O.P.SODHANI
REPORT ON FOREIGN EXCHANGE MARKET IN INDIA

JUNE 1995

R B I
MUMBAI

REPORT OF

THE EXPERT GROUP ON FOREIGN EXCHANGE MARKETS IN INDIA

RESERVE BANK OF INDIA

JUNE 1995

कार्यपालक निदेशक
EXECUTIVE DIRECTOR

भारतीय रिज़र्व बैंक
केन्द्रीय कार्यालय
बम्बई
RESERVE BANK OF INDIA
CENTRAL OFFICE
BOMBAY

June 27, 1995

The Governor,
Reserve Bank of India,
BOMBAY.

Dear Sir,

Please refer to the Memorandum of November 22,1994, constituting the Expert Group on Foreign Exchange Markets in India. I have great pleasure in submitting the Final Report of the Group.

Yours faithfully

O. P. Sodhani

(O.P.Sodhani)
CHAIRMAN - EXPERT GROUP

CONTENTS

Report of the Expert Group on Foreign Exchange Markets in India.

Executive Summary

.....

1. The steps taken since the middle of 1991 to liberalise the Indian economy and integrate it with the global markets have exposed corporates/banks to the risks of volatility in exchange and interest rates in the international markets. With a view to equipping the domestic markets to face these challenges,the Reserve Bank of India (RBI) set up in November 1994, a 14 member Expert Group headed by Shri O.P.Sodhani, Executive Director, RBI to recommend measures for the growth of an active, efficient and orderly foreign exchange (forex) market and to suggest introduction of new derivative products.

2. The Group at the outset decided that the terms of reference can be best examined by different sub-groups. Accordingly, four sub-groups were constituted. Based on the reports submitted by the sub-groups, an interim report was submitted in March 1995, incorporating those recommendations that could be implemented in the first phase. This final report traces the development of the Indian forex market and constraints on its efficient functioning (Chapter 2), identifies the areas where relaxations in extant regulations are called for (Chapter 3), suggests measures to widen the scope and reach of derivative products (Chapter 4) and recommends accounting/disclosure standards that are required to be put in place (Chapter 5). Certain related issues and suggestions aimed at developing a modern forex market are contained in Chapter 6.

3. Market constraints

The forex market in India is still in the early stages of development and suffers from several shortcomings. There is lack of depth and liquidity in the spot as well as forward markets. The market is skewed with a handful of public sector banks accounting for the major share of the merchant business and the foreign banks having a greater share of inter-bank business. The forward rates reflect demand and supply rather than interest rate differentials owing to absence of integration between the money and forex markets and the restrictions placed on borrowing/lending in the international market. On account of ceilings on open positions and gaps, there is virtual absence of market making. The cross-currency market has not developed on account of prohibition on initiating transactions in the overseas market. Besides forward contracts and cross currency options, there is no free access to other hedging products. Any attempt at vitalising the forex market should necessarily therefore start with relaxation of regulations governing the foregoing. Briefly these are as follows:

4. Areas identified for relaxation

4.1 The present guidelines prescribed by RBI for booking forward contracts cause difficulties to banks as well as corporates. Hence corporates should be permitted to take a hedge upon declaring the existence of an exposure.

4.2 The limit of Rs.15 crores set by RBI on open exchange position impedes market making. Further, in its present form, the limit does not capture cross-currency exposures. Hence, banks should be permitted to fix their own position limits subject to ensuring that capital is provided/earmarked to the extent of 5 percent of this limit based on internationally accepted guidelines.

4.3 Measurement of risk of exposure to interest rate differentials, is a general prudential norm and should not therefore be confined to just forex transactions. Gaps on this account ideally should reckon rupee transactions as well. To begin with however banks should be permitted to fix their own gap limits based on capital, risk-taking capacity etc.

4.4 As a first step towards bringing about a closer co-ordination between Indian and International markets, the banks should be given the freedom to initiate cross-currency position overseas and also borrow/lend short term funds up to six months subject to a ceiling.

