



MFX Solutions Cash flow Analyzer

The Cash Flow Analyzer is designed to help MIV managers and their clients analyze the repercussions of movements in foreign exchange and interest rates during the life of a loan. The Analyzer creates an output of three scenarios:

1. A loan in hard currency with no hedge in place.
2. A loan in local currency with no hedge in place.
3. And a loan in local currency with a hedge in place.

You can stress test the three scenarios by moving at your discretion the expected rate of depreciation (or appreciation) of the currency, as well as movements in the interest rate benchmarks in the case of floating rate loans.

Once you have received a swap quote from the MFX team, you can input those parameters into the Analyzer to observe the cash flow behavior under different parameters.

Instructions:

1. Tenor: Select the tenor of the loan (you can choose from 3 months and up to 15 years)
2. Hedge Pay by: select what entity will pay for the hedge: MIV or MFI.
3. 1st Leg Currency: select the hard currency of the loan. You can choose any available currency in the list.
4. 2nd Leg Currency: select the local currency of the loan. You can choose any available currency in the list.
5. FX Rate: will appear automatically once you have selected currencies 1 and 2.
6. 1st Leg Notional: Input the amount in hard currency of the loan. The corresponding amount in local currency will update automatically.
7. 1st Leg rate type: Select the type of interest rate for the hard currency, you can choose fixed or floating rate.
 - a. Fixed Rate: Skip steps 8 to 12 and go to 13.
 - b. Floating rate: continue to step 8 and follow the instructions.
8. Float Source: a simple reference
9. Initial Float Rate: Input the known benchmark for the first period (the MFX team can provide you with this information)
10. Spread (bps): Input the spread over the benchmark provided on the quote
11. Initial total Rate: will update automatically with the previous values you input
12. Expected Annual Movement (bps): input the annual movement in basis points that you expect the benchmark will change
13. Leg 1 frequency: select the interest payment frequency of the loan, you can choose from monthly to annually
14. 2nd Leg rate type: repeat steps 7 though 13 for the local currency leg of the swap

15. Amortization: Select the amortization of principal for the loan, you can choose:
 - a. Bullet: single payment of the principal on the final settlement
 - b. Linear: equal payments of the principal using the lowest frequency leg¹
 - c. Schedule: A calendar will appear showing the lower frequency of payments where you can input the amounts to be amortized, the sum of payments should be equal to the hard currency notional.
16. Expected Annual Movement of the FX Rate: Input the percentage annual rate of depreciation (+) or appreciation (-) that you want to use in the analysis.
17. Click Generate Cash Flow
18. On the scenarios page, you can go back to change the variables of you can click “export to excel”, which will generate an MS EXCEL spread sheet with the 3 scenarios

¹ For amortizations, swaps always use the lowest frequency of payments. For example, if one leg is quarterly and the other is semi-annual, the swap will use semi-annual.