

CIRCULAR

SEBI/HO/MRD/DP/CIR/P/2016/0000000038

March 09, 2016

To,

All Stock exchanges and Clearing corporations, All Depositories.

Dear Sir / Madam,

Subject: Introduction of Exchange Traded Cross Currency Derivatives contracts on EUR-USD, GBP-USD and USD-JPY currency pairs and Exchange Traded Option contracts on EUR-INR, GBP-INR and JPY-INR currency pairs

Reserve Bank of India (RBI) vide A.P. (DIR Series) circular no. 35 dated December 10, 2015 has permitted recognised stock exchanges to offer cross-currency futures and option contracts in the EUR-USD, GBP-USD and USD-JPY currency pairs. RBI has also permitted recognised stock exchanges to offer currency option contracts in EUR-INR, GBP-INR and JPY-INR currency pairs, in addition to the existing USD-INR pair.

- 2. In view of the above and after detailed consultations with stock exchanges, it has been decided to permit recognized stock exchanges to introduce cross-currency futures and options contracts on EUR-USD, GBP-USD and USD-JPY. The details in terms of product design, margins and position limits for the specified currency pairs are as given under Annexure I.
- 3. Further, it has also been decided to permit recognized stock exchanges to introduce currency options on EUR-INR, GBP-INR and JPY-INR currency pairs. The details in terms of product design, margins and position limits for the three additional currency pairs are as given under Annexure II.
- 4. Eligible market participants, i.e., stock brokers, domestic institutional investors, FPIs and clients, are allowed to take positions in the exchange traded cross-currency futures and option contracts in the EUR-USD, GBP-USD and USD-JPY currency pairs and exchange traded currency option contracts in EUR-INR, GBP-INR and JPY-INR currency pairs, subject to terms and conditions mentioned in this circular and the aforesaid circular of RBI.
- 5. The existing limits of USD 15 million for USD-INR contracts and USD 5 million for non USD-INR contracts (i.e. EUR-INR, GBP-INR and JPY-INR), all put

together, per exchange, without having to establish underlying exposure, as laid down in SEBI circular CIR/MRD/DP/04/2015 dated April 08, 2015, shall remain unchanged. The hedging procedure for eligible market participants as laid down in SEBI circulars CIR/MRD/DP/20/2014 dated June 20, 2014 and CIR/MRD/DP/04/2015 dated April 08, 2015 shall also remain unchanged.

- 6. Eligible market participants shall also ensure that any synthetic positions (such as synthetic USD-INR derivatives contracts) created using USD-INR, EUR-INR, GBP-INR or JPY-INR exchange traded currency derivatives contracts and exchange traded cross-currency derivatives contracts is within the position limits prescribed in SEBI circulars CIR/MRD/DP/20/2014 dated June 20, 2014 and CIR/MRD/DP/30/2014 dated October 22, 2014 for the USD-INR, EUR-INR, GBP-INR or JPY-INR derivatives contracts.
- 7. Stock exchanges shall impose appropriate penalties for violation of position limits by eligible market participants.
- 8. In addition to the above, it has been decided in consultation with RBI to allow trading in cross-currency derivatives contracts between 09:00 a.m. and 07:30 p.m. Accordingly, stock exchanges are permitted to set their trading hours for cross-currency derivatives contracts subject to the fulfilment of the following conditions:
 - (i) The trading hours for cross-currency derivatives contracts are between 09:00 a.m. and 07:30 p.m.
 - (ii) Stock exchange and its clearing corporation shall implement suitable risk management system and infrastructure commensurate with the trading hours.
 - (iii) The clearing corporation of the stock exchange shall undertake two additional updates of the SPAN risk management parameters during the extended trading hours. Accordingly, SPAN parameters shall be updated at Beginning-of-Day, 11:00 a.m., 12:30 p.m., 02:00 p.m., 03:30 p.m., 05:00 p.m., 06:30 p.m., End-of-Day.
 - (iv) The clearing corporation of the stock exchange shall undertake regular back-testing of the margins collected vis-à-vis the actual price changes for the cross-currency contracts being cleared and settled to assess appropriateness of its margining models.
- 9. With the view to ensure orderly trading and market integrity, stock exchanges shall implement a mechanism of Dynamic Price Bands in the currency

derivatives segment on the lines below so as to prevent acceptance of orders placed beyond the price limits set by the stock exchanges:

- (i) <u>Dynamic Price Bands for currency futures contracts (including cross-currency futures contracts)</u>
 - (a) Stock exchanges shall set the daily dynamic price bands of the currency futures contracts as mentioned in the table below:

