997 | 89.0192565 |
| 190829A00024 | 8/29/2019 | 1.54 | 8/29/2024 | 8/29/2019 | 105.99093 | 105.9909274 | 105.9909274 | 105.9909274 | 104.3522868 | 100.2404777 | 96.31259568 | 92.55942216 | 88.9722539 |
| 190830A00021 | 8/30/2019 | 1.76 | 8/30/2024 | 8/30/2019 | 106.15214 | 106.1521392 | 106.1521392 | 106.1521392 | 104.5208606 | 100.4247426 | 96.51135048 | 92.77154572 | 89.19669959 |
| 190906A00005 | 9/6/2019 | 1.77 | 9/6/2023 | 9/6/2019 | 104.73963 | 104.7396254 | 104.7396254 | 104.7396254 | 103.7915095 | 100.6439296 | 97.60788183 | 94.67875529 | 91.85216069 |
| 190906A00014 | 9/6/2019 | 1.57 | 9/6/2024 | 9/6/2019 | 106.14943 | 106.1494297 | 106.1494297 | 106.1494297 | 104.4919941 | 100.3562244 | 96.40624154 | 92.63269186 | 89.02674737 |
| 190912A00027 | 9/12/2019 | 1.95 | 9/12/2023 | 9/12/2019 | 105.34552 | 105.345517 | 105.345517 | 105.345517 | 104.3854945 | 101.2123028 | 98.15194968 | 95.19975042 | 92.35124639 |
| 190912A00034 | 9/12/2019 | 1.76 | 9/12/2022 | 9/12/2019 | 103.66116 | 103.6611569 | 103.6611569 | 103.6611569 | 103.1363834 | 100.9423763 | 98.80570437 | 96.72445312 | 94.69678844 |
| 190918A00016 | 9/18/2019 | 1.78 | 9/18/2024 | 9/18/2019 | 107.09411 | 107.0941058 | 107.0941058 | 107.0941058 | 105.4039865 | 101.2172072 | 97.21954427 | 93.40141573 | 89.75378221 |
| 190925A00024 | 9/25/2019 | 1.88 | 4/14/2022 | 9/25/2019 | 102.88338 | 102.8833795 | 102.8833795 | 102.8833795 | 102.5070846 | 100.7289091 | 98.99002912 | 97.28928325 | 95.62555447 |
| 190926A00010 | 9/26/2019 | 2.11 | 9/30/2020 | 9/26/2019 | 100.46898 | 100.4689831 | 100.4689831 | 100.4689831 | 100.4282834 | 100.1735568 | 99.92011501 | 99.66794843 | 99.41704752 |
| 190926A00016 | 9/26/2019 | 2.28 | 5/24/2030 | 9/26/2019 | 119.52264 | 119.5226434 | 119.5226434 | 118.9467876 | 108.9850762 | 99.67318639 | 91.24624686 | 83.61523925 | 76.70052365 |
| 190926A00034 | 9/26/2019 | 1.88 | 9/26/2022 | 9/26/2019 | 103.58747 | 103.5874674 | 103.5874674 | 103.5874674 | 103.0519414 | 100.8289028 | 98.66461729 | 96.5570965 | 94.50443723 |
| 190927A00019 | 9/30/2019 | 1.91 | 9/30/2022 | 9/30/2019 | 103.67317 | 103.6731665 | 103.6731665 | 103.6731665 | 103.1337276 | 100.8989233 | 98.72340726 | 96.60516457 | 94.54226685 |
| 191001A00009 | 10/1/2019 | 1.84 | 10/1/2020 | 10/1/2019 | 100.44487 | 100.4448656 | 100.4448656 | 100.4448656 | 100.4035382 | 100.1456536 | 99.88909142 | 99.63384158 | 99.379894 |
| 191002A00016 | 10/2/2019 | 1.79 | 10/2/2023 | 10/2/2019 | 104.91054 | 104.9105353 | 104.9105353 | 104.9105353 | 103.9201803 | 100.7012554 | 97.59851518 | 94.60707001 | 91.72226951 |
| 191003A00013 | 10/3/2019 | 1.66 | 10/3/2022 | 10/3/2019 | 103.11566 | 103.1156587 | 103.1156587 | 103.1156587 | 102.5747695 | 100.338563 | 98.16189852 | 96.04275996 | 93.97921711 |
| 191004A00002 | 10/4/2019 | 2.08 | 10/4/2029 | 10/4/2019 | 116.43573 | 116.4357322 | 116.4357322 | 116.4318376 | 107.2128359 | 98.50539251 | 90.58036533 | 83.36321282 | 76.78685826 |
| 191007A00024 | 10/7/2019 | 1.7 | 7/14/2022 | 10/7/2019 | 102.89271 | 102.8927146 | 102.8927146 | 102.8927146 | 102.4285119 | 100.4088716 | 98.4391894 | 96.51790677 | 94.64352514 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191008A00033 | 10/8/2019 | 1.71 | 10/8/2024 | 10/8/2019 | 106.09313 | 106.093131 | 106.093131 | 106.093131 | 104.3751069 | 100.1804868 | 96.17716802 | 92.35540029 | 88.70598626 |
| 191009A00018 | 10/9/2019 | 1.74 | 10/12/2021 | 10/9/2019 | 101.90405 | 101.9040472 | 101.9040472 | 101.9040472 | 101.6731136 | 100.3909929 | 99.13680705 | 97.90964375 | 96.70863054 |
| 191009A00027 | 10/9/2019 | 1.74 | 10/6/2023 | 10/9/2019 | 104.76217 | 104.7621666 | 104.7621666 | 104.7621666 | 103.7658095 | 100.5390839 | 97.42918487 | 94.43119915 | 91.54045267 |
| 191017A00025 | 10/17/2019 | 1.74 | 10/19/2020 | 10/17/2019 | 100.50019 | 100.5001881 | 100.5001881 | 100.5001881 | 100.4487135 | 100.1410676 | 99.83531706 | 99.53144421 | 99.2294317 |
| 200130A00006 | 1/30/2020 | 1.77 | 1/30/2025 | 1/30/2020 | 106.76612 | 106.766116 | 106.766116 | 106.766116 | 104.7745236 | 100.2821359 | 96.00764972 | 91.93936107 | 88.0662574 |
| 200130A00010 | 1/30/2020 | 1.56 | 1/31/2022 | 1/30/2020 | 102.32066 | 102.3206581 | 102.3206581 | 102.3206581 | 102.0093849 | 100.4325874 | 98.88784484 | 97.374249 | 95.89092551 |
| 200131A00016 | 1/31/2020 | 1.73 | 1/31/2025 | 1/31/2020 | 106.58526 | 106.5852607 | 106.5852607 | 106.5852607 | 104.5924934 | 100.1017215 | 95.82893114 | 91.76240701 | 87.89112637 |
| 200203A00004 | 2/3/2020 | 1.7 | 2/3/2023 | 2/3/2020 | 103.68401 | 103.6840139 | 103.6840139 | 103.6840139 | 103.0231985 | 100.457412 | 97.96842122 | 95.55346081 | 93.20988386 |
| 200203A00050 | 2/3/2020 | 1.54 | 2/3/2022 | 2/3/2020 | 102.3002 | 102.3002044 | 102.3002044 | 102.3002044 | 101.9863855 | 100.4009726 | 98.8479008 | 97.32624915 | 95.83513128 |
| 200204A00020 | 2/4/2020 | 1.6 | 2/4/2025 | 2/4/2020 | 106.89481 | 106.8948098 | 106.8948098 | 106.8948098 | 104.8750229 | 100.3396286 | 96.02548893 | 91.9206567 | 88.01389437 |
| 200205A00013 | 2/5/2020 | 1.77 | 2/6/2023 | 2/5/2020 | 103.87958 | 103.8795831 | 103.8795831 | 103.8795831 | 103.2150247 | 100.6380374 | 98.13835622 | 95.71318962 | 93.35986609 |
| 200214A00005 | 2/14/2020 | 1.59 | 2/14/2025 | 2/14/2020 | 106.88864 | 106.8886352 | 106.8886352 | 106.8886352 | 104.8435852 | 100.2807072 | 95.94161264 | 91.81415344 | 87.88690741 |
| 200219A00016 | 2/19/2020 | 1.57 | 10/19/2022 | 2/19/2020 | 103.3862 | 103.3862046 | 103.3862046 | 103.3862046 | 102.82758 | 100.5381012 | 98.31070589 | 96.14333005 | 94.03399263 |
| 200220A00001 | 2/20/2020 | 1.74 | 2/22/2022 | 2/20/2020 | 102.4253 | 102.4253041 | 102.4253041 | 102.4253041 | 102.0959744 | 100.458768 | 98.85560953 | 97.28550169 | 95.74748617 |
| 200221A00009 | 2/21/2020 | 1.69 | 2/22/2022 | 2/21/2020 | 102.3419 | 102.3419023 | 102.3419023 | 102.3419023 | 102.0127093 | 100.3762194 | 98.77376441 | 97.20434756 | 95.66701081 |
| 200221A00013 | 2/21/2020 | 1.69 | 2/21/2025 | 2/21/2020 | 106.47844 | 106.4784437 | 106.4784437 | 106.4784437 | 104.4339182 | 99.8882767 | 95.5657845 | 91.45431348 | 87.5424614 |
| 200224A00019 | 2/24/2020 | 1.59 | 2/18/2025 | 2/24/2020 | 106.00016 | 106.0001618 | 106.0001618 | 106.0001618 | 103.9665723 | 99.44002593 | 95.13549028 | 91.04091413 | 87.14496635 |
| 200224A00024 | 2/24/2020 | 1.59 | 2/24/2025 | 2/24/2020 | 106.02082 | 106.0208236 | 106.0208236 | 106.0208236 | 103.9721141 | 99.42878763 | 95.10899537 | 91.00056525 | 87.09205506 |
| 200225A00018 | 2/25/2020 | 1.94 | 2/25/2030 | 2/25/2020 | 115.77296 | 115.7729581 | 115.7729581 | 115.446195 | 105.833276 | 96.86375924 | 88.73233064 | 81.35617964 | 74.66107506 |
| 200226A00002 | 2/26/2020 | 1.53 | 2/27/2023 | 2/26/2020 | 103.31806 | 103.3180625 | 103.3180625 | 103.3180625 | 102.632915 | 100.0031849 | 97.45378615 | 94.98175902 | 92.5842744 |
| 200226A00016 | 2/26/2020 | 1.57 | 2/26/2025 | 2/26/2020 | 105.93385 | 105.9338469 | 105.9338469 | 105.9338469 | 103.8807791 | 99.33401438 | 95.01121682 | 90.90017714 | 86.98941914 |
| 200226A00017 | 2/26/2020 | 1.53 | 2/27/2023 | 2/26/2020 | 103.31806 | 103.3180625 | 103.3180625 | 103.3180625 | 102.632915 | 100.0031849 | 97.45378615 | 94.98175902 | 92.5842744 |
| 200228A00014 | 2/28/2020 | 1.4 | 2/28/2025 | 2/28/2020 | 105.14185 | 105.1418536 | 105.1418536 | 105.1418536 | 103.0895606 | 98.55556226 | 94.24539048 | 90.14682403 | 86.24837656 |
| 200228A00026 | 2/28/2020 | 2.14 | 2/28/2035 | 2/28/2020 | 126.67669 | 126.6766895 | 126.6766895 | 118.8256589 | 104.5408663 | 91.98049199 | 81.10743368 | 71.68414807 | 63.50770053 |
| 200228A00066 | 2/28/2020 | 1.35 | 2/28/2024 | 2/28/2020 | 103.89621 | 103.8962065 | 103.8962065 | 103.8962065 | 102.6503279 | 99.06407744 | 95.62140114 | 92.31575503 | 89.14093336 |
| 200228A00073 | 2/28/2020 | 1.32 | 2/28/2023 | 2/28/2020 | 102.75614 | 102.7561432 | 102.7561432 | 102.7561432 | 102.0716111 | 99.44660827 | 96.90191393 | 94.43456554 | 92.04173147 |
| 200302A00033 | 3/2/2020 | 1.31 | 3/3/2025 | 3/2/2020 | 104.72727 | 104.7272655 | 104.7272655 | 104.7272655 | 102.670358 | 98.13857819 | 93.8309838 | 89.73531177 | 85.84003775 |
| 200303A00001 | 3/3/2020 | 1.15 | 3/3/2025 | 3/3/2020 | 104.87697 | 104.876971 | 104.876971 | 104.876971 | 102.8034864 | 98.2409647 | 93.90485703 | 89.78274513 | 85.86296081 |
| 200429A00047 | 5/1/2020 | 2.7 | 4/30/2025 | 5/1/2020 | 111.64998 | 111.6499769 | 111.6499769 | 111.6499769 | 109.3904297 | 104.5513543 | 99.95645107 | 95.59216364 | 91.44575471 |
| 200511A00023 | 5/11/2020 | 1.7 | 2/3/2031 | 5/11/2020 | 114.74548 | 114.745477 | 114.745477 | 113.3333865 | 102.9119111 | 93.34573168 | 84.75332214 | 77.0303946 | 70.08431719 |
| 200511A00028 | 5/13/2020 | 1.02 | 5/13/2024 | 5/13/2020 | 102.826 | 102.8259957 | 102.8259957 | 102.8259957 | 101.4408929 | 97.68487241 | 94.08678788 | 90.63921989 | 87.33513498 |
| 200601A00009 | 6/1/2020 | 0.84 | 6/2/2025 | 6/1/2020 | 102.64861 | 102.6486073 | 102.6486073 | 102.6486073 | 100.3718727 | 95.66789599 | 91.20845206 | 86.97964631 | 82.96844154 |
| 200604A00009 | 6/4/2020 | 0.7 | 6/4/2025 | 6/4/2020 | 102.89885 | 102.8988466 | 102.8988466 | 102.8988466 | 100.5966759 | 95.85221192 | 91.35540578 | 87.09213253 | 83.04914213 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200604A00014 | 6/4/2020 | 2.42 | 6/4/2040 | 6/4/2020 | 141.45335 | 141.453349 | 141.453349 | 126.4421801 | 107.3723384 | 91.41329962 | 78.20105987 | 67.23808989 | 58.11983334 |
| 200611A00013 | 6/11/2020 | 0.59 | 6/12/2023 | 6/11/2020 | 100.87592 | 100.8759154 | 100.8759154 | 100.8759154 | 100.0701167 | 97.20318421 | 94.43230759 | 91.75376023 | 89.16398122 |
| 200615A00005 | 6/15/2020 | 0.61 | 6/15/2023 | 6/15/2020 | 100.93804 | 100.9380371 | 100.9380371 | 100.9380371 | 100.1278467 | 97.25218422 | 94.47312408 | 91.78690804 | 89.18994552 |
| 200429A00018 | 5/4/2020 | 0.73 | 4/17/2023 | 5/4/2020 | 101.22573 | 101.225727 | 101.225727 | 101.225727 | 100.4909024 | 97.76268072 | 95.12147591 | 92.56401795 | 90.08718062 |
| 200505A00005 | 5/5/2020 | 0.77 | 5/5/2025 | 5/5/2020 | 103.19369 | 103.1936879 | 103.1936879 | 103.1936879 | 100.969341 | 96.29025997 | 91.85155655 | 87.63973432 | 83.64211953 |
| 200505A00006 | 5/5/2020 | 0.39 | 11/4/2021 | 5/5/2020 | 100.37105 | 100.3710527 | 100.3710527 | 100.3710527 | 100.1297965 | 98.8017775 | 97.49745302 | 96.21624484 | 94.95759314 |
| 200511A00018 | 5/11/2020 | 0.98 | 2/2/2026 | 5/11/2020 | 103.79506 | 103.7950598 | 103.7950598 | 103.7950598 | 100.7229711 | 95.40859919 | 90.40300649 | 85.68672551 | 81.24161413 |
| 200511A00021 | 5/11/2020 | 1.53 | 2/1/2029 | 5/11/2020 | 110.53208 | 110.5320815 | 110.5320815 | 110.5320815 | 102.6387392 | 94.68464238 | 87.40408162 | 80.73662474 | 74.62754645 |
| 200601A00006 | 6/1/2020 | 0.6 | 6/1/2023 | 6/1/2020 | 100.89661 | 100.8966147 | 100.8966147 | 100.8966147 | 100.1060717 | 97.26746725 | 94.52301703 | 91.86910612 | 89.30227845 |
| 200611A00011 | 6/11/2020 | 1.2 | 6/9/2028 | 6/11/2020 | 107.11878 | 107.1187785 | 107.1187785 | 107.1187785 | 100.3510346 | 93.02186268 | 86.27409908 | 80.05881872 | 74.33143812 |
| 200615A00023 | 6/17/2020 | 1.68 | 6/17/2024 | 6/17/2020 | 105.53426 | 105.5342576 | 105.5342576 | 105.5342576 | 104.0638802 | 100.1667763 | 96.43672156 | 92.86569787 | 89.44611413 |
| 200630A00004 | 6/30/2020 | 0.66 | 7/1/2024 | 6/30/2020 | 101.47025 | 101.4702542 | 101.4702542 | 101.4702542 | 99.99348808 | 96.14110666 | 92.45634926 | 88.93107179 | 85.55756895 |
| 190820A00013 | 8/20/2019 | 1.76 | 8/21/2023 | 8/20/2019 | 104.64294 | 104.6429446 | 104.6429446 | 104.6429446 | 103.7202023 | 100.6157249 | 97.62007221 | 94.72879738 | 91.93766426 |
| 190826A00014 | 8/26/2019 | 1.86 | 8/26/2020 | 8/26/2019 | 100.27604 | 100.2760393 | 100.2760393 | 100.2760393 | 100.2525484 | 100.0943988 | 99.93675586 | 99.77961705 | 99.62297998 |
| 190826A00038 | 8/26/2019 | 1.74 | 8/26/2022 | 8/26/2019 | 103.14716 | 103.1471634 | 103.1471634 | 103.1471634 | 102.6414713 | 100.5065892 | 98.42649004 | 96.39938237 | 94.42354819 |
| 190826A00058 | 8/26/2019 | 1.91 | 8/26/2026 | 8/26/2019 | 109.92285 | 109.9228521 | 109.9228521 | 109.9228521 | 105.9459117 | 99.97420178 | 94.37710009 | 89.12917414 | 84.20684795 |
| 190826A00060 | 8/26/2019 | 2.02 | 8/26/2027 | 8/26/2019 | 112.30544 | 112.3054434 | 112.3054434 | 112.3054434 | 106.6785523 | 99.79182441 | 93.39814172 | 87.45964377 | 81.94156552 |
| 190828A00015 | 8/28/2019 | 2.04 | 8/28/2029 | 8/28/2019 | 115.89227 | 115.8922704 | 115.8922704 | 115.8922704 | 106.8689002 | 98.26121279 | 90.4199244 | 83.2726817 | 76.75431191 |
| 190829A00005 | 8/30/2019 | 2.06 | 8/30/2023 | 8/30/2019 | 105.638 | 105.6379957 | 105.6379957 | 105.6379957 | 104.6975984 | 101.5542018 | 98.52150415 | 95.59495622 | 92.77022586 |
| 190829A00021 | 8/30/2019 | 2.18 | 8/30/2021 | 8/30/2019 | 102.24972 | 102.2497234 | 102.2497234 | 102.2497234 | 102.0311389 | 100.8575801 | 99.71091562 | 98.59022923 | 97.49464608 |
| 190904A00008 | 9/4/2019 | 1.69 | 9/3/2024 | 9/4/2019 | 105.87335 | 105.8733479 | 105.8733479 | 105.8733479 | 104.2348839 | 100.1342812 | 96.21708419 | 92.47409746 | 88.89664004 |
| 190905A00015 | 9/5/2019 | 1.78 | 9/6/2022 | 9/5/2019 | 103.27937 | 103.2793695 | 103.2793695 | 103.2793695 | 102.7631091 | 100.5974991 | 98.48802773 | 96.43283682 | 94.4301457 |
| 190917A00021 | 9/17/2019 | 2.13 | 9/17/2020 | 9/17/2019 | 100.40734 | 100.4073355 | 100.4073355 | 100.4073355 | 100.3731334 | 100.154341 | 99.93651285 | 99.71964264 | 99.50372397 |
| 190917A00028 | 9/17/2019 | 2.02 | 3/1/2023 | 9/17/2019 | 104.64508 | 104.6450835 | 104.6450835 | 104.6450835 | 103.9538104 | 101.3007258 | 98.72868663 | 96.23470376 | 93.81592001 |
| 190919A00025 | 9/19/2019 | 1.8 | 9/19/2024 | 9/19/2019 | 107.18414 | 107.1841382 | 107.1841382 | 107.1841382 | 105.4912201 | 101.2999419 | 97.29806683 | 93.47599351 | 89.82466448 |
| 190923A00032 | 9/23/2019 | 1.72 | 9/22/2023 | 9/23/2019 | 105.23454 | 105.2345358 | 105.2345358 | 105.2345358 | 104.2539058 | 101.0416346 | 97.94475285 | 94.95842091 | 92.07803537 |
| 190926A00004 | 9/26/2019 | 1.93 | 9/21/2021 | 9/26/2019 | 102.05491 | 102.0549058 | 102.0549058 | 102.0549058 | 101.8315401 | 100.5996545 | 99.39744187 | 98.22384026 | 97.07783778 |
| 190930A00012 | 9/30/2019 | 1.93 | 9/30/2024 | 9/30/2019 | 107.0049 | 107.0049047 | 107.0049047 | 107.0049047 | 105.2995055 | 101.1056175 | 97.1018946 | 93.27865938 | 89.62678524 |
| 190930A00035 | 9/30/2019 | 1.93 | 9/30/2024 | 9/30/2019 | 107.0049 | 107.0049047 | 107.0049047 | 107.0049047 | 105.2995055 | 101.1056175 | 97.1018946 | 93.27865938 | 89.62678524 |
| 190930A00040 | 9/30/2019 | 1.92 | 2/25/2022 | 9/30/2019 | 102.7389 | 102.7388957 | 102.7388957 | 102.7388957 | 102.4064848 | 100.7578388 | 99.143588 | 97.56272039 | 96.01426384 |
| 190930A00070 | 9/30/2019 | 1.93 | 9/27/2024 | 9/30/2019 | 106.99149 | 106.9914917 | 106.9914917 | 106.9914917 | 105.292856 | 101.1069958 | 97.11062108 | 93.29410543 | 89.6483694 |
| 190930A00071 | 9/30/2019 | 2.05 | 9/29/2025 | 9/30/2019 | 109.21303 | 109.213026 | 109.213026 | 109.213026 | 106.5316838 | 101.37383 | 96.49677342 | 91.88372719 | 87.51900087 |
| 191004A00009 | 10/4/2019 | 1.71 | 10/4/2021 | 10/4/2019 | 101.83318 | 101.8331812 | 101.8331812 | 101.8331812 | 101.6061257 | 100.3424241 | 99.10857109 | 97.90351301 | 96.72624556 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191004A00032 | 10/4/2019 | 2.01 | 1/3/2028 | 10/4/2019 | 112.83557 | 112.8355711 | 112.8355711 | 112.8355711 | 106.6326709 | 99.43744561 | 92.78033475 | 86.61830924 | 80.91198792 |
| 191009A00021 | 10/9/2019 | 1.71 | 10/7/2022 | 10/9/2019 | 103.2455 | 103.2455039 | 103.2455039 | 103.2455039 | 102.7005979 | 100.4524719 | 98.26443799 | 96.13447249 | 94.06063653 |
| 191018A00007 | 10/18/2019 | 1.89 | 7/1/2022 | 10/18/2019 | 103.22673 | 103.2267325 | 103.2267325 | 103.2267325 | 102.7744475 | 100.7854249 | 98.84504979 | 96.95182757 | 95.10432007 |
| 200403A00021 | 4/3/2020 | 0.74 | 4/29/2022 | 4/3/2020 | 100.82148 | 100.821479 | 100.821479 | 100.821479 | 100.4349875 | 98.63602589 | 96.87764788 | 95.15870336 | 93.4780821 |
| 200407A00001 | 4/8/2020 | 2.41 | 4/7/2025 | 4/8/2020 | 110.10678 | 110.1067762 | 110.1067762 | 110.1067762 | 107.9198542 | 103.1764253 | 98.66999723 | 94.38745586 | 90.31648561 |
| 200420A00011 | 4/20/2020 | 0.7 | 4/19/2024 | 4/20/2020 | 102.23843 | 102.2384334 | 102.2384334 | 102.2384334 | 100.8954858 | 97.19254871 | 93.64349226 | 90.24112972 | 86.97864959 |
| 200427A00010 | 4/27/2020 | 0.68 | 4/27/2022 | 4/27/2020 | 100.70836 | 100.7083645 | 100.7083645 | 100.7083645 | 100.323942 | 98.53140688 | 96.77921283 | 95.06621029 | 93.39129014 |
| 200429A00010 | 4/29/2020 | 0.78 | 4/29/2025 | 4/29/2020 | 103.23172 | 103.2317238 | 103.2317238 | 103.2317238 | 101.0230274 | 96.35760221 | 91.93109534 | 87.73012989 | 83.74214235 |
| 200429A00046 | 5/1/2020 | 2.07 | 4/30/2025 | 5/1/2020 | 108.58463 | 108.5846337 | 108.5846337 | 108.5846337 | 106.3488578 | 101.5825432 | 97.05775156 | 92.76104575 | 88.67980142 |
| 200504A00015 | 5/4/2020 | 0.68 | 5/4/2023 | 5/4/2020 | 101.10243 | 101.1024278 | 101.1024278 | 101.1024278 | 100.3473344 | 97.57659089 | 94.89553604 | 92.30080986 | 89.7891962 |
| 200506A00005 | 5/6/2020 | 0.97 | 5/6/2025 | 5/6/2020 | 103.24344 | 103.2434435 | 103.2434435 | 103.2434435 | 101.0332513 | 96.37939317 | 91.96391241 | 87.77345615 | 83.79548364 |
| 200507A00005 | 5/7/2020 | 0.67 | 5/5/2023 | 5/7/2020 | 101.07477 | 101.0747657 | 101.0747657 | 101.0747657 | 100.3184747 | 97.54559677 | 94.86255805 | 92.26598988 | 89.75266794 |
| 200508A00004 | 5/8/2020 | 0.43 | 5/8/2023 | 5/8/2020 | 100.89982 | 100.8998158 | 100.8998158 | 100.8998158 | 100.1366504 | 97.34699982 | 94.64823287 | 92.03692381 | 89.5097946 |
| 200511A00019 | 5/11/2020 | 1.18 | 2/1/2027 | 5/11/2020 | 105.78747 | 105.7874684 | 105.7874684 | 105.7874684 | 101.1683464 | 94.96207028 | 89.17240815 | 83.76935009 | 78.72519372 |
| 200604A00001 | 6/4/2020 | 0.65 | 6/5/2023 | 6/4/2020 | 101.04786 | 101.0478589 | 101.0478589 | 101.0478589 | 100.25123 | 97.39997618 | 94.64362448 | 91.97851761 | 89.40115973 |
| 200604A00013 | 6/4/2020 | 2.21 | 6/4/2035 | 6/4/2020 | 128.1802 | 128.1802039 | 128.1802039 | 119.9269392 | 105.3555336 | 92.56849835 | 81.52287612 | 71.97001532 | 63.69799521 |
| 191021A00034 | 10/22/2019 | 1.9 | 10/17/2022 | 10/22/2019 | 103.72589 | 103.7258915 | 103.7258915 | 103.7258915 | 103.1705488 | 100.8907548 | 98.67247826 | 96.51367386 | 94.41237914 |
| 191022A00018 | 10/22/2019 | 1.9 | 10/22/2020 | 10/22/2019 | 100.51789 | 100.517892 | 100.517892 | 100.517892 | 100.4648132 | 100.1493831 | 99.83593897 | 99.52446198 | 99.21493365 |
| 191108A00011 | 11/8/2019 | 2.08 | 10/18/2024 | 11/8/2019 | 107.73612 | 107.7361232 | 107.7361232 | 107.7361232 | 105.985014 | 101.7305911 | 97.67084495 | 93.79585219 | 90.09624891 |
| 191115A00011 | 11/15/2019 | 1.89 | 11/16/2020 | 11/15/2019 | 100.63111 | 100.6311054 | 100.6311054 | 100.6311054 | 100.5633123 | 100.1788587 | 99.79734878 | 99.41874868 | 99.04302512 |
| 191115A00014 | 11/18/2019 | 2.45 | 11/18/2024 | 11/18/2019 | 109.52325 | 109.5232511 | 109.5232511 | 109.5232511 | 107.6886084 | 103.3165902 | 99.14773983 | 95.17158507 | 91.37824609 |
| 191115A00016 | 11/18/2019 | 2.48 | 11/18/2024 | 11/18/2019 | 109.65586 | 109.6558603 | 109.6558603 | 109.6558603 | 107.8203558 | 103.4454645 | 99.27383788 | 95.29499945 | 91.49906557 |
| 191119A00027 | 11/19/2019 | 1.8 | 11/19/2024 | 11/19/2019 | 107.46762 | 107.4676173 | 107.4676173 | 107.4676173 | 105.6317406 | 101.2781851 | 97.12826168 | 93.17142608 | 89.39773285 |
| 191120A00027 | 11/20/2019 | 1.73 | 11/20/2020 | 11/20/2019 | 100.64026 | 100.6402597 | 100.6402597 | 100.6402597 | 100.5699459 | 100.1738524 | 99.7808836 | 99.39100249 | 99.00417268 |
| 191120A00032 | 11/20/2019 | 1.73 | 5/20/2021 | 11/20/2019 | 101.44951 | 101.4495097 | 101.4495097 | 101.4495097 | 101.2663822 | 100.3720567 | 99.49347188 | 98.63021478 | 97.7818869 |
| 191121A00034 | 11/21/2019 | 2.28 | 11/2/2029 | 11/21/2019 | 118.44311 | 118.443107 | 118.443107 | 118.408055 | 109.0138829 | 100.1612469 | 92.10791205 | 84.77736018 | 78.10076006 |
| 191122A00021 | 11/26/2019 | 3.4 | 11/22/2038 | 11/26/2019 | 156.13099 | 156.1309858 | 156.1309858 | 142.9201988 | 123.7622197 | 107.3186799 | 93.4655908 | 81.76939267 | 71.87179562 |
| 191125A00036 | 11/25/2019 | 2.29 | 11/23/2029 | 11/25/2019 | 118.64868 | 118.6486834 | 118.6486834 | 118.5624844 | 109.1059407 | 100.2008775 | 92.10425639 | 84.73825487 | 78.03291202 |
| 191206A00009 | 12/6/2019 | 2.87 | 12/4/2037 | 12/6/2019 | 144.13888 | 144.1388769 | 144.1388769 | 132.4863674 | 114.9539545 | 99.8445942 | 87.04144575 | 76.1727702 | 66.92886194 |
| 191210A00010 | 12/10/2019 | 1.91 | 12/10/2020 | 12/10/2019 | 100.74892 | 100.7489199 | 100.7489199 | 100.7489199 | 100.6666982 | 100.2160637 | 99.76946314 | 99.32684244 | 98.88814846 |
| 191217A00012 | 12/20/2019 | 2.03 | 12/20/2024 | 12/20/2019 | 107.77287 | 107.7728705 | 107.7728705 | 107.7728705 | 105.8742631 | 101.4610277 | 97.257193 | 93.25174953 | 89.43432352 |
| 191223A00022 | 12/23/2019 | 1.93 | 12/30/2021 | 12/23/2019 | 102.49783 | 102.4978282 | 102.4978282 | 102.4978282 | 102.2128571 | 100.7236586 | 99.26372376 | 97.83226627 | 96.42852742 |
| 200115A00017 | 1/15/2020 | 1.88 | 1/17/2023 | 1/15/2020 | 104.08189 | 104.0818904 | 104.0818904 | 104.0818904 | 103.4372403 | 100.9113137 | 98.45999343 | 96.08063371 | 93.77069989 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200122A00035 | 1/22/2020 | 1.94 | 1/22/2025 | 1/22/2020 | 107.51546 | 107.5154624 | 107.5154624 | 107.5154624 | 105.5382253 | 101.048759 | 96.77599764 | 92.70835168 | 88.8349129 |
| 200124A00008 | 1/24/2020 | 1.92 | 1/22/2027 | 1/24/2020 | 111.94768 | 111.9476817 | 111.9476817 | 111.9476817 | 107.2362538 | 100.8101333 | 94.811664 | 89.21019203 | 83.97741262 |
| 200127A00016 | 1/27/2020 | 1.81 | 1/27/2025 | 1/27/2020 | 106.93848 | 106.9384803 | 106.9384803 | 106.9384803 | 104.953022 | 100.464158 | 96.19266179 | 92.12687603 | 88.25583086 |
| 200130A00015 | 1/30/2020 | 1.63 | 7/30/2021 | 1/30/2020 | 101.6574 | 101.6574 | 101.6574 | 101.6574 | 101.4440099 | 100.3555139 | 99.29025055 | 98.24748266 | 97.22650405 |
| 200130A00025 | 1/30/2020 | 1.54 | 1/30/2023 | 1/30/2020 | 103.72201 | 103.7220114 | 103.7220114 | 103.7220114 | 103.0624079 | 100.497259 | 98.00883617 | 95.59438043 | 93.2512507 |
| 200131A00047 | 1/31/2020 | 1.68 | 1/31/2023 | 1/31/2020 | 103.62033 | 103.6203282 | 103.6203282 | 103.6203282 | 102.9628745 | 100.4065453 | 97.9265429 | 95.52012669 | 93.18467309 |
| 200203A00012 | 2/3/2020 | 1.57 | 2/3/2025 | 2/3/2020 | 106.75122 | 106.7512221 | 106.7512221 | 106.7512221 | 104.7349862 | 100.2056182 | 95.89713784 | 91.79762294 | 87.89585911 |
| 200303A00002 | 3/3/2020 | 1.06 | 3/3/2023 | 3/3/2020 | 102.548 | 102.5480042 | 102.5480042 | 102.5480042 | 101.8576493 | 99.21709904 | 96.6577662 | 94.17663897 | 91.77083941 |
| 200304A00021 | 3/4/2020 | 0.94 | 3/4/2024 | 3/4/2020 | 103.05771 | 103.0577109 | 103.0577109 | 103.0577109 | 101.7991514 | 98.197996 | 94.74204631 | 91.42464195 | 88.23946907 |
| 200305A00020 | 3/5/2020 | 0.95 | 3/5/2025 | 3/5/2020 | 103.93595 | 103.9359479 | 103.9359479 | 103.9359479 | 101.8642258 | 97.3185232 | 92.99893201 | 88.8930296 | 84.98914488 |
| 200305A00035 | 3/5/2020 | 1.25 | 3/5/2026 | 3/5/2020 | 105.392 | 105.3920023 | 105.3920023 | 105.3920023 | 102.185183 | 96.74877447 | 91.63183985 | 86.81398885 | 82.27623853 |
| 200305A00043 | 3/5/2020 | 0.95 | 3/7/2022 | 3/5/2020 | 101.13111 | 101.1311073 | 101.1311073 | 101.1311073 | 100.792516 | 99.13079629 | 97.50419269 | 95.91165654 | 94.35218119 |
| 200306A00098 | 3/10/2020 | 1.59 | 3/8/2030 | 3/10/2020 | 112.43316 | 112.4331635 | 112.4331635 | 112.077015 | 102.544039 | 93.70214078 | 85.69288898 | 78.43357294 | 71.85008813 |
| 200309A00027 | 3/9/2020 | 0.97 | 3/10/2025 | 3/9/2020 | 103.13976 | 103.139759 | 103.139759 | 103.139759 | 101.0767234 | 96.56457465 | 92.27693551 | 88.20146747 | 84.32657876 |
| 200311A00021 | 3/11/2020 | 1.09 | 3/11/2024 | 3/11/2020 | 103.63488 | 103.6348788 | 103.6348788 | 103.6348788 | 102.3601906 | 98.73072462 | 95.2481226 | 91.90562008 | 88.69680633 |
| 200312A00004 | 3/13/2020 | 1.23 | 1/24/2025 | 3/13/2020 | 104.25642 | 104.2564238 | 104.2564238 | 104.2564238 | 102.2970805 | 97.87602981 | 93.66957735 | 89.66620903 | 85.85508943 |
| 200403A00006 | 4/3/2020 | 1.05 | 4/3/2025 | 4/3/2020 | 103.56703 | 103.5670258 | 103.5670258 | 103.5670258 | 101.4399529 | 96.85980326 | 92.51014483 | 88.37817364 | 84.45186875 |
| 200429A00035 | 5/1/2020 | 1.41 | 4/30/2024 | 5/1/2020 | 104.30775 | 104.3077517 | 104.3077517 | 104.3077517 | 102.9409168 | 99.18882191 | 95.59285137 | 92.14573949 | 88.84059505 |
| 200429A00056 | 5/1/2020 | 1.54 | 4/30/2025 | 5/1/2020 | 106.00585 | 106.005853 | 106.005853 | 106.005853 | 103.7900751 | 99.08497192 | 94.61916309 | 90.37931165 | 86.35288833 |
| 200430A00017 | 4/30/2020 | 0.94 | 4/30/2025 | 4/30/2020 | 103.08648 | 103.0864785 | 103.0864785 | 103.0864785 | 100.8933399 | 96.25753278 | 91.8584969 | 87.6830089 | 83.71864709 |
| 200501A00003 | 5/1/2020 | 0.66 | 4/14/2023 | 5/1/2020 | 101.02508 | 101.0250797 | 101.0250797 | 101.0250797 | 100.2944706 | 97.57696255 | 94.94592796 | 92.39811151 | 89.93040201 |
| 200504A00013 | 5/4/2020 | 1.26 | 5/4/2027 | 5/4/2020 | 106.55392 | 106.5539191 | 106.5539191 | 106.5539191 | 101.5190724 | 95.0777709 | 89.08339388 | 83.50279372 | 78.30543402 |
| 200513A00002 | 5/13/2020 | 0.56 | 5/13/2024 | 5/13/2020 | 101.72885 | 101.728848 | 101.728848 | 101.728848 | 100.341065 | 96.58722294 | 92.9919375 | 89.54773556 | 86.24753396 |
| 200513A00003 | 5/13/2020 | 0.68 | 5/13/2025 | 5/13/2020 | 102.76495 | 102.7649477 | 102.7649477 | 102.7649477 | 100.5226506 | 95.83456871 | 91.38847682 | 87.17072787 | 83.1685103 |
| 200615A00004 | 6/15/2020 | 0.56 | 6/15/2022 | 6/15/2020 | 100.523 | 100.5230013 | 100.5230013 | 100.5230013 | 100.0918378 | 98.17311501 | 96.30047333 | 94.47252628 | 92.68793853 |
| 200626A00014 | 6/26/2020 | 0.62 | 6/26/2025 | 6/26/2020 | 102.53041 | 102.5304075 | 102.5304075 | 102.5304075 | 100.1714572 | 95.38158748 | 90.84485683 | 86.54664971 | 82.47326739 |
| 191031A00033 | 10/31/2019 | 2.2 | 5/31/2028 | 10/31/2019 | 115.03161 | 115.0316133 | 115.0316133 | 115.0316133 | 108.1315328 | 100.525011 | 93.51305092 | 87.04606859 | 81.07885092 |
| 191104A00022 | 11/4/2019 | 2.17 | 8/4/2027 | 11/4/2019 | 113.27031 | 113.2703105 | 113.2703105 | 113.2703105 | 107.7229931 | 100.8526286 | 94.46993022 | 88.53773539 | 83.02189706 |
| 191105A00014 | 11/5/2019 | 1.96 | 11/6/2023 | 11/5/2019 | 105.62975 | 105.6297474 | 105.6297474 | 105.6297474 | 104.5784709 | 101.2576522 | 98.05966047 | 94.97932965 | 92.01173793 |
| 191108A00013 | 11/8/2019 | 2.25 | 11/8/2029 | 11/8/2019 | 120.12338 | 120.1233819 | 120.1233819 | 120.072728 | 110.4872077 | 101.4653577 | 93.26148626 | 85.79698228 | 79.0011623 |
| 191113A00019 | 11/15/2019 | 1.93 | 3/15/2021 | 11/15/2019 | 101.19805 | 101.1980464 | 101.1980464 | 101.1980464 | 101.0605776 | 100.3485897 | 99.64661287 | 98.95443688 | 98.27185741 |
| 191114A00021 | 11/18/2019 | 1.91 | 6/15/2022 | 11/18/2019 | 103.19607 | 103.1960654 | 103.1960654 | 103.1960654 | 102.7595617 | 100.8138701 | 98.91478263 | 97.06089778 | 95.250866 |
| 191120A00011 | 11/20/2019 | 1.88 | 1/20/2023 | 11/20/2019 | 104.09504 | 104.095035 | 104.095035 | 104.095035 | 103.4473209 | 100.9134068 | 98.45449925 | 96.0679311 | 93.75114782 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191120A00024 | 11/20/2019 | 2.23 | 11/16/2029 | 11/20/2019 | 118.04859 | 118.0485864 | 118.0485864 | 117.9794356 | 108.5598942 | 99.69544469 | 91.6349021 | 84.30099199 | 77.62423369 |
| 191122A00005 | 11/22/2019 | 2.03 | 11/22/2027 | 11/22/2019 | 114.27742 | 114.2774192 | 114.2774192 | 114.2774192 | 108.1630344 | 100.9515466 | 94.27287187 | 88.08491931 | 82.34912276 |
| 191126A00022 | 11/26/2019 | 1.72 | 5/26/2023 | 11/26/2019 | 104.70697 | 104.7069729 | 104.7069729 | 104.7069729 | 103.9077469 | 101.0164503 | 98.2203495 | 95.51580719 | 92.89934519 |
| 191206A00020 | 12/9/2019 | 1.91 | 12/15/2021 | 12/9/2019 | 102.41457 | 102.4145657 | 102.4145657 | 102.4145657 | 102.1413416 | 100.6919386 | 99.27029406 | 97.8756803 | 96.50739466 |
| 191212A00032 | 12/12/2019 | 1.99 | 12/12/2023 | 12/12/2019 | 105.8988 | 105.8987994 | 105.8987994 | 105.8987994 | 104.7844775 | 101.3653268 | 98.0760786 | 94.91111775 | 91.86510235 |
| 191220A00002 | 12/20/2019 | 3.02 | 12/20/2038 | 12/20/2019 | 149.43759 | 149.4375889 | 149.4375889 | 136.3285226 | 117.6212528 | 101.6383589 | 88.20364159 | 76.88705762 | 67.33371868 |
| 191223A00006 | 12/23/2019 | 1.92 | 12/23/2020 | 12/23/2019 | 100.81841 | 100.8184097 | 100.8184097 | 100.8184097 | 100.7283842 | 100.2418528 | 99.76001685 | 99.2828087 | 98.81016179 |
| 191223A00007 | 12/23/2019 | 1.95 | 6/23/2021 | 12/23/2019 | 101.66206 | 101.6620555 | 101.6620555 | 101.6620555 | 101.4595556 | 100.4739187 | 99.50736222 | 98.55933637 | 97.62931214 |
| 191230A00013 | 12/30/2019 | 1.84 | 12/2/2024 | 12/30/2019 | 107.70705 | 107.707046 | 107.707046 | 107.707046 | 105.8387684 | 101.4464795 | 97.26113499 | 93.27193917 | 89.46871416 |
| 200103A00009 | 1/3/2020 | 1.9 | 1/3/2024 | 1/3/2020 | 105.6828 | 105.6827979 | 105.6827979 | 105.6827979 | 104.5306941 | 101.0593551 | 97.72204398 | 94.51287148 | 91.42623992 |
| 200106A00015 | 1/6/2020 | 1.87 | 2/15/2024 | 1/6/2020 | 105.76235 | 105.7623534 | 105.7623534 | 105.7623534 | 104.5316499 | 100.9466351 | 97.50362263 | 94.19620237 | 91.01829187 |
| 200110A00004 | 1/10/2020 | 1.7 | 1/10/2022 | 1/10/2020 | 102.45378 | 102.4537832 | 102.4537832 | 102.4537832 | 102.1592138 | 100.6369533 | 99.14501423 | 97.68256484 | 96.24880359 |
| 200123A00048 | 1/23/2020 | 1.7 | 1/23/2025 | 1/23/2020 | 107.30781 | 107.3078068 | 107.3078068 | 107.3078068 | 105.3150487 | 100.8013772 | 96.50647055 | 92.41858915 | 88.52668593 |
| 200127A00023 | 1/27/2020 | 1.8 | 1/27/2025 | 1/27/2020 | 106.89237 | 106.8923697 | 106.8923697 | 106.8923697 | 104.9072351 | 100.419411 | 96.14891855 | 92.08410186 | 88.21399259 |
| 200130A00011 | 1/30/2020 | 1.54 | 1/30/2023 | 1/30/2020 | 103.72201 | 103.7220114 | 103.7220114 | 103.7220114 | 103.0624079 | 100.497259 | 98.00883617 | 95.59438043 | 93.2512507 |
| 200131A00014 | 2/5/2020 | 1.7 | 2/22/2022 | 2/5/2020 | 102.35858 | 102.3585827 | 102.3585827 | 102.3585827 | 102.0293623 | 100.3927291 | 98.79013344 | 97.22057838 | 95.68310588 |
| 200131A00015 | 2/5/2020 | 1.73 | 2/5/2025 | 2/5/2020 | 106.60439 | 106.6043945 | 106.6043945 | 106.6043945 | 104.5989779 | 100.0941112 | 95.80848651 | 91.73028973 | 87.8484069 |
| 200204A00016 | 2/4/2020 | 1.72 | 2/6/2023 | 2/4/2020 | 103.74803 | 103.7480304 | 103.7480304 | 103.7480304 | 103.0838512 | 100.5086006 | 98.01061641 | 95.58710828 | 93.23540592 |
| 200207A00018 | 2/7/2020 | 2.14 | 2/7/2030 | 2/7/2020 | 117.6154 | 117.6154034 | 117.6154034 | 117.3326152 | 107.7108533 | 98.69847266 | 90.52182661 | 83.09883773 | 76.35588522 |
| 200211A00022 | 2/11/2020 | 1.73 | 2/10/2023 | 2/11/2020 | 103.78987 | 103.7898656 | 103.7898656 | 103.7898656 | 103.121326 | 100.5340297 | 98.0246166 | 95.59026338 | 93.22826871 |
| 200214A00002 | 2/14/2020 | 1.58 | 11/15/2024 | 2/14/2020 | 106.4745 | 106.4745001 | 106.4745001 | 106.4745001 | 104.6545287 | 100.3328837 | 96.21318202 | 92.28498434 | 88.53844302 |
| 200214A00004 | 2/14/2020 | 1.81 | 2/16/2021 | 2/14/2020 | 100.99638 | 100.9963755 | 100.9963755 | 100.9963755 | 100.8746912 | 100.2371469 | 99.60764322 | 98.98602864 | 98.37215552 |
| 200214A00017 | 2/14/2020 | 1.59 | 2/14/2025 | 2/14/2020 | 106.88864 | 106.8886352 | 106.8886352 | 106.8886352 | 104.8435852 | 100.2807072 | 95.94161264 | 91.81415344 | 87.88690741 |
| 200218A00008 | 2/18/2020 | 1.77 | 2/18/2021 | 2/18/2020 | 100.979 | 100.9790032 | 100.9790032 | 100.9790032 | 100.8561955 | 100.2132532 | 99.57848798 | 98.9517446 | 98.33287166 |
| 200218A00028 | 2/18/2020 | 1.73 | 2/21/2023 | 2/18/2020 | 103.83256 | 103.832559 | 103.832559 | 103.832559 | 103.1522395 | 100.5327893 | 97.99290999 | 95.52968699 | 93.14033338 |
| 200220A00008 | 2/20/2020 | 1.74 | 2/20/2024 | 2/20/2020 | 105.30617 | 105.3061721 | 105.3061721 | 105.3061721 | 104.0683623 | 100.4780417 | 97.03046744 | 93.71917275 | 90.53802296 |
| 200220A00025 | 2/20/2020 | 1.72 | 2/21/2023 | 2/20/2020 | 103.80584 | 103.8058351 | 103.8058351 | 103.8058351 | 103.1255943 | 100.5065022 | 97.96697272 | 95.50409153 | 93.11507196 |
| 200224A00018 | 2/24/2020 | 1.58 | 8/19/2024 | 2/24/2020 | 105.35705 | 105.3570522 | 105.3570522 | 105.3570522 | 103.7542943 | 99.70203544 | 95.82970241 | 92.12834419 | 88.58950605 |
| 200225A00003 | 2/25/2020 | 1.54 | 2/27/2023 | 2/25/2020 | 103.34495 | 103.3449517 | 103.3449517 | 103.3449517 | 102.6597245 | 100.0296319 | 97.47987915 | 95.00750617 | 92.6096836 |
| 200225A00005 | 2/25/2020 | 1.57 | 2/25/2025 | 2/25/2020 | 105.93046 | 105.930458 | 105.930458 | 105.930458 | 103.8799085 | 99.33593683 | 95.01567782 | 90.90694249 | 86.99827323 |
| 200227A00006 | 2/27/2020 | 1.47 | 2/27/2025 | 2/27/2020 | 105.46764 | 105.4676421 | 105.4676421 | 105.4676421 | 103.415465 | 98.87668458 | 94.56174469 | 90.45843262 | 86.55526939 |
| 200227A00011 | 2/27/2020 | 1.42 | 2/28/2022 | 2/27/2020 | 101.90993 | 101.9099327 | 101.9099327 | 101.9099327 | 101.5763286 | 99.92613241 | 98.31050078 | 96.72841208 | 95.17888508 |
| 200227A00013 | 2/27/2020 | 1.43 | 2/27/2024 | 2/27/2020 | 104.1888 | 104.1887996 | 104.1887996 | 104.1887996 | 102.9433683 | 99.35446894 | 95.9091026 | 92.60073269 | 89.42316016 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200227A00022 | 2/27/2020 | 1.41 | 2/27/2023 | 2/27/2020 | 102.99539 | 102.9953919 | 102.9953919 | 102.9953919 | 102.311202 | 99.68582085 | 97.1406701 | 94.67279321 | 92.2793641 |
| 200228A00005 | 2/28/2020 | 1.35 | 2/28/2024 | 2/28/2020 | 103.89621 | 103.8962065 | 103.8962065 | 103.8962065 | 102.6503279 | 99.06407744 | 95.62140114 | 92.31575503 | 89.14093336 |
| 200228A00019 | 2/28/2020 | 1.21 | 2/20/2025 | 2/28/2020 | 105.1277 | 105.1277045 | 105.1277045 | 105.1277045 | 103.0802151 | 98.54116764 | 94.22600327 | 90.1225149 | 86.21922789 |
| 200228A00040 | 2/28/2020 | 1.14 | 2/28/2023 | 2/28/2020 | 102.75603 | 102.7560322 | 102.7560322 | 102.7560322 | 102.0684401 | 99.43284638 | 96.8780989 | 94.40120813 | 91.99931701 |
| 200228A00042 | 2/28/2020 | 1.17 | 2/28/2024 | 2/28/2020 | 103.89926 | 103.8992559 | 103.8992559 | 103.8992559 | 102.6461398 | 99.04236153 | 95.58327697 | 92.2622745 | 89.07308507 |
| 200228A00058 | 2/28/2020 | 1.31 | 2/28/2022 | 2/28/2020 | 101.72462 | 101.7246242 | 101.7246242 | 101.7246242 | 101.3913265 | 99.74273601 | 98.128681 | 96.54814069 | 95.00013461 |
| 200228A00065 | 2/28/2020 | 1.4 | 2/28/2025 | 2/28/2020 | 105.14185 | 105.1418536 | 105.1418536 | 105.1418536 | 103.0895606 | 98.55556226 | 94.24539048 | 90.14682403 | 86.24837656 |
| 200302A00028 | 3/2/2020 | 1.25 | 2/26/2024 | 3/2/2020 | 103.52146 | 103.5214574 | 103.5214574 | 103.5214574 | 102.2810409 | 98.70700644 | 95.2759527 | 91.98136949 | 88.81708267 |
| 200203A00005 | 2/3/2020 | 1.7 | 5/3/2023 | 2/3/2020 | 104.02669 | 104.0266858 | 104.0266858 | 104.0266858 | 103.2634065 | 100.4532828 | 97.73370386 | 95.10128551 | 92.55278843 |
| 200205A00011 | 2/7/2020 | 2.31 | 2/7/2024 | 2/7/2020 | 107.32887 | 107.3288703 | 107.3288703 | 107.3288703 | 106.1057121 | 102.5142769 | 99.06408917 | 95.74881233 | 92.5624318 |
| 200210A00005 | 2/10/2020 | 1.77 | 2/10/2027 | 2/10/2020 | 111.03915 | 111.0391499 | 111.0391499 | 111.0391499 | 106.2547403 | 99.81127227 | 93.80019693 | 88.19028996 | 82.9527373 |
| 200214A00019 | 2/14/2020 | 1.81 | 2/16/2021 | 2/14/2020 | 100.99638 | 100.9963755 | 100.9963755 | 100.9963755 | 100.8746912 | 100.2371469 | 99.60764322 | 98.98602864 | 98.37215552 |
| 200220A00002 | 2/20/2020 | 1.76 | 2/20/2025 | 2/20/2020 | 106.8021 | 106.8021004 | 106.8021004 | 106.8021004 | 104.7577415 | 100.207425 | 95.88026697 | 91.76414813 | 87.84767375 |
| 200220A00015 | 2/20/2020 | 1.57 | 2/20/2025 | 2/20/2020 | 106.8189 | 106.8188967 | 106.8188967 | 106.8188967 | 104.7591741 | 100.1813382 | 95.82875623 | 91.6891609 | 87.75102055 |
| 200221A00014 | 2/21/2020 | 1.49 | 2/21/2023 | 2/21/2020 | 103.67406 | 103.6740615 | 103.6740615 | 103.6740615 | 102.9911906 | 100.3633743 | 97.81560967 | 95.34495727 | 92.94860674 |
| 200224A00005 | 2/24/2020 | 1.59 | 2/24/2022 | 2/24/2020 | 102.18217 | 102.1821711 | 102.1821711 | 102.1821711 | 101.8515311 | 100.2105971 | 98.6038719 | 97.0303504 | 95.48906697 |
| 200224A00025 | 2/24/2020 | 1.59 | 1/23/2025 | 2/24/2020 | 105.90992 | 105.9099158 | 105.9099158 | 105.9099158 | 103.9414458 | 99.48562702 | 95.24547998 | 91.20945185 | 87.36666999 |
| 200224A00029 | 2/24/2020 | 1.56 | 2/24/2023 | 2/24/2020 | 103.38849 | 103.3884915 | 103.3884915 | 103.3884915 | 102.7063069 | 100.0842162 | 97.54201806 | 95.07677734 | 92.68568778 |
| 200225A00017 | 2/25/2020 | 1.94 | 2/25/2030 | 2/25/2020 | 115.77296 | 115.7729581 | 115.7729581 | 115.446195 | 105.833276 | 96.86375924 | 88.73233064 | 81.35617964 | 74.66107506 |
| 200225A00046 | 2/25/2020 | 1.54 | 2/23/2024 | 2/25/2020 | 104.58153 | 104.5815296 | 104.5815296 | 104.5815296 | 103.3416062 | 99.7563408 | 96.31402902 | 93.00817911 | 89.83263346 |
| 200226A00008 | 2/26/2020 | 1.38 | 2/26/2025 | 2/26/2020 | 105.94706 | 105.9470594 | 105.9470594 | 105.9470594 | 103.878515 | 99.30420234 | 94.95596419 | 90.82144214 | 86.88902175 |
| 200226A00015 | 2/26/2020 | 1.53 | 2/26/2024 | 2/26/2020 | 104.55476 | 104.5547604 | 104.5547604 | 104.5547604 | 103.3094312 | 99.71655262 | 96.2672048 | 92.95485702 | 89.77331547 |
| 200226A00018 | 2/26/2020 | 1.38 | 2/26/2025 | 2/26/2020 | 105.94706 | 105.9470594 | 105.9470594 | 105.9470594 | 103.878515 | 99.30420234 | 94.95596419 | 90.82144214 | 86.88902175 |
| 200228A00015 | 3/3/2020 | 1.34 | 10/16/2023 | 3/3/2020 | 103.47211 | 103.4721126 | 103.4721126 | 103.4721126 | 102.4644828 | 99.23351869 | 96.12058179 | 93.12071343 | 90.2291931 |
| 200228A00016 | 2/28/2020 | 1.35 | 2/22/2024 | 2/28/2020 | 103.87907 | 103.8790695 | 103.8790695 | 103.8790695 | 102.6443145 | 99.07452471 | 95.64711976 | 92.35563482 | 89.19393775 |
| 200228A00025 | 2/28/2020 | 1.57 | 3/2/2027 | 2/28/2020 | 108.46612 | 108.4661161 | 108.4661161 | 108.4661161 | 103.6793934 | 97.31683244 | 91.38443458 | 85.85094126 | 80.68752159 |
| 200228A00067 | 2/28/2020 | 1.4 | 2/28/2025 | 2/28/2020 | 105.14185 | 105.1418536 | 105.1418536 | 105.1418536 | 103.0895606 | 98.55556226 | 94.24539048 | 90.14682403 | 86.24837656 |
| 200302A00045 | 3/4/2020 | 1.31 | 3/4/2025 | 3/4/2020 | 104.73003 | 104.7300298 | 104.7300298 | 104.7300298 | 102.6705602 | 98.13628377 | 93.82642721 | 89.72870835 | 85.83158538 |
| 200303A00034 | 3/3/2020 | 1.21 | 3/3/2025 | 3/3/2020 | 104.25658 | 104.2565766 | 104.2565766 | 104.2565766 | 102.2031006 | 97.68214638 | 93.38499404 | 89.29939737 | 85.41384803 |
| 200304A00017 | 3/4/2020 | 0.83 | 3/16/2022 | 3/4/2020 | 101.2318 | 101.2318047 | 101.2318047 | 101.2318047 | 100.8838792 | 99.19267816 | 97.53767697 | 95.91777895 | 94.33193212 |
| 200306A00009 | 3/6/2020 | 0.82 | 3/7/2022 | 3/6/2020 | 100.90959 | 100.9095913 | 100.9095913 | 100.9095913 | 100.5713712 | 98.91159233 | 97.2868943 | 95.69622946 | 94.13859208 |
| 200306A00030 | 3/6/2020 | 0.88 | 3/6/2023 | 3/6/2020 | 101.58155 | 101.5815501 | 101.5815501 | 101.5815501 | 100.8938108 | 98.26928999 | 95.72557403 | 93.25966367 | 90.86869319 |
| 200302A00051 | 3/2/2020 | 1.22 | 8/8/2023 | 3/2/2020 | 102.89748 | 102.8974835 | 102.8974835 | 102.8974835 | 102.0012381 | 98.95742319 | 96.01963798 | 93.18358531 | 90.44516933 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200302A00053 | 3/2/2020 | 1.31 | 3/3/2025 | 3/2/2020 | 104.72727 | 104.7272655 | 104.7272655 | 104.7272655 | 102.670358 | 98.13857819 | 93.8309838 | 89.73531177 | 85.84003775 |
| 200306A00065 | 3/6/2020 | 1.38 | 3/6/2030 | 3/6/2020 | 110.39445 | 110.3944461 | 110.3944461 | 110.0440487 | 100.582015 | 91.8351826 | 83.91421032 | 76.73697019 | 70.22988389 |
| 200309A00003 | 3/9/2020 | 0.72 | 3/9/2022 | 3/9/2020 | 100.74162 | 100.7416224 | 100.7416224 | 100.7416224 | 100.4018936 | 98.73837829 | 97.11011051 | 95.51603458 | 93.95513721 |
| 200309A00056 | 3/9/2020 | 0.97 | 3/7/2025 | 3/9/2020 | 103.13426 | 103.1342579 | 103.1342579 | 103.1342579 | 101.0788482 | 96.57405911 | 92.29308117 | 88.22363285 | 84.35417467 |
| 200310A00022 | 3/10/2020 | 1.12 | 3/10/2027 | 3/10/2020 | 106.77126 | 106.7712571 | 106.7712571 | 106.7712571 | 101.9245149 | 95.55024319 | 89.61098607 | 84.07490513 | 78.91265087 |
| 200326A00029 | 3/26/2020 | 1.82 | 3/26/2027 | 3/26/2020 | 110.23943 | 110.2394327 | 110.2394327 | 110.2394327 | 105.3193195 | 98.84615313 | 92.81324519 | 87.18837491 | 81.94184415 |
| 200330A00041 | 4/1/2020 | 1.09 | 4/1/2025 | 4/1/2020 | 103.75443 | 103.754427 | 103.754427 | 103.754427 | 101.631119 | 97.05156695 | 92.70217075 | 88.57015127 | 84.6435114 |
| 200403A00016 | 4/3/2020 | 0.63 | 4/17/2023 | 4/3/2020 | 101.44796 | 101.4479638 | 101.4479638 | 101.4479638 | 100.709022 | 97.96630737 | 95.31128143 | 92.74064128 | 90.25122962 |
| 200413A00031 | 4/13/2020 | 0.73 | 4/13/2022 | 4/13/2020 | 100.80184 | 100.8018362 | 100.8018362 | 100.8018362 | 100.4302051 | 98.67400451 | 96.95663154 | 95.27693463 | 93.63380665 |
| 200417A00016 | 4/21/2020 | 2.18 | 4/21/2025 | 4/21/2020 | 109.0738 | 109.0737959 | 109.0737959 | 109.0737959 | 106.8578739 | 102.1028944 | 97.5875777 | 93.29861796 | 89.22351625 |
| 200429A00017 | 5/4/2020 | 0.66 | 8/15/2022 | 5/4/2020 | 100.78284 | 100.7828448 | 100.7828448 | 100.7828448 | 100.2927361 | 98.21238437 | 96.18504151 | 94.20899253 | 92.28259161 |
| 200429A00043 | 5/1/2020 | 1.56 | 4/30/2025 | 5/1/2020 | 106.10317 | 106.1031655 | 106.1031655 | 106.1031655 | 103.8866329 | 99.17921989 | 94.7111853 | 90.46918841 | 86.44069637 |
| 200429A00045 | 5/1/2020 | 1.54 | 4/30/2025 | 5/1/2020 | 106.00585 | 106.005853 | 106.005853 | 106.005853 | 103.7900751 | 99.08497192 | 94.61916309 | 90.37931165 | 86.35288833 |
| 200429A00051 | 5/1/2020 | 2.54 | 4/30/2025 | 5/1/2020 | 110.87148 | 110.871477 | 110.871477 | 110.871477 | 108.617967 | 103.7973705 | 99.22027341 | 94.87314958 | 90.74329038 |
| 200430A00007 | 4/30/2020 | 0.72 | 4/28/2023 | 4/30/2020 | 101.21021 | 101.2102112 | 101.2102112 | 101.2102112 | 100.4623071 | 97.70540233 | 95.03726357 | 92.45457409 | 89.9541593 |
| 200504A00004 | 5/4/2020 | 0.75 | 5/5/2025 | 5/4/2020 | 103.09565 | 103.0956452 | 103.0956452 | 103.0956452 | 100.8720658 | 96.19532602 | 91.75887819 | 87.54922976 | 83.55371063 |
| 200506A00010 | 5/6/2020 | 0.94 | 5/6/2026 | 5/6/2020 | 104.85678 | 104.8567831 | 104.8567831 | 104.8567831 | 101.3785215 | 95.77361183 | 90.5084488 | 85.56082781 | 80.91009956 |
| 200511A00014 | 5/11/2020 | 0.52 | 2/1/2022 | 5/11/2020 | 100.37816 | 100.3781569 | 100.3781569 | 100.3781569 | 100.0700219 | 98.51103061 | 96.98373735 | 95.48724395 | 94.02068583 |
| 200511A00016 | 5/11/2020 | 0.71 | 2/1/2024 | 5/11/2020 | 101.50121 | 101.501214 | 101.501214 | 101.501214 | 100.3160942 | 96.84549761 | 93.51196843 | 90.30935872 | 87.23183205 |
| 200515A00001 | 5/15/2020 | 0.59 | 5/15/2023 | 5/15/2020 | 100.85314 | 100.8531372 | 100.8531372 | 100.8531372 | 100.0847043 | 97.28973699 | 94.58613886 | 91.97045317 | 89.43937278 |
| 200527A00021 | 5/27/2020 | 0.53 | 11/26/2021 | 5/27/2020 | 100.36229 | 100.3622905 | 100.3622905 | 100.3622905 | 100.1064114 | 98.72256938 | 97.36436669 | 96.03115387 | 94.72230285 |
| 200529A00008 | 5/29/2020 | 0.33 | 5/31/2022 | 5/29/2020 | 100.41075 | 100.4107526 | 100.4107526 | 100.4107526 | 99.99291523 | 98.10884249 | 96.2692029 | 94.47268481 | 92.71802403 |
| 200604A00005 | 6/4/2020 | 0.89 | 6/4/2025 | 6/4/2020 | 102.89957 | 102.8995745 | 102.8995745 | 102.8995745 | 100.6154433 | 95.90050111 | 91.43083557 | 87.192497 | 83.17239742 |
| 200309A00016 | 3/9/2020 | 0.77 | 9/12/2022 | 3/9/2020 | 101.05591 | 101.05591 | 101.05591 | 101.05591 | 100.5392376 | 98.382495 | 96.28213047 | 94.23626322 | 92.24309142 |
| 200309A00019 | 3/9/2020 | 0.89 | 3/11/2024 | 3/9/2020 | 102.21582 | 102.2158194 | 102.2158194 | 102.2158194 | 100.9554012 | 97.36977556 | 93.92910467 | 90.62672246 | 87.45631077 |
| 200309A00033 | 3/9/2020 | 1.06 | 3/9/2026 | 3/9/2020 | 104.3154 | 104.3154004 | 104.3154004 | 104.3154004 | 101.1044354 | 95.68858296 | 90.5920393 | 85.79437439 | 81.27657144 |
| 200310A00065 | 3/13/2020 | 1.1 | 3/13/2025 | 3/13/2020 | 103.76071 | 103.760714 | 103.760714 | 103.760714 | 101.6855174 | 97.15177688 | 92.84375212 | 88.7490251 | 84.85593046 |
| 200311A00056 | 3/13/2020 | 1.27 | 4/10/2024 | 3/13/2020 | 103.71322 | 103.7132217 | 103.7132217 | 103.7132217 | 102.3882955 | 98.69912689 | 95.16161189 | 91.76869376 | 88.513686 |
| 200327A00036 | 3/27/2020 | 0.77 | 9/27/2023 | 3/27/2020 | 102.13846 | 102.1384575 | 102.1384575 | 102.1384575 | 101.1619779 | 97.98684346 | 94.92664425 | 91.97653153 | 89.13189478 |
| 200330A00027 | 3/30/2020 | 0.62 | 3/30/2022 | 3/30/2020 | 100.88774 | 100.8877417 | 100.8877417 | 100.8877417 | 100.5278147 | 98.8030693 | 97.11585854 | 95.46502383 | 93.84945484 |
| 200402A00011 | 4/2/2020 | 0.8 | 3/31/2023 | 4/2/2020 | 101.39999 | 101.3999932 | 101.3999932 | 101.3999932 | 100.68493 | 97.99900806 | 95.39748032 | 92.87714401 | 90.43494275 |
| 200406A00013 | 4/6/2020 | 0.83 | 4/1/2022 | 4/6/2020 | 100.96456 | 100.9645567 | 100.9645567 | 100.9645567 | 100.6038207 | 98.87835461 | 97.19044257 | 95.53892975 | 93.92270909 |
| 200408A00019 | 4/10/2020 | 1.7 | 4/11/2022 | 4/10/2020 | 102.54608 | 102.5460761 | 102.5460761 | 102.5460761 | 102.1731971 | 100.406268 | 98.67824689 | 96.9879736 | 95.33433312 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200415A00030 | 4/15/2020 | 0.76 | 3/15/2023 | 4/15/2020 | 101.26821 | 101.2682086 | 101.2682086 | 101.2682086 | 100.5713779 | 97.92811861 | 95.36686835 | 92.88455793 | 90.47825614 |
| 200429A00058 | 5/1/2020 | 1.83 | 4/30/2025 | 5/1/2020 | 107.41688 | 107.416884 | 107.416884 | 107.416884 | 105.1901637 | 100.4515675 | 95.95348509 | 91.68252465 | 87.62610492 |
| 200513A00001 | 5/13/2020 | 0.44 | 5/12/2023 | 5/13/2020 | 100.93229 | 100.9322928 | 100.9322928 | 100.9322928 | 100.16384 | 97.36354006 | 94.6547837 | 92.03410822 | 89.49820078 |
| 200611A00010 | 6/11/2020 | 1.08 | 6/11/2027 | 6/11/2020 | 105.39801 | 105.3980093 | 105.3980093 | 105.3980093 | 100.2167899 | 93.73090349 | 87.70221029 | 82.09629433 | 76.88149072 |
| 200626A00015 | 6/26/2020 | 0.43 | 6/26/2023 | 6/26/2020 | 100.94208 | 100.9420773 | 100.9420773 | 100.9420773 | 100.1125096 | 97.19561272 | 94.3779449 | 91.65559665 | 89.02483526 |
| 200629A00005 | 6/29/2020 | 0.55 | 6/29/2022 | 6/29/2020 | 100.51286 | 100.5128632 | 100.5128632 | 100.5128632 | 100.0680816 | 98.11224885 | 96.20428294 | 94.34271576 | 92.52613448 |
| 200604A00012 | 6/4/2020 | 1.59 | 6/4/2030 | 6/4/2020 | 112.73809 | 112.7380879 | 112.7380879 | 112.13116 | 102.3713602 | 93.34844533 | 85.19411147 | 77.82028738 | 71.14823578 |
| 150827A00029 | 8/27/2015 | 2.74 | 8/27/2024 | 8/27/2015 | 111.03351 | 111.0335064 | 111.0335064 | 111.0335064 | 109.369324 | 105.158381 | 101.1343161 | 97.28780422 | 93.6100401 |
| 150923A00045 | 9/23/2015 | 1.97 | 9/23/2021 | 9/23/2015 | 102.31274 | 102.3127366 | 102.3127366 | 102.3127366 | 102.0880382 | 100.845977 | 99.63400202 | 98.45103051 | 97.29603125 |
| 151002A00041 | 10/2/2015 | 1.76 | 10/4/2021 | 10/2/2015 | 102.10051 | 102.1005143 | 102.1005143 | 102.1005143 | 101.8725575 | 100.6038905 | 99.3652306 | 98.15551735 | 96.97373985 |
| 151002A00047 | 10/2/2015 | 1.64 | 9/2/2020 | 10/2/2015 | 100.24323 | 100.2432305 | 100.2432305 | 100.2432305 | 100.2165466 | 100.0393729 | 99.86282484 | 99.68689917 | 99.51159262 |
| 151002A00081 | 10/2/2015 | 2.29 | 10/2/2023 | 10/2/2015 | 107.15763 | 107.1576341 | 107.1576341 | 107.1576341 | 106.1531921 | 102.8829481 | 99.73072581 | 96.69155292 | 93.76070109 |
| 151014A00030 | 10/14/2015 | 1.68 | 10/14/2020 | 10/14/2015 | 100.41389 | 100.4138863 | 100.4138863 | 100.4138863 | 100.3653373 | 100.072156 | 99.78069615 | 99.49094267 | 99.20288048 |
| 151015A00006 | 10/15/2015 | 1.68 | 10/15/2020 | 10/15/2015 | 100.4178 | 100.4177965 | 100.4177965 | 100.4177965 | 100.3686848 | 100.0727445 | 99.77855814 | 99.48611001 | 99.19538469 |
| 151102A00012 | 11/2/2015 | 2.4 | 11/2/2022 | 11/2/2015 | 104.98007 | 104.9800715 | 104.9800715 | 104.9800715 | 104.4067193 | 102.0700904 | 99.79743664 | 97.58666204 | 95.43575141 |
| 151116A00027 | 11/16/2015 | 2.02 | 11/16/2020 | 11/16/2015 | 100.68127 | 100.6812696 | 100.6812696 | 100.6812696 | 100.613457 | 100.2288849 | 99.84725704 | 99.46853971 | 99.09269959 |
| 151211A00012 | 12/11/2015 | 1.89 | 12/11/2020 | 12/11/2015 | 100.8071 | 100.8070958 | 100.8070958 | 100.8070958 | 100.7241116 | 100.2698348 | 99.81965905 | 99.37352876 | 98.93138945 |
| 151221A00014 | 12/21/2015 | 2.94 | 12/22/2025 | 12/21/2015 | 114.51824 | 114.5182403 | 114.5182403 | 114.5182403 | 111.4939852 | 105.9907757 | 100.7969476 | 95.89347695 | 91.26260554 |
| 160113A00030 | 1/13/2016 | 2.52 | 1/13/2025 | 1/13/2016 | 111.03014 | 111.0301432 | 111.0301432 | 111.0301432 | 109.0363432 | 104.4641767 | 100.1114241 | 95.9663962 | 92.01808922 |
| 160119A00028 | 1/19/2016 | 3.34 | 1/21/2031 | 1/19/2016 | 131.98091 | 131.9809116 | 131.9809116 | 130.6008603 | 119.5609863 | 109.1871014 | 99.8407627 | 91.41362902 | 83.80933962 |
| 160128A00058 | 1/28/2016 | 1.83 | 1/28/2021 | 1/28/2016 | 100.92724 | 100.9272394 | 100.9272394 | 100.9272394 | 100.8163932 | 100.2310177 | 99.65241944 | 99.08048129 | 98.5150888 |
| 160129A00016 | 1/29/2016 | 1.76 | 1/29/2021 | 1/29/2016 | 100.89024 | 100.8902359 | 100.8902359 | 100.8902359 | 100.7788406 | 100.1908554 | 99.60970786 | 99.03527931 | 98.46745384 |
| 160212A00029 | 2/12/2016 | 1.8 | 2/11/2022 | 2/12/2016 | 102.4801 | 102.4801031 | 102.4801031 | 102.4801031 | 102.1600938 | 100.5544697 | 98.98182061 | 97.44119714 | 95.93168602 |
| 160212A00044 | 2/12/2016 | 1.93 | 2/13/2023 | 2/12/2016 | 104.33158 | 104.3315779 | 104.3315779 | 104.3315779 | 103.6582819 | 101.0551666 | 98.53055485 | 96.08159354 | 93.70555327 |
| 160223A00014 | 2/23/2016 | 1.75 | 2/23/2021 | 2/23/2016 | 100.98647 | 100.9864702 | 100.9864702 | 100.9864702 | 100.8608215 | 100.2042039 | 99.55610887 | 98.91637143 | 98.28483073 |
| 160329A00044 | 3/29/2016 | 1.79 | 3/29/2022 | 3/29/2016 | 102.95433 | 102.9543271 | 102.9543271 | 102.9543271 | 102.5916922 | 100.8508163 | 99.14772065 | 97.4812417 | 95.85026402 |
| 160401A00016 | 4/1/2016 | 2.42 | 4/1/2025 | 4/1/2016 | 110.12016 | 110.1201614 | 110.1201614 | 110.1201614 | 107.9489813 | 103.2206732 | 98.72786421 | 94.45753746 | 90.39747049 |
| 160407A00004 | 4/7/2016 | 1.41 | 4/7/2021 | 4/7/2016 | 101.00757 | 101.0075662 | 101.0075662 | 101.0075662 | 100.8556092 | 100.0803462 | 99.31695622 | 98.56516795 | 97.82471849 |
| 160429A00041 | 4/29/2016 | 1.71 | 4/29/2021 | 4/29/2016 | 101.21343 | 101.2134296 | 101.2134296 | 101.2134296 | 101.0461598 | 100.2117795 | 99.39111892 | 98.58384207 | 97.78962381 |
| 160504A00004 | 5/4/2016 | 2.3 | 5/4/2026 | 5/4/2016 | 112.88538 | 112.8853791 | 112.8853791 | 112.8853791 | 109.3246594 | 103.4957796 | 98.01584958 | 92.86221388 | 88.01379697 |
| 160510A00010 | 5/10/2016 | 1.6 | 5/3/2021 | 5/10/2016 | 101.13577 | 101.1357734 | 101.1357734 | 101.1357734 | 100.9656857 | 100.1208103 | 99.29001289 | 98.47294403 | 97.66926575 |
| 160526A00011 | 5/26/2016 | 1.58 | 5/26/2021 | 5/26/2016 | 101.33896 | 101.3389558 | 101.3389558 | 101.3389558 | 101.1515549 | 100.2414662 | 99.34768222 | 98.46976803 | 97.60730395 |
| 160603A00021 | 6/3/2016 | 1.66 | 6/3/2021 | 6/3/2016 | 101.30694 | 101.3069399 | 101.3069399 | 101.3069399 | 101.1148296 | 100.1851182 | 99.27242594 | 98.37628887 | 97.49625995 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160613A00047 | 6/15/2016 | 2.18 | 6/16/2025 | 6/15/2016 | 109.36112 | 109.3611165 | 109.3611165 | 109.3611165 | 106.9920618 | 102.0904864 | 97.4431657 | 93.03561083 | 88.85423175 |
| 160615A00023 | 6/15/2016 | 1.38 | 6/15/2021 | 6/15/2016 | 101.22569 | 101.2256898 | 101.2256898 | 101.2256898 | 101.0271882 | 100.06334 | 99.11779357 | 98.19003168 | 97.27955625 |
| 160616A00028 | 6/16/2016 | 1.81 | 6/16/2023 | 6/16/2016 | 104.52583 | 104.525831 | 104.525831 | 104.525831 | 103.7019239 | 100.7701564 | 97.93650164 | 95.19714676 | 92.54844909 |
| 160624A00006 | 6/24/2016 | 1.52 | 6/24/2021 | 6/24/2016 | 101.23851 | 101.238514 | 101.238514 | 101.238514 | 101.0359442 | 100.0498614 | 99.08293188 | 98.1346021 | 97.20433955 |
| 160624A00063 | 6/24/2016 | 1.52 | 6/24/2022 | 6/24/2016 | 102.81496 | 102.8149603 | 102.8149603 | 102.8149603 | 102.3687335 | 100.395928 | 98.47108913 | 96.59275323 | 94.75951143 |
| 160628A00030 | 6/28/2016 | 1.48 | 6/28/2021 | 6/28/2016 | 101.21198 | 101.2119798 | 101.2119798 | 101.2119798 | 101.0074289 | 100.010673 | 99.03348343 | 98.07528895 | 97.13554024 |
| 160628A00039 | 6/28/2016 | 2.01 | 6/29/2026 | 6/28/2016 | 111.46459 | 111.4645856 | 111.4645856 | 111.4645856 | 107.6828708 | 101.7595539 | 96.20034577 | 90.98099881 | 86.07900008 |
| 160701A00019 | 7/1/2016 | 1.73 | 7/3/2023 | 7/1/2016 | 104.3537 | 104.3536997 | 104.3536997 | 104.3536997 | 103.5061969 | 100.5322468 | 97.65929203 | 94.88334806 | 92.20061093 |
| 160712A00023 | 7/12/2016 | 1.79 | 7/12/2023 | 7/12/2016 | 104.573 | 104.5729992 | 104.5729992 | 104.5729992 | 103.7112891 | 100.7108166 | 97.81281096 | 95.01320337 | 92.30811097 |
| 160725A00010 | 7/25/2016 | 1.61 | 7/26/2021 | 7/25/2016 | 101.44664 | 101.4466435 | 101.4466435 | 101.4466435 | 101.2349126 | 100.1610372 | 99.10982932 | 98.08057743 | 97.0725995 |
