



# Product & Risk Disclosure

January 2022

# FX Forward



## Product Features

- FX forward locks in exchange rate for the purchase or sale of currency on a future date
- The forward premium is included in the forward rate.
- Can have customized terms, such as a particular notional amount or delivery period

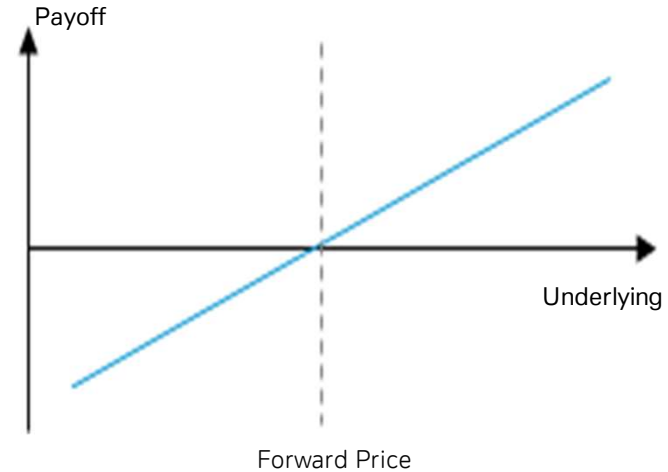
## Benefits

- Vanilla hedging strategy
- Customizable to notional/tenure
- Crystallizes the future cash flow against underlying foreign currency payables/receivables
- Full protection against downside, however no participation in upside

## Building Blocks and Primary Risks

- FX Spot
- Interest rates in both currencies (or forward premium)

## Payoff Illustration



# FX Forward



## Scenario Analysis

Scenarios below indicate potential payoff in INR Million on settlement date at different USD/INR Spot Rates for USD 1 Million Buy Forward at 75.00

USD/INR Spot	USD/INR Forward (Buy)	Payoff
70	75	-5.00
72	75	-3.00
74	75	-1.00
74.50	75	-0.50
75.50	75	0.50
76	75	1.00
78	75	3.00
80	75	5.00

The above table illustrates possible scenarios of this Transaction and the resulting payoff. It is important for Counterparty to acknowledge that there is no limit to the possible scenario variations on this Transaction.

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## Contract terms and conditions – Option to Unwind and Early unwind date

An amount equal to Deutsche Bank's total costs or loss (which shall be a positive number) or gain (which shall be a negative number) in connection with terminating all payments and contingent payments that would otherwise have been made under this transaction in the period from but excluding the relevant Optional Termination Date up to and including the originally scheduled Termination date.

Deutsche Bank's total costs or loss shall include, without limitation, any loss of bargain, cost of funding, or loss or cost incurred as a result of Deutsche Bank terminating, liquidating, obtaining or re-establishing any hedge or related position.

Party A shall provide the Mark to Market value of the trade as and when desired by Party B

Client has the option to unwind this trade as specified in the relevant confirmation and subject to unwind costs.

## Costs and Fees

Transactions of this nature are executed at an all-inclusive price and there would not be any separate breakup and recovery of costs, fees and other charges. Breakup will however be provided as per the extant RBI guidelines. This doesn't include statutory charges/levies and same will be recovered separately as applicable.

# FX Forward



## Market Risk

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## Credit Risk

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Credit Risk is the risk that we may, under certain circumstances, fail to perform our obligations to you when due.

## Funding Risk

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Funding Risk is the risk that, as a result of mismatches or delays in the timing of cash flows due from or to you under Transactions or related hedging, trading, collateral or other transactions, you will not have adequate cash available to fund current obligations.

## Liquidity Risk

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Liquidity Risk is the risk that due to prevailing market conditions it may not be possible to liquidate, nor to assess a fair value of your position. In addition, you should be aware that the operation of exchange rules or any power or system failure affecting electronic trading facilities may, in certain circumstances, impair or prevent us from liquidating or executing your Transactions, thus increasing the likelihood of loss..

## Operational Risk

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Operational Risk is the risk of loss to you arising from inadequacies in, or failures of, your internal procedures and controls for monitoring and quantifying the risks and contractual obligations associated with Transactions.

## Currency Risk

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Currency Risk The profit or loss from Transactions in foreign currencies will be affected by fluctuations in currency exchange rates where there is a need to convert from the currency denomination of the Transaction to another currency.