Contracts with tenure up to 6 months	± 3% of the theoretical price or the previous day closing price, as applicable
	± 5% of the theoretical price or the previous day closing price, as applicable

- (b) The dynamic price bands shall be relaxed in increments of 1% as and when a market-wide trend is observed.
- (ii) <u>Dynamic Price Bands for currency options contracts (including cross-</u>currency options contracts)
 - (a) For currency options, stock exchanges shall implement a dynamic price band mechanism based on theoretical price of contracts.
 - (b) The dynamic price bands shall be relaxed as and when a market wide trend is observed in situations of high volatility.
- (iii) Stock exchanges shall frame suitable rules with mutual consultation for such relaxation of dynamic price bands and shall make it known to the market.
- 10. Before the launch of the cross-currency derivatives product(s) and currency options on EUR-INR, GBP-INR and JPY-INR currency pairs, the stock exchange / clearing corporation shall submit proposal to SEBI for approval giving the details of contract specifications, risk management framework, surveillance systems, compliance vis-à-vis the requirements specified in this circular, etc.
- 11. All other conditions specified by SEBI for the currency derivatives segment shall remain unchanged. Stock exchanges / Clearing corporations may specify additional safeguards / conditions, as deemed fit and under intimation to SEBI, to manage risk and to ensure orderly trading.
- 12. Depositories are directed to forward this circular to DDPs (Designated Depository Participants) and the Custodians of Securities, who shall in turn bring

the contents of this circular to the notice of the FPIs (Foreign Portfolio Investors) registered with them.

- 13. Stock exchanges and Clearing corporations are directed to:
 - (i) take necessary steps to put in place systems for implementation of the circular, including necessary amendments to the relevant bye-laws, rules and regulations.
 - (ii) bring the provisions of this circular to the notice of the stock brokers / clearing members and also disseminate the same on their website.
 - (iii) communicate to SEBI the status of implementation of the provisions of this circular.
- 14. This circular is being issued in exercise of powers conferred under Section 11 (1) of the Securities and Exchange Board of India Act, 1992 to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.

Yours faithfully,

Susanta Kumar Das Deputy General Manager email: susantad@sebi.gov.in

<u>Enclosure</u>: Reserve Bank of India A.P. (DIR Series) Circular no. 35 dated December 10, 2015 on 'Guidelines on trading of Currency Futures and Exchange Traded Currency Options in Recognized Stock Exchanges – Introduction of Cross-Currency Futures and Exchange Traded Option Contracts'.



Annexure I

Product Design and Risk Management framework for Exchange Traded Cross-Currency Futures and Options Contracts

1. Permitted underlying

- (i) Euro US Dollar spot rate (EUR-USD)
- (ii) Pound Sterling US Dollar spot rate (GBP-USD)
- (iii) US Dollar Japanese Yen spot rate (USD-JPY)

2. Trading Hours

09:00 a.m. to 07:30 p.m.

3. Size of the contract

(i) EUR-USD: EUR 1,000

(ii) GBP-USD: GBP 1,000

(iii) USD-JPY: USD 1,000

4. Quotation

- (i) EUR-USD: The contract would be quoted in USD terms. The outstanding positions would be in Euro terms.
- (ii) GBP-USD: The contract would be quoted in USD terms. The outstanding positions would be in GBP terms.
- (iii) USD-JPY: The contract would be quoted in JPY terms. The outstanding positions would be in USD terms.

5. Available contracts

- (i) Futures contracts: Twelve (12) serial monthly contracts.
- (ii) Options contracts (Premium styled European Call and Put Options): Three(3) serial monthly contracts followed by three (3) quarterly contracts of the cycle March / June / September / December.

6. Strike price of option contracts

Minimum of three (3) in-the-money, three (3) out-of the-money and one (1) near-the-money strikes shall be provided for all available contracts.

7. Last trading day

The last trading day for the contracts shall be two working days prior to the last working day of the expiry month at 12:30 p.m. If any last trading day is a trading holiday, then the last trading day shall be the previous trading day.

8. Final Settlement Day

The contract would settle on the last working day (excluding Saturdays) of the month. The last working day would be taken to be the same as that for Interbank Settlements in Mumbai. The rules for Interbank Settlements, including those for 'known holidays' and 'subsequently declared holiday' would be those as laid down by FEDAI.

9. Settlement mechanism

The contracts would be settled in cash in Indian Rupee (INR).

