

Blended Funding Model

Interactive Banking Solutions

EXAMPLE:

Funding scenarios for a **POOL of LOANS** such as 1-4 family loans.

Sample of:

20 yr, 15 yr, 12 yr and 10 yr amortizations



Example Only

Federal Home Loan Bank of Des Moines

Disclosure Statement

This model is intended solely for informational and educational purposes and is not intended to serve as, or to replace, a comprehensive asset/liability model.

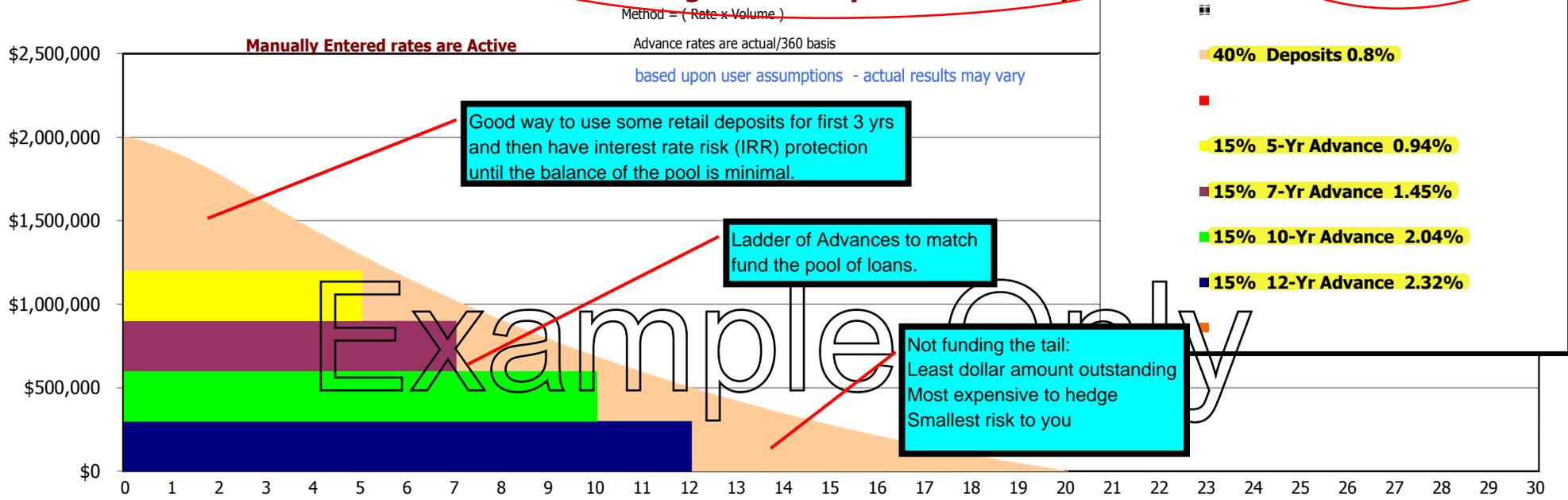
All products or strategies should be evaluated within the context of how they impact IRR and your institutions balance sheet.

It is expressly agreed that, in providing this information, the Bank is not in any manner providing financial or investment advice. It is understood that the user is responsible for any decisions made upon the basis of any illustrations presented.

Blended Funding Model

Initial Spread: 217 bps
Wtd Avg Lifetime Spread: 204 bps

Initial Blend: 60% Advances



Year End	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Spread	2.17	2.14	2.10	2.04	1.96	1.88	1.82	1.70	1.79	1.66	1.50	1.93	1.80	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
Adv Pct	60	63	67	75	83	93	78	88	66	76	87	51	59																		
Wtd COF	1.33	1.36	1.40	1.46	1.54	1.62	1.68	1.80	1.71	1.84	2.00	1.57	1.70	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Rem Prin	100	96	89	80	72	65	58	51	45	40	34	30	25	21	17	14	11	8	5	2											

Asset Amount	\$2,000,000
Gross Coupon Rate	3.500%
Amortization	20 years
Amort Frequency	Monthly
Term	Full Term