# Cross Currency Swap (CCS)



## Product Features

- In a CCS, client swaps principal and coupon payments in one currency on respective repayment dates into another currency, at pre-agreed spot rate (known as swap reference rate) and pays (or receives) relevant swap cost
- The payments on both the legs can be customized in terms of frequency and type (fixed or floating) to meet client requirements

## Benefits

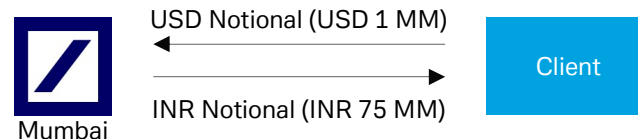
- Protection against FX and/or interest rate risk on principal and coupon payments

## Building Blocks and Primary Risks

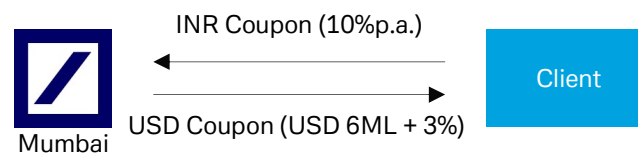
- Interest rate in currency A (ex. USD)
- interest rate in currency B (ex. INR)
- FX risk

## Payoff Illustration for USDINR CCS on USD 1 MM with bullet repayment on maturity, tenor 5Y

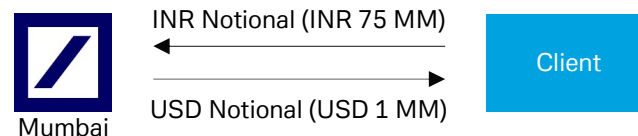
### Initial Exchange



### Interim Exchanges



### Final Exchange



# Cross Currency Swap (CCS)



## Scenario Analysis

Scenarios below indicate potential gain/loss at maturity in INR Million(per 1 million USD) at different USD/INR Spot Rates for a USD 1 Million CCS at swap reference of 75.00. A positive number indicates that this scenario is in favour of Party B.

USD/INR spot ref on maturity	70	72	74	75	76	78	80
Net mtm (INR Million)	-5.00	-3.00	-1.00	0.00	1.00	3.00	5.00

The above table illustrates possible scenarios of this Transaction and the resulting cash-flows. It is important for Counterparty to acknowledge that there is no limit to the possible scenario variations on this Transaction

Key Risks (Sensitivity Analysis):

Decrease in Modified MIFOR Rates, Increase in USD IRS, Depreciation of USD against INR

## Contract terms and conditions – Option to Unwind and Early unwind date

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Party A shall provide the Mark to Market value of the trade as and when desired by Party B

Client has the option to unwind this trade as specified in the relevant confirmation and subject to unwind costs.

## Costs and Fees

Transactions of this nature are executed at an all-inclusive price and there would not be any separate breakup and recovery of costs, fees and other charges. Breakup will however be provided as per the extant RBI guidelines. This doesn't include statutory charges/levies and same will be recovered separately as applicable.

# Cross Currency Swap (CCS) - Generic Risks



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## Market Risk

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## Credit Risk

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## Funding Risk

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## Liquidity Risk

Liquidity Risk is the risk that due to prevailing market conditions it may not be possible to liquidate, nor to assess a fair value of your position. In addition, you should be aware that the operation of exchange rules or any power or system failure affecting electronic trading facilities may, in certain circumstances, impair or prevent us from liquidating or executing your Transactions, thus increasing the likelihood of loss..

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## Operational Risk

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## Currency Risk

Currency Risk The profit or loss from Transactions in foreign currencies will be affected by fluctuations in currency exchange rates where there is a need to convert from the currency denomination of the Transaction to another currency.

# Principal Only Swap (POS)



## Product Features

- In a POS, client swaps principal in one currency on respective repayment dates into another currency, at pre-agreed spot rate (known as swap reference rate) and pay (or receive) relevant swap cost
- The payments on both the legs can be customized in terms of frequency to meet client requirements

## Benefits

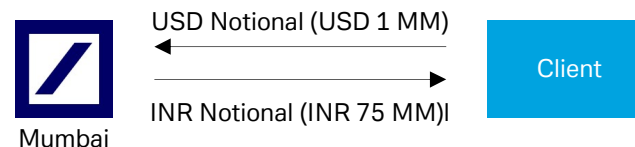
- Protection against FX risk on principal payments

## Building Blocks and Primary Risks

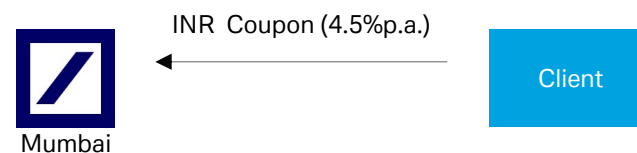
- Interest rate in currency A (ex. USD)
- interest rate in currency B (ex. INR)
- FX risk