10. Daily Settlement Price

The daily settlement price of cross-currency derivatives contracts shall be the last half an hour volume weighted average price of the contract.

In the absence of last half an hour trading, the daily settlement price shall be the theoretical price as calculated by the stock exchange. Stock exchanges shall be required to disclose the model / methodology used for arriving at the theoretical price.

For arriving at the settlement value in INR for EUR-USD and GBP-USD contracts, the latest available RBI reference rate for USD-INR shall be used. For USD-JPY contracts, the settlement value in INR shall be arrived at using the latest available exchange rate published by RBI for JPY-INR.

11. Final Settlement price

The final settlement price of the cross-currency derivatives contracts shall be computed using the RBI reference rate for USD-INR and the corresponding exchange rate published by RBI for EUR-INR, GBP-INR and JPY-INR, as applicable, on the last trading day of the contract.

For arriving at the final settlement value in INR for EUR-USD and GBP-USD contracts, the RBI reference rate for USD-INR on the last trading day of the contract shall be used. For USD-JPY contracts, the final settlement value in INR shall be arrived at using the exchange rate published by RBI for JPY-INR on the last trading day of the contract.

12. Settlement day

Daily Settlement shall be on T +1 settlement basis and the Final Settlement shall be on T+2 settlement basis.

13. Exercise of options at expiry

On expiry date, all open long in-the-money contracts, on a particular strike of a series, at the close of trading hours would be automatically exercised at the final settlement price and assigned on a random basis to the open short positions of the same strike and series.

14. Position limits per stock exchange

Eligible market participants are allowed to take positions in the exchange traded cross-currency futures and options contracts <u>without</u> having to establish underlying exposure subject to the position limits as prescribed below:

(i) Position limits for stock brokers (banks and non-bank), Category I & II FPIs, Domestic Institutional investors (DIIs) as permitted by the respective sectoral regulators and AD Category–I banks

Currency Pair	Position limits		
EUR-USD	Gross open position across all contracts shall not exceed 15% of the total open interest or EUR 100 million, whichever is higher		
GBP-USD	Gross open position across all contracts shall not exceed 15% of the total open interest or GBP 100 million, whichever is higher.		
USD-JPY	Gross open position across all contracts shall not exceed 15% of the total open interest or USD 100 million, whichever is higher.		

The aforementioned limits shall be the total limits available to the stock brokers for taking positions on proprietary basis and for positions of their clients.

(ii) Position limits for proprietary position of non-bank stock brokers

Currency Pair	Position limits
EUR-USD	Gross open position across all contracts shall not exceed 15% of the total open interest or EUR 50 million, whichever is higher

GBP-USD	Gross open position across all contracts shall not exceed 15% of the total open interest or GBP 50 million, whichever is higher.
USD-JPY	Gross open position across all contracts shall not exceed 15% of the total open interest or USD 50 million, whichever is higher.

(iii) Position limits for Clients and Category III FPIs

Currency Pair	Position limits	
EUR-USD	Gross open position across all contracts shall not exceed 6% of the total open interest or EUR 10 million, whichever is higher	
GBP-USD	Gross open position across all contracts shall not exceed 6% of the total open interest or GBP 10 million, whichever is higher.	
USD-JPY	Gross open position across all contracts shall not exceed 6% of the total open interest or USD 10 million, whichever is higher.	

(iv) <u>Clearing Member Level position limits</u>: No separate position limit is prescribed at the level of clearing member. However, the clearing member shall ensure that his own trading position and the positions of each stock broker clearing through him is within the limits specified above.

15. Risk Management

The margins shall be collected in INR. For this purpose, RBI reference rate of previous day for USD-INR and the corresponding exchange rate published by RBI for JPY-INR, as applicable, shall be used till 02:00 p.m. The latest available RBI reference rate for USD-INR and the corresponding exchange rate published by RBI for JPY-INR, as applicable, shall be used post 02:00 p.m.

(i) Initial Margin

The Initial Margin requirement would be based on a worst scenario loss of a portfolio of an individual client comprising his positions in options and futures contracts on the same underlying across different maturities and across various scenarios of price and volatility changes. In order to achieve this, the price range for generating the scenarios would be 3.5 standard

deviation and volatility range for generating the scenarios would be 3%. Since the margins shall be collected in INR, the price scanning range shall be scaled up by the total futures margin rate of the contract involving the quoted currency in cross-currency pair and INR. The initial margin so computed would be subject to a minimum of 2% for all cross-currency derivatives contracts.