4.5 To encourage competition, the number of market participants should be increased by permitting financial institutions like Industrial Development Bank of India(IDBI), Industrial Credit and Investment Corporation of India(ICICI), Industrial Finance Corporation of India(IFCI) etc. to freely trade in forex.

4.6 Although RBI's continuous presence on the buying side has helped to keep the dollar-rupee level stable, it would be desirable if central bank intervention is selective rather than continuous. Market participants should be left guessing about the action of the central bank, with the fear of intervention ensuring greater orderliness in the market, rather than actual intervention itself. It can also consider influencing the forward rates by initiating swaps.

4.7 Authorised dealers should be permitted to determine the interest rates and maturity period of FCNR(B) deposit, subject to a cap.

4.8 At present, exporters are permitted to retain upto 25% of export proceeds in foreign currency (50% in the case of EOUs). With a view to according greater freedom and competitiveness to exporters, they may be allowed to retain 100% of their exports earnings in India, subject to liquidation of outstanding advances against export bills.

5. Development of derivative products

5.1 Several measures are called for to popularise the use of options and to widen the scope and reach of derivatives in India. It will be necessary to progress on a two phase plan to address respectively, a limited set of immediate concerns for activating the existing market and a wider set of future concerns for its orderly development.

5.2 **Short-term measures**

a) It has to be recognised that the development of a vibrant derivatives market in India would ultimately rest on the introduction of rupee-based derivatives. A well developed and liquid forward dollar-rupee market is a sine qua non for the orderly development of a rupee derivatives market. This would in turn require creation of a deep and liquid inter-bank term money market. The inclusion of inter bank borrowings in the computation of demand and time liabilities for the purpose of statutory pre-emption is the key constraint to the development of such a market. It is an imperative need to exempt such borrowings from statutory pre-emption.

b) The cross currency options introduced in January, 1994 are yet to become popular, partly due to the restrictions imposed on cancellation and rebooking and the high premium which is payable upfront. It is therefore recommended that Corporates be permitted to freely cancel and re-book option contracts. Further, banks should be permitted to offer lower cost option strategies like "range forwards" and "ratio range forwards". Corporates should also have the freedom to hedge any contingent exposure using options.

c) Banks should be able to offer any derivative product on a fully covered basis and freely use such products for their own asset-liability management. Further banks should have the freedom to offer to customers products like swaps, cap, collars etc. subject to only post-facto reporting.

d) Tax laws relating to withholding tax should be made unambiguous and derivatives should not be subject to any withholding tax. Unless necessary action is initiated in this regard, this is likely to be a major stumbling block in the development of an active derivatives market.

e) Although the Group is not in favour of permitting corporates to undertake 'margin trading' purely for speculative purposes those corporates having EEFC accounts should be allowed to use amounts therein as margin for executing transactions that will enable them access to hedging products overseas which are not available in the Indian markets.

5.3 **Long-term measures**

a) The focus of reform in the long run should be the introduction of rupee-based derivatives in India. Towards this end,the Group suggests that the RBI invite detailed proposals from banks for offering rupee- based derivatives. As the market develops, banks in India should be free to offer all types of products without the requirement of these being offered only on a fully covered basis. This should however be preceded by the participants putting in place comprehensive risk management guidelines.

b) A refocussing of both Exchange Control Regulations as well as "Internal Control Guidelines" on risks, rather than on products is called for. A fresh set of guidelines for forex and derivatives risk management should be framed by RBI, which may be mandatory for the banks.