| 160726A00024 | 7/26/2016 | 1.61 | 7/26/2021 | 7/26/2016 | 101.44664 | 101.4466435 | 101.4466435 | 101.4466435 | 101.2349126 | 100.1610372 | 99.10982932 | 98.08057743 | 97.0725995 |
| 160728A00022 | 7/28/2016 | 1.37 | 7/28/2021 | 7/28/2016 | 101.36537 | 101.3653654 | 101.3653654 | 101.3653654 | 101.1527602 | 100.0713959 | 99.01301242 | 97.97688376 | 96.9623143 |
| 160811A00011 | 8/11/2016 | 2.25 | 8/11/2026 | 8/11/2016 | 111.94586 | 111.9458619 | 111.9458619 | 111.9458619 | 108.0086567 | 102.0117585 | 96.38785349 | 91.11179339 | 86.1602537 |
| 160825A00054 | 8/29/2016 | 2.49 | 8/30/2021 | 8/29/2016 | 102.61592 | 102.6159171 | 102.6159171 | 102.6159171 | 102.3968942 | 101.2210475 | 100.0721314 | 98.94922905 | 97.85146447 |
| 160829A00037 | 8/31/2016 | 2.35 | 8/31/2021 | 8/31/2016 | 102.45629 | 102.4562942 | 102.4562942 | 102.4562942 | 102.2373015 | 101.0597324 | 99.90920017 | 98.78478203 | 97.68559679 |
| 160906A00017 | 9/6/2016 | 1.65 | 9/7/2021 | 9/6/2016 | 101.65401 | 101.6540109 | 101.6540109 | 101.6540109 | 101.4343679 | 100.242907 | 99.07928702 | 97.94254127 | 96.8317474 |
| 160928A00014 | 9/28/2016 | 1.37 | 9/28/2021 | 9/28/2016 | 101.58066 | 101.5806604 | 101.5806604 | 101.5806604 | 101.3557277 | 100.1049622 | 98.88485071 | 97.69427827 | 96.53218329 |
| 161013A00038 | 10/13/2016 | 1.52 | 10/13/2021 | 10/13/2016 | 101.82846 | 101.8284642 | 101.8284642 | 101.8284642 | 101.5965812 | 100.3095015 | 99.05022966 | 97.81786615 | 96.61155041 |
| 161014A00006 | 10/14/2016 | 1.74 | 10/14/2021 | 10/14/2016 | 101.91218 | 101.9121776 | 101.9121776 | 101.9121776 | 101.6802869 | 100.3936269 | 99.13442362 | 97.90180047 | 96.69491837 |
| 161031A00042 | 10/31/2016 | 1.51 | 7/17/2020 | 10/31/2016 | 100.05666 | 100.0566649 | 100.0566649 | 100.0566649 | 100.05021 | 100.0031252 | 99.95610143 | 99.90913862 | 99.86223666 |
| 161102A00026 | 11/2/2016 | 1.54 | 10/30/2020 | 11/2/2016 | 100.43234 | 100.4323416 | 100.4323416 | 100.4323416 | 100.3748005 | 100.0375492 | 99.70255537 | 99.3697964 | 99.03925007 |
| 161109A00018 | 11/9/2016 | 2.63 | 11/9/2026 | 11/9/2016 | 114.85063 | 114.8506259 | 114.8506259 | 114.8506259 | 110.478408 | 104.18103 | 98.28769804 | 92.7703984 | 87.60319453 |
| 161208A00007 | 12/8/2016 | 2.6 | 12/8/2023 | 12/8/2016 | 107.99713 | 107.9971328 | 107.9971328 | 107.9971328 | 106.880801 | 103.4357464 | 100.1208251 | 96.93043643 | 93.85925107 |
| 161208A00016 | 12/8/2016 | 2.24 | 12/8/2021 | 12/8/2016 | 102.86397 | 102.8639719 | 102.8639719 | 102.8639719 | 102.5955543 | 101.1611451 | 99.75386224 | 98.3730033 | 97.01788947 |
| 161213A00017 | 12/13/2016 | 2.24 | 12/13/2022 | 12/13/2016 | 105.27234 | 105.2723419 | 105.2723419 | 105.2723419 | 104.656523 | 102.1973864 | 99.80873377 | 97.48814545 | 95.23329974 |
| 170110A00022 | 1/10/2017 | 2.27 | 1/10/2023 | 1/10/2017 | 105.51389 | 105.513893 | 105.513893 | 105.513893 | 104.8695798 | 102.3336831 | 99.87236859 | 97.48300299 | 95.16306332 |
| 170111A00012 | 1/11/2017 | 3.31 | 1/11/2030 | 1/11/2017 | 128.63156 | 128.631564 | 128.631564 | 128.4186265 | 118.5208492 | 109.0767972 | 100.4893669 | 92.6756434 | 85.56115756 |
| 170117A00046 | 1/17/2017 | 2.55 | 1/17/2024 | 1/17/2017 | 108.07203 | 108.0720257 | 108.0720257 | 108.0720257 | 106.8838806 | 103.3344613 | 99.92276545 | 96.64269805 | 93.48846881 |
| 170215A00017 | 2/15/2017 | 3.26 | 2/16/2027 | 2/15/2017 | 119.67124 | 119.6712372 | 119.6712372 | 119.6712372 | 114.7812153 | 108.0954045 | 101.8521411 | 96.0196907 | 90.56875815 |
| 170216A00028 | 2/16/2017 | 1.97 | 2/16/2021 | 2/16/2017 | 101.18772 | 101.1877208 | 101.1877208 | 101.1877208 | 101.0656927 | 100.4263321 | 99.79504794 | 99.17168785 | 98.55610317 |
| 170217A00014 | 2/17/2017 | 2.27 | 2/14/2022 | 2/17/2017 | 103.26604 | 103.2660358 | 103.2660358 | 103.2660358 | 102.94219 | 101.3211517 | 99.73350109 | 98.17827245 | 96.65453705 |
| 170310A00026 | 3/10/2017 | 2.15 | 9/8/2020 | 3/10/2017 | 100.36501 | 100.3650075 | 100.3650075 | 100.3650075 | 100.3353051 | 100.1414052 | 99.94826248 | 99.75587262 | 99.56423116 |
| 170313A00033 | 3/13/2017 | 3.31 | 3/15/2027 | 3/13/2017 | 120.2242 | 120.2242009 | 120.2242009 | 120.2242009 | 115.2021084 | 108.4318304 | 102.1138431 | 96.21540915 | 90.70633255 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170329A00015 | 3/29/2017 | 2.11 | 3/29/2021 | 3/29/2017 | 101.39904 | 101.3990411 | 101.3990411 | 101.3990411 | 101.2531736 | 100.5021953 | 99.76232207 | 99.03330902 | 98.31491849 |
| 170404A00007 | 4/4/2017 | 2.22 | 4/4/2022 | 4/4/2017 | 103.44511 | 103.445109 | 103.445109 | 103.445109 | 103.0772082 | 101.3210256 | 99.60313904 | 97.92238264 | 96.27763795 |
| 170410A00007 | 4/10/2017 | 2.1 | 4/11/2022 | 4/10/2017 | 103.57361 | 103.5736105 | 103.5736105 | 103.5736105 | 103.1976842 | 101.4158066 | 99.67322357 | 97.96876138 | 96.30129211 |
| 170417A00057 | 4/17/2017 | 2.32 | 4/17/2023 | 4/17/2017 | 105.71574 | 105.7157355 | 105.7157355 | 105.7157355 | 104.9666682 | 102.1750282 | 99.47192631 | 96.85404338 | 94.31820606 |
| 170417A00069 | 4/17/2018 | 2.07 | 4/16/2021 | 4/17/2018 | 101.45121 | 101.4512069 | 101.4512069 | 101.4512069 | 101.2928771 | 100.4927531 | 99.70523964 | 98.93004016 | 98.16686742 |
| 170419A00024 | 4/19/2017 | 2.45 | 4/21/2025 | 4/19/2017 | 111.33914 | 111.3391426 | 111.3391426 | 111.3391426 | 109.0887865 | 104.2512268 | 99.65755719 | 95.29421978 | 91.14848049 |
| 170501A00008 | 5/1/2017 | 2.23 | 5/2/2022 | 5/1/2017 | 103.5944 | 103.5943978 | 103.5943978 | 103.5943978 | 103.1999306 | 101.366767 | 99.57501959 | 97.82351458 | 96.11111893 |
| 170515A00038 | 5/15/2017 | 2.43 | 5/15/2023 | 5/15/2017 | 106.191 | 106.1910033 | 106.1910033 | 106.1910033 | 105.4049947 | 102.5326697 | 99.7536043 | 97.06428008 | 94.46133063 |
| 170515A00039 | 5/15/2017 | 2.58 | 5/15/2024 | 5/15/2017 | 108.92542 | 108.9254202 | 108.9254202 | 108.9254202 | 107.5044177 | 103.6259736 | 99.90946127 | 96.34729359 | 92.93227769 |
| 170516A00015 | 5/16/2017 | 1.88 | 5/17/2021 | 5/16/2017 | 101.56975 | 101.5697501 | 101.5697501 | 101.5697501 | 101.3887021 | 100.5019536 | 99.63066917 | 98.77444678 | 97.9328983 |
| 170522A00044 | 5/22/2017 | 1.99 | 5/24/2021 | 5/22/2017 | 101.56853 | 101.5685304 | 101.5685304 | 101.5685304 | 101.3827753 | 100.4788707 | 99.59103201 | 98.71883386 | 97.8618657 |
| 170525A00028 | 5/25/2017 | 1.97 | 5/25/2022 | 5/25/2017 | 103.56499 | 103.5649933 | 103.5649933 | 103.5649933 | 103.146836 | 101.2472936 | 99.39207645 | 97.57988668 | 95.80947305 |
| 170530A00005 | 5/30/2017 | 1.99 | 5/28/2021 | 5/30/2017 | 101.58769 | 101.5876901 | 101.5876901 | 101.5876901 | 101.3990062 | 100.4841591 | 99.58576014 | 98.703369 | 97.83656086 |
| 170530A00026 | 5/30/2017 | 1.81 | 6/1/2021 | 5/30/2017 | 101.57785 | 101.5778495 | 101.5778495 | 101.5778495 | 101.38607 | 100.4584749 | 99.54778025 | 98.65352762 | 97.77527508 |
| 170530A00064 | 5/30/2017 | 2.32 | 3/27/2023 | 5/30/2017 | 105.59879 | 105.5987921 | 105.5987921 | 105.5987921 | 104.8752429 | 102.1413945 | 99.49272702 | 96.92602703 | 94.43822717 |
| 170606A00014 | 6/6/2017 | 1.9 | 6/6/2022 | 6/6/2017 | 103.48946 | 103.4894603 | 103.4894603 | 103.4894603 | 103.059678 | 101.1288026 | 99.24370984 | 97.40303728 | 95.60547223 |
| 170609A00006 | 6/9/2017 | 1.89 | 12/9/2021 | 6/9/2017 | 102.59116 | 102.5911559 | 102.5911559 | 102.5911559 | 102.3216381 | 100.8828875 | 99.47145409 | 98.08662798 | 96.72772326 |
| 170609A00007 | 6/9/2017 | 1.96 | 6/9/2022 | 6/9/2017 | 103.62228 | 103.6222792 | 103.6222792 | 103.6222792 | 103.1892633 | 101.2489107 | 99.35474991 | 97.50540053 | 95.69953278 |
| 170609A00025 | 6/9/2017 | 2.13 | 6/9/2022 | 6/9/2017 | 103.62106 | 103.6210589 | 103.6210589 | 103.6210589 | 103.1895305 | 101.2553962 | 99.36719844 | 97.52356742 | 95.7231835 |
| 170623A00028 | 6/23/2017 | 2.79 | 6/23/2027 | 6/23/2017 | 117.39932 | 117.3993167 | 117.3993167 | 117.3993167 | 111.9684347 | 105.0548331 | 98.62229651 | 92.63476853 | 87.05907283 |
| 170629A00015 | 6/29/2017 | 1.92 | 10/26/2020 | 6/29/2017 | 100.54263 | 100.5426348 | 100.5426348 | 100.5426348 | 100.4873021 | 100.1608183 | 99.83645583 | 99.51419388 | 99.19401215 |
| 170630A00009 | 6/30/2017 | 2.53 | 6/30/2025 | 6/30/2017 | 112.19435 | 112.1943464 | 112.1943464 | 112.1943464 | 109.7443479 | 104.7069567 | 99.93269034 | 95.40642771 | 91.11399461 |
| 170630A00036 | 6/30/2017 | 2.01 | 6/30/2022 | 6/30/2017 | 103.8306 | 103.8306045 | 103.8306045 | 103.8306045 | 103.3763712 | 101.376894 | 99.42636988 | 97.52329339 | 95.66621603 |
| 170713A00033 | 7/13/2017 | 1.72 | 7/13/2020 | 7/13/2017 | 100.0579 | 100.0579042 | 100.0579042 | 100.0579042 | 100.0529568 | 100.0168667 | 99.98082005 | 99.94481695 | 99.90885726 |
| 170714A00006 | 7/14/2017 | 1.67 | 7/14/2020 | 7/14/2017 | 100.06041 | 100.0604141 | 100.0604141 | 100.0604141 | 100.0550864 | 100.0162225 | 99.9774066 | 99.9386386 | 99.89991842 |
| 170725A00001 | 7/25/2017 | 1.88 | 7/27/2020 | 7/25/2017 | 100.11919 | 100.1191923 | 100.1191923 | 100.1191923 | 100.1089362 | 100.0341351 | 99.95945181 | 99.88488612 | 99.81043776 |
| 170728A00030 | 7/28/2017 | 2.18 | 7/27/2022 | 7/28/2017 | 103.94938 | 103.9493798 | 103.9493798 | 103.9493798 | 103.4703171 | 101.4054198 | 99.39210581 | 97.42874265 | 95.51376205 |
| 170728A00032 | 7/28/2017 | 2.36 | 7/27/2023 | 7/28/2017 | 106.40303 | 106.4030295 | 106.4030295 | 106.4030295 | 105.5123084 | 102.4449469 | 99.48311261 | 96.62257426 | 93.85929662 |
| 170731A00027 | 7/31/2017 | 2 | 7/30/2021 | 7/31/2017 | 101.8887 | 101.8886976 | 101.8886976 | 101.8886976 | 101.6755597 | 100.5882851 | 99.52416668 | 98.48247117 | 97.46249585 |
| 170803A00005 | 8/3/2017 | 1.67 | 8/3/2020 | 8/3/2017 | 100.14672 | 100.1467184 | 100.1467184 | 100.1467184 | 100.1335731 | 100.0392224 | 99.94505474 | 99.85106955 | 99.75726627 |
| 170803A00019 | 8/3/2017 | 2.14 | 8/3/2022 | 8/3/2017 | 103.90128 | 103.9012767 | 103.9012767 | 103.9012767 | 103.4155946 | 101.3328071 | 99.30236413 | 97.32259629 | 95.39190049 |
| 170808A00037 | 8/8/2017 | 2.19 | 12/15/2022 | 8/8/2017 | 104.70762 | 104.7076214 | 104.7076214 | 104.7076214 | 104.0939492 | 101.6460266 | 99.26827832 | 96.95829541 | 94.71376632 |
| 170809A00005 | 8/9/2017 | 2.61 | 8/11/2025 | 8/9/2017 | 111.86195 | 111.8619503 | 111.8619503 | 111.8619503 | 109.3108598 | 104.2081672 | 99.37614561 | 94.79899771 | 90.46193243 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170809A00023 | 8/9/2017 | 2.86 | 8/9/2027 | 8/9/2017 | 118.21634 | 118.2163365 | 118.2163365 | 118.2163365 | 112.5621859 | 105.5124909 | 98.9605324 | 92.86845639 | 87.2014788 |
| 170811A00015 | 8/11/2017 | 1.81 | 8/11/2020 | 8/11/2017 | 100.17836 | 100.1783617 | 100.1783617 | 100.1783617 | 100.1616486 | 100.0453138 | 99.92926267 | 99.81349414 | 99.69800716 |
| 170815A00027 | 8/15/2017 | 1.85 | 8/17/2020 | 8/15/2017 | 100.20917 | 100.2091692 | 100.2091692 | 100.2091692 | 100.1897628 | 100.0568189 | 99.92424211 | 99.79203089 | 99.6601837 |
| 170830A00030 | 8/30/2017 | 2 | 3/30/2022 | 8/30/2017 | 103.02956 | 103.0295633 | 103.0295633 | 103.0295633 | 102.667053 | 100.9281634 | 99.22696583 | 97.56229994 | 95.93305363 |
| 170830A00047 | 8/30/2017 | 1.61 | 8/31/2020 | 8/30/2017 | 100.2572 | 100.2572025 | 100.2572025 | 100.2572025 | 100.2314709 | 100.059515 | 99.8881465 | 99.71736252 | 99.54716005 |
| 170831A00008 | 8/31/2017 | 1.78 | 8/31/2020 | 8/31/2017 | 100.25978 | 100.2597836 | 100.2597836 | 100.2597836 | 100.2340944 | 100.062419 | 99.89132695 | 99.72081517 | 99.55088081 |
| 170831A00022 | 8/31/2017 | 2.27 | 2/29/2024 | 8/31/2017 | 107.30179 | 107.3017877 | 107.3017877 | 107.3017877 | 106.037824 | 102.3866564 | 98.881079 | 95.51446653 | 92.28053599 |
| 170831A00047 | 8/31/2017 | 1.6 | 8/31/2020 | 8/31/2017 | 100.25548 | 100.2554805 | 100.2554805 | 100.2554805 | 100.2297492 | 100.0577955 | 99.88642929 | 99.71564751 | 99.54544724 |
| 170831A00049 | 8/31/2017 | 1.68 | 3/1/2021 | 8/31/2017 | 101.05772 | 101.0577226 | 101.0577226 | 101.0577226 | 100.9283656 | 100.2539107 | 99.58843686 | 98.93176573 | 98.2837236 |
| 170831A00054 | 8/31/2017 | 1.85 | 6/30/2022 | 8/31/2017 | 103.50657 | 103.5065653 | 103.5065653 | 103.5065653 | 103.0529972 | 101.05686 | 99.10961023 | 97.20974437 | 95.3558157 |
| 170911A00023 | 9/11/2017 | 1.77 | 9/11/2020 | 9/11/2017 | 100.30355 | 100.3035546 | 100.3035546 | 100.3035546 | 100.2723688 | 100.0702814 | 99.86901849 | 99.6685751 | 99.46894616 |
| 170913A00025 | 9/13/2017 | 1.94 | 8/16/2021 | 9/13/2017 | 101.90153 | 101.9015254 | 101.9015254 | 101.9015254 | 101.6855885 | 100.5521254 | 99.44383193 | 98.35987684 | 97.29946508 |
| 170913A00027 | 9/13/2017 | 2.08 | 9/13/2022 | 9/13/2017 | 103.97649 | 103.9764901 | 103.9764901 | 103.9764901 | 103.452122 | 101.2597709 | 99.12460381 | 97.04471352 | 95.01827305 |
| 171003A00005 | 10/3/2017 | 1.92 | 10/5/2020 | 10/3/2017 | 100.44333 | 100.4433306 | 100.4433306 | 100.4433306 | 100.3998278 | 100.1313686 | 99.86434678 | 99.5987509 | 99.33456953 |
| 171004A00017 | 10/4/2017 | 1.89 | 10/5/2020 | 10/4/2017 | 100.43525 | 100.4352512 | 100.4352512 | 100.4352512 | 100.3917506 | 100.1233058 | 99.85629832 | 99.59071672 | 99.32654955 |
| 171013A00021 | 10/13/2017 | 2 | 10/17/2022 | 10/13/2017 | 104.37886 | 104.3788587 | 104.3788587 | 104.3788587 | 103.8196618 | 101.5237502 | 99.28990461 | 97.11605734 | 95.00022451 |
| 171025A00026 | 10/25/2017 | 2.64 | 10/25/2024 | 10/25/2017 | 110.209 | 110.208999 | 110.208999 | 110.208999 | 108.4262347 | 104.1014701 | 99.97470654 | 96.03585851 | 92.27540651 |
| 171025A00027 | 10/25/2017 | 2.36 | 10/25/2022 | 10/25/2017 | 104.8398 | 104.8398014 | 104.8398014 | 104.8398014 | 104.27428 | 101.9604484 | 99.70947035 | 97.519277 | 95.38788078 |
| 171026A00004 | 10/26/2017 | 2 | 10/26/2020 | 10/26/2017 | 100.56884 | 100.5688427 | 100.5688427 | 100.5688427 | 100.5135014 | 100.1869636 | 99.86254729 | 99.54023182 | 99.21999682 |
| 171026A00006 | 10/26/2017 | 2.32 | 10/26/2022 | 10/26/2017 | 104.75163 | 104.7516269 | 104.7516269 | 104.7516269 | 104.185393 | 101.8699855 | 99.61754238 | 97.42599346 | 95.29334962 |
| 171026A00008 | 10/26/2017 | 2.6 | 10/25/2024 | 10/26/2017 | 110.03482 | 110.0348185 | 110.0348185 | 110.0348185 | 108.2531559 | 103.9321113 | 99.80894402 | 95.87357372 | 92.11648577 |
| 171031A00007 | 10/31/2017 | 2.15 | 12/27/2021 | 10/31/2017 | 102.81644 | 102.8164402 | 102.8164402 | 102.8164402 | 102.5333314 | 101.0495112 | 99.59469563 | 98.16810898 | 96.76900279 |
| 171031A00029 | 10/31/2017 | 2.43 | 10/31/2023 | 10/31/2017 | 107.18441 | 107.1844093 | 107.1844093 | 107.1844093 | 106.136975 | 102.8060148 | 99.59744139 | 96.5061359 | 93.52721986 |
| 171101A00022 | 11/1/2017 | 2.65 | 11/1/2024 | 11/1/2017 | 110.29781 | 110.2978061 | 110.2978061 | 110.2978061 | 108.4982856 | 104.1538113 | 100.008999 | 96.05366466 | 92.27819446 |
| 171115A00028 | 11/15/2017 | 2.25 | 8/18/2021 | 11/15/2017 | 102.26666 | 102.2666612 | 102.2666612 | 102.2666612 | 102.0499783 | 100.9088703 | 99.79320621 | 98.70214215 | 97.63487104 |
| 171120A00017 | 11/20/2017 | 2.41 | 11/21/2022 | 11/20/2017 | 105.11429 | 105.1142873 | 105.1142873 | 105.1142873 | 104.5226256 | 102.133056 | 99.81024361 | 97.55195584 | 95.35604798 |
| 171122A00012 | 11/22/2017 | 2.22 | 11/23/2020 | 11/22/2017 | 100.79651 | 100.7965131 | 100.7965131 | 100.7965131 | 100.7244488 | 100.3203662 | 99.9195251 | 99.5218867 | 99.12741268 |
| 171130A00003 | 11/30/2017 | 2.22 | 11/30/2020 | 11/30/2017 | 100.83458 | 100.8345813 | 100.8345813 | 100.8345813 | 100.7582962 | 100.3348927 | 99.91503424 | 99.49867655 | 99.08577609 |
| 171206A00010 | 12/6/2017 | 2.45 | 12/6/2022 | 12/6/2017 | 105.30012 | 105.3001249 | 105.3001249 | 105.3001249 | 104.6936294 | 102.2618097 | 99.89899666 | 97.60284503 | 95.37110353 |
| 171208A00007 | 12/8/2017 | 2.47 | 12/9/2024 | 12/8/2017 | 110.57292 | 110.572919 | 110.572919 | 110.572919 | 108.66856 | 104.1956783 | 99.93356487 | 95.87119974 | 91.99819602 |
| 171214A00005 | 12/14/2017 | 2.29 | 12/14/2022 | 12/14/2017 | 105.40262 | 105.4026167 | 105.4026167 | 105.4026167 | 104.7854702 | 102.3220755 | 99.92935016 | 97.60486574 | 95.34629215 |
| 171228A00089 | 12/28/2017 | 2.13 | 12/28/2020 | 12/28/2017 | 101.01143 | 101.0114269 | 101.0114269 | 101.0114269 | 100.9181726 | 100.416599 | 99.92000277 | 99.42831025 | 98.94144902 |
| 180102A00004 | 1/2/2018 | 2.28 | 1/8/2021 | 1/2/2018 | 101.08474 | 101.0847382 | 101.0847382 | 101.0847382 | 100.9852225 | 100.4540309 | 99.9284225 | 99.40830949 | 98.89360596 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180104A00018 | 1/4/2018 | 2.97 | 1/4/2027 | 1/4/2018 | 117.42931 | 117.4293101 | 117.4293101 | 117.4293101 | 112.7682719 | 106.2588058 | 100.1748396 | 94.48626852 | 89.16526833 |
| 180125A00022 | 1/25/2018 | 2.69 | 1/25/2023 | 1/25/2018 | 106.22131 | 106.2213092 | 106.2213092 | 106.2213092 | 105.5625237 | 102.987853 | 100.4894812 | 98.06468631 | 95.71086189 |
| 180205A00019 | 2/5/2018 | 2.88 | 2/5/2025 | 2/5/2018 | 112.85897 | 112.8589671 | 112.8589671 | 112.8589671 | 110.7942076 | 106.1204103 | 101.6728793 | 97.43943978 | 93.40863912 |
| 180215A00044 | 2/15/2018 | 2.64 | 2/1/2021 | 2/15/2018 | 101.43025 | 101.4302496 | 101.4302496 | 101.4302496 | 101.3168197 | 100.718795 | 100.127813 | 99.54374997 | 98.96648496 |
| 180220A00027 | 2/20/2018 | 2.69 | 2/19/2021 | 2/20/2018 | 101.58058 | 101.5805775 | 101.5805775 | 101.5805775 | 101.4568091 | 100.808938 | 100.1693329 | 99.53783614 | 98.9142942 |
| 180226A00043 | 2/26/2018 | 2.73 | 9/27/2021 | 2/26/2018 | 103.08933 | 103.0893292 | 103.0893292 | 103.0893292 | 102.8632743 | 101.608314 | 100.3839183 | 99.18898071 | 98.02244745 |
| 180307A00010 | 3/7/2018 | 2.68 | 2/16/2021 | 3/7/2018 | 101.55411 | 101.5541077 | 101.5541077 | 101.5541077 | 101.4320632 | 100.7925027 | 100.1610009 | 99.5374061 | 98.92157036 |
| 180308A00016 | 3/8/2018 | 2.88 | 6/1/2022 | 3/8/2018 | 105.0366 | 105.0365979 | 105.0365979 | 105.0365979 | 104.6101985 | 102.6836853 | 100.802364 | 98.96490294 | 97.17001811 |
| 180313A00022 | 3/13/2018 | 2.54 | 3/12/2021 | 3/13/2018 | 101.71434 | 101.7143395 | 101.7143395 | 101.7143395 | 101.5780181 | 100.8709039 | 100.1736276 | 99.48598451 | 98.8077759 |
| 180328A00006 | 3/28/2018 | 2.73 | 3/26/2021 | 3/28/2018 | 101.84637 | 101.8463715 | 101.8463715 | 101.8463715 | 101.7019358 | 100.9572926 | 100.2235384 | 99.50043575 | 98.78775378 |
| 180328A00008 | 3/28/2018 | 2.85 | 3/25/2022 | 3/28/2018 | 104.49646 | 104.4964628 | 104.4964628 | 104.4964628 | 104.1359208 | 102.3969751 | 100.6954636 | 99.03024211 | 97.40021341 |
| 180329A00003 | 3/29/2018 | 3.08 | 3/29/2028 | 3/29/2018 | 123.16346 | 123.1634618 | 123.1634618 | 123.1634618 | 116.2958377 | 108.4661679 | 101.2321032 | 94.54496174 | 88.36029302 |
| 180329A00010 | 3/29/2018 | 2.76 | 3/29/2021 | 3/29/2018 | 101.88963 | 101.8896265 | 101.8896265 | 101.8896265 | 101.7433865 | 100.9903682 | 100.2484761 | 99.51746524 | 98.79709746 |
| 180403A00005 | 4/3/2018 | 2.72 | 4/3/2023 | 4/3/2018 | 107.26444 | 107.2644385 | 107.2644385 | 107.2644385 | 106.5241891 | 103.7373087 | 101.0378223 | 98.42242285 | 95.88795355 |
| 180418A00021 | 4/18/2018 | 2.85 | 4/19/2021 | 4/18/2018 | 102.10025 | 102.1002489 | 102.1002489 | 102.1002489 | 101.9392739 | 101.1280983 | 100.3298224 | 99.54414012 | 98.77075487 |
| 180425A00023 | 4/25/2018 | 2.97 | 4/23/2021 | 4/25/2018 | 102.22773 | 102.2277306 | 102.2277306 | 102.2277306 | 102.0638284 | 101.2411674 | 100.4317576 | 99.63528084 | 98.85142865 |
| 180427A00011 | 4/27/2018 | 3.03 | 4/27/2022 | 4/27/2018 | 105.04347 | 105.0434679 | 105.0434679 | 105.0434679 | 104.6510976 | 102.8176533 | 101.0253174 | 99.27291866 | 97.55932724 |
| 180510A00024 | 5/10/2018 | 2.77 | 5/10/2021 | 5/10/2018 | 102.31133 | 102.3113333 | 102.3113333 | 102.3113333 | 102.1347379 | 101.2635283 | 100.4071677 | 99.56527834 | 98.73749554 |
| 180514A00030 | 5/14/2018 | 2.9 | 5/16/2022 | 5/14/2018 | 105.28626 | 105.2862619 | 105.2862619 | 105.2862619 | 104.8735791 | 102.9810089 | 101.1320271 | 99.32537236 | 97.55982803 |
| 180514A00035 | 5/14/2018 | 3.07 | 5/14/2024 | 5/14/2018 | 111.56541 | 111.5654061 | 111.5654061 | 111.5654061 | 110.1240404 | 106.1778458 | 102.3962187 | 98.771446 | 95.29621616 |
| 180515A00035 | 5/16/2018 | 2.98 | 5/17/2021 | 5/16/2018 | 102.41661 | 102.4166074 | 102.4166074 | 102.4166074 | 102.2351768 | 101.346166 | 100.4726097 | 99.61410706 | 98.77027121 |
| 180517A00036 | 5/17/2018 | 2.74 | 9/17/2020 | 5/17/2018 | 100.57546 | 100.5754589 | 100.5754589 | 100.5754589 | 100.5411591 | 100.3217361 | 100.1032843 | 99.88579709 | 99.66926814 |
| 180521A00025 | 5/21/2018 | 3.24 | 5/21/2025 | 5/21/2018 | 115.43997 | 115.4399672 | 115.4399672 | 115.4399672 | 113.0754655 | 108.0628855 | 103.3055434 | 98.78911141 | 94.50013809 |
| 180521A00072 | 5/21/2018 | 2.96 | 5/23/2022 | 5/21/2018 | 105.45546 | 105.4554605 | 105.4554605 | 105.4554605 | 105.0356097 | 103.1227936 | 101.2544218 | 99.42919674 | 97.64586711 |
| 180529A00060 | 5/29/2018 | 2.83 | 6/1/2021 | 5/29/2018 | 102.38977 | 102.3897659 | 102.3897659 | 102.3897659 | 102.1976292 | 101.2678936 | 100.3550453 | 99.45862744 | 98.57819933 |
| 180530A00006 | 5/30/2018 | 2.87 | 5/31/2022 | 5/30/2018 | 105.01006 | 105.0100572 | 105.0100572 | 105.0100572 | 104.5847008 | 102.6611754 | 100.7827105 | 98.94797971 | 97.15570487 |
| 180530A00084 | 5/30/2018 | 2.61 | 6/1/2021 | 5/30/2018 | 102.32407 | 102.3240676 | 102.3240676 | 102.3240676 | 102.1315751 | 101.2002199 | 100.2858131 | 99.38789538 | 98.50602372 |
| 180604A00045 | 6/4/2018 | 2.87 | 6/4/2021 | 6/4/2018 | 102.44866 | 102.448656 | 102.448656 | 102.448656 | 102.2549425 | 101.3167271 | 100.3957059 | 99.49140928 | 98.60338474 |
| 180604A00047 | 6/4/2018 | 2.97 | 6/3/2022 | 6/4/2018 | 105.22614 | 105.2261427 | 105.2261427 | 105.2261427 | 104.7973901 | 102.8635451 | 100.9751819 | 99.13095645 | 97.329573 |
| 180604A00050 | 6/4/2018 | 3.15 | 6/4/2024 | 6/4/2018 | 111.30949 | 111.3094905 | 111.3094905 | 111.3094905 | 109.8349441 | 105.8586787 | 102.0500552 | 98.40112813 | 94.90437075 |
| 180614A00006 | 6/14/2018 | 2.94 | 6/14/2021 | 6/14/2018 | 102.58845 | 102.5884463 | 102.5884463 | 102.5884463 | 102.3895287 | 101.4233284 | 100.4753511 | 99.54508448 | 98.6320353 |
| 180615A00069 | 6/15/2018 | 2.86 | 6/15/2022 | 6/15/2018 | 105.43818 | 105.4381792 | 105.4381792 | 105.4381792 | 104.9955845 | 103.020576 | 101.092887 | 99.21109206 | 97.3738186 |
| 180619A00031 | 6/19/2018 | 2.74 | 6/21/2021 | 6/19/2018 | 102.5907 | 102.5906962 | 102.5906962 | 102.5906962 | 102.3877833 | 101.4003933 | 100.4320216 | 99.48212253 | 98.55017096 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180625A00009 | 6/25/2018 | 3 | 6/27/2022 | 6/25/2018 | 105.44378 | 105.4437764 | 105.4437764 | 105.4437764 | 104.9908918 | 102.9898527 | 101.037412 | 99.13208508 | 97.27244335 |
| 180626A00045 | 6/26/2018 | 2.91 | 6/25/2021 | 6/26/2018 | 102.62987 | 102.6298742 | 102.6298742 | 102.6298742 | 102.4253741 | 101.429131 | 100.4522462 | 99.49415935 | 98.55433155 |
| 180627A00017 | 6/27/2018 | 2.9 | 6/25/2021 | 6/27/2018 | 102.61989 | 102.6198891 | 102.6198891 | 102.6198891 | 102.4153993 | 101.4192097 | 100.4423777 | 99.48434288 | 98.54456645 |
| 180628A00081 | 6/28/2018 | 2.72 | 6/21/2021 | 6/28/2018 | 102.57093 | 102.570931 | 102.570931 | 102.570931 | 102.3680382 | 101.3807532 | 100.4124852 | 99.46268844 | 98.53083779 |
| 180629A00039 | 6/29/2018 | 2.91 | 6/29/2021 | 6/29/2018 | 102.65901 | 102.6590142 | 102.6590142 | 102.6590142 | 102.45246 | 101.445174 | 100.4576661 | 99.48935797 | 98.53969369 |
| 180703A00015 | 7/3/2018 | 3.06 | 7/3/2023 | 7/3/2018 | 108.39147 | 108.3914663 | 108.3914663 | 108.3914663 | 107.5297855 | 104.4947304 | 101.5622131 | 98.72819769 | 95.98883069 |
| 180719A00064 | 7/19/2018 | 3.3 | 7/21/2025 | 7/19/2018 | 115.24136 | 115.2413616 | 115.2413616 | 115.2413616 | 112.7241562 | 107.589876 | 102.7242128 | 98.11166615 | 93.73771199 |
| 180720A00030 | 7/20/2018 | 2.79 | 7/20/2021 | 7/20/2018 | 102.85512 | 102.8551173 | 102.8551173 | 102.8551173 | 102.6427035 | 101.5745479 | 100.5285963 | 99.50416139 | 98.5005839 |
| 180723A00027 | 1/23/2019 | 3.13 | 1/24/2022 | 1/23/2019 | 104.51728 | 104.5172756 | 104.5172756 | 104.5172756 | 104.209126 | 102.6373396 | 101.0971765 | 99.58775187 | 98.10821345 |
| 180723A00029 | 6/21/2019 | 3.17 | 6/21/2022 | 6/21/2019 | 105.73847 | 105.738471 | 105.738471 | 105.738471 | 105.2909355 | 103.3032284 | 101.3633981 | 99.4699942 | 97.62162004 |
| 180724A00075 | 7/24/2018 | 2.98 | 7/24/2023 | 7/24/2018 | 108.87762 | 108.877622 | 108.877622 | 108.877622 | 107.9780514 | 104.8669593 | 101.8626488 | 98.96084335 | 96.1574639 |
| 180725A00027 | 7/25/2018 | 2.95 | 12/17/2020 | 7/25/2018 | 101.27653 | 101.2765345 | 101.2765345 | 101.2765345 | 101.1898739 | 100.7185191 | 100.2515611 | 99.78893859 | 99.3305912 |
| 180725A00029 | 7/25/2018 | 2.98 | 4/16/2021 | 7/25/2018 | 102.1834 | 102.1833966 | 102.1833966 | 102.1833966 | 102.02447 | 101.2211144 | 100.4304051 | 99.65204498 | 98.8857462 |
| 180727A00037 | 7/27/2018 | 3.13 | 7/27/2023 | 7/27/2018 | 108.79154 | 108.7915443 | 108.7915443 | 108.7915443 | 107.8921689 | 104.7879091 | 101.7901227 | 98.89454651 | 96.09711457 |
| 180727A00039 | 7/27/2018 | 3.48 | 7/27/2028 | 7/27/2018 | 125.6781 | 125.6781013 | 125.6781013 | 125.6781013 | 118.2854155 | 110.1480443 | 102.648612 | 95.73339952 | 89.35348449 |
| 180730A00023 | 7/30/2018 | 3.13 | 7/30/2024 | 7/30/2018 | 112.44168 | 112.4416777 | 112.4416777 | 112.4416777 | 110.8316132 | 106.6647417 | 102.6797383 | 98.86767106 | 95.22009716 |
| 180730A00033 | 7/30/2018 | 3.11 | 7/29/2022 | 7/30/2018 | 105.91423 | 105.9142256 | 105.9142256 | 105.9142256 | 105.4289922 | 103.3378803 | 101.2989895 | 99.31066464 | 97.37131602 |
| 180730A00041 | 7/30/2018 | 3.14 | 7/31/2023 | 7/30/2018 | 108.85394 | 108.8539359 | 108.8539359 | 108.8539359 | 107.9482887 | 104.8325597 | 101.8239653 | 98.91820398 | 96.11117386 |
| 180730A00081 | 7/30/2018 | 3.5 | 7/28/2028 | 7/30/2018 | 125.84855 | 125.8485494 | 125.8485494 | 125.8485494 | 118.4474158 | 110.3012684 | 102.7937878 | 95.87118542 | 89.4844764 |
| 180801A00009 | 8/1/2018 | 2.98 | 3/15/2021 | 8/1/2018 | 101.94978 | 101.9497765 | 101.9497765 | 101.9497765 | 101.8117653 | 101.0967867 | 100.3918488 | 99.69674109 | 99.01125867 |
| 180801A00011 | 8/1/2018 | 3 | 5/14/2021 | 8/1/2018 | 102.41165 | 102.4116521 | 102.4116521 | 102.4116521 | 102.2324183 | 101.3516098 | 100.4859732 | 99.63511863 | 98.79866947 |
| 180814A00010 | 8/14/2018 | 3.1 | 8/14/2025 | 8/14/2018 | 115.44737 | 115.4473747 | 115.4473747 | 115.4473747 | 112.8353468 | 107.6028106 | 102.6478179 | 97.95414263 | 93.50659526 |
| 180815A00008 | 8/15/2018 | 2.85 | 8/14/2020 | 8/15/2018 | 100.32106 | 100.3210588 | 100.3210588 | 100.3210588 | 100.3029786 | 100.1781968 | 100.0537399 | 99.92960675 | 99.80579606 |
| 180815A00021 | 8/15/2018 | 3.01 | 8/15/2023 | 8/15/2018 | 108.56149 | 108.5614936 | 108.5614936 | 108.5614936 | 107.6334552 | 104.4828822 | 101.4417623 | 98.5056526 | 95.67031918 |
| 180817A00022 | 8/17/2018 | 2.87 | 8/17/2023 | 8/17/2018 | 108.71924 | 108.7192361 | 108.7192361 | 108.7192361 | 107.7828031 | 104.610686 | 101.5491993 | 98.59383513 | 95.74029875 |
| 180820A00017 | 8/20/2018 | 3 | 8/18/2023 | 8/20/2018 | 108.55232 | 108.5523177 | 108.5523177 | 108.5523177 | 107.6196256 | 104.4613325 | 101.4129791 | 98.47009332 | 95.62841382 |
| 180820A00055 | 8/20/2018 | 3.37 | 8/21/2028 | 8/20/2018 | 124.99619 | 124.996185 | 124.996185 | 124.996185 | 117.5033244 | 109.3352233 | 101.8126957 | 94.8809759 | 88.49022435 |
| 180823A00053 | 8/23/2018 | 3.2 | 8/23/2028 | 8/23/2018 | 125.34852 | 125.3485243 | 125.3485243 | 125.3485243 | 117.7499595 | 109.4950667 | 101.8956148 | 94.89579935 | 88.44485174 |
| 180827A00020 | 8/27/2018 | 3.21 | 8/27/2025 | 8/27/2018 | 115.07762 | 115.0776169 | 115.0776169 | 115.0776169 | 112.449466 | 107.225978 | 102.2803025 | 97.59614955 | 93.15827294 |
| 180830A00033 | 8/30/2018 | 2.87 | 8/31/2020 | 8/30/2018 | 100.44744 | 100.4474401 | 100.4474401 | 100.4474401 | 100.4217158 | 100.2497992 | 100.0784665 | 99.90771486 | 99.73754127 |
| 180904A00004 | 9/4/2018 | 2.89 | 9/5/2023 | 9/4/2018 | 108.92839 | 108.9283875 | 108.9283875 | 108.9283875 | 107.9609759 | 104.734955 | 101.6228663 | 98.62000391 | 95.72188821 |
| 180904A00012 | 9/4/2018 | 3.35 | 9/4/2030 | 9/4/2018 | 133.16949 | 133.1694878 | 133.1694878 | 132.2513282 | 121.4021368 | 111.1549644 | 101.8931343 | 93.51570427 | 85.9325957 |
| 180906A00004 | 9/6/2018 | 2.92 | 9/7/2021 | 9/6/2018 | 103.18235 | 103.1823476 | 103.1823476 | 103.1823476 | 102.9608457 | 101.759661 | 100.586475 | 99.44031691 | 98.32026015 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180913A00030 | 9/13/2018 | 3.33 | 9/12/2025 | 9/13/2018 | 115.83271 | 115.8327146 | 115.8327146 | 115.8327146 | 113.1465617 | 107.8628139 | 102.8618711 | 98.12703696 | 93.6426932 |
| 180914A00008 | 9/14/2018 | 3.15 | 9/14/2023 | 9/14/2018 | 109.23874 | 109.2387353 | 109.2387353 | 109.2387353 | 108.2604797 | 105.0193373 | 101.8930416 | 98.8768284 | 95.96616397 |
| 180914A00046 | 9/14/2018 | 2.93 | 9/14/2021 | 9/14/2018 | 103.44165 | 103.4416507 | 103.4416507 | 103.4416507 | 103.2176495 | 101.9927359 | 100.7968662 | 99.62901604 | 98.4882087 |
| 180918A00011 | 9/18/2018 | 3.17 | 9/18/2023 | 9/18/2018 | 109.33505 | 109.3350494 | 109.3350494 | 109.3350494 | 108.3499513 | 105.0964422 | 101.9585353 | 98.9314208 | 96.0105222 |
| 180918A00013 | 9/18/2018 | 3.11 | 9/16/2022 | 9/18/2018 | 106.29506 | 106.2950631 | 106.2950631 | 106.2950631 | 105.7625007 | 103.5357916 | 101.367191 | 99.25475665 | 97.19662809 |
| 180920A00035 | 9/20/2018 | 3.16 | 9/20/2022 | 9/20/2018 | 106.43846 | 106.4384631 | 106.4384631 | 106.4384631 | 105.9018131 | 103.6625371 | 101.4819181 | 99.35798686 | 97.28885769 |
| 180921A00039 | 9/21/2018 | 3.15 | 9/21/2022 | 9/21/2018 | 106.42385 | 106.4238486 | 106.4238486 | 106.4238486 | 105.8862948 | 103.6444502 | 101.4613882 | 99.3351332 | 97.26379343 |
| 180924A00044 | 9/24/2018 | 3.1 | 9/24/2021 | 9/24/2018 | 103.53166 | 103.5316591 | 103.5316591 | 103.5316591 | 103.3057482 | 102.0560195 | 100.8365149 | 99.64614701 | 98.48388043 |
| 180927A00030 | 9/27/2018 | 3.01 | 10/27/2020 | 9/27/2018 | 100.90735 | 100.9073459 | 100.9073459 | 100.9073459 | 100.8513313 | 100.5213411 | 100.1935099 | 99.86781657 | 99.54424036 |
| 181010A00018 | 10/10/2018 | 3.17 | 6/1/2021 | 10/10/2018 | 102.70667 | 102.7066711 | 102.7066711 | 102.7066711 | 102.5142322 | 101.5829024 | 100.6684803 | 99.77050842 | 98.88854582 |
| 181026A00019 | 10/29/2018 | 3.09 | 10/16/2020 | 10/29/2018 | 100.84742 | 100.8474227 | 100.8474227 | 100.8474227 | 100.7976129 | 100.4980544 | 100.2002867 | 99.90429355 | 99.61005917 |
| 181109A00028 | 11/9/2018 | 3.72 | 11/9/2026 | 11/9/2018 | 121.81439 | 121.8143863 | 121.8143863 | 121.8143863 | 117.3483359 | 110.837232 | 104.739968 | 99.02798886 | 93.67485108 |
| 181113A00066 | 11/13/2018 | 3.25 | 11/15/2021 | 11/13/2018 | 104.14738 | 104.1473764 | 104.1473764 | 104.1473764 | 103.8939147 | 102.5121387 | 101.1554397 | 99.82319333 | 98.5147953 |
| 181114A00026 | 11/14/2018 | 3.32 | 12/14/2022 | 11/14/2018 | 107.50728 | 107.5072763 | 107.5072763 | 107.5072763 | 106.8871008 | 104.4068075 | 101.997311 | 99.65618645 | 97.38110707 |
| 181120A00024 | 11/20/2018 | 3.25 | 11/20/2023 | 11/20/2018 | 110.10678 | 110.1067833 | 110.1067833 | 110.1067833 | 109.0128442 | 105.579202 | 102.2731722 | 99.08934412 | 96.02256519 |
| 181121A00016 | 11/21/2018 | 3.29 | 11/21/2023 | 11/21/2018 | 110.25185 | 110.2518455 | 110.2518455 | 110.2518455 | 109.1555708 | 105.7167766 | 102.405859 | 99.21739229 | 96.14621011 |
| 181123A00015 | 11/23/2018 | 3.14 | 11/23/2021 | 11/23/2018 | 104.0573 | 104.0572974 | 104.0572974 | 104.0572974 | 103.7983462 | 102.3952892 | 101.0180582 | 99.66600116 | 98.33848745 |
| 181126A00048 | 11/26/2018 | 3.24 | 11/25/2022 | 11/26/2018 | 107.15431 | 107.1543108 | 107.1543108 | 107.1543108 | 106.5535734 | 104.128239 | 101.7707895 | 99.47894665 | 97.25052246 |
| 181128A00010 | 11/28/2018 | 2.95 | 11/30/2020 | 11/28/2018 | 101.2033 | 101.2032984 | 101.2032984 | 101.2032984 | 101.1267312 | 100.7017074 | 100.2802488 | 99.86231081 | 99.44784939 |
| 181203A00053 | 12/4/2018 | 3.23 | 12/1/2023 | 12/4/2018 | 110.127 | 110.1270026 | 110.1270026 | 110.1270026 | 109.0139598 | 105.5505014 | 102.2168268 | 99.00738736 | 95.91690186 |
| 181212A00033 | 12/12/2018 | 2.99 | 12/12/2023 | 12/12/2018 | 110.02907 | 110.029065 | 110.029065 | 110.029065 | 108.8907065 | 105.3841453 | 102.010464 | 98.76391856 | 95.63904491 |
| 181214A00012 | 12/14/2018 | 3.07 | 12/14/2021 | 12/14/2018 | 104.12057 | 104.1205682 | 104.1205682 | 104.1205682 | 103.8456539 | 102.3858015 | 100.9538358 | 99.54902681 | 98.17066953 |
| 181217A00052 | 12/17/2018 | 3.04 | 12/17/2021 | 12/17/2018 | 104.08442 | 104.0844183 | 104.0844183 | 104.0844183 | 103.8072545 | 102.3399717 | 100.9008618 | 99.48918354 | 98.10422131 |
| 181226A00034 | 12/26/2018 | 2.9 | 12/27/2021 | 12/26/2018 | 103.94927 | 103.9492712 | 103.9492712 | 103.9492712 | 103.6644864 | 102.171793 | 100.7082597 | 99.27310644 | 97.86558069 |
| 181227A00026 | 12/27/2018 | 3.03 | 12/27/2023 | 12/27/2018 | 109.63254 | 109.6325391 | 109.6325391 | 109.6325391 | 108.4754468 | 104.9530228 | 101.5652558 | 98.30627198 | 95.17048652 |
| 181227A00028 | 12/27/2018 | 3.46 | 12/27/2028 | 12/27/2018 | 126.82347 | 126.8234709 | 126.8234709 | 126.8234709 | 118.6859941 | 110.1555944 | 102.3240847 | 95.13009233 | 88.51794337 |
| 181228A00006 | 12/28/2018 | 2.86 | 11/13/2020 | 12/28/2018 | 100.98005 | 100.9800544 | 100.9800544 | 100.9800544 | 100.9139387 | 100.5369599 | 100.1628038 | 99.79143891 | 99.42283385 |
| 190102A00026 | 1/2/2019 | 2.62 | 1/4/2022 | 1/2/2019 | 103.83931 | 103.8393077 | 103.8393077 | 103.8393077 | 103.5474893 | 102.0301232 | 100.5427823 | 99.0846513 | 97.65494393 |
| 190102A00041 | 1/2/2019 | 2.91 | 1/2/2024 | 1/2/2019 | 109.25301 | 109.2530104 | 109.2530104 | 109.2530104 | 108.0868559 | 104.5555164 | 101.1597964 | 97.89375355 | 94.75173929 |
| 190107A00028 | 1/7/2019 | 2.62 | 1/7/2022 | 1/7/2019 | 103.86013 | 103.8601318 | 103.8601318 | 103.8601318 | 103.5658525 | 102.0403031 | 100.5450277 | 99.07919989 | 97.64202319 |
| 190107A00035 | 1/7/2019 | 2.82 | 10/15/2021 | 1/7/2019 | 103.32952 | 103.3295222 | 103.3295222 | 103.3295222 | 103.0953122 | 101.79667 | 100.5254115 | 99.28067319 | 98.0616284 |
| 190109A00010 | 1/9/2019 | 2.98 | 1/9/2023 | 1/9/2019 | 106.85611 | 106.8561085 | 106.8561085 | 106.8561085 | 106.2118445 | 103.6711714 | 101.2048527 | 98.81027369 | 96.48492841 |
| 190110A00012 | 1/10/2019 | 2.97 | 1/18/2024 | 1/10/2019 | 109.58318 | 109.5831845 | 109.5831845 | 109.5831845 | 108.3863774 | 104.8075814 | 101.3674537 | 98.05985959 | 94.87897096 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190110A00014 | 1/10/2019 | 2.97 | 1/17/2024 | 1/10/2019 | 109.57582 | 109.5758207 | 109.5758207 | 109.5758207 | 108.38087 | 104.8048059 | 101.3672251 | 98.06200475 | 94.88332793 |
| 190110A00080 | 1/10/2019 | 2.68 | 6/7/2021 | 1/10/2019 | 102.43197 | 102.4319733 | 102.4319733 | 102.4319733 | 102.2363288 | 101.2880223 | 100.3572809 | 99.44361975 | 98.5465717 |
| 190111A00010 | 1/11/2019 | 2.87 | 1/7/2022 | 1/11/2019 | 103.98272 | 103.9827186 | 103.9827186 | 103.9827186 | 103.6891079 | 102.1669255 | 100.6748809 | 99.21215333 | 97.7779512 |
| 190111A00037 | 1/11/2019 | 2.68 | 1/11/2022 | 1/11/2019 | 103.98114 | 103.9811402 | 103.9811402 | 103.9811402 | 103.6834377 | 102.1462285 | 100.6396401 | 99.16283108 | 97.71499083 |
| 190114A00040 | 1/14/2019 | 2.89 | 1/14/2025 | 1/14/2019 | 112.73714 | 112.7371365 | 112.7371365 | 112.7371365 | 110.728969 | 106.1159049 | 101.723813 | 97.5409293 | 93.55617891 |
| 190114A00043 | 1/14/2019 | 2.88 | 1/14/2022 | 1/14/2019 | 104.04844 | 104.0484373 | 104.0484373 | 104.0484373 | 103.7490798 | 102.2077354 | 100.697113 | 99.2163663 | 97.7646796 |
| 190117A00043 | 1/17/2019 | 2.88 | 7/17/2020 | 1/17/2019 | 100.12134 | 100.1213426 | 100.1213426 | 100.1213426 | 100.1148804 | 100.0677419 | 100.0206645 | 99.97364816 | 99.92669271 |
| 190122A00007 | 1/22/2019 | 3.03 | 1/22/2024 | 1/22/2019 | 109.82829 | 109.8282919 | 109.8282919 | 109.8282919 | 108.623078 | 105.0295218 | 101.5754849 | 98.25478056 | 95.06153265 |
| 190122A00045 | 1/22/2019 | 3.17 | 1/22/2027 | 1/22/2019 | 120.23745 | 120.2374471 | 120.2374471 | 120.2374471 | 115.4058455 | 108.7168475 | 102.4679095 | 96.62767352 | 91.16717576 |
| 190130A00012 | 1/30/2019 | 2.92 | 1/31/2022 | 1/30/2019 | 104.23491 | 104.2349079 | 104.2349079 | 104.2349079 | 103.9215521 | 102.3334637 | 100.7775483 | 99.25289596 | 97.7586311 |
| 190130A00018 | 1/30/2019 | 2.95 | 10/17/2022 | 1/30/2019 | 106.16426 | 106.1642628 | 106.1642628 | 106.1642628 | 105.6029523 | 103.2945615 | 101.0482929 | 98.8620831 | 96.73395245 |
| 190131A00018 | 1/31/2019 | 2.83 | 3/25/2022 | 1/31/2019 | 104.46139 | 104.4613885 | 104.4613885 | 104.4613885 | 104.1009071 | 102.3622771 | 100.6610755 | 98.99615823 | 97.36642829 |
| 190213A00023 | 2/13/2019 | 2.93 | 2/13/2024 | 2/13/2019 | 109.62772 | 109.627716 | 109.627716 | 109.627716 | 108.3826283 | 104.7332087 | 101.2274219 | 97.8588085 | 94.62123849 |
| 190226A00020 | 2/26/2019 | 2.64 | 2/26/2024 | 2/26/2019 | 109.33656 | 109.336561 | 109.336561 | 109.336561 | 108.0612237 | 104.3634343 | 100.8128503 | 97.40277762 | 94.12686795 |
| 190227A00005 | 2/27/2019 | 2.87 | 2/27/2024 | 2/27/2019 | 109.50689 | 109.5068857 | 109.5068857 | 109.5068857 | 108.2361399 | 104.5501878 | 101.0106034 | 97.610744 | 94.34430934 |
| 190228A00039 | 2/28/2019 | 2.88 | 2/28/2024 | 2/28/2019 | 109.55088 | 109.5508765 | 109.5508765 | 109.5508765 | 108.278049 | 104.5885313 | 101.0456056 | 97.64261512 | 94.3732462 |
| 190308A00014 | 3/8/2019 | 2.69 | 3/8/2021 | 3/8/2019 | 101.69484 | 101.694837 | 101.694837 | 101.694837 | 101.5611458 | 100.8663272 | 100.1810061 | 99.50498841 | 98.83808561 |
| 190311A00009 | 3/11/2019 | 2.54 | 3/11/2022 | 3/11/2019 | 104.15903 | 104.1590276 | 104.1590276 | 104.1590276 | 103.8106521 | 102.106696 | 100.4389205 | 98.80623798 | 97.20760486 |
| 190321A00018 | 3/21/2019 | 2.45 | 3/21/2022 | 3/21/2019 | 104.06913 | 104.0691303 | 104.0691303 | 104.0691303 | 103.7118175 | 101.9820728 | 100.2894893 | 98.63293486 | 97.01132354 |
| 190325A00014 | 3/25/2019 | 2.43 | 9/25/2020 | 3/25/2019 | 100.55876 | 100.5587566 | 100.5587566 | 100.5587566 | 100.5204612 | 100.2789545 | 100.0386138 | 99.79943081 | 99.56139705 |
| 190326A00001 | 3/26/2019 | 2.55 | 3/28/2022 | 3/26/2019 | 103.98916 | 103.9891632 | 103.9891632 | 103.9891632 | 103.6267867 | 101.8844805 | 100.1798254 | 98.51166583 | 96.87889396 |
| 190326A00007 | 3/26/2019 | 2.5 | 3/26/2021 | 3/26/2019 | 101.67469 | 101.6746926 | 101.6746926 | 101.6746926 | 101.530386 | 100.7864504 | 100.0533965 | 99.33098696 | 98.61899101 |
| 190327A00062 | 3/27/2019 | 2.44 | 3/26/2021 | 3/27/2019 | 101.62991 | 101.6299069 | 101.6299069 | 101.6299069 | 101.4856339 | 100.7418829 | 100.0090117 | 99.28678292 | 98.57496595 |
| 190328A00018 | 3/28/2019 | 2.5 | 3/29/2021 | 3/28/2019 | 101.69339 | 101.6933923 | 101.6933923 | 101.6933923 | 101.5473014 | 100.795099 | 100.0540145 | 99.32380275 | 98.60422587 |
| 190328A00027 | 3/28/2019 | 2.51 | 9/21/2021 | 3/28/2019 | 102.77536 | 102.775363 | 102.775363 | 102.775363 | 102.5510982 | 101.314492 | 100.1076379 | 98.92947149 | 97.7789789 |
| 190328A00046 | 3/28/2019 | 2.7 | 3/4/2025 | 3/28/2019 | 111.27641 | 111.2764103 | 111.2764103 | 111.2764103 | 109.1691624 | 104.484238 | 100.0290733 | 95.7911514 | 91.75870774 |
| 190328A00065 | 3/28/2019 | 2.56 | 3/28/2024 | 3/28/2019 | 108.54893 | 108.5489348 | 108.5489348 | 108.5489348 | 107.2252472 | 103.4793037 | 99.88506651 | 96.43551286 | 93.12399004 |
| 190329A00033 | 3/29/2019 | 2.52 | 3/29/2021 | 3/29/2019 | 101.70849 | 101.7084873 | 101.7084873 | 101.7084873 | 101.5623849 | 100.8101197 | 100.0689731 | 99.33869987 | 98.61906215 |
| 190401A00035 | 4/1/2019 | 2.53 | 10/1/2021 | 4/1/2019 | 102.86251 | 102.8625101 | 102.8625101 | 102.8625101 | 102.6355679 | 101.3717176 | 100.1385559 | 98.9349736 | 97.75991421 |
| 190409A00014 | 4/9/2019 | 2.59 | 10/12/2021 | 4/9/2019 | 103.00929 | 103.0092934 | 103.0092934 | 103.0092934 | 102.7769279 | 101.4872555 | 100.2256467 | 98.99118568 | 97.78299647 |
| 190409A00019 | 4/9/2019 | 2.91 | 4/9/2029 | 4/9/2019 | 124.72033 | 124.7203257 | 124.7203257 | 124.7203257 | 116.0337137 | 107.2776593 | 99.26582221 | 91.93068104 | 85.21118052 |
| 190411A00020 | 5/1/2019 | 2.63 | 5/2/2022 | 5/1/2019 | 104.33781 | 104.3378125 | 104.3378125 | 104.3378125 | 103.9419705 | 102.101743 | 100.3030645 | 98.54475741 | 96.82568523 |
| 190411A00037 | 4/11/2019 | 2.59 | 4/9/2021 | 4/11/2019 | 101.8324 | 101.8324042 | 101.8324042 | 101.8324042 | 101.6786768 | 100.8958558 | 100.1250718 | 99.36604871 | 98.61851866 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190416A00021 | 4/16/2019 | 2.73 | 4/16/2024 | 4/16/2019 | 109.31764 | 109.3176369 | 109.3176369 | 109.3176369 | 107.9527259 | 104.1422242 | 100.4877869 | 96.98217766 | 93.61853718 |
| 190423A00002 | 4/23/2019 | 2.52 | 4/23/2024 | 4/23/2019 | 109.27077 | 109.2707688 | 109.2707688 | 109.2707688 | 107.884065 | 104.0369749 | 100.3486392 | 96.81167616 | 93.41908716 |
| 190424A00015 | 4/24/2019 | 2.55 | 4/26/2021 | 4/24/2019 | 101.90061 | 101.9006052 | 101.9006052 | 101.9006052 | 101.7348629 | 100.9055036 | 100.0896391 | 99.28694193 | 98.49709528 |
| 190424A00021 | 4/24/2019 | 2.6 | 4/22/2022 | 4/24/2019 | 104.21847 | 104.2184678 | 104.2184678 | 104.2184678 | 103.8323168 | 102.0202793 | 100.248644 | 98.51624379 | 96.82195427 |
| 190424A00027 | 4/24/2019 | 2.55 | 4/23/2021 | 4/24/2019 | 101.88165 | 101.8816486 | 101.8816486 | 101.8816486 | 101.7180355 | 100.8969338 | 100.0890657 | 99.29411322 | 98.51176828 |
| 190429A00076 | 4/29/2019 | 2.52 | 4/29/2021 | 4/29/2019 | 101.89434 | 101.8943431 | 101.8943431 | 101.8943431 | 101.7264933 | 100.8889938 | 100.06525 | 99.25492534 | 98.45769394 |
| 190501A00017 | 5/1/2019 | 2.61 | 5/1/2024 | 5/1/2019 | 108.95349 | 108.9534875 | 108.9534875 | 108.9534875 | 107.5607512 | 103.7175318 | 100.0333253 | 96.50074829 | 93.11279774 |
| 190513A00013 | 5/13/2019 | 2.52 | 5/13/2024 | 5/13/2019 | 108.67874 | 108.678739 | 108.678739 | 108.678739 | 107.2630812 | 103.3944858 | 99.68725696 | 96.13384245 | 92.72708216 |
| 190514A00020 | 5/14/2019 | 2.66 | 5/14/2025 | 5/14/2019 | 111.54574 | 111.5457378 | 111.5457378 | 111.5457378 | 109.2490857 | 104.3775839 | 99.75370226 | 95.36359319 | 91.19425197 |
| 190515A00023 | 5/15/2019 | 2.25 | 5/16/2022 | 5/15/2019 | 104.05091 | 104.05091 | 104.05091 | 104.05091 | 103.6405754 | 101.7600048 | 99.92279423 | 98.1276888 | 96.37347815 |
| 190515A00038 | 5/15/2019 | 2.38 | 5/14/2021 | 5/15/2019 | 101.86469 | 101.864689 | 101.864689 | 101.864689 | 101.6859474 | 100.8077607 | 99.94471407 | 99.09641841 | 98.2624977 |
| 190515A00041 | 5/15/2019 | 2.41 | 11/15/2021 | 5/15/2019 | 102.9761 | 102.9761038 | 102.9761038 | 102.9761038 | 102.7242526 | 101.3510065 | 100.0026908 | 98.67868512 | 97.37838907 |
| 190515A00060 | 5/15/2019 | 2.38 | 5/14/2021 | 5/15/2019 | 101.86469 | 101.864689 | 101.864689 | 101.864689 | 101.6859474 | 100.8077607 | 99.94471407 | 99.09641841 | 98.2624977 |
| 190520A00007 | 5/20/2019 | 2.52 | 5/20/2024 | 5/20/2019 | 108.72159 | 108.721586 | 108.721586 | 108.721586 | 107.2915173 | 103.4042591 | 99.67986609 | 96.11068174 | 92.68944908 |
| 190521A00023 | 5/21/2019 | 2.47 | 11/22/2021 | 5/21/2019 | 103.10218 | 103.1021791 | 103.1021791 | 103.1021791 | 102.8452586 | 101.4519854 | 100.0843212 | 98.74162092 | 97.42326046 |
| 190523A00018 | 5/23/2019 | 2.51 | 3/15/2024 | 5/23/2019 | 108.2809 | 108.2809026 | 108.2809026 | 108.2809026 | 106.9834704 | 103.2758623 | 99.7172727 | 96.30085872 | 93.02013477 |
| 190524A00040 | 5/24/2019 | 2.47 | 5/24/2024 | 5/24/2019 | 108.54947 | 108.5494688 | 108.5494688 | 108.5494688 | 107.1122068 | 103.2180985 | 99.48759749 | 95.9129921 | 92.48697391 |
| 190528A00028 | 5/28/2019 | 2.42 | 5/30/2023 | 5/28/2019 | 106.24996 | 106.249956 | 106.249956 | 106.249956 | 105.4441204 | 102.5320253 | 99.71568975 | 96.99145428 | 94.3558199 |
| 190529A00023 | 5/29/2019 | 2.38 | 5/29/2024 | 5/29/2019 | 108.22427 | 108.2242709 | 108.2242709 | 108.2242709 | 106.7786181 | 102.8781217 | 99.14209592 | 95.56276192 | 92.13274931 |
| 190530A00006 | 5/30/2019 | 2.25 | 5/30/2024 | 5/30/2019 | 108.44665 | 108.4466542 | 108.4466542 | 108.4466542 | 106.9889765 | 103.0619617 | 99.30108346 | 95.69846025 | 92.24662537 |
| 190530A00008 | 5/30/2019 | 2.38 | 5/30/2025 | 5/30/2019 | 111.24239 | 111.2423946 | 111.2423946 | 111.2423946 | 108.8867307 | 103.9526869 | 99.27247245 | 94.83173334 | 90.6169993 |
| 190530A00029 | 5/30/2019 | 2.25 | 5/30/2024 | 5/30/2019 | 108.44665 | 108.4466542 | 108.4466542 | 108.4466542 | 106.9889765 | 103.0619617 | 99.30108346 | 95.69846025 | 92.24662537 |
| 190603A00047 | 6/3/2019 | 2.22 | 6/2/2023 | 6/3/2019 | 105.67738 | 105.6773754 | 105.6773754 | 105.6773754 | 104.869323 | 101.9577111 | 99.14216748 | 96.41900989 | 93.78471778 |
| 190607A00019 | 6/7/2019 | 2.04 | 12/7/2020 | 6/7/2019 | 100.85405 | 100.8540461 | 100.8540461 | 100.8540461 | 100.7734348 | 100.3300327 | 99.89053332 | 99.45488512 | 99.02303757 |
| 190611A00046 | 6/11/2019 | 2.25 | 6/13/2022 | 6/11/2019 | 103.87835 | 103.8783511 | 103.8783511 | 103.8783511 | 103.442368 | 101.4948339 | 99.59379648 | 97.73786157 | 95.92568629 |
| 190617A00026 | 6/17/2019 | 2.17 | 6/17/2022 | 6/17/2019 | 103.7212 | 103.721204 | 103.721204 | 103.721204 | 103.2816805 | 101.3252876 | 99.41585776 | 97.55197515 | 95.73227632 |
| 190620A00045 | 6/20/2019 | 2.14 | 6/20/2024 | 6/20/2019 | 107.38844 | 107.3884428 | 107.3884428 | 107.3884428 | 105.901761 | 101.9603467 | 98.18778823 | 94.57597392 | 91.1172249 |
| 190625A00021 | 6/25/2019 | 1.88 | 6/26/2023 | 6/25/2019 | 105.32829 | 105.3282868 | 105.3282868 | 105.3282868 | 104.4834142 | 101.500365 | 98.61821143 | 95.83298842 | 93.14090992 |
| 190626A00020 | 6/26/2019 | 2.08 | 6/25/2021 | 6/26/2019 | 101.80111 | 101.8011129 | 101.8011129 | 101.8011129 | 101.5974635 | 100.6056614 | 99.63315726 | 98.67939203 | 97.74382815 |
| 190701A00007 | 7/2/2019 | 2.09 | 7/1/2022 | 7/2/2019 | 103.63158 | 103.6315776 | 103.6315776 | 103.6315776 | 103.1784619 | 101.1852706 | 99.24080858 | 97.34357885 | 95.49214101 |
| 190703A00017 | 7/3/2019 | 2.33 | 5/4/2026 | 7/3/2019 | 111.89026 | 111.8902559 | 111.8902559 | 111.8902559 | 108.372936 | 102.6120795 | 97.19530161 | 92.10031343 | 87.3063768 |
| 190711A00019 | 7/11/2019 | 2.19 | 7/11/2023 | 7/11/2019 | 105.79204 | 105.7920449 | 105.7920449 | 105.7920449 | 104.9275008 | 101.9110271 | 98.99733699 | 96.18235494 | 93.46219144 |
| 190711A00025 | 7/11/2019 | 2.18 | 7/12/2021 | 7/11/2019 | 101.99072 | 101.990717 | 101.990717 | 101.990717 | 101.7815935 | 100.7425857 | 99.72472905 | 98.72738246 | 97.74993057 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190715A00014 | 7/15/2019 | 2.16 | 3/30/2022 | 7/15/2019 | 103.31237 | 103.3123689 | 103.3123689 | 103.3123689 | 102.9493653 | 101.2079126 | 99.50419906 | 97.83706319 | 96.20539153 |
| 190719A00006 | 7/19/2019 | 2.17 | 7/19/2024 | 7/19/2019 | 107.65795 | 107.6579451 | 107.6579451 | 107.6579451 | 106.1086585 | 102.0876914 | 98.24181299 | 94.56246954 | 91.04157228 |
| 190722A00035 | 7/22/2019 | 2.18 | 4/13/2021 | 7/22/2019 | 101.53174 | 101.5317428 | 101.5317428 | 101.5317428 | 101.3754375 | 100.5830194 | 99.80296322 | 99.0349813 | 98.27879476 |
| 190724A00025 | 7/24/2019 | 1.96 | 7/24/2023 | 7/24/2019 | 105.71311 | 105.7131092 | 105.7131092 | 105.7131092 | 104.824994 | 101.7627948 | 98.80612301 | 95.95074434 | 93.19262052 |
| 190730A00016 | 7/30/2019 | 2 | 7/30/2024 | 7/30/2019 | 107.77329 | 107.7732882 | 107.7732882 | 107.7732882 | 106.1900312 | 102.117918 | 98.22465245 | 94.50142389 | 90.93990506 |
| 190731A00029 | 7/31/2019 | 1.93 | 7/29/2022 | 7/31/2019 | 103.81432 | 103.8143199 | 103.8143199 | 103.8143199 | 103.3317708 | 101.2557889 | 99.23189176 | 97.25842366 | 95.33379423 |
| 190801A00010 | 8/1/2019 | 1.97 | 8/1/2023 | 8/1/2019 | 105.78517 | 105.7851736 | 105.7851736 | 105.7851736 | 104.8846799 | 101.800517 | 98.82318252 | 95.9483656 | 93.17195649 |
| 190802A00017 | 8/2/2019 | 2.01 | 11/15/2023 | 8/2/2019 | 105.84119 | 105.8411864 | 105.8411864 | 105.8411864 | 104.7737072 | 101.4256035 | 98.20215328 | 95.09807819 | 92.10835099 |
| 190805A00009 | 8/5/2019 | 1.91 | 8/5/2024 | 8/5/2019 | 106.6712 | 106.6712039 | 106.6712039 | 106.6712039 | 105.0911893 | 101.0472272 | 97.18117363 | 93.48425213 | 89.94816839 |
| 190806A00010 | 8/6/2019 | 1.7 | 8/5/2022 | 8/6/2019 | 103.36075 | 103.3607459 | 103.3607459 | 103.3607459 | 102.8724852 | 100.7828978 | 98.74607953 | 96.76033956 | 94.82405453 |
| 190806A00012 | 8/6/2019 | 1.93 | 8/6/2021 | 8/6/2019 | 101.84417 | 101.8441688 | 101.8441688 | 101.8441688 | 101.6298935 | 100.5238863 | 99.44185263 | 98.38301966 | 97.34664742 |
| 190807A00053 | 8/7/2019 | 1.66 | 8/6/2021 | 8/7/2019 | 101.72027 | 101.7202672 | 101.7202672 | 101.7202672 | 101.5056177 | 100.397715 | 99.31387461 | 98.25331963 | 97.21530614 |
| 190807A00055 | 8/7/2019 | 1.76 | 8/8/2022 | 8/7/2019 | 103.11773 | 103.1177342 | 103.1177342 | 103.1177342 | 102.6290446 | 100.5415733 | 98.50683706 | 96.52314436 | 94.58887115 |
| 190808A00019 | 8/8/2019 | 1.87 | 8/8/2022 | 8/8/2019 | 103.35194 | 103.3519372 | 103.3519372 | 103.3519372 | 102.8627351 | 100.7727337 | 98.73551845 | 96.74939616 | 94.81274143 |
| 190808A00039 | 8/8/2019 | 1.84 | 8/8/2023 | 8/8/2019 | 104.84118 | 104.8411762 | 104.8411762 | 104.8411762 | 103.9377757 | 100.8636272 | 97.89629202 | 95.03144637 | 92.2649689 |
| 190808A00045 | 8/8/2019 | 1.86 | 8/8/2023 | 8/8/2019 | 104.90388 | 104.903876 | 104.903876 | 104.903876 | 104.0002447 | 100.9251177 | 97.95682925 | 95.09105479 | 92.32367211 |
| 190808A00047 | 8/8/2019 | 1.89 | 8/8/2024 | 8/8/2019 | 106.60172 | 106.6017209 | 106.6017209 | 106.6017209 | 105.0155824 | 100.9654788 | 97.09385442 | 93.39188992 | 89.8512514 |
| 190809A00011 | 8/9/2019 | 1.69 | 8/9/2024 | 8/9/2019 | 106.53607 | 106.5360739 | 106.5360739 | 106.5360739 | 104.9380371 | 100.8656438 | 96.9733659 | 93.25227492 | 89.69393553 |
| 190809A00021 | 8/9/2019 | 2.12 | 8/9/2029 | 8/9/2019 | 118.39562 | 118.3956201 | 118.3956201 | 118.3956201 | 109.276923 | 100.5214425 | 92.54262323 | 85.26737227 | 78.62982955 |
| 190812A00006 | 8/12/2019 | 1.86 | 8/12/2024 | 8/12/2019 | 106.49473 | 106.4947264 | 106.4947264 | 106.4947264 | 104.9005124 | 100.8425263 | 96.96377205 | 93.25537334 | 89.70894377 |
| 190813A00021 | 8/13/2019 | 1.89 | 8/14/2023 | 8/13/2019 | 105.02433 | 105.0243336 | 105.0243336 | 105.0243336 | 104.1109821 | 101.0185129 | 98.03389477 | 95.15274369 | 92.37088184 |
| 190813A00030 | 8/13/2019 | 1.71 | 8/15/2022 | 8/13/2019 | 103.42615 | 103.4261489 | 103.4261489 | 103.4261489 | 102.9282702 | 100.8116177 | 98.74888316 | 96.73831999 | 94.77825242 |
| 190816A00011 | 8/16/2019 | 1.77 | 8/16/2024 | 8/16/2019 | 106.13732 | 106.1373213 | 106.1373213 | 106.1373213 | 104.536502 | 100.4757732 | 96.59486572 | 92.88485273 | 89.33730147 |
| 190820A00029 | 8/20/2019 | 1.76 | 8/20/2024 | 8/20/2019 | 106.11182 | 106.1118221 | 106.1118221 | 106.1118221 | 104.5024722 | 100.4322351 | 96.54262725 | 92.8246625 | 89.26985306 |
| 190821A00002 | 8/21/2019 | 1.61 | 8/21/2024 | 8/21/2019 | 106.2529 | 106.2528971 | 106.2528971 | 106.2528971 | 104.6302159 | 100.5332199 | 96.61865185 | 92.8774086 | 89.30089352 |
| 190821A00030 | 8/21/2019 | 1.8 | 8/21/2024 | 8/21/2019 | 106.2829 | 106.2829039 | 106.2829039 | 106.2829039 | 104.6703797 | 100.5941247 | 96.69881844 | 92.97545498 | 89.41552831 |
| 190821A00035 | 8/21/2019 | 2.03 | 8/21/2020 | 8/21/2019 | 100.25259 | 100.2525888 | 100.2525888 | 100.2525888 | 100.231383 | 100.0873416 | 99.94372607 | 99.80053446 | 99.65776491 |
| 190826A00018 | 8/26/2019 | 1.9 | 8/27/2029 | 8/26/2019 | 116.46185 | 116.4618486 | 116.4618486 | 116.4618486 | 107.3090902 | 98.59874743 | 90.6668529 | 83.43971112 | 76.85095813 |
| 190826A00065 | 8/26/2019 | 2.09 | 8/28/2029 | 8/26/2019 | 116.3504 | 116.3503977 | 116.3503977 | 116.3503977 | 107.313689 | 98.68645775 | 90.82685255 | 83.66242931 | 77.12793193 |
| 190827A00002 | 8/27/2019 | 1.74 | 8/27/2024 | 8/27/2019 | 106.05619 | 106.0561889 | 106.0561889 | 106.0561889 | 104.431984 | 100.3453532 | 96.44076233 | 92.70912102 | 89.14184509 |
| 190829A00012 | 8/29/2019 | 1.54 | 8/29/2024 | 8/29/2019 | 105.99093 | 105.9909274 | 105.9909274 | 105.9909274 | 104.3522868 | 100.2404777 | 96.31259568 | 92.55942216 | 88.9722539 |
| 190830A00010 | 9/3/2019 | 1.75 | 9/1/2023 | 9/3/2019 | 104.65539 | 104.6553879 | 104.6553879 | 104.6553879 | 103.7155715 | 100.5825733 | 97.56020107 | 94.64389897 | 91.82932914 |
| 190830A00012 | 8/30/2019 | 1.76 | 8/30/2024 | 8/30/2019 | 106.15214 | 106.1521392 | 106.1521392 | 106.1521392 | 104.5208606 | 100.4247426 | 96.51135048 | 92.77154572 | 89.19669959 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190906A00018 | 9/6/2019 | 1.76 | 9/6/2024 | 9/6/2019 | 106.18019 | 106.1801936 | 106.1801936 | 106.1801936 | 104.5332246 | 100.4185284 | 96.48810417 | 92.73269862 | 89.1435772 |
| 190909A00028 | 9/9/2019 | 1.84 | 9/9/2022 | 9/9/2019 | 103.42466 | 103.4246645 | 103.4246645 | 103.4246645 | 102.9052873 | 100.729954 | 98.61117045 | 96.54705867 | 94.5358192 |
| 190913A00001 | 9/13/2019 | 1.96 | 9/14/2020 | 9/13/2019 | 100.389 | 100.3889966 | 100.3889966 | 100.3889966 | 100.3562398 | 100.1453966 | 99.93545305 | 99.7264032 | 99.5182413 |
| 190917A00035 | 9/19/2019 | 2.02 | 10/16/2023 | 9/19/2019 | 105.73298 | 105.7329766 | 105.7329766 | 105.7329766 | 104.7162484 | 101.4479615 | 98.29870819 | 95.26349457 | 92.33756621 |