However, for first two days of trading, the initial margin shall be computed using a sigma of 1.15% for EUR-USD contracts, 0.95% for GBP-USD contracts and 0.60% for USD-JPY contracts. Thereafter, the sigma would be calculated using the methodology specified for currency futures in SEBI circular no. SEBI/DNPD/Cir-38/2008 dated August 06, 2008 and would be the standard deviation of daily logarithmic returns of futures price.

For the purpose of calculation of option values, the following standard option pricing models - Black-Scholes, Binomial, Merton would be used.

The initial margin shall be deducted from the liquid assets of the clearing member on an online, real time basis.

(ii) Extreme Loss margin

The extreme loss margin shall be deducted from the liquid assets of the clearing member on an online, real time basis.

<u>Futures</u>: The extreme loss margin shall be 1% of the mark to market value of the contract for all gross open positions.

<u>Options</u>: The extreme loss margin shall be 1% of the notional value of the open short option position. Notional Value would be calculated on the basis of the latest exchange rate published by RBI for respective exchange rate.

(iii) Net Option Value

The Net Option Value is the current market value of the option times the number of options (positive for long options and negative for short options) in the portfolio. The Net Option Value would be added to the Liquid Net Worth of the clearing member. Thus, mark to market gains and losses would not be settled in cash for options positions.

(iv) Calendar spread margin

A currency futures position at one maturity which is hedged by an offsetting position at a different maturity would be treated as a calendar spread. For a calendar spread position, the extreme loss margin shall be charged on one third of the mark to market value of the far month contract.

The calendar spread margin shall be as given below in INR.

Spread	EUR-USD	GBP-USD	USD-YEN
1 Month	1500	1500	1500
2 Months	1800	1800	1800
3 Months	2000	2000	2000
4 Months +	2100	2100	2100

A long currency option position at one maturity and a short option position at a different maturity in the same underlying would be treated as a calendar spread. The margin for options calendar spread would be the same as specified for the corresponding currency futures calendar spread.

The margin would be calculated on the basis of delta of the portfolio in each month. A portfolio consisting of a near month option with a delta of 100 and a far month option with a delta of –100 would bear a spread charge equal to the spread charge for a portfolio which is long 100 near month currency futures and short 100 far month currency futures. Option positions of different expiry, irrespective of their strike prices, shall also attract calendar spread margin.

The benefit for a calendar spread would continue till expiry of the near month contract. The calendar-spread margin shall be charged in addition to the worst-scenario loss of the portfolio.

(v) <u>Settlement of Premium</u>

Premium would be settled in INR and would be paid in by the buyer in cash and paid out to the seller in cash on T+1 day. Until the buyer pays in the premium, the premium due shall be deducted from the available liquid assets on a real time basis.

For arriving at the settlement value in INR for EUR-USD and GBP-USD contracts, the latest available RBI reference rate for USD-INR shall be used. For USD-JPY contracts, the settlement value in INR shall be arrived at using the latest available exchange rate published by RBI for JPY-INR.

(vi) Assignment Margin

Assignment Margin shall be levied on assigned positions of the clearing members towards exercise settlement obligations for option contracts. For

भारतीय प्रतिभूति और विनिमय बोर्ड Securities and Exchange Board of India

option positions exercised, the seller of the options shall be levied assignment margins which shall be 100% of the net exercise settlement value payable by a clearing member towards exercise settlement. Assignment margin shall be levied till the completion of pay-in towards the exercise settlement. Assignment margins shall be computed as net of assignment settlement and futures final settlement.



Annexure II

Product Design and Risk Management framework for Exchange Traded Options on EUR-INR, GBP-INR and JPY-INR Spot Rate

1. <u>Underlying</u>

- (i) Euro Indian Rupee Spot Rate (EUR-INR)
- (ii) Pound Sterling Indian Rupee Spot Rate (GBP-INR)
- (iii) Japanese Yen Indian Rupee Spot Rate (JPY-INR)

2. Type of option

Premium styled European Call and Put Options

3. Trading Hours

09:00 a.m. to 05:00 p.m.

4. Size of the contract

(i) EUR-INR: EUR 1,000

(ii) GBP-INR: GBP 1,000

(iii) JPY-INR: JPY 100,000

5. Quotation

The premium would be quoted in INR terms. However, the outstanding position would be in respective foreign currency terms, i.e. Euro for EUR-INR, GBP for GBP-INR and JPY in JPY-INR.