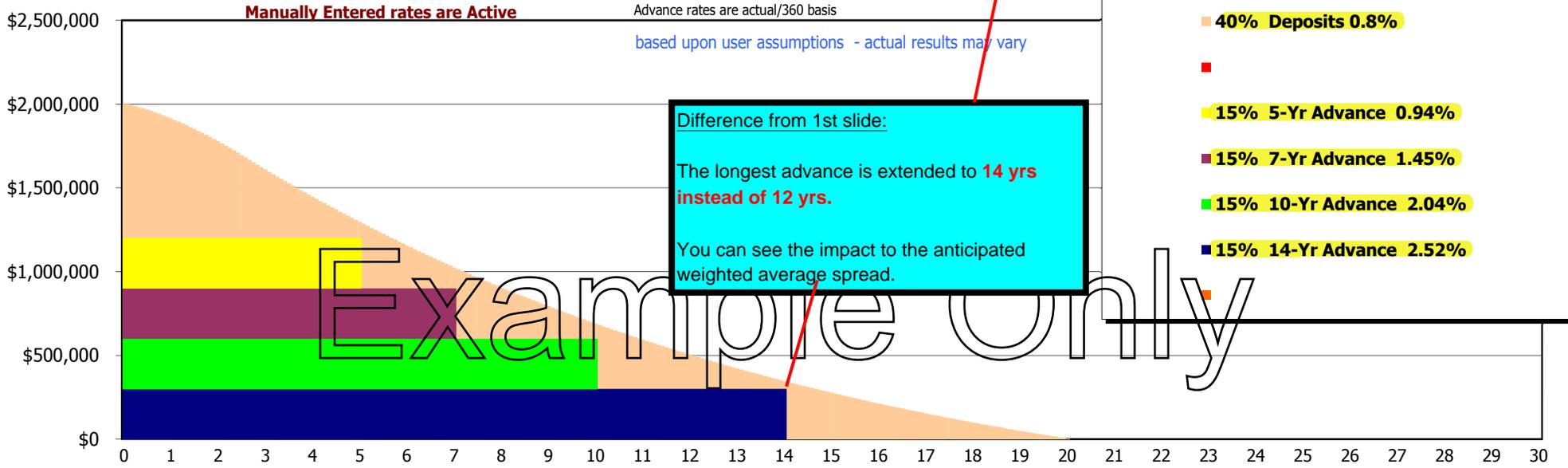
Prepay Type	PSA
Prepay Speed	100%
Payment Effect	Pool

Initial Funding Blend (not a financial yield)	
40% Deposits	0.80
60% Advances	1.69
Wtd COF	1.33

Blended Funding Model

Initial Spread: 214 bps
Wtd Avg Lifetime Spread: 193 bps

Initial Blend: 60% Advances



Example Only

Year End	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Spread	2.14	2.11	2.07	2.00	1.92	1.83	1.76	1.64	1.72	1.58	1.41	1.83	1.68	1.48	1.21	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
Adv Pct	60	63	67	75	83	93	78	88	66	76	87	51	59	71	86																
Wtd COF	1.36	1.39	1.43	1.50	1.58	1.67	1.74	1.86	1.78	1.92	2.09	1.67	1.82	2.02	2.29	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Rem Prin	100	96	89	80	72	65	58	51	45	40	34	30	25	21	17	14	11	8	5	2											

Asset Amount \$2,000,000
Gross Coupon Rate 3.500%
Amortization 20 years
Amort Frequency Monthly
Term Full Term

Prepay Type PSA
Prepay Speed 100%
Payment Effect Pool

Initial Funding Blend (not a financial yield)	
40% Deposits	0.80
60% Advances	1.74
Wtd COF	1.36

Blended Funding Model

Initial Spread: 226 bps
Wtd Avg Lifetime Spread: 206 bps

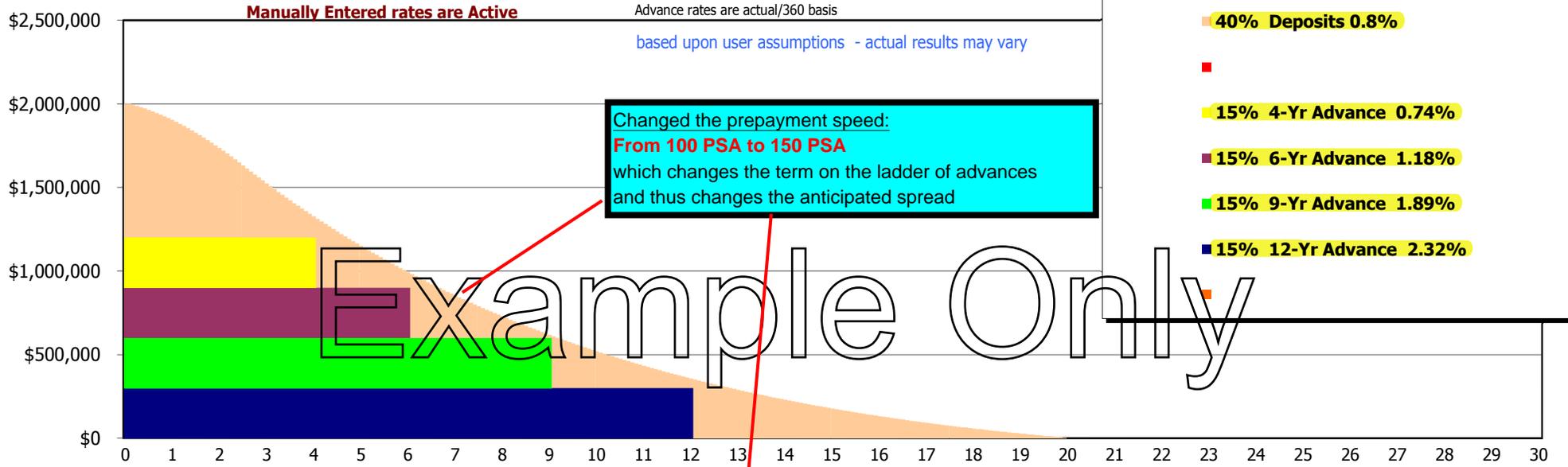
Initial Blend: 60% Advances

Method = (Rate x Volume)