| 190917A00045 | 9/17/2019 | 1.86 | 9/17/2021 | 9/17/2019 | 102.14639 | 102.1463923 | 102.1463923 | 102.1463923 | 101.9232943 | 100.6986158 | 99.50322898 | 98.33609292 | 97.1962154 |
| 190918A00003 | 9/18/2019 | 1.95 | 9/19/2022 | 9/18/2019 | 103.7141 | 103.714104 | 103.714104 | 103.714104 | 103.1847743 | 100.9791781 | 98.83146806 | 96.73970056 | 94.7020141 |
| 190923A00078 | 9/23/2019 | 1.96 | 6/28/2024 | 9/23/2019 | 106.70379 | 106.7037856 | 106.7037856 | 106.7037856 | 105.2043183 | 101.2556748 | 97.47726159 | 93.86085286 | 90.39866411 |
| 190926A00012 | 9/26/2019 | 1.93 | 9/27/2021 | 9/26/2019 | 102.08231 | 102.0823084 | 102.0823084 | 102.0823084 | 101.8575233 | 100.6092394 | 99.39140696 | 98.2029227 | 97.04273594 |
| 190927A00012 | 10/1/2019 | 1.96 | 10/1/2024 | 10/1/2019 | 107.13806 | 107.1380614 | 107.1380614 | 107.1380614 | 105.4295569 | 101.2303641 | 97.22164964 | 93.3937198 | 89.73743254 |
| 190930A00075 | 9/30/2019 | 2.19 | 9/29/2027 | 9/30/2019 | 113.69937 | 113.6993703 | 113.6993703 | 113.6993703 | 107.8993415 | 100.8869594 | 94.38144904 | 88.34348431 | 82.73699051 |
| 191001A00005 | 10/1/2019 | 1.8 | 4/18/2023 | 10/1/2019 | 104.25144 | 104.2514362 | 104.2514362 | 104.2514362 | 103.5058072 | 100.7321811 | 98.04675737 | 95.44622877 | 92.92743289 |
| 191003A00002 | 10/3/2019 | 1.58 | 10/4/2021 | 10/3/2019 | 101.8702 | 101.8702003 | 101.8702003 | 101.8702003 | 101.6425381 | 100.3754226 | 99.13828776 | 97.93007379 | 96.74977054 |
| 191004A00004 | 10/4/2019 | 1.54 | 10/4/2024 | 10/4/2019 | 106.13225 | 106.1322454 | 106.1322454 | 106.1322454 | 104.4118646 | 100.2040126 | 96.18820875 | 92.35464426 | 88.69406892 |
| 191004A00011 | 10/4/2019 | 1.77 | 10/5/2020 | 10/4/2019 | 100.44515 | 100.4451526 | 100.4451526 | 100.4451526 | 100.401573 | 100.1326469 | 99.86516626 | 99.5991194 | 99.33449476 |
| 191004A00013 | 10/4/2019 | 1.53 | 10/22/2021 | 10/4/2019 | 101.87679 | 101.876794 | 101.876794 | 101.876794 | 101.6405748 | 100.3329282 | 99.05093777 | 97.79386722 | 96.56100852 |
| 191007A00020 | 10/7/2019 | 1.69 | 10/7/2022 | 10/7/2019 | 103.19961 | 103.1996105 | 103.1996105 | 103.1996105 | 102.654815 | 100.4072211 | 98.21970816 | 96.09025278 | 94.01691641 |
| 191008A00031 | 10/8/2019 | 1.52 | 10/8/2024 | 10/8/2019 | 106.06149 | 106.061486 | 106.061486 | 106.061486 | 104.3323469 | 100.115951 | 96.09244734 | 92.25197892 | 88.58524898 |
| 191015A00001 | 10/15/2019 | 1.87 | 10/15/2021 | 10/15/2019 | 102.08636 | 102.0863598 | 102.0863598 | 102.0863598 | 101.8537689 | 100.5636704 | 99.30080956 | 98.06432733 | 96.85340081 |
| 191018A00015 | 10/18/2019 | 1.89 | 10/18/2021 | 10/18/2019 | 102.11288 | 102.1128836 | 102.1128836 | 102.1128836 | 101.8788735 | 100.582066 | 99.31177484 | 98.06719518 | 96.84755485 |
| 191031A00041 | 10/31/2019 | 1.72 | 10/31/2023 | 10/31/2019 | 105.40749 | 105.407489 | 105.407489 | 105.407489 | 104.3617924 | 101.0453988 | 97.85148492 | 94.7749097 | 91.8107744 |
| 191105A00008 | 11/5/2019 | 1.83 | 11/5/2024 | 11/5/2019 | 107.5347 | 107.5347034 | 107.5347034 | 107.5347034 | 105.7314807 | 101.4127899 | 97.29441781 | 93.36607715 | 89.6180601 |
| 191107A00011 | 11/8/2019 | 2.02 | 2/24/2023 | 11/8/2019 | 104.62159 | 104.6215927 | 104.6215927 | 104.6215927 | 103.9357635 | 101.2971006 | 98.73871439 | 96.25765735 | 93.85111168 |
| 191113A00016 | 11/15/2019 | 2.02 | 8/15/2024 | 11/15/2019 | 107.17321 | 107.1732113 | 107.1732113 | 107.1732113 | 105.5685208 | 101.4891202 | 97.5900141 | 93.86226324 | 90.2974226 |
| 191113A00017 | 11/15/2019 | 1.93 | 12/6/2021 | 11/15/2019 | 102.40281 | 102.4028133 | 102.4028133 | 102.4028133 | 102.1366131 | 100.7109619 | 99.31218012 | 97.93957452 | 96.59247513 |
| 191115A00028 | 11/15/2019 | 2.34 | 9/28/2029 | 11/15/2019 | 118.81098 | 118.8109779 | 118.8109779 | 118.8109779 | 109.5476458 | 100.7502146 | 92.73931948 | 85.44026305 | 78.78581224 |
| 191120A00005 | 11/20/2019 | 2.63 | 11/20/2034 | 11/20/2019 | 133.18669 | 133.1866899 | 133.1866899 | 125.6643911 | 111.2125287 | 98.39113096 | 87.24725509 | 77.54979094 | 69.1006493 |
| 191122A00007 | 11/22/2019 | 1.87 | 11/21/2025 | 11/22/2019 | 109.5534 | 109.5533955 | 109.5533955 | 109.5533955 | 106.6646746 | 101.3340002 | 96.30175521 | 91.54974222 | 87.06096205 |
| 191129A00010 | 11/29/2019 | 1.94 | 8/27/2021 | 11/29/2019 | 101.95236 | 101.9523554 | 101.9523554 | 101.9523554 | 101.7346049 | 100.5710275 | 99.43395034 | 98.32247627 | 97.23574827 |
| 191129A00012 | 11/29/2019 | 1.99 | 11/29/2024 | 11/29/2019 | 107.54087 | 107.5408684 | 107.5408684 | 107.5408684 | 105.6933726 | 101.3360723 | 97.18312216 | 93.22390728 | 89.44841768 |
| 191203A00004 | 12/4/2019 | 1.87 | 12/4/2024 | 12/4/2019 | 107.02843 | 107.0284338 | 107.0284338 | 107.0284338 | 105.1723992 | 100.813814 | 96.66038136 | 92.70140935 | 88.92681752 |
| 191204A00013 | 12/4/2019 | 1.72 | 12/4/2024 | 12/4/2019 | 107.1787 | 107.1786968 | 107.1786968 | 107.1786968 | 105.3090834 | 100.9233694 | 96.74468322 | 92.76220813 | 88.9657473 |
| 191212A00027 | 12/13/2019 | 1.93 | 10/17/2022 | 12/13/2019 | 103.79556 | 103.7955593 | 103.7955593 | 103.7955593 | 103.240046 | 100.959435 | 98.74035868 | 96.58077126 | 94.4787098 |
| 191212A00029 | 12/13/2019 | 1.94 | 5/16/2023 | 12/13/2019 | 104.77405 | 104.7740487 | 104.7740487 | 104.7740487 | 103.9914026 | 101.1370348 | 98.37558847 | 95.70355219 | 93.11756666 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 191216A00042 | 12/16/2019 | 1.95 | 12/16/2022 | 12/16/2019 | 104.11581 | 104.115806 | 104.115806 | 104.115806 | 103.5027476 | 101.0596306 | 98.68667275 | 96.3814623 | 94.14168524 |
| 191219A00036 | 12/20/2019 | 2.1 | 12/20/2024 | 12/20/2019 | 108.08836 | 108.0883597 | 108.0883597 | 108.0883597 | 106.1876281 | 101.7674298 | 97.55687023 | 93.54492991 | 89.72122535 |
| 191223A00019 | 12/23/2019 | 1.92 | 12/30/2020 | 12/23/2019 | 100.851 | 100.8509963 | 100.8509963 | 100.8509963 | 100.7567771 | 100.250968 | 99.75022024 | 99.25445825 | 98.76360793 |
| 191230A00031 | 12/30/2019 | 1.85 | 12/30/2024 | 12/30/2019 | 107.88593 | 107.8859264 | 107.8859264 | 107.8859264 | 105.9486757 | 101.4823283 | 97.22979002 | 93.17972367 | 89.32145211 |
| 191231A00006 | 12/31/2019 | 1.88 | 12/31/2021 | 12/31/2019 | 102.42631 | 102.4263136 | 102.4263136 | 102.4263136 | 102.1406703 | 100.6494075 | 99.18749906 | 97.7541551 | 96.34861338 |
| 200110A00014 | 1/10/2020 | 1.73 | 1/10/2023 | 1/10/2020 | 104.13007 | 104.1300662 | 104.1300662 | 104.1300662 | 103.4896039 | 100.9715297 | 98.52763646 | 96.15530345 | 93.85201953 |
| 200110A00022 | 1/13/2020 | 2 | 1/6/2025 | 1/13/2020 | 107.71682 | 107.7168178 | 107.7168178 | 107.7168178 | 105.7774956 | 101.3233168 | 97.08244491 | 93.0435603 | 89.19600323 |
| 200121A00009 | 1/24/2020 | 1.94 | 1/24/2025 | 1/24/2020 | 107.52444 | 107.5244448 | 107.5244448 | 107.5244448 | 105.5422358 | 101.0476018 | 96.77012602 | 92.69818354 | 88.82083385 |
| 200127A00018 | 1/27/2020 | 1.8 | 1/27/2025 | 1/27/2020 | 106.89237 | 106.8923697 | 106.8923697 | 106.8923697 | 104.9072351 | 100.419411 | 96.14891855 | 92.08410186 | 88.21399259 |
| 200128A00015 | 1/28/2020 | 1.81 | 1/28/2025 | 1/28/2020 | 106.94262 | 106.9426155 | 106.9426155 | 106.9426155 | 104.9546788 | 100.4632476 | 96.18941051 | 92.12149263 | 88.24850786 |
| 200128A00028 | 1/28/2020 | 1.81 | 1/28/2025 | 1/28/2020 | 106.94262 | 106.9426155 | 106.9426155 | 106.9426155 | 104.9546788 | 100.4632476 | 96.18941051 | 92.12149263 | 88.24850786 |
| 200203A00009 | 2/3/2020 | 1.52 | 2/3/2023 | 2/3/2020 | 103.68509 | 103.6850936 | 103.6850936 | 103.6850936 | 103.0213814 | 100.4454249 | 97.94677128 | 95.52263011 | 93.17033099 |
| 200203A00022 | 2/3/2020 | 1.75 | 2/3/2025 | 2/3/2020 | 106.68935 | 106.6893455 | 106.6893455 | 106.6893455 | 104.6883334 | 100.1870069 | 95.90449112 | 91.82900834 | 87.9494781 |
| 200207A00016 | 2/7/2020 | 1.74 | 2/7/2024 | 2/7/2020 | 105.25511 | 105.2551141 | 105.2551141 | 105.2551141 | 104.041588 | 100.4874603 | 97.07350291 | 93.79341938 | 90.64123316 |
| 200210A00009 | 2/10/2020 | 1.57 | 2/10/2025 | 2/10/2020 | 106.77909 | 106.7790881 | 106.7790881 | 106.7790881 | 104.744943 | 100.1956088 | 95.86895497 | 91.752918 | 87.83615349 |
| 200212A00003 | 2/12/2020 | 1.63 | 2/12/2025 | 2/12/2020 | 107.06759 | 107.0675893 | 107.0675893 | 107.0675893 | 105.0263163 | 100.4648742 | 96.12685147 | 92.00013422 | 88.07333135 |
| 200214A00013 | 2/18/2020 | 1.78 | 11/10/2021 | 2/18/2020 | 102.06318 | 102.0631836 | 102.0631836 | 102.0631836 | 101.816113 | 100.4633218 | 99.13487197 | 97.83016348 | 96.54861553 |
| 200218A00015 | 2/18/2020 | 1.77 | 2/18/2021 | 2/18/2020 | 100.979 | 100.9790032 | 100.9790032 | 100.9790032 | 100.8561955 | 100.2132532 | 99.57848798 | 98.9517446 | 98.33287166 |
| 200220A00019 | 2/20/2020 | 1.59 | 2/22/2021 | 2/20/2020 | 100.96833 | 100.9683256 | 100.9683256 | 100.9683256 | 100.8430284 | 100.1880463 | 99.54154802 | 98.90336947 | 98.27335081 |
| 200220A00029 | 2/20/2020 | 1.72 | 2/21/2023 | 2/20/2020 | 103.80584 | 103.8058351 | 103.8058351 | 103.8058351 | 103.1255943 | 100.5065022 | 97.96697272 | 95.50409153 | 93.11507196 |
| 200221A00004 | 2/21/2020 | 1.69 | 2/21/2025 | 2/21/2020 | 106.47844 | 106.4784437 | 106.4784437 | 106.4784437 | 104.4339182 | 99.8882767 | 95.5657845 | 91.45431348 | 87.5424614 |
| 200221A00006 | 2/21/2020 | 1.5 | 2/21/2025 | 2/21/2020 | 106.49384 | 106.4938413 | 106.4938413 | 106.4938413 | 104.433944 | 99.86081016 | 95.51292141 | 91.3780017 | 87.44451167 |
| 200221A00016 | 2/21/2020 | 1.69 | 2/21/2025 | 2/21/2020 | 106.47844 | 106.4784437 | 106.4784437 | 106.4784437 | 104.4339182 | 99.8882767 | 95.5657845 | 91.45431348 | 87.5424614 |
| 200225A00015 | 2/25/2020 | 1.54 | 2/26/2024 | 2/25/2020 | 104.59166 | 104.5916641 | 104.5916641 | 104.5916641 | 103.3461594 | 99.75260784 | 96.30260666 | 92.98962443 | 89.80746664 |
| 200225A00042 | 2/25/2020 | 1.39 | 2/25/2022 | 2/25/2020 | 102.13445 | 102.1344502 | 102.1344502 | 102.1344502 | 101.80201 | 100.1536772 | 98.53982583 | 96.95943938 | 95.41154132 |
| 200225A00044 | 2/25/2020 | 1.57 | 2/25/2022 | 2/25/2020 | 102.15218 | 102.1521808 | 102.1521808 | 102.1521808 | 101.8207358 | 100.1771529 | 98.56787365 | 96.99188862 | 95.44822814 |
| 200226A00025 | 2/26/2020 | 1.38 | 2/26/2025 | 2/26/2020 | 105.94706 | 105.9470594 | 105.9470594 | 105.9470594 | 103.878515 | 99.30420234 | 94.95596419 | 90.82144214 | 86.88902175 |
| 200227A00005 | 2/27/2020 | 1.43 | 2/27/2024 | 2/27/2020 | 104.1888 | 104.1887996 | 104.1887996 | 104.1887996 | 102.9433683 | 99.35446894 | 95.9091026 | 92.60073269 | 89.42316016 |
| 200227A00026 | 2/27/2020 | 1.41 | 2/27/2023 | 2/27/2020 | 102.99539 | 102.9953919 | 102.9953919 | 102.9953919 | 102.311202 | 99.68582085 | 97.1406701 | 94.67279321 | 92.2793641 |
| 200227A00031 | 2/27/2020 | 1.43 | 2/27/2024 | 2/27/2020 | 104.1888 | 104.1887996 | 104.1887996 | 104.1887996 | 102.9433683 | 99.35446894 | 95.9091026 | 92.60073269 | 89.42316016 |
| 200228A00027 | 2/28/2020 | 1.31 | 2/28/2022 | 2/28/2020 | 101.72462 | 101.7246242 | 101.7246242 | 101.7246242 | 101.3913265 | 99.74273601 | 98.128681 | 96.54814069 | 95.00013461 |
| 200228A00029 | 2/28/2020 | 1.31 | 2/28/2022 | 2/28/2020 | 101.72462 | 101.7246242 | 101.7246242 | 101.7246242 | 101.3913265 | 99.74273601 | 98.128681 | 96.54814069 | 95.00013461 |
| 200228A00031 | 2/28/2020 | 1.35 | 2/28/2024 | 2/28/2020 | 103.89621 | 103.8962065 | 103.8962065 | 103.8962065 | 102.6503279 | 99.06407744 | 95.62140114 | 92.31575503 | 89.14093336 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200228A00039 | 2/28/2020 | 1.33 | 4/28/2023 | 2/28/2020 | 102.95127 | 102.9512739 | 102.9512739 | 102.9512739 | 102.1977671 | 99.41602242 | 96.72364414 | 94.11729602 | 91.59378481 |
| 200303A00007 | 3/3/2020 | 1.11 | 3/4/2024 | 3/3/2020 | 103.69047 | 103.6904746 | 103.6904746 | 103.6904746 | 102.4288714 | 98.81608678 | 95.34884949 | 92.02048627 | 88.82467103 |
| 200304A00052 | 3/6/2020 | 2.11 | 3/8/2027 | 3/6/2020 | 112.11168 | 112.1116842 | 112.1116842 | 112.1116842 | 107.2435948 | 100.7505507 | 94.6951008 | 89.04546526 | 83.77233372 |
| 200305A00012 | 3/5/2020 | 1.14 | 3/5/2025 | 3/5/2020 | 103.93169 | 103.9316923 | 103.9316923 | 103.9316923 | 101.8755138 | 97.35718679 | 93.0628599 | 88.98026081 | 85.09785752 |
| 200306A00002 | 3/6/2020 | 0.64 | 3/7/2022 | 3/6/2020 | 100.88976 | 100.8897614 | 100.8897614 | 100.8897614 | 100.550515 | 98.88591017 | 97.2565691 | 95.66143663 | 94.09949996 |
| 200306A00012 | 3/6/2020 | 0.95 | 3/6/2024 | 3/6/2020 | 102.43049 | 102.4304903 | 102.4304903 | 102.4304903 | 101.1784567 | 97.60134096 | 94.16834755 | 90.87287105 | 87.70864945 |
| 200306A00063 | 3/6/2020 | 0.64 | 3/16/2022 | 3/6/2020 | 100.90283 | 100.9028253 | 100.9028253 | 100.9028253 | 100.5554614 | 98.86718876 | 97.21506236 | 95.59798705 | 94.01491229 |
| 200306A00101 | 3/10/2020 | 1.93 | 3/8/2030 | 3/10/2020 | 115.72452 | 115.7245199 | 115.7245199 | 115.368083 | 105.7283702 | 96.73905218 | 88.59209714 | 81.2040417 | 74.50009342 |
| 200309A00005 | 3/9/2020 | 0.77 | 3/7/2025 | 3/9/2020 | 103.0875 | 103.087499 | 103.087499 | 103.087499 | 101.0168897 | 96.48591528 | 92.18082304 | 88.08918282 | 84.19931752 |
| 200311A00006 | 3/13/2020 | 1.12 | 3/10/2025 | 3/13/2020 | 103.84867 | 103.8486664 | 103.8486664 | 103.8486664 | 101.7804228 | 97.25190561 | 92.94847986 | 88.85778139 | 84.96819413 |
| 200311A00036 | 3/16/2020 | 1.03 | 4/15/2022 | 3/16/2020 | 101.32982 | 101.3298202 | 101.3298202 | 101.3298202 | 100.9554496 | 99.18930364 | 97.4622828 | 95.77323373 | 94.12104702 |
| 200312A00042 | 3/16/2020 | 1.38 | 3/16/2023 | 3/16/2020 | 102.96567 | 102.9656725 | 102.9656725 | 102.9656725 | 102.2625708 | 99.59349796 | 97.00712559 | 94.50035901 | 92.07024267 |
| 200318A00043 | 3/18/2020 | 1.06 | 3/20/2023 | 3/18/2020 | 102.59242 | 102.5924186 | 102.5924186 | 102.5924186 | 101.882768 | 99.19761401 | 96.59618807 | 94.07533775 | 91.63205342 |
| 200323A00007 | 3/23/2020 | 1.05 | 9/23/2021 | 3/23/2020 | 100.96606 | 100.9660607 | 100.9660607 | 100.9660607 | 100.743597 | 99.51346748 | 98.31314863 | 97.14156806 | 95.99770428 |
| 200323A00010 | 3/23/2020 | 1.19 | 3/23/2022 | 3/23/2020 | 101.58027 | 101.5802679 | 101.5802679 | 101.5802679 | 101.2265649 | 99.51908846 | 97.84836597 | 96.21327575 | 94.61274215 |
| 200327A00075 | 3/31/2020 | 1.75 | 3/29/2024 | 3/31/2020 | 105.49477 | 105.4947742 | 105.4947742 | 105.4947742 | 104.1842659 | 100.4927202 | 96.95138416 | 93.55328554 | 90.29182049 |
| 200331A00029 | 4/2/2020 | 1.77 | 4/3/2023 | 4/2/2020 | 104.10591 | 104.1059088 | 104.1059088 | 104.1059088 | 103.3788386 | 100.6472984 | 98.00151906 | 95.43825709 | 92.95441619 |
| 200331A00030 | 4/2/2020 | 1.17 | 4/1/2022 | 4/2/2020 | 101.5674 | 101.5673975 | 101.5673975 | 101.5673975 | 101.205606 | 99.47465954 | 97.78136816 | 96.1245742 | 94.50316786 |
| 200403A00014 | 4/3/2020 | 0.63 | 4/17/2023 | 4/3/2020 | 101.44796 | 101.4479638 | 101.4479638 | 101.4479638 | 100.709022 | 97.96630737 | 95.31128143 | 92.74064128 | 90.25122962 |
| 200416A00005 | 4/16/2020 | 0.49 | 4/15/2022 | 4/16/2020 | 100.67401 | 100.6740147 | 100.6740147 | 100.6740147 | 100.2995296 | 98.53369061 | 96.80708725 | 95.11856029 | 93.46699477 |
| 200417A00009 | 4/17/2020 | 1.35 | 4/16/2027 | 4/17/2020 | 107.121 | 107.1209967 | 107.1209967 | 107.1209967 | 102.1561298 | 95.73659089 | 89.75911423 | 84.19108702 | 79.00245957 |
| 200429A00015 | 4/29/2020 | 0.66 | 4/29/2024 | 4/29/2020 | 102.09938 | 102.099385 | 102.099385 | 102.099385 | 100.737652 | 97.01155723 | 93.44134239 | 90.01972443 | 86.73979728 |
| 200429A00053 | 5/1/2020 | 2.18 | 4/30/2025 | 5/1/2020 | 109.11985 | 109.1198524 | 109.1198524 | 109.1198524 | 106.8799259 | 102.100907 | 97.5638737 | 93.25536792 | 89.16274564 |
| 200430A00009 | 4/30/2020 | 1.16 | 4/30/2026 | 4/30/2020 | 105.00867 | 105.008675 | 105.008675 | 105.008675 | 101.5850449 | 96.02848591 | 90.80655613 | 85.89750779 | 81.28110816 |
| 200430A00016 | 4/30/2020 | 0.82 | 4/30/2024 | 4/30/2020 | 102.02673 | 102.0267292 | 102.0267292 | 102.0267292 | 100.6716146 | 96.96300545 | 93.40920491 | 90.00299795 | 86.73754167 |
| 200505A00004 | 5/5/2020 | 0.77 | 5/5/2025 | 5/5/2020 | 103.19369 | 103.1936879 | 103.1936879 | 103.1936879 | 100.969341 | 96.29025997 | 91.85155655 | 87.63973432 | 83.64211953 |
| 200511A00020 | 5/11/2020 | 1.4 | 2/1/2028 | 5/11/2020 | 108.32847 | 108.3284712 | 108.3284712 | 108.3284712 | 102.0886024 | 94.9923605 | 88.43517528 | 82.3734255 | 76.76722779 |
| 200511A00022 | 5/11/2020 | 1.6 | 2/1/2030 | 5/11/2020 | 112.40966 | 112.4096635 | 112.4096635 | 112.1418636 | 102.7027007 | 93.93465813 | 85.98466352 | 78.77218165 | 72.22498233 |
| 200529A00004 | 5/29/2020 | 0.56 | 5/29/2024 | 5/29/2020 | 101.74847 | 101.7484736 | 101.7484736 | 101.7484736 | 100.3285879 | 96.5347172 | 92.90274414 | 89.42495948 | 86.09406058 |
| 120924A00030 | 9/24/2012 | 2.2 | 9/24/2027 | 9/25/2017 | 100.17941 | 100.1794082 | 100.1794082 | 100.1794082 | 100.1676064 | 99.91268469 | 98.01571956 | 95.13276742 | 92.0572343 |
| 200318A00015 | 3/18/2020 | 1.69 | 3/18/2030 | 3/18/2023 | 103.8185 | 103.8184974 | 103.8184974 | 103.8184973 | 102.579262 | 98.69980946 | 94.54099532 | 90.38693577 | 86.39507199 |
| 180712A00016 | 7/12/2018 | 3.66 | 7/12/2033 | 7/12/2028 | 123.89613 | 123.8961307 | 123.8961307 | 123.8544365 | 117.3709479 | 109.705801 | 102.410486 | 95.53845827 | 89.13486125 |
| 150108A00029 | 1/8/2015 | 3.16 | 1/9/2035 | 1/10/2022 | 104.72906 | 104.7290613 | 104.7290613 | 104.7290613 | 104.327194 | 101.7275144 | 97.61851417 | 92.40036551 | 86.87810803 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200115A00023 | 1/15/2020 | 2.16 | 1/15/2030 | 1/15/2025 | 106.70327 | 106.7032727 | 106.7032727 | 106.7032727 | 104.7224514 | 100.4478647 | 96.22206709 | 92.12506405 | 88.21225387 |
| 200612A00001 | 6/12/2020 | 0.75 | 6/12/2030 | 6/12/2025 | 102.42916 | 102.4291563 | 102.4291563 | 102.4291551 | 99.45636512 | 94.80330546 | 90.40282059 | 86.2703901 | 82.39974272 |
| 190930A00079 | 9/30/2019 | 2.04 | 10/1/2029 | 9/30/2024 | 106.62071 | 106.6207076 | 106.6207076 | 106.6207076 | 104.8610783 | 100.7667026 | 96.68125181 | 92.69349645 | 88.86669925 |
| 170113A00025 | 1/13/2017 | 3.59 | 1/13/2032 | 1/13/2022 | 105.29046 | 105.2904637 | 105.2904637 | 105.2904637 | 104.9791977 | 103.195931 | 100.686659 | 97.20069436 | 93.02499537 |
| 151124A00024 | 11/24/2015 | 2.6 | 11/24/2025 | 11/24/2020 | 100.9725 | 100.9725007 | 100.9725007 | 100.9725007 | 100.8946586 | 100.3972831 | 99.13845108 | 96.86986741 | 94.32836144 |
| 191220A00029 | 12/20/2019 | 2.57 | 12/19/2031 | 12/20/2024 | 108.51569 | 108.5156854 | 108.5156854 | 108.5156852 | 106.3104603 | 101.5621447 | 96.75733634 | 92.038919 | 87.5140923 |
| 150901A00019 | 9/1/2015 | 3.26 | 9/3/2030 | 9/1/2020 | 100.75009 | 100.75009 | 100.75009 | 100.75009 | 100.7096316 | 100.420503 | 99.12173071 | 95.95162843 | 92.04717126 |
| 180130A00087 | 1/30/2018 | 2.92 | 1/31/2028 | 1/30/2023 | 106.23391 | 106.2339144 | 106.2339144 | 106.2339144 | 105.6361228 | 103.1206692 | 100.3237938 | 97.26823747 | 94.08438476 |
| 200316A00030 | 3/16/2020 | 1.35 | 3/15/2030 | 3/16/2025 | 104.56627 | 104.5662687 | 104.5662687 | 104.5662686 | 102.1567891 | 97.67140398 | 93.33663053 | 89.20865627 | 85.31145419 |
| 150417A00033 | 4/17/2015 | 1.78 | 4/18/2022 | 4/17/2020 | 100.14325 | 100.1432451 | 100.1432451 | 100.1432451 | 100.1314476 | 99.98224567 | 99.12454707 | 97.81169402 | 96.429067 |
| 151209A00031 | 12/9/2015 | 3.18 | 12/9/2030 | 12/9/2020 | 101.44437 | 101.4443712 | 101.4443712 | 101.4443712 | 101.3508813 | 100.6978375 | 98.85585158 | 95.46389906 | 91.44554803 |
| 180302A00003 | 3/2/2018 | 3.89 | 3/2/2033 | 3/2/2023 | 110.10423 | 110.1042298 | 110.1042298 | 110.1042298 | 109.1967593 | 105.501866 | 100.7681803 | 95.10059379 | 88.9492371 |
| 150709A00019 | 7/9/2015 | 2.36 | 7/9/2025 | 7/9/2020 | 100.19318 | 100.1931846 | 100.1931846 | 100.1931846 | 100.1813811 | 100.0953008 | 99.21260343 | 97.27207381 | 95.03899921 |
| 191031A00036 | 10/31/2019 | 2.9 | 10/31/2039 | 10/31/2024 | 110.72659 | 110.7265876 | 110.7265876 | 110.7250636 | 106.9208168 | 100.1465077 | 93.16704465 | 86.37705841 | 80.02358015 |
| 151223A00007 | 12/23/2015 | 3.76 | 12/23/2030 | 12/23/2022 | 108.68411 | 108.6841075 | 108.6841075 | 108.6841075 | 107.8892886 | 104.4573774 | 100.0183767 | 94.69041535 | 88.89746895 |
| 150327A00011 | 3/27/2015 | 2.88 | 3/27/2030 | 3/27/2020 | 102.09925 | 102.0992489 | 102.0992489 | 102.0992489 | 101.9471741 | 100.9182761 | 98.63290742 | 94.94367636 | 90.77436283 |
| 190520A00018 | 5/20/2019 | 3.7 | 5/20/2044 | 5/20/2024 | 112.74967 | 112.7496689 | 112.7496689 | 112.749486 | 110.0013106 | 103.4521096 | 96.02648119 | 88.35950196 | 80.99432935 |
| 141224A00038 | 12/24/2014 | 2.93 | 12/24/2024 | 12/24/2019 | 100.22641 | 100.2264096 | 100.2264096 | 100.2264096 | 100.2146247 | 100.1286779 | 99.48601412 | 97.31177242 | 94.50813515 |
| 100517A00013 | 5/17/2010 | 3.71 | 5/19/2025 | 5/18/2015 | 100.30942 | 100.3094229 | 100.3094229 | 100.3094229 | 100.2976058 | 100.2114256 | 100.1253925 | 99.74443897 | 98.19602053 |
| 200108A00009 | 1/8/2020 | 2.4 | 1/8/2035 | 1/8/2025 | 109.25943 | 109.2594321 | 109.2594321 | 109.2593774 | 106.0661335 | 100.0790332 | 93.99190441 | 88.0849357 | 82.52995383 |
| 190222A00023 | 2/22/2019 | 3.66 | 2/22/2034 | 2/22/2026 | 121.50981 | 121.5098071 | 121.5098071 | 121.5058597 | 116.1634672 | 108.0533554 | 99.86418922 | 91.89070848 | 84.36336975 |
| 200423A00010 | 4/23/2020 | 1.59 | 4/23/2030 | 4/23/2025 | 106.69201 | 106.6920147 | 106.6920147 | 106.6920118 | 102.2637386 | 95.48029116 | 88.86101969 | 82.59368803 | 76.76461439 |
| 161012A00009 | 10/12/2016 | 2.56 | 10/14/2031 | 10/12/2021 | 103.33026 | 103.3302558 | 103.3302558 | 103.3302558 | 102.9815169 | 100.6166865 | 97.09698299 | 92.85429445 | 88.452764 |
| 180105A00006 | 1/5/2018 | 3.07 | 1/5/2028 | 1/5/2023 | 106.57305 | 106.5730483 | 106.5730483 | 106.5730483 | 105.984347 | 103.5076263 | 100.767406 | 97.75620301 | 94.59162183 |
| 190530A00044 | 5/30/2019 | 2.85 | 5/30/2034 | 5/30/2024 | 109.57127 | 109.5712677 | 109.5712677 | 109.5712672 | 107.5978132 | 102.6885056 | 97.42835299 | 92.06910633 | 86.84697598 |
| 141010A00012 | 10/10/2014 | 2.44 | 10/10/2024 | 10/10/2019 | 100.18506 | 100.1850597 | 100.1850597 | 100.1850597 | 100.1732784 | 100.0873586 | 99.28547141 | 97.57825751 | 95.63651793 |
| 130823A00025 | 8/23/2013 | 3.43 | 8/23/2023 | 8/24/2020 | 100.56917 | 100.5691689 | 100.5691689 | 100.5691689 | 100.5434486 | 100.3715215 | 100.1806721 | 99.36585677 | 97.43138773 |
| 160627A00034 | 6/27/2016 | 1.7 | 6/26/2026 | 6/28/2021 | 101.48601 | 101.486008 | 101.486008 | 101.486008 | 101.2668589 | 99.69959661 | 97.43668389 | 94.84158548 | 92.20992861 |
| 190409A00016 | 4/9/2019 | 2.91 | 4/9/2029 | 4/9/2024 | 109.59438 | 109.5943804 | 109.5943804 | 109.5943804 | 108.0315939 | 103.715416 | 99.10097295 | 94.33241052 | 89.59078061 |
| 161006A00023 | 10/6/2016 | 2.49 | 10/6/2031 | 10/6/2021 | 103.23411 | 103.2341142 | 103.2341142 | 103.2341142 | 102.8694733 | 100.4187402 | 96.81375386 | 92.52979031 | 88.12318728 |
| 130409A00013 | 4/9/2013 | 1.76 | 4/11/2023 | 4/9/2018 | 100.12652 | 100.1265188 | 100.1265188 | 100.1265188 | 100.1147444 | 99.88965634 | 98.87403114 | 97.55811596 | 96.21036172 |
| 191007A00013 | 10/7/2019 | 2 | 10/5/2029 | 10/7/2024 | 105.82998 | 105.829984 | 105.829984 | 105.829984 | 103.973017 | 99.82336293 | 95.70990009 | 91.71926451 | 87.90705663 |
| 130104A00013 | 1/4/2013 | 1.79 | 1/4/2023 | 1/4/2018 | 100.1291 | 100.1291014 | 100.1291014 | 100.1291014 | 100.1173267 | 99.92623627 | 99.02026178 | 97.8132087 | 96.5747764 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150501A00019 | 5/1/2015 | 3.69 | 5/1/2035 | 5/1/2020 | 103.13936 | 103.1393617 | 103.1393617 | 103.1393617 | 102.9390746 | 101.6388011 | 98.76244031 | 93.97299639 | 88.40338617 |
| 190430A00020 | 4/30/2019 | 3.41 | 4/28/2034 | 4/28/2026 | 121.08882 | 121.0888189 | 121.0888189 | 121.0622419 | 114.57474 | 106.1071532 | 97.7677229 | 89.77884652 | 82.31202501 |
| 111005A00009 | 10/5/2011 | 2.72 | 10/5/2026 | 10/5/2016 | 100.22418 | 100.2241815 | 100.2241815 | 100.2241815 | 100.2123744 | 100.1262674 | 99.46135588 | 97.34233024 | 94.69867547 |
| 090429A00044 | 4/29/2009 | 4.1 | 4/29/2024 | 4/29/2014 | 100.32797 | 100.3279684 | 100.3279684 | 100.3279684 | 100.3161703 | 100.230128 | 100.1442307 | 99.9915919 | 99.03491494 |
| 200430A00021 | 4/30/2020 | 1.2 | 4/30/2030 | 4/30/2025 | 103.42303 | 103.4230333 | 103.4230333 | 103.423033 | 100.7142151 | 96.15949748 | 91.81722046 | 87.71703861 | 83.86378813 |
| 140723A00038 | 7/23/2014 | 2.3 | 7/23/2024 | 7/23/2019 | 100.18802 | 100.1880184 | 100.1880184 | 100.1880184 | 100.1762156 | 100.0901397 | 99.39788061 | 97.79487072 | 95.95106561 |
| 151005A00020 | 10/5/2015 | 2.27 | 10/6/2025 | 10/5/2020 | 100.8105 | 100.8104962 | 100.8104962 | 100.8104962 | 100.7363261 | 100.128873 | 98.6447935 | 96.4631144 | 94.11167599 |
| 100707A00014 | 7/7/2010 | 3.19 | 7/7/2025 | 7/7/2015 | 100.26465 | 100.2646496 | 100.2646496 | 100.2646496 | 100.2528378 | 100.1666961 | 100.0347376 | 98.9659939 | 96.98139504 |
| 150325A00018 | 3/25/2015 | 2.02 | 3/25/2025 | 3/25/2020 | 100.16391 | 100.1639097 | 100.1639097 | 100.1639097 | 100.1521097 | 99.97992889 | 98.745267 | 96.75665496 | 94.62175983 |
| 191028A00015 | 10/28/2019 | 2.49 | 10/27/2034 | 10/28/2024 | 109.07688 | 109.0768805 | 109.0768805 | 109.076873 | 106.369764 | 100.8615026 | 95.19712584 | 89.62354439 | 84.32003932 |
| 190301A00015 | 3/1/2019 | 3.86 | 3/1/2034 | 3/2/2026 | 119.35995 | 119.3599506 | 119.3599506 | 119.3590838 | 114.8762892 | 107.5631979 | 100.0498512 | 92.58175262 | 85.40572909 |
| 171016A00037 | 10/16/2017 | 3.39 | 10/18/2032 | 10/16/2022 | 107.47302 | 107.4730236 | 107.4730236 | 107.4730236 | 106.6539179 | 102.9982173 | 98.06834166 | 92.21806829 | 86.05299488 |
| 180212A00090 | 2/12/2018 | 2.92 | 2/13/2023 | 2/12/2021 | 104.11358 | 104.1135833 | 104.1135833 | 104.1135833 | 103.7933214 | 102.170012 | 100.4435833 | 98.53912775 | 96.5008625 |
| 141110A00008 | 11/10/2014 | 2.31 | 11/12/2024 | 11/12/2019 | 100.18888 | 100.1888794 | 100.1888794 | 100.1888794 | 100.1770765 | 100.0909999 | 99.32381325 | 97.60248208 | 95.62652984 |
| 190807A00044 | 8/7/2019 | 2.27 | 8/7/2034 | 8/7/2024 | 108.06646 | 108.0664598 | 108.0664598 | 108.0664495 | 105.2547909 | 99.70487794 | 94.04456079 | 88.52448812 | 83.30170274 |
| 200108A00040 | 1/8/2020 | 2.52 | 1/8/2030 | 1/8/2025 | 109.29252 | 109.2925153 | 109.2925153 | 109.2925152 | 106.4014261 | 100.7099987 | 94.91714395 | 89.22116457 | 83.77676234 |
| 140508A00011 | 5/8/2014 | 2.32 | 5/8/2024 | 5/8/2019 | 100.18974 | 100.1897405 | 100.1897405 | 100.1897405 | 100.1779374 | 100.0918601 | 99.46540163 | 97.93605897 | 96.16196604 |
| 200309A00013 | 3/9/2020 | 1.1 | 3/8/2030 | 3/9/2025 | 102.92622 | 102.9262195 | 102.9262195 | 102.9262193 | 100.2732974 | 95.76455814 | 91.46714146 | 87.40967507 | 83.59714042 |
| 190530A00037 | 5/30/2019 | 2.85 | 5/30/2034 | 5/30/2024 | 109.57126 | 109.5712594 | 109.5712594 | 109.5712589 | 107.5978087 | 102.6885087 | 97.42836518 | 92.06912819 | 86.84700739 |
| 140617A00012 | 6/17/2014 | 3.14 | 6/18/2029 | 6/17/2019 | 100.26034 | 100.2603445 | 100.2603445 | 100.2603445 | 100.2485332 | 100.1623952 | 99.54154287 | 96.94604128 | 93.47711761 |
| 150202A00006 | 2/2/2015 | 1.92 | 2/3/2025 | 2/3/2020 | 100.1553 | 100.1552995 | 100.1552995 | 100.1552995 | 100.1435005 | 99.93429001 | 98.59735243 | 96.6072155 | 94.50144399 |
| 150223A00011 | 2/23/2015 | 3.54 | 2/22/2030 | 2/23/2022 | 105.06755 | 105.067553 | 105.067553 | 105.067553 | 104.7411898 | 102.9413887 | 100.5585342 | 97.42151084 | 93.76180691 |
| 151027A00015 | 10/27/2015 | 2.89 | 10/28/2030 | 10/27/2020 | 101.16156 | 101.1615558 | 101.1615558 | 101.1615558 | 101.0860362 | 100.5028346 | 98.59008958 | 95.11905383 | 91.10114866 |
| 180627A00005 | 6/27/2018 | 3.63 | 6/30/2033 | 6/30/2023 | 109.93612 | 109.9361208 | 109.9361208 | 109.9361208 | 108.9746559 | 105.4649708 | 101.391433 | 96.81870479 | 91.99241832 |
| 200326A00035 | 3/26/2020 | 1.68 | 3/26/2030 | 3/26/2025 | 105.09203 | 105.0920303 | 105.0920303 | 105.0920302 | 102.7717279 | 98.32631375 | 94.00963266 | 89.88532359 | 85.98297487 |
| 150116A00005 | 1/16/2015 | 1.92 | 1/16/2025 | 1/16/2020 | 100.1553 | 100.1552995 | 100.1552995 | 100.1552995 | 100.1435005 | 99.93968625 | 98.63238027 | 96.67441654 | 94.60153882 |
| 160506A00056 | 5/10/2016 | 3.77 | 5/10/2041 | 5/10/2021 | 103.21358 | 103.2135759 | 103.2135759 | 103.2135759 | 102.997582 | 101.166352 | 96.75820248 | 90.2886945 | 83.37779744 |
| 190329A00023 | 3/29/2019 | 3 | 3/29/2034 | 3/29/2024 | 109.90129 | 109.9012892 | 109.9012892 | 109.901289 | 108.1149988 | 103.4110017 | 98.30908977 | 93.04797966 | 87.86813835 |
| 140822A00012 | 8/22/2014 | 3.7 | 8/22/2034 | 8/23/2021 | 103.90066 | 103.9006559 | 103.9006559 | 103.9006559 | 103.6755013 | 102.1486507 | 99.42992201 | 95.25813772 | 90.31688596 |
| 161011A00037 | 10/11/2016 | 2.17 | 10/13/2026 | 10/11/2019 | 101.65659 | 101.6565868 | 101.6565868 | 101.6565868 | 101.4914728 | 100.3773899 | 98.35300279 | 95.63104333 | 92.76043393 |
| 171005A00047 | 10/5/2017 | 3.29 | 10/5/2032 | 10/5/2022 | 107.13358 | 107.1335791 | 107.1335791 | 107.1335791 | 106.3617639 | 102.912534 | 98.35248856 | 92.98832553 | 87.34967496 |
| 170721A00021 | 7/21/2017 | 2.95 | 7/21/2032 | 7/21/2022 | 105.76549 | 105.7654948 | 105.7654948 | 105.7654948 | 105.1468006 | 102.22811 | 98.45383698 | 94.06223402 | 89.46109066 |
| 190111A00040 | 1/11/2019 | 3.74 | 1/11/2034 | 1/11/2024 | 112.30748 | 112.3074815 | 112.3074815 | 112.3074814 | 110.7285329 | 105.9511892 | 100.3826747 | 94.26305177 | 87.99997826 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180105A00005 | 1/5/2018 | 3.07 | 1/5/2028 | 1/5/2023 | 106.57305 | 106.573049 | 106.573049 | 106.573049 | 105.9843476 | 103.5076261 | 100.7674046 | 97.75619987 | 94.5916166 |
| 150526A00019 | 5/28/2015 | 2.27 | 5/28/2025 | 5/28/2020 | 100.18544 | 100.1854353 | 100.1854353 | 100.1854353 | 100.1736328 | 100.0775624 | 99.11366012 | 97.18408335 | 95.00382748 |
| 150115A00030 | 1/15/2015 | 1.98 | 1/15/2025 | 1/15/2020 | 100.16047 | 100.1604656 | 100.1604656 | 100.1604656 | 100.148666 | 99.97001626 | 98.74052201 | 96.80267257 | 94.73252548 |
| 170802A00074 | 8/2/2017 | 2.92 | 8/2/2027 | 8/2/2022 | 105.27978 | 105.2797798 | 105.2797798 | 105.2797798 | 104.7208738 | 102.0687942 | 98.75029746 | 94.90584215 | 90.85250929 |
| 160711A00011 | 7/11/2016 | 1.66 | 7/13/2026 | 7/11/2021 | 101.67184 | 101.6718429 | 101.6718429 | 101.6718429 | 101.4183113 | 99.6566412 | 97.28797784 | 94.6463234 | 91.9830418 |
| 170705A00037 | 7/5/2017 | 2.85 | 7/6/2032 | 7/6/2027 | 114.34644 | 114.3464398 | 114.3464398 | 114.3464008 | 110.2999739 | 104.6072646 | 99.18640148 | 94.06167577 | 89.25009126 |
| 170519A00006 | 5/19/2017 | 3 | 5/19/2032 | 5/19/2022 | 105.23194 | 105.2319411 | 105.2319411 | 105.2319411 | 104.7423891 | 102.1620394 | 98.65913644 | 94.4160929 | 89.88909757 |
| 150319A00020 | 3/19/2015 | 2.98 | 3/19/2030 | 3/19/2020 | 100.23071 | 100.2307141 | 100.2307141 | 100.2307141 | 100.2189286 | 100.122662 | 98.55652768 | 95.22087029 | 91.3883818 |
| 140714A00012 | 7/14/2014 | 3.04 | 7/16/2029 | 7/15/2019 | 100.25173 | 100.2517343 | 100.2517343 | 100.2517343 | 100.2399239 | 100.1537933 | 99.34234833 | 96.55290426 | 93.01157489 |
| 140328A00011 | 3/28/2014 | 3.32 | 3/30/2026 | 3/29/2021 | 102.38886 | 102.3888585 | 102.3888585 | 102.3888585 | 102.2437046 | 101.4501327 | 100.1987336 | 97.80412237 | 94.45794253 |
| 180504A00024 | 5/4/2018 | 3.62 | 5/4/2028 | 5/4/2023 | 110.0265 | 110.0265034 | 110.0265034 | 110.0265034 | 109.1341126 | 105.6967752 | 101.6793596 | 97.03123798 | 91.9743087 |
| 190930A00083 | 9/30/2019 | 2.04 | 10/1/2029 | 9/30/2024 | 106.62071 | 106.6207076 | 106.6207076 | 106.6207076 | 104.861078 | 100.7667021 | 96.68125089 | 92.69349521 | 88.86669772 |
| 200423A00009 | 4/23/2020 | 1.59 | 4/23/2030 | 4/23/2025 | 106.69202 | 106.6920189 | 106.6920189 | 106.692016 | 102.2637386 | 95.48028598 | 88.86100948 | 82.59367312 | 76.76459519 |
| 200316A00032 | 3/16/2020 | 1.35 | 3/15/2030 | 3/16/2025 | 104.56627 | 104.566269 | 104.566269 | 104.5662689 | 102.1567882 | 97.671402 | 93.33662743 | 89.20865213 | 85.3114491 |
| 190116A00015 | 1/16/2019 | 3.61 | 1/17/2034 | 1/16/2024 | 110.71252 | 110.7125234 | 110.7125234 | 110.7125234 | 109.3361857 | 105.1649274 | 100.5093916 | 95.52232476 | 90.45601318 |
| 200306A00021 | 3/6/2020 | 1.16 | 3/6/2030 | 3/6/2025 | 103.14912 | 103.1491214 | 103.1491214 | 103.1491212 | 100.5352169 | 96.03136944 | 91.73002024 | 87.66482867 | 83.84254099 |
| 161012A00020 | 10/11/2016 | 2.96 | 10/14/2031 | 10/11/2023 | 109.19033 | 109.1903264 | 109.1903264 | 109.1903262 | 107.3684162 | 102.153096 | 96.15192117 | 89.78968835 | 83.4746534 |
| 161118A00013 | 11/18/2016 | 2.96 | 11/18/2026 | 11/18/2021 | 104.01627 | 104.0162706 | 104.0162706 | 104.0162706 | 103.7348146 | 101.9056736 | 99.12985182 | 95.34624361 | 91.00294499 |
| 171004A00022 | 10/4/2017 | 2.74 | 10/4/2027 | 10/4/2022 | 105.71728 | 105.7172792 | 105.7172792 | 105.7172792 | 105.0790842 | 102.2239127 | 98.75695724 | 94.82138174 | 90.70768758 |
| 150715A00020 | 7/15/2015 | 3.45 | 7/15/2030 | 7/15/2020 | 100.27118 | 100.2711758 | 100.2711758 | 100.2711758 | 100.2593856 | 100.1734005 | 99.54648054 | 96.76979588 | 93.00974996 |
| 170515A00052 | 5/15/2017 | 3.78 | 5/15/2042 | 5/15/2024 | 114.76741 | 114.767407 | 114.767407 | 114.7673507 | 112.1431477 | 106.0142589 | 99.1754523 | 92.02896494 | 85.01094803 |
| 171214A00010 | 12/14/2017 | 2.57 | 12/14/2022 | 12/14/2020 | 101.15974 | 101.1597392 | 101.1597392 | 101.1597392 | 101.0630245 | 100.5194668 | 99.61786398 | 97.99642621 | 96.08359269 |
| 140416A00025 | 4/14/2014 | 3.56 | 4/16/2029 | 4/14/2021 | 102.84334 | 102.8433434 | 102.8433434 | 102.8433434 | 102.6770213 | 101.7503635 | 100.0786166 | 96.93323891 | 92.70585767 |
| 160105A00024 | 1/5/2016 | 3.78 | 1/4/2036 | 1/5/2021 | 102.42963 | 102.4296282 | 102.4296282 | 102.4296282 | 102.3150078 | 101.4224572 | 99.05294263 | 94.70968628 | 89.42669419 |
| 200505A00010 | 5/5/2020 | 0.89 | 5/6/2030 | 5/5/2025 | 102.96397 | 102.9639716 | 102.9639716 | 102.963971 | 100.1239079 | 95.50920752 | 91.12724017 | 86.99981194 | 83.12818288 |
| 111215A00019 | 12/15/2011 | 2.53 | 12/15/2026 | 12/15/2021 | 103.30158 | 103.3015772 | 103.3015772 | 103.3015772 | 103.0273609 | 101.4030232 | 99.29729714 | 96.74144696 | 93.97106951 |
| 191031A00037 | 10/31/2019 | 2.59 | 10/30/2034 | 10/31/2024 | 108.99703 | 108.9970286 | 108.9970286 | 108.9970138 | 106.0869929 | 100.4834878 | 94.78715741 | 89.22848148 | 83.96251992 |
| 200423A00008 | 4/23/2020 | 1.59 | 4/23/2030 | 4/23/2025 | 106.69202 | 106.6920189 | 106.6920189 | 106.692016 | 102.2637386 | 95.48028598 | 88.86100948 | 82.59367312 | 76.76459519 |
| 130322A00001 | 3/22/2013 | 2.06 | 3/22/2023 | 3/22/2018 | 100.16735 | 100.1673538 | 100.1673538 | 100.1673538 | 100.1555534 | 100.0267044 | 99.00084589 | 97.16332967 | 95.13201335 |
| 190827A00044 | 8/27/2019 | 1.9 | 8/27/2029 | 8/27/2024 | 106.02856 | 106.0285586 | 106.0285586 | 106.0285586 | 104.2780916 | 100.2078728 | 96.15362127 | 92.20379755 | 88.4198895 |
| 160506A00054 | 5/10/2016 | 3.31 | 5/12/2036 | 5/10/2021 | 102.78684 | 102.7868439 | 102.7868439 | 102.7868439 | 102.5670663 | 100.7102487 | 96.63332112 | 90.99661396 | 85.07443832 |
| 190329A00025 | 3/29/2019 | 3 | 3/29/2034 | 3/29/2024 | 109.90127 | 109.9012728 | 109.9012728 | 109.9012726 | 108.1149899 | 103.4110077 | 98.30911346 | 93.04802201 | 87.86819887 |
| 160825A00032 | 8/25/2016 | 3.14 | 8/25/2036 | 8/25/2021 | 103.2689 | 103.2689001 | 103.2689001 | 103.2689001 | 102.9565735 | 100.4497176 | 96.09758878 | 90.63378343 | 84.99244572 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190807A00041 | 8/7/2019 | 2.27 | 8/7/2034 | 7/7/2024 | 107.79757 | 107.7975703 | 107.7975703 | 107.7975634 | 105.1251247 | 99.65074796 | 94.02636283 | 88.5194937 | 83.30068164 |
| 200115A00025 | 1/15/2020 | 2.1 | 1/15/2025 | 1/15/2023 | 104.18757 | 104.1875703 | 104.1875703 | 104.1875703 | 103.5111683 | 100.7354881 | 97.73058617 | 94.61241023 | 91.50503711 |
| 130614A00011 | 6/14/2013 | 2.95 | 6/14/2028 | 6/14/2018 | 100.24399 | 100.243985 | 100.243985 | 100.243985 | 100.2321756 | 100.1460517 | 99.43956472 | 96.94551743 | 93.75354212 |
| 141119A00005 | 11/19/2014 | 2.53 | 11/19/2024 | 11/19/2019 | 100.19281 | 100.1928077 | 100.1928077 | 100.1928077 | 100.1810255 | 100.0950991 | 99.39280218 | 97.70136892 | 95.73618159 |
| 181212A00026 | 12/12/2018 | 3.22 | 12/12/2028 | 12/12/2023 | 109.16725 | 109.1672544 | 109.1672544 | 109.1672544 | 108.1377267 | 104.8572461 | 101.4328373 | 97.89018622 | 94.31605834 |
| 150817A00038 | 8/17/2015 | 4.01 | 8/31/2040 | 8/17/2020 | 100.66969 | 100.6696897 | 100.6696897 | 100.6696897 | 100.6439133 | 100.4561576 | 98.60958177 | 93.27312185 | 86.69197565 |
| 200512A00023 | 5/12/2020 | 1.78 | 5/11/2035 | 5/12/2025 | 109.35964 | 109.3596358 | 109.3596358 | 109.0125097 | 101.9836227 | 94.04328103 | 86.61373364 | 79.80757996 | 73.64877432 |
| 150721A00044 | 7/23/2015 | 2.68 | 7/23/2025 | 7/23/2020 | 100.20489 | 100.2048874 | 100.2048874 | 100.2048874 | 100.193105 | 100.1071767 | 99.4285473 | 97.58464219 | 95.37926952 |
| 120702A00016 | 7/2/2012 | 2.42 | 7/6/2027 | 7/3/2013 | 100.19835 | 100.1983507 | 100.1983507 | 100.1983507 | 100.1865467 | 100.0539995 | 98.63726907 | 95.96041407 | 92.9718559 |
| 171012A00039 | 10/12/2017 | 3.73 | 10/12/2032 | 10/13/2020 | 101.5335 | 101.5334986 | 101.5334986 | 101.5334986 | 101.4550233 | 100.9098422 | 98.57869979 | 93.215603 | 86.77614749 |
| 170411A00031 | 4/11/2017 | 3.39 | 4/12/2032 | 4/11/2022 | 105.59528 | 105.5952756 | 105.5952756 | 105.5952756 | 105.1399017 | 102.7519556 | 99.50752676 | 95.47219923 | 91.04520001 |
| 160128A00029 | 1/29/2016 | 3.45 | 1/29/2036 | 1/29/2021 | 102.35784 | 102.3578434 | 102.3578434 | 102.3578434 | 102.2393352 | 101.2155401 | 98.48121492 | 93.85392047 | 88.45786548 |
| 160311A00019 | 3/11/2016 | 3.02 | 3/11/2031 | 3/11/2021 | 102.00923 | 102.0092255 | 102.0092255 | 102.0092255 | 101.861439 | 100.7439827 | 98.31478567 | 94.61526238 | 90.46857501 |
| 121121A00026 | 11/21/2012 | 1.63 | 11/21/2022 | 11/21/2017 | 100.11533 | 100.1153271 | 100.1153271 | 100.1153271 | 100.103554 | 99.85348913 | 98.90867664 | 97.75589221 | 96.58905256 |
| 190409A00017 | 4/9/2019 | 3.01 | 4/9/2029 | 4/9/2024 | 110.35662 | 110.3566246 | 110.3566246 | 110.3566246 | 108.6737629 | 104.0657091 | 99.07226432 | 93.86058052 | 88.64793172 |
| 170809A00042 | 8/9/2017 | 2.35 | 8/9/2027 | 8/9/2022 | 104.23802 | 104.2380193 | 104.2380193 | 104.2380193 | 103.7367413 | 101.4029978 | 98.68746906 | 95.7086307 | 92.65085054 |
| 200609A00003 | 6/9/2020 | 1.66 | 6/8/2035 | 6/9/2025 | 107.16015 | 107.1601483 | 107.1601483 | 106.9106896 | 99.83810051 | 91.4744653 | 83.58407376 | 76.37057917 | 69.88563255 |
| 150421A00009 | 4/21/2015 | 2.17 | 4/21/2025 | 4/21/2020 | 100.16098 | 100.1609821 | 100.1609821 | 100.1609821 | 100.1492048 | 99.95906934 | 98.65488643 | 96.62719804 | 94.46442668 |
| 200102A00020 | 1/2/2020 | 2.78 | 1/3/2040 | 1/2/2025 | 111.24205 | 111.2420485 | 111.2420485 | 111.24015 | 107.3408955 | 100.4605305 | 93.37161578 | 86.47158108 | 80.01433251 |
| 191007A00012 | 10/7/2019 | 2 | 10/5/2029 | 10/7/2024 | 105.82999 | 105.8299855 | 105.8299855 | 105.8299855 | 103.9730161 | 99.82335903 | 95.70989308 | 91.71925448 | 87.9070438 |
| 190329A00026 | 3/29/2019 | 3 | 3/29/2034 | 3/29/2024 | 109.90129 | 109.9012892 | 109.9012892 | 109.901289 | 108.1150003 | 103.4110057 | 98.30909694 | 93.04799014 | 87.86815195 |
| 151224A00017 | 12/24/2015 | 3.06 | 12/24/2030 | 12/24/2020 | 101.47801 | 101.4780065 | 101.4780065 | 101.4780065 | 101.3843449 | 100.7543599 | 99.0142948 | 95.68245654 | 91.66823578 |
| 150709A00018 | 7/9/2015 | 2.36 | 7/9/2025 | 7/6/2020 | 100.19318 | 100.1931846 | 100.1931846 | 100.1931846 | 100.1813811 | 100.0953008 | 99.21260409 | 97.27207601 | 95.03900325 |
| 130521A00009 | 5/21/2013 | 2.55 | 5/22/2028 | 5/21/2018 | 100.20954 | 100.209544 | 100.209544 | 100.209544 | 100.1977387 | 100.0782981 | 98.61150156 | 95.71272819 | 92.44175598 |
| 180703A00033 | 7/3/2018 | 3.4 | 7/3/2028 | 7/3/2023 | 108.02707 | 108.0270715 | 108.0270715 | 108.0270715 | 107.2503192 | 104.3832989 | 101.3164247 | 98.05374263 | 94.69102026 |
| 190204A00054 | 2/4/2019 | 3.98 | 2/6/2034 | 2/2/2024 | 112.93869 | 112.9386877 | 112.9386877 | 112.9386872 | 111.2065357 | 106.1935169 | 100.3594606 | 93.96677339 | 87.42326622 |
| 200110A00012 | 1/10/2020 | 2.57 | 1/10/2035 | 1/10/2025 | 109.08517 | 109.0851743 | 109.0851743 | 109.0851461 | 106.0129224 | 100.284171 | 94.48696227 | 88.85200208 | 83.52839557 |
| 130416A00025 | 4/16/2013 | 2.27 | 4/18/2028 | 4/16/2018 | 100.18544 | 100.1854353 | 100.1854353 | 100.1854353 | 100.1736328 | 99.91370351 | 97.91086258 | 94.84120933 | 91.5621892 |
| 160209A00028 | 2/9/2016 | 2.04 | 2/9/2026 | 2/9/2021 | 101.24551 | 101.2455052 | 101.2455052 | 101.2455052 | 101.097645 | 99.9464643 | 98.00380452 | 95.6013908 | 93.10854664 |
| 180315A00030 | 3/15/2018 | 3.76 | 3/15/2033 | 3/17/2025 | 116.41483 | 116.4148325 | 116.4148325 | 116.4148269 | 113.5725187 | 107.4413138 | 100.8549984 | 94.04726601 | 87.31378854 |
| 150526A00018 | 5/28/2015 | 2.27 | 5/28/2025 | 5/28/2020 | 100.18544 | 100.1854353 | 100.1854353 | 100.1854353 | 100.1736328 | 100.0775624 | 99.11365972 | 97.18408254 | 95.00382625 |
| 160608A00021 | 6/8/2016 | 1.91 | 6/8/2023 | 6/8/2016 | 104.52034 | 104.5203418 | 104.5203418 | 104.5203418 | 103.7612581 | 101.0101896 | 98.3490024 | 95.77425457 | 93.28265609 |
| 160608A00024 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88328 | 110.883281 | 110.883281 | 110.883281 | 107.7858978 | 102.5861285 | 97.68899667 | 93.07502148 | 88.72608066 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160729A00015 | 7/29/2016 | 2.06 | 7/30/2029 | 7/29/2016 | 108.33083 | 108.3308331 | 108.3308331 | 108.3308331 | 105.2310745 | 100.6451496 | 96.34498672 | 92.30958891 | 88.51967988 |
| 160902A00004 | 9/2/2016 | 2.15 | 9/4/2029 | 9/2/2016 | 108.85112 | 108.8511156 | 108.8511156 | 108.8511156 | 105.6792354 | 101.0342333 | 96.68098464 | 92.59789064 | 88.76513531 |
| 160907A00049 | 9/7/2016 | 1.41 | 9/9/2024 | 9/7/2016 | 102.86154 | 102.8615389 | 102.8615389 | 102.8615389 | 102.2283209 | 100.0596333 | 97.96224528 | 95.93321603 | 93.96974794 |
| 160908A00026 | 9/8/2016 | 2.21 | 9/8/2026 | 9/8/2016 | 110.45427 | 110.4542744 | 110.4542744 | 110.4542744 | 107.0591047 | 101.7044761 | 96.6724545 | 91.94154766 | 87.49181748 |
| 160908A00028 | 9/8/2016 | 2.21 | 9/8/2026 | 9/8/2016 | 110.45428 | 110.4542769 | 110.4542769 | 110.4542769 | 107.0591055 | 101.7044757 | 96.67245301 | 91.94154521 | 87.49181417 |
| 160908A00033 | 9/8/2016 | 2.17 | 9/8/2026 | 9/8/2016 | 109.70241 | 109.702406 | 109.702406 | 109.702406 | 106.5684607 | 101.4952153 | 96.72150998 | 92.2276108 | 87.99520053 |
| 160916A00015 | 9/16/2016 | 2.2 | 9/17/2029 | 9/16/2016 | 109.18083 | 109.1808271 | 109.1808271 | 109.1808271 | 105.942243 | 101.2463764 | 96.84775408 | 92.72421022 | 88.85542101 |
| 161014A00008 | 10/14/2016 | 2.28 | 10/15/2029 | 10/14/2016 | 109.66722 | 109.6672194 | 109.6672194 | 109.6670749 | 106.3559672 | 101.6021268 | 97.15155095 | 92.9814583 | 89.07097399 |
| 161021A00004 | 10/21/2016 | 2.23 | 10/22/2029 | 10/21/2016 | 109.41583 | 109.4158286 | 109.4158286 | 109.4156171 | 106.111767 | 101.3686384 | 96.92811057 | 92.7674503 | 88.86582699 |
| 161116A00005 | 11/16/2016 | 2.01 | 11/16/2021 | 11/16/2016 | 102.19223 | 102.1922313 | 102.1922313 | 102.1922313 | 101.9633985 | 100.7207659 | 99.50058274 | 98.30228248 | 97.12531728 |
| 170124A00017 | 1/24/2017 | 2.82 | 1/23/2032 | 1/24/2017 | 116.77102 | 116.7710169 | 116.7710169 | 116.4598031 | 111.3449243 | 105.2299569 | 99.58771464 | 94.37558837 | 89.5552081 |
| 170203A00022 | 2/3/2017 | 2.99 | 2/4/2030 | 2/3/2017 | 113.76742 | 113.767423 | 113.767423 | 113.7589349 | 110.0868496 | 105.0030025 | 100.2535038 | 95.8125041 | 91.6563767 |
| 170221A00028 | 2/21/2017 | 2.31 | 2/18/2022 | 2/21/2017 | 103.26041 | 103.2604115 | 103.2604115 | 103.2604115 | 102.9426076 | 101.354505 | 99.79911882 | 98.27549799 | 96.78272845 |
| 170224A00008 | 2/24/2017 | 2.18 | 2/24/2022 | 2/24/2017 | 103.07893 | 103.0789265 | 103.0789265 | 103.0789265 | 102.7567048 | 101.1542646 | 99.58505872 | 98.04811259 | 96.54248976 |
| 170317A00040 | 3/17/2017 | 2.74 | 3/18/2024 | 3/17/2017 | 108.72598 | 108.7259846 | 108.7259846 | 108.7259846 | 107.4975121 | 103.9436703 | 100.5307069 | 97.2521908 | 94.1020261 |
| 170317A00041 | 3/17/2017 | 2.73 | 3/18/2024 | 3/17/2017 | 108.54793 | 108.547934 | 108.547934 | 108.547934 | 107.3455611 | 103.8507123 | 100.4937012 | 97.26825196 | 94.16841486 |
| 170322A00033 | 3/22/2017 | 3.61 | 3/24/2042 | 3/22/2017 | 143.10301 | 143.103015 | 143.103015 | 135.7761412 | 122.3382018 | 109.9332609 | 99.19111743 | 89.8565569 | 81.71690894 |
| 170511A00011 | 5/11/2017 | 2.41 | 5/11/2027 | 5/11/2017 | 108.33676 | 108.3367573 | 108.3367573 | 108.3367573 | 106.5766757 | 102.972342 | 99.54590664 | 96.28685171 | 93.18536344 |
| 170619A00096 | 6/16/2017 | 2.79 | 6/16/2027 | 6/16/2017 | 115.26309 | 115.2630919 | 115.2630919 | 115.2630919 | 110.7777098 | 104.7066921 | 99.03870147 | 93.74431421 | 88.79641665 |
| 170707A00013 | 7/7/2017 | 2.88 | 7/8/2030 | 7/7/2017 | 113.76457 | 113.7645715 | 113.7645715 | 113.7282802 | 109.7659425 | 104.4932081 | 99.58026688 | 94.99831309 | 90.72110116 |
| 170731A00041 | 7/31/2017 | 2.74 | 7/31/2030 | 7/31/2017 | 112.98879 | 112.9887917 | 112.9887917 | 112.9520631 | 109.0160407 | 103.7787174 | 98.89883396 | 94.34776634 | 90.09943532 |
| 170921A00052 | 9/21/2017 | 2.21 | 9/21/2022 | 9/21/2017 | 104.08541 | 104.0854138 | 104.0854138 | 104.0854138 | 103.5846061 | 101.4813352 | 99.43263853 | 97.43669099 | 95.49174458 |
| 111115A00005 | 11/15/2011 | 2.26 | 11/15/2021 | 11/15/2011 | 101.51375 | 101.5137518 | 101.5137518 | 101.5137518 | 101.3711101 | 100.6140533 | 99.87003222 | 99.13868792 | 98.41967537 |
| 120806A00015 | 8/6/2012 | 2.38 | 8/6/2027 | 8/6/2012 | 107.78375 | 107.7837459 | 107.7837459 | 107.7837459 | 105.9018937 | 102.2124092 | 98.71010492 | 95.38362893 | 92.22240705 |
| 160616A00029 | 6/16/2016 | 1.58 | 6/16/2026 | 6/16/2016 | 104.56979 | 104.5697889 | 104.5697889 | 104.5697889 | 103.3213381 | 100.2699368 | 97.35196041 | 94.56034482 | 91.88845367 |
| 160629A00066 | 6/29/2016 | 2.61 | 6/30/2036 | 6/29/2016 | 130.69966 | 130.6996646 | 130.6996646 | 124.5077402 | 112.3542838 | 101.1569294 | 91.39610238 | 82.86880411 | 75.40240451 |
| 160722A00011 | 7/22/2016 | 2.17 | 7/23/2029 | 7/22/2016 | 108.86685 | 108.8668531 | 108.8668531 | 108.8668531 | 105.7521963 | 101.1438112 | 96.82256753 | 92.76736869 | 88.95884696 |
| 160802A00026 | 8/2/2016 | 1.84 | 8/2/2023 | 8/2/2016 | 104.5967 | 104.5966971 | 104.5966971 | 104.5966971 | 103.7518166 | 100.8321978 | 98.01228749 | 95.28809165 | 92.65580173 |
| 160810A00027 | 8/10/2016 | 2.13 | 8/10/2026 | 8/10/2016 | 109.38249 | 109.382493 | 109.382493 | 109.382493 | 106.3435039 | 101.3324766 | 96.61433941 | 92.16999136 | 87.98168814 |
| 160810A00030 | 8/10/2016 | 2.24 | 8/11/2031 | 8/10/2016 | 111.36047 | 111.3604672 | 111.3604672 | 111.1637876 | 106.5791928 | 100.9504237 | 95.74157055 | 90.91603496 | 86.44074537 |
| 160908A00027 | 9/8/2016 | 2.21 | 9/8/2026 | 9/8/2016 | 110.45428 | 110.4542769 | 110.4542769 | 110.4542769 | 107.0591055 | 101.7044757 | 96.67245301 | 91.94154521 | 87.49181417 |
| 160908A00031 | 9/8/2016 | 2.21 | 9/8/2026 | 9/8/2016 | 110.45427 | 110.4542744 | 110.4542744 | 110.4542744 | 107.0591047 | 101.7044761 | 96.6724545 | 91.94154766 | 87.49181748 |
| 160909A00018 | 9/9/2016 | 2.22 | 9/10/2029 | 9/9/2016 | 109.2801 | 109.2800988 | 109.2800988 | 109.2800988 | 106.0389404 | 101.3389714 | 96.93648743 | 92.80930648 | 88.93708991 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 161007A00012 | 10/7/2016 | 2.27 | 10/9/2029 | 10/7/2016 | 109.61653 | 109.6165285 | 109.6165285 | 109.6164419 | 106.3070934 | 101.5555594 | 97.1071277 | 92.93903045 | 89.03040519 |
| 161012A00011 | 10/12/2016 | 1.53 | 10/12/2023 | 10/12/2016 | 102.63275 | 102.6327502 | 102.6327502 | 102.6327502 | 102.168846 | 100.3302557 | 98.54298064 | 96.80519505 | 95.115151 |
| 170207A00055 | 2/7/2017 | 2.36 | 2/8/2027 | 2/7/2017 | 107.85277 | 107.8527717 | 107.8527717 | 107.8527717 | 106.2361727 | 102.7672456 | 99.46421437 | 96.31755026 | 93.31834549 |
| 170303A00011 | 3/3/2017 | 3.09 | 3/4/2030 | 3/3/2017 | 114.4283 | 114.4282973 | 114.4282973 | 114.4158504 | 110.6635653 | 105.5120644 | 100.7019003 | 96.20649607 | 92.00157521 |
| 170309A00016 | 3/9/2017 | 2.39 | 3/8/2024 | 3/9/2017 | 104.47329 | 104.4732886 | 104.4732886 | 104.4732886 | 103.955108 | 101.9998558 | 100.1028402 | 98.26184722 | 96.47476421 |
| 170406A00036 | 4/6/2017 | 3.07 | 4/6/2032 | 4/6/2017 | 117.48976 | 117.4897642 | 117.4897642 | 117.1107501 | 111.8401802 | 105.6107047 | 99.87003009 | 94.57344464 | 89.68074919 |
| 170619A00092 | 6/16/2017 | 2.79 | 6/16/2027 | 6/16/2017 | 115.26308 | 115.2630795 | 115.2630795 | 115.2630795 | 110.7777017 | 104.7066889 | 99.03870282 | 93.74431975 | 88.79642607 |
| 170711A00010 | 7/11/2017 | 2.38 | 7/12/2027 | 7/11/2017 | 108.42553 | 108.4255276 | 108.4255276 | 108.4255276 | 106.5699723 | 102.8832141 | 99.38219735 | 96.05573035 | 92.89338386 |
| 170713A00021 | 7/13/2017 | 3.25 | 7/13/2037 | 7/13/2017 | 141.66426 | 141.6642625 | 141.6642625 | 134.1811421 | 120.4730135 | 107.985997 | 97.17568677 | 87.79359268 | 79.63022348 |
| 170802A00013 | 8/2/2017 | 2.5 | 8/2/2024 | 8/2/2017 | 108.60759 | 108.6075852 | 108.6075852 | 108.6075852 | 107.1294328 | 103.2612937 | 99.55968707 | 96.01649194 | 92.62403003 |
| 140313A00025 | 3/13/2014 | 2.43 | 3/15/2021 | 3/13/2014 | 101.63398 | 101.6339795 | 101.6339795 | 101.6339795 | 101.4978876 | 100.7922149 | 100.096425 | 99.41031056 | 98.73367012 |
| 140313A00028 | 3/13/2014 | 2.86 | 3/13/2024 | 3/13/2014 | 108.33827 | 108.3382717 | 108.3382717 | 108.3382717 | 107.341172 | 104.2943577 | 101.361746 | 98.5382775 | 95.81915155 |
| 140618A00019 | 6/18/2014 | 3.08 | 6/18/2024 | 6/18/2014 | 105.85901 | 105.8590115 | 105.8590115 | 105.8590115 | 105.2746654 | 103.1736729 | 101.1383664 | 99.16615033 | 97.25455078 |
| 140929A00028 | 9/29/2014 | 2.62 | 3/29/2023 | 9/29/2014 | 106.44623 | 106.4462301 | 106.4462301 | 106.4462301 | 105.7754558 | 103.2078374 | 100.7187881 | 98.30536395 | 95.96475459 |
| 150115A00031 | 1/15/2015 | 1.42 | 1/18/2022 | 1/15/2015 | 101.10371 | 101.1037097 | 101.1037097 | 101.1037097 | 100.944908 | 100.1070862 | 99.2841854 | 98.47579394 | 97.68151596 |
| 150729A00028 | 7/29/2015 | 2.25 | 7/29/2025 | 7/29/2015 | 105.68126 | 105.6812647 | 105.6812647 | 105.6812647 | 104.776193 | 102.135927 | 99.59616657 | 97.15220834 | 94.7996041 |
| 150803A00037 | 8/3/2015 | 3.41 | 8/2/2030 | 8/3/2015 | 125.24598 | 125.2459773 | 125.2459773 | 124.7666713 | 116.9071146 | 108.8154292 | 101.4332448 | 94.6918622 | 88.52968757 |
| 160608A00016 | 6/8/2016 | 1.63 | 6/8/2021 | 6/8/2016 | 101.27545 | 101.2754498 | 101.2754498 | 101.2754498 | 101.0844745 | 100.1573875 | 99.24741439 | 98.35408332 | 97.4769396 |
| 160608A00019 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88328 | 110.883281 | 110.883281 | 110.883281 | 107.7858978 | 102.5861285 | 97.68899667 | 93.07502148 | 88.72608066 |
| 160810A00028 | 8/10/2016 | 2.19 | 8/10/2026 | 8/10/2016 | 110.5431 | 110.5430967 | 110.5430967 | 110.5430967 | 107.0995516 | 101.6433724 | 96.516209 | 91.69623625 | 87.16319587 |
| 160826A00005 | 8/26/2016 | 2.12 | 8/27/2029 | 8/26/2016 | 108.70317 | 108.7031714 | 108.7031714 | 108.7031714 | 105.5357692 | 100.8971315 | 96.54983796 | 92.47232123 | 88.64479388 |
| 160908A00015 | 9/8/2016 | 1.87 | 9/8/2023 | 9/8/2016 | 104.76256 | 104.7625625 | 104.7625625 | 104.7625625 | 103.8804841 | 100.913178 | 98.04923083 | 95.28440145 | 92.61465175 |
| 160908A00035 | 9/8/2016 | 2.3 | 9/8/2031 | 9/8/2016 | 111.81443 | 111.8144326 | 111.8144326 | 111.5991835 | 106.9434383 | 101.2566526 | 95.9968624 | 91.12662193 | 86.61211517 |
| 161104A00002 | 11/4/2016 | 2.26 | 11/5/2029 | 11/4/2016 | 109.65276 | 109.6527616 | 109.6527616 | 109.6520504 | 106.2835357 | 101.4934256 | 97.01124586 | 92.81369825 | 88.87944732 |
| 161227A00073 | 12/27/2016 | 2.83 | 12/28/2026 | 12/27/2016 | 113.33812 | 113.3381234 | 113.3381234 | 113.3381234 | 110.3007803 | 105.3854705 | 100.758165 | 96.39970035 | 92.2923095 |
| 170112A00015 | 1/12/2017 | 2.32 | 1/12/2027 | 1/12/2017 | 107.61221 | 107.6122096 | 107.6122096 | 107.6122096 | 106.0428824 | 102.6214435 | 99.3618886 | 96.25500981 | 93.29219408 |
| 170113A00028 | 1/13/2017 | 2.92 | 1/14/2030 | 1/13/2017 | 113.27645 | 113.2764495 | 113.2764495 | 113.2711077 | 109.673267 | 104.6490434 | 99.95278924 | 95.5593262 | 91.44562644 |
| 170217A00012 | 2/17/2017 | 2.97 | 2/19/2030 | 2/17/2017 | 113.5959 | 113.5959001 | 113.5959001 | 113.5871801 | 109.9452327 | 104.8900097 | 100.1665799 | 95.74932045 | 91.61481032 |
| 170301A00031 | 3/1/2017 | 2.11 | 3/1/2024 | 3/1/2017 | 103.83213 | 103.8321329 | 103.8321329 | 103.8321329 | 103.3349449 | 101.4313707 | 99.5835872 | 97.78950102 | 96.04711324 |
| 170309A00014 | 3/9/2017 | 2.58 | 3/9/2027 | 3/9/2017 | 108.75287 | 108.7528734 | 108.7528734 | 108.7528734 | 107.0780553 | 103.5401 | 100.1731456 | 96.9672734 | 93.91321756 |
| 170313A00045 | 3/13/2017 | 3.22 | 3/15/2032 | 3/13/2017 | 118.35436 | 118.3543584 | 118.3543584 | 117.9965835 | 112.7411577 | 106.5021612 | 100.7497195 | 95.4395861 | 90.53195513 |
| 170317A00044 | 3/17/2017 | 3.11 | 3/17/2027 | 3/17/2017 | 115.84866 | 115.8486589 | 115.8486589 | 115.8486589 | 111.974219 | 106.3248736 | 101.0310085 | 96.06771096 | 91.41196399 |