6. Risk Management, accounting and disclosure standards

6.1 It is critical that internationally accepted and understood accounting standards and disclosure norms be established for the proper development of the forex derivatives business. Such standards should be applicable to all market participants. In this context, the Group apprehends that with the relaxation of exchange control in recent years, some of the Corporates have converted exposure management function into a profit centre without having adequate control system. It is therefore pertinent that all market participants put in place risk management policies and internal control systems before transacting forex and interest rate derivative products. These policies should be approved by the respective Boards of Directors and the levels of delegated authority should be appropriately codified. Banks, corporate managements and indeed statutory auditors should note that in a liberalised environment what is permitted is not necessarily risk free. A risk control team independent of dealing and settlement functions should review the policy, procedure and transactions done on an on-going basis.

6.2 In view of the complexity of derivative instruments and attendant risk, Foreign Exchange Dealers' Association of India (FEDAI) or any other appropriate body should ensure that uniform documentation and market practices are followed by the market participants.

6.3 Commonly accepted international accounting standards have not yet been developed for the derivative transactions. Two widely accepted statements which seek to address these problems are Statement of Recommended Practices issued by British Bankers Association (BBA/SORP) and Exposure Draft 48 (ED 48) of International Accounting Standards Committee. These statements differentiate between use of derivatives for hedging and trading. When a derivative is used for hedging, the accounting should be consistent with the accounting of the underlying. A derivative not satisfying hedge criteria should be marked-to-market. On the basis of these, the Institute of Chartered Accountants of India (ICAI) should develop accounting/ disclosure standards and these should become minimum mandatory standards for all the market participants.

6.4 The Group has also evolved a provisioning methodology, keeping in mind that the exercise requires, in addition to regulatory acceptance, internal management approval, internal and external audit approval and also a tax treatment which is not unduly punitive.

6.5 The accounting practices recommended by the ICAI should be accepted by the tax authorities for the determination of business profits/losses of all market participants.

6.6 It is necessary that proper disclosure of derivative exposures and transactions be made in the financial reports. The disclosure should cover the reasons for and the extent of use of these products and the accounting method employed. All exposures including the underlying should be disclosed separately in the financial statements. Schedule VI of the Companies Act and Schedule III (Form A & B) of the Banking Regulation Act should be amended accordingly. For banks, in addition to the notional principal amounts, the replacement cost and the credit risk weighted amount should also be disclosed. It is important that outstanding exposures are revalued based on whether the exposure is on account of trading or hedging.

6.7 The netting of settlement and the related pre-settlement risks should be legally enforceable. RBI/ FEDAI should set up a study group to examine the issue of netting in all its ramifications.

6.8. The Group has recommended `best practices' to address the key risks - Credit, Exchange, Interest Rate, Basis, Volatility and Operating - faced by dealers and end-users.

6.9 To ensure that banks and others contemplating derivatives dealing activity are not unprepared for the potential capital requirements for market price risks, as and when international norms are formulated, appropriate quantification methodologies for spot position, forward gaps and volatility positions have been prescribed.

7. Miscellaneous

7.1 The RBI may set up a foreign exchange markets committee to advise it on policy issues relating to forex, effecting improvements in the quality of risk management and preparing issue papers on specific market related topics.

7.2 RBI should take the initiative in collecting and publishing on a daily basis, critical data on forex transactions to overcome the problem of lack of data and transparency as regards such transactions.

7.3. Off-shore banking units may be set up in Bombay to increase financial integration between domestic and international markets.

7.4 In veiw of the changing forex market scenario, the role of FEDAI should be reviewed and enlarged.

7.5 A forex clearing house may be set up in Bombay for settlement of inter-bank forex transactions.

Chapter 1

Introduction

The progressive globalisation of the economy has exposed Indian entities to the volatility in international markets. In order to examine the issues relating to products available for hedging forex risk, scope for further development of the market and introduction of new derivative products and other related matters, the Reserve Bank of India (RBI) in November 1994 set up an Expert Group, consisting of the following members :

