

OTC FX Derivatives in India

December 2011

Agenda

- Derivatives – what are they?
- Products in the OTC Market:
 - Forward Contracts
 - Option Forward Contracts
 - Vanilla Options
 - Cost Reduction Structures
 - IR Products

Derivatives

“As we know, there are known knowns; there are things we know we know,
We also know ,there are known unknowns; that is to say we know there are some
things we do not know,
But there are also unknown unknowns; the ones we don't know we don't know”

Donald Rumsfeld

“Although the benefits and costs of derivatives remain the subject of spirited debate,
the performance of the economy and the financial system in recent years suggests
that those benefits have materially exceeded the costs.”

Alan Greenspan

"We view them as time bombs, both for the parties that deal in them and the economic
system.”

Warren Buffet

Derivatives

- The term 'Derivatives' indicates it derives its value from some underlying i.e. it has no independent value. Underlying can be securities, stock market index, commodities, bullion, currency or anything else.
- To put it simply an example of Derivatives is curd which is derived from Milk. Many of us have invested indirectly in derivatives by purchasing mutual funds!
- From Currency Derivatives market point of view, the underlying is the Currency Exchange rate
- A financial derivative instrument is a contract between two parties that specifies conditions such as dates and the resulting values of the underlying variables under which cashflows are to be exchanged between the parties.
- Derivatives are not inherently "bad." In a way, derivatives are like electricity - Properly used, they can provide great benefit; If mishandled or misunderstood, the results can be catastrophic.

FX Forwards

- Forward contracts represent a commitment to exchange a specific quantity of one currency for another at a specified price on a specified future date.
- Forward contracts are the most direct and popular method of eliminating the short-term transaction risk

An Illustrative Example:

Spot Rate: 52.20

6m Forward Premia :1.43

Exporter Sells 500,000 USD Buys INR for 6m Expiry @ 53.63 (Spot Rate (52.20) + Forward Premia (1.43))

On maturity date, irrespective of where the spot price is prevalent at that time, export receivables (i.e conversion from USD to INR) will be converted at the pre-agreed forward rate of 53.63.

FX Forwards: Option or Window Forwards

- Option forward contracts give the client an option to carry out the conversion at the agreed forward rate at anytime during a pre-agreed period, rather than a fixed date
- This allows increased flexibility to the client

An Illustrative Example:

Spot Rate : 52.20

6m Forward Premia : 1.43

Exporter Sells 500,000 USD Buys INR for 6m-7m Expiry @ 52.63 (Spot Rate (52.20) + Forward Premia (1.43))

Anytime between 6th and 7th month, irrespective of where the spot price is prevalent at that time, export receivables will be converted at the pre agreed forward rate of 52.63

Key Regulations – FX Forwards

- RBI allows market participants to hedge their exports / imports under the following two categories –
 - On the basis of **Past Performance**
 - Against a **Specific Underlying**
- Capital Account Exposures (Loans / Bonds – inflows and outflows) are hedged on the basis of providing “Specific Underlying” only
- INR hedges on current a/c and capital a/c exposures below one year booked on specific underlying can be freely booked and cancelled

Key Regulations – FX Forwards – Contd.

(i) Past Performance:

- A Corporate can book contracts under Past Performance such that contracts booked in a financial year (Apr-March) and outstanding at any point of time are within the Permissible Limit
- Permissible Booking Limit (quantum) is the average of last 3 year's or the last year's number, whichever is greater
- Booking Limit includes contracts booked during a year as well as contracts booked in the previous financial year and carried forward to this financial
- This Limit is calculated separately for Exports and Imports
- The corporate can cancel contracts that have been booked under Past Performance to the extent of 75% of the overall limit
- Within the above limits contracts can be booked for any tenor – there is no cap on tenor
- Quarterly statutory auditor certificates stating that the contracts outstanding at any point in time with all banks during the quarter did not exceed the value of the underlying exposures are required to be submitted

Key Regulations – FX Forwards – Contd.

(ii) Specific Underlying:

- Specific Underlying refers to any contract/document that serves as a proof of crystallized forex exposure. This includes but is not limited to:
 - Crystallized import/export orders (i.e. current account exposures)
 - Foreign currency interest/principal repayments
 - Foreign currency account balances
- The Corporate needs to provide the “Firm Contract / Order/ Underlying” to the bank within 15 calendar days of booking
- The “Firm Contract /Order” must cover the “Quantum”, “Tenor” as well as the “Currency” of the Hedge
- Quarterly statutory auditor certificates stating the contracts booked during the quarter did not exceed the value of the underlying exposures (time and quantum) are required to be submitted
- Penalties in case of failure to comply include:
 - Cancellation of contract with the loss passed on to the client but not gains, if any
 - In case of three such instances within a financial year, reporting to RBI and requirement of production of underlying prior to dealing in future