## Payoff Illustration for USDINR POS on USD 1 MM with bullet repayment on maturity, tenor 5Y

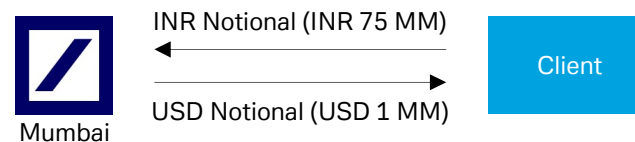
### Initial Exchange



### Interim Exchanges



### Final Exchange





# Principal Only Swap (POS)



## Scenario Analysis

Scenarios below indicate potential gain/loss at maturity in INR Million(per 1 million USD) at different USD/INR Spot Rates for a USD 1 Million POS at swap reference of 75.00. A positive number indicates that this scenario is in favour of Party B.

USD/INR spot ref on maturity	70	72	74	75	76	78	80
Net mtm (INR Million)	-5.00	-3.00	-1.00	0.00	1.00	3.00	5.00

The above table illustrates possible scenarios of this Transaction and the resulting cash-flows. It is important for Counterparty to acknowledge that there is no limit to the possible scenario variations on this Transaction. The analyses are provided to the Counterparty for information purposes only and Deutsche Bank does not make any representation or warranty to the Counterparty in respect of the same.

Key Risks (Sensitivity Analysis):

Decrease in Modified MIFOR Rates, Increase in USD IRS, Depreciation of USD against INR

## Contract terms and conditions – Option to Unwind and Early unwind date

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Client has the option to unwind this trade as specified in the relevant confirmation and subject to unwind costs.

## Costs and Fees

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# Principal Only Swap (POS)



## Market Risk

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## Credit Risk

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## Funding Risk

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## Operational Risk

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## Currency Risk

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# Coupon Only Swap (COS)



## Product Features

- In a COS, client swaps coupon payments in one currency on respective repayment dates into another currency, at pre-agreed spot rate (known as swap reference rate) and pay (or receive) relevant swap cost
- The payments on both the legs can be customized in terms of frequency and type (fixed or floating) to meet client requirements

## Benefits

- Protection against FX and/or interest rate risk on coupon payments

Payoff Illustration for USDINR COS on USD 1 MM with bullet repayment on maturity, tenor 5Y

Initial Exchange – NOT APPLICABLE

Interim Exchange



← INR Coupon (5.00% p.a.)

→ USD Coupon (4.00% p.a.)

Client

Final Exchange – NOT APPLICABLE

## Building Blocks and Primary Risks

- Interest rate in currency A (ex. USD)
- interest rate in currency B (ex. INR)
- FX risk

# Coupon Only Swap (COS)



## Scenario Analysis (Assuming 4% USD Coupon)

Scenarios below indicate potential gain/loss at maturity in INR Million(per 1 million USD) at different USD/INR Spot Rates for a COS on USD 1 Million notional at swap reference of 75.00. A positive number indicates that this scenario is in favour of Party B.

USD/INR spot ref on maturity	70	72	74	75	76	78	80
Net mtm (INR Million)	-0.10	-0.06	-0.02	0.00	0.02	0.06	0.10

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Key Risks (Sensitivity Analysis):

Decrease in Modified MIFOR Rates, Increase in USD IRS, Depreciation of USD against INR

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# Coupon Only Swap (COS)



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## Currency Risk

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# FX European Option – Call



## Product Features

- The product enables hedging foreign currency (FCY) liabilities/payables
- A Call Option allows the buyer the right, but not the obligation, to buy an agreed amount of a certain currency with another currency at a specified exchange rate on a specified date in the future, by paying an option premium

