# **Seagull 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.

# Seagull Option for FCY Payable

### Features

Importer seagull is a three legged option strategy which involves two call options and one put option. It consists of buying one call option, selling one call option at higher strike price and selling one put with lower strike price. All three options have same expiry and notional. Importer Seagull can be looked as a combination of call spread strategy and sell put option or a combination of Importer range forward and sell call option. The two sold options help in reducing overall cost of the structure thereby works as cost reduction strategy. This derivative product can be used to hedge FCY payables. This is usually zero premium structure.

### Illustration:

For a payable underlying in USD where INR is domestic currency, user enters into Importer seagull

The underlying exposure for this product is a USD payable. User is exposed to risk of INR depreciation against USD resulting in higher payables. The long call option acts as a hedge against USDINR spot rate going higher than its strike price and short put option caps the downside gains when USDINR spot rate appreciate below the strike price of put option. Also, short call option limits the gains when USDINR spot rate goes above its strike price. Under this product user pays very minimal cost to purchase this option strategy because user receives the premium for selling put and call options which offset the long call option cost.

### **Building Blocks:**

The building blocks of this option are as below:

- a. Spot FX rate,
- b. Forward FX rate
- 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; such as transaction handling charges.



## An illustration of how the product works

User enters into USD Importer seagull at different strike prices for agreed expiry day/delivery day

On expiry day, if the USDINR spot rate is -

- (1) Between strike price of buy call and sell call, user buys the USD at buy call strike price
- (2) Between strike price of buy call and sell put, user buys at market spot rate
- (3) Below strike price of sell put, user buys at strike price of sell put
- (4) Above strike price of sell call, user buys at market sport rate + difference in strike price of buy call and sell call

# **Pay-off profile:**



## **Impact Analysis**

Importer Seagull					
Spot at the time of deal: 74					
Buy Call Strike Price: 75					
Sell Call Strike Price: 78					
Sell Put Strike Price: 73					
Net Option Premium: 0					
Spot at	Buy price if	Option	<b>Option Payoff</b>	Net Buying	
Expiry	Unhedged	Payoff	net of Premium	Price	
71	71	-2	-2	73	
72	72	-1	-1	73	



73	73	0	0	73
74	74	0	0	74
75	75	0	0	75
76	76	1	1	75
77	77	2	2	75
78	78	3	3	75
79	79	3	3	76

## **Benefits**

Under this transaction in case of unfavorable INR depreciation, user receivable is protected at the strike price of the buy call, limited to the difference between the two strikes of the call options. If INR appreciates, user benefits up to a certain range while benefiting from nil/lower upfront premium cost on account of the premium received from the sell call and sell put.

### Risks

(1) In case of premium paid Importer seagull, option expiring without getting exercised, effectively increases cost 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 above sell call strike price

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



# Seagull Option for FCY Receivable

### Features

Exporter seagull is a three legged option strategy which involves two put options and one call option. It consists of buying one put option, selling one call option at higher strike price and selling one put with lower strike price. All three options have same expiry and notional. Exporter Seagull can be looked as a combination of put spread strategy and Sell call option or a combination of exporter range forward and sell put option. The two sold options help in reducing overall cost of the structure thereby works as cost reduction strategy. This derivative product can be used to hedge FCY receivables. This is usually zero premium structure.

#### Illustration:

For a receivable underlying in USD where INR is domestic currency, user enters into Exporter seagull

The underlying exposure for this product is a USD receivable. User is exposed to risk of INR appreciation against USD resulting in lower INR realization. The long put option acts as a hedge against USDINR spot rate going lower than its strike price and short call option caps the upside gains when USDINR spot rate depreciate above the strike price of call option. Also, short put option limits the gains when USDINR spot rate goes below its strike price. Under this product user pays very minimal cost to purchase this option strategy because user receives the premium for selling put and call options which offset the long put option cost.

### **Building Blocks:**

The building blocks of this option are as below:

- e. Spot FX rate,
- f. Forward FX rate
- g. Time to expiry and
- h. 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; such as transaction handling charges.

### An illustration of how the product works

User enters into USD Exporter seagull at different strike prices for agreed expiry day/delivery day

On expiry day, if the USDINR spot rate is -

- (5) Between strike price of buy put and sell put, user sells the USD at buy put strike price
- (6) Between strike price of buy put and sell call, user sells at market spot rate



- (7) Above strike price of sell call, user sells at strike price of sell call
- (8) Below strike price of sell put, user sells at market sport rate + difference in strike price of buy put and sell put



# Pay-off profile:

# **Impact Analysis**

Exporter Seagull Spot at the time of deal: 76 Buy Put Strike Price: 75 Sell Put Strike Price: 72 Sell Call Strike Price: 77 Net Option Premium: 0					
Spot at Expiry	Sell price if Unhedged	Option Payoff	Option Payoff net of Premium	Net Selling Price	
71	71	3	3	74	
72	72	3	3	75	
73	73	2	2	75	
74	74	1	1	75	
75	75	0	0	75	
76	76	0	0	76	
77	77	0	0	77	



78	78	-1	-1	77
79	79	-2	-2	77

### **Benefits**

Under this transaction in case of unfavorable INR appreciation, user receivable is protected at the strike price of the buy put, limited to the difference between the two strikes of the put option. If INR depreciates, user benefits up to a certain range while benefiting from nil/lower upfront premium cost on account of the premium received from the sell call and sell put.

### Risks

(1) In case of premium paid exporter seagull, 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.