

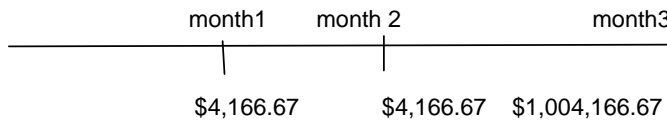
Advance Prepayment Fee Methodology

Example #1

What is the prepayment fee for a \$1,000,000 fixed-rate advance, with a coupon rate of 5%, that has 3 months to its stated maturity ?

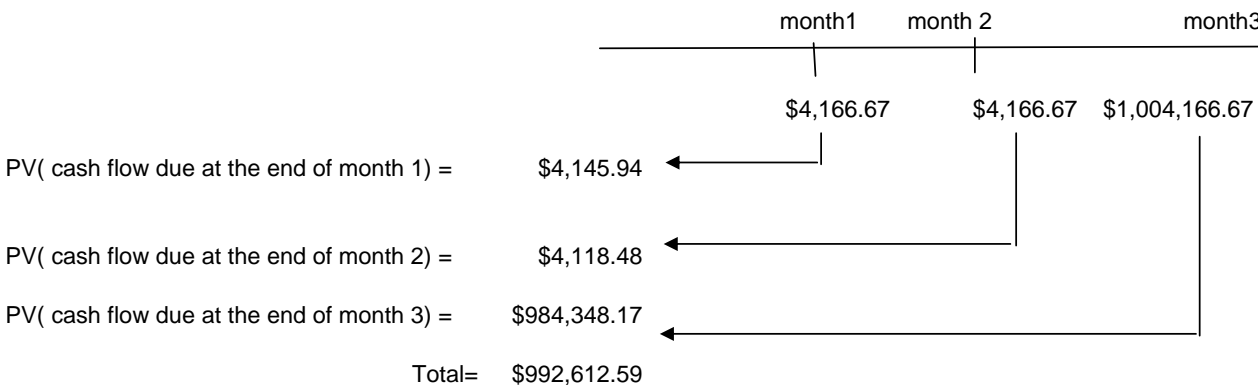
Step 1: Determine the outstanding cash flows due to FHLB-DM, as of the prepayment date

- a) assuming 30 days for each month, the interest payment on the said advance would be \$4,166.67
{Interest = Principal * Rate * Number of days in the month/360}
- b) be sure to include the principal payment that is due at maturity



Step 2: Obtain the present value of the cash flows that were identified in step 1

The discount rates are based upon FHLB-DM's funding rates.
 Each cash flow is discounted based upon the corresponding funding rate for the same term.
 Assuming FHLB-DM's funding rates for 1 month, 2 months, and 3 months are 6%, 7%, and 8%, respectively;
 then the outstanding cash flow due at the end of first month shall be discounted at the 6% rate, the outstanding cash flow due at the end of the second month shall be discounted at the 7% rate, and the outstanding cash flow due at the end of the third month shall be discounted at the 8% rate.



Step 3: Calculate the prepayment fee

Once the present value of all the outstanding cash flows have been aggregated, subtract from the outstanding principal. If the present value of all the outstanding cash flows is less than or equal to the outstanding principal amount, then the prepayment fee would be zero.

In this example, the prepayment fee would be zero.

It should be noted that the prepayment fee does not include the outstanding interest accrual amount since the last payment date, nor the outstanding principal amount.