| 170406A00024 | 4/6/2017 | 2.61 | 4/8/2024 | 4/6/2017 | 108.23824 | 108.2382382 | 108.2382382 | 108.2382382 | 107.0026901 | 103.4677247 | 100.074001 | 96.81503434 | 93.68467792 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170406A00029 | 4/6/2017 | 3.01 | 4/6/2027 | 4/6/2017 | 116.24585 | 116.2458455 | 116.2458455 | 116.2458455 | 111.9793221 | 105.995361 | 100.3987331 | 95.16179442 | 90.25903214 |
| 170406A00032 | 4/6/2017 | 3.01 | 4/6/2027 | 4/6/2017 | 116.24585 | 116.2458455 | 116.2458455 | 116.2458455 | 111.9793221 | 105.995361 | 100.3987331 | 95.16179442 | 90.25903214 |
| 170619A00089 | 6/16/2017 | 2.79 | 6/16/2027 | 6/16/2017 | 115.26309 | 115.2630919 | 115.2630919 | 115.2630919 | 110.7777098 | 104.7066921 | 99.03870147 | 93.74431421 | 88.79641665 |
| 170710A00079 | 7/10/2017 | 2.76 | 7/12/2032 | 7/10/2017 | 117.11557 | 117.1155678 | 117.1155678 | 116.6556273 | 111.2035567 | 104.8537906 | 99.01335149 | 93.63468142 | 88.67511678 |
| 170801A00022 | 8/1/2017 | 1.87 | 8/3/2020 | 8/1/2017 | 100.14911 | 100.1491088 | 100.1491088 | 100.1491088 | 100.1359927 | 100.0418451 | 99.94787806 | 99.85409119 | 99.76048394 |
| 170829A00066 | 8/29/2017 | 2.11 | 8/29/2024 | 8/29/2017 | 107.91278 | 107.9127827 | 107.9127827 | 107.9127827 | 106.3824101 | 102.4586366 | 98.70667104 | 95.11799366 | 91.68455788 |
| 171109A00016 | 11/9/2017 | 2.94 | 11/9/2032 | 11/9/2017 | 129.36049 | 129.3604916 | 129.3604916 | 126.3515793 | 115.7566441 | 105.6280143 | 96.58438539 | 88.49922903 | 81.26159667 |
| 171204A00024 | 12/4/2017 | 2.71 | 12/4/2024 | 12/4/2017 | 110.18282 | 110.1828226 | 110.1828226 | 110.1828226 | 108.4382815 | 104.2433431 | 100.2414024 | 96.42251327 | 92.77729488 |
| 120330A00013 | 3/30/2012 | 2.98 | 4/2/2024 | 3/30/2012 | 108.79656 | 108.7965604 | 108.7965604 | 108.7965604 | 107.6863407 | 104.4111994 | 101.2628425 | 98.23553351 | 95.32383404 |
| 120806A00014 | 8/6/2012 | 1.77 | 8/8/2022 | 8/6/2012 | 101.68757 | 101.6875722 | 101.6875722 | 101.6875722 | 101.4575013 | 100.3305806 | 99.22665586 | 98.14505737 | 97.08514092 |
| 160608A00025 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88328 | 110.883281 | 110.883281 | 110.883281 | 107.7858978 | 102.5861285 | 97.68899667 | 93.07502148 | 88.72608066 |
| 160608A00027 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88328 | 110.883281 | 110.883281 | 110.883281 | 107.7858978 | 102.5861285 | 97.68899667 | 93.07502148 | 88.72608066 |
| 160608A00028 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88328 | 110.883281 | 110.883281 | 110.883281 | 107.7858978 | 102.5861285 | 97.68899667 | 93.07502148 | 88.72608066 |
| 160608A00029 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88328 | 110.883281 | 110.883281 | 110.883281 | 107.7858978 | 102.5861285 | 97.68899667 | 93.07502148 | 88.72608066 |
| 160608A00033 | 6/8/2016 | 2.44 | 6/9/2031 | 6/8/2016 | 112.38681 | 112.3868054 | 112.3868054 | 112.2219333 | 107.701944 | 102.0926565 | 96.89635777 | 92.07750316 | 87.60393238 |
| 160624A00051 | 6/24/2016 | 2.11 | 6/26/2029 | 6/24/2016 | 108.4947 | 108.4946968 | 108.4946968 | 108.4946968 | 105.447111 | 100.891438 | 96.61736338 | 92.60435289 | 88.8335431 |
| 160719A00026 | 7/19/2016 | 1.87 | 7/20/2026 | 7/19/2016 | 104.95413 | 104.9541278 | 104.9541278 | 104.9541278 | 103.6697008 | 100.578892 | 97.62444206 | 94.79907257 | 92.09594906 |
| 160801A00002 | 8/1/2016 | 1.58 | 8/3/2026 | 8/1/2016 | 104.69589 | 104.6958934 | 104.6958934 | 104.6958934 | 103.3715816 | 100.2381512 | 97.24492167 | 94.38431424 | 91.64921761 |
| 160810A00035 | 8/10/2016 | 2.1 | 8/10/2026 | 8/10/2016 | 109.22473 | 109.2247298 | 109.2247298 | 109.2247298 | 106.1890932 | 101.1842049 | 96.47187565 | 92.03302516 | 87.84992826 |
| 160908A00025 | 9/8/2016 | 2.21 | 9/8/2026 | 9/8/2016 | 110.45427 | 110.4542744 | 110.4542744 | 110.4542744 | 107.0591047 | 101.7044761 | 96.6724545 | 91.94154766 | 87.49181748 |
| 160908A00032 | 9/8/2016 | 2.17 | 9/8/2026 | 9/8/2016 | 109.70241 | 109.702406 | 109.702406 | 109.702406 | 106.5684607 | 101.4952153 | 96.72150998 | 92.2276108 | 87.99520053 |
| 160930A00025 | 9/30/2016 | 1.66 | 9/30/2027 | 9/30/2016 | 105.83209 | 105.8320881 | 105.8320881 | 105.8320881 | 103.9256736 | 100.2489957 | 96.76135313 | 93.45113864 | 90.30754964 |
| 161014A00029 | 10/14/2016 | 2.51 | 10/15/2031 | 10/14/2016 | 114.43394 | 114.4339424 | 114.4339424 | 114.1916789 | 109.3395875 | 103.454484 | 98.01572617 | 92.98381123 | 88.32309879 |
| 161118A00012 | 11/18/2016 | 2.72 | 11/19/2029 | 11/18/2016 | 112.00712 | 112.0071205 | 112.0071205 | 112.0060528 | 108.5652914 | 103.6724443 | 99.09415787 | 94.80662889 | 90.78805963 |
| 161125A00010 | 11/25/2016 | 2.86 | 11/26/2029 | 11/25/2016 | 112.73008 | 112.7300845 | 112.7300845 | 112.7288379 | 109.2658059 | 104.3413438 | 99.73349098 | 95.41828714 | 91.37379109 |
| 170126A00003 | 1/26/2017 | 2.86 | 1/26/2027 | 1/26/2017 | 115.24899 | 115.2489908 | 115.2489908 | 115.2489908 | 111.5286653 | 105.9704809 | 100.7571938 | 95.86497867 | 91.27179558 |
| 170221A00033 | 2/21/2017 | 2.31 | 2/18/2022 | 2/21/2017 | 103.26041 | 103.2604115 | 103.2604115 | 103.2604115 | 102.9426076 | 101.354505 | 99.79911882 | 98.27549799 | 96.78272845 |
| 170224A00012 | 2/24/2017 | 2.92 | 2/25/2030 | 2/24/2017 | 113.39575 | 113.3957473 | 113.3957473 | 113.3867764 | 109.7260038 | 104.6582273 | 99.92380501 | 95.4969578 | 91.35412395 |
| 170303A00004 | 3/3/2017 | 2.8 | 3/4/2024 | 3/3/2017 | 108.85669 | 108.8566917 | 108.8566917 | 108.8566917 | 107.6513064 | 104.1263354 | 100.7399228 | 97.48579942 | 94.35801911 |
| 170524A00037 | 5/24/2017 | 2.46 | 5/24/2024 | 5/24/2017 | 107.71303 | 107.7130275 | 107.7130275 | 107.7130275 | 106.4486101 | 102.9200711 | 99.53530226 | 96.28762659 | 93.17071344 |
| 170619A00101 | 6/16/2017 | 2.74 | 6/16/2027 | 6/16/2017 | 114.13514 | 114.135138 | 114.135138 | 114.135138 | 110.0199753 | 104.2885604 | 98.92946655 | 93.91583985 | 89.22291861 |
| 170804A00005 | 8/4/2017 | 1.94 | 8/5/2024 | 8/4/2017 | 103.971 | 103.9710013 | 103.9710013 | 103.9710013 | 103.3532502 | 101.2023813 | 99.12111027 | 97.10660571 | 95.15617252 |
| 120820A00011 | 8/20/2012 | 2.4 | 8/22/2022 | 8/20/2012 | 104.22422 | 104.2242213 | 104.2242213 | 104.2242213 | 103.7620905 | 101.7801394 | 99.84788271 | 97.96371558 | 96.12609818 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 130206A00009 | 2/6/2013 | 2.83 | 2/7/2028 | 2/6/2013 | 114.16091 | 114.1609121 | 114.1609121 | 114.1609121 | 110.0721341 | 104.5319486 | 99.35917172 | 94.52624565 | 90.00786298 |
| 140821A00030 | 8/21/2014 | 2.27 | 8/21/2024 | 8/21/2014 | 104.70275 | 104.7027492 | 104.7027492 | 104.7027492 | 104.0799403 | 101.9131515 | 99.81651731 | 97.78718136 | 95.82242502 |
| 141015A00027 | 10/15/2014 | 2.01 | 10/15/2021 | 10/15/2014 | 102.38738 | 102.3873776 | 102.3873776 | 102.3873776 | 102.1616973 | 100.9128134 | 99.69012918 | 98.49281972 | 97.32009496 |
| 160608A00020 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88328 | 110.883281 | 110.883281 | 110.883281 | 107.7858978 | 102.5861285 | 97.68899667 | 93.07502148 | 88.72608066 |
| 160608A00034 | 6/8/2016 | 2.44 | 6/9/2031 | 6/8/2016 | 112.38681 | 112.386807 | 112.386807 | 112.2219351 | 107.7019463 | 102.0926582 | 96.89635856 | 92.07750308 | 87.60393139 |
| 160705A00008 | 7/5/2016 | 1.7 | 7/6/2026 | 7/5/2016 | 107.12928 | 107.1292841 | 107.1292841 | 107.1292841 | 104.6574958 | 100.2621767 | 96.1108908 | 92.18824705 | 88.47992005 |
| 160908A00016 | 9/8/2016 | 1.87 | 9/8/2023 | 9/8/2016 | 104.76256 | 104.7625625 | 104.7625625 | 104.7625625 | 103.8804841 | 100.913178 | 98.04923083 | 95.28440145 | 92.61465175 |
| 160908A00024 | 9/8/2016 | 2.21 | 9/8/2026 | 9/8/2016 | 110.45427 | 110.4542744 | 110.4542744 | 110.4542744 | 107.0591047 | 101.7044761 | 96.6724545 | 91.94154766 | 87.49181748 |
| 160908A00036 | 9/8/2016 | 2.3 | 9/8/2031 | 9/8/2016 | 111.81444 | 111.8144387 | 111.8144387 | 111.5991894 | 106.9434405 | 101.2566519 | 95.99685916 | 91.12661644 | 86.61210768 |
| 161004A00070 | 10/4/2016 | 1.92 | 10/4/2023 | 10/4/2016 | 105.09417 | 105.0941721 | 105.0941721 | 105.0941721 | 104.1565761 | 101.0776941 | 98.10849352 | 95.24439269 | 92.4810328 |
| 161110A00010 | 11/10/2016 | 2.53 | 11/9/2029 | 11/10/2016 | 111.03062 | 111.0306241 | 111.0306241 | 111.0298075 | 107.6191241 | 102.768976 | 98.23062129 | 93.98046873 | 89.99691451 |
| 161212A00010 | 12/12/2016 | 3 | 12/12/2029 | 12/12/2016 | 113.57659 | 113.5765872 | 113.5765872 | 113.5738949 | 110.025857 | 105.0265785 | 100.3511546 | 95.97490253 | 91.87523335 |
| 170105A00012 | 1/5/2017 | 2.68 | 1/5/2024 | 1/5/2017 | 108.07306 | 108.0730572 | 108.0730572 | 108.0730572 | 106.9718498 | 103.6075955 | 100.3711259 | 97.25686553 | 94.25951438 |
| 170106A00021 | 1/6/2017 | 2.99 | 1/7/2030 | 1/6/2017 | 113.64565 | 113.6456543 | 113.6456543 | 113.6404812 | 110.0311768 | 104.9907914 | 100.2794102 | 95.87177745 | 91.74479427 |
| 170106A00030 | 1/6/2017 | 2.39 | 1/6/2027 | 1/6/2017 | 107.85951 | 107.8595127 | 107.8595127 | 107.8595127 | 106.286979 | 102.8579048 | 99.5910592 | 96.47721596 | 93.50774476 |
| 170120A00028 | 1/20/2017 | 2.34 | 1/20/2022 | 1/20/2017 | 103.12104 | 103.1210412 | 103.1210412 | 103.1210412 | 102.8295226 | 101.3353035 | 99.87090156 | 98.43548785 | 97.02826384 |
| 170126A00004 | 1/26/2017 | 2.13 | 1/26/2022 | 1/26/2017 | 103.08877 | 103.0887696 | 103.0887696 | 103.0887696 | 102.7921632 | 101.2801432 | 99.79853206 | 98.34647521 | 96.92314981 |
| 170406A00026 | 4/6/2017 | 2.61 | 4/8/2024 | 4/6/2017 | 108.23823 | 108.2382319 | 108.2382319 | 108.2382319 | 107.0026849 | 103.4677222 | 100.0740011 | 96.81503685 | 93.68468277 |
| 170406A00034 | 4/6/2017 | 3.01 | 4/6/2027 | 4/6/2017 | 116.24584 | 116.245843 | 116.245843 | 116.245843 | 111.9793211 | 105.9953609 | 100.3987338 | 95.16179582 | 90.25903414 |
| 170407A00001 | 4/6/2017 | 2.97 | 4/6/2027 | 4/6/2017 | 115.14414 | 115.1441394 | 115.1441394 | 115.1441394 | 111.221814 | 105.5655811 | 100.267856 | 95.30335181 | 90.64871605 |
| 170512A00024 | 5/12/2017 | 2.88 | 5/13/2030 | 5/12/2017 | 113.53148 | 113.5314805 | 113.5314805 | 113.508546 | 109.6690734 | 104.4820641 | 99.64389508 | 95.12701971 | 90.9063079 |
| 170602A00030 | 6/2/2017 | 1.88 | 6/2/2022 | 6/2/2017 | 103.27173 | 103.2717273 | 103.2717273 | 103.2717273 | 102.8681396 | 101.0373375 | 99.24927856 | 97.50270041 | 95.79638661 |
| 170615A00006 | 6/15/2017 | 2.15 | 6/17/2024 | 6/15/2017 | 103.8004 | 103.800404 | 103.800404 | 103.800404 | 103.2471029 | 101.2268363 | 99.26872742 | 97.37035148 | 95.52939656 |
| 170619A00095 | 6/16/2017 | 2.79 | 6/16/2027 | 6/16/2017 | 115.26309 | 115.2630919 | 115.2630919 | 115.2630919 | 110.7777098 | 104.7066921 | 99.03870147 | 93.74431421 | 88.79641665 |
| 170727A00003 | 7/27/2017 | 1.97 | 7/29/2024 | 7/27/2017 | 103.95956 | 103.9595623 | 103.9595623 | 103.9595623 | 103.3622954 | 101.2512702 | 99.20753167 | 97.22837607 | 95.31122861 |
| 170921A00054 | 9/21/2017 | 2.22 | 9/21/2022 | 9/21/2017 | 104.16728 | 104.1672817 | 104.1672817 | 104.1672817 | 103.6578452 | 101.5234188 | 99.44457268 | 97.41944509 | 95.44625286 |
| 170921A00057 | 9/21/2017 | 2.79 | 9/21/2027 | 9/21/2017 | 114.9132 | 114.9132038 | 114.9132038 | 114.9132038 | 110.4794019 | 104.5539314 | 99.0249868 | 93.86310219 | 89.04117953 |
| 171013A00024 | 10/13/2017 | 2.47 | 10/15/2024 | 10/13/2017 | 108.46293 | 108.4629277 | 108.4629277 | 108.4629277 | 106.9383254 | 103.0863397 | 99.40409086 | 95.88308511 | 92.51530328 |
| 171030A00039 | 10/30/2017 | 2.86 | 10/30/2030 | 10/30/2017 | 114.00257 | 114.0025673 | 114.0025673 | 113.9392906 | 109.7973405 | 104.401047 | 99.38098877 | 94.70641988 | 90.34938085 |
| 160608A00015 | 6/8/2016 | 1.63 | 6/8/2021 | 6/8/2016 | 101.28048 | 101.28048 | 101.28048 | 101.28048 | 101.0886806 | 100.1579446 | 99.2444151 | 98.34761737 | 97.46709393 |
| 160608A00030 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88328 | 110.883281 | 110.883281 | 110.883281 | 107.7858978 | 102.5861285 | 97.68899667 | 93.07502148 | 88.72608066 |
| 160719A00012 | 7/19/2016 | 1.32 | 7/19/2021 | 7/19/2016 | 100.61781 | 100.6178061 | 100.6178061 | 100.6178061 | 100.5046813 | 99.91833985 | 99.34064844 | 98.77139497 | 98.21037463 |
| 160810A00022 | 8/10/2016 | 1.53 | 8/10/2021 | 8/10/2016 | 101.38305 | 101.3830519 | 101.3830519 | 101.3830519 | 101.1730479 | 100.0817326 | 99.01414166 | 97.96950541 | 96.94708712 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160810A00029 | 8/10/2016 | 2.17 | 8/10/2026 | 8/10/2016 | 110.11119 | 110.1111892 | 110.1111892 | 110.1111892 | 106.8211914 | 101.5338212 | 96.56175729 | 91.88420872 | 87.48187141 |
| 160812A00006 | 8/12/2016 | 2.16 | 8/12/2026 | 8/12/2016 | 110.56791 | 110.5679099 | 110.5679099 | 110.5679099 | 107.4800567 | 102.3971979 | 97.61230322 | 93.10588499 | 88.85984372 |
| 160812A00016 | 8/12/2016 | 2.06 | 8/13/2029 | 8/12/2016 | 108.40736 | 108.4073637 | 108.4073637 | 108.4073637 | 105.2492156 | 100.6234387 | 96.28816469 | 92.22189193 | 88.40489295 |
| 160906A00027 | 9/6/2016 | 2.03 | 9/8/2031 | 9/6/2016 | 111.35211 | 111.3521085 | 111.3521085 | 111.1352556 | 106.4658584 | 100.7739738 | 95.51100961 | 90.63923912 | 86.12460258 |
| 160907A00041 | 9/7/2016 | 1.83 | 9/7/2023 | 9/7/2016 | 104.70542 | 104.7054246 | 104.7054246 | 104.7054246 | 103.8093294 | 100.8032749 | 97.90232705 | 95.10216693 | 92.39868222 |
| 160908A00034 | 9/8/2016 | 2.17 | 9/8/2026 | 9/8/2016 | 109.70241 | 109.702406 | 109.702406 | 109.702406 | 106.5684607 | 101.4952153 | 96.72150998 | 92.2276108 | 87.99520053 |
| 161005A00016 | 10/5/2016 | 2.32 | 10/6/2031 | 10/5/2016 | 112.0274 | 112.0274019 | 112.0274019 | 111.7932107 | 107.0761956 | 101.3434996 | 96.04402139 | 91.13953563 | 86.59554402 |
| 161102A00014 | 11/2/2016 | 1.99 | 11/2/2023 | 11/2/2016 | 105.43958 | 105.4395755 | 105.4395755 | 105.4395755 | 104.4565459 | 101.3028194 | 98.26372094 | 95.33447493 | 92.51053006 |
| 161202A00003 | 12/2/2016 | 2.94 | 12/3/2029 | 12/2/2016 | 113.26182 | 113.2618228 | 113.2618228 | 113.2593714 | 109.7213478 | 104.7360587 | 100.073695 | 95.70964729 | 91.62139356 |
| 161207A00014 | 12/7/2016 | 2.75 | 12/8/2031 | 12/7/2016 | 116.19307 | 116.1930744 | 116.1930744 | 115.905899 | 110.8706871 | 104.8224561 | 99.2388102 | 94.07813106 | 89.30291663 |
| 161222A00013 | 12/22/2016 | 2.93 | 12/22/2026 | 12/22/2016 | 115.45312 | 115.4531211 | 115.4531211 | 115.4531211 | 111.8399645 | 106.333234 | 101.164205 | 96.30982079 | 91.74873136 |
| 161229A00018 | 12/29/2016 | 2.46 | 12/29/2026 | 12/29/2016 | 108.00589 | 108.0058881 | 108.0058881 | 108.0058881 | 106.4731052 | 103.0787566 | 99.84331385 | 96.75782469 | 93.81391036 |
| 170210A00007 | 2/10/2017 | 2.96 | 2/11/2030 | 2/10/2017 | 113.60794 | 113.6079425 | 113.6079425 | 113.5992958 | 109.9321089 | 104.8551921 | 100.1121895 | 95.67728293 | 91.52687466 |
| 170330A00060 | 3/30/2017 | 2.06 | 3/30/2022 | 3/30/2017 | 103.29231 | 103.2923051 | 103.2923051 | 103.2923051 | 102.9445106 | 101.2698656 | 99.63132173 | 98.02776988 | 96.45814693 |
| 170518A00027 | 5/18/2017 | 2.11 | 5/18/2022 | 5/18/2017 | 103.35769 | 103.3576919 | 103.3576919 | 103.3576919 | 102.9627883 | 101.1494435 | 99.37766311 | 97.64624458 | 95.95402822 |
| 170602A00019 | 6/2/2017 | 2.42 | 6/3/2024 | 6/2/2017 | 107.97442 | 107.9744233 | 107.9744233 | 107.9744233 | 106.6146395 | 102.9009861 | 99.34187702 | 95.9300362 | 92.65856926 |
| 170706A00029 | 7/6/2017 | 2.42 | 7/6/2027 | 7/6/2017 | 108.60787 | 108.6078668 | 108.6078668 | 108.6078668 | 106.5842575 | 102.841089 | 99.29661268 | 95.93832314 | 92.75460004 |
| 170707A00007 | 7/7/2017 | 2.65 | 7/8/2024 | 7/7/2017 | 109.0571 | 109.0570995 | 109.0570995 | 109.0570995 | 107.6226221 | 103.799363 | 100.1385591 | 96.63239259 | 93.27346554 |
| 170921A00048 | 9/21/2017 | 1.95 | 9/21/2020 | 9/21/2017 | 100.38539 | 100.3853859 | 100.3853859 | 100.3853859 | 100.3493038 | 100.1201488 | 99.89204953 | 99.66499858 | 99.43898872 |
| 170921A00053 | 9/21/2017 | 2.22 | 9/21/2022 | 9/21/2017 | 104.16728 | 104.1672817 | 104.1672817 | 104.1672817 | 103.6578452 | 101.5234188 | 99.44457268 | 97.41944509 | 95.44625286 |
| 170921A00055 | 9/21/2017 | 2.82 | 9/21/2027 | 9/21/2017 | 115.98135 | 115.981353 | 115.981353 | 115.981353 | 111.1452956 | 104.8684011 | 99.02101532 | 93.57081614 | 88.4881003 |
| 171204A00009 | 12/4/2017 | 2.23 | 12/4/2024 | 12/4/2017 | 104.89086 | 104.8908587 | 104.8908587 | 104.8908587 | 104.1981929 | 101.9036237 | 99.68691834 | 97.54477851 | 95.47407006 |
| 160608A00022 | 6/8/2016 | 1.91 | 6/8/2023 | 6/8/2016 | 104.52034 | 104.5203418 | 104.5203418 | 104.5203418 | 103.7612581 | 101.0101896 | 98.3490024 | 95.77425457 | 93.28265609 |
| 160608A00023 | 6/8/2016 | 2.36 | 6/8/2026 | 6/8/2016 | 110.88329 | 110.8832854 | 110.8832854 | 110.8832854 | 107.7859001 | 102.5861286 | 97.68899496 | 93.07501805 | 88.72607568 |
| 160705A00010 | 7/5/2016 | 1.68 | 7/5/2023 | 7/5/2016 | 104.0185 | 104.0185039 | 104.0185039 | 104.0185039 | 103.2148074 | 100.3726347 | 97.62584805 | 94.97070093 | 92.40361633 |
| 160713A00015 | 7/13/2016 | 1.57 | 7/13/2026 | 7/13/2016 | 104.60083 | 104.6008338 | 104.6008338 | 104.6008338 | 103.3151142 | 100.2235129 | 97.26867979 | 94.44329706 | 91.74049396 |
| 160810A00024 | 8/10/2016 | 1.52 | 8/10/2021 | 8/10/2016 | 101.36151 | 101.3615077 | 101.3615077 | 101.3615077 | 101.1531213 | 100.070214 | 99.01078139 | 97.9740629 | 96.95933064 |
| 160810A00025 | 8/10/2016 | 2.17 | 8/10/2026 | 8/10/2016 | 110.11119 | 110.1111892 | 110.1111892 | 110.1111892 | 106.8211914 | 101.5338212 | 96.56175729 | 91.88420872 | 87.48187141 |
| 160819A00012 | 8/19/2016 | 2.14 | 8/20/2029 | 8/19/2016 | 108.80132 | 108.8013217 | 108.8013217 | 108.8013217 | 105.6314178 | 100.9887474 | 96.63765649 | 92.55656211 | 88.7256623 |
| 160908A00017 | 9/8/2016 | 1.87 | 9/8/2023 | 9/8/2016 | 104.76256 | 104.7625625 | 104.7625625 | 104.7625625 | 103.8804841 | 100.913178 | 98.04923083 | 95.28440145 | 92.61465175 |
| 160908A00022 | 9/8/2016 | 2.21 | 9/8/2026 | 9/8/2016 | 110.45428 | 110.4542769 | 110.4542769 | 110.4542769 | 107.0591055 | 101.7044757 | 96.67245301 | 91.94154521 | 87.49181417 |
| 160908A00037 | 9/8/2016 | 1.4 | 9/8/2023 | 9/8/2016 | 102.44642 | 102.4464177 | 102.4464177 | 102.4464177 | 101.9682248 | 100.0963902 | 98.27840934 | 96.51230052 | 94.79617037 |
| 160930A00047 | 9/30/2016 | 2.08 | 10/1/2029 | 9/30/2016 | 108.5848 | 108.584796 | 108.584796 | 108.584796 | 105.3631338 | 100.6925293 | 96.31760747 | 92.21631522 | 88.36843252 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 161005A00031 | 10/5/2016 | 1.43 | 10/5/2021 | 10/5/2016 | 100.94115 | 100.9411517 | 100.9411517 | 100.9411517 | 100.8065939 | 100.094333 | 99.39473483 | 98.70742731 | 98.03205343 |
| 161014A00019 | 10/14/2016 | 2.39 | 10/15/2031 | 10/14/2016 | 112.46123 | 112.4612321 | 112.4612321 | 112.2258306 | 107.4904813 | 101.7355367 | 96.41550999 | 91.49202343 | 86.93044148 |
| 161014A00026 | 10/14/2016 | 2.16 | 10/14/2031 | 10/14/2016 | 112.24489 | 112.2448916 | 112.2448916 | 112.0072443 | 107.247447 | 101.4745188 | 96.1394428 | 91.20346734 | 86.63162963 |
| 161128A00006 | 11/28/2016 | 1.93 | 11/29/2021 | 11/28/2016 | 102.46297 | 102.4629663 | 102.4629663 | 102.4629663 | 102.2144997 | 100.8755775 | 99.56150848 | 98.27165512 | 97.00540113 |
| 161214A00034 | 12/14/2016 | 2.65 | 12/14/2026 | 12/14/2016 | 107.99625 | 107.99625 | 107.99625 | 107.99625 | 106.4720983 | 103.0914218 | 99.86850578 | 96.79448942 | 93.8610776 |
| 161216A00008 | 12/16/2016 | 3.16 | 12/17/2029 | 12/16/2016 | 114.41721 | 114.4172113 | 114.4172113 | 114.4143682 | 110.8400985 | 105.8038607 | 101.0938812 | 96.68529287 | 92.55533794 |
| 161229A00019 | 12/29/2016 | 2.46 | 12/29/2026 | 12/29/2016 | 108.00589 | 108.0058855 | 108.0058855 | 108.0058855 | 106.4731035 | 103.078756 | 99.84331422 | 96.75782599 | 93.81391252 |
| 170310A00008 | 3/10/2017 | 3.17 | 3/11/2030 | 3/10/2017 | 114.86143 | 114.8614278 | 114.8614278 | 114.8487399 | 111.0821299 | 105.9110389 | 101.0825997 | 96.57013093 | 92.34926109 |
| 170317A00039 | 3/17/2017 | 2.73 | 3/18/2024 | 3/17/2017 | 108.54793 | 108.547934 | 108.547934 | 108.547934 | 107.3455611 | 103.8507123 | 100.4937012 | 97.26825196 | 94.16841486 |
| 170406A00023 | 4/6/2017 | 2.24 | 4/6/2022 | 4/6/2017 | 103.38611 | 103.3861113 | 103.3861113 | 103.3861113 | 103.0283982 | 101.3193735 | 99.64750994 | 98.01168534 | 96.41082253 |
| 170406A00027 | 4/6/2017 | 2.61 | 4/8/2024 | 4/6/2017 | 108.23824 | 108.2382382 | 108.2382382 | 108.2382382 | 107.0026901 | 103.4677247 | 100.074001 | 96.81503434 | 93.68467792 |
| 170504A00012 | 5/4/2017 | 2.28 | 5/4/2026 | 5/4/2017 | 106.70806 | 106.7080583 | 106.7080583 | 106.7080583 | 105.4720698 | 102.399316 | 99.45929361 | 96.64505312 | 93.95006127 |
| 170526A00017 | 5/26/2017 | 2.16 | 5/28/2024 | 5/26/2017 | 103.74076 | 103.7407605 | 103.7407605 | 103.7407605 | 103.207566 | 101.2292525 | 99.31079174 | 97.44988021 | 95.64432033 |
| 170901A00030 | 9/1/2017 | 1.82 | 9/1/2022 | 9/1/2017 | 103.45515 | 103.4551471 | 103.4551471 | 103.4551471 | 102.9859726 | 100.9868482 | 99.03841732 | 97.13902225 | 95.28707364 |
| 121016A00013 | 10/16/2012 | 1.64 | 10/14/2022 | 10/16/2012 | 101.65367 | 101.6536725 | 101.6536725 | 101.6536725 | 101.4002595 | 100.1912688 | 99.00803301 | 97.84978021 | 96.71576863 |
| 160617A00012 | 6/17/2016 | 2.13 | 6/18/2029 | 6/17/2016 | 108.59091 | 108.5909101 | 108.5909101 | 108.5909101 | 105.541025 | 100.9814958 | 96.7037813 | 92.68733367 | 88.91327684 |
| 160711A00004 | 7/11/2016 | 1.51 | 7/13/2026 | 7/11/2016 | 104.40805 | 104.4080523 | 104.4080523 | 104.4080523 | 103.1246889 | 100.0387646 | 97.08935785 | 94.26916411 | 91.57132527 |
| 160805A00014 | 8/5/2016 | 2.11 | 8/6/2029 | 8/5/2016 | 108.65291 | 108.6529127 | 108.6529127 | 108.6529127 | 105.4880024 | 100.8519331 | 96.50699409 | 92.43163921 | 88.6060999 |
| 160824A00019 | 8/24/2016 | 1.98 | 8/25/2031 | 8/24/2016 | 110.96227 | 110.9622697 | 110.9622697 | 110.7635403 | 106.1627764 | 100.5257235 | 95.31074987 | 90.48095515 | 86.00300499 |
| 160908A00019 | 9/8/2016 | 1.87 | 9/8/2023 | 9/8/2016 | 104.76256 | 104.7625625 | 104.7625625 | 104.7625625 | 103.8804841 | 100.913178 | 98.04923083 | 95.28440145 | 92.61465175 |
| 160908A00023 | 9/8/2016 | 2.21 | 9/8/2026 | 9/8/2016 | 110.45427 | 110.4542744 | 110.4542744 | 110.4542744 | 107.0591047 | 101.7044761 | 96.6724545 | 91.94154766 | 87.49181748 |
| 160908A00030 | 9/8/2016 | 2.21 | 9/8/2026 | 9/8/2016 | 110.45427 | 110.4542744 | 110.4542744 | 110.4542744 | 107.0591047 | 101.7044761 | 96.6724545 | 91.94154766 | 87.49181748 |
| 160923A00009 | 9/23/2016 | 2.24 | 9/23/2031 | 9/23/2016 | 111.44755 | 111.4475531 | 111.4475531 | 111.2324947 | 106.5916145 | 100.9231828 | 95.68040949 | 90.82596125 | 86.32612412 |
| 160923A00020 | 9/23/2016 | 2.15 | 9/24/2029 | 9/23/2016 | 108.93233 | 108.9323313 | 108.9323313 | 108.9323313 | 105.7007157 | 101.0153436 | 96.62657163 | 92.51227999 | 88.65218729 |
| 161028A00011 | 10/28/2016 | 2.32 | 10/29/2029 | 10/28/2016 | 109.86968 | 109.8696848 | 109.8696848 | 109.8694048 | 106.5516398 | 101.7887576 | 97.32975244 | 93.1517938 | 89.23396182 |
| 161103A00013 | 11/3/2016 | 1.69 | 11/3/2021 | 11/3/2016 | 101.86491 | 101.8649138 | 101.8649138 | 101.8649138 | 101.6285131 | 100.3281215 | 99.0508058 | 97.79600215 | 96.56316478 |
| 161116A00006 | 11/16/2016 | 2.39 | 11/16/2026 | 11/16/2016 | 106.99919 | 106.9991884 | 106.9991884 | 106.9991884 | 105.530686 | 102.2206158 | 99.06332681 | 96.05032315 | 93.17364649 |
| 161202A00001 | 12/2/2016 | 2.65 | 12/1/2023 | 12/2/2016 | 107.76246 | 107.7624648 | 107.7624648 | 107.7624648 | 106.7194584 | 103.4436203 | 100.289218 | 97.25108563 | 94.32430558 |
| 170103A00025 | 1/3/2017 | 3.09 | 1/3/2030 | 1/3/2017 | 114.17482 | 114.1748201 | 114.1748201 | 114.16973 | 110.5438283 | 105.4801411 | 100.7469658 | 96.31893188 | 92.17283581 |
| 170105A00010 | 1/5/2017 | 2.61 | 1/5/2027 | 1/5/2017 | 107.95744 | 107.9574418 | 107.9574418 | 107.9574418 | 106.3913818 | 102.972348 | 99.71459127 | 96.60896378 | 93.64690712 |
| 170120A00027 | 1/20/2017 | 2.35 | 1/20/2022 | 1/20/2017 | 103.16964 | 103.1696353 | 103.1696353 | 103.1696353 | 102.8749051 | 101.3647964 | 99.88486593 | 98.43427465 | 97.01221426 |
| 170127A00008 | 1/27/2017 | 3.05 | 1/28/2030 | 1/27/2017 | 113.96473 | 113.9647311 | 113.9647311 | 113.9589839 | 110.3390312 | 105.2841026 | 100.5591815 | 96.13892912 | 92.00017175 |
| 170201A00016 | 2/1/2017 | 2.49 | 2/1/2024 | 2/1/2017 | 108.20683 | 108.2068297 | 108.2068297 | 108.2068297 | 107.0556279 | 103.6129478 | 100.3033777 | 97.12100117 | 94.06020029 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170224A00007 | 2/24/2017 | 2.02 | 2/24/2021 | 2/24/2017 | 101.15741 | 101.1574069 | 101.1574069 | 101.1574069 | 101.0325032 | 100.3793986 | 99.73476803 | 99.09844705 | 98.4702755 |
| 170224A00009 | 2/24/2017 | 2.39 | 2/24/2023 | 2/24/2017 | 105.35456 | 105.3545641 | 105.3545641 | 105.3545641 | 104.7029184 | 102.173349 | 99.71967902 | 97.33913959 | 95.02908296 |
| 170307A00013 | 3/7/2017 | 2.33 | 3/7/2024 | 3/7/2017 | 103.99523 | 103.9952273 | 103.9952273 | 103.9952273 | 103.4810971 | 101.5403361 | 99.65723664 | 97.82961181 | 96.05537443 |
| 170309A00042 | 3/9/2017 | 2.18 | 3/11/2024 | 3/9/2017 | 104.05503 | 104.0550307 | 104.0550307 | 104.0550307 | 103.5387764 | 101.5911308 | 99.70150398 | 97.86768984 | 96.0875831 |
| 170406A00033 | 4/6/2017 | 3.01 | 4/6/2027 | 4/6/2017 | 116.24584 | 116.245843 | 116.245843 | 116.245843 | 111.9793211 | 105.9953609 | 100.3987338 | 95.16179582 | 90.25903414 |
| 170406A00037 | 4/6/2017 | 3.07 | 4/6/2032 | 4/6/2017 | 117.48976 | 117.4897607 | 117.4897607 | 117.1107472 | 111.8401792 | 105.6107049 | 99.87003127 | 94.57344663 | 89.68075186 |
| 170421A00011 | 4/21/2017 | 2.83 | 4/22/2030 | 4/21/2017 | 113.14484 | 113.1448423 | 113.1448423 | 113.1272467 | 109.3582724 | 104.2262689 | 99.43690096 | 94.96329675 | 90.78092662 |
| 170504A00049 | 5/4/2017 | 2.63 | 5/6/2024 | 5/4/2017 | 108.61309 | 108.6130873 | 108.6130873 | 108.6130873 | 107.2988315 | 103.6326071 | 100.1162272 | 96.74276244 | 93.50564018 |
| 120808A00006 | 8/8/2012 | 2.06 | 8/9/2027 | 8/8/2012 | 107.29259 | 107.292592 | 107.292592 | 107.292592 | 105.4091043 | 101.7216159 | 98.22177984 | 94.89818428 | 91.74020147 |
| 130312A00007 | 3/12/2013 | 1.76 | 3/12/2021 | 3/12/2013 | 101.13713 | 101.1371275 | 101.1371275 | 101.1371275 | 101.0043554 | 100.3145817 | 99.63433312 | 98.96341257 | 98.30162818 |
| 140703A00026 | 7/3/2014 | 3.11 | 7/3/2024 | 7/3/2014 | 110.06097 | 110.0609719 | 110.0609719 | 110.0609719 | 108.7542913 | 105.1704204 | 101.7346037 | 98.43982688 | 95.27944801 |
| 141015A00029 | 10/15/2014 | 2.32 | 10/15/2024 | 10/15/2014 | 107.56938 | 107.5693847 | 107.5693847 | 107.5693847 | 106.2824801 | 102.872283 | 99.60581297 | 96.47604015 | 93.47632231 |
| 150203A00027 | 2/3/2015 | 2.26 | 2/4/2030 | 2/3/2015 | 110.9308 | 110.9308001 | 110.9308001 | 110.9224289 | 107.3178949 | 102.337271 | 97.68532553 | 93.33657421 | 89.26772982 |
| 150223A00017 | 2/23/2015 | 1.77 | 2/23/2022 | 2/23/2015 | 101.94455 | 101.9445456 | 101.9445456 | 101.9445456 | 101.7110162 | 100.5354605 | 99.38186826 | 98.24963746 | 97.13818839 |
| 150722A00035 | 7/22/2015 | 2.92 | 7/22/2025 | 7/22/2015 | 111.48299 | 111.4829906 | 111.4829906 | 111.4829906 | 109.4395754 | 105.0521552 | 100.8837889 | 96.92213991 | 93.15563718 |
| 150803A00040 | 8/3/2015 | 3.01 | 8/2/2030 | 8/3/2015 | 114.61195 | 114.611949 | 114.611949 | 114.5675754 | 110.5185165 | 105.1690687 | 100.1872587 | 95.54345323 | 91.21066972 |
| 150824A00050 | 8/24/2015 | 2.03 | 8/25/2025 | 8/24/2015 | 105.16871 | 105.1687076 | 105.1687076 | 105.1687076 | 104.2397799 | 101.571863 | 99.00686971 | 96.53992619 | 94.16642604 |
| 150911A00007 | 9/10/2015 | 2.51 | 9/9/2022 | 9/10/2015 | 104.76097 | 104.760966 | 104.760966 | 104.760966 | 104.2564979 | 102.1310798 | 100.0604304 | 98.04273804 | 96.07626666 |
| 150915A00072 | 9/15/2015 | 1.91 | 9/15/2020 | 9/15/2015 | 100.34873 | 100.348734 | 100.348734 | 100.348734 | 100.315685 | 100.1033246 | 99.89187565 | 99.68133241 | 99.47168897 |
| 151201A00004 | 12/1/2015 | 2.44 | 12/1/2022 | 12/1/2015 | 105.06955 | 105.0695463 | 105.0695463 | 105.0695463 | 104.4914952 | 102.1546211 | 99.88313999 | 97.6748485 | 95.52763095 |
| 151210A00011 | 12/10/2015 | 2.16 | 12/12/2022 | 12/10/2015 | 102.69478 | 102.6947793 | 102.6947793 | 102.6947793 | 102.4139476 | 101.1070895 | 99.8293641 | 98.57987844 | 97.3577745 |
| 160113A00002 | 1/13/2016 | 2.12 | 1/13/2026 | 1/13/2016 | 105.85254 | 105.8525449 | 105.8525449 | 105.8525449 | 104.7639757 | 101.8762886 | 99.10742374 | 96.45142418 | 93.90267654 |
| 160210A00054 | 2/10/2016 | 1.78 | 2/10/2026 | 2/10/2016 | 104.91578 | 104.9157809 | 104.9157809 | 104.9157809 | 103.8038521 | 100.9016773 | 98.12041163 | 95.45392576 | 92.89644733 |
| 160212A00047 | 2/12/2016 | 1.94 | 2/12/2026 | 2/12/2016 | 104.82506 | 104.8250568 | 104.8250568 | 104.8250568 | 103.7188921 | 100.8294671 | 98.06008765 | 95.40468348 | 92.85753696 |
| 160413A00016 | 4/13/2016 | 2.55 | 4/14/2031 | 4/13/2016 | 112.84759 | 112.8475926 | 112.8475926 | 112.7124242 | 108.2819411 | 102.7215984 | 97.56522622 | 92.77849365 | 88.33029955 |
| 160413A00021 | 4/13/2016 | 2.48 | 4/13/2026 | 4/13/2016 | 111.26448 | 111.2644838 | 111.2644838 | 111.2644838 | 108.3413643 | 103.23433 | 98.4177309 | 93.87324673 | 89.58381502 |
| 160523A00086 | 5/23/2016 | 2.2 | 5/26/2026 | 5/23/2016 | 110.44348 | 110.4434836 | 110.4434836 | 110.4434836 | 107.5957928 | 102.6566492 | 97.99863734 | 93.60390671 | 89.45583964 |
| 160524A00028 | 5/24/2016 | 2.06 | 5/24/2023 | 5/24/2016 | 104.94572 | 104.9457236 | 104.9457236 | 104.9457236 | 104.190801 | 101.4304868 | 98.75953311 | 96.17455748 | 93.67232461 |
| 160526A00018 | 5/26/2016 | 1.68 | 5/26/2021 | 5/26/2016 | 101.20895 | 101.2089462 | 101.2089462 | 101.2089462 | 101.0355495 | 100.1873771 | 99.35398148 | 98.53497425 | 97.72998072 |
| 160603A00014 | 6/3/2016 | 1.74 | 6/3/2026 | 6/3/2016 | 105.07706 | 105.0770588 | 105.0770588 | 105.0770588 | 103.8234003 | 100.7577236 | 97.8260565 | 95.02130682 | 92.33681152 |
| 160606A00018 | 6/6/2016 | 1.74 | 6/5/2026 | 6/6/2016 | 105.07719 | 105.077188 | 105.077188 | 105.077188 | 103.8234045 | 100.7576541 | 97.82592235 | 95.02111618 | 92.33657173 |
| 000929A00001 | 9/29/2000 | 6.82 | 9/29/2020 | 9/29/2000 | 101.68453 | 101.684533 | 101.684533 | 101.684533 | 101.6441949 | 101.3911475 | 101.1393643 | 100.8888361 | 100.6395533 |
| 110701A00011 | 7/1/2011 | 3.87 | 7/1/2026 | 7/1/2011 | 111.50432 | 111.5043165 | 111.5043165 | 111.5043165 | 110.1415517 | 106.8594311 | 103.7220395 | 100.7216563 | 97.85103106 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 110909A00006 | 9/9/2011 | 2.26 | 9/9/2026 | 9/9/2011 | 106.38257 | 106.3825717 | 106.3825717 | 106.3825717 | 105.0037887 | 101.7920117 | 98.72517944 | 95.79539455 | 92.99525023 |
| 150311A00003 | 3/11/2015 | 2.72 | 3/31/2025 | 3/11/2015 | 110.00339 | 110.0033937 | 110.0033937 | 110.0033937 | 108.2105272 | 104.0893572 | 100.1634025 | 96.42215235 | 92.85572691 |
| 150410A00021 | 4/10/2015 | 2.27 | 4/10/2025 | 4/10/2015 | 104.96201 | 104.9620056 | 104.9620056 | 104.9620056 | 104.1484926 | 101.657142 | 99.25646079 | 96.94236934 | 94.7110019 |
| 150603A00012 | 6/3/2015 | 2.77 | 6/3/2030 | 6/3/2015 | 114.12416 | 114.1241618 | 114.1241618 | 114.0946818 | 110.1515244 | 104.8751127 | 99.95734594 | 95.3696275 | 91.08589216 |
| 150604A00039 | 6/4/2015 | 2.82 | 6/4/2030 | 6/4/2015 | 114.40185 | 114.4018533 | 114.4018533 | 114.3722737 | 110.4195476 | 105.130323 | 100.2006157 | 95.60175936 | 91.30762505 |
| 150814A00029 | 8/14/2015 | 2.39 | 8/14/2025 | 8/14/2015 | 105.63298 | 105.6329785 | 105.6329785 | 105.6329785 | 104.7044232 | 102.0344076 | 99.46708318 | 96.99760165 | 94.62137955 |
| 151002A00042 | 10/2/2015 | 1.26 | 10/2/2020 | 10/2/2015 | 100.19123 | 100.1912316 | 100.1912316 | 100.1912316 | 100.1612542 | 99.96826557 | 99.77611635 | 99.58480068 | 99.3943128 |
| 151209A00024 | 12/9/2015 | 2.22 | 12/9/2025 | 12/9/2015 | 106.05786 | 106.057862 | 106.057862 | 106.057862 | 105.0000136 | 102.1474165 | 99.41070721 | 96.78414275 | 94.26230758 |
| 151229A00026 | 12/29/2015 | 2.28 | 12/29/2025 | 12/29/2015 | 106.23602 | 106.2360237 | 106.2360237 | 106.2360237 | 105.1752261 | 102.3170781 | 99.57510227 | 96.94353751 | 94.41695153 |
| 160104A00020 | 1/4/2016 | 2.47 | 1/4/2023 | 1/4/2016 | 105.33195 | 105.3319475 | 105.3319475 | 105.3319475 | 104.7220777 | 102.2986396 | 99.94532129 | 97.65967572 | 95.43935691 |
| 160106A00042 | 1/6/2016 | 2.43 | 1/6/2026 | 1/6/2016 | 106.20588 | 106.2058846 | 106.2058846 | 106.2058846 | 105.1189182 | 102.2321636 | 99.46384108 | 96.80802984 | 94.25914949 |
| 160210A00049 | 2/10/2016 | 1.78 | 2/10/2026 | 2/10/2016 | 104.91578 | 104.9157786 | 104.9157786 | 104.9157786 | 103.8038508 | 100.9016774 | 98.12041291 | 95.45392817 | 92.89645076 |
| 160328A00038 | 3/28/2016 | 2.54 | 3/30/2026 | 3/28/2016 | 110.93493 | 110.9349327 | 110.9349327 | 110.9349327 | 108.2602579 | 103.4263216 | 98.86044 | 94.5459423 | 90.46729484 |
| 160413A00018 | 4/13/2016 | 1.78 | 4/13/2026 | 4/13/2016 | 105.06034 | 105.0603427 | 105.0603427 | 105.0603427 | 103.8782753 | 100.892193 | 98.03359123 | 95.29586338 | 92.67279542 |
| 191004A00019 | 10/4/2019 | 2.02 | 10/4/2029 | 10/4/2019 | 113.95038 | 113.9503846 | 113.9503846 | 113.9474842 | 106.2672129 | 98.60678554 | 91.60373978 | 85.1969732 | 79.3314087 |
| 191112A00022 | 11/12/2019 | 2.36 | 11/13/2029 | 11/12/2019 | 116.99362 | 116.9936217 | 116.9936217 | 116.9469342 | 109.0049752 | 101.1123338 | 93.90236413 | 87.31111668 | 81.28098736 |
| 191203A00013 | 12/3/2019 | 1.93 | 12/3/2024 | 12/3/2019 | 106.88289 | 106.882886 | 106.882886 | 106.882886 | 105.1635435 | 101.04516 | 97.11697974 | 93.36918473 | 89.79251538 |
| 191224A00002 | 12/24/2019 | 2.17 | 12/24/2029 | 12/24/2019 | 109.2794 | 109.2794049 | 109.2794049 | 109.276512 | 105.8615882 | 101.0505116 | 96.55115283 | 92.33974954 | 88.39455555 |
| 200110A00053 | 1/10/2020 | 1.99 | 1/10/2025 | 1/10/2020 | 107.25344 | 107.253444 | 107.253444 | 107.253444 | 105.4496084 | 101.2381171 | 97.2250306 | 93.39989576 | 89.75286689 |
| 200212A00013 | 2/12/2020 | 1.98 | 2/12/2027 | 2/12/2020 | 110.19255 | 110.1925535 | 110.1925535 | 110.1925535 | 106.0057862 | 100.1343762 | 94.64417208 | 89.50813232 | 84.70127887 |
| 200306A00050 | 3/6/2020 | 0.87 | 3/6/2030 | 3/6/2020 | 103.78653 | 103.786533 | 103.786533 | 103.7750494 | 100.3471025 | 95.65096905 | 91.26711772 | 87.17116055 | 83.34082665 |
| 200306A00058 | 3/6/2020 | 1.06 | 3/6/2030 | 3/6/2020 | 103.78881 | 103.78881 | 103.78881 | 103.7774515 | 100.3718302 | 95.69742603 | 91.33281271 | 87.25386584 | 83.43854964 |
| 200311A00015 | 3/11/2020 | 1.26 | 3/11/2027 | 3/11/2020 | 105.81201 | 105.8120054 | 105.8120054 | 105.8120054 | 101.6433135 | 95.90603033 | 90.54611405 | 85.53649021 | 80.85217354 |
| 200406A00029 | 4/6/2020 | 1.61 | 4/5/2030 | 4/6/2020 | 111.03901 | 111.0390127 | 111.0390127 | 110.7211231 | 102.79515 | 95.01909629 | 87.94242582 | 81.49715522 | 75.62229502 |
| 200406A00030 | 4/6/2020 | 1.61 | 4/5/2030 | 4/6/2020 | 111.03902 | 111.0390229 | 111.0390229 | 110.7211329 | 102.7951521 | 95.01909122 | 87.94241431 | 81.4971379 | 75.62227246 |
| 200406A00035 | 4/6/2020 | 1.05 | 4/4/2025 | 4/6/2020 | 103.04192 | 103.0419172 | 103.0419172 | 103.0419172 | 101.3262713 | 97.41230782 | 93.68498577 | 90.13422244 | 86.75054101 |
| 200424A00022 | 4/24/2020 | 1.39 | 4/24/2030 | 4/24/2020 | 108.27528 | 108.2752845 | 108.2752845 | 108.0055007 | 101.2180878 | 94.24226666 | 87.86951472 | 82.04245671 | 76.70953899 |
| 171207A00020 | 12/7/2017 | 2.25 | 12/7/2020 | 12/7/2017 | 100.88078 | 100.8807812 | 100.8807812 | 100.8807812 | 100.8008375 | 100.3607738 | 99.92456436 | 99.49215855 | 99.06350667 |
| 111220A00025 | 12/20/2011 | 2.17 | 12/20/2021 | 12/20/2011 | 101.51912 | 101.5191174 | 101.5191174 | 101.5191174 | 101.3683781 | 100.5696369 | 99.7848616 | 99.01366875 | 98.25568954 |
| 120807A00025 | 8/7/2012 | 1.82 | 8/8/2022 | 8/7/2012 | 101.74509 | 101.7450926 | 101.7450926 | 101.7450926 | 101.5148928 | 100.3873402 | 99.28279634 | 98.20059125 | 97.14008032 |
| 120807A00026 | 8/7/2012 | 2.42 | 8/9/2027 | 8/7/2012 | 107.93765 | 107.9376463 | 107.9376463 | 107.9376463 | 106.0529659 | 102.3581586 | 98.85080862 | 95.51954664 | 92.3537823 |
| 131018A00006 | 10/18/2013 | 3.28 | 10/20/2025 | 10/18/2013 | 114.16 | 114.1599985 | 114.1599985 | 114.1599985 | 111.9493021 | 107.4107912 | 103.1051441 | 99.0188581 | 95.13929227 |
| 140318A00003 | 3/17/2014 | 3.08 | 3/18/2024 | 3/17/2014 | 110.53799 | 110.5379947 | 110.5379947 | 110.5379947 | 109.3040769 | 105.7227404 | 102.2831428 | 98.97881236 | 95.80361471 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 140924A00057 | 9/24/2014 | 3.25 | 9/25/2028 | 9/24/2014 | 122.70138 | 122.7013801 | 122.7013801 | 122.7013801 | 116.3142235 | 109.022678 | 102.2879118 | 96.06332473 | 90.30649211 |
| 150205A00031 | 2/5/2015 | 1.96 | 10/6/2025 | 2/5/2015 | 105.13537 | 105.1353723 | 105.1353723 | 105.1353723 | 104.1488473 | 101.4016442 | 98.7632002 | 96.22824596 | 93.79180692 |
| 150219A00016 | 2/19/2015 | 2.68 | 2/19/2025 | 2/19/2015 | 109.74634 | 109.7463383 | 109.7463383 | 109.7463383 | 107.9840733 | 103.8468867 | 99.90246649 | 96.14060001 | 92.5516767 |
| 150320A00019 | 3/20/2015 | 2.25 | 3/20/2025 | 3/20/2015 | 107.93872 | 107.9387197 | 107.9387197 | 107.9387197 | 106.4087724 | 102.7204473 | 99.19980728 | 95.83804133 | 92.62685837 |
| 150603A00032 | 6/3/2015 | 2.21 | 6/3/2025 | 6/3/2015 | 105.47898 | 105.478984 | 105.478984 | 105.478984 | 104.6046892 | 102.0113417 | 99.51529555 | 97.11205683 | 94.79737239 |
| 150617A00017 | 6/17/2015 | 2.27 | 6/17/2025 | 6/17/2015 | 105.64032 | 105.6403226 | 105.6403226 | 105.6403226 | 104.7640144 | 102.1660885 | 99.66567838 | 97.25827751 | 94.93962106 |
| 150714A00003 | 7/14/2015 | 3.76 | 7/12/2030 | 7/14/2015 | 119.92595 | 119.9259492 | 119.9259492 | 119.886874 | 115.6671797 | 110.0704163 | 104.8573041 | 99.99701639 | 95.46147516 |
| 150717A00032 | 7/17/2015 | 1.88 | 7/17/2020 | 7/17/2015 | 100.08328 | 100.0832757 | 100.0832757 | 100.0832757 | 100.0768054 | 100.0296082 | 99.98247321 | 99.93540033 | 99.88838941 |
| 150803A00036 | 8/3/2015 | 3.41 | 8/2/2030 | 8/3/2015 | 125.24599 | 125.2459939 | 125.2459939 | 124.7666869 | 116.9071213 | 108.8154308 | 101.433242 | 94.69185565 | 88.52967789 |
| 150925A00034 | 9/25/2015 | 2.36 | 9/25/2025 | 9/25/2015 | 105.64112 | 105.6411177 | 105.6411177 | 105.6411177 | 104.6828036 | 101.9716108 | 99.36611616 | 96.86126779 | 94.45229301 |
| 151223A00036 | 12/23/2015 | 2.64 | 12/23/2025 | 12/23/2015 | 108.093 | 108.0929987 | 108.0929987 | 108.0929987 | 106.5674242 | 103.083222 | 99.76011868 | 96.58926084 | 93.56234303 |
| 160307A00024 | 3/7/2016 | 2.17 | 3/6/2026 | 3/7/2016 | 105.59583 | 105.5958317 | 105.5958317 | 105.5958317 | 104.4483064 | 101.4980422 | 98.6718402 | 95.96335873 | 93.36662799 |
| 160401A00005 | 4/1/2016 | 2.02 | 4/3/2023 | 4/1/2016 | 104.60988 | 104.6098817 | 104.6098817 | 104.6098817 | 103.9149421 | 101.2834003 | 98.73349899 | 96.26216798 | 93.86647593 |
| 160428A00020 | 4/28/2016 | 1.69 | 4/28/2021 | 4/28/2016 | 101.15546 | 101.1554554 | 101.1554554 | 101.1554554 | 100.9945695 | 100.1889353 | 99.39635014 | 98.61649739 | 97.84907049 |
| 160428A00025 | 4/28/2016 | 1.25 | 4/28/2021 | 4/28/2016 | 100.52856 | 100.5285574 | 100.5285574 | 100.5285574 | 100.442179 | 99.97776235 | 99.5187423 | 99.06501435 | 98.61647687 |
| 160524A00101 | 5/24/2016 | 2.98 | 5/23/2031 | 5/24/2016 | 124.59829 | 124.5982867 | 124.5982867 | 123.3208646 | 114.2683937 | 105.3619176 | 97.31147859 | 90.02735692 | 83.42979462 |
| 160601A00023 | 6/1/2016 | 2.37 | 6/1/2029 | 6/1/2016 | 109.75335 | 109.753353 | 109.753353 | 109.753353 | 106.6718726 | 102.0640962 | 97.74106372 | 93.68201882 | 89.86789344 |
| 020129A00031 | 12/31/2001 | 6.03 | 6/30/2021 | 12/31/2001 | 103.28656 | 103.2865584 | 103.2865584 | 103.2865584 | 103.1785388 | 102.6157158 | 102.0606655 | 101.5132089 | 100.9731729 |
| 110504A00017 | 5/4/2011 | 3.46 | 5/4/2021 | 5/4/2011 | 102.77489 | 102.7748855 | 102.7748855 | 102.7748855 | 102.6076561 | 101.7750504 | 100.956199 | 100.1507612 | 99.3584073 |
| 110810A00009 | 8/10/2011 | 2.36 | 8/10/2021 | 8/10/2011 | 101.3204 | 101.320404 | 101.320404 | 101.320404 | 101.1990331 | 100.5684137 | 99.94773686 | 99.33674245 | 98.73517987 |
| 150803A00041 | 8/3/2015 | 3.01 | 8/2/2030 | 8/3/2015 | 114.61193 | 114.6119258 | 114.6119258 | 114.5675523 | 110.5185038 | 105.1690645 | 100.187262 | 95.54346322 | 91.21068572 |
| 150804A00022 | 8/4/2015 | 2.37 | 8/4/2022 | 8/4/2015 | 104.26331 | 104.2633143 | 104.2633143 | 104.2633143 | 103.7921811 | 101.7633053 | 99.78509013 | 97.85592254 | 95.97425366 |
| 150812A00052 | 8/14/2015 | 2.13 | 8/14/2025 | 8/14/2015 | 105.44259 | 105.4425861 | 105.4425861 | 105.4425861 | 104.5118278 | 101.8374543 | 99.26622345 | 96.79325316 | 94.41392874 |
| 150825A00008 | 8/25/2015 | 2.82 | 8/25/2025 | 8/25/2015 | 111.21142 | 111.2114205 | 111.2114205 | 111.2114205 | 109.0965761 | 104.6545673 | 100.4374941 | 96.43250897 | 92.62757434 |
| 150929A00087 | 9/29/2015 | 2.09 | 9/29/2025 | 9/29/2015 | 105.42008 | 105.4200765 | 105.4200765 | 105.4200765 | 104.4595043 | 101.7444358 | 99.13552126 | 96.62767324 | 94.21608626 |
| 151002A00003 | 10/2/2015 | 1.94 | 10/2/2025 | 10/2/2015 | 105.0784 | 105.0783968 | 105.0783968 | 105.0783968 | 104.0926256 | 101.3470658 | 98.71018915 | 96.17673024 | 93.74171848 |
| 151005A00084 | 10/5/2015 | 2.25 | 10/5/2022 | 10/5/2015 | 104.32881 | 104.3288133 | 104.3288133 | 104.3288133 | 103.8032414 | 101.6191297 | 99.49274563 | 97.4221478 | 95.40547679 |
| 151013A00033 | 10/13/2015 | 2.23 | 10/14/2025 | 10/13/2015 | 105.36102 | 105.3610207 | 105.3610207 | 105.3610207 | 104.3761474 | 101.6323083 | 98.99681621 | 96.46443426 | 94.03021787 |
| 151023A00019 | 10/23/2015 | 1.74 | 10/23/2020 | 10/23/2015 | 100.46825 | 100.4682492 | 100.4682492 | 100.4682492 | 100.4150213 | 100.0990556 | 99.78508945 | 99.47310391 | 99.1630802 |
| 151030A00004 | 10/30/2015 | 2.48 | 10/30/2025 | 10/30/2015 | 109.77422 | 109.7742167 | 109.7742167 | 109.7742167 | 107.8236258 | 103.7100954 | 99.80245698 | 96.08893926 | 92.55851357 |
| 151118A00025 | 11/18/2015 | 2.4 | 11/18/2022 | 11/18/2015 | 104.7545 | 104.7544983 | 104.7544983 | 104.7544983 | 104.2085574 | 101.9767697 | 99.80611298 | 97.69456091 | 95.64016646 |
| 151124A00007 | 11/24/2015 | 1.98 | 11/23/2022 | 11/24/2015 | 102.14813 | 102.1481275 | 102.1481275 | 102.1481275 | 101.8812404 | 100.6244573 | 99.39505833 | 98.19221559 | 97.01513336 |
| 151228A00013 | 12/28/2015 | 2.27 | 12/29/2025 | 12/28/2015 | 106.20663 | 106.2066266 | 106.2066266 | 106.2066266 | 105.1461208 | 102.2887604 | 99.5475403 | 96.91670087 | 94.39081133 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160225A00011 | 2/25/2016 | 1.5 | 2/27/2023 | 2/25/2016 | 102.18519 | 102.1851855 | 102.1851855 | 102.1851855 | 101.8278053 | 100.2726023 | 98.75629379 | 97.27759074 | 95.83525735 |
| 160413A00014 | 4/13/2016 | 2.55 | 4/14/2031 | 4/13/2016 | 112.84759 | 112.8475925 | 112.8475925 | 112.7124242 | 108.2819411 | 102.7215985 | 97.56522629 | 92.77849375 | 88.33029967 |
| 160413A00020 | 4/13/2016 | 2.48 | 4/13/2026 | 4/13/2016 | 111.26448 | 111.2644838 | 111.2644838 | 111.2644838 | 108.3413643 | 103.23433 | 98.4177309 | 93.87324673 | 89.58381502 |
| 160413A00033 | 4/13/2016 | 2.32 | 4/13/2026 | 4/13/2016 | 108.88944 | 108.8894418 | 108.8894418 | 108.8894418 | 106.5963255 | 102.2603988 | 98.1558045 | 94.26846752 | 90.58525706 |
| 160414A00042 | 4/13/2016 | 2.48 | 4/13/2026 | 4/13/2016 | 111.26448 | 111.2644838 | 111.2644838 | 111.2644838 | 108.3413643 | 103.23433 | 98.4177309 | 93.87324673 | 89.58381502 |
| 160421A00016 | 4/21/2016 | 2.26 | 4/21/2026 | 4/21/2016 | 110.6003 | 110.6002978 | 110.6002978 | 110.6002978 | 107.8517991 | 102.9677235 | 98.35779595 | 94.00482705 | 89.89280241 |
| 160511A00015 | 5/11/2016 | 2.42 | 5/11/2026 | 5/11/2016 | 111.0776 | 111.0776026 | 111.0776026 | 111.0776026 | 108.0678527 | 102.913723 | 98.05612563 | 93.47619346 | 89.15635976 |
| 160603A00029 | 6/3/2016 | 2.18 | 6/3/2031 | 6/3/2016 | 111.99544 | 111.9954386 | 111.9954386 | 111.8294469 | 107.293714 | 101.6761707 | 96.47368431 | 91.65042864 | 87.17399735 |
| 110304A00006 | 3/4/2011 | 3.6 | 3/4/2021 | 3/4/2011 | 102.2766 | 102.2766038 | 102.2766038 | 102.2766038 | 102.1511919 | 101.4954457 | 100.8483616 | 100.2097671 | 99.57949444 |
| 191004A00017 | 10/4/2019 | 2.02 | 10/4/2029 | 10/4/2019 | 113.95039 | 113.9503889 | 113.9503889 | 113.9474885 | 106.2672129 | 98.60678334 | 91.60373579 | 85.19696773 | 79.331402 |
| 191009A00009 | 10/9/2019 | 1.8 | 10/9/2026 | 10/9/2019 | 104.92268 | 104.9226761 | 104.9226761 | 104.9226761 | 103.5232285 | 100.3162877 | 97.25571424 | 94.33345076 | 91.54194518 |
| 200303A00028 | 3/3/2020 | 1.54 | 3/4/2030 | 3/3/2020 | 109.34249 | 109.3424946 | 109.3424946 | 109.1494972 | 102.3868725 | 95.41048476 | 89.03011419 | 83.18968396 | 77.83875193 |
| 200309A00083 | 3/9/2020 | 0.82 | 3/9/2023 | 3/9/2020 | 101.36818 | 101.3681774 | 101.3681774 | 101.3681774 | 100.7088327 | 98.18032992 | 95.72904982 | 93.35213248 | 91.0468453 |
| 120820A00009 | 8/20/2012 | 2.4 | 8/22/2022 | 8/20/2012 | 104.22422 | 104.2242247 | 104.2242247 | 104.2242247 | 103.7620935 | 101.7801408 | 99.84788258 | 97.96371391 | 96.12609504 |
| 140508A00008 | 5/8/2014 | 1.66 | 5/10/2021 | 5/8/2014 | 100.7782 | 100.7782026 | 100.7782026 | 100.7782026 | 100.6833675 | 100.1808373 | 99.68458921 | 99.19449297 | 98.71042225 |
| 140730A00037 | 7/30/2014 | 2.83 | 1/30/2024 | 7/30/2014 | 105.12134 | 105.1213379 | 105.1213379 | 105.1213379 | 104.6366085 | 102.7512571 | 100.920199 | 99.14142613 | 97.41302017 |
| 140821A00040 | 8/21/2014 | 3.41 | 8/21/2031 | 8/21/2014 | 130.76578 | 130.7657786 | 130.7657786 | 129.2523862 | 119.8220618 | 110.5054405 | 102.092685 | 94.48774716 | 87.60541654 |
| 140917A00030 | 9/17/2014 | 3.23 | 9/17/2029 | 9/17/2014 | 122.61131 | 122.6113142 | 122.6113142 | 122.6113142 | 115.8713574 | 108.5910391 | 101.8960512 | 95.73406686 | 90.05778659 |
| 150114A00029 | 1/14/2015 | 1.99 | 1/14/2022 | 1/14/2015 | 101.44495 | 101.4449533 | 101.4449533 | 101.4449533 | 101.2861302 | 100.4478295 | 99.62441981 | 98.81549152 | 98.02065048 |
| 150213A00014 | 2/13/2015 | 2.41 | 2/13/2025 | 2/13/2015 | 105.61307 | 105.6130745 | 105.6130745 | 105.6130745 | 104.8427644 | 102.4096229 | 100.0627769 | 97.79842973 | 95.61298013 |
| 150227A00011 | 2/27/2015 | 2.33 | 2/27/2025 | 2/27/2015 | 108.15071 | 108.1507141 | 108.1507141 | 108.1507141 | 106.6536707 | 102.9969454 | 99.50482574 | 96.16874853 | 92.98065039 |
| 150529A00055 | 5/29/2015 | 1.78 | 5/31/2022 | 5/29/2015 | 101.52346 | 101.5234572 | 101.5234572 | 101.5234572 | 101.3256954 | 100.3206435 | 99.33486978 | 98.36782898 | 97.41899659 |
| 150617A00018 | 6/17/2015 | 2.45 | 6/17/2025 | 6/17/2015 | 105.61149 | 105.611492 | 105.611492 | 105.611492 | 104.7389793 | 102.1505146 | 99.65894564 | 97.25980582 | 94.94886754 |
| 150722A00033 | 7/22/2015 | 2.47 | 7/22/2025 | 7/22/2015 | 105.75943 | 105.7594285 | 105.7594285 | 105.7594285 | 104.8577644 | 102.2248324 | 99.69183356 | 97.25410438 | 94.90723359 |
| 150803A00039 | 8/3/2015 | 3.01 | 8/2/2030 | 8/3/2015 | 114.61193 | 114.6119324 | 114.6119324 | 114.5675589 | 110.5185075 | 105.1690657 | 100.1872611 | 95.54346035 | 91.21068113 |
| 150824A00033 | 8/24/2015 | 2.22 | 8/25/2025 | 8/24/2015 | 105.16731 | 105.1673078 | 105.1673078 | 105.1673078 | 104.242251 | 101.5834945 | 99.02702615 | 96.56801471 | 94.20189316 |
| 150828A00018 | 8/28/2015 | 1.7 | 8/29/2022 | 8/28/2015 | 101.74858 | 101.7485782 | 101.7485782 | 101.7485782 | 101.5282545 | 100.4366444 | 99.36694443 | 98.31852156 | 97.29076682 |
| 150928A00016 | 9/28/2015 | 1.73 | 9/28/2020 | 9/28/2015 | 100.35854 | 100.3585413 | 100.3585413 | 100.3585413 | 100.3195027 | 100.0741219 | 99.82994792 | 99.58697186 | 99.34518496 |
| 150929A00076 | 9/29/2015 | 2.28 | 9/29/2025 | 9/29/2015 | 105.41817 | 105.4181716 | 105.4181716 | 105.4181716 | 104.4616549 | 101.7559946 | 99.15582856 | 96.65611369 | 94.25208592 |
| 150929A00083 | 9/29/2015 | 2.09 | 9/29/2025 | 9/29/2015 | 105.42008 | 105.4200765 | 105.4200765 | 105.4200765 | 104.4595043 | 101.7444358 | 99.13552126 | 96.62767324 | 94.21608626 |
| 151007A00010 | 10/7/2015 | 1.7 | 10/7/2020 | 10/7/2015 | 100.3905 | 100.3904973 | 100.3904973 | 100.3904973 | 100.3460809 | 100.0732906 | 99.80199085 | 99.5321693 | 99.26381388 |
| 151204A00011 | 12/4/2015 | 2.28 | 12/4/2025 | 12/4/2015 | 106.23362 | 106.2336208 | 106.2336208 | 106.2336208 | 105.1743285 | 102.3172257 | 99.57617874 | 96.94543724 | 94.41957872 |
| 160115A00011 | 1/15/2016 | 2.18 | 1/15/2026 | 1/15/2016 | 105.46418 | 105.4641761 | 105.4641761 | 105.4641761 | 104.3842105 | 101.5171704 | 98.76777864 | 96.13015207 | 93.59874582 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160209A00006 | 2/9/2016 | 1.91 | 2/9/2026 | 2/9/2016 | 104.73501 | 104.7350133 | 104.7350133 | 104.7350133 | 103.6299688 | 100.7431324 | 97.97622562 | 95.32318467 | 92.77829794 |
| 160210A00051 | 2/10/2016 | 2.28 | 2/10/2031 | 2/10/2016 | 112.20774 | 112.2077414 | 112.2077414 | 112.0993879 | 107.7728325 | 102.2892912 | 97.20016127 | 92.47225766 | 88.07548712 |
| 160329A00017 | 3/29/2016 | 2.48 | 3/30/2026 | 3/29/2016 | 110.63387 | 110.6338746 | 110.6338746 | 110.6338746 | 107.9647206 | 103.1418441 | 98.586458 | 94.2819248 | 90.21274205 |
| 160330A00003 | 3/30/2016 | 1.68 | 3/30/2021 | 3/30/2016 | 101.06409 | 101.06409 | 101.06409 | 101.06409 | 100.9199724 | 100.1776218 | 99.44623655 | 98.72557477 | 98.01540151 |
| 160404A00019 | 4/4/2016 | 2.48 | 4/4/2031 | 4/4/2016 | 112.43164 | 112.4316396 | 112.4316396 | 112.2972922 | 107.8832661 | 102.3435079 | 97.20620116 | 92.43714683 | 88.00536289 |
| 160412A00029 | 4/12/2016 | 2.48 | 4/14/2031 | 4/12/2016 | 112.43215 | 112.4321522 | 112.4321522 | 112.2974757 | 107.8832061 | 102.3432565 | 97.20579843 | 92.4366268 | 88.00475409 |
| 140908A00080 | 9/8/2014 | 2.51 | 3/8/2024 | 9/8/2014 | 107.00015 | 107.0001518 | 107.0001518 | 107.0001518 | 106.060258 | 103.1456861 | 100.3387372 | 97.63468958 | 95.02906082 |
| 140925A00039 | 9/25/2014 | 2.02 | 9/27/2021 | 9/25/2014 | 101.18484 | 101.1848406 | 101.1848406 | 101.1848406 | 101.0564883 | 100.3815143 | 99.71801876 | 99.06567669 | 98.42417604 |
| 141107A00027 | 11/7/2014 | 1.98 | 11/8/2021 | 11/7/2014 | 101.2899 | 101.2899036 | 101.2899036 | 101.2899036 | 101.1478788 | 100.3936858 | 99.65245835 | 98.92383989 | 98.20748758 |
| 141203A00039 | 12/3/2014 | 3.6 | 12/4/2034 | 12/3/2014 | 126.30951 | 126.3095102 | 126.3095102 | 124.6695416 | 117.1964246 | 109.2573818 | 102.0654817 | 95.53929703 | 89.60712836 |
| 150414A00037 | 4/14/2015 | 2.34 | 4/14/2025 | 4/14/2015 | 105.14201 | 105.1420089 | 105.1420089 | 105.1420089 | 104.3269156 | 101.8311204 | 99.42616788 | 97.10797003 | 94.87265347 |
| 150617A00036 | 6/17/2015 | 2.44 | 6/15/2022 | 6/17/2015 | 104.02284 | 104.0228388 | 104.0228388 | 104.0228388 | 103.6102098 | 101.7563367 | 99.94630155 | 98.17879034 | 96.45253754 |
| 150624A00077 | 6/24/2015 | 2.54 | 6/24/2022 | 6/24/2015 | 104.26182 | 104.2618199 | 104.2618199 | 104.2618199 | 103.8405992 | 101.9618395 | 100.1280208 | 98.33777994 | 96.58980481 |
| 150701A00056 | 7/1/2015 | 2.34 | 7/1/2025 | 7/1/2015 | 105.9225 | 105.9225022 | 105.9225022 | 105.9225022 | 105.0167913 | 102.3717439 | 99.82730943 | 97.37878391 | 95.02171846 |
| 150729A00041 | 7/29/2015 | 2.44 | 7/29/2025 | 7/29/2015 | 105.67892 | 105.6789245 | 105.6789245 | 105.6789245 | 104.7775933 | 102.1463587 | 99.61501149 | 97.17888918 | 94.83358152 |
| 151006A00050 | 10/6/2015 | 2.21 | 10/6/2022 | 10/6/2015 | 102.35814 | 102.3581378 | 102.3581378 | 102.3581378 | 102.1032549 | 100.8867103 | 99.69605914 | 98.53052483 | 97.38936107 |
| 151023A00018 | 10/23/2015 | 1.74 | 10/23/2020 | 10/23/2015 | 100.46825 | 100.4682492 | 100.4682492 | 100.4682492 | 100.4150213 | 100.0990556 | 99.78508945 | 99.47310391 | 99.1630802 |
| 151102A00024 | 11/2/2015 | 2.37 | 11/2/2022 | 11/2/2015 | 104.74756 | 104.7475581 | 104.7475581 | 104.7475581 | 104.1961979 | 101.9371193 | 99.73938962 | 97.60100417 | 95.52003529 |
| 151118A00037 | 11/18/2015 | 2.75 | 11/18/2025 | 11/18/2015 | 110.19476 | 110.1947617 | 110.1947617 | 110.1947617 | 108.2055784 | 104.0596128 | 100.1223141 | 96.38168479 | 92.82648845 |
| 160126A00004 | 1/26/2016 | 2.52 | 1/26/2026 | 1/26/2016 | 112.49074 | 112.4907372 | 112.4907372 | 112.4907372 | 109.6516042 | 104.4842115 | 99.60548128 | 94.99758162 | 90.64387948 |
| 160211A00038 | 2/11/2016 | 1.83 | 2/11/2026 | 2/11/2016 | 104.49579 | 104.4957901 | 104.4957901 | 104.4957901 | 103.3931317 | 100.5127747 | 97.75208448 | 95.1050102 | 92.56585238 |
| 160212A00006 | 2/12/2016 | 1.57 | 2/13/2023 | 2/12/2016 | 101.78484 | 101.7848351 | 101.7848351 | 101.7848351 | 101.4822939 | 100.108319 | 98.76623447 | 97.45503569 | 96.17375799 |
| 160301A00012 | 3/1/2016 | 2.02 | 3/1/2023 | 3/1/2016 | 104.46471 | 104.4647084 | 104.4647084 | 104.4647084 | 103.8047821 | 101.2546742 | 98.78164558 | 96.38286724 | 94.05563478 |
| 110505A00036 | 5/5/2011 | 3.23 | 5/5/2021 | 5/5/2011 | 102.51226 | 102.5122602 | 102.5122602 | 102.5122602 | 102.3501579 | 101.5415048 | 100.7460948 | 99.96360071 | 99.19370621 |
| 191004A00022 | 10/4/2019 | 2.02 | 10/4/2029 | 10/4/2019 | 113.95039 | 113.950387 | 113.950387 | 113.9474866 | 106.2672129 | 98.60678431 | 91.60373753 | 85.19697011 | 79.3314049 |
| 191011A00027 | 10/11/2019 | 1.84 | 10/11/2029 | 10/11/2019 | 108.4249 | 108.4248986 | 108.4248986 | 108.4247927 | 105.1301379 | 100.4085509 | 95.9891668 | 91.84922034 | 87.9678565 |