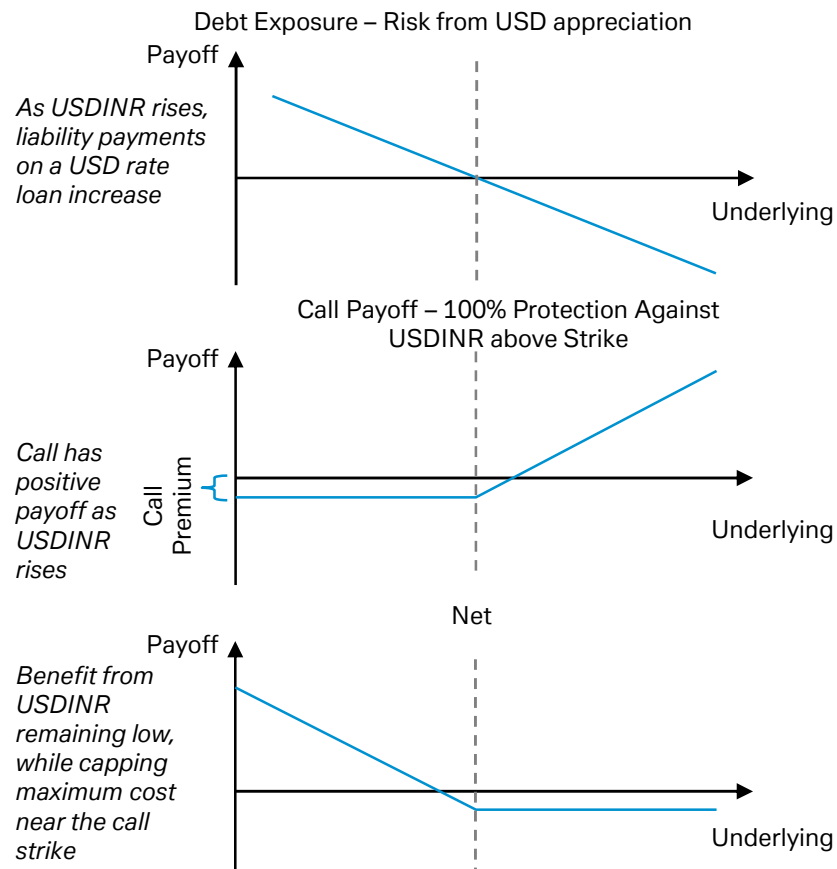
## Benefits

- Protects against FCY appreciation while allowing full participation if FCY depreciation
- Downside limited to premium payment

## Building Blocks and Primary Risks

- FX Volatility
- FX Spot
- Interest rates in both currencies

## Payoff Illustration for USDINR



# FX European Option – Call



## Scenario Analysis

Scenarios below indicate potential payoff in INR million on expiry date at different USD/INR Spot for a USD 1 Million Call at 75.00

USD/INR	Strike	Payoff
70	75	0.00
72	75	0.00
74	75	0.00
74.5	75	0.00
75	75	0.00
78	75	3.00
80	75	5.00
90	75	15.00

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# FX European Option – Call



## Market Risk

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## Funding Risk

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## Operational Risk

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## Currency Risk

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# FX European Option – Put



## Product Features

- The product enables hedging foreign currency (FCY) assets/receivables
- A Put Option allows the buyer the right, but not the obligation, to sell an agreed amount of a certain currency for another currency at a specified exchange rate on a specified date in the future., by paying an option premium

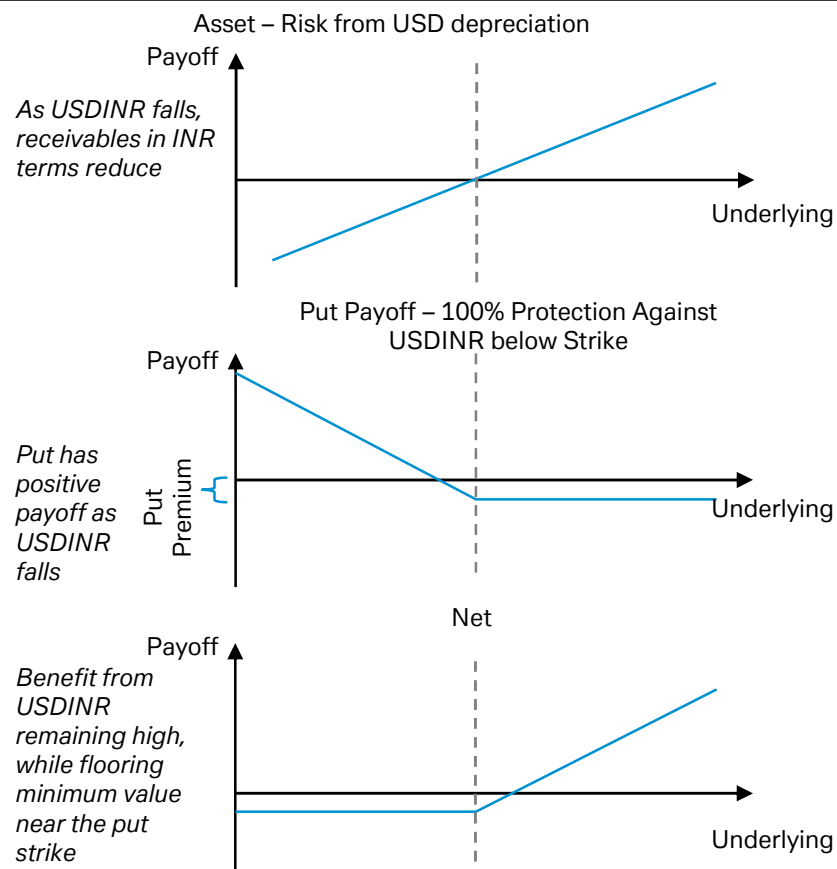
## Benefits

- Protects against FCY depreciation while allowing full participation if FCY appreciation
- Downside limited to premium payment