1. Shri O.P.Sodhani Executive Director Reserve Bank of India	Chairman
2. Shri V. Ananthakrishnan Chief Executive Foreign Exchange Dealers' Association of India	Member
3. Shri S.A. Kamath Executive Director Union Bank of India	Member
4. Smt. L. Gupte Executive Director Industrial Credit & Investment Corpn.of India	Member
5. Shri Pradeep Pain General Manager State Bank of India	Member
6. Shri Pavan Sukhdev Head of Treasury Deutsche Bank	Member
7. Shri Kiran Umrootkar Chief Executive Paterson & Co.	Member
8. Shri A.V.Rajwade Forex Consultant	Member
9. Shri Jamal Mecklai Partner Mecklai & Mecklai	Member

10. Shri R.Sridharan — Member
Officer on Special Duty
(External Equity)
Ministry of Finance
Government of India

11. Shri B.K.Pal — Member
Controller
Exchange Control Department
Reserve Bank of India

12. Shri P.R. Anantharaman — Member
Chief Officer
Department of External
Investments & Operations
Reserve Bank of India

13. Smt. Shyamala Gopinath — Member
Joint Chief Officer
Department of Banking
Operations and Development
Reserve Bank of India

14. Shri D.S.R. Simhudu — Member-Secretary
Additional Controller
Reserve Bank of India

1.2 The terms of reference of the Group were:

i) To review the existing forex markets in India and products available for hedging forex risks.

ii) To consider relaxations that would be needed in exchange control and monetary control to facilitate the development of forex markets.

iii) To examine the scope for further development of forex markets in India, including derivative products.

iv) To recommend the type/nature of products (including derivatives) that are considered appropriate and the measures necessary to impart sufficient liquidity to the markets in these products.

v) To consider permitting 'margin trading' in forex by corporates in India.

vi) To consider the accounting standards and procedures that should be followed for these products by the market participants and the minimum requirement for disclosure in the annual accounts.

vii) To make recommendations regarding the internal control systems for measurement and control of risk for financial institutions offering these products.

viii)To make recommendations for the prudential regulatory framework (including capital adequacy norms, appropriate risk weights etc.) for an orderly development/functioning of the forex markets.

ix) To make any other suggestions/recommendations having a bearing on the above terms of reference.

The Memorandum constituting the Expert Group is given at Annexure I (A).

1.3 The Expert Group in its first meeting decided that the terms of reference could be best addressed by constituting four sub groups as under:

Sub-Group I: To review the existing forex markets in India and products available for hedging forex risk and to recommend relaxations that would be needed for facilitating further development of forex markets.

Sub-Group II: To examine the introduction of new derivative products in India.

Sub-Group III: To consider the feasibility of allowing corporates to undertake `margin trading' and

Sub-Group IV: To suggest the accounting standards as also disclosure requirements to be followed by the market participants and to make recommendations regarding the internal control systems etc. for the orderly development and functioning of the forex markets.

1.4 Based on the reports submitted by the sub-groups, the Expert Group submitted an interim report in March 1995, incorporating those recommendations that could be implemented immediately. These recommendations are included in Chapter 3 and 4 of this report. The Group completed its task in June 1995.

1.5 The Expert Group met ten times. The sub-group meetings were many more in number. After initial deliberations on issues of general concern, the reports submitted by the sub-groups were discussed and debated upon. The Group had the benefit of the views of several bankers, Chartered Accountants etc. who either worked as members of the sub-groups or made presentations to the Expert Group. A list of such persons is furnished in Annexure I(B). The Expert Group would like to thank these persons for their whole-hearted co-operation and support.

1.6 The Secretariat for the Group was provided by the Exchange Control Department (AD&EM Division), Reserve Bank of India. The Group wishes to record its appreciation for the unstinted assistance provided by the Member Secretary and the officials of the AD&EM Division in the conduct of the meetings. The report was drafted by Sarvashri G. Padmanabhan and P.Oommen Joseph of the AD&EM Division under the guidance and supervision of Smt. Usha Thorat (RBI). The Group would like to thank them for their efforts.