FX Options

- A currency option holder has the right, but not the obligation to buy (or sell) a specific quantity of a currency at a specified exchange rate on a specified date.
- Currency options become attractive when the exchange rates can move in either direction and the exporter/importer wants to avoid the downside risk but wants to keep the possibility of gains if the exchange rates move favorably

An Illustrative Example:

Spot Rate : 52.21

6m Forward Premia : 1.44

Forward Rate : 53.65

Client who is an importer has a view that in six months time, USD/INR will be lower than 53.65. Hence the client chooses to enter into a Plain Vanilla Call option on USD at 53.65(ATMF). For this, the client has to pay premia upfront. The payoff will look like this:

- If the USD/INR Spot Rate on Expiry Date is below 53.65, client will buy USD @ Prevailing spot rate (*Best case is unlimited*)
- If the USD/INR Spot Rate on Expiry Date is above 53.65, client will buy USD @ 53.65 (*Worst case is protected*)

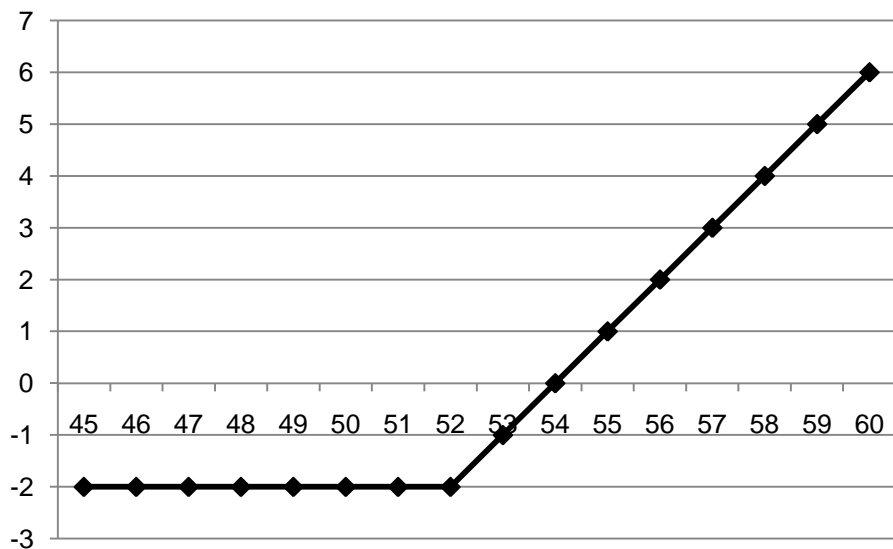
Client's loss is limited to the upfront premium paid for buying the option

Options – Permissible Products

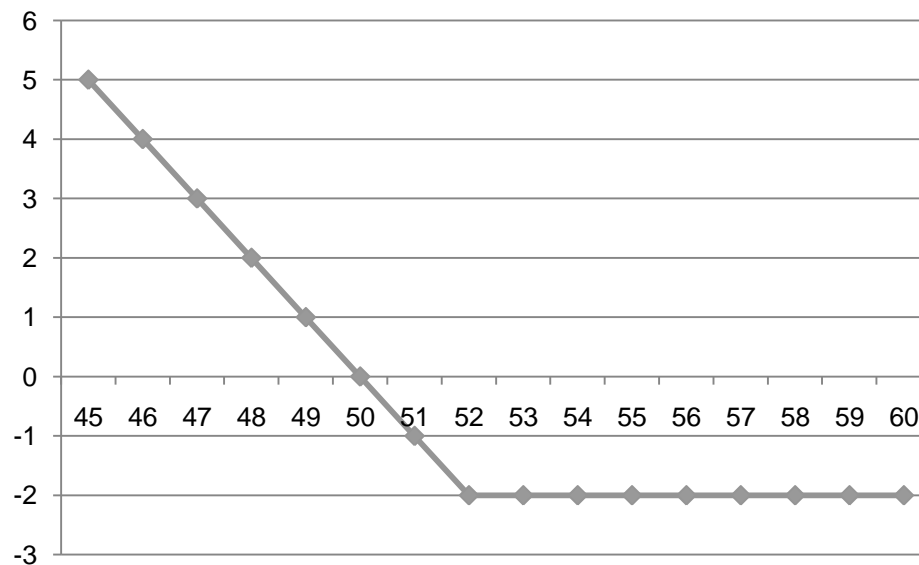
Vanilla Options

- Vanilla puts or calls can be bought by paying upfront premium to insure against adverse exchange rate movement.
- Buying a vanilla option gives downside protection and upside participation.

