

European Put Spread Option

This Product Disclosure Statement is in reference to RBI Circular dated 16.09.2021, Master Direction – Reserve Bank of India (Market-makers in OTC Derivatives) Directions, 2021.

This document contains standard information about the product which may enable the user to determine if the product will meet its hedging needs and to facilitate comparison with other products.

Features

This option structure consists of two put options which provides limited protection to the user as compared to plain vanilla put option at a reduced cost. This structure uses two put options, one buy put (at higher strike price) and one sell put (at lower strike price) for the same expiry date/delivery date and same notional. Since the user is selling a put option apart from buying plain vanilla put option, it reduces overall cost thereby works as cost reduction strategy. The user will pay net premium which is difference between Buy Put (payable) and Sell Put (receivable). This derivative product can be used to hedge FCY receivables

Illustration:

For a receivable underlying in USD where INR is domestic currency, user buys USD Put Spread option

The underlying exposure for this product is USD receivables. User is exposed to risk of INR appreciation against USD resulting in lower INR realization. The put spread structure provides protection starting from the buy put strike till sell put strike. Once USD/INR rate goes below the sell put strike, the structure does not provide any incremental hedge. In other words, maximum hedge provided by the structure will be difference of two strike price and user is at risk of incremental loss if spot moves below sell put strike.

Building Blocks:

The building blocks of this option are as below:

- a. Spot FX rate,
- b. Forward FX rates
- c. Time to expiry and
- d. Implied volatility.

Costs and fees, including break-up and details

The option cost consists of market cost which is determined through a financial model taking above building blocks as input parameters and the price is dependent on Bid/Offer spread of the spot rate, forward rate, implied volatility; along with administrative costs; and transaction handling charges.

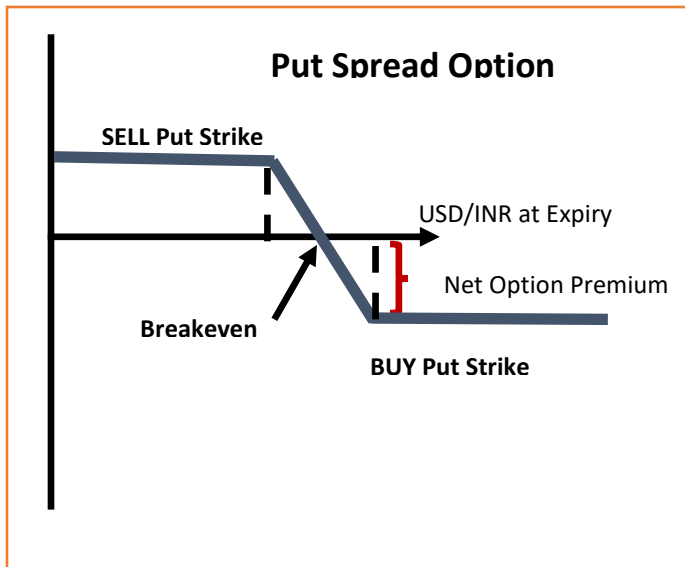
An illustration of how the product works

User buys USD Put/ INR call at higher strike price for agreed expiry day/delivery day
 User sells USD Put / INR call at lower strike price for agreed expiry day/delivery day

On expiry day, if the USDINR spot rate is –

- (1) Above Buy Put strike price, User sells USD at prevailing spot rate of USD
- (2) Between Buy Put strike and Sell Put strike price, User will sell USD at Buy Put strike price
- (3) Below Sell Put strike price, User sells USD at market spot rate + difference between Buy Put and Sell Put strike price

Pay-off profile:



Impact Analysis

Option: Buy Put Spread Spot at the time of deal: 73 Buy Put Strike Price: 78 Sell Put Strike Price: 75 Net Option Premium: 1				
Spot at Expiry	Sell price if Unhedged	Net Premium	Option Payoff net of Premium	Net Selling Price
74	74	-1	2	76
75	75	-1	2	77
76	76	-1	1	77
77	77	-1	0	77
78	78	-1	-1	77

79	79	-1	-1	78
80	80	-1	-1	79

Benefits

Under this transaction User purchases an option structure that entitles it a right but no obligation to sell USD against INR. If INR appreciates, user receivable is protected at the Buy put strike price limited to the difference between the two strikes of the put options minus net premium cost. If INR depreciates, user benefits from INR depreciation.

Risks

- (1) Option expiring without getting exercised, effectively reducing INR realization compared to unhedged transaction on account of option premium paid
- (2) Liquidity risk
- (3) Bid-offer spreads in case of unwind
- (4) Limited participation. Maximum gain from the structure will be if spot on the maturity is below sell put strike price

The terms and conditions applicable for booking/termination will be guided by deal term sheet/sanction letter/ISDA document