Advance rates are actual/360 basis

based upon user assumptions - actual results may vary

Changed the prepayment speed:
From 100 PSA to 150 PSA
 which changes the term on the ladder of advances
 and thus changes the anticipated spread



- 40% Deposits 0.8%
- 15% 4-Yr Advance 0.74%
- 15% 6-Yr Advance 1.18%
- 15% 9-Yr Advance 1.89%
- 15% 12-Yr Advance 2.32%

Year End	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Spread	2.26	2.24	2.19	2.12	2.04	1.92	1.80	1.78	1.63	1.43	1.82	1.65	1.42	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
Adv Pct	60	63	69	79	90	78	91	70	82	97	58	69	84																		
Wtd COF	1.24	1.26	1.31	1.38	1.46	1.58	1.70	1.72	1.87	2.07	1.68	1.85	2.08	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Rem Prin	100	95	87	76	66	58	50	43	36	31	26	22	18	14	12	9	7	5	3	1											

Asset Amount \$2,000,000
Gross Coupon Rate 3.500%
Amortization 20 years
Amort Frequency Monthly
Term Full Term

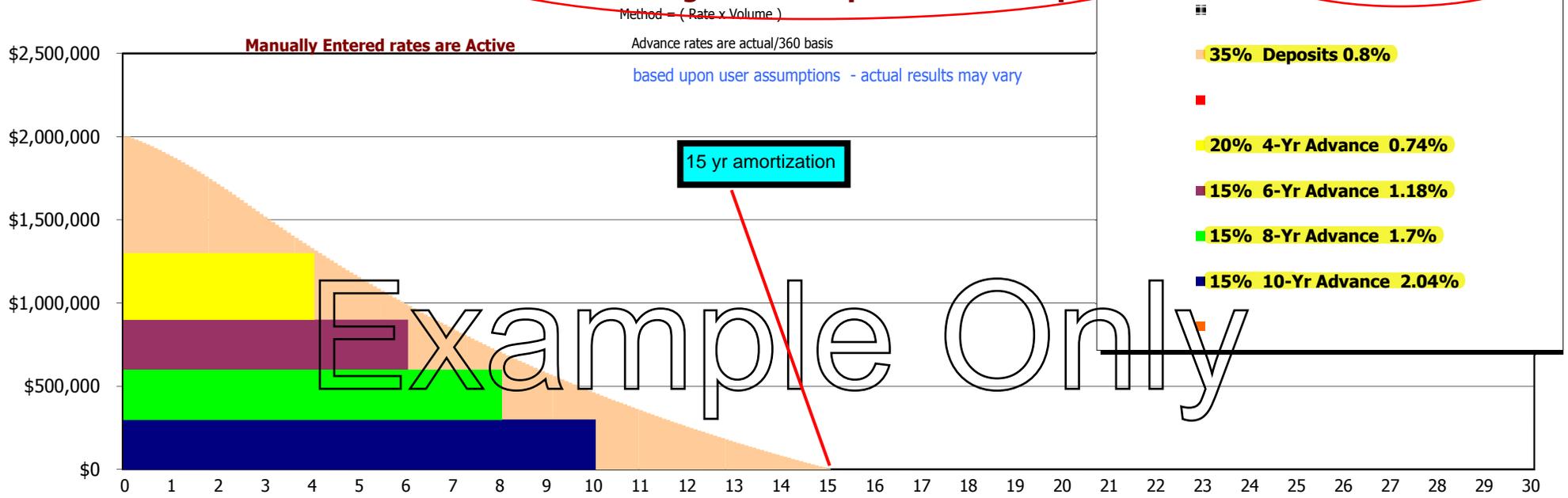
Prepay Type PSA
Prepay Speed 150%
Payment Effect Pool

Initial Funding Blend (not a financial yield)	
40% Deposits	0.80
60% Advances	1.53
Wtd COF	1.24

Blended Funding Model

Initial Spread: 221 bps
Wtd Avg Lifetime Spread: 208 bps

Initial Blend: 65% Advances



- 35% Deposits 0.8%
- 20% 4-Yr Advance 0.74%
- 15% 6-Yr Advance 1.18%
- 15% 8-Yr Advance 1.7%
- 15% 10-Yr Advance 2.04%

Year End	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Spread	2.21	2.19	2.15	2.10	2.03	1.93	1.82	1.82	1.67	1.94	1.78	2.58	2.58	2.58	2.58	2.58															
Adv Pct	65	69	76	86	98	78	91	71	85	52	65																				
Wtd COF	1.17	1.19	1.23	1.28	1.35	1.45	1.56	1.56	1.71	1.44	1.60	0.80	0.80	0.80	0.80	0.80															
Rem Prin	100	94	86	76	66	58	50	42	35	29	23	18	13	8	4																

Asset Amount	\$2,000,000
Gross Coupon Rate	3.375%
Amortization	15 years
Amort Frequency	Monthly
Term	Full Term

