Annex 2.10

REPORTING OF DERIVATIVES UNDER IBS

REPORTING BY BRANCHES/SUBSIDIARIES:

Banks branches in India (including foreign banks) and foreign branches/subsidiaries of Indian Banks are required to submit counter party and contract wise marked to market (MTM) values of derivative (viz., forwards, swaps, FRA, futures, options, credit derivatives, etc.,) contracts on gross basis (i.e., positive as well as negative market/fair values) in equivalent US Dollar with details of currency of settlement, country of the counter party, country and sector of ultimate risk, to their respective head/ principal offices. It may be mentioned that counter party wise netting (where specific legally enforceable bilateral netting arrangement such as International Swaps and Derivative Association (ISDA) master agreement, etc., exists) would be done at head office level. The information on subsidiaries is not required to be reported unless there is an explicit guarantee provided by the parent.

All derivatives whether held in the banking or trading book (hedge or trading) should be reported on fair value basis.

Credit derivatives, such as, credit default swaps and total return swaps, should be reported, if they belong to the trading book of a protection buying reporting bank. Credit derivatives that belong to the banking book should be reported as "Risk transfers" by the protection buyer.

In case of credit derivatives, on the trading book, there are basically three parties, the protection seller, the protection buyer and the issuer of the underlying. The country of ultimate risk shall be based on the issuer of the underlying. Hence, if a buyer of credit default swaps have underlying bonds/debentures, whose issuer is located in US. The ultimate risk is on the US. The value of the derivatives shall be the amount of the loan/ investment less the expected recovery from the underlying.

Currency of Reporting: Counter party and contract wise MTM values of all derivative contracts are to be reported in equivalent US Dollar based on spot rates as published by FEDAI on the relevant reporting dates. However, the currency of reporting should be the currency of settlement and the same should be reported as ISO currency codes provided in Annexure-III. The detail information on currency of settlement and country of counterparty of derivative contracts are required for the purpose of netting at HO/PO.

Country of the Counter Party: is the country where the counter party is located/operating. If the reporting bank/branch has a derivative contract with a branch/office of a Singapore based bank in India the country of the counter party will be India (IN) and the country of ultimate risk (guarantor) will be Singapore (SG).

Country of Ultimate Risk: is defined as the country in which the guarantor of a financial claim resides and/or the country in which the head office of a legally dependent branch is located e.g., An Indian Bank which has a cross currency swap with a US based bank's branch/ office in Thailand, the country of ultimate risk is US and the country of the counter party is Thailand**.** Collateral that is liquid and available in a country other than that of the borrower may be considered in the same manner as guarantees for this purpose. Claims on legally independent subsidiaries can only be considered as being guaranteed by the head office if the parent has provided an explicit guarantee. In contrast, claims on legally dependent branches are by definition always guaranteed by the respective head office. In the case of a multinational enterprise in India whose head office is outside India, it needs to be determined whether the head office has provided a guarantee to its office in India or not. If, it has, the ultimate risk country is that of the head office. If it has not provided a guarantee, the ultimate risk country is India.

Sector of Ultimate Risk: is the sector of the guarantor of a financial claim, e.g., bank, non-bank public sector, non-bank private sector, governments, etc.

Valuation: The valuation of derivatives should be based on marked to market (MTM) and on net present value (NPV) basis. However, counter party wise netting would be done at banks' head/principal office and NOT at branch level. With respect to MTM methodology of valuing FX forward contracts, the current practice may be followed till the NPV method is introduced for forward contracts. The valuation should be performed based on the general guidance provided below.

Guidance for Arriving at Fair/Market Value:

As a general rule, for an instrument that is actively traded on a recognized public exchange, the price quoted by the exchange where the instrument is traded is used as the base valuation price to arrive at the fair value of the instrument.

In case of instruments that are actively traded over the counter, the quoted bid price for long positions and quoted offer price for short positions is used as the base valuation price. These may be obtained through relevant market makers or brokers.

In case of less actively traded instruments/non-traded OTC derivatives, various techniques are used to determine the best estimate of a market price. This synthetic market price may be derived through use of market data (such as interest/ exchange rates) in appropriate models/systems designed for this purpose.

In case of the following instruments, fair value can be arrived at using the market data as mentioned there against:

FX spot / forwards	Prices as published by FEDAI
Exchange traded interest rate futures	Prices quoted on the relevant exchange
Commodity futures	Price quoted by relevant exchange
OTC derivatives	
Actively traded OTC instruments: In all other cases	Rates quoted by market makers Based on best estimate of market prices as described in (2) above

Some more Concepts: The market value of forward financial derivatives contract is derived from the difference between the agreed-upon contract price of an underlying item and the prevailing market price (or market price expected to prevail) of that item, times the notional amount, approximately discounted. The notional amounts - sometimes described as the nominal amount - is the amount underlying a financial derivatives contract that is necessary for calculating payments or receipts on the contract. This amount may or may not be exchanged. In the specific case of a swap contract, the market value is derived from the difference between the expected gross receipts and gross payments, appropriately discounted; that is, its net present value. The market value for a forward contract can therefore be calculated using available information – market and contract prices for the underlying item, time to maturity of the contract, the notional value, and market interest rates. From the viewpoint of the counter parties, the value of a forward contract may become negative (liability) or positive (asset) and may change both in magnitude and direction over time, depending on the movement in the market price for the underlying item. Forward contract settled on a daily basis, such as those traded on organized exchanges - and known as futures - have a market value, but because of daily settlement it is likely to be zero value at each end-period.

