



Foreign Currency Options Conventions

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1. Description

Options are chiefly used to hedge currency risk or to produce income as part of a trading strategy. The predominant appeal of OTC currency options is that the option specifications can be tailored to suit individual requirements.

A foreign currency option is a contract where the seller grants to the buyer the right (but does not impose the obligation) to buy or sell a specified amount of one currency for another, at a specified price, on or before a specified future date. The buyer pays a premium to the seller for this right.

2. Products

Please also refer to [Appendix 1](#).

There are several types of foreign currency options. Most option transactions are based on either puts, calls or a combination of the two.

- *Put* - Gives the buyer the right, but not the obligation, to sell a currency at a predetermined price.
- *Call* - Gives the buyer the right, but not the obligation, to buy a currency at a predetermined price.
- *Straddle* - Buying a call and a put (long straddle) or selling a call and a put (short straddle) with the same strike price. The most common straddle is the at the money straddle, i.e. when the strike price is equivalent to the underlying asset.
- *Strangle* - Buying a call and a put (long strangle) or selling a call and a put (short strangle) with different strike prices.
- *Risk Reversal (collar)* - Combining a bought call and a sold put or a sold call and a bought put.
- *Exotic Options* - Any option which has a non-standard component. The most widely used exotic option is the barrier option.
- *Barrier Option* - An option the terms of which change in some predefined manner when an event occurs in the option currency pair in the spot market at a rate that is at or beyond a pre-specified level.

3. Dealing

The following market conventions should be read in conjunction with [The Model Code](#) published by ACI - The Financial Markets Association.

3.1. Methods of Dealing

Brokers or direct via telephone.

3.2. Electronic Dealing

Reuters or EBS dealing systems.

3.3. Business Days

A good business day may be defined as a day on which banks in the state of New South Wales (NSW) are generally open for business, or a day other than one on which banks in NSW are obliged or permitted to close, excluding Saturday and Sunday.

Essentially, NSW business days are weekdays (Monday to Friday) other than NSW public holidays.

3.4. Standard Transaction Size (market parcel)

The standard amount for contracts against AUD is AUD 20 million. In the case of a straddle it is AUD 10 million on each leg.

For contracts based in USD the standard amount is USD 20 million, and USD 10 million per leg in the case of a straddle.

3.5. Two Way Pricing

Two way pricing is generally undertaken only on a bilateral reciprocal basis between counterparties which have previously agreed to do so and is dependent upon market conditions.

3.6. Quotation and Dealing

- *Style* - To be European unless otherwise stated.
- *Exchange of Delta* - Unless otherwise specified all trades will include the exchange of delta. Once the contract specifications are agreed to the exchange rate for the exchange of delta will be determined. Delta should be in the spot market at the fair market midrate, unless otherwise agreed at the time of the trade or where there is an inability to agree forward points.
- *Live Price* - A request for an option quotation where there is no delta hedge exchange.
- *Spreads* - Should not be standardised because of significant differences in market conditions and willingness of banks to quote markets. Standard spread agreements should be left to individual parties.

When making a volatility price the price should be rounded to the nearest .05 increment.

- *Strike* - For a volatility trade the strike is that which makes the straddle as close as can be agreed to delta neutral. If a contract with any other strike is required this would need to be stated when asking for the volatility price.

The strike price should be rounded to four decimal places and must be a multiple of five, eg. 0.0005 - 0.0010.

- *Determinations of Dealing Dates* - The straight dealing date is determined as:

The first date preceding the equivalent forward date (as dealt in the forward foreign exchange market) that will give settlement on the forward date, if it is exercised on the expiration date.

An exception to straight dealing dates are 1 week, 2 week and 3 week dates. These will be 7 days, 14 days and 21 days respectively unless these dates fall on a non business day in which case the term must be negotiated.

- *Setting Spot and Forward Rate* - As soon as a volatility price is hit (dealt), a spot level for pricing purposes should be agreed and a forward price agreed as soon as possible thereafter. In both cases good market practice would be to use middle of the rate quoted in the foreign exchange market.

It is recognised that the contract may not be legally binding until the premium has been agreed but a commitment exists, after agreeing to trade, to complete the contract and to agree on the premium value as soon as possible. To ensure this dealing method remains viable, the calculation of the premium must accurately reflect the agreed volatility and market conditions at the time volatility was agreed. Prompt reference to mutually acceptable third party arbitration is suggested if a dispute cannot be resolved. Participants should note that differences in premium calculations are more likely to occur in transactions involving American style options and due care should be exercised.

- *Rounding the Option Price* - In the case of AUD-USD contracts, to ensure prices can be agreed as easily as possible interbank participants will accept a price rounded to the nearest quarter point, e.g. 0.002525 or 0.002550.