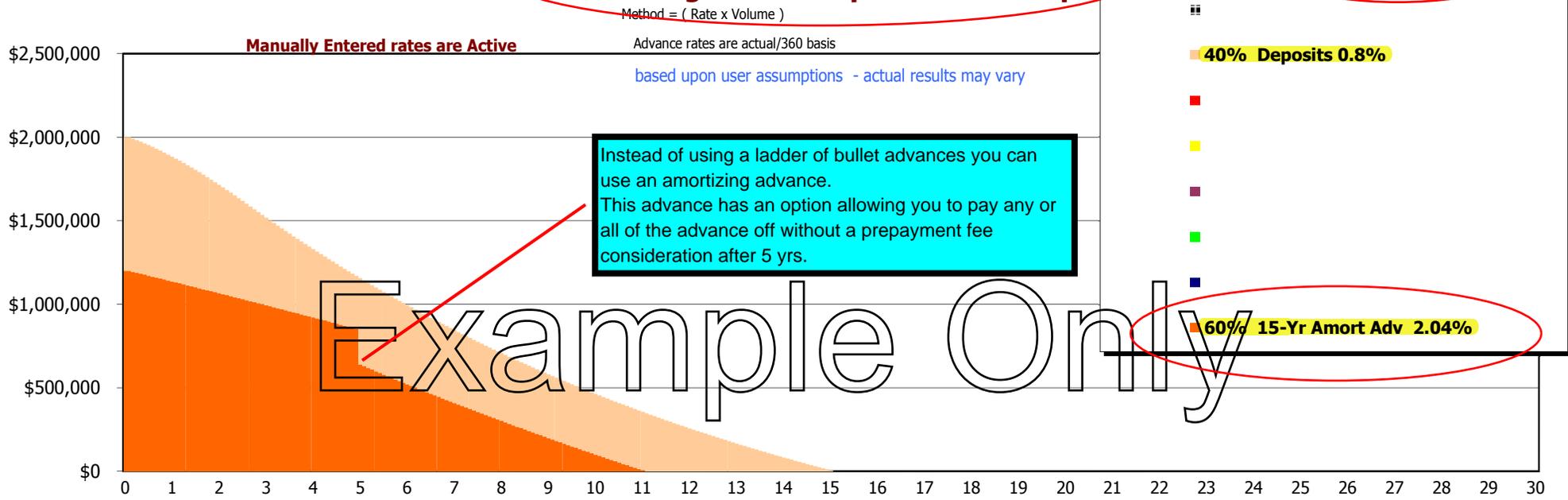
Prepay Type	PSA
Prepay Speed	100%
Payment Effect	Pool

Initial Funding Blend (not a financial yield)	
35% Deposits	0.80
65% Advances	1.36
Wtd COF	1.17

Blended Funding Model

Initial Spread: 184 bps
Wtd Avg Lifetime Spread: 192 bps

Initial Blend: 60% Advances



Example Only

Year End	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Spread	1.84	1.83	1.81	1.77	1.72	1.89	1.93	1.98	2.05	2.15	2.31	2.56	2.58	2.58	2.58	2.58															
Adv Pct	60	60	62	66	69	55	52	48	43	34	22	2																			
Wtd COF	1.54	1.55	1.57	1.61	1.66	1.49	1.45	1.40	1.33	1.23	1.07	0.82	0.80	0.80	0.80	0.80															
Rem Prin	100	94	86	76	66	58	50	42	35	29	23	18	13	8	4																

Asset Amount	\$2,000,000
Gross Coupon Rate	3.375%
Amortization	15 years
Amort Frequency	Monthly
Term	Full Term

Prepay Type	PSA
Prepay Speed	100%
Payment Effect	Pool

Initial Funding Blend (not a financial yield)	
40% Deposits	0.80
60% Advances	2.04
Wtd COF	1.54