Chapter 2

Foreign Exchange Markets in India - An overview

2.1. The early years:

2.1.1. Until the early seventies, given the fixed rate regime, the exchange market was perceived as a mechanism merely to put through merchant transactions. With the collapse of the Bretton Woods agreement and the floatation of the major currencies, the conduct of exchange rate policy posed a great challenge to central banks as currency fluctuations opened up tremendous opportunities for market players to trade in currency volatilities in a borderless market. The market in India, however, remained relatively insulated, as exchange controls inhibited capital movements and the banks were required to undertake only cover operations and maintain a square or near square position at all times.

2.1.2 Slowly a demand began to build up that banks in India be permitted to trade in forex. In response to this demand the RBI, as a first step, permitted banks to undertake intra-day trade in forex in 1978. As a consequence, the stipulation of maintaining square or near square position was to be complied with only as at the close of business each day. The extent of position which could be left uncovered overnight (the open position) as well as the limits upto which dealers could trade during the day was to be decided by the management of banks.

2.1.3 As opportunities to make profits began to emerge, the major banks started quoting two-way prices against the rupee as well as in cross-currencies (i.e. Euro-currencies), and gradually, trading volumes began to increase. This was enabled by a major change in the exchange rate regime in 1975 whereby the rupee was delinked from the pound sterling and under a managed floating arrangement, the external value of the rupee was determined by the RBI in terms of a weighted basket of the currencies of India's major trading partners. Given the RBI's obligation to buy and sell unlimited amounts of the intervention currency i.e. pound sterling, arising from the banks' merchant purchases, its quotes for buying/selling effectively became the fulcrum around which the market moved.

2.1.4 As volumes increased and the appetite for profits was found to lead to the observance of widely different practices (some of which were irregular) dictated largely by the size of the players, their location, expertise of the dealing staff, and availability of communication facilities, it was thought necessary to draw up a comprehensive set of guidelines covering the entire gamut of dealing operations to be observed by banks engaged in forex buisness. Accordingly in 1981 the "Guidelines For Internal Control Over Foreign Exchange Business" was framed for adoption by the banks.

2.1.5 During the eighties, a deterioration in the macro-economic situation set in, ultimately warranting a structural change in the exchange rate regime which in turn had an impact on the forex market. Large and persistent external imbalances were reflected in rising level of internal indebtedness. The graduated depreciation of the rupee could not compensate for the widening inflation differentials between India and the rest of the world and the exchange rate of the rupee was getting increasingly overvalued. The Gulf war of July 1990, given the fragile state of the economy, triggered off an unprecedented crisis of liquidity and confidence.

2.1.6. This unprecedented crisis called for the adoption of exceptional corrective steps. The country simultaneously embarked upon measures of adjustment to stabilise the economy and set in motion structural reforms to generate renewed impulses for stable growth.

2.2 Recent Developments :

2.2.1 As a first step in this direction, the RBI effected a two-step downward adjustment of the rupee in July 1991. Simultaneously, in order to provide a closer alignment between exports and imports the EXIM Scrip Scheme was introduced. The Scheme provided a boost to exports and with the experience gained in the working of the scheme, it was thought prudent to institutionalise the incentive component and convey it through the price mechanism, while simultaneously insulating essential imports from currency fluctuations. Therefore, with effect from 1st March,1992, RBI instituted a system of dual exchange rates under the Liberalised Exchange Rate Management System (LERMS), following the recommendations of the (High Level) Committee on Balance of Payments (Chairman Dr. C. Rangarajan). Under this, 40% of exchange earnings had to be surrendered at a rate determined by the RBI and the RBI was obliged to sell foreign exchange only for import of certain essential commodities such as oil, fertilizer, life saving drugs, etc., besides the government's debt servicing. The balance 60% could be converted at rates determined by the market. The scheme worked satisfactorily preparing the market for its emerging role and the rupee remained fairly stable, with the spread between official and market rates hovering around 17%.