Where the premium is quoted as a percentage of the base amount (ie. per cent of AUD in the case of an AUD cross contract, or per cent of USD in a contract such as Deutschmark-USD), interbank participants will accept a price rounded to the nearest quarter per cent, eg. 1.0000% or 1.0025%.

3.7. Other Instrument Conventions

Not applicable.

3.8. Basis

Not applicable.

3.9. Maturity Conventions

Not applicable.

3.10. Settlement Rate or Index

Not applicable.

3.11. Premium Payment Date(s)

Two business days after the trade date.

3.12. Expiry Conventions

Standard expiry times should be 3pm Tokyo unless otherwise negotiated.

3.13. Broker Conventions

- *Passing Names* - Where a volatility price has been hit (dealt) through a broker the broker should take all steps necessary to pass the name of the potential counterparty as soon as possible.
- *Quiet Trade* - When two counterparties elect to deal through the regular broking market neither party can expect the trade not to be reported to the general market. However, in the case of deals larger than standard market parcels it is up to the counterparties to decide whether the total amount of the trade is reported.
- *Misquote* - Should an obviously incorrect price be quoted the onus is on the price taker to reconfirm the price from the price maker before transacting.

3.14. Confidentiality

Not applicable.

3.15. Credit

The ability to deal is subject to credit limits. Dealers should advise a counterparty if they are unable to deal because of credit limits. The quoting of a price to a counterparty indicates to that counterparty that credit lines are in place up to the dealing amount that was requested or a reasonable sized dealing parcel, if no dealing amount has been specified.

3.16. Exercise of Options

It is acknowledged that exercise must be made on or before the expiry time set for the particular contract but it is good market practice to accept a late exercise of a contract which, at expiry time, has a reasonable degree of intrinsic value.

An option contract with at least 1% intrinsic value is considered automatically exercisable.

Options can be exercised either in whole or in part. However, when partial amounts are exercised these should be in even amounts.

Expiry time for options in this trading zone should be referenced against the time page on Reuters.

Where exercise is being confirmed it is good market practice to confirm also the flows and value dates involved.

3.17. Data Source

Data relating to currency options can be found on *AFMAdata* pages Currency Option Strikes and Currency Option Vol. - Monthly.

3.18. Pricing formulae

Not applicable.

4. Confirmations

4.1. Timing

All transactions must be confirmed either electronically or in writing by both parties as soon as possible but no later than midday on the business day following the day on which the transaction was executed.

MT 305 is best practice for confirming vanilla options; exotics options are typically confirmed via fax but where possible SWIFT MT306 should be utilised.

4.2. Terminology

Operations personnel of either party to a deal may initiate a telephone confirmation if no confirmation has been received one hour after the transaction. Both operations offices must have the dealing ticket at the time. If the office receiving the call does not have the dealing ticket, it must obtain it and inform the other office of the status of the deal within 30 minutes of the original call.

Recommended language is:

"A [name in full] buys an AUD put USD call from B [name in full], face value AUD 10,000,000, strike 0.5500 expiry 2 September 2005, cut-off time 3 p.m. Tokyo, European style. A [name in full] will pay B [name in full] a premium of USD 207,000.00, value 4 April 2005.

- a) method of dealing (telephone or broker's name)
- b) payment — SSI or full details of alternative
- c) reference number
- d) name of caller "

4.3. Documentation

Not applicable.

5. Settlements

5.1. Physical Settlements

Settlement of all contracts will be on a spot basis, ie. two good business days after expiry, unless negotiated otherwise at the time of trade.

For cross currency options the settlement date must be a valid business date in the currency pairs making up the cross.

5.2. Premium Payments

Premium currency for contracts against the USD, including AUD-USD and NZD-USD, should be USD.

Premium currency for contracts against the AUD, excluding USD, should be AUD unless otherwise specified.

Premium currency for all other currencies must be negotiated between the counterparties at the time of dealing.

All premiums are payable for the same value dates as those traded for spot on the day of the trade, i.e. two business days after trade date.

FX option premium settlements can be effected as a single settlement class or can be included in FX transaction netting, as mutually agreed by both parties.

Appendix 1 - Terminology

At The Money - An at the money option has a strike price equal to the price of the underlying asset. An at the money option has no intrinsic value but will have time value.

Delta Hedging - Involves taking an offsetting position in the underlying instrument equivalent to the option face value multiplied by its current delta.

Delta - The change in the price of an option for a given percentage change in the price of the underlying instrument.

Expiry Date - Also known as the maturity date. If an option is not exercised by this date it becomes worthless and expires. An American option can be exercised on any date up to and including the expiry date. European options have a fixed delivery date and are usually exercised on the expiry date.

Face Value - The quantity of one currency to be exchanged under the option contract.

In-the-money - An in the money option has intrinsic value as well as time value, ie. the option has value if it is exercised immediately.