Payoff - Plain Vanilla Call Option



Payoff - Plain Vanilla Put Option

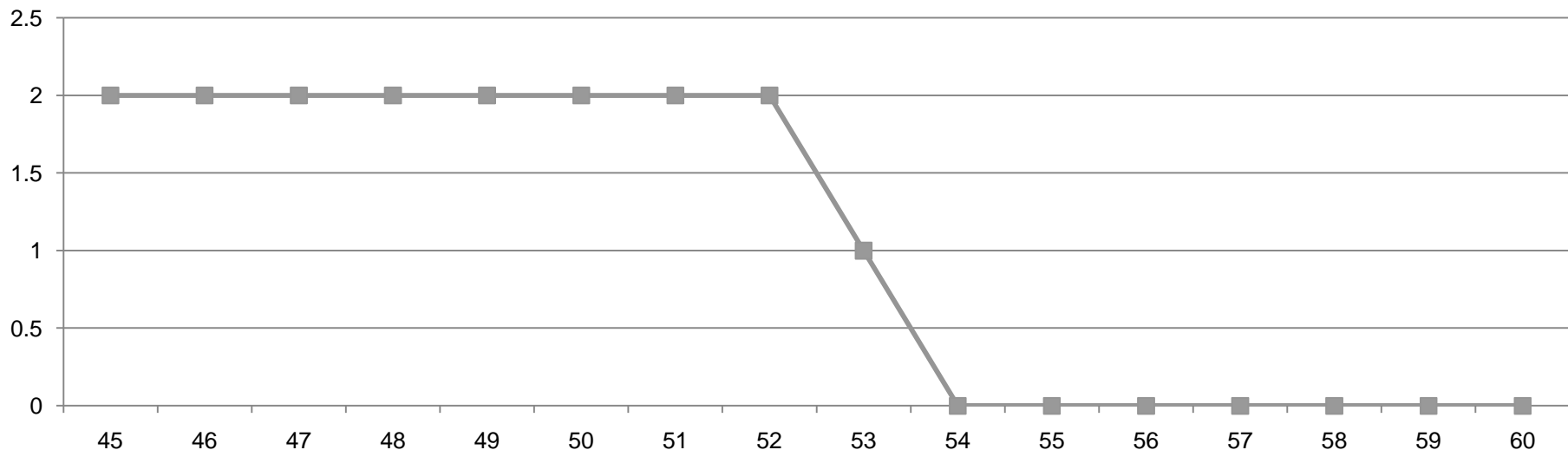


Options – Permissible Products – Contd.

Put (Call) Spread

- A Put spread involves buying a Put option and selling a Put option at the same time so that the net premium payable is reduced.
- Assume a three month maturity Put Spread with a range of 52.0 to 54.0 that costs zero
- If spot is above 54, exporter sells at market rate; If spot is between 52 and 54, exporter sells at 54; if spot is below 52, exporter sells at Prevailing Spot minus 2 Rs

Payoff - Put Spread

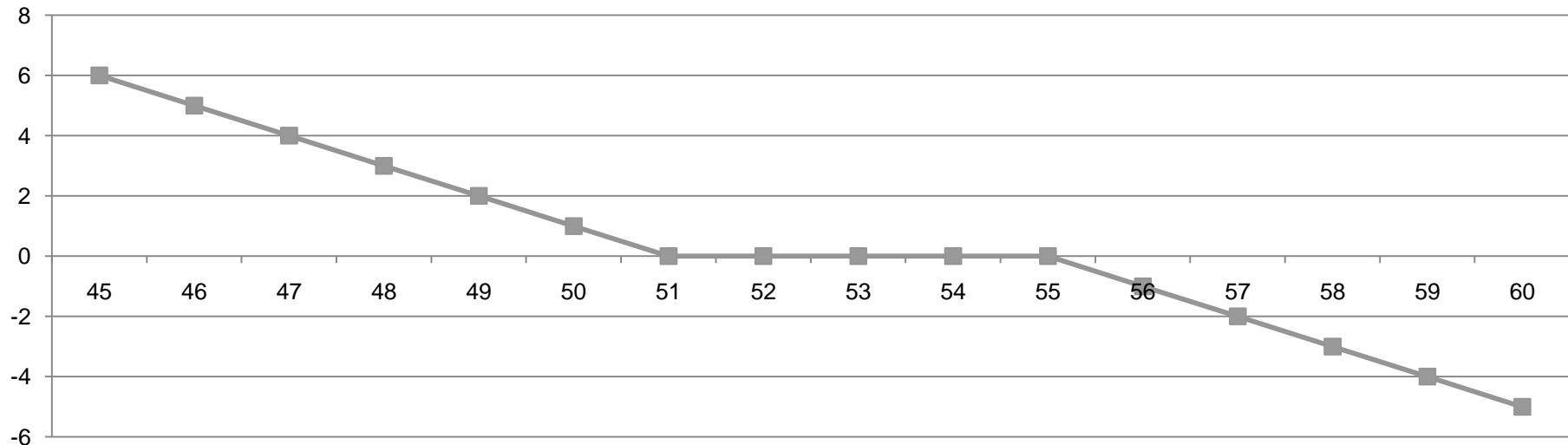


Options – Permissible Products – Contd.