| 191031A00025 | 10/31/2019 | 1.91 | 10/31/2024 | 10/31/2019 | 103.65096 | 103.650965 | 103.650965 | 103.650965 | 102.9917703 | 100.7714718 | 98.62518522 | 96.54982269 | 94.54244801 |
| 191203A00011 | 12/3/2019 | 2.21 | 12/3/2029 | 12/3/2019 | 115.79651 | 115.7965091 | 115.7965091 | 115.7131444 | 107.7872224 | 99.92826354 | 92.75316647 | 86.19750506 | 80.20328132 |
| 191206A00005 | 12/6/2019 | 2.18 | 12/7/2026 | 12/6/2019 | 111.14704 | 111.1470392 | 111.1470392 | 111.1470392 | 107.1861563 | 101.4047933 | 95.98964938 | 90.91536648 | 86.15847405 |
| 200110A00039 | 1/10/2020 | 2.32 | 1/10/2030 | 1/10/2020 | 116.90587 | 116.9058734 | 116.9058734 | 116.747684 | 108.6896048 | 100.709727 | 93.43015808 | 86.78432772 | 80.71236959 |
| 200110A00043 | 1/10/2020 | 2.32 | 1/10/2030 | 1/10/2020 | 116.90587 | 116.9058734 | 116.9058734 | 116.747684 | 108.6896048 | 100.709727 | 93.43015808 | 86.78432772 | 80.71236959 |
| 200227A00046 | 2/27/2020 | 1.52 | 3/1/2027 | 2/27/2020 | 104.19925 | 104.1992477 | 104.1992477 | 104.1992477 | 102.6437216 | 99.30401704 | 96.12362612 | 93.0934174 | 90.20485359 |
| 121114A00020 | 11/14/2012 | 1.74 | 11/14/2022 | 11/14/2012 | 103.57333 | 103.5733287 | 103.5733287 | 103.5733287 | 103.0454942 | 100.8777839 | 98.76907357 | 96.71741396 | 94.72093214 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 130321A00009 | 3/21/2013 | 2.17 | 3/23/2026 | 3/21/2013 | 107.7452 | 107.7452021 | 107.7452021 | 107.7452021 | 105.9768714 | 102.2529805 | 98.71226496 | 95.34414425 | 92.13872384 |
| 130422A00020 | 4/22/2013 | 1.98 | 4/22/2025 | 4/22/2013 | 104.22104 | 104.2210398 | 104.2210398 | 104.2210398 | 103.4126615 | 100.9382589 | 98.55394478 | 96.25566434 | 94.03957559 |
| 140219A00005 | 2/19/2014 | 3.13 | 2/20/2029 | 2/19/2014 | 113.91646 | 113.9164602 | 113.9164602 | 113.9164602 | 110.9337029 | 106.2879298 | 101.9209068 | 97.81287222 | 93.94563051 |
| 140428A00015 | 4/28/2014 | 2.35 | 4/29/2024 | 4/28/2014 | 104.49339 | 104.4933877 | 104.4933877 | 104.4933877 | 103.9546429 | 101.9563733 | 100.0187054 | 98.13930141 | 96.31593139 |
| 140730A00035 | 7/30/2014 | 2.67 | 1/30/2023 | 7/30/2014 | 103.48945 | 103.4894515 | 103.4894515 | 103.4894515 | 103.1932893 | 101.8331404 | 100.5040224 | 99.2049685 | 97.93505021 |
| 141017A00022 | 10/17/2014 | 2.78 | 10/17/2024 | 10/17/2014 | 109.42653 | 109.4265284 | 109.4265284 | 109.4265284 | 107.9455927 | 104.1666217 | 100.5525273 | 97.09510339 | 93.78660069 |
| 150203A00012 | 2/3/2015 | 1.61 | 2/3/2022 | 2/3/2015 | 101.17654 | 101.1765356 | 101.1765356 | 101.1765356 | 101.0097069 | 100.1340998 | 99.27428503 | 98.42982553 | 97.60030076 |
| 150224A00010 | 2/24/2015 | 2.34 | 2/24/2025 | 2/24/2015 | 105.55074 | 105.5507399 | 105.5507399 | 105.5507399 | 104.6184716 | 101.8873249 | 99.25921744 | 96.72933266 | 94.29311643 |
| 150617A00030 | 6/17/2015 | 2.91 | 6/16/2025 | 6/17/2015 | 111.24178 | 111.2417757 | 111.2417757 | 111.2417757 | 109.2770345 | 104.9656809 | 100.8662142 | 96.96689197 | 93.25668789 |
| 150805A00015 | 8/5/2015 | 2.29 | 8/5/2022 | 8/5/2015 | 104.47597 | 104.4759741 | 104.4759741 | 104.4759741 | 104.001869 | 101.961767 | 99.97276274 | 98.03322397 | 96.14158364 |
| 151022A00020 | 10/22/2015 | 1.71 | 10/22/2020 | 10/22/2015 | 100.4566 | 100.4565955 | 100.4565955 | 100.4565955 | 100.4027894 | 100.0831095 | 99.76544428 | 99.44977456 | 99.1360816 |
| 151029A00008 | 10/29/2015 | 2.28 | 10/29/2025 | 10/29/2015 | 105.504 | 105.503997 | 105.503997 | 105.503997 | 104.5169613 | 101.7688108 | 99.12921946 | 96.59293853 | 94.1550121 |
| 151030A00026 | 10/30/2015 | 3.29 | 10/30/2030 | 10/30/2015 | 124.69897 | 124.6989672 | 124.6989672 | 124.0476318 | 116.0564172 | 107.8777087 | 100.4298919 | 93.64088241 | 87.44617994 |
| 151113A00035 | 11/13/2015 | 1.8 | 11/14/2022 | 11/13/2015 | 102.14478 | 102.144779 | 102.144779 | 102.144779 | 101.8775061 | 100.6185178 | 99.38699749 | 98.1821137 | 97.00306752 |
| 151124A00006 | 11/24/2015 | 1.66 | 11/24/2020 | 11/24/2015 | 100.35559 | 100.3555916 | 100.3555916 | 100.3555916 | 100.31378 | 100.0618388 | 99.81141744 | 99.56250081 | 99.31507395 |
| 151215A00039 | 12/15/2015 | 2.46 | 12/15/2025 | 12/15/2015 | 106.2018 | 106.2017973 | 106.2017973 | 106.2017973 | 105.1467646 | 102.3001205 | 99.56881716 | 96.94715206 | 94.42974728 |
| 160209A00008 | 2/9/2016 | 2.45 | 2/10/2031 | 2/9/2016 | 112.0616 | 112.0616032 | 112.0616032 | 111.9546052 | 107.6632484 | 102.2135098 | 97.15438028 | 92.45309069 | 88.07991661 |
| 160303A00035 | 3/3/2016 | 2.14 | 3/3/2026 | 3/3/2016 | 105.65077 | 105.6507672 | 105.6507672 | 105.6507672 | 104.4550376 | 101.4228611 | 98.51982805 | 95.73925417 | 93.07485251 |
| 160328A00030 | 3/28/2016 | 1.79 | 3/29/2021 | 3/28/2016 | 101.14234 | 101.1423376 | 101.1423376 | 101.1423376 | 100.9987099 | 100.2585715 | 99.52932766 | 98.81073887 | 98.10257244 |
| 110504A00014 | 5/4/2011 | 3.46 | 5/4/2021 | 5/4/2011 | 102.77489 | 102.7748855 | 102.7748855 | 102.7748855 | 102.6076561 | 101.7750504 | 100.956199 | 100.1507612 | 99.3584073 |
| 110719A00017 | 7/19/2011 | 3.68 | 7/20/2026 | 7/19/2011 | 110.87405 | 110.874047 | 110.874047 | 110.874047 | 109.5176628 | 106.2533029 | 103.1329432 | 100.1488981 | 97.29395041 |
| 191004A00026 | 10/4/2019 | 1.74 | 10/4/2024 | 10/4/2019 | 105.85998 | 105.8599801 | 105.8599801 | 105.8599801 | 104.274361 | 100.3197746 | 96.54193661 | 92.93192329 | 89.48131534 |
| 191122A00003 | 11/22/2019 | 2.32 | 11/22/2039 | 11/22/2019 | 128.3921 | 128.3921011 | 128.3921011 | 121.1740611 | 108.6873672 | 97.34468205 | 87.5860775 | 79.16241802 | 71.86650713 |
| 200220A00026 | 2/20/2020 | 2.22 | 2/21/2040 | 2/20/2020 | 120.66738 | 120.6673759 | 120.6673759 | 115.9196813 | 105.8352966 | 96.2488593 | 87.85070241 | 80.47130576 | 73.96745975 |
| 200306A00048 | 3/6/2020 | 1.04 | 3/6/2035 | 3/6/2020 | 107.06804 | 107.0680401 | 107.0680401 | 105.5857752 | 99.14712433 | 92.35582377 | 86.21283545 | 80.64657698 | 75.59412196 |
| 170524A00027 | 5/24/2017 | 2.32 | 5/24/2027 | 5/24/2017 | 108.0024 | 108.0023992 | 108.0023992 | 108.0023992 | 106.2469467 | 102.653304 | 99.23706964 | 95.98775184 | 92.89556122 |
| 170619A00097 | 6/16/2017 | 2.74 | 6/16/2027 | 6/16/2017 | 114.13514 | 114.135138 | 114.135138 | 114.135138 | 110.0199753 | 104.2885604 | 98.92946655 | 93.91583985 | 89.22291861 |
| 171201A00016 | 12/1/2017 | 2.91 | 12/2/2030 | 12/1/2017 | 114.5234 | 114.5234025 | 114.5234025 | 114.439191 | 110.1661577 | 104.6713044 | 99.56487105 | 94.81470035 | 90.3915854 |
| 120517A00021 | 5/17/2012 | 1.85 | 5/17/2024 | 5/17/2012 | 103.54926 | 103.5492616 | 103.5492616 | 103.5492616 | 102.9960948 | 100.975628 | 99.01743757 | 97.11909058 | 95.27826739 |
| 130522A00027 | 5/22/2013 | 2.08 | 5/22/2023 | 5/22/2013 | 103.0113 | 103.0113046 | 103.0113046 | 103.0113046 | 102.6641211 | 101.1455287 | 99.66450685 | 98.21981817 | 96.81027592 |
| 130614A00018 | 6/14/2013 | 2.83 | 6/14/2023 | 6/14/2013 | 104.00489 | 104.0048872 | 104.0048872 | 104.0048872 | 103.6414172 | 102.0713446 | 100.5407895 | 99.04843569 | 97.5930208 |
| 140317A00056 | 3/17/2014 | 1.82 | 3/17/2021 | 3/17/2014 | 100.65912 | 100.6591238 | 100.6591238 | 100.6591238 | 100.5826243 | 100.1634587 | 99.74863513 | 99.33807915 | 98.93171794 |
| 140717A00027 | 7/17/2014 | 3.14 | 7/17/2026 | 7/17/2014 | 114.14135 | 114.1413465 | 114.1413465 | 114.1413465 | 111.2167766 | 106.2145274 | 101.4975175 | 97.0474675 | 92.84737748 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150318A00003 | 3/18/2015 | 2.04 | 3/18/2022 | 3/18/2015 | 101.94347 | 101.9434653 | 101.9434653 | 101.9434653 | 101.749308 | 100.7406213 | 99.75229284 | 98.78368628 | 97.83419247 |
| 150409A00009 | 4/9/2015 | 1.89 | 4/9/2025 | 4/9/2015 | 104.47557 | 104.4755653 | 104.4755653 | 104.4755653 | 103.6626155 | 101.1745287 | 98.77723631 | 96.46664276 | 94.23886783 |
| 150420A00012 | 4/20/2015 | 2.07 | 4/20/2022 | 4/20/2015 | 103.15164 | 103.1516392 | 103.1516392 | 103.1516392 | 102.7803849 | 101.0309271 | 99.32021488 | 97.64712342 | 96.0105696 |
| 150427A00014 | 4/27/2015 | 2.98 | 4/27/2035 | 4/27/2015 | 121.37147 | 121.3714742 | 121.3714742 | 119.6695858 | 112.384545 | 104.7009453 | 97.75125301 | 91.45432119 | 85.73883245 |
| 150615A00024 | 6/15/2015 | 2.26 | 6/16/2025 | 6/15/2015 | 105.61356 | 105.6135581 | 105.6135581 | 105.6135581 | 104.7375188 | 102.1402914 | 99.64055063 | 97.23379139 | 94.91575031 |
| 150713A00011 | 7/13/2015 | 1.89 | 7/13/2020 | 7/13/2015 | 100.06404 | 100.0640425 | 100.0640425 | 100.0640425 | 100.0590944 | 100.0229991 | 99.98694744 | 99.95093924 | 99.91497447 |
| 150803A00033 | 8/3/2015 | 3.41 | 8/2/2030 | 8/3/2015 | 125.24599 | 125.2459939 | 125.2459939 | 124.7666869 | 116.9071213 | 108.8154308 | 101.433242 | 94.69185565 | 88.52967789 |
| 150803A00038 | 8/3/2015 | 3.41 | 8/2/2030 | 8/3/2015 | 125.24599 | 125.2459939 | 125.2459939 | 124.7666869 | 116.9071213 | 108.8154308 | 101.433242 | 94.69185565 | 88.52967789 |
| 150803A00042 | 8/3/2015 | 3.01 | 8/2/2030 | 8/3/2015 | 114.61194 | 114.6119366 | 114.6119366 | 114.5675631 | 110.518509 | 105.1690657 | 100.1872598 | 95.54345799 | 91.21067781 |
| 150902A00008 | 9/2/2015 | 1.37 | 9/2/2020 | 9/2/2015 | 100.18226 | 100.1822556 | 100.1822556 | 100.1822556 | 100.1608363 | 100.0156869 | 99.87099231 | 99.72675036 | 99.58295879 |
| 150902A00009 | 9/2/2015 | 1.68 | 9/2/2020 | 9/2/2015 | 100.27561 | 100.275611 | 100.275611 | 100.275611 | 100.2491192 | 100.0730874 | 99.89767766 | 99.72288686 | 99.54871165 |
| 150922A00014 | 9/22/2015 | 1.84 | 9/22/2020 | 9/22/2015 | 100.36427 | 100.364274 | 100.364274 | 100.364274 | 100.3277152 | 100.0959349 | 99.86523369 | 99.63560407 | 99.40703856 |
| 151001A00023 | 10/1/2015 | 2.02 | 10/1/2025 | 10/1/2015 | 105.30497 | 105.3049659 | 105.3049659 | 105.3049659 | 104.3171422 | 101.5657382 | 98.92324541 | 96.3843875 | 93.94418356 |
| 151120A00019 | 11/20/2015 | 2.72 | 11/20/2030 | 11/20/2015 | 114.44377 | 114.4437666 | 114.4437666 | 114.3693397 | 110.1263791 | 104.6457871 | 99.55130651 | 94.81108405 | 90.39617908 |
| 151125A00037 | 11/25/2015 | 2.41 | 11/25/2025 | 11/25/2015 | 105.96438 | 105.9643783 | 105.9643783 | 105.9643783 | 104.9425527 | 102.1421566 | 99.45381451 | 96.87204716 | 94.39168422 |
| 151216A00005 | 12/16/2015 | 2.15 | 12/16/2020 | 12/16/2015 | 100.88715 | 100.8871453 | 100.8871453 | 100.8871453 | 100.8019747 | 100.3379092 | 99.87813712 | 99.42259898 | 98.97123624 |
| 151216A00006 | 12/16/2015 | 2.3 | 12/16/2021 | 12/16/2015 | 102.90241 | 102.9024076 | 102.9024076 | 102.9024076 | 102.6348691 | 101.2170575 | 99.82635584 | 98.46205152 | 97.12345627 |
| 151223A00078 | 12/23/2015 | 2.28 | 12/23/2025 | 12/23/2015 | 106.23545 | 106.2354521 | 106.2354521 | 106.2354521 | 105.1750151 | 102.3171156 | 99.57536043 | 96.94399097 | 94.41757731 |
| 191004A00023 | 10/4/2019 | 2.02 | 10/4/2029 | 10/4/2019 | 113.95038 | 113.9503789 | 113.9503789 | 113.9474785 | 106.2672126 | 98.6067882 | 91.60374501 | 85.19698064 | 79.33141801 |
| 191101A00004 | 11/1/2019 | 1.91 | 11/1/2029 | 11/1/2019 | 113.35752 | 113.3575207 | 113.3575207 | 113.3385955 | 106.5493401 | 99.47827404 | 92.99467228 | 87.04479152 | 81.58013818 |
| 200109A00008 | 1/9/2020 | 1.95 | 1/9/2030 | 1/9/2020 | 109.22263 | 109.2226254 | 109.2226254 | 109.217544 | 105.7251909 | 100.8577501 | 96.30912016 | 92.05475629 | 88.07221572 |
| 200110A00037 | 1/10/2020 | 2.32 | 1/10/2030 | 1/10/2020 | 116.90587 | 116.9058734 | 116.9058734 | 116.747684 | 108.6896048 | 100.709727 | 93.43015807 | 86.78432772 | 80.71236959 |
| 200206A00027 | 2/6/2020 | 2.15 | 2/6/2030 | 2/6/2020 | 115.54015 | 115.5401475 | 115.5401475 | 115.3302835 | 107.2857497 | 99.34023457 | 92.09716037 | 85.48929918 | 79.45623817 |
| 200206A00032 | 2/6/2020 | 2.15 | 2/6/2030 | 2/6/2020 | 115.54015 | 115.5401519 | 115.5401519 | 115.3302876 | 107.28575 | 99.34023276 | 92.09715682 | 85.48929417 | 79.45623196 |
| 200327A00084 | 3/27/2020 | 1.1 | 3/27/2025 | 3/27/2020 | 103.38553 | 103.3855317 | 103.3855317 | 103.3855317 | 101.5719617 | 97.48707628 | 93.59947205 | 89.89842587 | 86.37386186 |
| 200330A00079 | 3/30/2020 | 1.51 | 3/30/2035 | 3/30/2020 | 109.25254 | 109.2525385 | 109.2525385 | 107.7589253 | 101.2408908 | 94.35126665 | 88.11664438 | 82.46493314 | 77.3327358 |
| 200413A00009 | 4/13/2020 | 0.77 | 4/13/2027 | 4/13/2020 | 102.29963 | 102.2996269 | 102.2996269 | 102.2996269 | 100.6803185 | 97.31351869 | 94.11119854 | 91.0637236 | 88.16209904 |
| 200512A00001 | 5/12/2020 | 1.17 | 5/12/2027 | 5/12/2020 | 105.37817 | 105.3781697 | 105.3781697 | 105.3781697 | 101.0005259 | 95.16940645 | 89.73038654 | 84.65480976 | 79.91625984 |
| 200512A00018 | 5/12/2020 | 0.85 | 5/12/2025 | 5/12/2020 | 102.36974 | 102.3697382 | 102.3697382 | 102.3697382 | 100.4744686 | 96.3310122 | 92.39241651 | 88.64738911 | 85.085319 |
| 171207A00024 | 12/7/2017 | 2.93 | 12/7/2027 | 12/7/2017 | 117.74563 | 117.7456322 | 117.7456322 | 117.7456322 | 112.3444146 | 105.6520684 | 99.4348479 | 93.65594715 | 88.28160921 |
| 180215A00034 | 2/15/2018 | 2.9 | 2/15/2023 | 2/15/2018 | 106.63559 | 106.6355949 | 106.6355949 | 106.6355949 | 105.985074 | 103.4494371 | 100.9893227 | 98.60199832 | 96.28484978 |
| 180309A00015 | 3/9/2018 | 3.37 | 3/10/2031 | 3/9/2018 | 117.64232 | 117.6423198 | 117.6423198 | 117.5163343 | 112.95553 | 107.197568 | 101.8550788 | 96.89298321 | 92.27948179 |
| 181214A00010 | 12/14/2018 | 3.41 | 12/14/2028 | 12/14/2018 | 121.60144 | 121.6014353 | 121.6014353 | 121.6014353 | 115.5320665 | 108.554899 | 102.1077468 | 96.14606522 | 90.6293263 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 181218A00086 | 12/18/2018 | 3.06 | 10/18/2023 | 12/18/2018 | 108.292 | 108.2920041 | 108.2920041 | 108.2920041 | 107.3850082 | 104.3861699 | 101.4928627 | 98.70073442 | 96.00563944 |
| 181218A00089 | 12/18/2018 | 3.05 | 6/19/2023 | 12/18/2018 | 107.52198 | 107.5219845 | 107.5219845 | 107.5219845 | 106.770573 | 104.0422178 | 101.4025441 | 98.84814455 | 96.37576355 |
| 190104A00035 | 1/4/2019 | 3.1 | 1/5/2026 | 1/4/2019 | 114.22684 | 114.226843 | 114.226843 | 114.226843 | 111.4880587 | 106.3843573 | 101.5609976 | 97.00089645 | 92.68810441 |
| 190205A00027 | 2/5/2019 | 2.87 | 2/7/2022 | 2/5/2019 | 104.10832 | 104.1083161 | 104.1083161 | 104.1083161 | 103.7965775 | 102.2246146 | 100.6846464 | 99.17575842 | 97.69707101 |
| 190308A00016 | 3/8/2019 | 3.18 | 3/8/2034 | 3/8/2019 | 133.18981 | 133.1898103 | 133.1898103 | 129.0644199 | 117.9790469 | 107.3932744 | 98.00188506 | 89.65632667 | 82.22765857 |
| 190315A00029 | 3/15/2019 | 2.88 | 3/15/2034 | 3/15/2019 | 120.52896 | 120.5289576 | 120.5289576 | 119.3703816 | 112.7145363 | 105.4718797 | 98.87952104 | 92.86978245 | 87.38271632 |
| 190327A00035 | 3/27/2019 | 2.68 | 3/27/2034 | 3/27/2019 | 118.96233 | 118.9623322 | 118.9623322 | 117.8182715 | 111.2483495 | 104.0994136 | 97.59240483 | 91.6605114 | 86.24455323 |
| 190503A00015 | 5/3/2019 | 3.03 | 5/3/2034 | 5/3/2019 | 120.38825 | 120.3882507 | 120.3882507 | 119.1661478 | 112.4701497 | 105.2090672 | 98.60415306 | 92.58664822 | 87.09570121 |
| 190605A00023 | 6/5/2019 | 2.64 | 6/5/2029 | 6/5/2019 | 118.5767 | 118.576703 | 118.576703 | 118.576703 | 111.1381859 | 103.4239205 | 96.34964074 | 89.85773788 | 83.89610787 |
| 190605A00025 | 6/5/2019 | 2.64 | 6/5/2029 | 6/5/2019 | 118.57669 | 118.5766943 | 118.5766943 | 118.5766943 | 111.1381829 | 103.423921 | 96.34964432 | 89.85774414 | 83.89611646 |
| 190607A00013 | 6/7/2019 | 2.59 | 6/7/2034 | 6/7/2019 | 117.04144 | 117.0414397 | 117.0414397 | 115.8135141 | 109.2549735 | 102.162608 | 95.71454202 | 89.8429167 | 84.48771564 |
| 200512A00021 | 5/12/2020 | 0.86 | 5/12/2025 | 5/12/2020 | 102.52326 | 102.523258 | 102.523258 | 102.523258 | 100.5089763 | 96.17859228 | 92.06565248 | 88.15807641 | 84.44451589 |
| 200522A00009 | 5/22/2020 | 0.96 | 5/22/2030 | 5/22/2020 | 103.44281 | 103.4428121 | 103.4428121 | 103.407676 | 99.7289254 | 94.85239629 | 90.30965871 | 86.07393947 | 82.12084646 |
| 171207A00026 | 12/7/2017 | 2.93 | 12/7/2027 | 12/7/2017 | 117.74563 | 117.7456322 | 117.7456322 | 117.7456322 | 112.3444146 | 105.6520684 | 99.4348479 | 93.65594715 | 88.28160921 |
| 171219A00067 | 12/19/2017 | 2.72 | 12/20/2027 | 12/19/2017 | 116.1719 | 116.1719044 | 116.1719044 | 116.1719044 | 111.3914439 | 105.2305491 | 99.49484571 | 94.15182304 | 89.17164799 |
| 180202A00027 | 2/2/2018 | 3.02 | 2/3/2025 | 2/2/2018 | 111.88427 | 111.8842734 | 111.8842734 | 111.8842734 | 109.988722 | 105.607705 | 101.4342814 | 97.45741999 | 93.66673766 |
| 180223A00012 | 2/23/2018 | 3.33 | 2/24/2031 | 2/23/2018 | 117.26206 | 117.2620592 | 117.2620592 | 117.1497087 | 112.6599914 | 106.9579924 | 101.6646898 | 96.74579419 | 92.17020254 |
| 180322A00044 | 3/22/2018 | 3.18 | 3/22/2033 | 3/22/2018 | 121.15287 | 121.1528671 | 121.1528671 | 120.4312895 | 114.3609748 | 107.5014703 | 101.2186079 | 95.45606206 | 90.16356024 |
| 180517A00024 | 5/17/2018 | 3.46 | 5/17/2033 | 5/17/2018 | 123.53382 | 123.5338161 | 123.5338161 | 122.7290669 | 116.4325519 | 109.3658325 | 102.8999163 | 96.97547819 | 91.53963507 |
| 180605A00031 | 6/5/2018 | 3.37 | 6/5/2030 | 6/5/2018 | 116.36917 | 116.3691669 | 116.3691669 | 116.3393879 | 112.3456976 | 106.9911578 | 101.9993281 | 97.34137057 | 92.99099354 |
| 180628A00068 | 6/28/2018 | 3.12 | 6/28/2028 | 6/28/2018 | 117.73462 | 117.7346231 | 117.7346231 | 117.7346231 | 113.1484228 | 107.2202372 | 101.7018074 | 96.56113067 | 91.76891913 |
| 180809A00031 | 8/9/2018 | 2.98 | 8/9/2021 | 8/9/2018 | 102.99016 | 102.9901638 | 102.9901638 | 102.9901638 | 102.7773993 | 101.6735578 | 100.5936378 | 99.53686526 | 98.50249943 |
| 181105A00015 | 11/5/2018 | 3.57 | 11/5/2025 | 11/5/2018 | 116.57151 | 116.571513 | 116.571513 | 116.571513 | 113.9097838 | 108.7570304 | 103.8812233 | 99.2658996 | 94.89565969 |
| 181115A00044 | 11/15/2018 | 3.26 | 11/15/2023 | 11/15/2018 | 109.46779 | 109.4677903 | 109.4677903 | 109.4677903 | 108.4604302 | 105.2324018 | 102.1214511 | 99.12268519 | 96.23144219 |
| 190104A00006 | 1/4/2019 | 2.83 | 1/5/2026 | 1/4/2019 | 107.40046 | 107.4004551 | 107.4004551 | 107.4004551 | 106.3014074 | 103.3823755 | 100.5830945 | 97.89757812 | 95.32018393 |
| 190207A00003 | 2/7/2019 | 2.68 | 2/7/2024 | 2/7/2019 | 108.32108 | 108.3210765 | 108.3210765 | 108.3210765 | 107.2538812 | 104.0110372 | 100.8912422 | 97.88906715 | 94.99935651 |
| 190212A00029 | 2/12/2019 | 2.6 | 2/12/2024 | 2/12/2019 | 104.78595 | 104.7859488 | 104.7859488 | 104.7859488 | 104.284986 | 102.3651413 | 100.5015148 | 98.69199942 | 96.93458303 |
| 190315A00017 | 3/15/2019 | 2.88 | 3/15/2034 | 3/15/2019 | 120.52897 | 120.528974 | 120.528974 | 119.3703972 | 112.7145434 | 105.4718811 | 98.87951742 | 92.86977445 | 87.38270452 |
| 190315A00021 | 3/15/2019 | 3.11 | 3/15/2034 | 3/15/2019 | 120.76018 | 120.7601835 | 120.7601835 | 119.6137278 | 112.9960079 | 105.7797769 | 99.20889663 | 93.2164176 | 87.74301574 |
| 190403A00013 | 4/3/2019 | 3.05 | 4/3/2029 | 4/3/2019 | 120.81073 | 120.8107326 | 120.8107326 | 120.8107326 | 113.8644324 | 106.3775696 | 99.49153122 | 93.15356086 | 87.31584743 |
| 190403A00015 | 4/3/2019 | 3.05 | 4/3/2029 | 4/3/2019 | 120.81074 | 120.8107422 | 120.8107422 | 120.8107422 | 113.8644367 | 106.3775705 | 99.49152914 | 93.15355617 | 87.31584048 |
| 190501A00015 | 5/1/2019 | 2.78 | 5/1/2029 | 5/1/2019 | 111.64726 | 111.6472554 | 111.6472554 | 111.6472554 | 108.5709214 | 103.9222495 | 99.55851831 | 95.45911576 | 91.60509416 |
| 190605A00007 | 6/5/2019 | 2.47 | 6/5/2026 | 6/5/2019 | 111.97009 | 111.9700902 | 111.9700902 | 111.9700902 | 108.6734363 | 103.2294022 | 98.10655773 | 93.28409122 | 88.74264762 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190614A00022 | 6/14/2019 | 2.62 | 6/14/2034 | 6/14/2019 | 117.27665 | 117.2766512 | 117.2766512 | 116.0460681 | 109.4743153 | 102.3676804 | 95.90665557 | 90.02324147 | 84.65729788 |
| 190619A00010 | 6/19/2019 | 2.04 | 6/17/2022 | 6/19/2019 | 102.04178 | 102.0417839 | 102.0417839 | 102.0417839 | 101.8324308 | 100.7803744 | 99.74894419 | 98.73755208 | 97.74563211 |
| 190718A00012 | 7/18/2019 | 2.55 | 7/18/2029 | 7/18/2019 | 116.33022 | 116.3302233 | 116.3302233 | 116.3302233 | 109.7859937 | 102.7485659 | 96.27799773 | 90.32387862 | 84.84059673 |
| 190813A00067 | 8/13/2019 | 1.9 | 8/13/2024 | 8/13/2019 | 106.31168 | 106.3116816 | 106.3116816 | 106.3116816 | 104.8238487 | 100.9745503 | 97.29249034 | 93.76945172 | 90.39766874 |
| 190930A00028 | 9/30/2019 | 1.95 | 9/30/2024 | 9/30/2019 | 106.44194 | 106.4419388 | 106.4419388 | 106.4419388 | 104.9388059 | 101.1254467 | 97.47980086 | 93.99346541 | 90.65851126 |
| 191004A00025 | 10/4/2019 | 1.74 | 10/4/2024 | 10/4/2019 | 105.85998 | 105.8599801 | 105.8599801 | 105.8599801 | 104.274361 | 100.3197746 | 96.54193661 | 92.93192329 | 89.48131534 |
| 191101A00005 | 11/1/2019 | 1.83 | 11/2/2026 | 11/1/2019 | 110.05437 | 110.0543656 | 110.0543656 | 110.0543656 | 106.2253547 | 100.5295449 | 95.19107154 | 90.18545201 | 85.49000608 |
| 191112A00024 | 11/12/2019 | 2.09 | 11/12/2024 | 11/12/2019 | 107.47386 | 107.4738621 | 107.4738621 | 107.4738621 | 105.7920363 | 101.7042131 | 97.80284943 | 94.07843829 | 90.52200625 |
| 191203A00009 | 12/3/2019 | 2.21 | 12/3/2029 | 12/3/2019 | 115.79651 | 115.7965091 | 115.7965091 | 115.7131444 | 107.7872224 | 99.92826354 | 92.75316647 | 86.19750506 | 80.20328132 |
| 191203A00010 | 12/3/2019 | 2.21 | 12/3/2029 | 12/3/2019 | 115.79651 | 115.7965091 | 115.7965091 | 115.7131444 | 107.7872224 | 99.92826354 | 92.75316647 | 86.19750506 | 80.20328132 |
| 200103A00002 | 1/3/2020 | 2.07 | 1/3/2030 | 1/3/2020 | 114.82604 | 114.8260352 | 114.8260352 | 114.7144115 | 107.7354753 | 100.4950453 | 93.86494679 | 87.78848868 | 82.21460466 |
| 200115A00013 | 1/15/2020 | 2.18 | 1/15/2030 | 1/15/2020 | 112.62485 | 112.6248459 | 112.6248459 | 112.5370229 | 106.7505727 | 100.3335044 | 94.42683217 | 88.98482391 | 83.96617566 |
| 200206A00034 | 2/6/2020 | 1.84 | 2/6/2025 | 2/6/2020 | 106.70005 | 106.7000506 | 106.7000506 | 106.7000506 | 104.8438931 | 100.5886484 | 96.53654614 | 92.6767421 | 88.99903139 |
| 200221A00012 | 2/21/2020 | 2.14 | 2/21/2040 | 2/21/2020 | 119.75712 | 119.7571197 | 119.7571197 | 115.0458474 | 105.0390482 | 95.52643739 | 87.19297193 | 79.87043335 | 73.41671189 |
| 200318A00012 | 3/18/2020 | 1.68 | 3/18/2033 | 3/18/2020 | 112.32315 | 112.3231505 | 112.3231505 | 110.8880011 | 103.9495512 | 96.65383133 | 90.04579705 | 84.05127768 | 78.60479579 |
| 200406A00014 | 4/6/2020 | 1.33 | 4/6/2035 | 4/6/2020 | 109.41008 | 109.410076 | 109.410076 | 107.8552383 | 101.2331211 | 94.26437003 | 87.96410269 | 82.25816101 | 77.0813955 |
| 200512A00010 | 5/12/2020 | 1.48 | 5/10/2030 | 5/12/2020 | 109.99851 | 109.9985124 | 109.9985124 | 109.6106791 | 101.6744648 | 93.9086918 | 86.84778391 | 80.42267682 | 74.57145525 |
| 171207A00025 | 12/7/2017 | 2.91 | 12/7/2027 | 12/7/2017 | 117.0139 | 117.0139021 | 117.0139021 | 117.0139021 | 111.8821256 | 105.4189493 | 99.40886382 | 93.81701334 | 88.61141697 |
| 180104A00024 | 1/4/2018 | 2.98 | 1/4/2028 | 1/4/2018 | 117.63909 | 117.639089 | 117.639089 | 117.639089 | 112.3966904 | 105.859472 | 99.78427636 | 94.13525367 | 88.8795376 |
| 180117A00004 | 1/17/2018 | 2.44 | 1/17/2025 | 1/17/2018 | 105.48672 | 105.4867178 | 105.4867178 | 105.4867178 | 104.7661524 | 102.4173851 | 100.1495399 | 97.95914401 | 95.84289969 |
| 180125A00027 | 1/25/2018 | 2.69 | 1/24/2025 | 1/25/2018 | 106.11004 | 106.1100426 | 106.1100426 | 106.1100426 | 105.2754132 | 102.7306372 | 100.2789474 | 97.91614963 | 95.6382692 |
| 180206A00046 | 2/6/2018 | 2.72 | 2/6/2023 | 2/6/2018 | 106.11703 | 106.1170338 | 106.1170338 | 106.1170338 | 105.4774708 | 102.9747561 | 100.5460673 | 98.18874792 | 95.90025539 |
| 180615A00021 | 6/15/2018 | 3.02 | 6/15/2023 | 6/15/2018 | 107.38047 | 107.3804675 | 107.3804675 | 107.3804675 | 106.6383854 | 103.9333156 | 101.3157566 | 98.78235975 | 96.32992509 |
| 180628A00078 | 6/28/2018 | 2.73 | 6/28/2023 | 6/28/2018 | 104.13563 | 104.1356297 | 104.1356297 | 104.1356297 | 103.7700878 | 102.1928083 | 100.6553675 | 99.15643329 | 97.69472885 |
| 180717A00021 | 7/17/2018 | 3.34 | 7/17/2028 | 7/17/2018 | 120.15837 | 120.1583743 | 120.1583743 | 120.1583743 | 114.6332061 | 107.9774348 | 101.8071031 | 96.08298576 | 90.76926607 |
| 180907A00013 | 9/7/2018 | 3.27 | 9/8/2025 | 9/7/2018 | 114.28736 | 114.2873565 | 114.2873565 | 114.2873565 | 111.895329 | 107.0402681 | 102.4380888 | 98.07408469 | 93.93448939 |
| 181128A00011 | 11/28/2018 | 3.27 | 11/28/2023 | 11/28/2018 | 109.7388 | 109.7388001 | 109.7388001 | 109.7388001 | 108.6983146 | 105.4111874 | 102.24515 | 99.19507246 | 96.25607068 |
| 190227A00033 | 2/27/2019 | 2.65 | 2/27/2026 | 2/27/2019 | 107.55094 | 107.5509408 | 107.5509408 | 107.5509408 | 106.4102176 | 103.434763 | 100.5833157 | 97.84958613 | 95.22765114 |
| 190315A00023 | 3/15/2019 | 2.88 | 3/15/2034 | 3/15/2019 | 120.52895 | 120.5289487 | 120.5289487 | 119.3703716 | 112.7145314 | 105.4718781 | 98.87952237 | 92.86978641 | 87.38272263 |
| 190322A00008 | 3/22/2019 | 2.64 | 3/20/2026 | 3/22/2019 | 107.03804 | 107.0380414 | 107.0380414 | 107.0380414 | 105.8740879 | 102.8832025 | 100.0181225 | 97.2724144 | 94.64002237 |
| 200311A00026 | 3/11/2020 | 1.34 | 3/11/2030 | 3/11/2020 | 108.31657 | 108.3165668 | 108.3165668 | 108.0774522 | 100.7484649 | 93.42901578 | 86.75429717 | 80.6625175 | 75.09817346 |
| 200323A00090 | 3/23/2020 | 1.55 | 3/23/2027 | 3/23/2020 | 104.7054 | 104.705397 | 104.705397 | 104.705397 | 102.8642881 | 99.21882011 | 95.7572049 | 92.46838328 | 89.34204732 |
| 200327A00094 | 3/27/2020 | 1.6 | 3/27/2030 | 3/27/2020 | 109.85248 | 109.8524764 | 109.8524764 | 109.6236865 | 102.8049798 | 95.77622673 | 89.35062572 | 83.4711571 | 78.08655951 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200512A00017 | 5/12/2020 | 0.85 | 5/12/2025 | 5/12/2020 | 102.36974 | 102.3697382 | 102.3697382 | 102.3697382 | 100.4744686 | 96.3310122 | 92.39241651 | 88.64738911 | 85.085319 |
| 200520A00009 | 5/20/2020 | 1.63 | 5/20/2038 | 5/20/2020 | 120.24253 | 120.2425343 | 120.2425343 | 112.9359722 | 100.5616364 | 89.47747927 | 79.96324568 | 71.77466781 | 64.7075932 |
| 180206A00045 | 2/6/2018 | 2.71 | 2/6/2023 | 2/6/2018 | 105.99187 | 105.9918659 | 105.9918659 | 105.9918659 | 105.3646989 | 102.90337 | 100.514515 | 98.19553843 | 95.94395584 |
| 180228A00055 | 2/28/2018 | 3.33 | 2/28/2028 | 2/28/2018 | 119.53987 | 119.5398742 | 119.5398742 | 119.5398742 | 114.2974995 | 107.7152845 | 101.5960653 | 95.90373009 | 90.60520299 |
| 180601A00037 | 6/1/2018 | 2.86 | 6/1/2021 | 6/1/2018 | 102.38636 | 102.3863644 | 102.3863644 | 102.3863644 | 102.1969452 | 101.2791363 | 100.3779175 | 99.49284096 | 98.62347487 |
| 180813A00045 | 8/13/2018 | 2.89 | 8/13/2025 | 8/13/2018 | 107.54593 | 107.545933 | 107.545933 | 107.545933 | 106.5967898 | 103.8693712 | 101.2471343 | 98.72510051 | 96.29856439 |
| 180925A00116 | 9/25/2018 | 3.28 | 9/25/2028 | 9/25/2018 | 113.91456 | 113.9145561 | 113.9145561 | 113.9145561 | 111.2181432 | 106.7721537 | 102.5817451 | 98.62950958 | 94.8993683 |
| 181003A00032 | 10/3/2018 | 3.23 | 10/3/2025 | 10/3/2018 | 108.21462 | 108.2146176 | 108.2146176 | 108.2146176 | 107.2038772 | 104.3865253 | 101.680386 | 99.08008524 | 96.58054911 |
| 190103A00020 | 1/3/2019 | 3.12 | 1/5/2026 | 1/3/2019 | 114.64632 | 114.6463209 | 114.6463209 | 114.6463209 | 111.8209989 | 106.6011625 | 101.6701501 | 97.01029367 | 92.60510056 |
| 190305A00017 | 3/5/2019 | 3.12 | 3/5/2026 | 3/5/2019 | 114.2032 | 114.2031978 | 114.2031978 | 114.2031978 | 111.4125366 | 106.3487251 | 101.5661572 | 97.04740486 | 92.77622116 |
| 190308A00026 | 3/8/2019 | 3.18 | 3/8/2034 | 3/8/2019 | 133.18981 | 133.1898103 | 133.1898103 | 129.0644199 | 117.9790469 | 107.3932744 | 98.00188506 | 89.65632667 | 82.22765857 |
| 190405A00004 | 4/5/2019 | 3.02 | 4/5/2034 | 4/5/2019 | 120.18246 | 120.1824634 | 120.1824634 | 119.0022634 | 112.3668143 | 105.1515264 | 98.58488269 | 92.59925279 | 87.1347469 |
| 190412A00011 | 4/12/2019 | 3.07 | 4/12/2034 | 4/12/2019 | 120.58056 | 120.580556 | 120.580556 | 119.3957006 | 112.7365786 | 105.4961654 | 98.90673074 | 92.90039464 | 87.41704688 |
| 190502A00016 | 5/2/2019 | 2.87 | 5/1/2026 | 5/2/2019 | 114.02871 | 114.0287095 | 114.0287095 | 114.0287095 | 110.8172357 | 105.3673423 | 100.2338771 | 95.396649 | 90.83685867 |
| 190506A00025 | 5/6/2019 | 3.03 | 5/4/2029 | 5/6/2019 | 121.62024 | 121.6202431 | 121.6202431 | 121.6202431 | 114.1693679 | 106.3478631 | 99.16838923 | 92.57371556 | 86.51202848 |
| 190605A00027 | 6/5/2019 | 2.64 | 6/5/2029 | 6/5/2019 | 118.57669 | 118.5766943 | 118.5766943 | 118.5766943 | 111.1381829 | 103.423921 | 96.34964432 | 89.85774414 | 83.89611646 |
| 190628A00026 | 6/28/2019 | 2.54 | 6/28/2034 | 6/28/2019 | 116.65138 | 116.6513762 | 116.6513762 | 115.4268523 | 108.8897432 | 101.820719 | 95.39392894 | 89.54172354 | 84.20427281 |
| 190712A00016 | 7/12/2019 | 2.39 | 7/12/2029 | 7/12/2019 | 109.94385 | 109.9438465 | 109.9438465 | 109.9438465 | 106.7991352 | 102.1455841 | 97.78195496 | 93.68695001 | 89.84101646 |
| 190802A00011 | 8/2/2019 | 2.01 | 8/2/2029 | 8/2/2019 | 109.11126 | 109.1112563 | 109.1112563 | 109.1112563 | 105.9131772 | 101.2366628 | 96.85477284 | 92.74564221 | 88.88921452 |
| 190823A00018 | 8/23/2019 | 2.12 | 8/23/2034 | 8/23/2019 | 113.56239 | 113.5623944 | 113.5623944 | 112.2926391 | 105.8357708 | 98.89076345 | 92.58325798 | 86.84543265 | 81.61738048 |
| 190829A00039 | 8/29/2019 | 1.85 | 8/29/2034 | 8/29/2019 | 112.98471 | 112.9847105 | 112.9847105 | 111.7052072 | 105.230978 | 98.28194549 | 91.97338906 | 86.23694866 | 81.0122647 |
| 190905A00019 | 9/5/2019 | 2.08 | 9/5/2029 | 9/5/2019 | 114.34271 | 114.3427069 | 114.3427069 | 114.3427069 | 106.7513415 | 99.11613409 | 92.13116394 | 85.73643471 | 79.87782435 |
| 200610A00006 | 6/10/2020 | 1.11 | 6/10/2027 | 6/10/2020 | 105.05309 | 105.053088 | 105.053088 | 105.053088 | 100.5829067 | 94.71442625 | 89.24471932 | 84.14433458 | 79.38614759 |
| 200618A00004 | 6/18/2020 | 0.7 | 6/18/2030 | 6/18/2020 | 102.99711 | 102.9971147 | 102.9971147 | 102.9700786 | 99.40864253 | 94.64442212 | 90.20413839 | 86.06195435 | 82.19432093 |
| 190621A00020 | 6/21/2019 | 2.58 | 6/21/2034 | 6/21/2019 | 116.96377 | 116.9637719 | 116.9637719 | 115.7362185 | 109.1817965 | 102.0939788 | 95.65008242 | 89.78228301 | 84.4305955 |
| 190702A00068 | 7/2/2019 | 2.69 | 7/1/2039 | 7/2/2019 | 137.28852 | 137.2885179 | 137.2885179 | 128.3427074 | 113.9150135 | 101.075935 | 90.11630241 | 80.73210329 | 72.67137028 |
| 190809A00017 | 8/9/2019 | 2.27 | 8/9/2034 | 8/9/2019 | 114.73162 | 114.7316225 | 114.7316225 | 113.44934 | 106.9265367 | 99.91041283 | 93.5382747 | 87.74161636 | 82.45992572 |
| 190813A00052 | 8/13/2019 | 2.24 | 8/13/2029 | 8/13/2019 | 115.58085 | 115.5808503 | 115.5808503 | 115.5808503 | 108.0188619 | 100.3533931 | 93.33645786 | 86.90858026 | 81.01607308 |
| 190906A00009 | 9/6/2019 | 2.08 | 9/6/2034 | 9/6/2019 | 113.33112 | 113.3311233 | 113.3311233 | 112.0251524 | 105.5359157 | 98.57410262 | 92.25455963 | 86.50862588 | 81.27569066 |
| 200612A00004 | 6/12/2020 | 1.42 | 6/12/2040 | 6/12/2020 | 112.10874 | 112.1087418 | 112.1087418 | 107.4539366 | 97.83458865 | 88.74146497 | 80.79262198 | 73.82260518 | 67.69197655 |
| 160427A00004 | 4/27/2016 | 2.09 | 4/27/2026 | 4/27/2016 | 105.43087 | 105.430872 | 105.430872 | 105.430872 | 104.2491809 | 101.2629214 | 98.40382822 | 95.66532618 | 93.04122985 |
| 160428A00028 | 4/28/2016 | 2 | 4/28/2026 | 4/28/2016 | 105.74337 | 105.7433718 | 105.7433718 | 105.7433718 | 104.5527419 | 101.5467766 | 98.66918228 | 95.9133043 | 93.27288328 |
| 160504A00022 | 5/4/2016 | 2 | 5/4/2023 | 5/4/2016 | 104.6898 | 104.6897984 | 104.6897984 | 104.6897984 | 103.9598541 | 101.2513227 | 98.6290344 | 96.0897796 | 93.63048578 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160511A00016 | 5/11/2016 | 2.48 | 5/12/2031 | 5/11/2016 | 112.52984 | 112.5298422 | 112.5298422 | 112.3803122 | 107.9082849 | 102.3276489 | 97.15517621 | 92.35595912 | 87.89839333 |
| 001127A00007 | 11/27/2000 | 6.74 | 11/27/2020 | 11/27/2000 | 101.69087 | 101.6908719 | 101.6908719 | 101.6908719 | 101.6480822 | 101.3907801 | 101.135051 | 100.8808789 | 100.6282482 |
| 190930A00026 | 9/30/2019 | 1.95 | 9/30/2024 | 9/30/2019 | 106.44194 | 106.4419417 | 106.4419417 | 106.4419417 | 104.9388077 | 101.1254469 | 97.47979947 | 93.99346255 | 90.65850702 |
| 191105A00012 | 11/5/2019 | 2.07 | 11/3/2034 | 11/5/2019 | 114.97407 | 114.9740705 | 114.9740705 | 113.5508633 | 106.8236276 | 99.65785209 | 93.16257391 | 87.26517946 | 81.90167331 |
| 191112A00023 | 11/12/2019 | 2.36 | 11/13/2029 | 11/12/2019 | 116.99362 | 116.993624 | 116.993624 | 116.9469364 | 109.0049755 | 101.1123332 | 93.90236262 | 87.31111451 | 81.28098463 |
| 191113A00013 | 11/13/2019 | 2.17 | 11/13/2026 | 11/13/2019 | 110.98094 | 110.9809398 | 110.9809398 | 110.9809398 | 107.1141545 | 101.3871285 | 96.01956712 | 90.98681021 | 86.26601594 |
| 191209A00005 | 12/9/2019 | 2.22 | 12/10/2029 | 12/9/2019 | 114.37524 | 114.3752363 | 114.3752363 | 114.3010226 | 107.4447707 | 100.3042534 | 93.76012715 | 87.75747426 | 82.24677956 |
| 200109A00006 | 1/9/2020 | 1.95 | 1/9/2030 | 1/9/2020 | 109.22263 | 109.2226301 | 109.2226301 | 109.2175487 | 105.725192 | 100.8577488 | 96.30911681 | 92.05475113 | 88.072209 |
| 200130A00046 | 1/30/2020 | 1.81 | 1/29/2027 | 1/30/2020 | 105.1529 | 105.1529018 | 105.1529018 | 105.1529018 | 103.6258026 | 100.29446 | 97.12032764 | 94.09448358 | 91.20858089 |
| 200206A00008 | 2/6/2020 | 1.64 | 2/6/2025 | 2/6/2020 | 106.38203 | 106.3820266 | 106.3820266 | 106.3820266 | 104.6212369 | 100.5265485 | 96.62510127 | 92.9066292 | 89.36147047 |
| 200206A00031 | 2/6/2020 | 2.15 | 2/6/2030 | 2/6/2020 | 115.54015 | 115.5401475 | 115.5401475 | 115.3302835 | 107.2857497 | 99.34023457 | 92.09716037 | 85.48929918 | 79.45623817 |
| 200206A00038 | 2/6/2020 | 1.78 | 2/6/2023 | 2/6/2020 | 103.77827 | 103.7782738 | 103.7782738 | 103.7782738 | 103.13891 | 100.6454695 | 98.22617171 | 95.87834962 | 93.59945079 |
| 200306A00057 | 3/6/2020 | 0.92 | 3/8/2027 | 3/6/2020 | 104.57361 | 104.573611 | 104.573611 | 104.573611 | 100.7960729 | 95.42855323 | 90.40632003 | 85.70488461 | 81.30163499 |
| 200309A00082 | 3/9/2020 | 1.18 | 3/8/2030 | 3/9/2020 | 107.28572 | 107.2857214 | 107.2857214 | 107.0297676 | 99.35900788 | 91.84373962 | 85.00172482 | 78.76784316 | 73.08363871 |
| 200319A00035 | 3/19/2020 | 1.72 | 3/18/2033 | 3/19/2020 | 112.6497 | 112.6496953 | 112.6496953 | 111.2106032 | 104.252023 | 96.93491574 | 90.30747902 | 84.2953306 | 78.83280601 |
| 200330A00058 | 3/30/2020 | 1.49 | 3/29/2030 | 3/30/2020 | 108.99912 | 108.9991153 | 108.9991153 | 108.7684368 | 101.9908634 | 95.00869544 | 88.62620347 | 82.78665647 | 77.43905623 |
| 200406A00036 | 4/6/2020 | 1.09 | 4/4/2025 | 4/6/2020 | 103.50777 | 103.5077728 | 103.5077728 | 103.5077728 | 101.5654381 | 97.28332653 | 93.21200792 | 89.33990309 | 85.65613585 |
| 200421A00026 | 4/21/2020 | 1.34 | 4/19/2030 | 4/21/2020 | 107.87829 | 107.8782863 | 107.8782863 | 107.6166713 | 100.8563896 | 93.90844629 | 87.56065461 | 81.75596425 | 76.44311015 |
| 200501A00002 | 5/1/2020 | 1.3 | 5/1/2035 | 5/1/2020 | 107.68814 | 107.6881386 | 107.6881386 | 106.1375951 | 99.62829445 | 92.77981048 | 86.58874393 | 80.98206076 | 75.89561361 |
| 200501A00009 | 5/4/2020 | 0.67 | 5/1/2025 | 5/4/2020 | 100.92458 | 100.9245753 | 100.9245753 | 100.9245753 | 100.1171952 | 97.68260677 | 95.33785795 | 93.07885999 | 90.90174048 |
| 200512A00013 | 5/12/2020 | 1.17 | 5/12/2027 | 5/12/2020 | 105.37817 | 105.3781697 | 105.3781697 | 105.3781697 | 101.0005259 | 95.16940645 | 89.73038654 | 84.65480976 | 79.91625984 |
| 200514A00008 | 5/14/2020 | 1.23 | 5/14/2030 | 5/14/2020 | 107.06802 | 107.0680196 | 107.0680196 | 106.7681246 | 100.005383 | 93.07104033 | 86.73946522 | 80.95302379 | 75.65995629 |
| 171207A00022 | 12/7/2017 | 2.45 | 12/7/2022 | 12/7/2017 | 105.09435 | 105.0943484 | 105.0943484 | 105.0943484 | 104.5149805 | 102.1775383 | 99.90580162 | 97.69754358 | 95.55062657 |
| 190905A00023 | 9/5/2019 | 2.08 | 9/5/2029 | 9/5/2019 | 114.34271 | 114.3427069 | 114.3427069 | 114.3427069 | 106.7513415 | 99.1161341 | 92.13116396 | 85.73643473 | 79.87782438 |
| 190905A00025 | 9/5/2019 | 2.08 | 9/5/2029 | 9/5/2019 | 114.34271 | 114.3427069 | 114.3427069 | 114.3427069 | 106.7513415 | 99.11613409 | 92.13116394 | 85.73643471 | 79.87782435 |
| 190925A00009 | 9/25/2019 | 2 | 9/25/2026 | 9/25/2019 | 109.17228 | 109.1722751 | 109.1722751 | 109.1722751 | 105.834877 | 100.5872456 | 95.65586703 | 91.01960727 | 86.65886759 |
| 200309A00081 | 3/9/2020 | 1.18 | 3/8/2030 | 3/9/2020 | 107.28573 | 107.2857263 | 107.2857263 | 107.0297719 | 99.35900375 | 91.84373089 | 85.0017122 | 78.76782725 | 73.08362007 |
| 200330A00047 | 3/30/2020 | 1.5 | 3/30/2035 | 3/30/2020 | 109.17356 | 109.1735642 | 109.1735642 | 107.6810268 | 101.1676965 | 94.28304433 | 88.05292152 | 82.40528915 | 77.27679582 |
| 200406A00032 | 4/6/2020 | 1.09 | 4/4/2025 | 4/6/2020 | 103.50778 | 103.5077751 | 103.5077751 | 103.5077751 | 101.5654383 | 97.28332398 | 93.21200285 | 89.3398957 | 85.65612633 |
| 200406A00033 | 4/6/2020 | 1.09 | 4/4/2025 | 4/6/2020 | 103.50777 | 103.5077728 | 103.5077728 | 103.5077728 | 101.5654381 | 97.28332653 | 93.21200792 | 89.33990309 | 85.65613585 |
| 200406A00037 | 4/6/2020 | 0.9 | 4/6/2023 | 4/6/2020 | 101.62113 | 101.6211304 | 101.6211304 | 101.6211304 | 100.9313705 | 98.33159643 | 95.81301154 | 93.372562 | 91.00733128 |
| 200512A00011 | 5/12/2020 | 1.48 | 5/10/2030 | 5/12/2020 | 109.99852 | 109.9985213 | 109.9985213 | 109.6106877 | 101.6744655 | 93.90868572 | 86.84777164 | 80.42265899 | 74.57143242 |
| 171207A00021 | 12/7/2017 | 2.25 | 12/7/2020 | 12/7/2017 | 100.87882 | 100.8788227 | 100.8788227 | 100.8788227 | 100.7990771 | 100.3599918 | 99.9247486 | 99.49329715 | 99.0655879 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 171219A00009 | 12/19/2017 | 2.3 | 12/19/2024 | 12/19/2017 | 105.14925 | 105.1492452 | 105.1492452 | 105.1492452 | 104.4315395 | 102.0908398 | 99.83074821 | 97.64780761 | 95.53873483 |
| 180305A00030 | 3/5/2018 | 3.12 | 3/5/2025 | 3/5/2018 | 112.5368 | 112.5367961 | 112.5367961 | 112.5367961 | 110.5663097 | 106.0933099 | 101.8353986 | 97.78097261 | 93.91912203 |
| 180309A00011 | 3/9/2018 | 3.19 | 3/10/2025 | 3/9/2018 | 112.8932 | 112.8931994 | 112.8931994 | 112.8931994 | 110.9067305 | 106.4112786 | 102.1324641 | 98.0585728 | 94.17859235 |
| 180713A00031 | 7/13/2018 | 3.06 | 7/14/2025 | 7/13/2018 | 107.36332 | 107.3633247 | 107.3633247 | 107.3633247 | 106.4484844 | 103.7761611 | 101.2052417 | 98.73099536 | 96.34894725 |
| 180718A00008 | 7/18/2018 | 3.37 | 7/18/2028 | 7/18/2018 | 122.21061 | 122.2106104 | 122.2106104 | 122.2106104 | 115.7766071 | 108.3994791 | 101.5822311 | 95.27858868 | 89.44635823 |
| 180913A00033 | 9/13/2018 | 3.31 | 9/13/2033 | 9/13/2018 | 123.02139 | 123.0213911 | 123.0213911 | 122.0744541 | 115.592509 | 108.4116166 | 101.8549575 | 95.85956022 | 90.369433 |
| 180914A00049 | 9/14/2018 | 3.37 | 9/14/2033 | 9/14/2018 | 123.48267 | 123.4826749 | 123.4826749 | 122.5321793 | 116.0260032 | 108.8182384 | 102.2370421 | 96.2192069 | 90.70853167 |
| 180925A00013 | 9/25/2018 | 3.41 | 9/25/2028 | 9/25/2018 | 113.61225 | 113.6122533 | 113.6122533 | 113.6122533 | 110.9387157 | 106.5233889 | 102.3610811 | 98.4346062 | 94.72808672 |
| 181128A00004 | 11/28/2018 | 3.08 | 11/28/2023 | 11/28/2018 | 109.71541 | 109.7154056 | 109.7154056 | 109.7154056 | 108.6709583 | 105.3730149 | 102.1968665 | 99.13734091 | 96.18951445 |
| 181226A00030 | 12/26/2018 | 2.91 | 12/26/2028 | 12/26/2018 | 112.60758 | 112.6075839 | 112.6075839 | 112.6075839 | 109.7731408 | 105.2591681 | 101.0115143 | 97.01159488 | 93.24227653 |
| 190104A00034 | 1/4/2019 | 3.18 | 1/4/2029 | 1/4/2019 | 117.87024 | 117.8702448 | 117.8702448 | 117.8702448 | 112.7926527 | 106.6048777 | 100.8657759 | 95.53862214 | 90.58995059 |
| 190111A00038 | 1/11/2019 | 2.63 | 1/11/2022 | 1/11/2019 | 103.60621 | 103.6062125 | 103.6062125 | 103.6062125 | 103.3317247 | 101.9112573 | 100.5187844 | 99.1535367 | 97.81477302 |
| 190131A00013 | 1/31/2019 | 3.48 | 1/31/2034 | 1/31/2019 | 136.05533 | 136.0553318 | 136.0553318 | 131.4771499 | 119.6507829 | 108.5113876 | 98.65152094 | 89.91073993 | 82.14984449 |
| 190131A00023 | 1/31/2019 | 3.02 | 1/30/2034 | 1/31/2019 | 121.35868 | 121.3586845 | 121.3586845 | 120.2710066 | 113.6706784 | 106.4469902 | 99.86507259 | 93.8588112 | 88.36956984 |
| 190205A00025 | 2/5/2019 | 2.88 | 2/7/2022 | 2/5/2019 | 104.12434 | 104.1243425 | 104.1243425 | 104.1243425 | 103.8125684 | 102.2404236 | 100.700277 | 99.19121409 | 97.71235503 |
| 190313A00039 | 3/13/2019 | 2.7 | 6/13/2022 | 3/13/2019 | 104.6311 | 104.6311037 | 104.6311037 | 104.6311037 | 104.2074447 | 102.3067014 | 100.4510178 | 98.63904503 | 96.86948389 |
| 190313A00044 | 3/13/2019 | 2.7 | 6/13/2022 | 3/13/2019 | 104.6311 | 104.6311037 | 104.6311037 | 104.6311037 | 104.2074447 | 102.3067014 | 100.4510178 | 98.63904503 | 96.86948389 |
| 190329A00067 | 3/29/2019 | 2.61 | 3/29/2024 | 3/29/2019 | 107.74642 | 107.7464155 | 107.7464155 | 107.7464155 | 106.6124941 | 103.2890625 | 100.0952628 | 97.02520622 | 94.07331109 |
| 190403A00010 | 4/3/2019 | 3.08 | 4/3/2029 | 4/3/2019 | 121.8411 | 121.8411007 | 121.8411007 | 121.8411007 | 114.5007752 | 106.7227657 | 99.57777471 | 93.00977713 | 86.96802633 |
| 190401A00017 | 4/1/2019 | 2.55 | 4/1/2022 | 4/1/2019 | 103.87401 | 103.874014 | 103.874014 | 103.874014 | 103.5218046 | 101.8296748 | 100.1740588 | 98.55383827 | 96.96794101 |
| 190510A00049 | 5/10/2019 | 2.58 | 5/8/2026 | 5/10/2019 | 106.95405 | 106.9540537 | 106.9540537 | 106.9540537 | 105.7552138 | 102.7258897 | 99.82557114 | 97.04758754 | 94.38566371 |
| 190517A00012 | 5/17/2019 | 2.88 | 5/17/2034 | 5/17/2019 | 119.20532 | 119.2053228 | 119.2053228 | 117.9946496 | 111.3638949 | 104.1737731 | 97.63345394 | 91.67483951 | 86.23766417 |
| 190605A00024 | 6/5/2019 | 2.64 | 6/5/2029 | 6/5/2019 | 118.57669 | 118.5766943 | 118.5766943 | 118.5766943 | 111.1381829 | 103.423921 | 96.34964432 | 89.85774414 | 83.89611646 |
| 190708A00028 | 7/8/2019 | 2.57 | 7/2/2029 | 7/8/2019 | 118.1348 | 118.1347978 | 118.1347978 | 118.1347978 | 110.6121881 | 102.8753001 | 95.78520574 | 89.28323577 | 83.31637042 |
| 190708A00030 | 7/8/2019 | 2.57 | 7/2/2029 | 7/8/2019 | 118.13483 | 118.1348274 | 118.1348274 | 118.1348274 | 110.6122033 | 102.8753027 | 95.78519704 | 89.28321687 | 83.31634232 |
| 190719A00017 | 7/19/2019 | 2.55 | 7/19/2034 | 7/19/2019 | 116.83211 | 116.8321123 | 116.8321123 | 115.5663514 | 108.9718445 | 101.8597392 | 95.39709607 | 89.51516616 | 84.1531846 |
| 190816A00023 | 8/16/2019 | 2.14 | 8/16/2034 | 8/16/2019 | 113.71768 | 113.7176786 | 113.7176786 | 112.4464097 | 105.9808655 | 99.02647201 | 92.71042509 | 86.96481551 | 81.72965869 |
| 190826A00032 | 8/26/2019 | 1.72 | 8/24/2029 | 8/26/2019 | 107.68262 | 107.6826215 | 107.6826215 | 107.6826215 | 104.5250573 | 99.90907818 | 95.5839728 | 91.52814841 | 87.72179906 |
| 190910A00044 | 9/10/2019 | 2.02 | 9/10/2026 | 9/10/2019 | 109.82307 | 109.8230695 | 109.8230695 | 109.8230695 | 106.2196882 | 100.6650546 | 95.45099731 | 90.55460433 | 85.95463109 |
| 190920A00014 | 9/20/2019 | 2.28 | 9/20/2034 | 9/20/2019 | 114.89996 | 114.8999621 | 114.8999621 | 113.5756873 | 106.9968893 | 99.93891357 | 93.53209383 | 87.70681564 | 82.40162709 |
| 200616A00005 | 6/16/2020 | 0.74 | 6/17/2030 | 6/16/2020 | 103.20533 | 103.2053325 | 103.2053325 | 103.1782685 | 99.60971911 | 94.83593724 | 90.38673779 | 86.23623264 | 82.3608261 |
| 190403A00014 | 4/3/2019 | 3.05 | 4/3/2029 | 4/3/2019 | 120.81074 | 120.8107374 | 120.8107374 | 120.8107374 | 113.8644349 | 106.3775704 | 99.49153047 | 93.15355873 | 87.31584407 |
| 190411A00022 | 4/11/2019 | 2.68 | 4/11/2022 | 4/11/2019 | 102.92584 | 102.9258425 | 102.9258425 | 102.9258425 | 102.6817653 | 101.4702556 | 100.2831688 | 99.1197961 | 97.97945619 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190422A00037 | 4/22/2019 | 3.07 | 4/21/2034 | 4/22/2019 | 120.57665 | 120.5766545 | 120.5766545 | 119.3920924 | 112.7347257 | 105.4956732 | 98.90743763 | 92.90215682 | 87.41973615 |
| 190529A00061 | 5/29/2019 | 2.46 | 5/29/2026 | 5/29/2019 | 106.67387 | 106.6738697 | 106.6738697 | 106.6738697 | 105.4423616 | 102.3808563 | 99.4512922 | 96.64677401 | 93.96081878 |
| 190702A00071 | 7/2/2019 | 2.69 | 7/1/2039 | 7/2/2019 | 137.28844 | 137.2884406 | 137.2884406 | 128.3426589 | 113.9149992 | 101.0759456 | 90.11633274 | 80.73214935 | 72.67142874 |
| 190708A00025 | 7/8/2019 | 2.21 | 7/1/2024 | 7/8/2019 | 107.34524 | 107.345238 | 107.345238 | 107.345238 | 105.9298992 | 102.1492316 | 98.52911675 | 95.0618455 | 91.74012129 |
| 190926A00002 | 9/30/2019 | 2.01 | 9/29/2034 | 9/30/2019 | 114.32175 | 114.3217467 | 114.3217467 | 112.9871137 | 106.3900832 | 99.32746328 | 92.91910477 | 87.09483172 | 81.79272042 |
| 160119A00072 | 1/19/2016 | 2.77 | 1/21/2031 | 1/19/2016 | 114.45175 | 114.4517497 | 114.4517497 | 114.2793729 | 109.5880135 | 103.7774287 | 98.39489918 | 93.40353017 | 88.76994302 |
| 160201A00016 | 2/1/2016 | 2.1 | 2/2/2026 | 2/1/2016 | 105.30432 | 105.3043187 | 105.3043187 | 105.3043187 | 104.1937287 | 101.2915654 | 98.50994705 | 95.84278022 | 93.28432515 |
| 160203A00017 | 2/3/2016 | 2.07 | 2/3/2023 | 2/3/2016 | 104.47911 | 104.4791104 | 104.4791104 | 104.4791104 | 103.8446056 | 101.3628962 | 98.95462819 | 96.61717012 | 94.34800293 |
| 160405A00011 | 4/5/2016 | 1.31 | 4/5/2021 | 4/5/2016 | 100.48554 | 100.4855435 | 100.4855435 | 100.4855435 | 100.4009616 | 99.94373646 | 99.49168945 | 99.04472362 | 98.60274457 |
| 191008A00007 | 10/8/2019 | 1.67 | 10/9/2029 | 10/8/2019 | 107.57364 | 107.5736377 | 107.5736377 | 107.5735518 | 104.3046571 | 99.62001051 | 95.2352023 | 91.12764569 | 87.27664899 |
| 191008A00014 | 10/8/2019 | 1.85 | 10/8/2026 | 10/8/2019 | 108.93152 | 108.931516 | 108.931516 | 108.931516 | 105.2456454 | 99.67137238 | 94.44276235 | 89.53633081 | 84.93031651 |
| 191015A00025 | 10/15/2019 | 2.01 | 10/15/2029 | 10/15/2019 | 108.31202 | 108.3120226 | 108.3120226 | 108.3118798 | 105.0414219 | 100.3460871 | 95.95029181 | 91.83153428 | 87.96919574 |
| 200110A00038 | 1/10/2020 | 2.32 | 1/10/2030 | 1/10/2020 | 116.90587 | 116.9058734 | 116.9058734 | 116.747684 | 108.6896048 | 100.709727 | 93.43015807 | 86.78432772 | 80.71236959 |
| 200116A00012 | 1/16/2020 | 2.16 | 1/19/2027 | 1/16/2020 | 111.21033 | 111.2103282 | 111.2103282 | 111.2103282 | 107.0875087 | 101.2219496 | 95.73370429 | 90.59623939 | 85.78502838 |
| 200206A00033 | 2/6/2020 | 2.15 | 2/6/2030 | 2/6/2020 | 115.54015 | 115.5401475 | 115.5401475 | 115.3302835 | 107.2857497 | 99.34023457 | 92.09716037 | 85.48929918 | 79.45623817 |
| 200206A00035 | 2/6/2020 | 1.78 | 2/6/2023 | 2/6/2020 | 103.77827 | 103.7782738 | 103.7782738 | 103.7782738 | 103.13891 | 100.6454695 | 98.22617171 | 95.87834962 | 93.59945079 |
| 200309A00084 | 3/9/2020 | 1.06 | 3/9/2027 | 3/9/2020 | 104.57767 | 104.57767 | 104.57767 | 104.57767 | 100.45001 | 94.76988 | 89.46344983 | 84.50391323 | 79.86653163 |
| 200317A00009 | 3/17/2020 | 1.61 | 3/16/2035 | 3/17/2020 | 110.04378 | 110.0437804 | 110.0437804 | 108.5398092 | 101.9749883 | 95.03575671 | 88.75620422 | 83.06373054 | 77.89448973 |
| 200414A00009 | 4/14/2020 | 0.82 | 4/14/2025 | 4/14/2020 | 101.28513 | 101.285132 | 101.285132 | 101.285132 | 100.4997386 | 98.09505214 | 95.77789841 | 93.54433828 | 91.39063929 |
| 200414A00024 | 4/14/2020 | 1.37 | 4/14/2027 | 4/14/2020 | 106.57392 | 106.5739172 | 106.5739172 | 106.5739172 | 102.2620362 | 96.42942156 | 90.98478885 | 85.90002499 | 81.14920281 |
| 200512A00014 | 5/12/2020 | 1.17 | 5/12/2027 | 5/12/2020 | 105.37817 | 105.3781697 | 105.3781697 | 105.3781697 | 101.0005259 | 95.16940645 | 89.73038654 | 84.65480976 | 79.91625984 |
| 200512A00020 | 5/12/2020 | 0.86 | 5/12/2025 | 5/12/2020 | 102.52326 | 102.523258 | 102.523258 | 102.523258 | 100.5089763 | 96.17859228 | 92.06565248 | 88.15807641 | 84.44451589 |
| 180126A00011 | 1/26/2018 | 2.72 | 1/26/2028 | 1/26/2018 | 110.4302 | 110.4302021 | 110.4302021 | 110.4302021 | 108.2398997 | 104.2444477 | 100.4625196 | 96.88052763 | 93.48585764 |
| 180712A00044 | 7/12/2018 | 3.44 | 7/12/2033 | 7/12/2018 | 122.17483 | 122.1748255 | 122.1748255 | 121.3184561 | 115.0328547 | 108.010413 | 101.5893971 | 95.70996481 | 90.31882137 |
| 180809A00032 | 8/9/2018 | 3.08 | 8/9/2023 | 8/9/2018 | 108.33353 | 108.3335263 | 108.3335263 | 108.3335263 | 107.4657946 | 104.4734628 | 101.5832729 | 98.79112295 | 96.09310233 |
| 180905A00017 | 9/5/2018 | 3.43 | 9/6/2033 | 9/5/2018 | 136.90746 | 136.9074613 | 136.9074613 | 132.8413227 | 121.3190897 | 110.4049293 | 100.7162159 | 92.10282519 | 84.43406481 |
| 180913A00062 | 9/13/2018 | 3.05 | 9/13/2023 | 9/13/2018 | 108.32074 | 108.3207368 | 108.3207368 | 108.3207368 | 107.4242493 | 104.4049483 | 101.4905109 | 98.67663162 | 95.95921182 |
| 181116A00006 | 11/16/2018 | 3.18 | 11/17/2025 | 11/16/2018 | 108.19975 | 108.1997505 | 108.1997505 | 108.1997505 | 107.1569839 | 104.2981263 | 101.553633 | 98.91791358 | 96.38569257 |
| 181119A00008 | 11/19/2018 | 3.23 | 11/17/2023 | 11/19/2018 | 108.99648 | 108.9964769 | 108.9964769 | 108.9964769 | 108.0459383 | 104.9716426 | 102.00772 | 99.14957058 | 96.39281176 |
| 181214A00009 | 12/14/2018 | 3.22 | 12/14/2028 | 12/14/2018 | 113.14275 | 113.1427522 | 113.1427522 | 113.1427522 | 110.3125672 | 105.797134 | 101.5472203 | 97.54435186 | 93.77149307 |
| 181214A00030 | 12/14/2018 | 3.47 | 12/14/2033 | 12/14/2018 | 138.16781 | 138.1678099 | 138.1678099 | 133.6442931 | 121.6532954 | 110.3550313 | 100.3492439 | 91.47469675 | 83.59138357 |
| 200309A00034 | 3/9/2020 | 0.96 | 3/9/2035 | 3/9/2020 | 106.44225 | 106.4422475 | 106.4422475 | 104.9684808 | 98.56720839 | 91.81541765 | 85.70818181 | 80.17433181 | 75.15130479 |
| 200317A00043 | 3/17/2020 | 1.29 | 3/15/2030 | 3/17/2020 | 105.94217 | 105.942169 | 105.942169 | 105.9302186 | 102.4313742 | 97.63797603 | 93.16333543 | 88.98255714 | 85.07290715 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200326A00032 | 3/26/2020 | 1.49 | 3/26/2030 | 3/26/2020 | 105.989 | 105.9890049 | 105.9890049 | 105.9768984 | 102.4991412 | 97.72573044 | 93.26870584 | 89.10342482 | 85.20737883 |
| 200406A00027 | 4/6/2020 | 1.31 | 4/5/2030 | 4/6/2020 | 109.12141 | 109.1214117 | 109.1214117 | 108.8762691 | 102.0176308 | 94.97353591 | 88.53786873 | 82.65280529 | 77.26638784 |
| 200413A00013 | 4/13/2020 | 1.19 | 4/12/2030 | 4/13/2020 | 104.4889 | 104.4889042 | 104.4889042 | 104.4728859 | 100.9906971 | 96.24997594 | 91.82579195 | 87.69332 | 83.82989877 |
| 200428A00009 | 4/28/2020 | 1.08 | 4/29/2030 | 4/28/2020 | 103.9241 | 103.9241022 | 103.9241022 | 103.9077474 | 100.4438763 | 95.72837541 | 91.32777289 | 87.21736782 | 83.3746127 |
| 200429A00030 | 4/29/2020 | 1.41 | 4/29/2030 | 4/29/2020 | 108.99373 | 108.9937258 | 108.9937258 | 108.6647083 | 101.2155287 | 93.79212512 | 87.02976455 | 80.86444075 | 75.23871705 |
| 200430A00027 | 4/30/2020 | 1.31 | 4/30/2035 | 4/30/2020 | 107.72397 | 107.7239709 | 107.7239709 | 106.2117518 | 99.74211041 | 92.91977053 | 86.74922808 | 81.1584035 | 76.08394949 |
| 180104A00041 | 1/4/2018 | 3.08 | 1/4/2033 | 1/4/2018 | 131.38191 | 131.3819136 | 131.3819136 | 128.1421594 | 117.268352 | 106.8921855 | 97.63798756 | 89.3735921 | 81.9832785 |
| 180206A00040 | 2/6/2018 | 2.47 | 2/8/2021 | 2/6/2018 | 101.35901 | 101.3590108 | 101.3590108 | 101.3590108 | 101.2427463 | 100.6311198 | 100.0269119 | 99.42998801 | 98.84021666 |
| 180206A00048 | 2/6/2018 | 2.72 | 2/6/2023 | 2/6/2018 | 106.11703 | 106.1170342 | 106.1170342 | 106.1170342 | 105.4774712 | 102.9747563 | 100.5460673 | 98.18874779 | 95.90025511 |
| 180220A00107 | 2/20/2018 | 3.13 | 2/20/2025 | 2/20/2018 | 111.87258 | 111.8725836 | 111.8725836 | 111.8725836 | 110.0619038 | 105.8426229 | 101.821526 | 97.98808576 | 94.33239578 |
| 180402A00013 | 4/2/2018 | 2.99 | 4/3/2028 | 4/2/2018 | 116.53903 | 116.5390295 | 116.5390295 | 116.5390295 | 112.2016019 | 106.4428921 | 101.0731875 | 96.06278001 | 91.38443207 |
| 180517A00018 | 5/17/2018 | 3.46 | 5/17/2033 | 5/17/2018 | 123.53382 | 123.5338201 | 123.5338201 | 122.72907 | 116.4325533 | 109.3658327 | 102.8999156 | 96.97547674 | 91.539633 |
| 180716A00062 | 7/16/2018 | 2.91 | 7/16/2025 | 7/16/2018 | 107.4786 | 107.4785956 | 107.4785956 | 107.4785956 | 106.5588994 | 103.8745151 | 101.2922774 | 98.80740819 | 96.41538878 |
| 180717A00026 | 7/17/2018 | 3.24 | 7/16/2025 | 7/17/2018 | 113.30347 | 113.3034698 | 113.3034698 | 113.3034698 | 111.1612972 | 106.5975568 | 102.2635009 | 98.14615295 | 94.2333427 |
| 181003A00019 | 10/3/2018 | 3.44 | 10/3/2025 | 10/3/2018 | 115.63971 | 115.63971 | 115.63971 | 115.63971 | 113.0911432 | 108.0421753 | 103.2607946 | 98.73122185 | 94.43869891 |
| 190104A00038 | 1/4/2019 | 3.25 | 1/4/2029 | 1/4/2019 | 121.83705 | 121.8370517 | 121.8370517 | 121.8370517 | 115.1682496 | 107.7823555 | 100.9750121 | 94.69659986 | 88.90204264 |
| 190129A00073 | 1/29/2019 | 3.11 | 1/29/2029 | 1/29/2019 | 112.75635 | 112.7563515 | 112.7563515 | 112.7563515 | 109.8782974 | 105.3386833 | 101.0683293 | 97.04834692 | 93.26132972 |
| 190205A00017 | 2/5/2019 | 3.36 | 2/5/2029 | 2/5/2019 | 122.90038 | 122.9003846 | 122.9003846 | 122.9003846 | 116.0728983 | 108.5778379 | 101.6743633 | 95.31134348 | 89.44236612 |
| 190402A00005 | 4/2/2019 | 2.77 | 4/2/2032 | 4/2/2019 | 120.06178 | 120.0617826 | 120.0617826 | 119.0731613 | 112.1906459 | 104.7409248 | 97.95117891 | 91.75456163 | 86.09159168 |
| 190708A00029 | 7/8/2019 | 2.57 | 7/2/2029 | 7/8/2019 | 118.13483 | 118.1348274 | 118.1348274 | 118.1348274 | 110.6122033 | 102.8753027 | 95.78519704 | 89.28321687 | 83.31634232 |
| 190708A00032 | 7/8/2019 | 2.58 | 7/2/2029 | 7/8/2019 | 118.21791 | 118.2179056 | 118.2179056 | 118.2179056 | 110.6914581 | 102.9500854 | 95.85584386 | 89.35003535 | 83.3796141 |