The price of an option depends on the potential price volatility of the price of the underlying item, the time to maturity, interest rates, and the difference between the contract price and the market price of the underlying item. For traded options, whether they are traded on an exchange or not, the valuation should be based on the observable price. At inception the market value of a non-traded option is the amount of the premium paid or received. Subsequently non-traded options can be valued with the use of mathematical models, such as the Black-Scholes formulae, that take account of the factors mentioned above that determine option prices. In the absence of a pricing model, the price reported for accounting or regulatory purposes might be used. Unlike forwards, options cannot switch from negative to positive value, or vice

versa, but they remain an asset for the owner and a liability for the writer of the option.

Some Examples for the Calculation of Market or Fair Values of Derivative Contracts: The following examples indicate how to calculate the market or fair value of various derivative contracts:

For a forward, a contract to purchase USD against EUR at a forward rate of 1.00 when initiated has a positive market value if the EUR/USD forward rate at the time of reporting for the same settlement date is lower than 1.00. It has a negative market value if the forward rate at the time of reporting is higher than 1.00, and it has a zero market value if the forward rate at the time of reporting is equal to 1.00.

For swaps, which involve multiple (and sometimes two-way) payments, the market or fair value is the net present value of the payments to be exchanged between the counter parties between the reporting date and the contracts maturity, where the discount factor to be applied would normally reflect the market interest rate for the period of the contract's remaining maturity. Thus, a fixed/floating swap which at the interest rates prevailing at the reporting date involves net annual receipts by the reporter of e.g. 2% of the notional principal amount for the next three years has a positive marked to market (or replacement) value equal to the sum of three net payments (each 2% of the notional amount), discounted by the market interest rate prevailing at the reporting date. If the contract is not in the reporter's favour (i.e., the reporter would have to make net annual payments), the contract has a negative net present value.

Unlike forwards or swaps, OTC options have a market or fair value at initiation which is equal to the premium paid to the writer of the option. Throughout their life, option contracts can only have a positive market or fair value for the buyer and a negative market or fair value for the seller. If a quoted market price is available for a contract, the market value to be reported for that contract is the product of the number of trading units of the contract multiplied by that market price. If a quoted market price is not available, the market or fair value of an outstanding option contract at the time of reporting can be determined on the basis of secondary market prices for options with the same strike prices and remaining maturities as the options being valued, or by using option pricing models. In an option pricing model, current quotes of forward prices for the underlying (spot prices for American options) and the implied volatility and market interest rate relevant to the option's maturity would normally be used to calculate the market values. Options sold and purchased with the same counter party should not be netted against each other, nor should offsetting bought and sold options on the same underlying. The format for reporting of derivatives from branch to HO/PO has been discussed in paragraph 3.24.

Ensuring the data quality: Due to unavailability of secondary data on derivatives, it will not be possible to ensure/cross-check the coverage at RBI level. The reporting banks/branches are required to ensure the correctness/coverage/quality of data before submitting the same to the RBI.

REPORTING BY BANK HEAD/PRINCIPAL OFFICES TO RBI:

The head/principal offices of banks are required to submit consolidated amount for each country (ultimate risk country) across all derivatives (forwards, swaps, FRA, futures, options, credit derivatives, etc.,). The amount shall be the positive market value representing financial claims and denominated in equivalent USD using closing FEDAI spot rate on relevant reporting dates. The information on subsidiaries is not required to be reported unless there is an explicit guarantee provided by the parent.

The head/principal offices of banks are required to collate counter party and contract wise data on derivatives supplied by the branches along with such data available at head office level and then do netting for a counter party *where specific legally enforceable bilateral netting arrangement such as International Swaps and Derivative Association (ISDA) master agreement, etc., exists*. An illustration to the mechanism of netting has been provided at the end of this Annex. After netting, wherever necessary, only positive market values representing financial claims of the bank are to be reported.

Mechanism of Netting: Derivative contracts entered by SBI branches worldwide

Reporting Branch	Counter-party	Currency of Settlement	Country of Counter Party	Country of Ultimate Risk	Type of derivative	MTM Value (in USD)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
New York	CP1 – Citibank, New York	USD	US	US	FX Forward	+100
New York	CP1 – Citibank, Tokyo	USD	US	US	IRS	–10
Mumbai	CP1 – Citibank, Kolkata	JPY	IN	US	FCY IRS	-75
Mumbai	CP1 – Citibank, Mumbai	JPY	IN	US	FX Forward	+50
Mumbai	CP1 – Citibank, Delhi	USD	IN	US	FCY IRS	–10
Mumbai	CP2 – ICICI Bank, Singapore	GBP	SG	IN	FX Forward	+30
Kolkata	CP2 – ICICI Bank, Singapore	GBP	SG	IN	FX Option	–50
Mumbai	CP2 – ICICI Bank, Mumbai	USD	IN	IN	IRS	+80
Kolkata	CP3 – SBI, New York	USD	US	IN	Currency Swap	-30
Kolkata	CP3 – SBI,London	GBP	GB	IN	FX Option	+60

Note: It has been assumed that there exist *specific legally enforceable bilateral netting arrangement between SBI and each of the counter-parties mentioned at column no. (2).* However, if there exist no such agreement with a particular counter-party then amounts for all contracts with that counter party with positive market values should be added and reported without netting with negative values.

Counter Party-wise Netting and Reporting by SBI

Counter party	Currency of Settlement	Country of Counter Party	Country of Ultimate Risk	Netting of values	Remark
(1)	(2)	(3)	(4)	(5)	(6)
CP1	USD	US	US	+100-10=+90	Should be Reported
CP1	JPY	IN	US	-75+50=-25	Should NOT be Reported
CP1	USD	IN	US	-10	Should NOT be Reported
CP2	GBP	SG	IN	+30-50=-20	Should NOT be Reported
CP2	USD	IN	IN	+80	Should be Reported
CP3	USD	US	IN	-30	Should NOT be Reported
CP3	GBP	GB	IN	+60	Should be Reported