Blended Funding Model

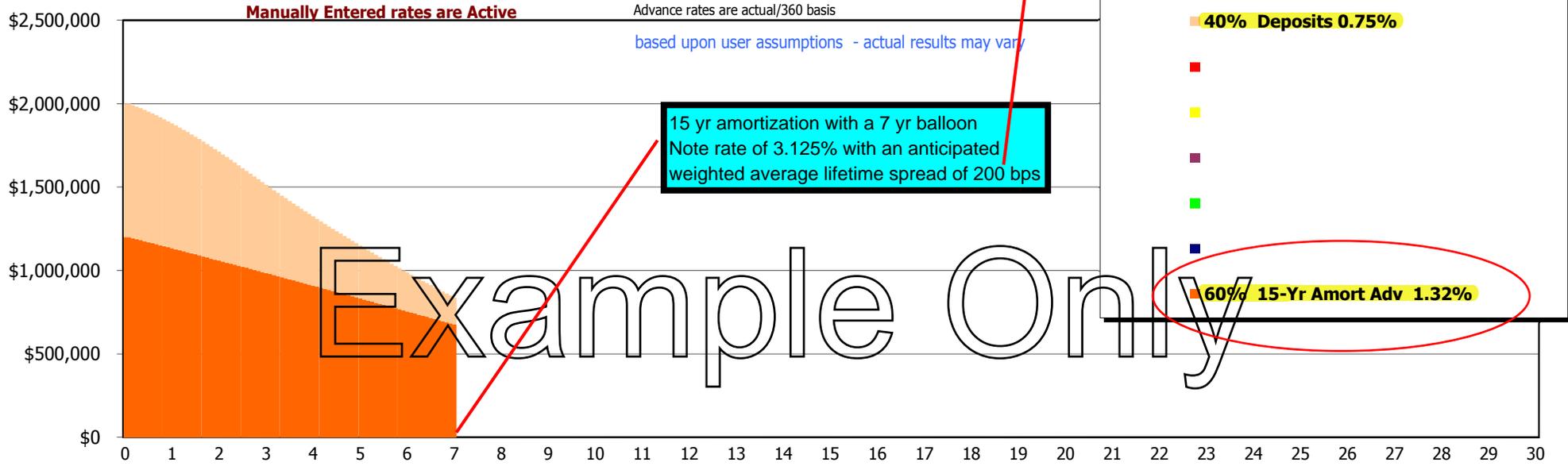
Initial Spread: 204 bps
Wtd Avg Lifetime Spread: 200 bps

Initial Blend: 60% Advances

Method = (Rate x Volume)

Advance rates are actual/360 basis

based upon user assumptions - actual results may vary



Year End	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Spread	2.04	2.04	2.03	2.01	1.99	1.97	1.94	1.92																							
Adv Pct	60	60	62	65	69	72	76	81																							
Wtd COF	1.09	1.09	1.10	1.12	1.14	1.16	1.19	1.21																							
Rem Prin	100	94	86	76	66	57	49	42																							

Asset Amount	\$2,000,000
Gross Coupon Rate	3.125%
Amortization	15 years
Amort Frequency	Monthly
Balloon/Reset	7 years

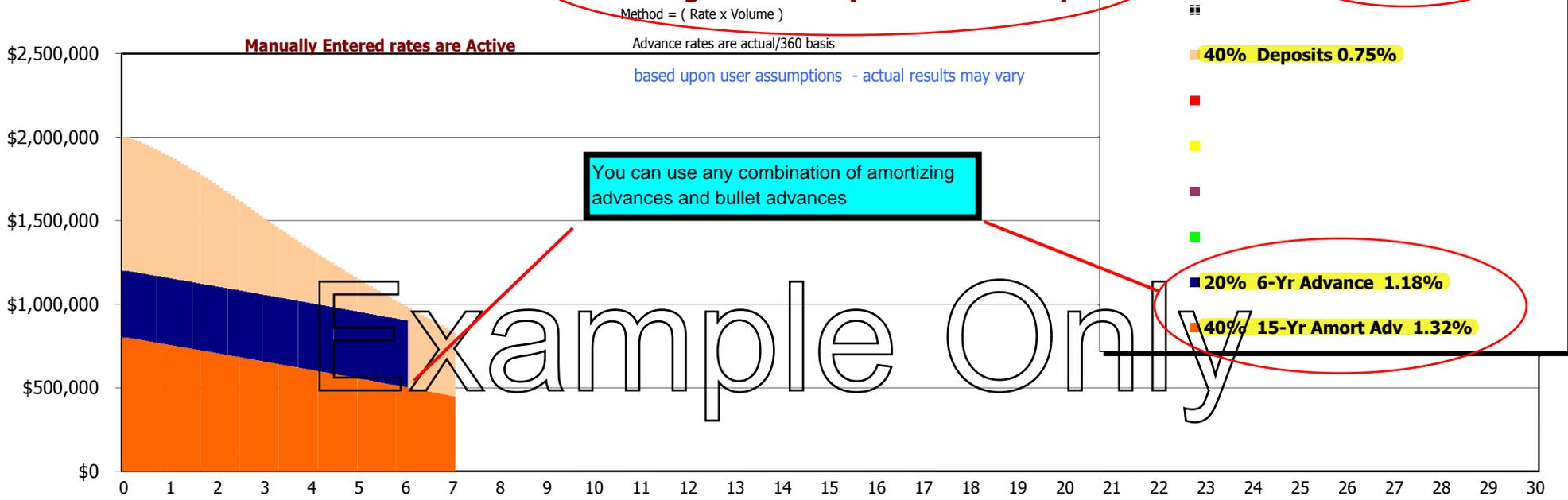
Prepay Type	PSA
Prepay Speed	100%
Payment Effect	Pool

Initial Funding Blend (not a financial yield)	
40% Deposits	0.75
60% Advances	1.32
Wtd COF	1.09

Blended Funding Model

Initial Spread: 207 bps
Wtd Avg Lifetime Spread: 202 bps

Initial Blend: 60% Advances



Year End	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Spread	2.07	2.06	2.04	2.02	1.99	1.96	1.92	2.07																							
Adv Pct	60	61	65	70	76	83	91	54																							
Wtd COF	1.06	1.07	1.09	1.11	1.14	1.17	1.21	1.06																							
Rem Prin	100	94	86	76	66	57	49	42																							