## Building Blocks and Primary Risks

- FX Volatility
- FX Spot
- Interest rates in both currencies

## Payoff Illustration for USDINR



# FX European Option – Put



## Scenario Analysis

Scenarios below indicate potential payoff in INR Million on expiry date at different USD/INR Spot Rates for a USD 1 Million Put at 75.00

USDINR	Strike	Payoff
70	75	5.00
72	75	3.00
74	75	1.00
74.5	75	0.50
75	75	0.00
78	75	0.00
80	75	0.00
90	75	0.00

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# FX European Option – Put



## Market Risk

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## Currency Risk

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# Interest Rate Swap (IRS)



## Product Features

- In an IRS, client swaps the floating payments for fixed payments or vice versa on the underlying notional
- The Floating index is FBIL benchmark fixing against which the swap is settled.
- The payments on both the legs can be customized in terms of frequency, index term and fixing time to meet client requirements

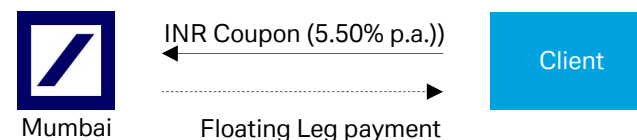
## Benefits

- IRS provides protection against INR interest rate risk

## Building Blocks and Primary Risks

- INR Interest Rate Risk (OIS rates)

## Illustration of Interest Rate Swap





## Scenario Analysis

Scenarios below indicate potential payoff at different INR-IRS Rates

Parallel shift in curve (bps)	MTM change in INR for a 5y trade of notional INR 1bn
5	-2,182,014
1	-436,403
0	0
-1	436,403
-5	2,182,015

The above table illustrates possible scenarios of this Transaction and the resulting payoff. It is important for Counterparty to acknowledge that there is no limit to the possible scenario variations on this Transaction.

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## Contract terms and conditions – Option to Unwind and Early unwind date

An amount equal to Deutsche Bank's total costs or loss (which shall be a positive number) or gain (which shall be a negative number) in connection with terminating all payments and contingent payments that would otherwise have been made under this transaction in the period from but excluding the relevant Optional Termination Date up to and including the originally scheduled Termination date.

Deutsche Bank's total costs or loss shall include, without limitation, any loss of bargain, cost of funding, or loss or cost incurred as a result of Deutsche Bank terminating, liquidating, obtaining or re-establishing any hedge or related position.

Party A shall provide the Mark to Market value of the trade as and when desired by Party B

Client has the option to unwind this trade as specified in the relevant confirmation and subject to unwind costs.

## Costs and Fees

Transactions of this nature are executed at an all-inclusive price and there would not be any separate breakup and recovery of costs, fees and other charges. Breakup will however be provided as per the extant RBI guidelines. This doesn't include statutory charges/levies and same will be recovered separately as applicable.



## Market Risk

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## Credit Risk

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Credit Risk is the risk that we may, under certain circumstances, fail to perform our obligations to you when due.

## Funding Risk

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Funding Risk is the risk that, as a result of mismatches or delays in the timing of cash flows due from or to you under Transactions or related hedging, trading, collateral or other transactions, you will not have adequate cash available to fund current obligations.

## Liquidity Risk

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Liquidity Risk is the risk that due to prevailing market conditions it may not be possible to liquidate, nor to assess a fair value of your position. In addition, you should be aware that the operation of exchange rules or any power or system failure affecting electronic trading facilities may, in certain circumstances, impair or prevent us from liquidating or executing your Transactions, thus increasing the likelihood of loss..

## Operational Risk

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Operational Risk is the risk of loss to you arising from inadequacies in, or failures of, your internal procedures and controls for monitoring and quantifying the risks and contractual obligations associated with Transactions.

## Currency Risk

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Currency Risk The profit or loss from Transactions in foreign currencies will be affected by fluctuations in currency exchange rates where there is a need to convert from the currency denomination of the Transaction to another currency.