Misquote - Should an obviously incorrect price be quoted. The onus is on the price taker to reconfirm the price from the price maker before transacting.

Out-of-the-money - An out of the money option also has no intrinsic value but will have time value.

Premium - The cost of purchasing an option contract. The premium is made up of two components:

- Intrinsic value - the value derived if the option is exercised immediately, ie. the difference between the price of the underlying currency and the strike price of the option
- Time value - the extra value (over intrinsic) related to having option protection until the expiry date. Time value declines as the option approaches its expiry date.

Strike Price (Exercise Price) - The price or rate at which the option contract can be exercised.

Underlying Instrument - A currency option is an option on a spot foreign exchange contract. Therefore, the underlying instrument is a foreign exchange spot contract to exchange the underlying currencies at the expiry date of the option.

Volatility - Is a statistical means of measuring the changes in price of the underlying instrument, expressed as an annualised percentage. There are two types of volatility:

- Implied volatility - is an estimate of future volatility.
- Historical volatility - a measure of historical movements in the underlying asset.

Appendix 2 - Barrier Options

- *Barrier Options* - Barrier options are complex instruments with unusual risks. Barrier options are options the terms of which change in some predefined manner when a barrier event occurs. A barrier event is a transaction in the relevant currency pair occurring in the spot market at a rate that is at or beyond a certain pre specified level (generically called the barrier price).

There are many specific types of barrier options including the knock out option, the double knock out option, the knock in option, the lock out option, the double lock out option, the lock in option, the step payment option and others.

- *Barrier Determination Agent* - Parties to a barrier option are expected to nominate a barrier determination agent (BDA), which will generally be either the buyer or the seller. Unless otherwise determined the BDA will be the market maker, ie. the party which provided the price quotation for the option. The BDA for each option must be designated in the confirmation. It is the responsibility of the BDA to determine whether a barrier event has occurred.
- *Barrier Event* - Problems can arise when the criteria used for determining barrier events are not transparent. The following conventions should be followed in relation to determining if a barrier event has occurred.

a) The transaction must occur at a rate that is at or beyond the barrier price.

b) A barrier event must be an actual transaction in the foreign exchange markets. A transaction determined to be a barrier event can take place between:

- two independent counterparties through the brokers market;
- the BDA and an independent counterparty through the brokers market; or
- the BDA and an independent counterparty dealing direct.

Quotations, whether firm or indicative, obtained from a foreign exchange broker or dealer or a quotation screen or other information source which does not provide evidence of an actual transaction, are not acceptable evidence that a barrier has been breached.

c) Transactions known to be at off market prices are not evidence that a barrier has been breached. An off market rate is defined as a rate that is substantially more favourable or substantially less favourable than the rate available to a professional spot dealer in the interbank spot market at the time of the transaction.

d) Transactions must occur between 5:00am Sydney time on Monday and 5:00pm New York time on Friday. Trades are considered valid even if they occur on a holiday in the country where the trade takes place.

e) Transactions must be an amount that is not less than the equivalent of three million USD.

- f) Breaching transactions may include transactions of the BDA with third parties, but not with its affiliates or other parties who are not dealing at arm's length or otherwise are not providing good faith fair market prices.
- *Illiquid Currency Pair* - In the case of a barrier option in an illiquid currency pair A/B (ie. a pair in which spot transactions are few and irregular) the BDA may determine whether a barrier event has occurred by observing a transaction in the currency pair meeting all the criteria above, or alternatively by observing two spot transactions, one in which currency A is traded against a third currency C, and the other in which C is traded against B, and calculating from these the implied rate of exchange for A/B. Such spot transactions must be reasonably close together in time and meet all the above criteria (except a).
 - *Disputes* - The BDA is required to inform the other party as soon as possible of the occurrence of a barrier event. If there is a dispute over the determination of a barrier event, the BDA must be able to furnish evidence of the observed spot transaction(s). Transactions that the BDA does not observe and could not observe from sources regularly available to it in the ordinary course of its business cannot be the basis for barrier event determination.
 - *Specific Orders* - A barrier event does not require the execution of an order placed by the seller or the buyer of the option at the barrier price or any other specific order.
 - *Confirmations* - The initial spot rate is a term which should be included in barrier options confirmations, since it is helpful for potential dispute resolution and risk management purposes. The initial spot rate means the spot rate at the time a barrier options is entered into.
 - *Disclosure Statement* - Users of barrier options may wish to consider whether it would be appropriate to disclose to its counterparty that its ordinary course foreign exchange transactions and its activities in hedging or de-hedging its position under a barrier option may increase the probability that a barrier event will occur.
 - *Good Faith* - All option counterparties are expected to act honestly and in good faith. Use of disclosure statements does not justify foreign exchange transactions that are undertaken to manipulate the spot exchange rate and not as part of bona fide good-faith foreign exchange transactions, hedging or de-hedging.