Asset Amount \$2,000,000
Gross Coupon Rate 3.125%
Amortization 15 years
Amort Frequency Monthly
Balloon/Reset 7 years

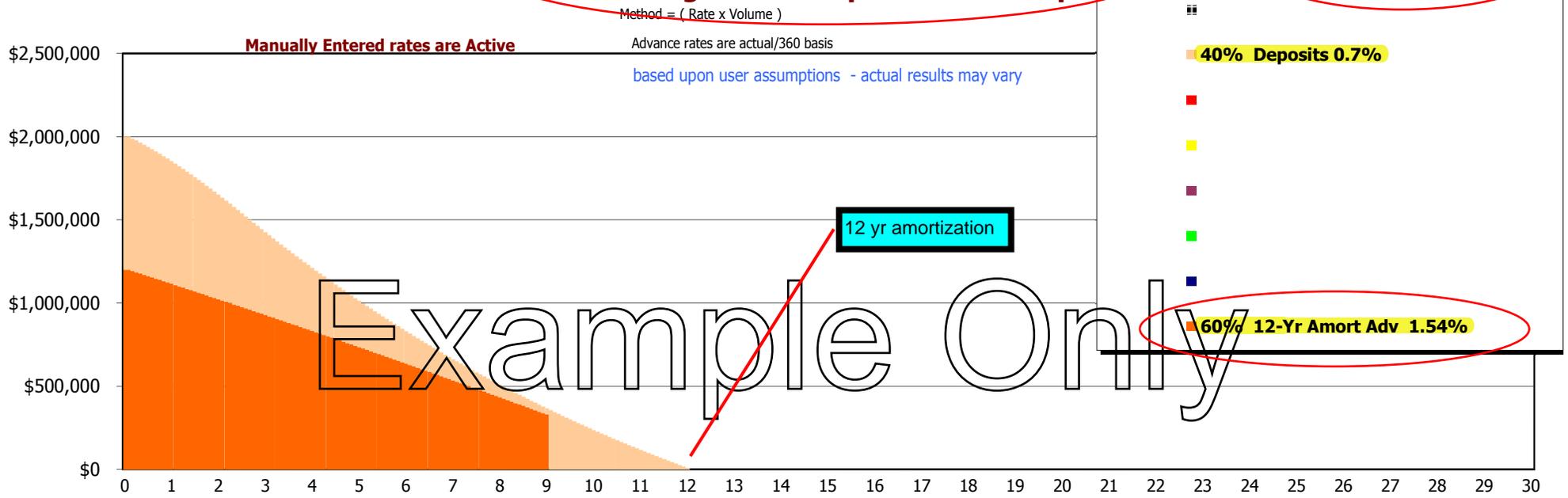
Prepay Type PSA
Prepay Speed 100%
Payment Effect Pool

Initial Funding Blend (not a financial yield)	
40% Deposits	0.75
60% Advances	1.27
Wtd COF	1.06

Blended Funding Model

Initial Spread: 205 bps
Wtd Avg Lifetime Spread: 201 bps

Initial Blend: 60% Advances



Year End	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Spread	2.05	2.04	2.03	2.00	1.97	1.94	1.91	1.87	1.83	1.79	2.55	2.55	2.55																		
Adv Pct	60	60	62	65	69	73	77	81	85	90																					
Wtd COF	1.20	1.21	1.22	1.25	1.28	1.31	1.34	1.38	1.42	1.46	0.70	0.70	0.70																		
Rem Prin	100	93	83	71	61	51	42	33	25	18	12	6																			

Asset Amount \$2,000,000
Gross Coupon Rate 3.250%
Amortization 12 years
Amort Frequency Monthly
Term Full Term