# European Call Spread



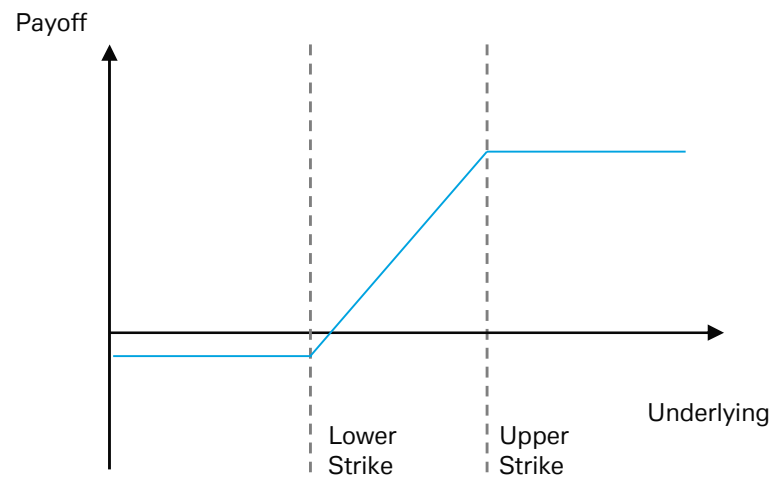
## Product Features

- The product enables hedging foreign currency (FCY) liabilities/payables
- The product is a combination of two vanilla call options- Client buys a call a lower strike and client sells a call at a higher strike

## Benefits

- Protects against FCY appreciation till sold call strike while allowing full participation in FCY depreciation below the bought call strike
- Downside limited to premium payment

## Payoff Illustration for USDINR



## Building Blocks and Primary Risks

- FX Volatility
- FX Spot
- Interest rates in both currencies

# European Call Spread



## Scenario Analysis

Scenarios below indicate potential gain/loss in INR million on expiry at different USD/INR Spot Rates for USD 1 Million Buy Call at 75.00 and Sell Call at 80.00

Scenario	USD/INR Fix	Payoff
1	68.00	0.00
2	70.00	0.00
3	72.00	0.00
4	74.00	0.00
5	76.00	1.00
6	78.00	3.00
7	81.00	5.00
8	82.00	5.00

The above table illustrates possible scenarios of this Transaction and the resulting cash-flows. It is important for Counterparty to acknowledge that there is no limit to the possible scenario variations on this Transaction.

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## Contract terms and conditions – Unwind Cost

An amount equal to Deutsche Bank's total costs or loss (which shall be a positive number) or gain (which shall be a negative number) in connection with terminating all payments and contingent payments that would otherwise have been made under this transaction in the period from but excluding the relevant Optional Termination Date up to and including the originally scheduled Termination date.

Deutsche Bank's total costs or loss shall include, without limitation, any loss of bargain, cost of funding, or loss or cost incurred as a result of Deutsche Bank terminating, liquidating, obtaining or re-establishing any hedge or related position.

Party A shall provide the Mark to Market value of the trade as and when desired by Party B



# European Call Spread - Generic Risks



## Market Risk

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Market Risk is the risk that the value of a Transaction will be adversely affected by fluctuations in the level or volatility of or correlation or relationship between one or more market prices, rates or indices or other market factors or by illiquidity in the market for the Transaction or in a related market. In particular leveraged Transactions will entail a higher degree of risk as the losses arising from a small market movement will be multiplied and you may be required to provide substantial margin at short notice to meet your obligations. Failure to meet such obligations may result in us having to liquidate your position at a loss for which you would be liable. You should also note that while we will seek to observe "stop loss" and "stop limit" orders, market conditions may prevent us from executing any "stop loss" or "stop limit" orders which may have been previously agreed.

## Credit Risk

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Credit Risk is the risk that we may, under certain circumstances, fail to perform our obligations to you when due.

## Funding Risk

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Funding Risk is the risk that, as a result of mismatches or delays in the timing of cash flows due from or to you under Transactions or related hedging, trading, collateral or other transactions, you will not have adequate cash available to fund current obligations.

## Liquidity Risk

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Liquidity Risk is the risk that due to prevailing market conditions it may not be possible to liquidate, nor to assess a fair value of your position. In addition, you should be aware that the operation of exchange rules or any power or system failure affecting electronic trading facilities may, in certain circumstances, impair or prevent us from liquidating or executing your Transactions, thus increasing the likelihood of loss..

## Operational Risk

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Operational Risk is the risk of loss to you arising from inadequacies in, or failures of, your internal procedures and controls for monitoring and quantifying the risks and contractual obligations associated with Transactions.

