FXO Tiered Margin Examples

Limited Risk Strategies

Long option

You buy a 10M USDCAD call option. The maximum loss besides the premium is 0. The margin requirement is therefore 0.

Short call spread

Assume you have the same call spread as above. The current spot rate moves to 1.415. As the maximum future loss is now 35,336 USD (10M x (1.42 – 1.415) = 50,000 CAD / USD @ 1.415), this will also be the margin requirement.

Same calculation is applied to **short put spreads.**
Long call or put spreads have a margin requirement of 0, since the maximum loss besides the premium is 0.

Protective put

You hold a long 10M USDCAD spot position and you want to protect yourself by buying a put option on 10M USDCAD that is slightly out-of-the-money. The current spot rate is 1.40, and the strike of the put is 1.39.

The netting mechanism between FX Options and FX spot will allocate a part of the notional spot amount to the option position according to what minimizes the potential exposure on the put. In this case, the mechanism allocates 5M USDCAD (half of the notional amount on the put) to the put position, and the potential exposure on the put decreases from 10M USDCAD to 5M USDCAD. The potential loss on the put is now 35,714 USD (5M x (1.40 – 1.39) = 50k CAD / USD @ 1.40). We have 5M USDCAD amount of notional spot left that was not allocated. This is margined on the side at the prevailing spot margin rate.

The prevailing spot margin rate is determined by the highest potential exposure across the portfolio. The highest potential exposure is 10M USDCAD (if the option expires out-of-the-money). Therefore, the prevailing spot margin rate is the blended margin rate of 2.2% ((1% x 3M USD + 2% x 2M USD + 3% x 5M USD) / 10M).
The margin requirement on the remaining 5M USDCAD is 110,000 USD (2.2% x 5M USD).
The total margin requirement for the protective put is 145,714 USD (35,714 USD + 110,000 USD).

Same calculation is applied to a **protective call**.

Unlimited Risk Strategies

Short straddle

You sell a 10M USDCAD straddle at 1.40 (sell 10M USDCAD call, sell 10M USDCAD put). The current spot rate is 1.40. You both have an unlimited downside and upside risk. However, the margin requirement is only based on one of the legs. The prevailing spot margin rate is the blended margin rate of 2.2%, since the highest potential exposure is 10M USD (either the put or the call is in-the-money at maturity).
The margin requirement is therefore 220,000 USD (2.2% x 10M USD).

Same calculation is applied to a **short strangle**. (i.e. no discount for out-of-the-moneyness). Same calculation is applied to a strategy, where you have the call at one maturity date and the put at another maturity date.

Covered call

You hold a long 10M USDCAD spot position and you want to enhance your profits by selling an out-of-the-money call option. The current spot rate is 1.40, and the strike of the call is 1.42. You have an unlimited downside risk, so your margin requirement is driven by the prevailing spot margin rate or blended margin rate of 2.2% ((1% x 3M USD + 2% x 2M USD + 3% x 5M USD) / 10M).

The netting mechanism between FX Options and FX spot will allocate a part of the notional spot amount to the option position according to what minimizes the potential exposure on the call. In this case, the mechanism allocates 5M USDCAD (half of the notional amount on the call) to the call position, and the potential exposure on the call decreases from 10M USDCAD to 5M USDCAD.

The margin on the call is then 110,000 USD (2.2% x 5M), and the margin on the remaining 5M USDCAD (that was not allocated) is 110,000 USD (2.2% x 5M), yielding a total margin requirement of 220,000 USD (110,000 USD + 110,000 USD).

Same calculation is applied to a **covered put.**