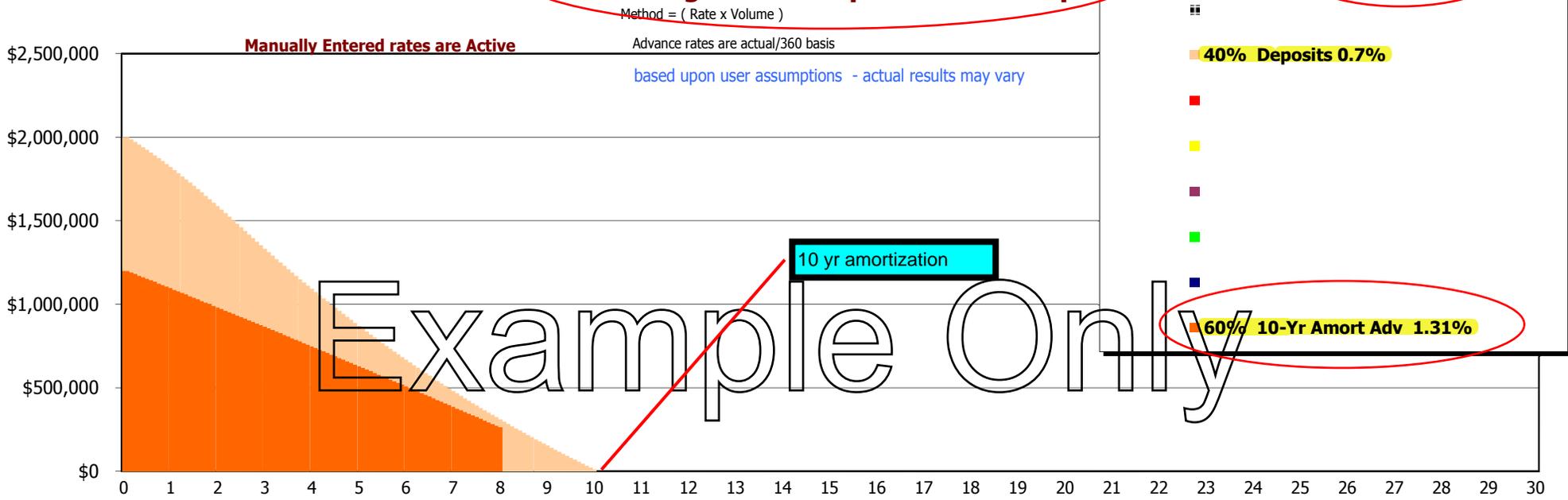
Prepay Type PSA
Prepay Speed 100%
Payment Effect Pool

Initial Funding Blend (not a financial yield)	
40% Deposits	0.70
60% Advances	1.54
Wtd COF	1.20

Blended Funding Model

Initial Spread: 206 bps
Wtd Avg Lifetime Spread: 204 bps

Initial Blend: 60% Advances



Year End	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Spread	2.06	2.06	2.05	2.03	2.01	1.99	1.96	1.94	1.91	2.43	2.43																				
Adv Pct	60	60	62	65	69	72	76	80	85																						
Wtd COF	1.07	1.07	1.08	1.10	1.12	1.14	1.17	1.19	1.22	0.70	0.70																				
Rem Prin	100	91	79	67	55	44	33	24	16	8	1																				

Asset Amount \$2,000,000
Gross Coupon Rate 3.125%
Amortization 10 years
Amort Frequency Monthly
Term Full Term

Prepay Type PSA
Prepay Speed 100%
Payment Effect Pool

Initial Funding Blend (not a financial yield)	
40% Deposits	0.70
60% Advances	1.31
Wtd COF	1.07

Blended Funding Model

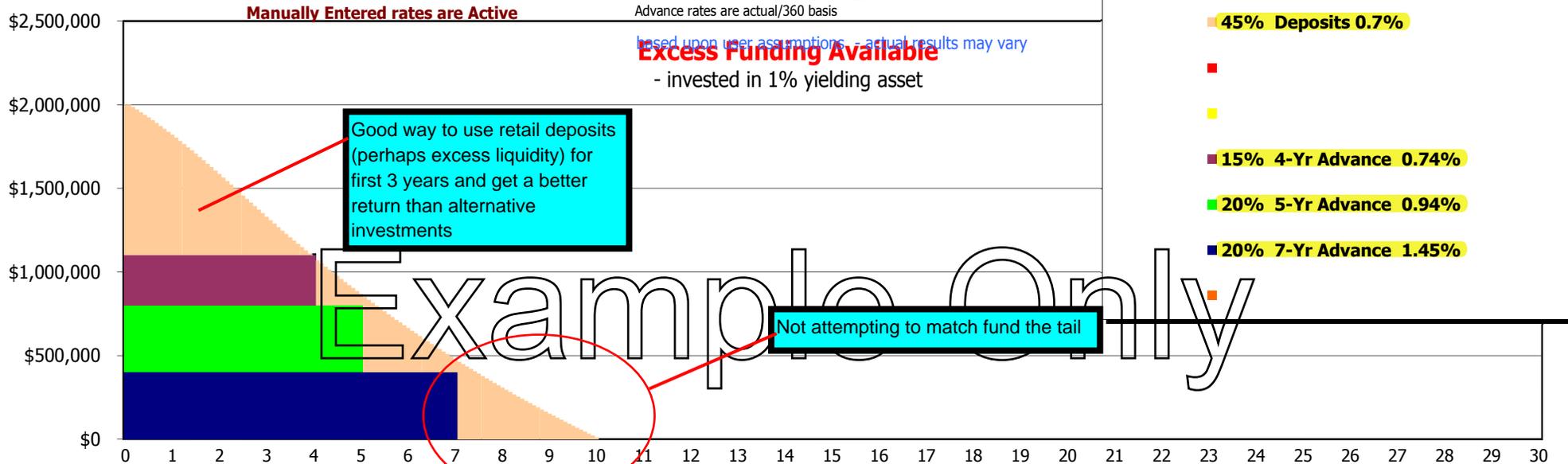
Initial Spread: 210 bps
Wtd Avg Lifetime Spread: 201 bps

Initial Blend: 55% Advances

Method = (Rate x Volume)

