

Security Deposits for Forex Option Transactions

The National Futures Association (“NFA”) requires that Forex Dealer Members (“FDMs”) collect security deposits from customers who make OTC spot Forex and Forex option transactions. Specifically, the NFA Forex Regulatory Guide (“rule”) states that security deposits (“margins”) for Forex options are collected as follows:

For short options, the FDM must collect the security deposit plus the premium the customer received. For long options, the FDM must simply collect the entire premium from the customer.¹

Implicit in the rule is NFA’s desire to ensure market safety, fairness and efficiency, as well as to achieve the following important goals:

1. To assure that FDMs maintain safe net capital by collecting margins from their customers.
2. To assure that customers post margin that adequately reflects the actual risk they assume.
3. To assure that margin requirements provide a competitive environment vis-à-vis United States equities and futures markets and other analogous marketplaces.

For an individual long option trade, the rule successfully yields an effective margin requirement: The customer posts an adequate, yet competitive margin and the FDM maintains a safe capital level. The required margin is also similar in size (and calculation) to that of extant margin rules for equity options or futures options.

However, inefficiencies in assigning margin can arise in cases where a customer combines options with spot trades or when a customer combines long and short options in the same currency pair. In either case, the rule can result in a margin that is greater than the maximum risk of the combined trades.

Since combining options with spot trades or combining long and short options in the same currency pair is often part of a trader’s overall risk management strategy, the rule can disadvantage customers by increasing the cost of risk reduction. The rule can

¹ <http://www.nfa.futures.org/nfa-compliance/publication-library/forex-regulatory-guide.pdf>, p16.

also disadvantage FDMs by creating an uncompetitive environment for their customers to trade relative to equities or futures markets.

Potential Inefficiencies

Three examples of where inefficiencies can arise under the rule are among the most popular option trading strategies:

1. synthetic options,
2. option spreads, and
3. covered writes.

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The trading strategy that combines an at-the-money put with a long spot trade is commonly referred to as a synthetic call. Under the rule, the customer is required to post full margin for the spot trade, plus the long option premium. However, the maximum risk of the synthetic call is identical to that of a long call option, where the rule only requires that the FDM collect the long option premium.

One consequence of the rule is customers can be subject to a margin call or be forced to exit the market without assuming any additional risk. U.S. equities and futures markets require no margin for a synthetic call or put beyond an amount equal to the premium of the equivalent long call.

Credit and debit option spreads (which have a pre-defined maximum risk) are subject to similar treatment under the rule: customers can be required to post a margin that exceeds the maximum risk of the spread or be forced to exit an otherwise viable trading strategy without assuming any additional risk.

Combining a long spot trade with a short out-of-the-money call is commonly referred to as a covered write strategy. Under every market condition a covered call reduces the trader's risk, yet under the rule it is subject to twice the margin of the spot trade alone. Other popular option strategies, among them butterflies and condors, are also subject to margin requirements that exceed their maximum risk.

In each of the preceding examples customers face the adverse effect of an increased cost of risk reduction and an unnecessary and inefficient use of their capital. This may cause customers to use other markets (e.g., equities or futures markets) to trade such strategies, thereby diminishing the competitiveness of FDMs and the United States Forex marketplace.

Portfolio Margining

Risk-based margining of all open trades in the same currency pair of an account (generally referred to as portfolio margining) eliminates the inefficiencies described above. Portfolio margining is recognized in equities and futures markets worldwide as an effective and efficient method of achieving the goals set out above.

Portfolio margining is a mathematical approach to determine the potential risk of all open spot and option trades in the same currency pair for a given account and assigns a margin value based on the worst case market scenario.² The computational methodology used in risk-based margining³ is similar to that of SPAN[®] margining, which is the accepted margining system used in United States futures markets and has an exemplary record of efficiency and safety.

The risk-based method of assessing portfolio risk utilizes the margin requirements for spot transactions already established by the NFA⁴ and can be adjusted for increased market volatility by increasing the spot transaction margin rate. Calculations can be performed in real-time by an electronic trading platform or back-office risk management system and would be identical across all FDMs.

Portfolio margining effectively and efficiently achieves the intent of NFA's margin rule. It provides a reasonable margin relative to the actual risk assumed by the customer while protecting the FDM and its accounts from worst case market fluctuations.

Appendix

The table shows the maximum risk of example option strategies and compares the associated margin for each calculated under the rule and the portfolio margin.⁵

Strategy	Maximum Risk	NFA Margin	Portfolio Margin
Synthetic long call ¹	\$ 2,000 ²	\$ 4,600 ³	\$ 2,000 ⁴
Credit spread ⁵	\$ 2,000 ⁶	\$ 5,600 ⁷	\$ 2,000 ⁸
Debit spread ⁹	\$ 1,000 ¹⁰	\$ 5,600 ¹¹	\$ 1,000 ¹²

² Specifically referring to FX Bridge Technologies Corporation's Risk-Based Margining™.

³ See [Risk-Based Margining for OTC Forex Options](http://www.fxbridge.com/PDF/Applied_Research.pdf) by John Nelson of the Applied Research Company at http://www.fxbridge.com/PDF/Applied_Research.pdf.

⁴ See footnote 1.

⁵ See footnote 2.

- 1 1 long Euro 1.30 put @ \$2,000 premium + 1 long spot @ 1.30
- 2 Total amount of long option premium
- 3 Long premium + margin: $\$2,000 + (2\% * 130,000) = \$4,600$
- 4 Risk-based margin = maximum risk
- 5 Short Euro 1.30 call @ \$2,000 + long Euro 1.32 call @ \$1,000
- 6 Difference in strikes: $(1.32 - 1.30) * 100,000 = \$2,000$
- 7 Long premium + margin: $\$1,000 + (2\% * 130,000 + \$2,000) = \$5,600$
- 8 Risk-based margin = maximum risk
- 9 Long Euro 1.30 call @ \$2,000 + short Euro 1.32 call @ \$1,000
- 10 Difference in premiums: $\$2,000 - \$1,000 = \$1,000$
- 11 Long premium + margin: $\$2,000 + (2\% * 130,000 + \$1,000) = \$5,600$
- 12 Risk-based margin = maximum risk