| 190726A00012 | 7/26/2019 | 2.58 | 7/26/2034 | 7/26/2019 | 117.06849 | 117.0684855 | 117.0684855 | 115.7999708 | 109.1920823 | 102.0655613 | 95.58983237 | 89.69600331 | 84.32318332 |
| 190802A00020 | 8/2/2019 | 2.42 | 8/2/2034 | 8/2/2019 | 115.90842 | 115.9084164 | 115.9084164 | 114.6133176 | 108.0240496 | 100.936278 | 94.49904011 | 88.64313647 | 83.30744218 |
| 190813A00051 | 8/13/2019 | 2.19 | 8/13/2029 | 8/13/2019 | 115.16494 | 115.1649436 | 115.1649436 | 115.1649436 | 107.6228659 | 99.98023064 | 92.9843847 | 86.57600259 | 80.70153345 |
| 180104A00023 | 1/4/2018 | 2.91 | 1/4/2028 | 1/4/2018 | 114.89453 | 114.8945331 | 114.8945331 | 114.8945331 | 110.6918886 | 105.0287027 | 99.74260597 | 94.8053415 | 90.19095102 |
| 180322A00040 | 3/22/2018 | 3.16 | 3/21/2031 | 3/22/2018 | 120.39855 | 120.3985494 | 120.3985494 | 119.9939243 | 114.1486969 | 107.4681924 | 101.3273695 | 95.67606265 | 90.469205 |
| 180403A00014 | 4/3/2018 | 3.11 | 4/3/2025 | 4/3/2018 | 112.6941 | 112.6940987 | 112.6940987 | 112.6940987 | 110.6543701 | 106.11083 | 101.788833 | 97.67626808 | 93.76175783 |
| 180410A00002 | 4/10/2018 | 3.14 | 4/11/2033 | 4/10/2018 | 121.00276 | 121.0027594 | 121.0027594 | 120.2488149 | 114.1333891 | 107.2467235 | 100.9422589 | 95.16281893 | 89.85740334 |
| 180420A00011 | 4/20/2018 | 2.74 | 4/20/2023 | 4/20/2018 | 103.92327 | 103.9232731 | 103.9232731 | 103.9232731 | 103.5869094 | 102.096709 | 100.642635 | 99.22351203 | 97.83821281 |
| 180601A00038 | 6/1/2018 | 2.86 | 6/1/2021 | 6/1/2018 | 102.37434 | 102.3743423 | 102.3743423 | 102.3743423 | 102.1859745 | 101.2727885 | 100.3760781 | 99.49539885 | 98.63032243 |
| 180702A00022 | 7/2/2018 | 2.84 | 6/30/2023 | 7/2/2018 | 107.47563 | 107.4756329 | 107.4756329 | 107.4756329 | 106.7133008 | 103.9655743 | 101.3080729 | 98.73729115 | 96.24988118 |
| 180702A00040 | 7/2/2018 | 2.9 | 7/2/2021 | 7/2/2018 | 102.63308 | 102.6330813 | 102.6330813 | 102.6330813 | 102.4286843 | 101.4274847 | 100.4460014 | 99.48365455 | 98.53988713 |
| 180809A00034 | 8/9/2018 | 3.08 | 8/9/2023 | 8/9/2018 | 108.33353 | 108.3335263 | 108.3335263 | 108.3335263 | 107.4657946 | 104.4734628 | 101.5832729 | 98.79112295 | 96.09310233 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180906A00032 | 9/6/2018 | 3.24 | 9/5/2025 | 9/6/2018 | 114.41455 | 114.414553 | 114.414553 | 114.414553 | 111.9639091 | 107.0188032 | 102.3327433 | 97.89062914 | 93.67832634 |
| 180913A00012 | 9/13/2018 | 3.31 | 9/13/2033 | 9/13/2018 | 123.02139 | 123.0213889 | 123.0213889 | 122.0744528 | 115.5925085 | 108.4116167 | 101.8549582 | 95.85956126 | 90.36943435 |
| 180924A00033 | 9/24/2018 | 3.08 | 9/22/2023 | 9/24/2018 | 108.71917 | 108.7191711 | 108.7191711 | 108.7191711 | 107.8429776 | 104.8860829 | 102.0315827 | 99.27525996 | 96.61310164 |
| 181010A00025 | 10/10/2018 | 3.48 | 10/10/2030 | 10/10/2018 | 118.73553 | 118.7355341 | 118.7355341 | 118.6695914 | 114.3279437 | 108.6817698 | 103.4305299 | 98.54186371 | 93.98635083 |
| 181129A00005 | 11/29/2018 | 3.21 | 11/29/2023 | 11/29/2018 | 109.546 | 109.5459996 | 109.5459996 | 109.5459996 | 108.5052285 | 105.2200749 | 102.0560436 | 99.00799905 | 96.07105215 |
| 181207A00026 | 12/7/2018 | 2.94 | 12/6/2023 | 12/7/2018 | 108.78342 | 108.7834197 | 108.7834197 | 108.7834197 | 107.8037928 | 104.6824652 | 101.6750305 | 98.77666431 | 95.9827745 |
| 190118A00006 | 1/18/2019 | 3.14 | 1/18/2034 | 1/18/2019 | 122.29664 | 122.2966433 | 122.2966433 | 121.2010777 | 114.5502172 | 107.2710413 | 100.6385253 | 94.5860563 | 89.05455521 |
| 190205A00019 | 2/5/2019 | 2.94 | 2/5/2024 | 2/5/2019 | 109.09572 | 109.0957162 | 109.0957162 | 109.0957162 | 107.9483699 | 104.5149054 | 101.2137353 | 98.03898808 | 94.98508812 |
| 190205A00020 | 2/5/2019 | 3.32 | 2/5/2029 | 2/5/2019 | 122.58648 | 122.5864818 | 122.5864818 | 122.5864818 | 115.7720246 | 108.2930696 | 101.4045457 | 95.05541567 | 89.19935305 |
| 190205A00021 | 2/5/2019 | 3.32 | 2/5/2029 | 2/5/2019 | 122.58648 | 122.5864818 | 122.5864818 | 122.5864818 | 115.7720246 | 108.2930696 | 101.4045457 | 95.05541567 | 89.19935305 |
| 190308A00008 | 3/8/2019 | 3.19 | 3/8/2034 | 3/8/2019 | 121.38756 | 121.3875562 | 121.3875562 | 120.2354483 | 113.5836477 | 106.3301441 | 99.72530064 | 93.70182743 | 88.20009842 |
| 190322A00011 | 3/22/2019 | 2.99 | 3/22/2034 | 3/22/2019 | 119.82242 | 119.8224176 | 119.8224176 | 118.6845514 | 112.1178824 | 104.9574467 | 98.43739742 | 92.49129697 | 87.0602753 |
| 190329A00021 | 3/29/2019 | 2.96 | 3/29/2034 | 3/29/2019 | 119.58892 | 119.588923 | 119.588923 | 118.4530139 | 111.8989688 | 104.7523704 | 98.24494073 | 92.31036579 | 86.88988543 |
| 190430A00026 | 4/30/2019 | 3.03 | 4/28/2034 | 4/30/2019 | 120.26224 | 120.26224 | 120.26224 | 119.0805024 | 112.440305 | 105.2199924 | 98.64883275 | 92.65913464 | 87.190955 |
| 190510A00022 | 5/10/2019 | 2.95 | 5/10/2034 | 5/10/2019 | 119.75643 | 119.7564317 | 119.7564317 | 118.5404539 | 111.8793204 | 104.6561534 | 98.0857521 | 92.09971094 | 86.63749177 |
| 190515A00035 | 5/15/2019 | 2.82 | 2/15/2029 | 5/15/2019 | 119.47558 | 119.4755761 | 119.4755761 | 119.4755761 | 112.4040124 | 104.8249685 | 97.85632767 | 91.44466713 | 85.54153952 |
| 190708A00026 | 7/8/2019 | 2.21 | 7/1/2024 | 7/8/2019 | 107.34524 | 107.345238 | 107.345238 | 107.345238 | 105.9298992 | 102.1492316 | 98.52911675 | 95.0618455 | 91.74012129 |
| 190813A00057 | 8/13/2019 | 1.9 | 8/13/2024 | 8/13/2019 | 106.31168 | 106.3116816 | 106.3116816 | 106.3116816 | 104.8238487 | 100.9745503 | 97.29249034 | 93.76945172 | 90.39766874 |
| 190829A00032 | 8/29/2019 | 1.69 | 8/28/2026 | 8/29/2019 | 105.0564 | 105.0563993 | 105.0563993 | 105.0563993 | 103.7260008 | 100.5809907 | 97.57676396 | 94.70570553 | 91.96067058 |
| 190830A00013 | 8/30/2019 | 2.06 | 8/30/2034 | 8/30/2019 | 113.09672 | 113.0967234 | 113.0967234 | 111.8319298 | 105.4013376 | 98.48467112 | 92.20292478 | 86.48854884 | 81.28187696 |
| 190905A00018 | 9/5/2019 | 1.85 | 9/5/2029 | 9/5/2019 | 112.7071 | 112.7070994 | 112.7070994 | 112.7070994 | 106.1176727 | 99.1639558 | 92.78015932 | 86.91480118 | 81.5213746 |
| 190913A00006 | 9/13/2019 | 2.33 | 9/13/2034 | 9/13/2019 | 115.29396 | 115.2939612 | 115.2939612 | 113.9653808 | 107.3642038 | 100.2821473 | 93.85344886 | 88.00826135 | 82.68492704 |
| 190712A00003 | 7/12/2019 | 2.61 | 7/12/2034 | 7/12/2019 | 117.30423 | 117.3042273 | 117.3042273 | 116.0336209 | 109.4127076 | 102.2720335 | 95.78340943 | 89.87781496 | 84.49424524 |
| 190905A00021 | 9/5/2019 | 2.08 | 9/5/2029 | 9/5/2019 | 114.34271 | 114.3427069 | 114.3427069 | 114.3427069 | 106.7513415 | 99.1161341 | 92.13116396 | 85.73643473 | 79.87782438 |
| 190905A00024 | 9/5/2019 | 2.08 | 9/5/2029 | 9/5/2019 | 114.34271 | 114.3427069 | 114.3427069 | 114.3427069 | 106.7513415 | 99.1161341 | 92.13116396 | 85.73643473 | 79.87782438 |
| 190913A00018 | 9/13/2019 | 2.11 | 9/11/2026 | 9/13/2019 | 105.88407 | 105.8840704 | 105.8840704 | 105.8840704 | 104.511574 | 101.3147041 | 98.26211317 | 95.34593975 | 92.55881064 |
| 181218A00040 | 12/18/2018 | 3.23 | 6/18/2030 | 12/18/2018 | 115.58857 | 115.5885699 | 115.5885699 | 115.5586113 | 111.5912026 | 106.2721869 | 101.3135169 | 96.68653829 | 92.36512717 |
| 190205A00022 | 2/5/2019 | 3.32 | 2/5/2029 | 2/5/2019 | 122.58648 | 122.5864818 | 122.5864818 | 122.5864818 | 115.7720246 | 108.2930696 | 101.4045457 | 95.05541567 | 89.19935305 |
| 190205A00023 | 2/5/2019 | 3.32 | 2/5/2029 | 2/5/2019 | 122.5865 | 122.5865037 | 122.5865037 | 122.5865037 | 115.7720397 | 108.2930775 | 101.4045469 | 95.05541075 | 89.19934251 |
| 190305A00015 | 3/5/2019 | 3.32 | 3/5/2029 | 3/5/2019 | 122.76778 | 122.7677845 | 122.7677845 | 122.7677845 | 115.8435889 | 108.3037639 | 101.3637408 | 94.97127723 | 89.07899001 |
| 190315A00019 | 3/15/2019 | 2.88 | 3/15/2034 | 3/15/2019 | 120.52893 | 120.5289277 | 120.5289277 | 119.3703524 | 112.7145186 | 105.4718728 | 98.87952373 | 92.86979386 | 87.38273562 |
| 190404A00015 | 4/4/2019 | 2.88 | 4/3/2026 | 4/4/2019 | 113.91158 | 113.9115838 | 113.9115838 | 113.9115838 | 110.8010811 | 105.4154294 | 100.3388501 | 95.55175519 | 91.03590846 |
| 190506A00026 | 5/6/2019 | 3.03 | 5/4/2029 | 5/6/2019 | 121.62024 | 121.6202431 | 121.6202431 | 121.6202431 | 114.1693679 | 106.3478631 | 99.16838923 | 92.57371556 | 86.51202848 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190524A00041 | 5/24/2019 | 2.83 | 5/24/2034 | 5/24/2019 | 118.8126 | 118.8125989 | 118.8125989 | 117.6056634 | 110.9965678 | 103.8300027 | 97.31113078 | 91.37207235 | 85.95275546 |
| 190531A00036 | 5/31/2019 | 2.71 | 5/31/2034 | 5/31/2019 | 117.87293 | 117.8729334 | 117.8729334 | 116.6752226 | 110.118033 | 103.0078869 | 96.54036169 | 90.64810604 | 85.27151601 |
| 190620A00033 | 6/20/2019 | 2.1 | 6/20/2029 | 6/20/2019 | 109.38149 | 109.3814892 | 109.3814892 | 109.3814892 | 106.2902401 | 101.6770313 | 97.34988864 | 93.28789537 | 89.47184119 |
| 190705A00007 | 7/5/2019 | 2.56 | 7/5/2034 | 7/5/2019 | 116.91017 | 116.9101733 | 116.9101733 | 115.6440134 | 109.0453373 | 101.9286407 | 95.46179259 | 89.57600779 | 84.21048892 |
| 190731A00013 | 7/31/2019 | 2.23 | 7/22/2022 | 7/31/2019 | 102.13765 | 102.1376451 | 102.1376451 | 102.1376451 | 101.917386 | 100.8251892 | 99.75484394 | 98.70572092 | 97.67721472 |
| 190813A00064 | 8/13/2019 | 1.9 | 8/13/2024 | 8/13/2019 | 106.31168 | 106.3116816 | 106.3116816 | 106.3116816 | 104.8238487 | 100.9745503 | 97.29249034 | 93.76945172 | 90.39766874 |
| 190911A00016 | 9/11/2019 | 1.9 | 9/11/2029 | 9/11/2019 | 108.64721 | 108.6472135 | 108.6472135 | 108.6472135 | 105.4041269 | 100.7100028 | 96.31398216 | 92.19377366 | 88.32894342 |
| 200623A00028 | 6/23/2020 | 1.23 | 6/23/2038 | 6/23/2020 | 111.00685 | 111.0068511 | 111.0068511 | 107.6629947 | 98.98723823 | 90.492241 | 82.9598548 | 76.26486785 | 70.29981385 |
| 200608A00001 | 6/8/2020 | 1.34 | 6/7/2030 | 6/8/2020 | 107.97379 | 107.9737938 | 107.9737938 | 107.633001 | 100.7796119 | 93.76118311 | 87.3559749 | 81.50503501 | 76.15545332 |
| 200605A00018 | 6/5/2020 | 0.91 | 6/5/2025 | 6/5/2020 | 102.78712 | 102.7871208 | 102.7871208 | 102.7871208 | 100.7143747 | 96.32536712 | 92.15937316 | 88.20385283 | 84.44703585 |
| 070518A00023 | 5/18/2007 | 5.46 | 5/18/2027 | 5/18/2007 | 120.29812 | 120.2981227 | 120.2981227 | 120.2981227 | 118.1780151 | 114.0150699 | 110.0624027 | 106.3072818 | 102.7378467 |
| 121217A00009 | 12/17/2012 | 2.02 | 12/17/2027 | 12/17/2012 | 107.6839 | 107.6838957 | 107.6838957 | 107.6838957 | 105.4108082 | 101.421475 | 97.65068126 | 94.08413709 | 90.70860217 |
| 130128A00009 | 1/28/2013 | 2.82 | 1/28/2028 | 1/28/2013 | 113.68822 | 113.6882153 | 113.6882153 | 113.6882153 | 109.7225641 | 104.2728437 | 99.18000758 | 94.41744344 | 89.96070387 |
| 141126A00006 | 11/26/2014 | 2.41 | 11/30/2021 | 11/26/2014 | 102.95151 | 102.9515102 | 102.9515102 | 102.9515102 | 102.695177 | 101.3120812 | 99.95447614 | 98.62171534 | 97.3131737 |
| 150601A00019 | 6/1/2015 | 5.64 | 10/3/2022 | 6/1/2015 | 111.95145 | 111.9514472 | 111.9514472 | 111.9514472 | 111.4121227 | 109.1549653 | 106.9569336 | 104.8160384 | 102.7303751 |
| 150601A00022 | 6/1/2015 | 5.43 | 10/26/2037 | 6/1/2015 | 145.68052 | 145.6805214 | 145.6805214 | 142.7670966 | 133.6748138 | 124.2608386 | 115.8190693 | 108.2312627 | 101.3950479 |
| 150601A00023 | 6/1/2015 | 5.46 | 10/30/2037 | 6/1/2015 | 153.83425 | 153.8342505 | 153.8342505 | 149.7681341 | 138.5954731 | 127.5410066 | 117.7069522 | 108.9383857 | 101.1018111 |
| 150601A00058 | 6/1/2015 | 4.46 | 8/16/2024 | 6/1/2015 | 108.56255 | 108.5625491 | 108.5625491 | 108.5625491 | 107.961708 | 105.8369908 | 103.779674 | 101.7870518 | 99.85654742 |
| 150601A00061 | 6/1/2015 | 4.25 | 9/30/2024 | 6/1/2015 | 108.36526 | 108.3652584 | 108.3652584 | 108.3652584 | 107.7336112 | 105.5517752 | 103.4407708 | 101.3976974 | 99.41979508 |
| 150601A00422 | 6/1/2015 | 2.03 | 2/19/2021 | 6/1/2015 | 100.53567 | 100.5356729 | 100.5356729 | 100.5356729 | 100.4813472 | 100.1750499 | 99.87143142 | 99.57045209 | 99.27207299 |
| 150601A00425 | 6/1/2015 | 2.64 | 2/21/2024 | 6/1/2015 | 104.25726 | 104.2572616 | 104.2572616 | 104.2572616 | 103.783023 | 101.952501 | 100.174974 | 98.44847104 | 96.77110915 |
| 150601A00496 | 6/1/2015 | 2.27 | 6/27/2024 | 6/1/2015 | 104.29088 | 104.2908833 | 104.2908833 | 104.2908833 | 103.7353312 | 101.7286354 | 99.78443739 | 97.90027002 | 96.07378203 |
| 150601A00543 | 6/1/2015 | 2.23 | 8/8/2024 | 6/1/2015 | 104.32996 | 104.3299649 | 104.3299649 | 104.3299649 | 103.7465431 | 101.6843637 | 99.68783558 | 97.75431892 | 95.88129986 |
| 150601A00544 | 6/1/2015 | 1.95 | 8/13/2021 | 6/1/2015 | 100.93595 | 100.935948 | 100.935948 | 100.935948 | 100.8269983 | 100.2605042 | 99.7026724 | 99.15328228 | 98.61212094 |
| 150601A00563 | 6/1/2015 | 2.14 | 9/10/2021 | 6/1/2015 | 101.11741 | 101.1174087 | 101.1174087 | 101.1174087 | 101.0012392 | 100.3933013 | 99.79529925 | 99.20696255 | 98.62803096 |
| 150601A00624 | 6/1/2015 | 2.48 | 12/8/2021 | 6/1/2015 | 103.33963 | 103.3396268 | 103.3396268 | 103.3396268 | 103.0740239 | 101.6549019 | 100.2626292 | 98.89650846 | 97.55586585 |
| 150601A00732 | 6/1/2015 | 1.91 | 4/29/2022 | 6/1/2015 | 101.49168 | 101.4916839 | 101.4916839 | 101.4916839 | 101.3112849 | 100.385074 | 99.47629003 | 98.58444253 | 97.70905979 |
| 150601A00735 | 6/1/2015 | 2.35 | 5/1/2025 | 6/1/2015 | 104.9296 | 104.9295964 | 104.9295964 | 104.9295964 | 104.142491 | 101.7241396 | 99.39342859 | 97.14642084 | 94.97938542 |
| 150601A00865 | 6/1/2015 | 6 | 4/3/2028 | 6/1/2015 | 122.75697 | 122.756969 | 122.756969 | 122.756969 | 120.4609677 | 116.2307596 | 112.2242408 | 108.427176 | 104.826355 |
| 150601A00871 | 6/1/2015 | 6.74 | 7/31/2028 | 6/1/2015 | 129.96735 | 129.9673493 | 129.9673493 | 129.9673493 | 126.9397405 | 121.8706997 | 117.0901261 | 112.5786548 | 108.3183756 |
| 150601A00893 | 6/1/2015 | 6.49 | 4/6/2029 | 6/1/2015 | 131.45182 | 131.4518157 | 131.4518157 | 131.4518157 | 127.8018941 | 122.2760347 | 117.0891711 | 112.2168693 | 107.6366576 |
| 150601A00898 | 6/1/2015 | 6.66 | 6/8/2029 | 6/1/2015 | 129.15446 | 129.1544635 | 129.1544635 | 129.1544635 | 125.9877774 | 120.9937134 | 116.2959995 | 111.8735826 | 107.7070919 |
| 150601A00899 | 6/1/2015 | 7.07 | 6/14/2029 | 6/1/2015 | 130.00944 | 130.0094439 | 130.0094439 | 130.0094439 | 126.8522878 | 121.8597283 | 117.1622226 | 112.7388709 | 108.5704389 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150601A00918 | 6/1/2015 | 5.62 | 4/28/2025 | 6/1/2015 | 113.88996 | 113.8899633 | 113.8899633 | 113.8899633 | 113.0209444 | 110.3427939 | 107.7618495 | 105.2737534 | 102.8743755 |
| 011115A00014 | 11/15/2001 | 5.19 | 11/16/2021 | 11/15/2001 | 104.62457 | 104.6245668 | 104.6245668 | 104.6245668 | 104.4566311 | 103.5380527 | 102.6340951 | 101.7444146 | 100.8686785 |
| 030605A00010 | 6/5/2003 | 3.97 | 6/5/2023 | 6/5/2003 | 107.70973 | 107.7097287 | 107.7097287 | 107.7097287 | 107.2074144 | 105.181863 | 103.2127117 | 101.2979821 | 99.43577898 |
| 050823A00088 | 8/23/2005 | 4.78 | 8/25/2025 | 8/23/2005 | 119.90105 | 119.9010524 | 119.9010524 | 119.9010524 | 117.8104641 | 113.3326984 | 109.0782736 | 105.0345129 | 101.1895367 |
| 110824A00006 | 8/24/2011 | 2.69 | 8/24/2026 | 8/24/2011 | 108.23342 | 108.2334248 | 108.2334248 | 108.2334248 | 106.768447 | 103.5326097 | 100.4488723 | 97.50861761 | 94.70378451 |
| 120423A00011 | 4/23/2012 | 2.07 | 4/25/2022 | 4/24/2017 | 102.37932 | 102.3793249 | 102.3793249 | 102.3793249 | 102.1016365 | 100.7769926 | 99.4795394 | 98.20852608 | 96.96322829 |
| 120614A00015 | 6/14/2012 | 1.89 | 6/14/2022 | 6/14/2012 | 103.26224 | 103.2622379 | 103.2622379 | 103.2622379 | 102.8533223 | 101.0194843 | 99.22907294 | 97.48078284 | 95.77335691 |
| 120827A00052 | 8/27/2012 | 2.01 | 8/27/2027 | 8/27/2012 | 107.01638 | 107.016377 | 107.016377 | 107.016377 | 105.0468172 | 101.415511 | 97.97696429 | 94.71896156 | 91.6301612 |
| 121120A00011 | 11/20/2012 | 2.22 | 11/22/2027 | 11/20/2012 | 111.15101 | 111.1510109 | 111.1510109 | 111.1510109 | 107.404727 | 102.1641509 | 97.26271015 | 92.67549839 | 88.37960056 |
| 121220A00023 | 12/20/2012 | 1.82 | 12/20/2022 | 12/20/2012 | 103.62662 | 103.6266208 | 103.6266208 | 103.6266208 | 103.1092364 | 100.9902826 | 98.92960449 | 96.9252274 | 94.97525638 |
| 130528A00020 | 5/28/2013 | 2.43 | 5/30/2023 | 5/29/2018 | 105.46575 | 105.4657485 | 105.4657485 | 105.4657485 | 104.7758608 | 102.2079979 | 99.7206676 | 97.31086607 | 94.97571934 |
| 150601A00011 | 6/1/2015 | 5.17 | 8/3/2022 | 6/1/2015 | 110.15134 | 110.1513368 | 110.1513368 | 110.1513368 | 109.6709453 | 107.5913033 | 105.5632915 | 103.5852688 | 101.6556592 |
| 150601A00033 | 6/1/2015 | 5.96 | 12/24/2025 | 6/1/2015 | 128.72451 | 128.7245061 | 128.7245061 | 128.7245061 | 125.9362025 | 120.5422899 | 115.4366414 | 110.6019728 | 106.0221343 |
| 150601A00100 | 6/1/2015 | 3.26 | 1/7/2021 | 6/1/2015 | 100.79052 | 100.7905237 | 100.7905237 | 100.7905237 | 100.7442473 | 100.4772897 | 100.2123335 | 99.94935386 | 99.6883262 |
| 150601A00261 | 6/1/2015 | 3.19 | 2/11/2033 | 6/1/2015 | 127.90499 | 127.9049943 | 127.9049943 | 125.6225091 | 116.5954166 | 107.5927628 | 99.50308498 | 92.22311191 | 85.66208061 |
| 150601A00396 | 6/1/2015 | 3.61 | 1/3/2029 | 6/1/2015 | 113.92505 | 113.9250536 | 113.9250536 | 113.9250536 | 111.280055 | 106.9531062 | 102.8755401 | 99.03020668 | 95.40128094 |
| 150601A00478 | 6/1/2015 | 2 | 6/16/2021 | 6/1/2015 | 100.83276 | 100.8327614 | 100.8327614 | 100.8327614 | 100.7396178 | 100.2517717 | 99.77039026 | 99.29533073 | 98.82645478 |
| 150601A00505 | 6/1/2015 | 2.07 | 7/8/2021 | 6/1/2015 | 100.93446 | 100.9344629 | 100.9344629 | 100.9344629 | 100.8328465 | 100.3053456 | 99.78536382 | 99.27272281 | 98.76725005 |
| 150601A00690 | 6/1/2015 | 2.34 | 2/28/2025 | 6/1/2015 | 104.71377 | 104.7137743 | 104.7137743 | 104.7137743 | 103.9849852 | 101.6629371 | 99.42231613 | 97.25956687 | 95.1713159 |
| 150601A00745 | 6/1/2015 | 1.76 | 5/7/2021 | 6/1/2015 | 100.63904 | 100.6390411 | 100.6390411 | 100.6390411 | 100.5581219 | 100.1249248 | 99.69686158 | 99.27383095 | 98.85573428 |
| 150601A00772 | 6/1/2015 | 1.84 | 5/13/2022 | 6/1/2015 | 101.44684 | 101.4468392 | 101.4468392 | 101.4468392 | 101.263275 | 100.3242347 | 99.40297975 | 98.49900943 | 97.61184181 |
| 150601A00832 | 6/1/2015 | 7.17 | 8/28/2025 | 6/1/2015 | 117.61987 | 117.6198673 | 117.6198673 | 117.6198673 | 116.6732339 | 113.8876083 | 111.2066003 | 108.6253388 | 106.1392161 |
| 150601A00938 | 6/1/2015 | 6.35 | 12/21/2020 | 6/1/2015 | 102.91009 | 102.9100879 | 102.9100879 | 102.9100879 | 102.8217478 | 102.3422799 | 101.8673606 | 101.396925 | 100.9309094 |
| 150601A00943 | 6/1/2015 | 6.44 | 5/9/2031 | 6/1/2015 | 139.28326 | 139.2832643 | 139.2832643 | 139.0997781 | 133.3931248 | 126.3516366 | 119.8304506 | 113.7848384 | 108.1743162 |
| 150601A00964 | 6/1/2015 | 5.25 | 1/6/2033 | 6/1/2015 | 131.95815 | 131.958147 | 131.958147 | 131.4140773 | 125.7229678 | 118.9417864 | 112.6977914 | 106.9406912 | 101.6254216 |
| 110223A00003 | 2/23/2011 | 3.41 | 2/23/2021 | 2/23/2011 | 102.07914 | 102.0791439 | 102.0791439 | 102.0791439 | 101.9499343 | 101.2749853 | 100.6088134 | 99.9512485 | 99.30212477 |
| 111007A00007 | 10/7/2011 | 3.92 | 10/7/2031 | 10/7/2011 | 129.92978 | 129.9297822 | 129.9297822 | 128.6521037 | 120.3845334 | 111.8698278 | 104.1470125 | 97.1336586 | 90.75653834 |
| 120716A00025 | 7/16/2012 | 1.83 | 7/18/2022 | 7/17/2017 | 101.66502 | 101.6650157 | 101.6650157 | 101.6650157 | 101.4338368 | 100.3646625 | 99.32009878 | 98.29937271 | 97.30174203 |
| 120907A00026 | 9/7/2012 | 1.71 | 9/7/2022 | 9/7/2012 | 102.94896 | 102.9489558 | 102.9489558 | 102.9489558 | 102.5257651 | 100.702283 | 98.92533415 | 97.19336469 | 95.50488661 |
| 140311A00039 | 3/11/2014 | 3.06 | 3/11/2024 | 3/11/2014 | 108.48751 | 108.4875146 | 108.4875146 | 108.4875146 | 107.4670779 | 104.3445954 | 101.3384568 | 98.44350773 | 95.6548581 |
| 140911A00033 | 9/11/2014 | 3.02 | 9/13/2027 | 9/11/2014 | 112.08807 | 112.0880679 | 112.0880679 | 112.0880679 | 109.2480378 | 104.7432901 | 100.5042442 | 96.51263216 | 92.75157927 |
| 150601A00018 | 6/1/2015 | 4.91 | 9/5/2025 | 6/1/2015 | 122.35365 | 122.353647 | 122.353647 | 122.353647 | 119.9491623 | 114.9672947 | 110.2408377 | 105.7550593 | 101.4961648 |
| 150601A00089 | 6/1/2015 | 2.56 | 10/27/2020 | 6/1/2015 | 100.37595 | 100.375946 | 100.375946 | 100.375946 | 100.3494875 | 100.1829894 | 100.0173042 | 99.85242558 | 99.68834695 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150601A00407 | 6/1/2015 | 2.06 | 1/22/2021 | 6/1/2015 | 100.47381 | 100.473812 | 100.473812 | 100.473812 | 100.4276384 | 100.1616198 | 99.89766176 | 99.63573697 | 99.37581876 |
| 150601A00447 | 6/1/2015 | 2.02 | 4/28/2021 | 6/1/2015 | 100.73008 | 100.7300776 | 100.7300776 | 100.7300776 | 100.6517175 | 100.2300818 | 99.81331464 | 99.4013223 | 98.99401359 |
| 150601A00459 | 6/1/2015 | 2.42 | 5/16/2024 | 6/1/2015 | 104.09942 | 104.0994217 | 104.0994217 | 104.0994217 | 103.5743297 | 101.6340723 | 99.75270381 | 97.92794865 | 96.15763645 |
| 150601A00497 | 6/1/2015 | 1.95 | 7/1/2021 | 6/1/2015 | 100.84214 | 100.8421354 | 100.8421354 | 100.8421354 | 100.74439 | 100.2351309 | 99.73291322 | 99.23757453 | 98.7489577 |
| 150601A00736 | 6/1/2015 | 2.87 | 5/1/2030 | 6/1/2015 | 112.48328 | 112.4832759 | 112.4832759 | 112.4669376 | 108.9652657 | 104.0868126 | 99.52805588 | 95.26419291 | 91.2725679 |
| 150601A00875 | 6/1/2015 | 7.14 | 9/29/2028 | 6/1/2015 | 132.32571 | 132.325706 | 132.325706 | 132.325706 | 129.1502819 | 123.935378 | 119.0213735 | 114.3877789 | 110.0156655 |
| 150601A00883 | 6/1/2015 | 6.21 | 11/30/2028 | 6/1/2015 | 128.16861 | 128.1686054 | 128.1686054 | 128.1686054 | 124.984134 | 119.8638199 | 115.0435752 | 110.5026536 | 106.2219123 |
| 150601A00888 | 6/1/2015 | 5.92 | 3/1/2029 | 6/1/2015 | 127.79846 | 127.7984621 | 127.7984621 | 127.7984621 | 124.3720044 | 119.096024 | 114.1395007 | 109.4796565 | 105.0955254 |
| 150601A00922 | 6/1/2015 | 6.51 | 7/7/2020 | 6/1/2015 | 100.12164 | 100.1216358 | 100.1216358 | 100.1216358 | 100.1189744 | 100.0995582 | 100.0801621 | 100.0607863 | 100.0414306 |
| 150601A00927 | 6/1/2015 | 6.08 | 8/7/2030 | 6/1/2015 | 130.00038 | 130.0003798 | 130.0003798 | 129.9655769 | 125.9470466 | 120.3565963 | 115.134588 | 110.2521088 | 105.6827836 |
| 150601A00931 | 6/1/2015 | 7.13 | 9/20/2030 | 6/1/2015 | 140.70616 | 140.7061618 | 140.7061618 | 140.6459359 | 135.5120547 | 128.8201266 | 122.5942602 | 116.7965339 | 111.3924437 |
| 150601A00948 | 6/1/2015 | 6.04 | 10/22/2031 | 6/1/2015 | 132.03936 | 132.0393611 | 132.0393611 | 131.8302815 | 126.9901007 | 120.8039861 | 115.0642507 | 109.7326435 | 104.7745683 |
| 160928A00033 | 9/28/2016 | 2.46 | 9/29/2036 | 9/28/2016 | 117.69533 | 117.6953304 | 117.6953304 | 115.3772644 | 107.907041 | 100.2124274 | 93.3079776 | 87.09897566 | 81.50318254 |
| 160928A00044 | 9/28/2016 | 2.89 | 9/29/2036 | 9/28/2023 | 121.22783 | 121.2278303 | 121.2278303 | 118.8822383 | 111.2545564 | 103.3720201 | 96.29527621 | 89.9280152 | 84.18658904 |
| 170530A00019 | 5/30/2017 | 1.58 | 6/1/2021 | 5/30/2017 | 100.79555 | 100.7955476 | 100.7955476 | 100.7955476 | 100.691608 | 100.1501083 | 99.61591949 | 99.08887824 | 98.56882621 |
| 170929A00046 | 9/29/2017 | 2.49 | 9/30/2027 | 9/29/2017 | 108.06645 | 108.0664478 | 108.0664478 | 108.0664478 | 106.2110927 | 102.5708851 | 99.11488021 | 95.83188449 | 92.71147435 |
| 050823A00085 | 8/23/2005 | 4.78 | 8/25/2025 | 8/23/2005 | 119.90098 | 119.9009834 | 119.9009834 | 119.9009834 | 117.8104053 | 113.3326555 | 109.0782454 | 105.0344985 | 101.1895351 |
| 111128A00006 | 11/28/2011 | 3.03 | 11/28/2031 | 11/28/2011 | 117.1463 | 117.1462964 | 117.1462964 | 116.8341189 | 111.9514025 | 106.0257474 | 100.5526629 | 95.49146603 | 90.80552301 |
| 120210A00005 | 2/10/2012 | 1.64 | 2/10/2022 | 2/10/2012 | 101.75755 | 101.7575511 | 101.7575511 | 101.7575511 | 101.5309214 | 100.380652 | 99.25154923 | 98.1430446 | 97.05459008 |
| 121120A00010 | 11/20/2012 | 1.93 | 11/22/2027 | 11/20/2012 | 107.16865 | 107.1686513 | 107.1686513 | 107.1686513 | 104.9733971 | 101.0748604 | 97.38790076 | 93.89881043 | 90.59487909 |
| 130206A00004 | 2/6/2013 | 2.14 | 2/7/2028 | 2/6/2013 | 107.99779 | 107.9977928 | 107.9977928 | 107.9977928 | 105.7992871 | 101.8983594 | 98.20980596 | 94.71981082 | 91.41557114 |
| 130624A00019 | 6/24/2013 | 3.4 | 6/26/2023 | 6/24/2013 | 108.63451 | 108.6345112 | 108.6345112 | 108.6345112 | 107.8467119 | 105.0067857 | 102.2598582 | 99.60233706 | 97.03079079 |
| 141031A00015 | 10/31/2014 | 2.38 | 10/31/2024 | 10/31/2019 | 105.34428 | 105.3442761 | 105.3442761 | 105.3442761 | 104.6217447 | 102.2630932 | 99.98497204 | 97.78397616 | 95.65686782 |
| 150601A00001 | 6/1/2015 | 5.43 | 6/15/2037 | 6/1/2015 | 152.21451 | 152.2145137 | 152.2145137 | 148.465017 | 137.6564772 | 126.8843117 | 117.279285 | 108.6959331 | 101.0085547 |
| 150601A00096 | 6/1/2015 | 2.32 | 11/23/2020 | 6/1/2015 | 100.44298 | 100.4429829 | 100.4429829 | 100.4429829 | 100.4092466 | 100.2047678 | 100.0014919 | 99.79940714 | 99.59850198 |
| 150601A00397 | 6/1/2015 | 2.2 | 12/31/2020 | 6/1/2015 | 100.49533 | 100.495333 | 100.495333 | 100.495333 | 100.4509822 | 100.1936914 | 99.93827404 | 99.68470751 | 99.43296946 |
| 150601A00449 | 6/1/2015 | 2.12 | 4/28/2021 | 6/1/2015 | 100.77176 | 100.7717648 | 100.7717648 | 100.7717648 | 100.6933799 | 100.2716047 | 99.8546994 | 99.44257013 | 99.0351257 |
| 150601A00477 | 6/1/2015 | 3.21 | 6/1/2029 | 6/1/2015 | 116.28468 | 116.2846784 | 116.2846784 | 116.2846784 | 112.4956193 | 107.1177673 | 102.0872437 | 97.37811374 | 92.96658311 |
| 150601A00508 | 6/1/2015 | 1.97 | 7/8/2021 | 6/1/2015 | 100.86694 | 100.866945 | 100.866945 | 100.866945 | 100.767308 | 100.2491311 | 99.73823067 | 99.23443635 | 98.73758345 |
| 150601A00555 | 6/1/2015 | 2.13 | 9/2/2021 | 6/1/2015 | 101.11745 | 101.1174499 | 101.1174499 | 101.1174499 | 101.0006739 | 100.3896504 | 99.78864761 | 99.197392 | 98.61562059 |
| 150601A00693 | 6/1/2015 | 2.31 | 2/27/2025 | 6/1/2015 | 104.65598 | 104.6559759 | 104.6559759 | 104.6559759 | 103.9241101 | 101.5973926 | 99.35243354 | 97.18565709 | 95.09367042 |
| 150601A00851 | 6/1/2015 | 7.12 | 4/30/2027 | 6/1/2015 | 126.31593 | 126.3159323 | 126.3159323 | 126.3159323 | 124.2790881 | 120.0855862 | 116.0986046 | 112.3059859 | 108.6963821 |
| 150601A00868 | 6/1/2015 | 7.08 | 6/5/2028 | 6/1/2015 | 130.9507 | 130.9506959 | 130.9506959 | 130.9506959 | 128.0090701 | 122.9932763 | 118.2590649 | 113.7877467 | 109.5620223 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150601A00909 | 6/1/2015 | 6.14 | 11/30/2020 | 6/1/2015 | 101.09077 | 101.0907701 | 101.0907701 | 101.0907701 | 101.0607691 | 100.8755016 | 100.6912334 | 100.5079557 | 100.3256593 |
| 150601A00939 | 6/1/2015 | 5.79 | 1/17/2031 | 6/1/2015 | 133.06656 | 133.0665556 | 133.0665556 | 132.9621829 | 127.9006757 | 121.4467886 | 115.4534071 | 109.8821377 | 104.6981306 |
| 150601A01012 | 6/1/2015 | 5.43 | 9/15/2023 | 6/1/2015 | 115.81608 | 115.8160762 | 115.8160762 | 115.8160762 | 114.8882745 | 111.7454057 | 108.7110599 | 105.7807864 | 102.9503483 |
| 150601A01040 | 6/1/2015 | 5.4 | 10/2/2026 | 6/1/2015 | 128.6321 | 128.632098 | 128.632098 | 128.632098 | 124.9718339 | 119.0745255 | 113.526433 | 108.3044083 | 103.3869783 |
| 160928A00029 | 9/28/2016 | 2.52 | 9/29/2036 | 9/28/2016 | 118.18824 | 118.1882373 | 118.1882373 | 115.8663305 | 108.3741362 | 100.6533008 | 93.72480996 | 87.49372536 | 81.87761135 |
| 160930A00033 | 9/30/2016 | 1.8 | 9/30/2026 | 9/30/2016 | 104.77166 | 104.7716624 | 104.7716624 | 104.7716624 | 103.4473087 | 100.3371049 | 97.36621392 | 94.5270761 | 91.81260037 |
| 170130A00046 | 1/30/2017 | 2.52 | 1/30/2026 | 1/30/2017 | 106.3279 | 106.327898 | 106.327898 | 106.327898 | 105.2242474 | 102.3806981 | 99.65630745 | 97.04498166 | 94.54098512 |
| 050812A00050 | 8/12/2005 | 4.97 | 8/12/2025 | 8/12/2005 | 112.51595 | 112.5159538 | 112.5159538 | 112.5159538 | 111.4953404 | 108.7165325 | 106.0500463 | 103.4903208 | 101.0321128 |
| 080423A00066 | 4/23/2008 | 4.41 | 4/24/2023 | 4/23/2008 | 107.94041 | 107.9404051 | 107.9404051 | 107.9404051 | 107.4889288 | 105.6087408 | 103.7781306 | 101.9954338 | 100.2590535 |
| 081226A00013 | 12/26/2008 | 3.99 | 12/26/2023 | 12/26/2008 | 107.46422 | 107.4642219 | 107.4642219 | 107.4642219 | 106.9147949 | 104.8761202 | 102.8986728 | 100.9801094 | 99.11819306 |
| 110414A00007 | 4/14/2011 | 3.95 | 1/21/2025 | 4/14/2011 | 110.19741 | 110.1974082 | 110.1974082 | 110.1974082 | 109.2166728 | 106.3150681 | 103.5222484 | 100.8332496 | 98.24336832 |
| 120410A00005 | 4/10/2012 | 2.35 | 4/12/2027 | 4/10/2012 | 108.6283 | 108.6283027 | 108.6283027 | 108.6283027 | 106.6519007 | 102.7832966 | 99.11112094 | 95.62347218 | 92.30926301 |
| 121126A00009 | 11/26/2012 | 1.07 | 11/30/2020 | 11/26/2012 | 100.4044 | 100.4044011 | 100.4044011 | 100.4044011 | 100.3279498 | 99.90381047 | 99.48323606 | 99.06618186 | 98.65260391 |
| 121219A00029 | 12/19/2012 | 1.75 | 12/19/2022 | 12/21/2017 | 101.90168 | 101.9016804 | 101.9016804 | 101.9016804 | 101.6250528 | 100.3366049 | 99.07672524 | 97.84454132 | 96.63921476 |
| 130425A00032 | 4/25/2013 | 2.59 | 4/25/2028 | 4/25/2018 | 109.93228 | 109.9322804 | 109.9322804 | 109.9322804 | 107.3439945 | 103.0021914 | 98.90593417 | 95.03873924 | 91.38536358 |
| 140314A00026 | 3/14/2014 | 2.99 | 3/14/2024 | 3/14/2019 | 109.54506 | 109.545064 | 109.545064 | 109.545064 | 108.405458 | 105.0171542 | 101.7593825 | 98.62625441 | 95.61218693 |
| 140414A00009 | 4/14/2014 | 2.32 | 4/30/2024 | 4/14/2014 | 105.19609 | 105.1960917 | 105.1960917 | 105.1960917 | 104.5052275 | 102.1344266 | 99.84120418 | 97.62243273 | 95.47513167 |
| 150601A00005 | 6/1/2015 | 4.84 | 6/9/2025 | 6/1/2015 | 121.06874 | 121.0687439 | 121.0687439 | 121.0687439 | 118.8988356 | 114.1486976 | 109.6330751 | 105.3389499 | 101.2540983 |
| 150601A00038 | 6/1/2015 | 5.77 | 6/2/2023 | 6/1/2015 | 115.66862 | 115.6686219 | 115.6686219 | 115.6686219 | 114.8698893 | 111.9403081 | 109.1051415 | 106.3608022 | 103.7038605 |
| 150601A00270 | 6/1/2015 | 3.12 | 3/21/2031 | 6/1/2015 | 126.3974 | 126.3973979 | 126.3973979 | 125.3309996 | 116.5047263 | 107.7123399 | 99.74675414 | 92.52279704 | 85.96462422 |
| 150601A00299 | 6/1/2015 | 1.8 | 4/11/2023 | 6/1/2015 | 102.13145 | 102.1314518 | 102.1314518 | 102.1314518 | 101.8131371 | 100.395945 | 99.01277828 | 97.66253827 | 96.34417097 |
| 150601A00410 | 6/1/2015 | 2.68 | 1/24/2024 | 6/1/2015 | 104.23401 | 104.2340054 | 104.2340054 | 104.2340054 | 103.7770385 | 101.9863213 | 100.2465712 | 98.5559187 | 96.91257706 |
| 150601A00424 | 6/1/2015 | 1.95 | 2/19/2021 | 6/1/2015 | 100.55083 | 100.5508269 | 100.5508269 | 100.5508269 | 100.4917599 | 100.1620521 | 99.83536091 | 99.51164045 | 99.19084572 |
| 150601A00461 | 6/1/2015 | 1.94 | 5/14/2021 | 6/1/2015 | 100.70721 | 100.7072086 | 100.7072086 | 100.7072086 | 100.6272695 | 100.1992596 | 99.77630467 | 99.35830437 | 98.94516131 |
| 150601A00509 | 6/1/2015 | 2.52 | 7/8/2024 | 6/1/2015 | 104.45235 | 104.4523457 | 104.4523457 | 104.4523457 | 103.8917888 | 101.8765594 | 99.92426294 | 98.03240964 | 96.19862698 |
| 150601A00526 | 6/1/2015 | 2 | 7/28/2021 | 6/1/2015 | 100.92821 | 100.9282114 | 100.9282114 | 100.9282114 | 100.823238 | 100.2778646 | 99.74053566 | 99.21105321 | 98.68922629 |
| 150601A00558 | 6/1/2015 | 2.51 | 8/30/2024 | 6/1/2015 | 104.59437 | 104.5943669 | 104.5943669 | 104.5943669 | 103.9960421 | 101.9061309 | 99.88338987 | 97.92509595 | 96.02865709 |
| 150601A00585 | 6/1/2015 | 2.45 | 10/8/2024 | 6/1/2015 | 104.5731 | 104.5730951 | 104.5730951 | 104.5730951 | 103.9493654 | 101.8119185 | 99.74445967 | 97.74410605 | 95.8081151 |
| 150601A00680 | 6/1/2015 | 2.23 | 2/6/2025 | 6/1/2015 | 104.41197 | 104.4119668 | 104.4119668 | 104.4119668 | 103.6990039 | 101.4059823 | 99.19268374 | 97.05565379 | 94.99161352 |
| 150601A00685 | 6/1/2015 | 1.91 | 2/10/2022 | 6/1/2015 | 101.30826 | 101.3082566 | 101.3082566 | 101.3082566 | 101.1540297 | 100.3428713 | 99.54621464 | 98.76365913 | 97.99481927 |
| 150601A00714 | 6/1/2015 | 1.67 | 4/1/2022 | 6/1/2015 | 101.21678 | 101.2167836 | 101.2167836 | 101.2167836 | 101.0459694 | 100.1604528 | 99.29129451 | 98.4380338 | 97.60022761 |
| 120614A00013 | 6/14/2012 | 1.89 | 6/14/2022 | 6/14/2012 | 103.26225 | 103.2622516 | 103.2622516 | 103.2622516 | 102.8533341 | 101.0194885 | 99.22906975 | 97.48077245 | 95.77333953 |
| 120827A00048 | 8/27/2012 | 2.01 | 8/27/2027 | 8/27/2012 | 107.01638 | 107.0163754 | 107.0163754 | 107.0163754 | 105.0468169 | 101.4155115 | 97.97696543 | 94.71896328 | 91.63016342 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 120907A00005 | 9/7/2012 | 1.76 | 9/7/2022 | 9/7/2012 | 101.82307 | 101.8230724 | 101.8230724 | 101.8230724 | 101.5621086 | 100.3364763 | 99.14028906 | 97.97254823 | 96.83229894 |
| 120907A00032 | 9/7/2012 | 1.86 | 9/9/2024 | 9/7/2012 | 105.24068 | 105.2406811 | 105.2406811 | 105.2406811 | 104.1792573 | 101.2190554 | 98.37863363 | 95.65225871 | 93.03451126 |
| 121219A00036 | 12/19/2012 | 2.2 | 12/19/2022 | 12/19/2017 | 104.04185 | 104.0418465 | 104.0418465 | 104.0418465 | 103.52529 | 101.4071584 | 99.3470323 | 97.34295355 | 95.39304271 |
| 130207A00012 | 2/7/2013 | 2.9 | 2/7/2033 | 2/7/2013 | 117.26548 | 117.2654757 | 117.2654757 | 116.5306644 | 110.8040489 | 104.2416216 | 98.22628915 | 92.70446917 | 87.62837867 |
| 130913A00018 | 9/13/2013 | 3.72 | 9/13/2028 | 9/13/2013 | 114.55162 | 114.5516163 | 114.5516163 | 114.5516163 | 111.8053801 | 107.4008224 | 103.2546024 | 99.34867019 | 95.6663931 |
| 130918A00010 | 9/18/2013 | 2.43 | 9/18/2020 | 9/18/2013 | 100.50703 | 100.5070323 | 100.5070323 | 100.5070323 | 100.4727547 | 100.2536132 | 100.0354465 | 99.81824805 | 99.60201126 |
| 140325A00012 | 3/25/2014 | 3.61 | 3/26/2029 | 3/25/2019 | 115.74088 | 115.7408791 | 115.7408791 | 115.7408791 | 112.479675 | 107.5765243 | 102.9745119 | 98.65158524 | 94.58750311 |
| 150601A00024 | 6/1/2015 | 5.58 | 11/8/2022 | 6/1/2015 | 112.31901 | 112.3190063 | 112.3190063 | 112.3190063 | 111.7464879 | 109.3929832 | 107.1033205 | 104.8754016 | 102.7072101 |
| 150601A00370 | 6/1/2015 | 2.58 | 10/31/2023 | 6/1/2015 | 103.79448 | 103.7944828 | 103.7944828 | 103.7944828 | 103.385006 | 101.7119155 | 100.0841296 | 98.50004946 | 96.95814518 |
| 150601A00371 | 6/1/2015 | 1.88 | 10/30/2020 | 6/1/2015 | 100.27392 | 100.2739177 | 100.2739177 | 100.2739177 | 100.2463917 | 100.074231 | 99.90293787 | 99.73250508 | 99.56292553 |
| 150601A00387 | 6/1/2015 | 2.81 | 12/19/2023 | 6/1/2015 | 104.34432 | 104.3443153 | 104.3443153 | 104.3443153 | 103.9070212 | 102.1621548 | 100.4659147 | 98.8165467 | 97.21237364 |
| 150601A00390 | 6/1/2015 | 2.39 | 5/20/2022 | 6/1/2015 | 102.70114 | 102.701136 | 102.701136 | 102.701136 | 102.4571608 | 101.2594527 | 100.0853291 | 98.93414902 | 97.80529338 |
| 150601A00409 | 6/1/2015 | 1.98 | 1/22/2021 | 6/1/2015 | 100.49156 | 100.4915596 | 100.4915596 | 100.4915596 | 100.4408416 | 100.1521162 | 99.86572476 | 99.5816359 | 99.29981878 |
| 150601A00411 | 6/1/2015 | 3.38 | 1/24/2029 | 6/1/2015 | 113.03955 | 113.0395474 | 113.0395474 | 113.0395474 | 110.3698996 | 106.041757 | 101.9647806 | 98.12159272 | 94.49616592 |
| 150601A00436 | 6/1/2015 | 1.99 | 3/18/2021 | 6/1/2015 | 100.5864 | 100.5864001 | 100.5864001 | 100.5864001 | 100.5246137 | 100.1816913 | 99.84204612 | 99.50562569 | 99.17237878 |
| 150601A00557 | 6/1/2015 | 2.03 | 9/2/2021 | 6/1/2015 | 101.02847 | 101.0284659 | 101.0284659 | 101.0284659 | 100.9146819 | 100.3203192 | 99.73547805 | 99.15990417 | 98.59335271 |
| 150601A00678 | 6/1/2015 | 2.12 | 1/30/2025 | 6/1/2015 | 104.1573 | 104.1573031 | 104.1573031 | 104.1573031 | 103.4463293 | 101.1588182 | 98.95081671 | 96.8188812 | 94.75974264 |
| 150601A00872 | 6/1/2015 | 7.42 | 7/31/2028 | 6/1/2015 | 132.67015 | 132.6701548 | 132.6701548 | 132.6701548 | 129.6584487 | 124.5655483 | 119.7601987 | 115.2231882 | 110.9367438 |
| 150601A00901 | 6/1/2015 | 7.16 | 7/26/2029 | 6/1/2015 | 130.79326 | 130.7932567 | 130.7932567 | 130.7932567 | 127.5435904 | 122.4716156 | 117.7024366 | 113.2143938 | 108.9875698 |
| 150601A00925 | 6/1/2015 | 5.73 | 7/21/2020 | 6/1/2015 | 100.13915 | 100.1391514 | 100.1391514 | 100.1391514 | 100.1356796 | 100.1103557 | 100.0850672 | 100.0598139 | 100.0345957 |
| 150601A00932 | 6/1/2015 | 5.84 | 10/20/2020 | 6/1/2015 | 101.72867 | 101.7286703 | 101.7286703 | 101.7286703 | 101.6769246 | 101.3678745 | 101.0607346 | 100.755487 | 100.4521141 |
| 150601A00966 | 6/1/2015 | 4.84 | 2/3/2023 | 6/1/2015 | 106.14111 | 106.1411132 | 106.1411132 | 106.1411132 | 105.8498237 | 104.5110725 | 103.2027976 | 101.9240492 | 100.6739152 |
| 020918A00047 | 9/18/2002 | 4.72 | 9/19/2022 | 9/18/2002 | 105.78824 | 105.7882369 | 105.7882369 | 105.7882369 | 105.5153029 | 104.2385341 | 102.9926006 | 101.7764495 | 100.5890745 |
| 080220A00035 | 2/20/2008 | 4.65 | 2/22/2022 | 2/20/2008 | 105.31366 | 105.3136625 | 105.3136625 | 105.3136625 | 105.0791928 | 103.8963144 | 102.7354399 | 101.5959675 | 100.4773174 |
| 120210A00004 | 2/10/2012 | 1.98 | 2/10/2022 | 2/10/2012 | 102.79001 | 102.7900091 | 102.7900091 | 102.7900091 | 102.4931673 | 100.9994527 | 99.53570469 | 98.10107264 | 96.69473823 |
| 120217A00007 | 2/17/2012 | 2.25 | 2/20/2024 | 2/17/2012 | 106.02679 | 106.0267895 | 106.0267895 | 106.0267895 | 105.1322957 | 102.2962951 | 99.56233215 | 96.92599067 | 94.38307616 |
| 120523A00024 | 5/23/2012 | 2.6 | 5/24/2027 | 5/23/2012 | 109.02575 | 109.0257483 | 109.0257483 | 109.0257483 | 106.9802117 | 103.0403739 | 99.30263544 | 95.75464463 | 92.38490058 |
| 121219A00045 | 12/19/2012 | 1.75 | 12/19/2022 | 12/19/2017 | 102.01957 | 102.0195733 | 102.0195733 | 102.0195733 | 101.7226304 | 100.3545081 | 99.01777965 | 97.71145087 | 96.43456811 |
| 130925A00035 | 9/25/2013 | 1.53 | 6/25/2025 | 9/25/2013 | 104.27871 | 104.2787116 | 104.2787116 | 104.2787116 | 103.1889267 | 100.2027863 | 97.33727088 | 94.58649561 | 91.94490503 |
| 150601A00035 | 6/1/2015 | 5.73 | 4/1/2038 | 6/1/2015 | 149.45903 | 149.459035 | 149.459035 | 146.2665555 | 136.7560913 | 126.975109 | 118.2218717 | 110.3691019 | 103.3069224 |
| 150601A00330 | 6/1/2015 | 2.6 | 8/2/2023 | 6/1/2015 | 103.54811 | 103.5481146 | 103.5481146 | 103.5481146 | 103.1841925 | 101.6331037 | 100.1217715 | 98.64885069 | 97.21305234 |
| 150601A00394 | 6/1/2015 | 2.1 | 12/31/2020 | 6/1/2015 | 100.4765 | 100.4765034 | 100.4765034 | 100.4765034 | 100.4314427 | 100.1706272 | 99.91173107 | 99.65473079 | 99.39960332 |
| 150601A00438 | 6/1/2015 | 1.91 | 3/18/2021 | 6/1/2015 | 100.59461 | 100.594606 | 100.594606 | 100.594606 | 100.5284096 | 100.1639553 | 99.80316494 | 99.44597726 | 99.09233232 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150601A00448 | 6/1/2015 | 2.61 | 4/26/2024 | 6/1/2015 | 104.41124 | 104.4112376 | 104.4112376 | 104.4112376 | 103.896311 | 101.9754662 | 100.1123336 | 98.30470055 | 96.5504559 |
| 150601A00451 | 6/1/2015 | 1.91 | 4/30/2021 | 6/1/2015 | 100.70252 | 100.7025185 | 100.7025185 | 100.7025185 | 100.6214059 | 100.1885412 | 99.76086315 | 99.33826751 | 98.9206529 |
| 150601A00458 | 6/1/2015 | 1.86 | 5/14/2021 | 6/1/2015 | 100.70013 | 100.7001326 | 100.7001326 | 100.7001326 | 100.6166301 | 100.1717437 | 99.73225712 | 99.29806121 | 98.8690499 |
| 150601A00889 | 6/1/2015 | 6.55 | 3/2/2029 | 6/1/2015 | 131.80146 | 131.801462 | 131.801462 | 131.801462 | 128.159387 | 122.6164466 | 117.4122395 | 112.5224748 | 107.9248021 |
| 150601A00906 | 6/1/2015 | 6.2 | 11/1/2029 | 6/1/2015 | 131.81636 | 131.8163552 | 131.8163552 | 131.8159217 | 127.6922349 | 121.8611737 | 116.4073723 | 111.3022159 | 106.519502 |
| 150601A00947 | 6/1/2015 | 6.19 | 8/20/2021 | 6/1/2015 | 106.67129 | 106.6712885 | 106.6712885 | 106.6712885 | 106.455752 | 105.3179877 | 104.2052943 | 103.116843 | 102.0518412 |
| 150601A00953 | 6/1/2015 | 6.6 | 6/10/2032 | 6/1/2015 | 145.12788 | 145.1278762 | 145.1278762 | 144.5762322 | 137.6736433 | 129.696278 | 122.3611781 | 115.6084602 | 109.3843792 |
| 150601A00955 | 6/1/2015 | 5.84 | 7/15/2032 | 6/1/2015 | 134.28595 | 134.2859499 | 134.2859499 | 133.8881695 | 128.4486735 | 121.7933829 | 115.6465638 | 109.9622027 | 104.6989178 |
| 150601A01011 | 6/1/2015 | 5.05 | 9/8/2025 | 6/1/2015 | 112.24612 | 112.2461227 | 112.2461227 | 112.2461227 | 111.3149794 | 108.6070354 | 106.0019292 | 103.4948337 | 101.081185 |
| 150601A01041 | 6/1/2015 | 5.99 | 10/2/2036 | 6/1/2015 | 155.0317 | 155.0316958 | 155.0316958 | 151.8125595 | 141.420554 | 130.8688806 | 121.4135026 | 112.9230136 | 105.283213 |
| 151123A00067 | 11/23/2015 | 1.68 | 11/23/2020 | 11/23/2015 | 100.35954 | 100.3595357 | 100.3595357 | 100.3595357 | 100.3178813 | 100.0666847 | 99.81699734 | 99.56880436 | 99.32209094 |
| 160210A00068 | 2/10/2016 | 2.76 | 2/10/2031 | 2/10/2021 | 113.13734 | 113.1373411 | 113.1373411 | 113.0526089 | 109.0443915 | 103.7953462 | 98.91216549 | 94.36474251 | 90.12572683 |
| 180716A00046 | 7/16/2018 | 2.9 | 7/16/2025 | 7/16/2018 | 107.1608 | 107.1607994 | 107.1607994 | 107.1607994 | 106.2985928 | 103.7199921 | 101.2372847 | 98.84606103 | 96.54214764 |
| 190102A00020 | 1/2/2019 | 2.97 | 1/3/2034 | 1/2/2019 | 119.66245 | 119.6624511 | 119.6624511 | 118.7351039 | 112.7154754 | 105.9512892 | 99.77078685 | 94.11491614 | 88.9312218 |
| 190618A00009 | 6/18/2019 | 2.34 | 6/18/2021 | 6/18/2019 | 101.13105 | 101.1310488 | 101.1310488 | 101.1310488 | 101.0263717 | 100.4808031 | 99.94267274 | 99.41181196 | 98.88805749 |
| 200316A00008 | 3/16/2020 | 1.31 | 3/15/2030 | 3/16/2020 | 104.96028 | 104.9602782 | 104.9602782 | 104.9492465 | 101.6095783 | 96.9714821 | 92.63784031 | 88.5850794 | 84.79165907 |
| 200326A00037 | 3/26/2020 | 1.78 | 3/26/2035 | 3/26/2020 | 110.92705 | 110.9270541 | 110.9270541 | 109.54659 | 103.2622094 | 96.50843301 | 90.38400467 | 84.82050553 | 79.75769898 |
| 200330A00010 | 3/30/2020 | 0.61 | 3/30/2022 | 3/30/2020 | 100.30178 | 100.3017821 | 100.3017821 | 100.3017821 | 100.1264619 | 99.21591316 | 98.32213499 | 97.44465575 | 96.58302199 |
| 120119A00015 | 1/19/2012 | 2.27 | 1/19/2024 | 1/19/2012 | 105.90347 | 105.9034711 | 105.9034711 | 105.9034711 | 105.0538335 | 102.3038681 | 99.65102891 | 97.09119679 | 94.62045417 |
| 120315A00002 | 3/14/2012 | 2.56 | 3/15/2027 | 3/14/2022 | 109.23994 | 109.2399358 | 109.2399358 | 109.2399358 | 107.3248413 | 103.5153725 | 99.89693066 | 96.45796195 | 93.18770638 |
| 120621A00009 | 6/21/2012 | 3.18 | 6/21/2032 | 6/21/2012 | 123.28376 | 123.2837566 | 123.2837566 | 121.8861204 | 114.3739181 | 106.4678003 | 99.29695255 | 92.78363443 | 86.8589945 |
| 121214A00014 | 12/14/2012 | 2.16 | 12/14/2027 | 12/14/2017 | 108.25234 | 108.2523391 | 108.2523391 | 108.2523391 | 105.9970267 | 102.0317882 | 98.28352219 | 94.73805864 | 91.38226715 |
| 130624A00017 | 6/24/2013 | 3.4 | 6/26/2023 | 6/24/2013 | 108.63451 | 108.6345112 | 108.6345112 | 108.6345112 | 107.8467119 | 105.0067857 | 102.2598582 | 99.60233706 | 97.03079079 |
| 140311A00037 | 3/11/2014 | 2.59 | 3/11/2021 | 3/11/2014 | 101.64172 | 101.6417244 | 101.6417244 | 101.6417244 | 101.5040699 | 100.7901351 | 100.0861068 | 99.39177986 | 98.70695497 |
| 141124A00024 | 11/24/2014 | 2.27 | 11/30/2021 | 11/24/2014 | 102.94588 | 102.9458786 | 102.9458786 | 102.9458786 | 102.6921618 | 101.3230224 | 99.97909669 | 98.65974479 | 97.3643479 |
| 150601A00030 | 6/1/2015 | 5.28 | 11/26/2027 | 6/1/2015 | 132.68099 | 132.6809947 | 132.6809947 | 132.6809947 | 127.4136603 | 120.510539 | 114.0775778 | 108.0792257 | 102.4828297 |
| 150601A00040 | 6/1/2015 | 5.45 | 7/14/2023 | 6/1/2015 | 108.08041 | 108.080406 | 108.080406 | 108.080406 | 107.7004612 | 106.0749728 | 104.4909564 | 102.9470155 | 101.4418119 |
| 150601A00165 | 6/1/2015 | 2.66 | 6/4/2032 | 6/1/2015 | 115.08967 | 115.0896701 | 115.0896701 | 114.7321155 | 109.8311188 | 103.9431052 | 98.51186371 | 93.49576017 | 88.85736392 |
| 150601A00348 | 6/1/2015 | 2.11 | 9/16/2020 | 6/1/2015 | 100.19505 | 100.1950456 | 100.1950456 | 100.1950456 | 100.1789708 | 100.0710643 | 99.96351599 | 99.85632411 | 99.74948669 |
| 150601A00395 | 6/1/2015 | 2.86 | 1/3/2024 | 6/1/2015 | 104.48265 | 104.4826529 | 104.4826529 | 104.4826529 | 104.0366536 | 102.2703212 | 100.553648 | 98.88483016 | 97.26214298 |
| 150601A00426 | 6/1/2015 | 3.37 | 2/21/2029 | 6/1/2015 | 113.11927 | 113.1192673 | 113.1192673 | 113.1192673 | 110.3967881 | 106.0296862 | 101.918062 | 98.04410422 | 94.39139588 |
| 150601A00473 | 6/1/2015 | 2.22 | 5/31/2024 | 6/1/2015 | 104.11846 | 104.1184605 | 104.1184605 | 104.1184605 | 103.5800134 | 101.6094182 | 99.69936588 | 97.84749317 | 96.05154695 |
| 150601A00475 | 6/1/2015 | 3.04 | 6/1/2029 | 6/1/2015 | 112.07481 | 112.0748144 | 112.0748144 | 112.0748144 | 109.1881064 | 104.7268087 | 100.5340727 | 96.59067319 | 92.87892726 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150601A00492 | 6/1/2015 | 1.92 | 6/25/2021 | 6/1/2015 | 100.81686 | 100.8168578 | 100.8168578 | 100.8168578 | 100.7204251 | 100.2174573 | 99.7213544 | 99.23196043 | 98.74912418 |
| 150601A00527 | 6/1/2015 | 2.5 | 7/26/2024 | 6/1/2015 | 104.46976 | 104.4697607 | 104.4697607 | 104.4697607 | 103.8960795 | 101.8547054 | 99.87774679 | 97.96263296 | 96.10691512 |
| 150601A00529 | 6/1/2015 | 2.08 | 7/28/2021 | 6/1/2015 | 100.90476 | 100.9047607 | 100.9047607 | 100.9047607 | 100.8072381 | 100.2989618 | 99.79769753 | 99.30328403 | 98.81556507 |
| 150601A00660 | 6/1/2015 | 2.26 | 1/5/2022 | 6/1/2015 | 103.18725 | 103.1872499 | 103.1872499 | 103.1872499 | 102.900499 | 101.4105921 | 99.95014796 | 98.51836493 | 97.11447012 |
| 150601A00679 | 6/1/2015 | 1.86 | 2/4/2022 | 6/1/2015 | 101.259 | 101.258997 | 101.258997 | 101.258997 | 101.1060381 | 100.3009134 | 99.51015069 | 98.73335346 | 97.97014029 |
| 150601A00739 | 6/1/2015 | 2.35 | 5/6/2025 | 6/1/2015 | 104.93209 | 104.932091 | 104.932091 | 104.932091 | 104.1441364 | 101.7244307 | 99.39245453 | 97.14426519 | 94.97612659 |
| 150601A00847 | 6/1/2015 | 6.59 | 1/31/2022 | 6/1/2015 | 109.26641 | 109.2664094 | 109.2664094 | 109.2664094 | 108.9752866 | 107.4921895 | 106.0387012 | 104.6139851 | 103.2172364 |
| 150601A00912 | 6/1/2015 | 5.96 | 11/30/2029 | 6/1/2015 | 130.58628 | 130.5862761 | 130.5862761 | 130.5857243 | 126.4758538 | 120.6794768 | 115.2589067 | 110.1855955 | 105.433405 |
| 150601A00928 | 6/1/2015 | 5.94 | 8/21/2030 | 6/1/2015 | 129.40411 | 129.4041109 | 129.4041109 | 129.3661175 | 125.3316512 | 119.7423232 | 114.5227979 | 109.6439543 | 105.0792361 |
| 150601A00919 | 6/1/2015 | 7.41 | 6/7/2030 | 6/1/2015 | 141.36361 | 141.3636113 | 141.3636113 | 141.331961 | 136.3945404 | 129.8140339 | 123.6819224 | 117.962472 | 112.6231059 |
| 150601A00923 | 6/1/2015 | 7.03 | 7/7/2020 | 6/1/2015 | 100.1316 | 100.1316014 | 100.1316014 | 100.1316014 | 100.1289375 | 100.1095027 | 100.0900881 | 100.0706938 | 100.0513196 |
| 150601A00941 | 6/1/2015 | 6.23 | 3/8/2021 | 6/1/2015 | 104.09525 | 104.0952486 | 104.0952486 | 104.0952486 | 103.9628543 | 103.2732275 | 102.5929414 | 101.9218061 | 101.2596367 |
| 150601A00971 | 6/1/2015 | 6.42 | 6/20/2033 | 6/1/2015 | 145.77431 | 145.7743078 | 145.7743078 | 144.7465747 | 137.1044021 | 128.6255036 | 120.876316 | 113.7841796 | 107.2843739 |
| 151026A00034 | 10/26/2015 | 2.88 | 10/28/2030 | 10/26/2020 | 114.53403 | 114.5340286 | 114.5340286 | 114.4775609 | 110.55733 | 105.3291721 | 100.4590384 | 95.91796729 | 91.67960598 |
| 160331A00096 | 3/31/2016 | 1.32 | 11/30/2020 | 3/31/2016 | 100.27288 | 100.2728764 | 100.2728764 | 100.2728764 | 100.2304166 | 99.9755874 | 99.72232683 | 99.4706188 | 99.22044753 |
| 160928A00032 | 9/28/2016 | 2.52 | 9/29/2036 | 9/28/2016 | 118.18824 | 118.1882373 | 118.1882373 | 115.8663305 | 108.3741362 | 100.6533008 | 93.72480996 | 87.49372536 | 81.87761135 |
| 170612A00024 | 6/12/2017 | 1.72 | 6/13/2022 | 6/12/2017 | 101.69009 | 101.6900937 | 101.6900937 | 101.6900937 | 101.4828176 | 100.4403387 | 99.41825306 | 98.4159797 | 97.43295976 |
| 170705A00029 | 7/5/2017 | 1.98 | 7/5/2022 | 7/5/2017 | 101.84458 | 101.8445812 | 101.8445812 | 101.8445812 | 101.6271461 | 100.5467491 | 99.48788815 | 98.44994497 | 97.43232451 |
| 180914A00035 | 9/14/2018 | 2.82 | 9/15/2020 | 9/14/2018 | 100.40094 | 100.4009446 | 100.4009446 | 100.4009446 | 100.3773569 | 100.2202051 | 100.0636024 | 99.90754588 | 99.75203241 |
| 181220A00006 | 12/20/2018 | 2.93 | 12/20/2022 | 12/20/2018 | 103.44401 | 103.4440068 | 103.4440068 | 103.4440068 | 103.1652707 | 101.866147 | 100.5958331 | 99.35344825 | 98.13814625 |
| 190111A00047 | 1/11/2019 | 2.8 | 1/11/2021 | 1/11/2019 | 100.85136 | 100.8513576 | 100.8513576 | 100.8513576 | 100.7928656 | 100.4601959 | 100.130206 | 99.8028605 | 99.47812426 |
| 200130A00027 | 1/31/2020 | 1.79 | 1/31/2025 | 1/31/2020 | 103.49895 | 103.4989485 | 103.4989485 | 103.4989485 | 102.783329 | 100.4754764 | 98.24767576 | 96.09646675 | 94.01856429 |
| 200203A00046 | 2/3/2020 | 1.98 | 2/3/2040 | 2/3/2020 | 118.50425 | 118.5042505 | 118.5042505 | 114.568231 | 105.5100541 | 96.70921218 | 88.953142 | 82.09767903 | 76.02042571 |
| 200311A00027 | 3/11/2020 | 1.52 | 3/9/2035 | 3/11/2020 | 108.99989 | 108.9998909 | 108.9998909 | 107.6260626 | 101.4075695 | 94.73977885 | 88.69501041 | 83.20542132 | 78.21129086 |
| 200331A00056 | 3/31/2020 | 0.96 | 3/29/2030 | 3/31/2020 | 104.18201 | 104.1820057 | 104.1820057 | 104.1704186 | 100.806423 | 96.15801289 | 91.81657594 | 87.75823543 | 83.96118196 |
| 970806A00018 | 8/1/1997 | 6.7 | 10/23/2026 | 8/1/1997 | 121.00691 | 121.0069063 | 121.0069063 | 121.0069063 | 119.5291628 | 116.0307565 | 112.6878783 | 109.492097 | 106.4355052 |
| 180123A00010 | 1/23/2018 | 2.68 | 1/24/2028 | 1/23/2018 | 109.93322 | 109.9332197 | 109.9332197 | 109.9332197 | 107.8542906 | 103.9932729 | 100.3356332 | 96.86854132 | 93.58008095 |
| 180126A00018 | 1/26/2018 | 2.34 | 1/26/2023 | 1/26/2018 | 103.00405 | 103.0040467 | 103.0040467 | 103.0040467 | 102.7126022 | 101.371731 | 100.0613448 | 98.78049533 | 97.52827198 |
| 180529A00057 | 5/29/2018 | 3.09 | 5/30/2028 | 5/29/2018 | 114.29932 | 114.299322 | 114.299322 | 114.299322 | 111.0539639 | 106.223227 | 101.6916775 | 97.43764735 | 93.44120676 |
| 180725A00034 | 7/25/2018 | 2.79 | 7/25/2022 | 7/25/2018 | 102.93527 | 102.9352728 | 102.9352728 | 102.9352728 | 102.7148152 | 101.6209749 | 100.5490155 | 99.49830561 | 98.46823831 |
| 180928A00077 | 9/28/2018 | 2.85 | 9/28/2021 | 9/28/2018 | 101.84999 | 101.8499893 | 101.8499893 | 101.8499893 | 101.7212595 | 101.0440588 | 100.3783673 | 99.72385881 | 99.08022041 |
| 181120A00026 | 11/20/2018 | 2.92 | 11/20/2020 | 11/20/2018 | 100.6677 | 100.6677032 | 100.6677032 | 100.6677032 | 100.6263115 | 100.3761503 | 100.1274759 | 99.88027385 | 99.63452967 |
| 181211A00042 | 12/11/2018 | 3.7 | 12/11/2028 | 12/11/2023 | 122.34585 | 122.3458525 | 122.3458525 | 122.3458525 | 116.5894577 | 109.8043731 | 103.5240635 | 97.70655863 | 92.31364712 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190102A00022 | 1/2/2019 | 2.97 | 1/3/2034 | 1/2/2019 | 119.66236 | 119.6623575 | 119.6623575 | 118.7350437 | 112.7154537 | 105.9512964 | 99.77081779 | 94.11496646 | 88.9312878 |
| 190102A00024 | 1/2/2019 | 2.97 | 1/3/2034 | 1/2/2019 | 119.66241 | 119.6624078 | 119.6624078 | 118.7350787 | 112.7154678 | 105.9512947 | 99.77080295 | 94.1149407 | 88.93125303 |
| 190520A00020 | 5/20/2019 | 2.39 | 5/20/2026 | 5/20/2019 | 106.8985 | 106.8985009 | 106.8985009 | 106.8985009 | 105.698273 | 102.6845827 | 99.79984568 | 97.0373455 | 94.39076712 |
| 190627A00020 | 6/27/2019 | 2.28 | 6/25/2021 | 6/27/2019 | 101.10142 | 101.1014168 | 101.1014168 | 101.1014168 | 100.9964686 | 100.4494421 | 99.90991273 | 99.37770943 | 98.85266645 |
| 191114A00012 | 11/14/2019 | 1.89 | 11/15/2021 | 11/14/2019 | 101.22546 | 101.225463 | 101.225463 | 101.225463 | 101.0837989 | 100.3318883 | 99.59290358 | 98.86648926 | 98.15230343 |
| 191114A00014 | 11/14/2019 | 1.9 | 11/14/2023 | 11/14/2019 | 102.83807 | 102.8380664 | 102.8380664 | 102.8380664 | 102.4061819 | 100.6667568 | 98.97529155 | 97.33007187 | 95.72945789 |
| 191231A00021 | 12/31/2019 | 1.9 | 2/28/2023 | 12/31/2019 | 102.09917 | 102.0991686 | 102.0991686 | 102.0991686 | 101.8224455 | 100.5342214 | 99.27463652 | 98.04281371 | 96.83791014 |
| 200317A00022 | 3/17/2020 | 0.97 | 3/17/2022 | 3/17/2020 | 100.63531 | 100.6353122 | 100.6353122 | 100.6353122 | 100.4601431 | 99.54907221 | 98.65474485 | 97.77669125 | 96.91445972 |
| 200317A00024 | 3/17/2020 | 1.09 | 3/17/2025 | 3/17/2020 | 101.91418 | 101.914181 | 101.914181 | 101.914181 | 101.1575877 | 98.79664748 | 96.52014264 | 94.32432738 | 92.20565003 |
| 200428A00018 | 4/28/2020 | 1.33 | 4/27/2035 | 4/28/2020 | 107.63412 | 107.6341226 | 107.6341226 | 106.2275825 | 100.0145147 | 93.37951043 | 87.36875824 | 81.91387035 | 76.95469152 |
| 150601A01055 | 6/1/2015 | 5.29 | 3/16/2022 | 6/1/2015 | 108.53969 | 108.5396912 | 108.5396912 | 108.5396912 | 108.1911627 | 106.4887588 | 104.8224173 | 103.1910509 | 101.5936162 |
| 151119A00027 | 11/19/2015 | 1.64 | 11/19/2020 | 11/19/2015 | 100.34639 | 100.3463873 | 100.3463873 | 100.3463873 | 100.3052168 | 100.0562387 | 99.80873593 | 99.56269401 | 99.31809878 |
| 170705A00027 | 7/5/2017 | 1.73 | 7/6/2020 | 7/5/2017 | 100.0235 | 100.0235036 | 100.0235036 | 100.0235036 | 100.021225 | 100.0046006 | 99.98799277 | 99.97140139 | 99.95482645 |
| 170705A00028 | 7/5/2017 | 1.86 | 7/6/2021 | 7/5/2017 | 100.93074 | 100.9307387 | 100.9307387 | 100.9307387 | 100.8178688 | 100.2341826 | 99.65902206 | 99.09218078 | 98.53345921 |
| 180719A00077 | 7/19/2018 | 3.06 | 7/19/2023 | 7/19/2018 | 108.06336 | 108.0633567 | 108.0633567 | 108.0633567 | 107.233559 | 104.3179891 | 101.5004289 | 98.77700288 | 96.14401317 |
| 180727A00030 | 7/27/2018 | 2.89 | 7/27/2021 | 7/27/2018 | 101.54744 | 101.5474403 | 101.5474403 | 101.5474403 | 101.4337239 | 100.8430763 | 100.261164 | 99.68777162 | 99.12269123 |