Advance rates are actual/360 basis

based upon user assumptions - actual results may vary
Excess Funding Available
 - invested in 1% yielding asset



- Excess Funding (inverted)
- 45% Deposits 0.7%
- 15% 4-Yr Advance 0.74%
- 20% 5-Yr Advance 0.94%
- 20% 7-Yr Advance 1.45%

Example Only

Year End	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Spread	2.10	2.08	2.04	1.99	1.91	1.84	1.85	1.67	2.30	2.30	2.30																				
Adv Pct	55	60	69	83	101	92	60	83																							
Wtd COF	0.90	0.92	0.96	1.01	1.07	1.16	1.15	1.33	0.70	0.70	0.70																				
Rem Prin	100	91	79	67	54	43	33	24	15	8	1																				

Asset Amount	\$2,000,000
Gross Coupon Rate	3.000%
Amortization	10 years
Amort Frequency	Monthly
Term	Full Term

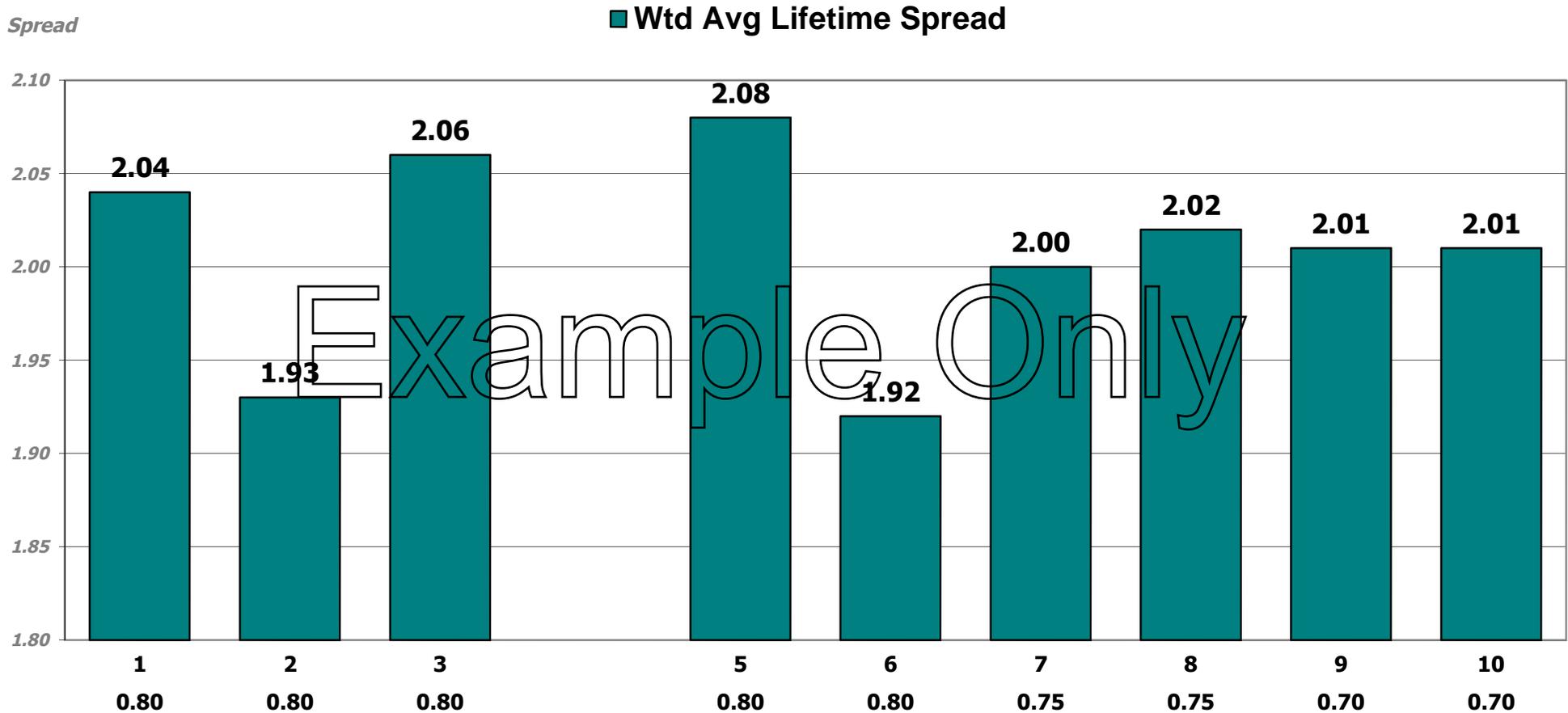
Prepay Type	PSA
Prepay Speed	100%
Payment Effect	Pool

Initial Funding Blend (not a financial yield)	
45% Deposits	0.70
55% Advances	1.07
Wtd COF	0.90

Summary of Scenarios

Comparison of Projected Weighted Lifetime Spreads

How do combinations look under different deposit/prepay assumptions?



Run Number, Deposit COF (constant for entire life), Asset Prepay Speed - Compare Deposit COF with Your History
Asset yield is based gross coupon rates/Funding rate is not based on a financial yield