## Currency Risk

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Currency Risk The profit or loss from Transactions in foreign currencies will be affected by fluctuations in currency exchange rates where there is a need to convert from the currency denomination of the Transaction to another currency.

# European Put Spread



## Product Features

- The product enables hedging foreign currency (FCY) assets/receivables
- The product is a combination of two vanilla put options - client buys at a higher strike and client sells a put at a lower strike

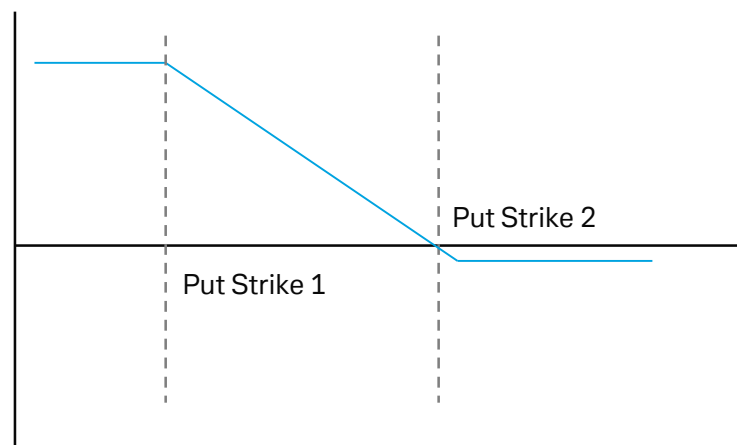
## Benefits

- Protects against FCY depreciation till sold put strike while allowing full participation in FCY appreciation above the bought put strike
- Downside limited to premium payment

## Components/Risks/Building Blocks

- FX Volatility
- FX Spot
- Interest rates in both currencies

## Payoff Illustration



# European Put Spread



## Scenario Analysis

Scenarios below indicate potential payoff in INR Million on expiry at different USD/INR Spot Rates for USD 1 Million Buy Put at 75.000 and Sell Put at 72.00

USD/INR	Put Strike 1	Put Strike 2	Payoff
70	72	75	3.00
72	72	75	3.00
74	72	75	1.00
74.5	72	75	0.50
75	72	75	0.00
78	72	75	0.00
80	72	75	0.00

The above table illustrates possible scenarios of this Transaction and the resulting payoff. It is important for Counterparty to acknowledge that there is no limit to the possible scenario variations on this Transaction.

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## Contract terms and conditions – Option to Unwind and Early unwind date

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Party A shall provide the Mark to Market value of the trade as and when desired by Party B

Client has the option to unwind this trade as specified in the relevant confirmation and subject to unwind costs.

## Costs and Fees

Transactions of this nature are executed at an all-inclusive price and there would not be any separate breakup and recovery of costs, fees and other charges. Breakup will however be provided as per the extant RBI guidelines. This doesn't include statutory charges/levies and same will be recovered separately as applicable.

# European Put Spread- Generic Risks



## Market Risk

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Market Risk is the risk that the value of a Transaction will be adversely affected by fluctuations in the level or volatility of or correlation or relationship between one or more market prices, rates or indices or other market factors or by illiquidity in the market for the Transaction or in a related market. In particular leveraged Transactions will entail a higher degree of risk as the losses arising from a small market movement will be multiplied and you may be required to provide substantial margin at short notice to meet your obligations. Failure to meet such obligations may result in us having to liquidate your position at a loss for which you would be liable. You should also note that while we will seek to observe "stop loss" and "stop limit" orders, market conditions may prevent us from executing any "stop loss" or "stop limit" orders which may have been previously agreed.

## Credit Risk

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Credit Risk is the risk that we may, under certain circumstances, fail to perform our obligations to you when due.

## Funding Risk

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## Liquidity Risk

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## Operational Risk

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Operational Risk is the risk of loss to you arising from inadequacies in, or failures of, your internal procedures and controls for monitoring and quantifying the risks and contractual obligations associated with Transactions.

## Currency Risk

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Currency Risk The profit or loss from Transactions in foreign currencies will be affected by fluctuations in currency exchange rates where there is a need to convert from the currency denomination of the Transaction to another currency.