| 180830A00066 | 8/30/2018 | 3.02 | 8/30/2023 | 8/30/2018 | 108.2305 | 108.2304999 | 108.2304999 | 108.2304999 | 107.3418009 | 104.3244573 | 101.4112968 | 98.59807829 | 95.88076187 |
| 181003A00072 | 10/3/2018 | 2.78 | 10/2/2020 | 10/3/2018 | 100.51583 | 100.515829 | 100.515829 | 100.515829 | 100.4857375 | 100.2919964 | 100.0991011 | 99.90704589 | 99.71582479 |
| 181029A00097 | 10/29/2018 | 3.53 | 10/27/2028 | 10/29/2018 | 120.86987 | 120.8698704 | 120.8698704 | 120.8698704 | 115.4278212 | 108.9053411 | 102.8611776 | 97.25612951 | 92.05445879 |
| 181214A00026 | 12/14/2018 | 2.92 | 12/14/2020 | 12/14/2018 | 100.77464 | 100.7746373 | 100.7746373 | 100.7746373 | 100.7249949 | 100.4347445 | 100.1465125 | 99.8602757 | 99.57601137 |
| 190118A00031 | 1/18/2019 | 2.81 | 1/19/2021 | 1/18/2019 | 100.85953 | 100.8595262 | 100.8595262 | 100.8595262 | 100.8003817 | 100.4645881 | 100.1315419 | 99.80120598 | 99.47354369 |
| 190813A00019 | 8/13/2019 | 2.13 | 8/13/2021 | 8/13/2019 | 101.17093 | 101.1709311 | 101.1709311 | 101.1709311 | 101.0501825 | 100.4221976 | 99.80411029 | 99.19566117 | 98.59660058 |
| 200310A00067 | 3/10/2020 | 0.94 | 3/10/2025 | 3/10/2020 | 101.54798 | 101.5479841 | 101.5479841 | 101.5479841 | 100.7932421 | 98.43845229 | 96.16790081 | 93.97785063 | 91.86475837 |
| 200521A00005 | 5/21/2020 | 0.75 | 5/21/2030 | 5/21/2020 | 103.19123 | 103.1912314 | 103.1912314 | 103.1706465 | 99.71857407 | 95.03288762 | 90.66168471 | 86.58014036 | 82.76560861 |
| 970806A00017 | 8/1/1997 | 7.02 | 7/23/2026 | 8/1/1997 | 121.15195 | 121.1519461 | 121.1519461 | 121.1519461 | 119.7969271 | 116.4269584 | 113.2016661 | 110.1134521 | 107.1551763 |
| 970806A00059 | 8/1/1997 | 8.25 | 9/22/2025 | 8/1/1997 | 138.09131 | 138.0913097 | 138.0913097 | 138.0913097 | 135.4417324 | 129.94838 | 124.7351284 | 119.7858214 | 115.0853333 |
| 180814A00020 | 8/14/2018 | 2.7 | 8/14/2020 | 8/14/2018 | 100.25529 | 100.2552892 | 100.2552892 | 100.2552892 | 100.2403542 | 100.1349764 | 100.0298337 | 99.92492527 | 99.82025027 |
| 181015A00043 | 10/15/2018 | 2.91 | 10/15/2020 | 10/15/2018 | 100.5345 | 100.5344986 | 100.5344986 | 100.5344986 | 100.5026194 | 100.3001777 | 100.0986793 | 99.89811714 | 99.69848409 |
| 190513A00026 | 5/13/2019 | 2.55 | 5/13/2021 | 5/13/2019 | 101.15162 | 101.1516188 | 101.1516188 | 101.1516188 | 101.0567559 | 100.5541641 | 100.0578467 | 99.56767343 | 99.08351825 |
| 200311A00028 | 3/11/2020 | 1.04 | 3/12/2024 | 3/11/2020 | 101.5017 | 101.5016993 | 101.5016993 | 101.5016993 | 100.9754181 | 99.01266732 | 97.10930781 | 95.26304145 | 93.47167725 |
| 150601A00848 | 6/1/2015 | 6.36 | 2/18/2022 | 6/1/2015 | 105.13287 | 105.132867 | 105.132867 | 105.132867 | 104.9711042 | 104.1217161 | 103.2875717 | 102.4682488 | 101.663341 |
| 150601A00864 | 6/1/2015 | 7.37 | 3/31/2028 | 6/1/2015 | 131.48906 | 131.4890598 | 131.4890598 | 131.4890598 | 128.6805633 | 123.7564745 | 119.1033101 | 114.7034119 | 110.5404133 |
| 150601A00897 | 6/1/2015 | 6.15 | 5/28/2029 | 6/1/2015 | 129.72425 | 129.7242517 | 129.7242517 | 129.7242517 | 126.0860266 | 120.6185905 | 115.4884622 | 110.671176 | 106.1442441 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150601A00900 | 6/1/2015 | 6.06 | 6/28/2024 | 6/1/2015 | 112.33551 | 112.335514 | 112.335514 | 112.335514 | 111.7295321 | 109.5332637 | 107.4053012 | 105.3429599 | 103.3436802 |
| 150601A00905 | 6/1/2015 | 6.14 | 10/29/2029 | 6/1/2015 | 131.2179 | 131.2178956 | 131.2178956 | 131.2178511 | 127.1755945 | 121.4097944 | 116.0144715 | 110.9617092 | 106.2259303 |
| 150601A00929 | 6/1/2015 | 5.91 | 8/30/2030 | 6/1/2015 | 133.18152 | 133.1815184 | 133.1815184 | 133.1242709 | 128.232282 | 121.8722637 | 115.9561337 | 110.4477328 | 105.3141629 |
| 150601A00946 | 6/1/2015 | 6.28 | 8/22/2031 | 6/1/2015 | 139.32746 | 139.3274583 | 139.3274583 | 139.0776335 | 133.1307997 | 125.9265418 | 119.2663858 | 113.1025985 | 107.392063 |
| 150601A00952 | 6/1/2015 | 6.34 | 2/13/2032 | 6/1/2015 | 141.81272 | 141.8127172 | 141.8127172 | 141.3985412 | 134.9176938 | 127.2989558 | 120.2787398 | 113.8025404 | 107.8213149 |
| 150601A00988 | 6/1/2015 | 4.57 | 3/22/2024 | 6/1/2015 | 107.94353 | 107.9435259 | 107.9435259 | 107.9435259 | 107.4405564 | 105.5228645 | 103.661402 | 101.8540524 | 100.098795 |
| 150601A00997 | 6/1/2015 | 5.46 | 9/30/2022 | 6/1/2015 | 111.35713 | 111.3571291 | 111.3571291 | 111.3571291 | 110.830345 | 108.6179871 | 106.4632486 | 104.3641867 | 102.3189415 |
| 150601A01005 | 6/1/2015 | 5.82 | 3/10/2025 | 6/1/2015 | 123.72017 | 123.7201689 | 123.7201689 | 123.7201689 | 121.7985066 | 117.2894966 | 112.9909572 | 108.8916883 | 104.9811545 |
| 150601A01013 | 6/1/2015 | 5.21 | 9/29/2023 | 6/1/2015 | 115.33181 | 115.3318138 | 115.3318138 | 115.3318138 | 114.3855263 | 111.2156081 | 108.1562804 | 105.2029594 | 102.3512843 |
| 150601A01020 | 6/1/2015 | 5.22 | 10/19/2020 | 6/1/2015 | 100.80183 | 100.8018283 | 100.8018283 | 100.8018283 | 100.7757259 | 100.6105521 | 100.4461606 | 100.2825455 | 100.1197008 |
| 150601A01030 | 6/1/2015 | 5.43 | 9/30/2020 | 6/1/2015 | 101.32627 | 101.3262693 | 101.3262693 | 101.3262693 | 101.2855425 | 101.0305115 | 100.7767685 | 100.5243038 | 100.2731078 |
| 150601A01047 | 6/1/2015 | 5.35 | 12/30/2024 | 6/1/2015 | 121.39568 | 121.3956846 | 121.3956846 | 121.3956846 | 119.5900896 | 115.2106578 | 111.0309486 | 107.0406292 | 103.2299603 |
| 150601A01051 | 6/1/2015 | 4.91 | 2/7/2025 | 6/1/2015 | 120.0303 | 120.0303019 | 120.0303019 | 120.0303019 | 118.1485221 | 113.7069427 | 109.4720558 | 105.4329592 | 101.5793901 |
| 150601A01056 | 6/1/2015 | 4.7 | 3/16/2022 | 6/1/2015 | 107.56511 | 107.5651075 | 107.5651075 | 107.5651075 | 107.2182251 | 105.5244087 | 103.8664982 | 102.2434105 | 100.6541064 |
| 151110A00011 | 11/10/2015 | 3.23 | 11/12/2030 | 11/10/2020 | 115.40987 | 115.4098692 | 115.4098692 | 115.3458234 | 111.4001377 | 106.1468044 | 101.2535019 | 96.6910497 | 92.43290158 |
| 160210A00062 | 2/10/2016 | 1.36 | 2/10/2021 | 2/10/2016 | 100.41627 | 100.4162652 | 100.4162652 | 100.4162652 | 100.3490759 | 99.9747127 | 99.60379081 | 99.23625795 | 98.87206292 |
| 160928A00030 | 9/28/2016 | 2.52 | 9/29/2036 | 9/28/2016 | 118.18824 | 118.1882373 | 118.1882373 | 115.8663305 | 108.3741362 | 100.6533008 | 93.72480996 | 87.49372536 | 81.87761135 |
| 160928A00042 | 9/28/2016 | 3.05 | 9/29/2036 | 9/28/2021 | 122.54225 | 122.5422488 | 122.5422488 | 120.1864147 | 112.5001435 | 104.5476825 | 97.40682918 | 90.98068107 | 85.18506588 |
| 190327A00030 | 3/27/2019 | 2.9 | 3/27/2036 | 3/27/2019 | 120.50235 | 120.5023509 | 120.5023509 | 118.6176849 | 111.4807786 | 103.9402504 | 97.13353719 | 90.97705573 | 85.39770468 |
| 190523A00038 | 5/23/2019 | 2.54 | 5/24/2021 | 5/23/2019 | 101.1529 | 101.1528957 | 101.1528957 | 101.1528957 | 101.0573037 | 100.5519929 | 100.0530509 | 99.56034385 | 99.07374213 |
| 191216A00013 | 12/16/2019 | 1.95 | 12/16/2024 | 12/16/2019 | 103.80579 | 103.8057899 | 103.8057899 | 103.8057899 | 103.1130857 | 100.8408264 | 98.64615068 | 96.5257507 | 94.47648418 |
| 150601A00976 | 6/1/2015 | 6.8 | 9/22/2033 | 6/1/2015 | 149.75973 | 149.7597272 | 149.7597272 | 148.6524931 | 140.9122952 | 132.2870911 | 124.4065432 | 117.1958867 | 110.5886146 |
| 150601A00993 | 6/1/2015 | 5.37 | 6/9/2034 | 6/1/2015 | 141.47245 | 141.4724545 | 141.4724545 | 139.9607161 | 131.9125399 | 123.2549967 | 115.3891142 | 108.231195 | 101.7072384 |
| 150601A01008 | 6/1/2015 | 5.08 | 4/15/2025 | 6/1/2015 | 111.39119 | 111.3911934 | 111.3911934 | 111.3911934 | 110.5931541 | 108.0969741 | 105.6896898 | 103.3673574 | 101.126238 |
| 150601A01015 | 6/1/2015 | 5.61 | 10/28/2025 | 6/1/2015 | 125.68187 | 125.6818665 | 125.6818665 | 125.6818665 | 123.1763334 | 118.0985024 | 113.2838089 | 108.7169126 | 104.3834536 |
| 150819A00027 | 8/19/2015 | 3.05 | 8/19/2030 | 8/19/2020 | 115.1821 | 115.1821049 | 115.1821049 | 115.1422534 | 111.319264 | 106.1429797 | 101.3158632 | 96.81006382 | 92.60020657 |
| 160506A00016 | 5/6/2016 | 1.28 | 5/6/2021 | 5/6/2016 | 100.50967 | 100.5096694 | 100.5096694 | 100.5096694 | 100.4156878 | 99.91714546 | 99.42479556 | 98.9385107 | 98.4581672 |
| 160930A00032 | 9/30/2016 | 2.15 | 9/30/2031 | 9/30/2016 | 110.48079 | 110.4807919 | 110.4807919 | 110.2881146 | 105.9284354 | 100.4968647 | 95.46590694 | 90.80080803 | 86.47015858 |
| 170616A00003 | 6/16/2017 | 1.91 | 6/17/2024 | 6/16/2017 | 103.70508 | 103.7050766 | 103.7050766 | 103.7050766 | 103.1396223 | 101.0995259 | 99.12305796 | 97.20770476 | 95.35107094 |
| 171206A00020 | 12/6/2017 | 2.62 | 12/6/2027 | 12/6/2017 | 108.83376 | 108.8337628 | 108.8337628 | 108.8337628 | 106.832675 | 103.0609297 | 99.48541128 | 96.09388395 | 92.87497375 |
| 180725A00035 | 7/25/2018 | 2.85 | 7/25/2023 | 7/25/2018 | 104.38347 | 104.3834724 | 104.3834724 | 104.3834724 | 104.0085756 | 102.4078877 | 100.8482164 | 99.32817391 | 97.84643011 |
| 181003A00044 | 10/3/2018 | 2.78 | 10/2/2020 | 10/3/2018 | 100.51583 | 100.515829 | 100.515829 | 100.515829 | 100.4857375 | 100.2919964 | 100.0991011 | 99.90704589 | 99.71582479 |
| 181226A00040 | 12/26/2018 | 2.84 | 12/28/2020 | 12/26/2018 | 100.77107 | 100.7710688 | 100.7710688 | 100.7710688 | 100.7200304 | 100.4233659 | 100.1288401 | 99.83642754 | 99.54610293 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190701A00022 | 7/1/2019 | 2.28 | 7/1/2021 | 7/1/2019 | 101.17529 | 101.1752948 | 101.1752948 | 101.1752948 | 101.0623311 | 100.4787004 | 99.90356451 | 99.3367185 | 98.77796441 |
| 191114A00013 | 11/14/2019 | 1.9 | 11/14/2022 | 11/14/2019 | 102.02918 | 102.0291785 | 102.0291785 | 102.0291785 | 101.7650658 | 100.5194607 | 99.30090631 | 98.10858656 | 96.94171688 |
| 191115A00029 | 11/15/2019 | 2.07 | 11/15/2029 | 11/15/2019 | 108.42089 | 108.4208931 | 108.4208931 | 108.4200354 | 105.2387279 | 100.6341909 | 96.32147476 | 92.27868775 | 88.4857719 |
| 200225A00049 | 2/25/2020 | 1.79 | 2/24/2040 | 2/25/2020 | 116.61599 | 116.6159864 | 116.6159864 | 112.7045367 | 103.7419201 | 95.04739886 | 87.38771686 | 80.61983915 | 74.62235308 |
| 200327A00004 | 3/27/2020 | 0.63 | 3/28/2022 | 3/27/2020 | 100.32028 | 100.3202845 | 100.3202845 | 100.3202845 | 100.1450268 | 99.23460531 | 98.34094686 | 97.46358017 | 96.60205214 |
| 150601A00935 | 6/1/2015 | 6.46 | 11/21/2030 | 6/1/2015 | 137.15189 | 137.1518871 | 137.1518871 | 137.0691295 | 131.9145438 | 125.292586 | 119.1387452 | 113.4143982 | 108.0844486 |
| 150601A00950 | 6/1/2015 | 6.76 | 12/18/2031 | 6/1/2015 | 143.13798 | 143.1379815 | 143.1379815 | 142.797786 | 136.5814738 | 129.124158 | 122.2394224 | 115.8760794 | 109.9879902 |
| 150601A00960 | 6/1/2015 | 6.49 | 12/16/2032 | 6/1/2015 | 139.50532 | 139.5053192 | 139.5053192 | 138.9735539 | 133.1206896 | 126.0714779 | 119.5740237 | 113.5771357 | 108.0349051 |
| 150601A00963 | 6/1/2015 | 4.76 | 12/27/2022 | 6/1/2015 | 105.78457 | 105.7845735 | 105.7845735 | 105.7845735 | 105.510171 | 104.2291755 | 102.9765591 | 101.7514533 | 100.5530237 |
| 150601A00978 | 6/1/2015 | 6.32 | 11/24/2033 | 6/1/2015 | 141.33534 | 141.3353367 | 141.3353367 | 140.4491064 | 133.9225715 | 126.3682239 | 119.4424389 | 113.0833272 | 107.235764 |
| 150601A00994 | 6/1/2015 | 5.86 | 6/24/2022 | 6/1/2015 | 110.81123 | 110.81123 | 110.81123 | 110.81123 | 110.3730541 | 108.4136207 | 106.5009591 | 104.6336492 | 102.8103241 |
| 150601A01014 | 6/1/2015 | 4.96 | 9/30/2020 | 6/1/2015 | 101.20854 | 101.2085401 | 101.2085401 | 101.2085401 | 101.1678559 | 100.9130972 | 100.6596254 | 100.4074306 | 100.1565033 |
| 150601A01016 | 6/1/2015 | 5.73 | 10/28/2025 | 6/1/2015 | 126.24315 | 126.2431533 | 126.2431533 | 126.2431533 | 123.7327141 | 118.640904 | 113.8127723 | 109.232953 | 104.8870615 |
| 150601A01021 | 6/1/2015 | 5.28 | 10/3/2025 | 6/1/2015 | 112.97848 | 112.9784767 | 112.9784767 | 112.9784767 | 112.0241022 | 109.275465 | 106.6320557 | 104.088898 | 101.6412884 |
| 150601A01048 | 6/1/2015 | 5.27 | 1/3/2025 | 6/1/2015 | 121.11636 | 121.1163645 | 121.1163645 | 121.1163645 | 119.3039892 | 114.9212668 | 110.7388662 | 106.7464021 | 102.9340869 |
| 160928A00041 | 9/28/2016 | 3.26 | 9/29/2036 | 9/30/2019 | 124.26742 | 124.2674232 | 124.2674232 | 121.8981461 | 114.1349766 | 106.0907394 | 98.86574245 | 92.36230503 | 86.49556673 |
| 170130A00036 | 1/30/2017 | 3.11 | 1/31/2033 | 1/30/2017 | 117.77555 | 117.7755457 | 117.7755457 | 117.1676474 | 111.7752643 | 105.5101955 | 99.7565714 | 94.46531831 | 89.59257339 |
| 170130A00039 | 1/30/2017 | 2.74 | 1/31/2028 | 1/30/2017 | 109.39066 | 109.3906591 | 109.3906591 | 109.3906591 | 107.2566987 | 103.4142401 | 99.77823181 | 96.33540145 | 93.07343897 |
| 170130A00043 | 1/30/2017 | 2.64 | 1/29/2027 | 1/30/2017 | 107.83844 | 107.8384365 | 107.8384365 | 107.8384365 | 106.2678935 | 102.9234035 | 99.7389573 | 96.70531705 | 93.81385091 |
| 170313A00041 | 3/13/2017 | 3.21 | 3/15/2032 | 3/13/2017 | 117.22375 | 117.2237473 | 117.2237473 | 116.9183407 | 112.1066327 | 106.2285199 | 100.7965935 | 95.77094733 | 91.11563498 |
| 170315A00005 | 3/15/2017 | 2.1 | 3/15/2022 | 3/15/2017 | 101.68352 | 101.6835246 | 101.6835246 | 101.6835246 | 101.5071821 | 100.5896916 | 99.68904189 | 98.80476082 | 97.93639439 |
| 190102A00015 | 1/2/2019 | 2.97 | 1/3/2034 | 1/2/2019 | 119.6626 | 119.6626043 | 119.6626043 | 118.7352194 | 112.7155267 | 105.9512914 | 99.77074756 | 94.11484187 | 88.93111812 |
| 190220A00012 | 2/20/2019 | 2.76 | 2/19/2021 | 2/20/2019 | 100.87978 | 100.8797806 | 100.8797806 | 100.8797806 | 100.81708 | 100.4665576 | 100.1192168 | 99.77500917 | 99.43388738 |
| 190604A00010 | 6/4/2019 | 2.45 | 6/4/2021 | 6/4/2019 | 101.18969 | 101.1896883 | 101.1896883 | 101.1896883 | 101.0855511 | 100.5428851 | 100.0075422 | 99.47935865 | 98.95817573 |
| 190628A00007 | 6/28/2019 | 2.28 | 6/28/2034 | 6/28/2019 | 115.35723 | 115.3572336 | 115.3572336 | 114.2642042 | 108.1450172 | 101.4035256 | 95.26262203 | 89.65975718 | 84.5395608 |
| 190823A00009 | 8/23/2019 | 1.8 | 8/23/2029 | 8/23/2019 | 107.8623 | 107.8623024 | 107.8623024 | 107.8623024 | 104.8215286 | 100.30855 | 96.07651493 | 92.10472042 | 88.37416835 |
| 191231A00027 | 12/31/2019 | 1.9 | 4/28/2023 | 12/31/2019 | 102.09917 | 102.0991657 | 102.0991657 | 102.0991657 | 101.8224404 | 100.5342079 | 99.27461503 | 98.04278464 | 96.83787389 |
| 200210A00007 | 2/10/2020 | 1.78 | 2/10/2025 | 2/10/2023 | 105.94295 | 105.9429528 | 105.9429528 | 105.9429528 | 104.5275279 | 101.0210036 | 97.670336 | 94.46750162 | 91.40494044 |
| 200401A00011 | 4/1/2020 | 0.68 | 4/3/2023 | 4/1/2020 | 100.56671 | 100.5667106 | 100.5667106 | 100.5667106 | 100.2438092 | 98.81086854 | 97.41250204 | 96.04758744 | 94.71504828 |
| 200402A00050 | 4/6/2020 | 0.73 | 4/5/2024 | 4/6/2020 | 100.85935 | 100.8593475 | 100.8593475 | 100.8593475 | 100.344917 | 98.43118952 | 96.57519039 | 94.77470081 | 93.02760423 |
| 061013A00024 | 10/13/2006 | 5.53 | 10/15/2021 | 10/13/2006 | 106.87581 | 106.8758064 | 106.8758064 | 106.8758064 | 106.6369777 | 105.3139638 | 104.0187495 | 102.7504598 | 101.5082566 |
| 110609A00010 | 6/9/2011 | 3.83 | 6/9/2021 | 6/9/2011 | 103.40073 | 103.4007349 | 103.4007349 | 103.4007349 | 103.2035559 | 102.2468095 | 101.3078292 | 100.3861226 | 99.48121591 |
| 110706A00009 | 7/6/2011 | 3.93 | 7/6/2021 | 7/6/2011 | 103.7597 | 103.7597023 | 103.7597023 | 103.7597023 | 103.5500864 | 102.5176413 | 101.5058221 | 100.5140144 | 99.54162819 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 140605A00058 | 6/6/2016 | 3.29 | 6/7/2021 | 6/6/2016 | 102.86872 | 102.8687154 | 102.8687154 | 102.8687154 | 102.6730731 | 101.7245278 | 100.7935089 | 99.87953362 | 98.98213669 |
| 140811A00047 | 8/11/2016 | 3.13 | 8/11/2021 | 8/11/2016 | 103.22153 | 103.2215315 | 103.2215315 | 103.2215315 | 103.0048712 | 101.877045 | 100.7739123 | 99.69466794 | 98.63854162 |
| 140814A00004 | 8/14/2014 | 2.25 | 8/14/2020 | 8/14/2014 | 100.24608 | 100.2460823 | 100.2460823 | 100.2460823 | 100.2280142 | 100.1033159 | 99.97894251 | 99.85489264 | 99.73116501 |
| 150211A00005 | 2/11/2015 | 2.35 | 2/15/2022 | 2/11/2015 | 103.40335 | 103.4033465 | 103.4033465 | 103.4033465 | 103.0784206 | 101.4532904 | 99.86166707 | 98.30257994 | 96.77509564 |
| 150601A00188 | 6/1/2015 | 2.06 | 8/24/2021 | 6/1/2015 | 102.04254 | 102.0425354 | 102.0425354 | 102.0425354 | 101.8251544 | 100.6691374 | 99.53926629 | 98.43466192 | 97.35448405 |
| 150601A00334 | 6/1/2015 | 3.33 | 8/9/2022 | 6/1/2015 | 106.36698 | 106.3669819 | 106.3669819 | 106.3669819 | 105.870221 | 103.7449511 | 101.6732379 | 99.65336364 | 97.68367953 |
| 150710A00025 | 7/10/2015 | 2.07 | 7/10/2020 | 7/10/2015 | 100.04861 | 100.0486147 | 100.0486147 | 100.0486147 | 100.0448161 | 100.017104 | 99.9894224 | 99.96177132 | 99.9341507 |
| 151002A00011 | 10/2/2015 | 1.65 | 10/2/2020 | 10/2/2015 | 100.35914 | 100.3591357 | 100.3591357 | 100.3591357 | 100.3173409 | 100.0572921 | 99.79858797 | 99.54121824 | 99.28517262 |
| 151002A00038 | 10/2/2015 | 2.81 | 10/2/2025 | 10/2/2015 | 113.24732 | 113.247323 | 113.247323 | 113.247323 | 110.5194139 | 105.2505682 | 100.2673555 | 95.55273304 | 91.09076989 |
| 151002A00091 | 10/2/2015 | 1.65 | 10/2/2020 | 10/2/2015 | 100.35914 | 100.3591357 | 100.3591357 | 100.3591357 | 100.3173409 | 100.0572921 | 99.79858797 | 99.54121824 | 99.28517262 |
| 151211A00037 | 12/11/2017 | 2.69 | 1/11/2023 | 12/11/2017 | 106.12871 | 106.128711 | 106.128711 | 106.128711 | 105.4844274 | 102.9478192 | 100.4856198 | 98.09520714 | 95.77406833 |
| 160208A00024 | 2/8/2016 | 1.64 | 2/8/2021 | 2/8/2016 | 100.8572 | 100.8571951 | 100.8571951 | 100.8571951 | 100.7401378 | 100.1249371 | 99.5172299 | 98.91687992 | 98.32375412 |
| 160209A00010 | 2/9/2016 | 1.57 | 2/9/2021 | 2/9/2016 | 100.81745 | 100.8174536 | 100.8174536 | 100.8174536 | 100.6998539 | 100.0820621 | 99.47182982 | 98.86901906 | 98.27349497 |
| 160211A00093 | 2/16/2016 | 2.62 | 2/16/2021 | 2/16/2016 | 101.51564 | 101.5156434 | 101.5156434 | 101.5156434 | 101.3936237 | 100.7542023 | 100.1228383 | 99.49938007 | 98.88367968 |
| 160225A00023 | 2/25/2016 | 1.66 | 2/25/2021 | 2/25/2016 | 100.93469 | 100.9346874 | 100.9346874 | 100.9346874 | 100.8079393 | 100.1460574 | 99.49283544 | 98.84810442 | 98.2116997 |
| 160302A00013 | 3/2/2016 | 1.63 | 3/2/2021 | 3/2/2016 | 101.02805 | 101.0280497 | 101.0280497 | 101.0280497 | 100.8981223 | 100.2210452 | 99.553023 | 98.89387497 | 98.24342526 |
| 160304A00015 | 3/4/2016 | 1.82 | 3/4/2021 | 3/4/2016 | 101.07147 | 101.0714674 | 101.0714674 | 101.0714674 | 100.9405702 | 100.2590823 | 99.5867674 | 98.92344125 | 98.26892453 |
| 160311A00005 | 3/11/2016 | 1.91 | 3/11/2021 | 3/11/2016 | 101.16534 | 101.1653382 | 101.1653382 | 101.1653382 | 101.0302501 | 100.3293015 | 99.63805775 | 98.9563181 | 98.28388745 |
| 081219A00006 | 12/19/2008 | 3.88 | 12/22/2023 | 12/19/2008 | 113.24157 | 113.2415684 | 113.2415684 | 113.2415684 | 112.071185 | 108.4824674 | 105.0301952 | 101.7084368 | 98.51155151 |
| 120419A00009 | 4/19/2012 | 2.76 | 4/19/2022 | 4/19/2012 | 104.49103 | 104.4910268 | 104.4910268 | 104.4910268 | 104.1072077 | 102.3008034 | 100.5345143 | 98.80717183 | 97.11765112 |
| 130211A00016 | 2/11/2013 | 2.27 | 2/15/2023 | 2/11/2013 | 105.24343 | 105.2434331 | 105.2434331 | 105.2434331 | 104.5653513 | 101.9443312 | 99.40239889 | 96.9366759 | 94.54440895 |
| 130501A00021 | 5/1/2013 | 2.27 | 5/1/2023 | 5/1/2013 | 105.65053 | 105.6505276 | 105.6505276 | 105.6505276 | 104.8846037 | 102.0563934 | 99.31896723 | 96.66894083 | 94.10307437 |
| 140701A00054 | 7/2/2014 | 2.65 | 7/2/2020 | 7/2/2014 | 100.01273 | 100.0127291 | 100.0127291 | 100.0127291 | 100.0119693 | 100.0064252 | 100.000886 | 99.99535164 | 99.98982215 |
| 141218A00039 | 12/18/2014 | 2.29 | 12/18/2020 | 12/18/2014 | 100.97076 | 100.9707628 | 100.9707628 | 100.9707628 | 100.8836495 | 100.4104011 | 99.94159467 | 99.47716777 | 99.01705915 |
| 150115A00021 | 1/17/2017 | 2.26 | 1/18/2022 | 1/17/2017 | 103.103 | 103.1029955 | 103.1029955 | 103.1029955 | 102.8018678 | 101.2575644 | 99.7441786 | 98.2608533 | 96.80676253 |
| 150601A00356 | 6/1/2015 | 3.66 | 9/22/2023 | 6/1/2015 | 110.79499 | 110.7949854 | 110.7949854 | 110.7949854 | 109.797705 | 106.5096755 | 103.3385954 | 100.2795882 | 97.32801503 |
| 150731A00040 | 7/31/2015 | 2.01 | 7/31/2020 | 7/31/2015 | 100.14804 | 100.1480412 | 100.1480412 | 100.1480412 | 100.1362642 | 100.0503762 | 99.96463296 | 99.87903421 | 99.79357958 |
| 150824A00118 | 8/24/2015 | 1.65 | 8/24/2020 | 8/24/2015 | 100.23428 | 100.2342755 | 100.2342755 | 100.2342755 | 100.2116896 | 100.0591229 | 99.90703142 | 99.75541288 | 99.60426504 |
| 150909A00003 | 9/9/2015 | 3.11 | 9/9/2025 | 9/9/2015 | 114.65811 | 114.6581059 | 114.6581059 | 114.6581059 | 111.9921468 | 106.7460154 | 101.780725 | 97.079705 | 92.62745391 |
| 151030A00022 | 10/30/2015 | 1.8 | 10/30/2020 | 10/30/2015 | 100.5204 | 100.5204036 | 100.5204036 | 100.5204036 | 100.4628329 | 100.1253962 | 99.79021794 | 99.45727544 | 99.1265465 |
| 160210A00036 | 2/10/2016 | 1.77 | 2/10/2023 | 2/10/2016 | 104.37418 | 104.3741784 | 104.3741784 | 104.3741784 | 103.7009978 | 101.0956485 | 98.5688769 | 96.11782838 | 93.73977224 |
| 160211A00086 | 2/16/2016 | 2.8 | 2/16/2022 | 2/16/2016 | 104.15214 | 104.1521359 | 104.1521359 | 104.1521359 | 103.8251379 | 102.1907076 | 100.5899971 | 99.02202835 | 97.48586068 |
| 160216A00040 | 2/16/2016 | 1.49 | 2/16/2021 | 2/16/2016 | 100.87985 | 100.8798529 | 100.8798529 | 100.8798529 | 100.758024 | 100.119778 | 99.48959838 | 98.86733297 | 98.25283323 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160216A00051 | 2/16/2016 | 1.49 | 2/16/2021 | 2/16/2016 | 100.87985 | 100.8798529 | 100.8798529 | 100.8798529 | 100.758024 | 100.119778 | 99.48959838 | 98.86733297 | 98.25283323 |
| 160303A00020 | 3/3/2016 | 2.97 | 3/3/2031 | 3/3/2016 | 130.67648 | 130.6764758 | 130.6764758 | 129.1211182 | 117.8657625 | 107.3654587 | 97.92299546 | 89.42525443 | 81.77178925 |
| 160316A00009 | 3/16/2016 | 1.95 | 3/16/2021 | 3/16/2016 | 101.21707 | 101.2170733 | 101.2170733 | 101.2170733 | 101.0790015 | 100.3642106 | 99.6595081 | 98.96468139 | 98.27952382 |
| 160331A00056 | 3/31/2016 | 2.09 | 3/30/2023 | 3/31/2016 | 104.97747 | 104.9774727 | 104.9774727 | 104.9774727 | 104.2524528 | 101.519415 | 98.87180174 | 96.30638083 | 93.82006749 |
| 161017A00015 | 10/17/2016 | 1.68 | 10/18/2021 | 10/17/2016 | 101.83635 | 101.8363548 | 101.8363548 | 101.8363548 | 101.6027068 | 100.3078103 | 99.03939763 | 97.79666468 | 96.57884025 |
| 161031A00028 | 10/31/2016 | 1.51 | 10/30/2020 | 10/31/2016 | 100.42218 | 100.4221806 | 100.4221806 | 100.4221806 | 100.3646429 | 100.027413 | 99.69244045 | 99.35970266 | 99.0291774 |
| 120614A00005 | 6/14/2012 | 2.22 | 6/15/2022 | 6/14/2012 | 104.16862 | 104.1686249 | 104.1686249 | 104.1686249 | 103.7285726 | 101.7664024 | 99.85130234 | 97.98185397 | 96.15669151 |
| 140811A00037 | 8/11/2016 | 2.97 | 8/11/2020 | 8/11/2016 | 100.31365 | 100.313654 | 100.313654 | 100.313654 | 100.2969202 | 100.18044 | 100.0642438 | 99.94833051 | 99.83269907 |
| 140923A00070 | 9/23/2014 | 2.88 | 9/23/2022 | 9/23/2014 | 105.83044 | 105.8304411 | 105.8304411 | 105.8304411 | 105.2924103 | 103.0518684 | 100.8702267 | 98.74550081 | 96.67579074 |
| 150601A00211 | 6/1/2015 | 2.63 | 9/25/2020 | 6/1/2015 | 100.55878 | 100.5587803 | 100.5587803 | 100.5587803 | 100.520551 | 100.2794553 | 100.0395189 | 99.80073337 | 99.56309056 |
| 150601A00672 | 6/1/2015 | 1.96 | 1/28/2022 | 6/1/2015 | 102.6324 | 102.6324046 | 102.6324046 | 102.6324046 | 102.3239754 | 100.7570817 | 99.22187215 | 97.71745472 | 96.24297048 |
| 150630A00091 | 6/30/2015 | 2.31 | 6/30/2021 | 6/30/2015 | 102.05888 | 102.058885 | 102.058885 | 102.058885 | 101.852449 | 100.8456953 | 99.85877944 | 98.89111977 | 97.94215706 |
| 150731A00020 | 7/31/2015 | 2.47 | 7/29/2022 | 7/31/2015 | 104.56925 | 104.5692535 | 104.5692535 | 104.5692535 | 104.0869133 | 102.0101491 | 99.98531879 | 98.01077561 | 96.08493771 |
| 150812A00026 | 8/12/2015 | 1.86 | 8/12/2020 | 8/12/2015 | 100.18858 | 100.1885781 | 100.1885781 | 100.1885781 | 100.1714153 | 100.0523064 | 99.93349483 | 99.81497929 | 99.69675868 |
| 150929A00024 | 9/29/2015 | 1.81 | 9/29/2020 | 9/29/2015 | 100.38811 | 100.3881051 | 100.3881051 | 100.3881051 | 100.3479246 | 100.0960895 | 99.84551325 | 99.59618644 | 99.34809979 |
| 151002A00007 | 10/2/2015 | 1.65 | 10/2/2020 | 10/2/2015 | 100.35914 | 100.3591357 | 100.3591357 | 100.3591357 | 100.3173409 | 100.0572921 | 99.79858797 | 99.54121824 | 99.28517262 |
| 151211A00041 | 12/11/2017 | 2.71 | 3/13/2023 | 12/11/2017 | 106.58423 | 106.5842333 | 106.5842333 | 106.5842333 | 105.8735477 | 103.1627618 | 100.535396 | 97.98834339 | 95.51863633 |
| 160205A00004 | 2/5/2016 | 1.7 | 2/5/2021 | 2/5/2016 | 100.8825 | 100.882505 | 100.882505 | 100.882505 | 100.7671342 | 100.1600403 | 99.56023955 | 98.96760119 | 98.3819975 |
| 160209A00026 | 2/9/2016 | 1.57 | 2/8/2021 | 2/9/2016 | 100.81387 | 100.8138729 | 100.8138729 | 100.8138729 | 100.6968426 | 100.0817937 | 99.47423695 | 98.87403612 | 98.2810582 |
| 160211A00005 | 2/11/2016 | 1.3 | 2/11/2021 | 2/11/2016 | 100.74174 | 100.7417351 | 100.7417351 | 100.7417351 | 100.6228357 | 99.99876044 | 99.38240599 | 98.77362963 | 98.17229214 |
| 160211A00036 | 2/11/2016 | 2.41 | 2/11/2026 | 2/11/2016 | 111.89038 | 111.8903793 | 111.8903793 | 111.8903793 | 108.7002043 | 103.1413956 | 97.90309573 | 92.96513668 | 88.30872456 |
| 160212A00002 | 2/12/2016 | 1.58 | 11/17/2020 | 2/12/2016 | 100.51515 | 100.5151456 | 100.5151456 | 100.5151456 | 100.4467971 | 100.0598721 | 99.67593096 | 99.29493917 | 98.91686276 |
| 160212A00005 | 2/12/2016 | 1.42 | 2/16/2021 | 2/12/2016 | 100.83496 | 100.8349555 | 100.8349555 | 100.8349555 | 100.7131556 | 100.0750721 | 99.44505366 | 98.82294788 | 98.20860636 |
| 160216A00007 | 2/16/2016 | 1.68 | 2/16/2021 | 2/16/2016 | 100.91304 | 100.9130362 | 100.9130362 | 100.9130362 | 100.7914058 | 100.1541627 | 99.52495759 | 98.90363891 | 98.29005904 |
| 160225A00024 | 2/25/2016 | 2.22 | 2/26/2024 | 2/25/2016 | 107.10111 | 107.1011144 | 107.1011144 | 107.1011144 | 105.8436787 | 102.2043628 | 98.7099332 | 95.35380842 | 92.12974631 |
| 160304A00016 | 3/4/2016 | 1.82 | 3/4/2021 | 3/4/2016 | 101.07147 | 101.0714674 | 101.0714674 | 101.0714674 | 100.9405702 | 100.2590823 | 99.5867674 | 98.92344125 | 98.26892453 |
| 160422A00019 | 4/22/2016 | 1.69 | 4/22/2021 | 4/22/2016 | 101.16907 | 101.1690693 | 101.1690693 | 101.1690693 | 101.0067537 | 100.191578 | 99.38951326 | 98.60024518 | 97.82346934 |
| 110706A00010 | 7/6/2011 | 3.93 | 7/6/2021 | 7/6/2011 | 103.7597 | 103.7597023 | 103.7597023 | 103.7597023 | 103.5500864 | 102.5176413 | 101.5058221 | 100.5140144 | 99.54162819 |
| 110927A00009 | 9/27/2011 | 3.07 | 9/27/2021 | 9/27/2011 | 103.51731 | 103.517313 | 103.517313 | 103.517313 | 103.2907184 | 102.0329207 | 100.8057356 | 99.60805536 | 98.43882485 |
| 111024A00013 | 10/24/2011 | 3.24 | 10/25/2021 | 10/24/2011 | 103.94789 | 103.9478883 | 103.9478883 | 103.9478883 | 103.708134 | 102.3827852 | 101.0825043 | 99.80660757 | 98.55443631 |
| 140625A00021 | 6/27/2016 | 3.2 | 6/25/2021 | 6/27/2016 | 102.91944 | 102.9194414 | 102.9194414 | 102.9194414 | 102.7146441 | 101.7168493 | 100.7384339 | 99.77883709 | 98.83751948 |
| 140923A00069 | 9/23/2014 | 2.63 | 9/23/2021 | 9/23/2014 | 102.93743 | 102.9374326 | 102.9374326 | 102.9374326 | 102.7125 | 101.4694023 | 100.2563331 | 99.07221404 | 97.91601766 |
| 150115A00022 | 1/17/2017 | 2.56 | 1/16/2024 | 1/17/2017 | 108.10159 | 108.1015933 | 108.1015933 | 108.1015933 | 106.9151293 | 103.3677687 | 99.95796632 | 96.67963837 | 93.52700491 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150601A00246 | 6/1/2015 | 2 | 12/9/2022 | 6/1/2015 | 104.5845 | 104.5845008 | 104.5845008 | 104.5845008 | 103.9744201 | 101.5343351 | 99.16394989 | 96.86088137 | 94.62284256 |
| 150601A00677 | 6/1/2015 | 2.39 | 1/30/2025 | 6/1/2015 | 110.37813 | 110.3781297 | 110.3781297 | 110.3781297 | 108.3463554 | 103.7456133 | 99.3676493 | 95.20049384 | 91.23288545 |
| 150601A00713 | 6/1/2015 | 2.2 | 4/1/2022 | 6/1/2015 | 103.33717 | 103.337172 | 103.337172 | 103.337172 | 102.9722779 | 101.2252239 | 99.51612206 | 97.84380637 | 96.20715898 |
| 150821A00008 | 8/21/2015 | 1.83 | 8/21/2020 | 8/21/2015 | 100.22371 | 100.2237096 | 100.2237096 | 100.2237096 | 100.2025088 | 100.0585018 | 99.91492063 | 99.77176329 | 99.62902791 |
| 150929A00031 | 9/29/2015 | 1.81 | 9/29/2020 | 9/29/2015 | 100.38811 | 100.3881051 | 100.3881051 | 100.3881051 | 100.3479246 | 100.0960895 | 99.84551325 | 99.59618644 | 99.34809979 |
| 151002A00053 | 10/2/2017 | 2.17 | 10/4/2021 | 10/2/2017 | 102.42113 | 102.4211303 | 102.4211303 | 102.4211303 | 102.193324 | 100.9256692 | 99.68793032 | 98.47905184 | 97.29802763 |
| 151027A00021 | 10/27/2015 | 2.02 | 10/27/2021 | 10/27/2015 | 102.32738 | 102.3273829 | 102.3273829 | 102.3273829 | 102.0888273 | 100.7703357 | 99.47624247 | 98.2059062 | 96.95870774 |
| 160210A00050 | 2/10/2016 | 1.64 | 2/10/2021 | 2/10/2016 | 100.86474 | 100.8647446 | 100.8647446 | 100.8647446 | 100.7465481 | 100.1258591 | 99.51279863 | 98.90722666 | 98.30900657 |
| 160211A00034 | 2/11/2016 | 1.82 | 2/10/2023 | 2/11/2016 | 104.02765 | 104.0276525 | 104.0276525 | 104.0276525 | 103.3584235 | 100.7679753 | 98.25548258 | 95.8181198 | 93.45318345 |
| 160212A00014 | 2/12/2016 | 1.61 | 2/12/2021 | 2/12/2016 | 100.85339 | 100.8533948 | 100.8533948 | 100.8533948 | 100.7340711 | 100.1079617 | 99.48961577 | 98.87888964 | 98.275643 |
| 160711A00016 | 7/11/2016 | 1.42 | 7/12/2021 | 7/11/2016 | 101.19607 | 101.1960683 | 101.1960683 | 101.1960683 | 100.9877986 | 99.95323456 | 98.9397585 | 97.94673085 | 96.97353773 |
| 161031A00027 | 10/31/2016 | 1.51 | 10/30/2020 | 10/31/2016 | 100.42218 | 100.4221806 | 100.4221806 | 100.4221806 | 100.3646429 | 100.027413 | 99.69244045 | 99.35970266 | 99.0291774 |
| 161115A00021 | 11/15/2016 | 2.02 | 11/15/2021 | 11/15/2016 | 102.4323 | 102.4322986 | 102.4322986 | 102.4322986 | 102.1811952 | 100.8119094 | 99.46748595 | 98.1473063 | 96.85077189 |
| 170404A00003 | 4/4/2017 | 2.74 | 4/4/2025 | 4/4/2017 | 111.67171 | 111.6717145 | 111.6717145 | 111.6717145 | 109.4809054 | 104.7085608 | 100.1737776 | 95.86343205 | 91.76519971 |
| 170518A00008 | 5/18/2018 | 3.06 | 5/18/2028 | 5/18/2018 | 121.75806 | 121.7580627 | 121.7580627 | 121.7580627 | 114.7712291 | 106.94168 | 99.7159035 | 93.04399451 | 86.88041642 |
| 130211A00026 | 2/11/2013 | 2.27 | 2/15/2023 | 2/11/2013 | 105.24343 | 105.2434331 | 105.2434331 | 105.2434331 | 104.5653513 | 101.9443312 | 99.40239889 | 96.9366759 | 94.54440895 |
| 130716A00006 | 7/16/2013 | 2.81 | 7/30/2020 | 7/16/2013 | 100.20992 | 100.2099174 | 100.2099174 | 100.2099174 | 100.1985133 | 100.1153431 | 100.0323107 | 99.94941598 | 99.86665854 |
| 140314A00003 | 3/14/2014 | 3.32 | 3/14/2024 | 3/14/2014 | 111.30183 | 111.3018289 | 111.3018289 | 111.3018289 | 109.9916487 | 106.2308481 | 102.6205147 | 99.15375688 | 95.82404239 |
| 140930A00104 | 9/30/2016 | 3.23 | 9/30/2021 | 9/30/2016 | 103.74322 | 103.743215 | 103.743215 | 103.743215 | 103.5156326 | 102.2481679 | 101.0117328 | 99.80519789 | 98.6274878 |
| 150601A00406 | 6/1/2015 | 3.71 | 1/17/2024 | 6/1/2015 | 112.03783 | 112.0378254 | 112.0378254 | 112.0378254 | 110.8317152 | 107.21196 | 103.7319344 | 100.3854697 | 97.16670525 |
| 150601A00682 | 6/1/2015 | 2.3 | 2/9/2022 | 6/1/2015 | 103.23331 | 103.2333149 | 103.2333149 | 103.2333149 | 102.9138079 | 101.3076577 | 99.73440212 | 98.19309698 | 96.68283418 |
| 150601A00775 | 6/1/2015 | 2.28 | 11/12/2021 | 6/1/2015 | 102.71797 | 102.7179701 | 102.7179701 | 102.7179701 | 102.4686072 | 101.1056255 | 99.76725347 | 98.45288211 | 97.16192194 |
| 150601A00791 | 6/1/2015 | 2.42 | 5/20/2022 | 6/1/2015 | 104.00597 | 104.005967 | 104.005967 | 104.005967 | 103.5932118 | 101.7084596 | 99.86728832 | 98.06843307 | 96.31067374 |
| 150619A00028 | 6/19/2015 | 2.54 | 6/20/2022 | 6/19/2015 | 104.47442 | 104.4744192 | 104.4744192 | 104.4744192 | 104.0304225 | 102.0582782 | 100.1336315 | 98.25504459 | 96.42113346 |
| 150714A00061 | 7/14/2015 | 2.09 | 7/14/2020 | 7/14/2015 | 100.06921 | 100.0692148 | 100.0692148 | 100.0692148 | 100.0638963 | 100.0250988 | 99.98634835 | 99.94764496 | 99.90898851 |
| 150715A00017 | 7/15/2015 | 2.14 | 7/15/2020 | 7/15/2015 | 100.07624 | 100.0762415 | 100.0762415 | 100.0762415 | 100.070543 | 100.0289736 | 99.98745578 | 99.94598952 | 99.90457469 |
| 150824A00031 | 8/24/2015 | 1.93 | 2/25/2021 | 8/24/2015 | 101.11451 | 101.1145149 | 101.1145149 | 101.1145149 | 100.9876463 | 100.3250934 | 99.67120664 | 99.02581701 | 98.38875973 |
| 151215A00027 | 12/15/2015 | 2.09 | 12/15/2020 | 12/15/2015 | 100.85586 | 100.8558625 | 100.8558625 | 100.8558625 | 100.7706059 | 100.3059634 | 99.84560732 | 99.38947847 | 98.93751867 |
| 160201A00024 | 2/1/2016 | 2.16 | 2/1/2023 | 2/1/2016 | 104.88036 | 104.8803643 | 104.8803643 | 104.8803643 | 104.2182445 | 101.6424929 | 99.14359524 | 96.71879105 | 94.36543793 |
| 160210A00021 | 2/10/2016 | 1.97 | 2/10/2023 | 2/10/2016 | 104.42396 | 104.423964 | 104.423964 | 104.423964 | 103.753586 | 101.1578846 | 98.64025922 | 96.19788051 | 93.82804135 |
| 160211A00091 | 2/16/2016 | 3.55 | 2/16/2023 | 2/16/2016 | 108.65182 | 108.6518234 | 108.6518234 | 108.6518234 | 107.9627112 | 105.2933507 | 102.7042779 | 100.1925733 | 97.75544427 |
| 160217A00004 | 2/17/2016 | 1.54 | 2/17/2021 | 2/17/2016 | 100.91584 | 100.9158393 | 100.9158393 | 100.9158393 | 100.7934186 | 100.1523065 | 99.51933067 | 98.89433694 | 98.27717492 |
| 160218A00014 | 2/18/2016 | 1.57 | 2/18/2021 | 2/18/2016 | 100.93916 | 100.9391644 | 100.9391644 | 100.9391644 | 100.8161601 | 100.1722273 | 99.5365004 | 98.90882327 | 98.28904365 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160307A00029 | 3/7/2016 | 3.21 | 3/7/2031 | 3/7/2016 | 130.96033 | 130.9603336 | 130.9603336 | 129.4213208 | 118.2952953 | 107.8773044 | 98.50375162 | 90.06329567 | 82.45703889 |
| 161123A00035 | 11/23/2016 | 2.16 | 11/23/2021 | 11/23/2016 | 102.66912 | 102.6691212 | 102.6691212 | 102.6691212 | 102.4121051 | 101.0193022 | 99.65214841 | 98.30999655 | 96.99222076 |
| 161125A00002 | 11/25/2016 | 2.62 | 11/27/2023 | 11/25/2016 | 107.99618 | 107.9961775 | 107.9961775 | 107.9961775 | 106.8991274 | 103.4826649 | 100.194195 | 97.02825551 | 93.97964644 |
| 130211A00035 | 2/11/2013 | 2.27 | 2/15/2023 | 2/11/2013 | 105.24343 | 105.2434331 | 105.2434331 | 105.2434331 | 104.5653513 | 101.9443312 | 99.40239889 | 96.9366759 | 94.54440895 |
| 130827A00012 | 8/27/2013 | 3.66 | 7/31/2023 | 8/27/2013 | 110.47268 | 110.4726836 | 110.4726836 | 110.4726836 | 109.5611412 | 106.4203227 | 103.3872839 | 100.4577011 | 97.62745174 |
| 130827A00014 | 8/27/2013 | 2.73 | 8/31/2020 | 8/27/2013 | 100.45006 | 100.4500624 | 100.4500624 | 100.4500624 | 100.4242947 | 100.2520904 | 100.0804743 | 99.90944337 | 99.73899466 |
| 141002A00030 | 10/2/2014 | 2.33 | 10/2/2020 | 10/2/2014 | 100.53661 | 100.5366071 | 100.5366071 | 100.5366071 | 100.4947653 | 100.2344094 | 99.97539946 | 99.71772514 | 99.46137613 |
| 150120A00025 | 1/20/2015 | 2.54 | 1/21/2025 | 1/20/2015 | 110.26775 | 110.2677497 | 110.2677497 | 110.2677497 | 108.2737723 | 103.7249225 | 99.39470399 | 95.27145166 | 91.34418519 |
| 150601A00998 | 6/1/2015 | 5.37 | 10/25/2034 | 6/1/2015 | 170.86124 | 170.8612353 | 170.8612353 | 163.003955 | 146.4373311 | 131.3301137 | 118.1032561 | 106.5052594 | 96.31983916 |
| 150814A00024 | 8/14/2015 | 2.04 | 8/14/2020 | 8/14/2015 | 100.21984 | 100.2198406 | 100.2198406 | 100.2198406 | 100.2017766 | 100.0771077 | 99.95276343 | 99.8287427 | 99.70504414 |
| 151013A00007 | 10/13/2015 | 1.75 | 10/13/2020 | 10/13/2015 | 100.43038 | 100.4303823 | 100.4303823 | 100.4303823 | 100.3823897 | 100.0919287 | 99.80315715 | 99.5160603 | 99.23062355 |
| 151030A00001 | 10/30/2015 | 1.9 | 10/30/2020 | 10/30/2015 | 100.55427 | 100.5542737 | 100.5542737 | 100.5542737 | 100.4966915 | 100.1591836 | 99.82393432 | 99.49092123 | 99.16012205 |
| 151211A00040 | 12/11/2017 | 2.7 | 2/13/2023 | 12/11/2017 | 106.37234 | 106.3723424 | 106.3723424 | 106.3723424 | 105.6931047 | 103.0628571 | 100.5117369 | 98.03687128 | 95.63551213 |
| 160209A00007 | 2/9/2016 | 1.53 | 2/9/2021 | 2/9/2016 | 100.79259 | 100.7925871 | 100.7925871 | 100.7925871 | 100.675003 | 100.0572987 | 99.44715313 | 98.84442833 | 98.24898946 |
| 160209A00049 | 2/9/2016 | 1.92 | 2/9/2023 | 2/9/2016 | 104.28746 | 104.2874554 | 104.2874554 | 104.2874554 | 103.6185351 | 101.0275227 | 98.51439326 | 96.07632694 | 93.71062554 |
| 160210A00053 | 2/10/2016 | 1.99 | 2/10/2023 | 2/10/2016 | 104.47681 | 104.4768056 | 104.4768056 | 104.4768056 | 103.8062744 | 101.2098725 | 98.69156277 | 96.24851527 | 93.87802241 |
| 160222A00019 | 2/22/2016 | 3.09 | 2/21/2031 | 2/22/2016 | 129.57677 | 129.5767725 | 129.5767725 | 128.0897507 | 117.0547993 | 106.7325385 | 97.44360804 | 89.07809393 | 81.53833484 |
| 160309A00015 | 3/9/2016 | 1.84 | 3/9/2021 | 3/9/2016 | 101.10719 | 101.1071925 | 101.1071925 | 101.1071925 | 100.9733241 | 100.2780583 | 99.59234339 | 98.91598352 | 98.2487881 |
| 160315A00003 | 3/15/2016 | 1.88 | 3/15/2021 | 3/15/2016 | 101.16225 | 101.1622497 | 101.1622497 | 101.1622497 | 101.0248068 | 100.3129613 | 99.61112545 | 98.91908906 | 98.23664783 |
| 160404A00040 | 4/4/2016 | 1.65 | 4/5/2021 | 4/4/2016 | 101.07887 | 101.0788719 | 101.0788719 | 101.0788719 | 100.9285544 | 100.159861 | 99.40283312 | 98.65720683 | 97.92272609 |
| 160711A00022 | 1/10/2018 | 1.91 | 1/10/2025 | 1/10/2018 | 107.32463 | 107.3246337 | 107.3246337 | 107.3246337 | 105.3781796 | 100.9227987 | 96.68130812 | 92.64233251 | 88.7951611 |
| 160712A00019 | 7/12/2017 | 2.32 | 7/12/2027 | 7/12/2017 | 114.21173 | 114.2117291 | 114.2117291 | 114.2117291 | 108.7495613 | 101.8991464 | 95.5306944 | 89.60776562 | 84.09685426 |
| 160729A00017 | 7/31/2017 | 2.47 | 7/31/2029 | 7/31/2017 | 119.66812 | 119.6681243 | 119.6681243 | 119.6681243 | 110.6740159 | 101.9633661 | 94.01850264 | 86.76783283 | 80.14680773 |
| 161005A00007 | 10/5/2016 | 1.51 | 10/5/2020 | 10/5/2016 | 100.33291 | 100.3329123 | 100.3329123 | 100.3329123 | 100.2894398 | 100.0211772 | 99.75435121 | 99.48895035 | 99.22496318 |
| 160323A00030 | 3/23/2016 | 2.22 | 3/22/2023 | 3/23/2016 | 105.29561 | 105.2956056 | 105.2956056 | 105.2956056 | 104.5786421 | 101.86201 | 99.22971595 | 96.67859163 | 94.20561188 |
| 160331A00088 | 3/31/2016 | 1.69 | 3/30/2021 | 3/31/2016 | 101.08604 | 101.0860351 | 101.0860351 | 101.0860351 | 100.9398168 | 100.1874181 | 99.44618936 | 98.71588352 | 97.99626065 |
| 160406A00012 | 4/6/2016 | 1.62 | 4/6/2021 | 4/6/2016 | 101.05942 | 101.0594167 | 101.0594167 | 101.0594167 | 100.9084115 | 100.1370823 | 99.37750156 | 98.62940254 | 97.89252638 |
| 160520A00018 | 9/20/2017 | 2.34 | 9/20/2024 | 9/20/2017 | 108.7062 | 108.7062011 | 108.7062011 | 108.7062011 | 107.0127389 | 102.8091239 | 98.79460355 | 94.95962124 | 91.29516045 |
| 160711A00020 | 8/24/2017 | 1.59 | 8/24/2022 | 8/24/2017 | 102.81317 | 102.8131708 | 102.8131708 | 102.8131708 | 102.3101101 | 100.1841347 | 98.11263837 | 96.09384305 | 94.12604342 |
| 160714A00018 | 9/6/2016 | 2.28 | 9/4/2026 | 9/6/2016 | 112.25955 | 112.2595531 | 112.2595531 | 112.2595531 | 108.2139706 | 102.151397 | 96.46917849 | 91.14144862 | 86.14423402 |
| 160801A00007 | 8/1/2016 | 1.47 | 8/2/2021 | 8/1/2016 | 101.31807 | 101.3180734 | 101.3180734 | 101.3180734 | 101.1050311 | 100.012963 | 98.94434987 | 97.89844279 | 96.87452459 |
| 160830A00068 | 11/30/2016 | 1.95 | 11/30/2023 | 11/30/2016 | 105.7048 | 105.7047969 | 105.7047969 | 105.7047969 | 104.6123708 | 101.2271018 | 97.96932663 | 94.83358449 | 91.81467778 |
| 170327A00078 | 3/27/2019 | 3.04 | 3/27/2026 | 3/27/2019 | 115.77735 | 115.7773475 | 115.7773475 | 115.7773475 | 112.3722025 | 106.5953701 | 101.1561237 | 96.03288228 | 91.20556211 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 170531A00055 | 5/31/2017 | 2.13 | 5/31/2022 | 5/31/2017 | 103.57533 | 103.5753278 | 103.5753278 | 103.5753278 | 103.1527624 | 101.2434221 | 99.37887008 | 97.55778786 | 95.77890455 |
| 170609A00052 | 6/11/2018 | 2.9 | 6/9/2027 | 6/11/2018 | 118.07116 | 118.0711597 | 118.0711597 | 118.0711597 | 112.6919643 | 105.7890562 | 99.36349097 | 93.37969775 | 87.80493082 |
| 170614A00019 | 6/14/2017 | 2.48 | 6/13/2025 | 6/14/2017 | 110.84157 | 110.8415698 | 110.8415698 | 110.8415698 | 108.4687221 | 103.5387674 | 98.86360318 | 94.42874862 | 90.22061896 |
| 170703A00022 | 7/3/2017 | 2.86 | 7/3/2026 | 7/3/2017 | 115.42133 | 115.4213252 | 115.4213252 | 115.4213252 | 111.6105209 | 105.6038798 | 99.9636237 | 94.66545691 | 89.68681701 |
| 170816A00029 | 8/16/2017 | 1.79 | 8/17/2020 | 8/16/2017 | 100.20117 | 100.2011718 | 100.2011718 | 100.2011718 | 100.1817667 | 100.048832 | 99.91626442 | 99.78406236 | 99.65222431 |
| 171110A00008 | 11/10/2017 | 2.65 | 11/12/2024 | 11/10/2017 | 110.36866 | 110.3686628 | 110.3686628 | 110.3686628 | 108.5426953 | 104.1679968 | 99.99564171 | 96.01524256 | 92.21699732 |
| 171110A00019 | 5/4/2018 | 2.46 | 5/4/2023 | 5/4/2018 | 106.21232 | 106.2123181 | 106.2123181 | 106.2123181 | 105.4406477 | 102.5965979 | 99.84401502 | 97.17948136 | 94.59972531 |
| 180104A00016 | 1/4/2018 | 2.56 | 1/4/2023 | 1/4/2018 | 105.7522 | 105.7521993 | 105.7521993 | 105.7521993 | 105.1160773 | 102.6027287 | 100.1627598 | 97.79360021 | 95.49278621 |
| 180417A00028 | 4/17/2018 | 2.88 | 4/16/2021 | 4/17/2018 | 102.10294 | 102.1029362 | 102.1029362 | 102.1029362 | 101.9440752 | 101.1410747 | 100.3507166 | 99.57270379 | 98.80674853 |
| 180621A00031 | 6/21/2018 | 3.07 | 6/21/2023 | 6/21/2018 | 108.33024 | 108.330245 | 108.330245 | 108.330245 | 107.4861401 | 104.4841506 | 101.5825871 | 98.77753712 | 96.06526359 |
| 180727A00017 | 7/27/2018 | 3.16 | 7/27/2023 | 7/27/2018 | 108.8846 | 108.8846033 | 108.8846033 | 108.8846033 | 107.9848907 | 104.8791934 | 101.8800062 | 98.9830649 | 96.18430229 |
| 180821A00040 | 8/21/2018 | 2.99 | 8/21/2023 | 8/21/2018 | 108.54298 | 108.5429768 | 108.5429768 | 108.5429768 | 107.6056329 | 104.4396266 | 101.3840477 | 98.43439463 | 95.58637871 |
| 170404A00002 | 4/4/2017 | 2.42 | 4/4/2023 | 4/4/2017 | 105.92222 | 105.922222 | 105.922222 | 105.922222 | 105.1882844 | 102.4287336 | 99.7557047 | 97.16593084 | 94.65629296 |
| 170405A00031 | 4/5/2017 | 2.22 | 4/4/2022 | 4/5/2017 | 103.44511 | 103.445109 | 103.445109 | 103.445109 | 103.0772082 | 101.3210256 | 99.60313904 | 97.92238264 | 96.27763795 |
| 170519A00019 | 5/19/2017 | 2 | 11/19/2021 | 5/19/2017 | 102.42345 | 102.4234456 | 102.4234456 | 102.4234456 | 102.1695629 | 100.7894559 | 99.43458729 | 98.10432474 | 96.79805653 |
| 170622A00044 | 6/22/2017 | 2.38 | 6/21/2024 | 6/22/2017 | 108.35562 | 108.3556243 | 108.3556243 | 108.3556243 | 106.8615831 | 102.8984767 | 99.10504486 | 95.47313632 | 91.9950347 |
| 170918A00051 | 12/18/2017 | 2.24 | 12/19/2022 | 12/18/2017 | 104.85337 | 104.8533701 | 104.8533701 | 104.8533701 | 104.2354234 | 101.77526 | 99.38590507 | 97.06491758 | 94.80995563 |
| 171110A00006 | 11/10/2017 | 2.11 | 11/10/2020 | 11/10/2017 | 100.68158 | 100.6815803 | 100.6815803 | 100.6815803 | 100.6173807 | 100.2493412 | 99.88399755 | 99.52132009 | 99.16127964 |
| 171219A00032 | 12/19/2017 | 2.42 | 12/20/2021 | 12/19/2017 | 103.18284 | 103.1828423 | 103.1828423 | 103.1828423 | 102.9046497 | 101.4364037 | 99.99650906 | 98.5842163 | 97.19880185 |
| 180124A00073 | 1/24/2018 | 2.46 | 1/25/2021 | 1/24/2018 | 101.27955 | 101.2795469 | 101.2795469 | 101.2795469 | 101.1702087 | 100.5918711 | 100.0201366 | 99.45489276 | 98.8960294 |
| 180201A00022 | 2/1/2018 | 2.99 | 2/3/2025 | 2/1/2018 | 112.43083 | 112.4308312 | 112.4308312 | 112.4308312 | 110.3892088 | 105.7578788 | 101.3499041 | 97.15330952 | 93.15682728 |
| 180205A00047 | 2/5/2018 | 2.56 | 2/5/2021 | 2/5/2018 | 101.40759 | 101.4075946 | 101.4075946 | 101.4075946 | 101.2919017 | 100.6829911 | 100.0813894 | 99.48696544 | 98.89959131 |
| 180518A00046 | 5/25/2018 | 3.62 | 5/18/2027 | 5/25/2018 | 122.88805 | 122.8880523 | 122.8880523 | 122.8880523 | 117.5309083 | 110.5203483 | 103.9875371 | 97.89727842 | 92.21714297 |
| 180821A00029 | 8/21/2018 | 3.01 | 8/21/2023 | 8/21/2018 | 108.60639 | 108.606392 | 108.606392 | 108.606392 | 107.6688106 | 104.5018039 | 101.4452505 | 98.49464824 | 95.6457074 |
| 190315A00039 | 3/15/2019 | 2.64 | 9/15/2021 | 3/15/2019 | 102.89765 | 102.8976503 | 102.8976503 | 102.8976503 | 102.67463 | 101.4535155 | 100.2613935 | 99.09724022 | 97.96007962 |
| 190318A00017 | 3/19/2019 | 2.7 | 3/18/2022 | 3/19/2019 | 104.1866 | 104.1866016 | 104.1866016 | 104.1866016 | 103.8329298 | 102.1152967 | 100.434349 | 98.78897553 | 97.17811041 |
| 190322A00024 | 3/22/2019 | 2.55 | 3/22/2021 | 3/22/2019 | 101.68653 | 101.6865271 | 101.6865271 | 101.6865271 | 101.5445725 | 100.8115121 | 100.0890223 | 99.37687541 | 98.67485044 |
| 190329A00012 | 3/29/2019 | 2.61 | 3/29/2024 | 3/29/2019 | 108.74408 | 108.744083 | 108.744083 | 108.744083 | 107.4175124 | 103.6653663 | 100.0652311 | 96.61006618 | 93.29320253 |
| 190422A00030 | 4/22/2019 | 2.93 | 12/22/2025 | 4/22/2019 | 114.46313 | 114.4631332 | 114.4631332 | 114.4631332 | 111.4394218 | 105.9376844 | 100.7452689 | 95.84315418 | 91.21358501 |
| 190529A00078 | 5/29/2019 | 2.39 | 11/30/2020 | 5/29/2019 | 100.90678 | 100.9067845 | 100.9067845 | 100.9067845 | 100.830469 | 100.4068826 | 99.98684243 | 99.57030411 | 99.15722413 |
| 190530A00049 | 5/30/2019 | 2.44 | 5/30/2023 | 5/30/2019 | 106.3088 | 106.3088023 | 106.3088023 | 106.3088023 | 105.5027692 | 102.5898099 | 99.77263145 | 97.04757373 | 94.41113706 |
| 190621A00034 | 6/21/2019 | 2.17 | 6/15/2023 | 6/21/2019 | 105.59677 | 105.5967655 | 105.5967655 | 105.5967655 | 104.770594 | 101.8255192 | 98.97877826 | 96.22655574 | 93.56520599 |
| 190722A00047 | 11/22/2019 | 2.03 | 11/22/2021 | 11/22/2019 | 102.48013 | 102.4801337 | 102.4801337 | 102.4801337 | 102.2240788 | 100.8353926 | 99.47223622 | 98.13396681 | 96.81996245 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 160520A00017 | 9/20/2017 | 2.34 | 9/20/2024 | 9/20/2017 | 108.7062 | 108.7062011 | 108.7062011 | 108.7062011 | 107.0127389 | 102.8091239 | 98.79460355 | 94.95962124 | 91.29516045 |
| 160524A00015 | 11/25/2016 | 2.71 | 11/25/2026 | 11/25/2016 | 115.46629 | 115.4662889 | 115.4662889 | 115.4662889 | 111.0138088 | 104.6590559 | 98.71433276 | 93.15104041 | 87.94271389 |
| 160527A00021 | 5/27/2016 | 1.68 | 5/27/2021 | 5/27/2016 | 101.29825 | 101.2982518 | 101.2982518 | 101.2982518 | 101.1105673 | 100.1998684 | 99.30550416 | 98.42703834 | 97.56405007 |
| 160601A00021 | 6/1/2016 | 1.71 | 6/1/2021 | 6/1/2016 | 101.34584 | 101.3458429 | 101.3458429 | 101.3458429 | 101.1547019 | 100.2302176 | 99.32255374 | 98.43125478 | 97.55588151 |
| 160627A00068 | 6/27/2016 | 1.4 | 6/28/2021 | 6/27/2016 | 101.13143 | 101.1314344 | 101.1314344 | 101.1314344 | 100.9269669 | 99.9306456 | 98.95388477 | 97.99611318 | 97.05678169 |
| 160714A00024 | 9/20/2016 | 2.5 | 9/20/2028 | 9/20/2016 | 118.07804 | 118.0780436 | 118.0780436 | 118.0780436 | 110.60795 | 102.639062 | 95.31170374 | 88.5707054 | 82.36591861 |
| 160819A00015 | 10/12/2016 | 2.3 | 10/13/2026 | 10/12/2016 | 112.59551 | 112.5955091 | 112.5955091 | 112.5955091 | 108.373669 | 102.2084727 | 96.43588174 | 91.028847 | 85.9623198 |
| 161005A00008 | 10/5/2016 | 1.51 | 10/5/2020 | 10/5/2016 | 100.33291 | 100.3329123 | 100.3329123 | 100.3329123 | 100.2894398 | 100.0211772 | 99.75435121 | 99.48895035 | 99.22496318 |
| 161017A00007 | 10/17/2016 | 1.99 | 10/18/2023 | 10/17/2016 | 105.64258 | 105.6425809 | 105.6425809 | 105.6425809 | 104.6229158 | 101.3509949 | 98.19842491 | 95.16019995 | 92.23155361 |
| 161123A00037 | 11/23/2016 | 2.16 | 11/23/2021 | 11/23/2016 | 102.66912 | 102.6691212 | 102.6691212 | 102.6691212 | 102.4121051 | 101.0193022 | 99.65214841 | 98.30999655 | 96.99222076 |
| 171110A00007 | 11/10/2017 | 2.38 | 11/10/2022 | 11/10/2017 | 104.97863 | 104.9786297 | 104.9786297 | 104.9786297 | 104.3977147 | 102.0394867 | 99.74638402 | 97.51625417 | 95.34702836 |
| 171222A00037 | 12/22/2017 | 2.71 | 12/29/2023 | 12/22/2017 | 108.51856 | 108.5185615 | 108.5185615 | 108.5185615 | 107.3628442 | 103.8547087 | 100.4810774 | 97.23607047 | 94.11409762 |
| 180328A00015 | 3/28/2018 | 2.93 | 3/28/2023 | 3/28/2018 | 107.29336 | 107.2933624 | 107.2933624 | 107.2933624 | 106.5634513 | 103.8035117 | 101.1294581 | 98.538051 | 96.02619805 |
| 180504A00039 | 5/4/2018 | 3.33 | 5/5/2025 | 5/4/2018 | 114.75677 | 114.7567652 | 114.7567652 | 114.7567652 | 112.4594451 | 107.5339438 | 102.8565749 | 98.41355517 | 94.19193556 |
| 180518A00048 | 5/25/2018 | 3.65 | 5/18/2028 | 5/25/2018 | 126.41865 | 126.4186499 | 126.4186499 | 126.4186499 | 119.3319863 | 111.3284846 | 103.9383403 | 97.11102088 | 90.80040827 |
| 180618A00036 | 6/18/2018 | 3.89 | 6/18/2048 | 6/18/2018 | 197.81345 | 197.8134471 | 193.1261665 | 161.230657 | 132.6859854 | 110.1066424 | 92.38112835 | 78.38280354 | 67.25704964 |
| 180627A00065 | 6/27/2018 | 2.9 | 6/25/2021 | 6/27/2018 | 102.61989 | 102.6198891 | 102.6198891 | 102.6198891 | 102.4153993 | 101.4192097 | 100.4423777 | 99.48434288 | 98.54456645 |
| 180709A00081 | 7/9/2018 | 3.05 | 7/7/2023 | 7/9/2018 | 108.39149 | 108.3914868 | 108.3914868 | 108.3914868 | 107.5237604 | 104.4781849 | 101.5357719 | 98.69244853 | 95.94432748 |
| 180821A00041 | 8/21/2018 | 3 | 9/21/2023 | 8/21/2018 | 108.80521 | 108.8052065 | 108.8052065 | 108.8052065 | 107.8173218 | 104.5642782 | 101.4271464 | 98.40109127 | 95.48151257 |
| 180823A00043 | 8/23/2018 | 2.83 | 9/23/2020 | 8/23/2018 | 100.60335 | 100.6033502 | 100.6033502 | 100.6033502 | 100.5661076 | 100.3304546 | 100.0959118 | 99.86247116 | 99.63012507 |
| 180919A00012 | 9/19/2018 | 3 | 9/18/2020 | 9/19/2018 | 100.60572 | 100.605721 | 100.605721 | 100.605721 | 100.5709732 | 100.3491121 | 100.12824 | 99.90835053 | 99.68943693 |
| 170622A00045 | 6/22/2017 | 2.76 | 6/22/2027 | 6/22/2017 | 117.18255 | 117.1825488 | 117.1825488 | 117.1825488 | 111.7597112 | 104.8557086 | 98.43206661 | 92.4527896 | 86.88475639 |
| 170726A00025 | 7/26/2017 | 2.14 | 7/26/2022 | 7/26/2017 | 103.86043 | 103.860434 | 103.860434 | 103.860434 | 103.3825338 | 101.3212102 | 99.31134205 | 97.3513027 | 95.43952933 |
| 170816A00030 | 8/16/2017 | 1.95 | 8/16/2021 | 8/16/2017 | 101.91295 | 101.9129505 | 101.9129505 | 101.9129505 | 101.6970003 | 100.5634679 | 99.45510616 | 98.37108387 | 97.31060593 |
| 171219A00031 | 12/19/2017 | 2.42 | 12/20/2021 | 12/19/2017 | 103.18284 | 103.1828423 | 103.1828423 | 103.1828423 | 102.9046497 | 101.4364037 | 99.99650906 | 98.5842163 | 97.19880185 |
| 171229A00031 | 12/29/2017 | 2.36 | 12/29/2020 | 12/29/2017 | 101.06863 | 101.068625 | 101.068625 | 101.068625 | 100.9748928 | 100.4711856 | 99.97249176 | 99.47873674 | 98.98984751 |
| 180105A00021 | 1/5/2018 | 2.33 | 1/5/2021 | 1/5/2018 | 101.09401 | 101.0940104 | 101.0940104 | 101.0940104 | 100.996207 | 100.4732149 | 99.95563104 | 99.44337192 | 98.93635562 |
| 180110A00011 | 1/10/2018 | 2.38 | 1/11/2021 | 1/10/2018 | 101.15582 | 101.1558214 | 101.1558214 | 101.1558214 | 101.0545504 | 100.5149119 | 99.98103464 | 99.45282666 | 98.93019783 |
| 180131A00022 | 1/31/2018 | 2.96 | 1/30/2025 | 1/31/2018 | 112.26306 | 112.2630575 | 112.2630575 | 112.2630575 | 110.2327573 | 105.6161875 | 101.2218523 | 97.03785981 | 93.05301917 |
| 180403A00024 | 4/3/2018 | 2.96 | 4/3/2023 | 4/3/2018 | 107.42047 | 107.4204698 | 107.4204698 | 107.4204698 | 106.6830843 | 103.9053463 | 101.2144669 | 98.60716739 | 96.08031764 |
| 180404A00018 | 4/4/2018 | 2.89 | 4/4/2022 | 4/4/2018 | 104.63861 | 104.6386139 | 104.6386139 | 104.6386139 | 104.2686114 | 102.5015292 | 100.7729444 | 99.08168532 | 97.42662822 |
| 180518A00025 | 5/18/2018 | 2.96 | 5/18/2021 | 5/18/2018 | 102.40627 | 102.4062748 | 102.4062748 | 102.4062748 | 102.224123 | 101.3324368 | 100.4562989 | 99.59530476 | 98.74906408 |
| 180518A00041 | 5/25/2018 | 3.32 | 5/20/2024 | 5/25/2018 | 111.85842 | 111.8584229 | 111.8584229 | 111.8584229 | 110.4118407 | 106.4639634 | 102.6808057 | 99.0546393 | 95.57813838 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 180518A00071 | 5/25/2018 | 3.56 | 5/18/2026 | 5/25/2018 | 119.23935 | 119.2393461 | 119.2393461 | 119.2393461 | 115.5801652 | 109.5765893 | 103.9301337 | 98.61764528 | 93.61758697 |
| 180613A00046 | 6/13/2018 | 3 | 1/13/2022 | 6/13/2018 | 104.22814 | 104.2281441 | 104.2281441 | 104.2281441 | 103.929319 | 102.3891874 | 100.8797209 | 99.40007598 | 97.94943979 |
| 180613A00047 | 6/13/2018 | 3.17 | 1/12/2024 | 6/13/2018 | 110.25235 | 110.2523467 | 110.2523467 | 110.2523467 | 109.0634706 | 105.4884761 | 102.0514001 | 98.74616591 | 95.5669993 |
| 180615A00039 | 6/15/2018 | 3.49 | 6/15/2028 | 6/15/2018 | 125.39641 | 125.3964135 | 125.3964135 | 125.3964135 | 118.2033169 | 110.1732194 | 102.7649371 | 95.92674121 | 89.61146537 |
| 180720A00022 | 7/20/2018 | 2.88 | 7/20/2020 | 7/20/2018 | 100.14329 | 100.1432942 | 100.1432942 | 100.1432942 | 100.1356911 | 100.0802326 | 100.0248506 | 99.96954514 | 99.91431593 |
| 180912A00017 | 9/12/2018 | 3.13 | 9/12/2023 | 9/12/2018 | 109.15843 | 109.1584305 | 109.1584305 | 109.1584305 | 108.1837194 | 104.9492755 | 101.8292879 | 98.81901556 | 95.9139465 |
| 181003A00023 | 10/3/2018 | 3.17 | 4/4/2022 | 10/3/2018 | 105.13739 | 105.137392 | 105.137392 | 105.137392 | 104.7665113 | 102.994874 | 101.2618182 | 99.56617002 | 97.90680326 |
| 181113A00073 | 11/13/2018 | 3.17 | 11/13/2020 | 11/13/2018 | 101.09709 | 101.0970935 | 101.0970935 | 101.0970935 | 101.0309333 | 100.6536827 | 100.2792563 | 99.90762261 | 99.53875023 |
| 190311A00031 | 3/11/2019 | 2.71 | 9/8/2021 | 3/11/2019 | 102.93636 | 102.9363566 | 102.9363566 | 102.9363566 | 102.7149206 | 101.5125817 | 100.3383436 | 99.19122937 | 98.070307 |
| 161221A00053 | 12/23/2016 | 3.05 | 12/23/2021 | 12/23/2016 | 104.1452 | 104.1452008 | 104.1452008 | 104.1452008 | 103.8632544 | 102.3796129 | 100.9247544 | 99.49791405 | 98.09835357 |