6. Available contracts

Three (3) serial monthly contracts followed by three (3) quarterly contracts of the cycle March / June / September / December.

7. Strike price

Minimum of three (3) in-the-money, three (3) out-of the-money and one (1) near-the-money strikes shall be provided for all available contracts.

8. Last trading day

The last trading day for the options contract would be two working days prior to the last working day of the expiry month at 12:30 p.m. If any last trading day is a trading holiday, then last trading day shall be the previous trading day.

9. Final Settlement Day

The options contract would settle on the last working day (excluding Saturdays) of the contract month. The last working day would be taken to be the same as that for Interbank Settlements in Mumbai. The rules for Interbank Settlements, including those for 'known holidays' and 'subsequently declared holiday' would be those as laid down by FEDAI.

10. Settlement mechanism

The contract would be settled in cash in INR.

11. Final Settlement price

The final settlement price would be the exchange rate published by RBI on the last trading day of the contracts.

12. Settlement day

Daily Settlement shall be on T +1 settlement basis and the Final Settlement shall be on T+2 settlement basis.

13. Exercise of options at expiry

On expiry date, all open long in-the-money contracts, on a particular strike of a series, at the close of trading hours would be automatically exercised at the final settlement price and assigned on a random basis to the open short positions of the same strike and series.

14. Position limits

The position limits as prescribed in SEBI circulars CIR/MRD/DP/20/2014 dated June 20, 2014 and CIR/MRD/DP/30/2014 dated October 22, 2014 for EUR-INR, GBP-INR and JPY-INR currency pairs shall be the overall limits for the gross open positions across all contracts (both futures and options contracts) of the eligible participant in the respective currency pair.

The existing position limits of USD 5 million per exchange for non USD-INR contracts, all put together, for residents and FPIs, without having to establish underlying exposure, shall remain unchanged.

15. Risk Management

(i) Initial Margin

The Initial Margin requirement would be based on a worst scenario loss of a portfolio of an individual client comprising his positions in options and futures contracts on the same underlying across different maturities and across various scenarios of price and volatility changes. In order to achieve this, the price range for generating the scenarios would be 3.5 standard deviation and volatility range for generating the scenarios would be 3%.

The sigma would be calculated using the methodology specified for currency futures in SEBI circular SEBI/DNPD/Cir-38/2008 dated August 06, 2008 and would be the standard deviation of daily logarithmic returns of futures price.

For the purpose of calculation of option values, the following standard option pricing models - Black-Scholes, Binomial, Merton would be used.

The initial margin shall be deducted from the liquid assets of the clearing member on an online, real time basis.

(ii) Extreme Loss margin

Extreme loss margin shall be equal to the following percentages of the notional value of the open short option position.

EUR-INR: 1.5%GBP-INR: 1.5%JPY-INR: 1.5%

Notional Value would be calculated on the basis of the latest exchange rate published by Reserve Bank for respective FCY-INR.

The extreme loss margin shall be deducted from the liquid assets of the clearing member on an online, real time basis.

(iii) Net Option Value

The Net Option Value is the current market value of the option times the number of options (positive for long options and negative for short options) in the portfolio. The Net Option Value would be added to the Liquid Net Worth of the clearing member. Thus, mark to market gains and losses would not be settled in cash for options positions.

(iv) Calendar Spread Margin

A long currency option position at one maturity and a short option position at a different maturity in the same underlying would be treated as a calendar spread. The margin for options calendar spread would be the same as specified for FCY-INR currency futures calendar spread.

The margin would be calculated on the basis of delta of the portfolio in each month. A portfolio consisting of a near month option with a delta of 100 and a far month option with a delta of – 100 would bear a spread charge equal to the spread charge for a portfolio which is long 100 near month currency futures and short 100 far month currency futures. Option positions of different expiry, irrespective of their strike prices, shall also attract calendar spread margin.

(v) Settlement of Premium

Premium would be paid in by the buyer in cash and paid out to the seller in cash on T+1 day. Until the buyer pays in the premium, the premium due shall be deducted from the available liquid assets on a real time basis.

(vi) Assignment Margin

Assignment Margin shall be levied on assigned positions of the clearing members towards exercise settlement obligations for option contracts. For option positions exercised, the seller of the options shall be levied assignment margins which shall be 100% of the net exercise settlement value payable by a clearing member towards exercise settlement. Assignment margin shall be levied till the completion of pay-in towards the exercise settlement. Assignment margins shall be computed as net of assignment settlement and futures final settlement.