# Seagull



## Product Features

- A seagull option is a three-legged currency options trading strategy to hedge FCY liabilities/payables or assets/receivables
- Seagull to hedge FCY liability/payable is a combination of a bought call, a sold put at same or lower strike, and a sold call at a higher strike
- Seagull to hedge FCY asset/receivable is a combination of a bought put, a sold call at same or higher strike, and a sold put at a lower strike

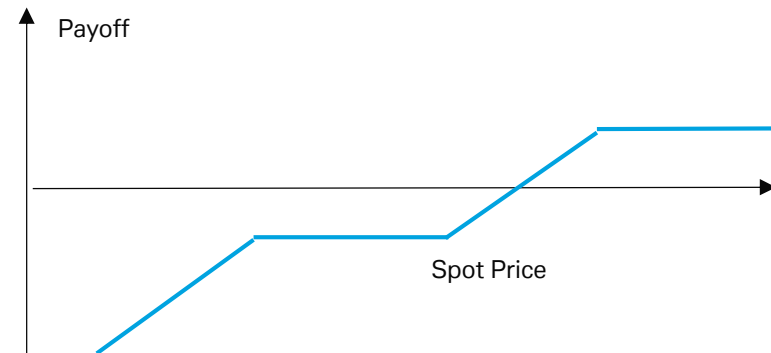
## Benefits

- Optimizes the option premium compared to vanillas options and spreads
- Provides partial participation in upside, however partial protection against downside

## Building Blocks and Primary Risks

- FX Spot
- FX Volatility
- Interest rates in both currencies

## Payoff Illustration for seagull to hedge FCY liabilities/payables





## Scenario Analysis

Scenarios below indicate potential payoff in INR million on expiry at different USD/INR Spot Rates. for USD 1 Million Buy USDINR Call at 75, Sell USDINR Call at 85, Sell USDINR Put at 65

Scenario	USD/INR Fix	Gain / (Loss)
1	55.00	-10.00
2	60.00	-5.00
3	65.00	0.00
4	70.00	0.00
5	75.00	0.00
6	80.00	5.00
7	85.00	10.00

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## Costs and Fees

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# Seagull Generic Risks



## Market Risk

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## Credit Risk

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## Funding Risk

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## Liquidity Risk

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## Operational Risk

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Operational Risk is the risk of loss to you arising from inadequacies in, or failures of, your internal procedures and controls for monitoring and quantifying the risks and contractual obligations associated with Transactions.

## Currency Risk

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Currency Risk The profit or loss from Transactions in foreign currencies will be affected by fluctuations in currency exchange rates where there is a need to convert from the currency denomination of the Transaction to another currency.

# Risk Reversal (RR)



## Product Features

- Risk Reversal (RR) is a 2 legged option strategy for hedging FCY liabilities/payables and assets/receivables
- RR to hedge FCY liabilities is a combination of Buy Call, and Sell Put at lower strike
- RR to hedge FCY assets is a combination of Sell Call, and Buy Put at lower strike

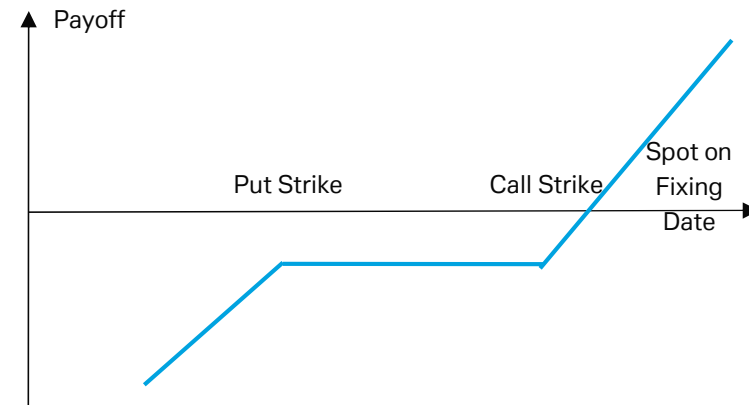
## Benefits

- Participation in upside till sold option strike along with protection against downside beyond bought option strike

## Building Blocks and Primary Risks

- FX Spot
- FX Volatility
- Interest rates in both currencies

## Payoff Illustration





# Risk Reversal



## Scenario Analysis

Scenarios below indicate potential payoff in INR million on expiry at different USD/INR Spot Rates for USD 1 Million Buy Call at 85.00 and Sell Put at 65.00

USD/INR	Put Strike	Call Strike	Payoff
60	65	85	-5.00
65	65	85	0.00
70	65	85	0.00
74.5	65	85	0.00
80	65	85	0.00
85	65	85	0.00
90	65	85	5.00

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# Risk Reversal Generic Risks



## Market Risk

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## Operational Risk

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## Currency Risk

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Currency Risk The profit or loss from Transactions in foreign currencies will be affected by fluctuations in currency exchange rates where there is a need to convert from the currency denomination of the Transaction to another currency.

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