| 170628A00044 | 10/9/2018 | 2.12 | 10/8/2021 | 10/9/2018 | 102.37769 | 102.37769 | 102.37769 | 102.37769 | 102.1480407 | 100.8716789 | 99.62426651 | 98.40481865 | 97.212395 |
| 170703A00024 | 7/3/2017 | 2.95 | 7/6/2027 | 7/3/2017 | 118.61334 | 118.6133372 | 118.6133372 | 118.6133372 | 113.1041872 | 106.1195378 | 99.6223188 | 93.57586248 | 87.9464424 |
| 170908A00021 | 9/8/2017 | 1.96 | 9/8/2022 | 9/8/2017 | 103.68618 | 103.6861756 | 103.6861756 | 103.6861756 | 103.1671243 | 100.9915579 | 98.87247555 | 96.8080038 | 94.79634743 |
| 180312A00014 | 3/12/2018 | 3 | 3/13/2023 | 3/12/2018 | 107.37521 | 107.3752064 | 107.3752064 | 107.3752064 | 106.6621278 | 103.9405345 | 101.3026146 | 98.74525311 | 96.26547454 |
| 180515A00022 | 5/15/2018 | 3.19 | 5/15/2023 | 5/15/2018 | 108.39577 | 108.395774 | 108.395774 | 108.395774 | 107.6025059 | 104.6982288 | 101.8879922 | 99.16825206 | 96.53561757 |
| 180524A00003 | 5/24/2018 | 2.91 | 5/24/2021 | 5/24/2018 | 102.40565 | 102.4056455 | 102.4056455 | 102.4056455 | 102.2191119 | 101.3110842 | 100.4191738 | 99.54295415 | 98.68201381 |
| 180621A00068 | 6/21/2018 | 3.32 | 6/23/2025 | 6/21/2018 | 115.11212 | 115.1121219 | 115.1121219 | 115.1121219 | 112.6766741 | 107.616945 | 102.8185854 | 98.26670341 | 93.94733236 |
| 180626A00026 | 6/26/2018 | 2.92 | 6/25/2021 | 6/26/2018 | 102.63986 | 102.6398593 | 102.6398593 | 102.6398593 | 102.435349 | 101.4390523 | 100.4621148 | 99.50397582 | 98.56409665 |
| 180713A00024 | 7/13/2018 | 2.96 | 7/13/2021 | 7/13/2018 | 102.81372 | 102.8137241 | 102.8137241 | 102.8137241 | 102.6034844 | 101.5571463 | 100.5321357 | 99.52780501 | 98.5435326 |
| 180821A00039 | 8/21/2018 | 2.99 | 7/21/2023 | 8/21/2018 | 108.31269 | 108.3126893 | 108.3126893 | 108.3126893 | 107.4241017 | 104.3429679 | 101.367167 | 98.49249831 | 95.71495445 |
| 180911A00007 | 9/11/2018 | 3.12 | 9/8/2023 | 9/11/2018 | 109.09509 | 109.0950896 | 109.0950896 | 109.0950896 | 108.1270913 | 104.9044796 | 101.7955861 | 98.79571529 | 95.90039673 |
| 180925A00033 | 9/25/2018 | 3.26 | 9/25/2023 | 9/25/2018 | 109.68435 | 109.6843458 | 109.6843458 | 109.6843458 | 108.6865612 | 105.4084683 | 102.2473843 | 99.19841585 | 96.25690863 |
| 181001A00031 | 10/1/2018 | 3.23 | 9/29/2023 | 10/1/2018 | 109.61857 | 109.6185746 | 109.6185746 | 109.6185746 | 108.6145775 | 105.3267422 | 102.1566084 | 99.09923886 | 96.1499381 |
| 181119A00020 | 11/19/2018 | 3.06 | 11/19/2020 | 11/19/2018 | 101.10589 | 101.1058901 | 101.1058901 | 101.1058901 | 101.0361071 | 100.6422726 | 100.2515142 | 99.86379576 | 99.47908185 |
| 181210A00068 | 12/10/2018 | 3.34 | 12/10/2025 | 12/10/2018 | 116.6229 | 116.6229034 | 116.6229034 | 116.6229034 | 113.6220762 | 108.0922701 | 102.8707166 | 97.93859558 | 93.27833092 |
| 190123A00059 | 1/23/2019 | 2.95 | 1/24/2022 | 1/23/2019 | 104.23146 | 104.2314598 | 104.2314598 | 104.2314598 | 103.9237548 | 102.3543133 | 100.8164535 | 99.30929157 | 97.83197651 |
| 190206A00010 | 2/12/2019 | 2.84 | 2/11/2022 | 2/12/2019 | 104.18324 | 104.1832363 | 104.1832363 | 104.1832363 | 103.8604905 | 102.2404834 | 100.6537092 | 99.09921109 | 97.57606911 |
| 190221A00011 | 2/21/2019 | 2.81 | 8/23/2021 | 2/21/2019 | 102.94471 | 102.944715 | 102.944715 | 102.944715 | 102.7264299 | 101.5675758 | 100.4348339 | 99.32732868 | 98.2442233 |
| 190311A00069 | 3/25/2019 | 2.78 | 3/27/2023 | 3/25/2019 | 106.87118 | 106.8711809 | 106.8711809 | 106.8711809 | 106.1437093 | 103.3922436 | 100.7263754 | 98.14287824 | 95.63867178 |
| 190311A00072 | 3/25/2019 | 2.79 | 9/25/2023 | 3/25/2019 | 108.14884 | 108.1488356 | 108.1488356 | 108.1488356 | 107.1570653 | 103.9038989 | 100.7670777 | 97.74173166 | 94.82322833 |
| 170727A00020 | 7/27/2017 | 1.94 | 7/27/2021 | 7/27/2017 | 101.8091 | 101.8091048 | 101.8091048 | 101.8091048 | 101.5967423 | 100.518062 | 99.46219266 | 98.42841665 | 97.41604632 |
| 170814A00034 | 8/14/2017 | 2.1 | 8/15/2022 | 8/14/2017 | 103.87659 | 103.8765932 | 103.8765932 | 103.8765932 | 103.3796352 | 101.2655736 | 99.20520333 | 97.19678939 | 95.23866696 |
| 170822A00023 | 8/23/2017 | 3.95 | 8/23/2028 | 8/23/2017 | 129.74683 | 129.7468314 | 129.7468314 | 129.7468314 | 122.1356915 | 113.780398 | 106.0817668 | 98.98424367 | 92.43726344 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 171219A00022 | 12/19/2017 | 2.26 | 12/18/2020 | 12/19/2017 | 100.95652 | 100.9565226 | 100.9565226 | 100.9565226 | 100.8694161 | 100.3962075 | 99.92744062 | 99.463053 | 99.00298339 |
| 171228A00023 | 12/28/2017 | 2.69 | 3/29/2024 | 12/28/2017 | 109.04634 | 109.0463443 | 109.0463443 | 109.0463443 | 107.7182796 | 103.9604962 | 100.3548912 | 96.89441786 | 93.57240086 |
| 171228A00024 | 12/28/2017 | 2.71 | 6/28/2024 | 12/28/2017 | 109.72486 | 109.724856 | 109.724856 | 109.724856 | 108.208734 | 104.2001908 | 100.3637502 | 96.69111227 | 93.17442213 |
| 180118A00008 | 1/18/2018 | 2.44 | 1/19/2021 | 1/18/2018 | 101.23153 | 101.2315291 | 101.2315291 | 101.2315291 | 101.1256509 | 100.5639086 | 100.0084046 | 99.45903537 | 98.91569945 |
| 180123A00067 | 1/23/2018 | 2.67 | 1/23/2023 | 1/23/2018 | 106.15623 | 106.1562314 | 106.1562314 | 106.1562314 | 105.4996639 | 102.9311035 | 100.4385552 | 98.01931163 | 95.67078044 |
| 180130A00062 | 1/30/2018 | 2.51 | 2/1/2021 | 1/30/2018 | 101.35232 | 101.3523175 | 101.3523175 | 101.3523175 | 101.2389345 | 100.6411747 | 100.0504553 | 99.46665274 | 98.88964601 |
| 180316A00031 | 3/16/2018 | 2.96 | 12/16/2022 | 3/16/2018 | 106.6284 | 106.6284027 | 106.6284027 | 106.6284027 | 106.008617 | 103.5340458 | 101.1303277 | 98.7950298 | 96.52581785 |
| 180328A00042 | 3/28/2018 | 2.95 | 3/28/2023 | 3/28/2018 | 107.34874 | 107.3487388 | 107.3487388 | 107.3487388 | 106.6186568 | 103.8579496 | 101.1831468 | 98.591008 | 96.07844038 |
| 180625A00012 | 6/25/2018 | 3.07 | 6/23/2023 | 6/25/2018 | 108.3455 | 108.3454956 | 108.3454956 | 108.3454956 | 107.4984865 | 104.4908756 | 101.5840561 | 98.77409435 | 96.05723297 |
| 180726A00044 | 7/26/2018 | 2.94 | 7/27/2020 | 7/26/2018 | 100.19867 | 100.1986731 | 100.1986731 | 100.1986731 | 100.188408 | 100.1135409 | 100.0387917 | 99.96416024 | 99.88964622 |
| 181016A00019 | 10/18/2018 | 3.32 | 10/16/2023 | 10/18/2018 | 110.05522 | 110.0552165 | 110.0552165 | 110.0552165 | 109.0210944 | 105.681455 | 102.4627734 | 99.35998791 | 96.36827952 |
| 181203A00039 | 12/3/2018 | 3.27 | 12/1/2023 | 12/3/2018 | 110.26505 | 110.265054 | 110.265054 | 110.265054 | 109.1514224 | 105.6856026 | 102.349632 | 99.13795981 | 96.04530241 |
| 190311A00030 | 3/11/2019 | 2.68 | 3/11/2021 | 3/11/2019 | 101.70807 | 101.708068 | 101.708068 | 101.708068 | 101.5725945 | 100.8695167 | 100.1761645 | 99.49233698 | 98.81783864 |
| 190311A00061 | 3/25/2019 | 2.75 | 3/25/2022 | 3/25/2019 | 104.32109 | 104.3210912 | 104.3210912 | 104.3210912 | 103.9608525 | 102.2234852 | 100.5235231 | 98.85982273 | 97.23128781 |
| 190311A00068 | 3/25/2019 | 2.76 | 9/26/2022 | 3/25/2019 | 105.58008 | 105.5800766 | 105.5800766 | 105.5800766 | 105.0398319 | 102.7939796 | 100.6073559 | 98.47795841 | 96.40387047 |
| 190318A00016 | 3/19/2019 | 2.7 | 3/18/2022 | 3/19/2019 | 104.1866 | 104.1866016 | 104.1866016 | 104.1866016 | 103.8329298 | 102.1152967 | 100.434349 | 98.78897553 | 97.17811041 |
| 190501A00024 | 5/1/2019 | 2.62 | 5/1/2024 | 5/1/2019 | 108.99218 | 108.9921763 | 108.9921763 | 108.9921763 | 107.599241 | 103.7552836 | 100.0703613 | 96.53709003 | 93.14846589 |
| 190515A00030 | 5/15/2019 | 2.49 | 5/15/2024 | 5/15/2019 | 108.57376 | 108.5737614 | 108.5737614 | 108.5737614 | 107.1545992 | 103.2829282 | 99.5729824 | 96.01718257 | 92.60834354 |
| 190722A00056 | 12/19/2019 | 2.02 | 12/20/2021 | 12/19/2019 | 102.58641 | 102.5864098 | 102.5864098 | 102.5864098 | 102.3090893 | 100.8454616 | 99.41010474 | 98.0022714 | 96.62124015 |
| 190815A00041 | 8/15/2019 | 1.86 | 8/15/2024 | 8/15/2019 | 106.50764 | 106.507644 | 106.507644 | 106.507644 | 104.9068353 | 100.8410433 | 96.95510943 | 93.24011216 | 89.68762318 |
| 190829A00016 | 8/29/2019 | 1.82 | 8/29/2022 | 8/29/2019 | 103.33413 | 103.3341318 | 103.3341318 | 103.3341318 | 102.8251952 | 100.6804026 | 98.59077962 | 96.55451672 | 94.56987881 |
| 111213A00004 | 12/13/2011 | 2.96 | 12/13/2021 | 12/13/2011 | 103.95092 | 103.9509242 | 103.9509242 | 103.9509242 | 103.6770377 | 102.2211346 | 100.792996 | 99.39189661 | 98.01713553 |
| 150601A00332 | 6/1/2015 | 2.72 | 8/7/2020 | 6/1/2015 | 100.25168 | 100.2516782 | 100.2516782 | 100.2516782 | 100.2367489 | 100.1314049 | 100.026292 | 99.92140943 | 99.81675646 |
| 150601A00625 | 6/1/2015 | 3.96 | 12/9/2044 | 6/1/2015 | 185.9077 | 185.9077023 | 185.9077023 | 159.007533 | 133.3498087 | 112.4331808 | 95.58373837 | 81.95166045 | 70.87167323 |
| 150601A00656 | 6/1/2015 | 2.59 | 12/17/2021 | 6/1/2015 | 103.36097 | 103.3609735 | 103.3609735 | 103.3609735 | 103.0848585 | 101.6231325 | 100.1894826 | 98.78317043 | 97.40348277 |
| 150630A00097 | 6/30/2015 | 3.05 | 7/1/2024 | 6/30/2015 | 111.11708 | 111.1170785 | 111.1170785 | 111.1170785 | 109.5869457 | 105.5429289 | 101.672535 | 97.96738267 | 94.4195403 |
| 150706A00019 | 7/6/2015 | 1.93 | 7/6/2020 | 7/6/2015 | 100.02684 | 100.026836 | 100.026836 | 100.026836 | 100.024557 | 100.0079299 | 99.99131931 | 99.97472517 | 99.95814747 |
| 150731A00016 | 7/31/2015 | 3.04 | 7/31/2025 | 7/31/2015 | 113.99291 | 113.9929086 | 113.9929086 | 113.9929086 | 111.4572645 | 106.328813 | 101.4702981 | 96.86606325 | 92.50144338 |
| 150824A00043 | 8/24/2015 | 1.82 | 8/24/2020 | 8/24/2015 | 100.23657 | 100.2365661 | 100.2365661 | 100.2365661 | 100.214017 | 100.0616964 | 99.90984748 | 99.7584679 | 99.60755552 |
| 150824A00046 | 8/24/2015 | 1.82 | 8/24/2020 | 8/24/2015 | 100.23657 | 100.2365661 | 100.2365661 | 100.2365661 | 100.214017 | 100.0616964 | 99.90984748 | 99.7584679 | 99.60755552 |
| 150930A00059 | 9/30/2015 | 1.78 | 9/30/2020 | 9/30/2015 | 100.38469 | 100.3846889 | 100.3846889 | 100.3846889 | 100.344011 | 100.0894272 | 99.83612772 | 99.58410287 | 99.33334313 |
| 151008A00025 | 10/8/2015 | 2.91 | 10/8/2025 | 10/8/2015 | 113.81905 | 113.8190524 | 113.8190524 | 113.8190524 | 111.0656279 | 105.7672473 | 100.7566734 | 96.01671914 | 91.53131654 |
| 151013A00012 | 10/13/2015 | 1.58 | 10/13/2020 | 10/13/2015 | 100.42648 | 100.4264816 | 100.4264816 | 100.4264816 | 100.3784053 | 100.0874457 | 99.79818449 | 99.51060686 | 99.22469799 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 151214A00051 | 12/14/2015 | 2.92 | 12/15/2025 | 12/14/2015 | 114.35794 | 114.3579443 | 114.3579443 | 114.3579443 | 111.3608888 | 105.8790345 | 100.7044187 | 95.81820944 | 91.2028238 |
| 160208A00004 | 2/8/2016 | 1.46 | 2/8/2021 | 2/8/2016 | 100.83105 | 100.8310531 | 100.8310531 | 100.8310531 | 100.7138023 | 100.0976187 | 99.48895567 | 98.88767604 | 98.29364601 |
| 160210A00041 | 2/10/2016 | 1.97 | 2/10/2023 | 2/10/2016 | 104.42396 | 104.423964 | 104.423964 | 104.423964 | 103.753586 | 101.1578846 | 98.64025922 | 96.19788051 | 93.82804136 |
| 160210A00052 | 2/10/2016 | 1.64 | 2/10/2021 | 2/10/2016 | 100.86474 | 100.8647446 | 100.8647446 | 100.8647446 | 100.7465481 | 100.1258591 | 99.51279863 | 98.90722666 | 98.30900657 |
| 160211A00056 | 2/11/2016 | 1.82 | 2/10/2023 | 2/11/2016 | 104.02765 | 104.0276525 | 104.0276525 | 104.0276525 | 103.3584235 | 100.7679753 | 98.25548258 | 95.8181198 | 93.45318345 |
| 160212A00017 | 2/12/2016 | 1.57 | 2/12/2021 | 2/12/2016 | 100.8282 | 100.8281956 | 100.8281956 | 100.8281956 | 100.7088879 | 100.0828682 | 99.46461121 | 98.85397321 | 98.25081394 |
| 160222A00005 | 2/22/2016 | 2.79 | 2/22/2028 | 2/22/2016 | 119.04586 | 119.0458565 | 119.0458565 | 119.0458565 | 112.5007462 | 104.9673258 | 98.00124357 | 91.55665169 | 85.59163846 |
| 160222A00018 | 2/22/2016 | 2.59 | 2/23/2026 | 2/22/2016 | 112.98131 | 112.9813145 | 112.9813145 | 112.9813145 | 109.7332893 | 104.1125963 | 98.81722631 | 93.82661703 | 89.12161426 |
| 160229A00027 | 2/29/2016 | 1.74 | 3/1/2021 | 2/29/2016 | 101.00425 | 101.0042544 | 101.0042544 | 101.0042544 | 100.875171 | 100.2021235 | 99.53802235 | 98.88269025 | 98.23595451 |
| 181031A00070 | 3/1/2019 | 3.77 | 3/1/2029 | 3/1/2019 | 130.05764 | 130.057637 | 130.057637 | 130.057637 | 121.5278107 | 112.7173222 | 104.6389132 | 97.22730248 | 90.42336958 |
| 181220A00078 | 12/20/2018 | 3.17 | 12/20/2024 | 12/20/2018 | 112.91084 | 112.910837 | 112.910837 | 112.910837 | 110.9776359 | 106.4510042 | 102.1376508 | 98.02640132 | 94.10672475 |
| 190110A00036 | 1/10/2019 | 2.88 | 10/9/2020 | 1/10/2019 | 100.73083 | 100.7308324 | 100.7308324 | 100.7308324 | 100.6850001 | 100.4049954 | 100.1265553 | 99.84966672 | 99.57431656 |
| 190311A00073 | 3/14/2019 | 2.81 | 3/14/2024 | 3/14/2019 | 109.39593 | 109.3959256 | 109.3959256 | 109.3959256 | 108.0949987 | 104.3693769 | 100.7931857 | 97.35957242 | 94.06204218 |
| 190328A00077 | 3/28/2019 | 2.46 | 9/28/2021 | 3/28/2019 | 102.75549 | 102.7554939 | 102.7554939 | 102.7554939 | 102.5296277 | 101.2741698 | 100.0493691 | 98.85411309 | 97.68734257 |
| 190426A00023 | 4/26/2019 | 2.91 | 6/24/2026 | 4/26/2019 | 115.65931 | 115.6593083 | 115.6593083 | 115.6593083 | 111.884216 | 105.8925652 | 100.2648895 | 94.97714744 | 90.00700584 |
| 190515A00032 | 5/15/2019 | 2.49 | 5/15/2024 | 5/15/2019 | 108.57376 | 108.5737614 | 108.5737614 | 108.5737614 | 107.1545992 | 103.2829282 | 99.5729824 | 96.01718257 | 92.60834354 |
| 190607A00040 | 6/7/2019 | 2.12 | 6/7/2022 | 6/7/2019 | 103.59131 | 103.5913149 | 103.5913149 | 103.5913149 | 103.1618167 | 101.2333864 | 99.3506327 | 97.51219747 | 95.71677202 |
| 190621A00039 | 6/21/2019 | 2.21 | 6/17/2024 | 6/21/2019 | 107.65315 | 107.6531463 | 107.6531463 | 107.6531463 | 106.1712361 | 102.2324182 | 98.46194537 | 94.85174854 | 91.39418803 |
| 190826A00046 | 8/26/2019 | 1.77 | 8/26/2024 | 8/26/2019 | 106.17791 | 106.1779113 | 106.1779113 | 106.1779113 | 104.5551558 | 100.4685231 | 96.56380404 | 92.83192007 | 89.26429794 |
| 190904A00044 | 9/4/2019 | 1.72 | 12/30/2022 | 9/4/2019 | 103.59881 | 103.5988126 | 103.5988126 | 103.5988126 | 102.9736141 | 100.5007598 | 98.1000026 | 95.76882622 | 93.50481816 |
| 191002A00038 | 1/13/2020 | 1.76 | 1/13/2023 | 1/13/2020 | 103.75658 | 103.7565755 | 103.7565755 | 103.7565755 | 103.1168691 | 100.6055612 | 98.16823879 | 95.80228696 | 93.50520012 |
| 191002A00043 | 2/3/2020 | 1.75 | 2/3/2023 | 2/3/2020 | 103.81515 | 103.8151533 | 103.8151533 | 103.8151533 | 103.1539614 | 100.586449 | 98.09577175 | 95.679163 | 93.3339747 |
| 200131A00031 | 1/31/2020 | 1.74 | 1/31/2024 | 1/31/2020 | 105.22762 | 105.227622 | 105.227622 | 105.227622 | 104.0271762 | 100.4925533 | 97.09672375 | 93.83348142 | 90.69693404 |
| 180910A00037 | 9/10/2018 | 3.03 | 9/9/2022 | 9/10/2018 | 106.0634 | 106.0633996 | 106.0633996 | 106.0633996 | 105.537939 | 103.3329836 | 101.1851881 | 99.09265638 | 97.05357192 |
| 180919A00013 | 9/19/2018 | 3.14 | 9/19/2022 | 9/19/2018 | 106.38567 | 106.385672 | 106.385672 | 106.385672 | 105.8500839 | 103.6141429 | 101.4367175 | 99.31584535 | 97.24964725 |
| 181220A00041 | 12/20/2018 | 3.36 | 12/18/2026 | 12/20/2018 | 119.83878 | 119.8387833 | 119.8387833 | 119.8387833 | 115.2213582 | 108.6765826 | 102.5554456 | 96.82821796 | 91.46740547 |
| 181220A00079 | 12/20/2018 | 3.23 | 6/20/2025 | 12/20/2018 | 114.63696 | 114.6369631 | 114.6369631 | 114.6369631 | 112.2137741 | 107.1734312 | 102.3932075 | 97.85830157 | 93.55483018 |
| 181227A00001 | 12/27/2018 | 2.92 | 12/27/2021 | 12/27/2018 | 103.97948 | 103.9794801 | 103.9794801 | 103.9794801 | 103.6946505 | 102.2017205 | 100.7379547 | 99.30257303 | 97.89482277 |
| 190122A00018 | 1/22/2019 | 2.98 | 12/1/2022 | 1/22/2019 | 106.56693 | 106.5669278 | 106.5669278 | 106.5669278 | 105.9619851 | 103.5276349 | 101.1618968 | 98.86245301 | 96.62707812 |
| 190221A00009 | 2/21/2019 | 2.81 | 2/22/2021 | 2/21/2019 | 101.67956 | 101.6795618 | 101.6795618 | 101.6795618 | 101.5540214 | 100.8975728 | 100.2496011 | 99.60994283 | 98.9784387 |
| 190311A00076 | 3/14/2019 | 2.88 | 9/16/2024 | 3/14/2019 | 110.97751 | 110.9775098 | 110.9775098 | 110.9775098 | 109.2792663 | 105.0387141 | 100.9879058 | 97.11728862 | 93.41784801 |
| 190327A00027 | 3/27/2019 | 2.66 | 1/15/2025 | 3/27/2019 | 110.78033 | 110.7803279 | 110.7803279 | 110.7803279 | 108.7976558 | 104.2524401 | 99.92490476 | 95.80347248 | 91.87724335 |
| 190530A00028 | 5/30/2019 | 2.35 | 5/28/2021 | 5/30/2019 | 101.91925 | 101.919247 | 101.919247 | 101.919247 | 101.730251 | 100.813754 | 99.91372603 | 99.02972621 | 98.16132931 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190607A00041 | 6/7/2019 | 2.12 | 6/7/2022 | 6/7/2019 | 103.59131 | 103.5913149 | 103.5913149 | 103.5913149 | 103.1618167 | 101.2333864 | 99.3506327 | 97.51219747 | 95.71677202 |
| 191002A00042 | 1/13/2020 | 1.76 | 1/13/2023 | 1/13/2020 | 103.75658 | 103.7565755 | 103.7565755 | 103.7565755 | 103.1168691 | 100.6055612 | 98.16823879 | 95.80228696 | 93.50520012 |
| 191002A00044 | 2/3/2020 | 1.75 | 2/3/2023 | 2/3/2020 | 103.81515 | 103.8151533 | 103.8151533 | 103.8151533 | 103.1539614 | 100.586449 | 98.09577175 | 95.679163 | 93.3339747 |
| 190325A00022 | 3/25/2019 | 2.55 | 11/25/2022 | 3/25/2019 | 105.47774 | 105.4777363 | 105.4777363 | 105.4777363 | 104.8813506 | 102.4765391 | 100.1391662 | 97.86696726 | 95.6577672 |
| 190501A00014 | 5/1/2019 | 2.62 | 5/1/2024 | 5/1/2019 | 108.99218 | 108.9921763 | 108.9921763 | 108.9921763 | 107.599241 | 103.7552836 | 100.0703613 | 96.53709003 | 93.14846589 |
| 190514A00006 | 5/14/2019 | 2.43 | 5/17/2021 | 5/14/2019 | 101.92683 | 101.9268262 | 101.9268262 | 101.9268262 | 101.7458409 | 100.8591975 | 99.98797978 | 99.13178746 | 98.29023413 |
| 190514A00017 | 5/14/2019 | 2.43 | 5/17/2021 | 5/14/2019 | 101.92683 | 101.9268262 | 101.9268262 | 101.9268262 | 101.7458409 | 100.8591975 | 99.98797978 | 99.13178746 | 98.29023413 |
| 190523A00035 | 5/23/2019 | 2.34 | 11/23/2021 | 5/23/2019 | 102.92409 | 102.9240923 | 102.9240923 | 102.9240923 | 102.6667208 | 101.2720345 | 99.9030298 | 98.55905862 | 97.23949423 |
| 190530A00040 | 5/30/2019 | 2.32 | 11/30/2021 | 5/30/2019 | 102.93527 | 102.9352712 | 102.9352712 | 102.9352712 | 102.6729936 | 101.2591491 | 99.87165714 | 98.50984501 | 97.17306228 |
| 190531A00051 | 6/3/2019 | 2.27 | 6/3/2021 | 6/3/2019 | 101.87888 | 101.8788848 | 101.8788848 | 101.8788848 | 101.6862253 | 100.7536202 | 99.83807114 | 98.93911363 | 98.05629979 |
| 190722A00054 | 12/19/2019 | 2.02 | 12/20/2021 | 12/19/2019 | 102.58641 | 102.5864098 | 102.5864098 | 102.5864098 | 102.3090893 | 100.8454616 | 99.41010474 | 98.0022714 | 96.62124015 |
| 190829A00017 | 8/29/2019 | 1.8 | 8/29/2023 | 8/29/2019 | 104.80301 | 104.8030058 | 104.8030058 | 104.8030058 | 103.8673139 | 100.7397542 | 97.72238298 | 94.8106728 | 92.00031215 |
| 190829A00076 | 8/29/2019 | 1.81 | 6/30/2023 | 8/29/2019 | 104.58403 | 104.5840263 | 104.5840263 | 104.5840263 | 103.7401956 | 100.7705003 | 97.90142809 | 95.12901828 | 92.44948938 |
| 190917A00033 | 1/10/2020 | 2.03 | 1/10/2023 | 1/10/2020 | 104.43472 | 104.4347157 | 104.4347157 | 104.4347157 | 103.7961515 | 101.2839413 | 98.84551921 | 96.47828509 | 94.17974717 |
| 190405A00040 | 4/3/2020 | 3.12 | 4/5/2030 | 4/3/2020 | 127.45692 | 127.4569228 | 127.4569228 | 127.0209137 | 116.9248107 | 107.3520984 | 98.66793499 | 90.78445743 | 83.62293971 |
| 190520A00048 | 5/20/2019 | 2.53 | 5/20/2024 | 5/20/2019 | 108.7608 | 108.7607965 | 108.7607965 | 108.7607965 | 107.3305214 | 103.4425054 | 99.71737783 | 96.14748121 | 92.72555769 |
| 190604A00019 | 6/4/2019 | 2.27 | 6/4/2024 | 6/4/2019 | 107.82273 | 107.8227339 | 107.8227339 | 107.8227339 | 106.3668722 | 102.4586598 | 98.71599002 | 95.13099975 | 91.69624031 |
| 190829A00080 | 8/29/2019 | 1.8 | 12/29/2023 | 8/29/2019 | 105.30785 | 105.3078542 | 105.3078542 | 105.3078542 | 104.1663221 | 100.7142761 | 97.3951523 | 94.20312825 | 91.13266876 |
| 190904A00037 | 9/4/2019 | 1.73 | 6/15/2022 | 9/4/2019 | 102.83966 | 102.8396568 | 102.8396568 | 102.8396568 | 102.4038651 | 100.4617695 | 98.56620805 | 96.71578158 | 94.90914233 |
| 190904A00043 | 9/4/2019 | 1.72 | 12/15/2022 | 9/4/2019 | 103.53969 | 103.539689 | 103.539689 | 103.539689 | 102.9291393 | 100.4958222 | 98.13235753 | 95.83634594 | 93.60548538 |
| 191002A00046 | 2/14/2020 | 1.75 | 2/14/2023 | 2/14/2020 | 103.85845 | 103.8584523 | 103.8584523 | 103.8584523 | 103.185474 | 100.5857764 | 98.06458966 | 95.61905702 | 93.24644567 |
| 190621A00035 | 6/21/2019 | 2.19 | 12/15/2023 | 6/21/2019 | 106.61077 | 106.6107682 | 106.6107682 | 106.6107682 | 105.4880897 | 102.0489953 | 98.74072937 | 95.55762636 | 92.49429683 |
| 190807A00043 | 8/7/2019 | 1.8 | 8/7/2023 | 8/7/2019 | 104.71162 | 104.711623 | 104.711623 | 104.711623 | 103.8102444 | 100.7406917 | 97.77774005 | 94.91707705 | 92.15459197 |
| 190829A00013 | 8/29/2019 | 1.78 | 8/29/2024 | 8/29/2019 | 106.23207 | 106.2320711 | 106.2320711 | 106.2320711 | 104.6024876 | 100.5072239 | 96.59453193 | 92.85528604 | 89.28086956 |
| 190829A00028 | 8/29/2019 | 1.78 | 8/29/2024 | 8/29/2019 | 106.23207 | 106.2320711 | 106.2320711 | 106.2320711 | 104.6024876 | 100.5072239 | 96.59453193 | 92.85528604 | 89.28086956 |
| 190829A00073 | 8/29/2019 | 1.81 | 3/15/2023 | 8/29/2019 | 104.13786 | 104.1378621 | 104.1378621 | 104.1378621 | 103.4323256 | 100.7497816 | 98.15016828 | 95.63038709 | 93.18747874 |
| 190904A00034 | 9/4/2019 | 1.74 | 6/1/2022 | 9/4/2019 | 102.82319 | 102.8231908 | 102.8231908 | 102.8231908 | 102.4011052 | 100.4965063 | 98.63667882 | 96.82030269 | 95.04610553 |
| 190904A00040 | 9/4/2019 | 1.73 | 6/22/2022 | 9/4/2019 | 102.86729 | 102.8672948 | 102.8672948 | 102.8672948 | 102.4245718 | 100.4633699 | 98.54960496 | 96.68183659 | 94.85867827 |
| 160301A00006 | 3/1/2016 | 1.69 | 3/1/2021 | 3/1/2016 | 100.9704 | 100.9703984 | 100.9703984 | 100.9703984 | 100.841338 | 100.1684184 | 99.50444391 | 98.8492373 | 98.20262589 |
| 160308A00011 | 3/8/2016 | 1.81 | 2/16/2021 | 3/8/2016 | 100.99638 | 100.9963755 | 100.9963755 | 100.9963755 | 100.8746912 | 100.2371469 | 99.60764322 | 98.98602864 | 98.37215552 |
| 160309A00008 | 3/9/2016 | 1.83 | 3/3/2021 | 3/9/2016 | 101.07395 | 101.0739463 | 101.0739463 | 101.0739463 | 100.9436367 | 100.2648679 | 99.59519733 | 98.93444301 | 98.28242783 |
| 160309A00014 | 3/9/2016 | 1.84 | 3/9/2021 | 3/9/2016 | 101.10719 | 101.1071925 | 101.1071925 | 101.1071925 | 100.9733241 | 100.2780583 | 99.59234339 | 98.91598352 | 98.2487881 |
| 160405A00018 | 4/5/2016 | 1.61 | 4/5/2021 | 4/5/2016 | 101.04791 | 101.0479059 | 101.0479059 | 101.0479059 | 100.8976126 | 100.1290511 | 99.37215375 | 98.62665658 | 97.89230359 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 161118A00026 | 12/20/2016 | 3.03 | 12/21/2026 | 12/20/2016 | 117.71774 | 117.7177427 | 117.7177427 | 117.7177427 | 113.1163114 | 106.6306145 | 100.5664392 | 94.89412576 | 89.58624902 |
| 170331A00031 | 3/31/2017 | 2.03 | 3/31/2021 | 3/31/2017 | 101.34852 | 101.3485207 | 101.3485207 | 101.3485207 | 101.2015125 | 100.4452889 | 99.70032568 | 98.96637283 | 98.24318785 |
| 170412A00019 | 4/12/2017 | 2.56 | 4/12/2024 | 4/12/2017 | 108.64211 | 108.6421058 | 108.6421058 | 108.6421058 | 107.2885028 | 103.501341 | 99.86902392 | 96.38436943 | 93.04057078 |
| 171016A00016 | 10/16/2017 | 2.23 | 10/17/2022 | 10/16/2017 | 104.49224 | 104.4922368 | 104.4922368 | 104.4922368 | 103.9350184 | 101.6462369 | 99.41916285 | 97.25174533 | 95.14201647 |
| 171219A00024 | 12/19/2017 | 2.26 | 12/18/2020 | 12/19/2017 | 100.95652 | 100.9565226 | 100.9565226 | 100.9565226 | 100.8694161 | 100.3962075 | 99.92744062 | 99.463053 | 99.00298339 |
| 180110A00012 | 1/10/2018 | 2.38 | 1/11/2021 | 1/10/2018 | 101.15582 | 101.1558214 | 101.1558214 | 101.1558214 | 101.0545504 | 100.5149119 | 99.98103464 | 99.45282666 | 98.93019783 |
| 180125A00038 | 2/1/2018 | 2.91 | 2/3/2025 | 2/1/2018 | 112.06041 | 112.0604128 | 112.0604128 | 112.0604128 | 110.0214104 | 105.3984677 | 100.9985871 | 96.80980622 | 92.82086927 |
| 180302A00011 | 3/2/2018 | 2.68 | 3/2/2021 | 3/2/2018 | 101.64748 | 101.6474794 | 101.6474794 | 101.6474794 | 101.5173677 | 100.8391527 | 100.1699817 | 99.50967482 | 98.85805678 |
| 180424A00028 | 4/24/2018 | 2.98 | 4/23/2021 | 4/24/2018 | 102.23597 | 102.2359707 | 102.2359707 | 102.2359707 | 102.0720616 | 101.2493634 | 100.439917 | 99.64340388 | 98.8595158 |
| 180518A00042 | 5/25/2018 | 3.42 | 5/19/2025 | 5/25/2018 | 115.3154 | 115.3153971 | 115.3153971 | 115.3153971 | 112.9753863 | 108.001045 | 103.2789129 | 98.79488548 | 94.53571768 |
| 180529A00072 | 5/29/2018 | 3 | 5/30/2023 | 5/29/2018 | 107.9565 | 107.9565006 | 107.9565006 | 107.9565006 | 107.1449358 | 104.2077783 | 101.366999 | 98.61891829 | 95.96001757 |
| 180726A00046 | 7/26/2018 | 3.2 | 12/26/2023 | 7/26/2018 | 110.22341 | 110.223409 | 110.223409 | 110.223409 | 109.0654892 | 105.5353535 | 102.1399669 | 98.87345804 | 95.73024415 |
| 180910A00039 | 9/10/2018 | 3.03 | 9/9/2022 | 9/10/2018 | 106.0634 | 106.0633996 | 106.0633996 | 106.0633996 | 105.537939 | 103.3329836 | 101.1851881 | 99.09265638 | 97.05357192 |
| 181206A00021 | 12/6/2018 | 3.15 | 12/6/2023 | 12/6/2018 | 109.8902 | 109.8902013 | 109.8902013 | 109.8902013 | 108.7692771 | 105.2968645 | 101.9551001 | 98.73837625 | 95.64135615 |
| 181210A00066 | 12/10/2018 | 3.13 | 12/11/2023 | 12/10/2018 | 109.85993 | 109.8599275 | 109.8599275 | 109.8599275 | 108.7302464 | 105.2453613 | 101.8920898 | 98.66476087 | 95.55797866 |
| 181220A00077 | 12/20/2018 | 3.06 | 12/20/2023 | 12/20/2018 | 109.68493 | 109.6849303 | 109.6849303 | 109.6849303 | 108.5400268 | 105.0348188 | 101.6629103 | 98.41851745 | 95.29613931 |
| 190221A00012 | 2/21/2019 | 2.83 | 8/23/2022 | 2/21/2019 | 105.50102 | 105.5010223 | 105.5010223 | 105.5010223 | 104.992873 | 102.8399395 | 100.741973 | 98.69718333 | 96.70385367 |
| 190517A00023 | 5/17/2019 | 2.51 | 5/17/2024 | 5/17/2019 | 108.66409 | 108.6640949 | 108.6640949 | 108.6640949 | 107.2404071 | 103.3619005 | 99.64559307 | 96.08387394 | 92.66952858 |
| 190530A00048 | 5/30/2019 | 2.41 | 5/31/2022 | 5/30/2019 | 104.1182 | 104.1181984 | 104.1181984 | 104.1181984 | 103.6945769 | 101.7798693 | 99.91005292 | 98.0838064 | 96.29985602 |
| 190614A00007 | 6/14/2019 | 2.22 | 6/15/2021 | 6/14/2019 | 101.89682 | 101.8968249 | 101.8968249 | 101.8968249 | 101.6980905 | 100.7327802 | 99.78574781 | 98.8564776 | 97.94447328 |
| 190621A00037 | 6/21/2019 | 2.21 | 5/15/2024 | 6/21/2019 | 107.47971 | 107.4797119 | 107.4797119 | 107.4797119 | 106.0662751 | 102.215676 | 98.52615926 | 94.99017053 | 91.6005484 |
| 190722A00051 | 11/22/2019 | 2.03 | 11/22/2021 | 11/22/2019 | 102.48013 | 102.4801337 | 102.4801337 | 102.4801337 | 102.2240788 | 100.8353926 | 99.47223622 | 98.13396681 | 96.81996245 |
| 190726A00014 | 7/26/2019 | 2.23 | 7/24/2024 | 7/26/2019 | 107.9297 | 107.9296994 | 107.9296994 | 107.9296994 | 106.3682406 | 102.3291298 | 98.46629278 | 94.77109652 | 91.23537865 |
| 190829A00075 | 8/29/2019 | 1.8 | 6/15/2023 | 8/29/2019 | 104.49181 | 104.4918107 | 104.4918107 | 104.4918107 | 103.6694295 | 100.7408179 | 97.91012951 | 95.17356237 | 92.52748396 |
| 190829A00078 | 8/29/2019 | 1.8 | 12/15/2023 | 8/29/2019 | 105.24976 | 105.2497591 | 105.2497591 | 105.2497591 | 104.1329908 | 100.7174278 | 97.43203527 | 94.27117133 | 91.22946929 |
| 190904A00036 | 9/4/2019 | 1.74 | 6/8/2022 | 9/4/2019 | 102.85122 | 102.85122 | 102.85122 | 102.85122 | 102.4221969 | 100.4984616 | 98.62038735 | 96.78661412 | 94.99583176 |
| 191002A00045 | 2/14/2020 | 1.75 | 2/14/2023 | 2/14/2020 | 103.85845 | 103.8584523 | 103.8584523 | 103.8584523 | 103.185474 | 100.5857764 | 98.06458966 | 95.61905702 | 93.24644567 |
| 200131A00029 | 1/31/2020 | 1.78 | 10/31/2024 | 1/31/2020 | 106.48863 | 106.4886256 | 106.4886256 | 106.4886256 | 104.7157226 | 100.4555 | 96.39197783 | 92.5151039 | 88.81538927 |
| 110805A00021 | 8/5/2011 | 3.36 | 8/5/2021 | 8/5/2011 | 103.42981 | 103.4298097 | 103.4298097 | 103.4298097 | 103.2138907 | 102.1012176 | 101.0125409 | 99.94708998 | 98.90412693 |
| 120531A00008 | 5/31/2012 | 2.27 | 5/31/2022 | 5/31/2012 | 103.84676 | 103.8467631 | 103.8467631 | 103.8467631 | 103.4236697 | 101.5116457 | 99.6444615 | 97.82079713 | 96.03938028 |
| 141117A00011 | 11/17/2014 | 3.81 | 11/17/2034 | 11/17/2014 | 150.00604 | 150.0060378 | 150.0060378 | 142.2929502 | 126.8731758 | 113.0152263 | 100.9301809 | 90.37681484 | 81.14809414 |
| 141215A00062 | 12/15/2014 | 2.65 | 12/16/2024 | 12/15/2014 | 111.43122 | 111.4312153 | 111.4312153 | 111.4312153 | 109.5039898 | 104.9943622 | 100.6978472 | 96.60326267 | 92.70007161 |
| 150601A00333 | 6/1/2015 | 3.06 | 8/9/2021 | 6/1/2015 | 103.07577 | 103.0757682 | 103.0757682 | 103.0757682 | 102.8595985 | 101.7380902 | 100.6410234 | 99.56760504 | 98.51707601 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 150601A00341 | 6/1/2015 | 3.09 | 8/21/2020 | 6/1/2015 | 100.39833 | 100.3983339 | 100.3983339 | 100.3983339 | 100.3771031 | 100.2328879 | 100.0890991 | 99.94573457 | 99.80279257 |
| 150601A00355 | 6/1/2015 | 2.86 | 9/24/2020 | 6/1/2015 | 100.6064 | 100.6063965 | 100.6063965 | 100.6063965 | 100.5686542 | 100.330238 | 100.0929567 | 99.85680196 | 99.62176595 |
| 150731A00036 | 7/31/2015 | 2.01 | 7/31/2020 | 7/31/2015 | 100.14804 | 100.1480412 | 100.1480412 | 100.1480412 | 100.1362642 | 100.0503762 | 99.96463296 | 99.87903421 | 99.79357958 |
| 150812A00040 | 8/12/2015 | 2.94 | 8/12/2025 | 8/12/2015 | 113.56778 | 113.5677821 | 113.5677821 | 113.5677821 | 110.9988996 | 105.8509882 | 100.9756299 | 96.35692919 | 91.98000318 |
| 150909A00017 | 9/9/2015 | 2.02 | 9/9/2020 | 9/9/2015 | 100.34457 | 100.3445693 | 100.3445693 | 100.3445693 | 100.3143723 | 100.1177421 | 99.9218916 | 99.72681597 | 99.5325106 |
| 150929A00085 | 9/29/2015 | 1.81 | 9/29/2020 | 9/29/2015 | 100.38811 | 100.3881051 | 100.3881051 | 100.3881051 | 100.3479246 | 100.0960895 | 99.84551325 | 99.59618644 | 99.34809979 |
| 151002A00014 | 10/2/2015 | 1.65 | 10/2/2020 | 10/2/2015 | 100.35914 | 100.3591357 | 100.3591357 | 100.3591357 | 100.3173409 | 100.0572921 | 99.79858797 | 99.54121824 | 99.28517262 |
| 151027A00020 | 10/27/2015 | 1.75 | 10/27/2020 | 10/27/2015 | 100.49107 | 100.4910744 | 100.4910744 | 100.4910744 | 100.4351973 | 100.1060702 | 99.77909785 | 99.45425924 | 99.13153351 |
| 151215A00010 | 12/15/2015 | 2.16 | 12/15/2020 | 12/15/2015 | 100.88851 | 100.8885062 | 100.8885062 | 100.8885062 | 100.8032343 | 100.3385018 | 99.87805636 | 99.42183874 | 98.96979076 |
| 160203A00012 | 2/3/2016 | 1.54 | 2/3/2021 | 2/3/2016 | 100.861 | 100.8610041 | 100.8610041 | 100.8610041 | 100.7465777 | 100.1439774 | 99.54856289 | 98.96020635 | 98.37878285 |
| 160209A00019 | 2/9/2016 | 2.52 | 2/9/2026 | 2/9/2016 | 112.49993 | 112.49993 | 112.49993 | 112.49993 | 109.3111787 | 103.7410364 | 98.4914962 | 93.54241065 | 88.87500321 |
| 160210A00042 | 2/10/2016 | 2.57 | 2/10/2026 | 2/10/2016 | 112.78826 | 112.7882614 | 112.7882614 | 112.7882614 | 109.5926457 | 104.011953 | 98.75248478 | 93.79404958 | 89.11783056 |
| 160211A00089 | 2/16/2016 | 3.91 | 2/16/2024 | 2/16/2016 | 113.23894 | 113.2389434 | 113.2389434 | 113.2389434 | 111.9712695 | 108.2481499 | 104.6711583 | 101.2337252 | 97.92961631 |
| 160212A00027 | 2/12/2016 | 2.53 | 2/12/2026 | 2/12/2016 | 112.57437 | 112.57437 | 112.57437 | 112.57437 | 109.3732213 | 103.7930381 | 98.53443302 | 93.57717178 | 88.9023989 |
| 160212A00037 | 2/12/2016 | 3.03 | 2/12/2031 | 2/12/2016 | 128.87418 | 128.874181 | 128.874181 | 127.418831 | 116.4362216 | 106.1672805 | 96.92502635 | 88.60042892 | 81.0965904 |
| 160223A00012 | 2/23/2016 | 1.89 | 2/23/2023 | 2/23/2016 | 104.75539 | 104.7553908 | 104.7553908 | 104.7553908 | 104.0671882 | 101.419044 | 98.85159818 | 96.36188377 | 93.9470644 |
| 160229A00028 | 2/29/2016 | 1.74 | 3/1/2021 | 2/29/2016 | 101.00425 | 101.0042544 | 101.0042544 | 101.0042544 | 100.875171 | 100.2021235 | 99.53802235 | 98.88269025 | 98.23595451 |
| 160406A00009 | 4/6/2016 | 1.62 | 4/6/2021 | 4/6/2016 | 101.05942 | 101.0594167 | 101.0594167 | 101.0594167 | 100.9084115 | 100.1370823 | 99.37750156 | 98.62940254 | 97.89252638 |
| 170327A00077 | 3/27/2019 | 2.74 | 3/27/2024 | 3/27/2019 | 109.2218 | 109.2217998 | 109.2217998 | 109.2217998 | 107.8967125 | 104.1408025 | 100.5367748 | 97.07760583 | 93.75664197 |
| 170327A00079 | 3/27/2019 | 3.19 | 3/29/2027 | 3/27/2019 | 119.52646 | 119.5264565 | 119.5264565 | 119.5264565 | 114.4508583 | 107.6702002 | 101.3452169 | 95.44274785 | 89.93222099 |
| 170327A00080 | 3/27/2019 | 3.43 | 3/27/2029 | 3/27/2019 | 127.32771 | 127.3277125 | 127.3277125 | 127.3277125 | 118.7420712 | 109.9850488 | 101.9635268 | 94.61133175 | 87.86858758 |
| 170331A00032 | 3/31/2017 | 2.03 | 3/31/2021 | 3/31/2017 | 101.34852 | 101.3485207 | 101.3485207 | 101.3485207 | 101.2015125 | 100.4452889 | 99.70032568 | 98.96637283 | 98.24318785 |
| 180130A00063 | 1/30/2018 | 2.63 | 1/31/2022 | 1/30/2018 | 103.76881 | 103.768814 | 103.768814 | 103.768814 | 103.4561918 | 101.871969 | 100.3198503 | 98.79892776 | 97.30832753 |
| 180130A00064 | 1/30/2018 | 2.75 | 1/30/2023 | 1/30/2018 | 106.41109 | 106.4110873 | 106.4110873 | 106.4110873 | 105.7466765 | 103.1563685 | 100.6430876 | 98.20407425 | 95.83668676 |
| 180612A00031 | 6/12/2018 | 3.04 | 6/13/2022 | 6/12/2018 | 105.43838 | 105.4383842 | 105.4383842 | 105.4383842 | 104.9992949 | 103.036061 | 101.1196278 | 99.2485924 | 97.42160373 |
| 180726A00045 | 7/26/2018 | 3.1 | 7/26/2022 | 7/26/2018 | 105.86994 | 105.8699419 | 105.8699419 | 105.8699419 | 105.3877394 | 103.3050558 | 101.274254 | 99.29369531 | 97.36180505 |
| 180919A00091 | 5/19/2020 | 3.3 | 5/19/2025 | 5/19/2020 | 114.72528 | 114.7252847 | 114.7252847 | 114.7252847 | 112.3899434 | 107.4297528 | 102.7212517 | 98.25035895 | 94.00385198 |
| 181015A00034 | 4/15/2019 | 3.25 | 4/15/2021 | 4/15/2019 | 102.39238 | 102.3923808 | 102.3923808 | 102.3923808 | 102.2339903 | 101.4324458 | 100.6434724 | 99.86677558 | 99.10207019 |
| 181029A00051 | 2/5/2019 | 3.69 | 2/5/2029 | 2/5/2019 | 129.14553 | 129.1455314 | 129.1455314 | 129.1455314 | 120.7563715 | 112.042057 | 104.0475095 | 96.70894633 | 89.96856533 |
| 181206A00018 | 12/6/2018 | 3.13 | 12/6/2023 | 12/6/2018 | 109.8209 | 109.8209007 | 109.8209007 | 109.8209007 | 108.7002741 | 105.2290514 | 101.888444 | 98.6728451 | 95.57691923 |
| 181220A00076 | 12/20/2018 | 3.02 | 1/20/2023 | 12/20/2018 | 107.04102 | 107.0410247 | 107.0410247 | 107.0410247 | 106.3850172 | 103.8128684 | 101.3165907 | 98.89349028 | 96.54098687 |
| 190122A00017 | 1/22/2019 | 2.94 | 5/2/2022 | 1/22/2019 | 104.91396 | 104.9139589 | 104.9139589 | 104.9139589 | 104.5170515 | 102.6713494 | 100.8672992 | 99.10372061 | 97.37947412 |
| 190206A00009 | 2/12/2019 | 2.84 | 2/11/2022 | 2/12/2019 | 104.18324 | 104.1832363 | 104.1832363 | 104.1832363 | 103.8604905 | 102.2404834 | 100.6537092 | 99.09921109 | 97.57606911 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190425A00041 | 4/25/2019 | 2.56 | 6/15/2021 | 4/25/2019 | 102.22692 | 102.2269166 | 102.2269166 | 102.2269166 | 102.027853 | 101.0608171 | 100.1120818 | 99.18113119 | 98.26746831 |
| 190530A00018 | 5/30/2019 | 2.36 | 5/28/2021 | 5/30/2019 | 101.92846 | 101.9284569 | 101.9284569 | 101.9284569 | 101.7394522 | 100.8229094 | 99.92283619 | 99.03879169 | 98.17035065 |
| 190530A00066 | 5/30/2019 | 2.44 | 5/30/2023 | 5/30/2019 | 106.3088 | 106.3088023 | 106.3088023 | 106.3088023 | 105.5027692 | 102.5898099 | 99.77263145 | 97.04757373 | 94.41113706 |
| 190815A00040 | 8/15/2019 | 1.86 | 8/15/2023 | 8/15/2019 | 104.93411 | 104.9341074 | 104.9341074 | 104.9341074 | 104.0195454 | 100.9259166 | 97.94026329 | 95.05819292 | 92.27551985 |
| 190829A00072 | 8/29/2019 | 1.81 | 12/15/2022 | 8/29/2019 | 103.76334 | 103.7633356 | 103.7633356 | 103.7633356 | 103.152188 | 100.7160741 | 98.34987428 | 96.05118733 | 93.81770939 |
| 190917A00030 | 1/10/2020 | 2.03 | 1/10/2023 | 1/10/2020 | 104.43472 | 104.4347157 | 104.4347157 | 104.4347157 | 103.7961515 | 101.2839413 | 98.84551921 | 96.47828509 | 94.17974717 |
| 070906A00048 | 9/10/2007 | 3.79 | 9/12/2022 | 9/10/2020 | 107.77753 | 107.777529 | 107.777529 | 107.777529 | 107.2453507 | 105.0192923 | 102.9014264 | 101.0643188 | 99.97379309 |
| 081028A00036 | 10/30/2008 | 4.22 | 10/30/2023 | | 113.19884 | 113.1988368 | 113.1988368 | 113.1988368 | 112.1283844 | 108.6995391 | 105.3957002 | 102.2116162 | 99.14230298 |
| 180404A00037 | 4/6/2018 | 2.51 | 4/6/2028 | 4/6/2022 | 118.75785 | 118.7578512 | 118.7578512 | 118.7578512 | 113.0092629 | 107.0366238 | 102.5460986 | 99.39611751 | 97.18643964 |
| 180406A00015 | 4/10/2018 | 2.61 | 4/10/2028 | 4/10/2023 | 119.5696 | 119.569605 | 119.569605 | 119.569605 | 113.6987334 | 107.5193269 | 102.6284665 | 98.81887458 | 95.76673155 |
| 180925A00059 | 9/25/2018 | 3.01 | 9/25/2028 | 9/25/2023 | 124.04798 | 124.0479751 | 124.0479751 | 124.0479751 | 117.1303108 | 110.1634972 | 104.5092166 | 100.0012066 | 96.3570282 |
| 181004A00034 | 10/4/2018 | 2.58 | 10/5/2020 | 7/6/2020 | 100.62108 | 100.6210772 | 100.6210772 | 100.6210772 | 100.5775251 | 100.3087486 | 100.0414116 | 99.9727713 | 99.96468266 |
| 181004A00037 | 10/4/2018 | 2.48 | 10/5/2020 | 7/6/2020 | 100.59415 | 100.5941459 | 100.5941459 | 100.5941459 | 100.5506012 | 100.2818727 | 100.0196525 | 99.97194017 | 99.96385218 |
| 181031A00046 | 11/2/2018 | 3.05 | 10/29/2021 | 11/2/2020 | 103.72467 | 103.7246673 | 103.7246673 | 103.7246673 | 103.4832987 | 102.1526856 | 100.8985088 | 99.97598985 | 99.51159285 |
| 181203A00046 | 12/4/2018 | 2.8 | 12/4/2023 | 12/4/2020 | 108.66364 | 108.663645 | 108.663645 | 108.663645 | 107.5703092 | 104.3261532 | 101.6650349 | 100.0012906 | 99.29112429 |
| 181210A00035 | 12/12/2018 | 2.65 | 1/16/2024 | 1/15/2021 | 108.42359 | 108.4235878 | 108.4235878 | 108.4235878 | 107.2648903 | 103.9805553 | 101.3697675 | 99.78691247 | 99.03148763 |
| 190104A00032 | 1/4/2019 | 2.33 | 1/4/2024 | 9/4/2020 | 107.21146 | 107.2114591 | 107.2114591 | 107.2114591 | 106.0993632 | 103.0002787 | 100.7444938 | 99.96908086 | 99.9610099 |
| 190426A00017 | 4/26/2019 | 2.31 | 4/26/2022 | 7/27/2020 | 103.70971 | 103.7097135 | 103.7097135 | 103.7097135 | 103.3232103 | 101.5912502 | 100.2600325 | 99.92080733 | 99.85465359 |
| 190426A00018 | 4/26/2019 | 2.14 | 4/26/2024 | 7/27/2020 | 107.10982 | 107.1098215 | 107.1098215 | 107.1098215 | 105.8329081 | 102.6396218 | 100.4732038 | 99.90950422 | 99.84335922 |
| 190426A00024 | 4/26/2019 | 2.24 | 4/26/2022 | 7/27/2020 | 103.58078 | 103.5807761 | 103.5807761 | 103.5807761 | 103.1950235 | 101.4769009 | 100.1913801 | 99.91615311 | 99.85000297 |
| 190509A00033 | 5/9/2019 | 2.41 | 5/9/2022 | 5/10/2021 | 103.96991 | 103.9699124 | 103.9699124 | 103.9699124 | 103.5700685 | 101.7858876 | 100.277585 | 99.15957768 | 98.28747632 |
| 190509A00063 | 5/9/2019 | 2.11 | 5/9/2024 | 8/10/2020 | 107.05901 | 107.0590077 | 107.0590077 | 107.0590077 | 105.7656957 | 102.5795239 | 100.460287 | 99.84771674 | 99.73891422 |
| 190510A00019 | 5/10/2019 | 2.39 | 5/10/2022 | 5/10/2021 | 103.93815 | 103.9381538 | 103.9381538 | 103.9381538 | 103.5375303 | 101.7537962 | 100.2494589 | 99.13306317 | 98.25640399 |
| 190513A00033 | 5/13/2019 | 2.35 | 5/15/2023 | 5/13/2022 | 105.95892 | 105.9589222 | 105.9589222 | 105.9589222 | 105.1880801 | 102.4912982 | 100.1288432 | 98.091285 | 96.27096674 |
| 190513A00065 | 5/13/2019 | 2.01 | 5/13/2022 | 8/13/2020 | 103.57904 | 103.5790359 | 103.5790359 | 103.5790359 | 103.1766539 | 101.4297754 | 100.1824643 | 99.84349612 | 99.72161222 |
| 190516A00018 | 5/16/2019 | 2.03 | 5/16/2024 | 8/17/2020 | 106.78117 | 106.7811704 | 106.7811704 | 106.7811704 | 105.4903335 | 102.3553119 | 100.3443021 | 99.81562984 | 99.68961691 |
| 190516A00028 | 5/16/2019 | 2.03 | 5/16/2024 | 8/17/2020 | 106.78117 | 106.7811704 | 106.7811704 | 106.7811704 | 105.4903335 | 102.3553119 | 100.3443021 | 99.81562984 | 99.68961691 |
| 190522A00029 | 5/22/2019 | 2.41 | 5/22/2024 | 5/22/2023 | 108.30191 | 108.3019091 | 108.3019091 | 108.3019091 | 106.9156118 | 103.2789516 | 100.0220554 | 97.08988529 | 94.38966654 |
| 190523A00048 | 5/23/2019 | 2.32 | 5/23/2024 | 5/23/2023 | 107.95409 | 107.9540927 | 107.9540927 | 107.9540927 | 106.5745668 | 102.9643989 | 99.73557248 | 96.82373989 | 94.13393707 |
| 190523A00050 | 5/23/2019 | 2.3 | 5/23/2023 | 5/23/2022 | 105.85814 | 105.8581406 | 105.8581406 | 105.8581406 | 105.0731135 | 102.3514646 | 99.98638617 | 97.95394823 | 96.12731579 |
| 190529A00115 | 5/29/2019 | 1.92 | 5/29/2024 | 8/31/2020 | 106.40922 | 106.4092241 | 106.4092241 | 106.4092241 | 105.1190102 | 102.0561052 | 100.1979246 | 99.75234216 | 99.59008282 |
| 190530A00057 | 5/30/2019 | 1.71 | 5/30/2024 | 8/31/2020 | 106.3068 | 106.3067994 | 106.3067994 | 106.3067994 | 105.0153614 | 101.9696377 | 100.1603494 | 99.74647878 | 99.58444268 |
| 190530A00092 | 5/30/2019 | 1.69 | 5/30/2024 | 8/31/2020 | 106.22755 | 106.2275455 | 106.2275455 | 106.2275455 | 104.940913 | 101.9148254 | 100.1396762 | 99.74321408 | 99.58118196 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190530A00108 | 5/30/2019 | 1.88 | 5/30/2024 | 8/31/2020 | 106.25576 | 106.2557586 | 106.2557586 | 106.2557586 | 104.9731106 | 101.9464917 | 100.1534067 | 99.74530915 | 99.58358052 |
| 190603A00067 | 6/3/2019 | 1.72 | 6/3/2024 | 9/3/2020 | 105.63961 | 105.6396145 | 105.6396145 | 105.6396145 | 104.3956591 | 101.5455959 | 100.0274246 | 99.6721114 | 99.49358737 |
| 190605A00032 | 6/5/2019 | 1.92 | 6/3/2022 | 9/3/2020 | 103.18168 | 103.1816787 | 103.1816787 | 103.1816787 | 102.7655639 | 101.0544965 | 100.008196 | 99.71019313 | 99.53186216 |
| 190606A00030 | 6/6/2019 | 1.48 | 6/6/2024 | 9/8/2020 | 105.4217 | 105.4217041 | 105.4217041 | 105.4217041 | 104.1883809 | 101.4006509 | 99.98860046 | 99.66739285 | 99.48597461 |
| 190606A00032 | 6/6/2019 | 1.75 | 6/6/2024 | 9/8/2020 | 105.77034 | 105.770337 | 105.770337 | 105.770337 | 104.5126466 | 101.623391 | 100.0508299 | 99.67383689 | 99.49236796 |
| 190606A00054 | 6/6/2019 | 1.8 | 6/6/2024 | 9/8/2020 | 105.96872 | 105.9687226 | 105.9687226 | 105.9687226 | 104.6971737 | 101.7535409 | 100.0956598 | 99.68362743 | 99.50147962 |
| 190607A00016 | 6/7/2019 | 1.75 | 6/7/2024 | 9/8/2020 | 105.77432 | 105.7743165 | 105.7743165 | 105.7743165 | 104.5149185 | 101.6233363 | 100.0466589 | 99.66215029 | 99.47254239 |
| 190607A00022 | 6/7/2019 | 1.5 | 6/7/2024 | 9/8/2020 | 105.50516 | 105.5051593 | 105.5051593 | 105.5051593 | 104.2636149 | 101.4491939 | 99.99732812 | 99.65737342 | 99.46772598 |
| 190607A00025 | 6/7/2019 | 1.48 | 6/7/2024 | 9/8/2020 | 105.42546 | 105.4254631 | 105.4254631 | 105.4254631 | 104.1903205 | 101.3998604 | 99.98263866 | 99.65346886 | 99.46391568 |
| 190610A00069 | 6/10/2019 | 2.04 | 6/10/2022 | 9/10/2020 | 103.44916 | 103.4491605 | 103.4491605 | 103.4491605 | 103.0237212 | 101.2544466 | 100.0806881 | 99.71101759 | 99.5127374 |
| 190613A00024 | 6/13/2019 | 2.18 | 6/13/2024 | 6/13/2023 | 107.51257 | 107.5125705 | 107.5125705 | 107.5125705 | 106.1087988 | 102.4944386 | 99.26101217 | 96.33142534 | 93.61193021 |
| 190702A00051 | 7/2/2019 | 1.46 | 7/2/2024 | 7/2/2020 | 105.43838 | 105.4383818 | 105.4383818 | 105.4383818 | 104.170733 | 101.3741131 | 100.042257 | 99.98100857 | 99.97556438 |
| 190702A00079 | 7/2/2019 | 1.69 | 7/2/2024 | 7/5/2022 | 106.37078 | 106.3707833 | 106.3707833 | 106.3707833 | 105.0259978 | 101.7736296 | 99.14583483 | 96.97163272 | 95.04417667 |
| 190702A00082 | 7/2/2019 | 1.63 | 6/30/2022 | 9/30/2020 | 103.06101 | 103.0610113 | 103.0610113 | 103.0610113 | 102.6222166 | 100.8980522 | 99.91148666 | 99.58470616 | 99.33328768 |
| 190703A00023 | 7/3/2019 | 1.9 | 6/30/2022 | 9/30/2020 | 103.24253 | 103.2425315 | 103.2425315 | 103.2425315 | 102.8022473 | 101.0407653 | 99.9663573 | 99.61029659 | 99.35903263 |
| 190712A00038 | 7/12/2019 | 1.87 | 7/12/2021 | 7/13/2020 | 101.83298 | 101.8329803 | 101.8329803 | 101.8329803 | 101.6238653 | 100.6295009 | 100.0058157 | 99.95515334 | 99.92755171 |
| 190712A00044 | 7/12/2019 | 1.73 | 7/12/2022 | 7/13/2020 | 103.31719 | 103.3171898 | 103.3171898 | 103.3171898 | 102.864675 | 101.0797477 | 100.045865 | 99.95127428 | 99.92367566 |
| 190712A00047 | 7/12/2019 | 1.54 | 7/12/2024 | 7/13/2020 | 105.80205 | 105.8020476 | 105.8020476 | 105.8020476 | 104.4921565 | 101.5787178 | 100.0775861 | 99.94600985 | 99.91841531 |
| 190725A00018 | 7/25/2019 | 1.78 | 7/25/2024 | 7/27/2020 | 106.08904 | 106.0890398 | 106.0890398 | 106.0890398 | 104.7424643 | 101.7404589 | 100.1003473 | 99.88555788 | 99.8194281 |
| 190725A00022 | 7/25/2019 | 1.7 | 7/25/2022 | 7/27/2020 | 103.31248 | 103.3124796 | 103.3124796 | 103.3124796 | 102.8485527 | 101.0454262 | 100.0194032 | 99.89473027 | 99.82844704 |
| 190731A00008 | 7/31/2019 | 1.53 | 7/31/2024 | 7/31/2020 | 105.83548 | 105.8354766 | 105.8354766 | 105.8354766 | 104.4943101 | 101.5536302 | 100.0404324 | 99.85230762 | 99.76672783 |
| 190801A00025 | 8/1/2019 | 1.68 | 8/1/2024 | 8/3/2020 | 105.70551 | 105.7055131 | 105.7055131 | 105.7055131 | 104.3821438 | 101.4925626 | 100.0268072 | 99.85070138 | 99.76527111 |
| 190805A00014 | 8/5/2019 | 1.49 | 8/5/2024 | 8/5/2022 | 105.6891 | 105.6890966 | 105.6890966 | 105.6890966 | 104.3452365 | 101.1654622 | 98.57855535 | 96.38612769 | 94.39999366 |
| 190807A00035 | 8/7/2019 | 1.45 | 8/7/2024 | 8/7/2020 | 104.77668 | 104.7766803 | 104.7766803 | 104.7766803 | 103.5344493 | 100.9548043 | 99.91379253 | 99.77386193 | 99.66954782 |
| 190807A00056 | 8/7/2019 | 1.49 | 8/7/2024 | 8/7/2020 | 104.94219 | 104.9421941 | 104.9421941 | 104.9421941 | 103.6826045 | 101.044633 | 99.92866618 | 99.77806954 | 99.67375119 |
| 190808A00013 | 8/8/2019 | 1.23 | 8/8/2024 | 8/10/2020 | 104.61988 | 104.6198771 | 104.6198771 | 104.6198771 | 103.3923038 | 100.8697656 | 99.90998055 | 99.77965234 | 99.67503735 |
| 190809A00026 | 8/9/2019 | 1.52 | 8/9/2024 | 8/10/2020 | 105.07308 | 105.0730757 | 105.0730757 | 105.0730757 | 103.7974974 | 101.1123014 | 99.94024704 | 99.78123118 | 99.67691149 |
| 190812A00020 | 8/12/2019 | 1.47 | 8/12/2024 | 8/12/2020 | 104.87562 | 104.8756169 | 104.8756169 | 104.8756169 | 103.6164527 | 100.9973218 | 99.91146042 | 99.75269952 | 99.63470936 |
| 190812A00026 | 8/12/2019 | 1.48 | 8/12/2024 | 8/12/2020 | 104.91713 | 104.9171325 | 104.9171325 | 104.9171325 | 103.6536229 | 101.0199553 | 99.91535352 | 99.7538895 | 99.63589805 |
| 190812A00027 | 8/12/2019 | 1.71 | 8/12/2024 | 8/12/2022 | 105.87199 | 105.8719921 | 105.8719921 | 105.8719921 | 104.5067192 | 101.2905303 | 98.6715808 | 96.4570273 | 94.45649744 |
| 190814A00019 | 8/14/2019 | 1.46 | 8/14/2024 | 8/14/2020 | 104.84052 | 104.8405184 | 104.8405184 | 104.8405184 | 103.5825305 | 100.9749823 | 99.9041962 | 99.74215317 | 99.6186987 |
| 190816A00028 | 8/16/2019 | 1.33 | 8/16/2022 | 8/17/2020 | 102.61149 | 102.6114858 | 102.6114858 | 102.6114858 | 102.1485719 | 100.5224074 | 99.88844932 | 99.75489629 | 99.6311325 |
| 190816A00029 | 8/16/2019 | 1.11 | 8/16/2024 | 8/17/2020 | 104.14311 | 104.1431054 | 104.1431054 | 104.1431054 | 102.9626626 | 100.6170447 | 99.86041911 | 99.72749463 | 99.60376085 |

Classification | Public

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 190820A00068 | 8/20/2019 | 1.39 | 8/20/2024 | 8/20/2020 | 104.56762 | 104.5676242 | 104.5676242 | 104.5676242 | 103.3324118 | 100.8184322 | 99.86778818 | 99.70422598 | 99.56439966 |
| 190821A00024 | 8/21/2019 | 1.65 | 8/21/2024 | 8/22/2022 | 105.65647 | 105.6564663 | 105.6564663 | 105.6564663 | 104.2947844 | 101.1053932 | 98.506563 | 96.29599447 | 94.28705208 |
| 190821A00046 | 8/21/2019 | 1.44 | 8/21/2024 | 8/21/2020 | 104.77945 | 104.7794533 | 104.7794533 | 104.7794533 | 103.5192251 | 100.928024 | 99.88336202 | 99.70655294 | 99.56398976 |
| 190823A00023 | 8/23/2019 | 1.37 | 8/23/2024 | 8/24/2020 | 104.49304 | 104.4930392 | 104.4930392 | 104.4930392 | 103.2627599 | 100.774418 | 99.85910033 | 99.6964978 | 99.55395116 |
| 190828A00011 | 8/28/2019 | 1.1 | 8/28/2024 | 8/28/2020 | 104.13395 | 104.1339471 | 104.1339471 | 104.1339471 | 102.9392037 | 100.5869283 | 99.81843899 | 99.64688995 | 99.4849705 |
| 190828A00021 | 8/28/2019 | 1.36 | 8/28/2024 | 8/28/2020 | 104.46589 | 104.4658933 | 104.4658933 | 104.4658933 | 103.2330425 | 100.7519442 | 99.84155492 | 99.66042572 | 99.49879446 |
| 190830A00028 | 8/30/2019 | 1.39 | 8/30/2024 | 8/31/2020 | 104.59779 | 104.597791 | 104.597791 | 104.597791 | 103.3469756 | 100.8150654 | 99.85112638 | 99.66534091 | 99.50370968 |
| 190909A00021 | 9/9/2019 | 1.2 | 9/9/2024 | 9/9/2020 | 104.59094 | 104.5909362 | 104.5909362 | 104.5909362 | 103.3333047 | 100.8221481 | 99.82642415 | 99.58868802 | 99.39433653 |
| 190911A00012 | 9/11/2019 | 1.27 | 9/11/2024 | 9/11/2020 | 104.89442 | 104.8944154 | 104.8944154 | 104.8944154 | 103.5988201 | 100.9748458 | 99.85403167 | 99.59198956 | 99.39221232 |
| 190917A00040 | 9/17/2019 | 1.63 | 9/17/2024 | 9/17/2020 | 105.6717 | 105.6716969 | 105.6716969 | 105.6716969 | 104.2909554 | 101.4007442 | 99.94859133 | 99.59651771 | 99.38040968 |
| 190924A00014 | 9/24/2019 | 1.54 | 9/24/2024 | 9/24/2020 | 105.31297 | 105.3129734 | 105.3129734 | 105.3129734 | 103.9579661 | 101.1799153 | 99.87371464 | 99.54526951 | 99.31065087 |
| 191008A00020 | 10/8/2019 | 1.58 | 10/8/2024 | 10/11/2022 | 105.5331 | 105.5331048 | 105.5331048 | 105.5331048 | 104.1174998 | 100.8772519 | 98.20082531 | 95.88831972 | 93.76911844 |
| 191008A00028 | 10/11/2019 | 1.08 | 10/8/2024 | 10/8/2020 | 104.15859 | 104.1585862 | 104.1585862 | 104.1585862 | 102.9304383 | 100.5961729 | 99.69807891 | 99.38903369 | 99.11674063 |
| 191011A00020 | 10/11/2019 | 1.53 | 10/11/2024 | 10/13/2020 | 105.32791 | 105.3279065 | 105.3279065 | 105.3279065 | 103.9534989 | 101.1792133 | 99.84582977 | 99.45215671 | 99.17668874 |
| 191017A00012 | 10/17/2019 | 1.43 | 10/17/2022 | 10/19/2020 | 103.05234 | 103.0523398 | 103.0523398 | 103.0523398 | 102.5308774 | 100.724492 | 99.80088537 | 99.44749655 | 99.15341219 |
| 191029A00020 | 10/29/2019 | 1.51 | 10/31/2022 | 11/2/2020 | 103.29256 | 103.292564 | 103.292564 | 103.292564 | 102.7524387 | 100.8583074 | 99.81844664 | 99.40767799 | 99.07582539 |
| 191121A00031 | 11/21/2019 | 1.54 | 11/21/2024 | 11/21/2022 | 106.32085 | 106.3208471 | 106.3208471 | 106.3208471 | 104.770099 | 101.3215095 | 98.45860163 | 95.99204039 | 93.74554078 |
| 191209A00045 | 12/9/2019 | 1.56 | 12/9/2024 | 12/9/2022 | 106.48148 | 106.4814754 | 106.4814754 | 106.4814754 | 104.8932179 | 101.3930102 | 98.47570798 | 95.95754631 | 93.66535383 |
| 191211A00013 | 12/11/2019 | 1.57 | 12/11/2024 | 12/12/2022 | 106.53447 | 106.5344686 | 106.5344686 | 106.5344686 | 104.9386604 | 101.428628 | 98.50453902 | 95.98281007 | 93.68916469 |
| 200128A00045 | 1/28/2020 | 1.45 | 1/28/2025 | 1/28/2021 | 105.28165 | 105.2816488 | 105.2816488 | 105.2816488 | 103.7845296 | 101.0024569 | 99.54452843 | 98.8348879 | 98.26532005 |
| 200130A00029 | 1/30/2020 | 1.3 | 1/30/2023 | 2/1/2021 | 103.09369 | 103.0936855 | 103.0936855 | 103.0936855 | 102.4954208 | 100.5861241 | 99.49137322 | 98.84496618 | 98.27457923 |
| 200131A00023 | 1/31/2020 | 1.56 | 1/31/2025 | 1/31/2023 | 105.79952 | 105.7995189 | 105.7995189 | 105.7995189 | 104.1972243 | 100.7387105 | 97.82196661 | 95.2518778 | 92.87487317 |
| 200207A00008 | 2/7/2020 | 1.35 | 2/7/2025 | 2/7/2023 | 105.74154 | 105.7415405 | 105.7415405 | 105.7415405 | 104.1322708 | 100.6583949 | 97.71837543 | 95.12107477 | 92.7172678 |
| 200221A00040 | 2/21/2020 | 1.28 | 2/21/2025 | 2/22/2021 | 104.55985 | 104.5598474 | 104.5598474 | 104.5598474 | 103.1415453 | 100.6125961 | 99.3184946 | 98.59813796 | 97.97482687 |
| 200221A00041 | 2/21/2020 | 1.53 | 2/21/2025 | 2/21/2023 | 105.72972 | 105.7297234 | 105.7297234 | 105.7297234 | 104.1049649 | 100.6186511 | 97.66186241 | 95.04352457 | 92.61645612 |
| 200221A00045 | 2/21/2020 | 1.03 | 2/21/2025 | 2/22/2021 | 104.2846 | 104.2846014 | 104.2846014 | 104.2846014 | 102.9071193 | 100.4813128 | 99.26136178 | 98.55701891 | 97.93335048 |
| 200227A00018 | 2/27/2020 | 0.99 | 2/27/2025 | 2/28/2022 | 104.11085 | 104.1108539 | 104.1108539 | 104.1108539 | 102.7410042 | 100.024266 | 98.0046081 | 96.32301763 | 94.76421731 |
| 200227A00024 | 2/27/2020 | 0.85 | 2/27/2025 | 3/1/2021 | 103.45046 | 103.4504632 | 103.4504632 | 103.4504632 | 102.2166052 | 100.1158995 | 99.07963594 | 98.39600374 | 97.75676507 |
| 200227A00025 | 2/27/2020 | 1.09 | 2/27/2025 | 2/27/2023 | 104.58256 | 104.582562 | 104.582562 | 104.582562 | 103.071873 | 99.74893059 | 96.89148371 | 94.31107274 | 91.8859333 |
| 200228A00090 | 2/28/2020 | 1 | 2/28/2025 | 3/1/2021 | 103.26239 | 103.2623895 | 103.2623895 | 103.2623895 | 102.0686824 | 100.0476281 | 99.0509945 | 98.37474544 | 97.73728429 |
| 200228A00095 | 2/28/2020 | 1.15 | 2/28/2023 | 3/1/2021 | 102.29856 | 102.2985588 | 102.2985588 | 102.2985588 | 101.7332734 | 100.0873797 | 99.15384633 | 98.48018491 | 97.84226814 |
| 200228A00096 | 2/28/2020 | 1.28 | 2/28/2022 | 3/1/2021 | 101.67409 | 101.6740856 | 101.6740856 | 101.6740856 | 101.360426 | 100.0839693 | 99.23858427 | 98.57225221 | 97.93409019 |
| 200303A00035 | 3/3/2020 | 0.81 | 3/3/2025 | 3/3/2023 | 103.26941 | 103.269411 | 103.269411 | 103.269411 | 101.9406141 | 98.82414706 | 96.07589175 | 93.5391081 | 91.12673241 |

| | Parallel-Shift Sensitivity Analysis | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30/2020 | | | | | Price | | | | | | | | |
| REFERENCE | DATE | Rate | DATE | Call/Put | -400 | -300 | -200 | -100 | Base | 100 | 200 | 300 | 400 |
| 200306A00069 | 3/6/2020 | 0.58 | 3/6/2025 | 3/7/2022 | 102.18579 | 102.1857891 | 102.1857891 | 102.1857891 | 101.1991084 | 98.99275176 | 97.20272901 | 95.58036984 | 94.0220296 |
| 061128A00049 | 11/30/2006 | 3.84 | 11/30/2021 | 2/28/2007 | 105.3502 | 105.3502021 | 105.3502021 | 105.3502021 | 105.0838252 | 103.5368659 | 102.0998171 | 100.8440255 | 99.91101175 |
| 070727A00036 | 7/31/2007 | 4.23 | 8/1/2022 | 10/31/2007 | 108.30055 | 108.3005487 | 108.3005487 | 108.3005487 | 107.8072329 | 105.3675313 | 103.3283833 | 101.5916766 | 100.2154706 |