Range Forwards

- A Range Forward involves buying a Put option and selling a Call option at the same time such that the net premium payable is zero.
- For eg., assume a 3 month maturity range forward with a range of 51.0(BP) to 55.00(SC). This means that the buyer of the product is assured of selling at 51.0 even if the market rate goes below that level, but is bound to sell at 55.0, even if the market rate goes above that level.

Payoff - Exporter Range Forward

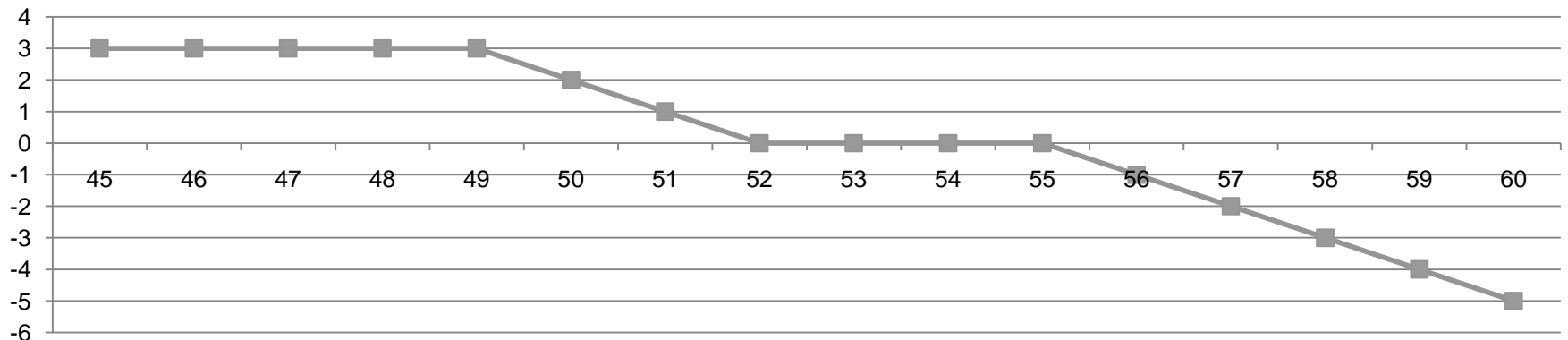


Options – Permissible Products – Contd.

Seagull

- A Seagull is a range forward with a sold put below the strike of the bought put. For eg., keeping the Buy Put at 52.0, one can participate in the upside till 55.0 in return for selling a put at 49.0
- While a seagull enables higher strikes, it exposes the buyer to market risk in the case of sharp rupee appreciation.
- If spot is above 55, exporter sells at 55; If spot is between 55 and 52, exporter sells at market; If spot is between 49 and 52, exporter sells at 52; If spot is below 49, exporter sells at market plus 3 Rs.

Payoff - Exporter Seagull



Key Regulations – FX Options

- Proof of underlying exposure whether in the form of specific or past performance is required akin to FX forwards
- Corporates are prohibited from selling a naked option (i.e. selling an option without buying another)
- Only vanilla options are permitted in both FCYINR and Cross Currencies, i.e. exotic options such as barriers and digitals are not allowed
- While cost reduction structures (option combinations involving selling at least one option) are allowed, the following conditions apply:
 - Company should be above a specific size (Min Net worth INR 1B under specific underlying and INR 2B under past performance)
 - The company must adopt AS 30/32 accounting policy and have a risk management policy which allows cost reduction structures
 - The set of underlying exposure allowed is restricted to Trade and ECB exposure
 - The firm should have a formal risk management policy and BR authorising such products

Advantages of using OTC Products

- Customisation – Can be customised to cover specific underlying exposure both in terms of tenor and amount
- Very liquid for tenors of upto five years
- Available in virtually all currency pairs
- Deliverable – minimise slippage
- No / Low margin requirements
- MTM settled at maturity

Relevant RBI Master Circulars

- Master Circular on Risk Management and Interbank Dealings
- Master Circular on External Commercial Borrowings and Trade Credit
- Master Circular on Foreign Investments into India
- Master Circular on Direct Investment by Residents in Joint Venture (JV)/Wholly Owned Subsidiary (WOS) Abroad

All available on the RBI website under Notifications Section

Thank You

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