2.2.2 Even though the dual exchange rate system worked well, it however, implied an implicit tax on exporters and remittances. Moreover it distorted the efficient allocation of resources. The LERMS was essentially a transitional mechanism and in March 1993, the two legs of the exchange rate were unified. Christened modified LERMS, it was stipulated that from 2nd March 1993, all forex receipts could be converted at market determined rates of exchange. Over the next eighteen months restrictions on a number of other current account transactions were relaxed and on 20th August 1994 the rupee was made fully convertible for all current account transactions and the country accepted obligations under Article VIII of the IMF's Articles of Agreement.

2.3 The Market Place :

2.3.1 Participants and Products:

There are 84 banks authorised to deal in foreign exchange, referred to in exchange control parlance as Authorised Dealers (ADs) . Of these most of the foreign banks and the bigger Indian banks are active, quoting two-way prices. The banks deal among themselves directly or through forex brokers numbering 40. The market operates from the major centres -Bombay, Delhi, Calcutta, Madras, Bangalore, Kochi and Ahmedabad, with Bombay accounting for the major portion of the transactions. Besides banks, financial institutions such as IDBI, ICICI, IFCI etc. have also been given licence to undertake forex transactions incidental to their main business activities. The market which was following the system of indirect quotes switched over to direct quotes in August 1993.

2.3.2 Reserve Bank of India:

The behaviour of the market has been influenced a great deal by RBI's exchange rate policy which found its expression in the daily price setting exercise. Till March 1992, the RBI purchased USD, Stg. Pound, D.Marks and Yen spot and forward for varying maturities upto 12 months, but only sold Stg. Pound and Dollar on spot basis. On 8 May 1991, it commenced forward sale of Dollar but this was discontinued in February 1992. In the wake of the change in 1993 in exchange rate management, the RBI's obligation to sell forex for any purpose other than debt service payments of the Government of India was removed. It presently buys only US$ spot which in March 1992 replaced Pound Sterling as intervention currency. The RBI which entered the market for buy/sell swaps in April 1991 closed this window in May 1994.

2.3.3 RBI Intervention:

With a view to ensuring that the nominal appreciation in the rupee does not erode export competitiveness, the RBI as a matter of concious policy has been `passively' intervening in the market by buying Dollars at the rate announced by it (and thus virtually became the price setter). This rate has remained unchanged since August 1993. Such `passive intervention' led to substantial purchases of over $ 24 billion in the two years 1993-95 (April -March) resulting in increase in the RBI's foreign currency assets to over $ 20 billion as at end of March 1995.

2.3.4 Foreign Exchange Dealers' Association of India (FEDAI)

FEDAI plays a special role in the forex market as it sets the ground rules for fixation of commissions and other charges and also involves itself in matters of mutual interest of the authorised dealers. Compliance with the guidelines is ensured by the RBI making membership of FEDAI a licensing condition.

2.3.5 Turnover:

The market trades freely in spot and forward exchange contracts, in Dollar/Rupee and cross-currencies. On the basis of quick estimates submitted to the Group, the aggregate daily turnover is in the region of US$ 3 billion. This figure however is without making adjustments for double counting of purchase and sales in inter-bank transactions(purchase of one bank is sale of another). The total turnover has been showing an increasing trend over the years (EXHIBIT-A). The market is a fairly skewed one with around 30% of merchant business emanating from State Bank of India and the foreign banks accounting for 55% of inter-bank business.

2.3.6 The efforts of the Expert Group in critically analysing the category-wise forex transactions in India have not been as fruitful as the Group would have liked owing to lack of data on spot/ forward transactions currency-wise, direct/broker deals etc.

2.4. Recent relaxations in Exchange Control

It was recognised that alongside the far reaching changes introduced in the exchange rate policy, an ongoing review of exchange control regulations was warranted to sustain the process of liberalisation. The review resulted in relaxations that encompassed the following areas:

2.4.1 Forward Contracts:

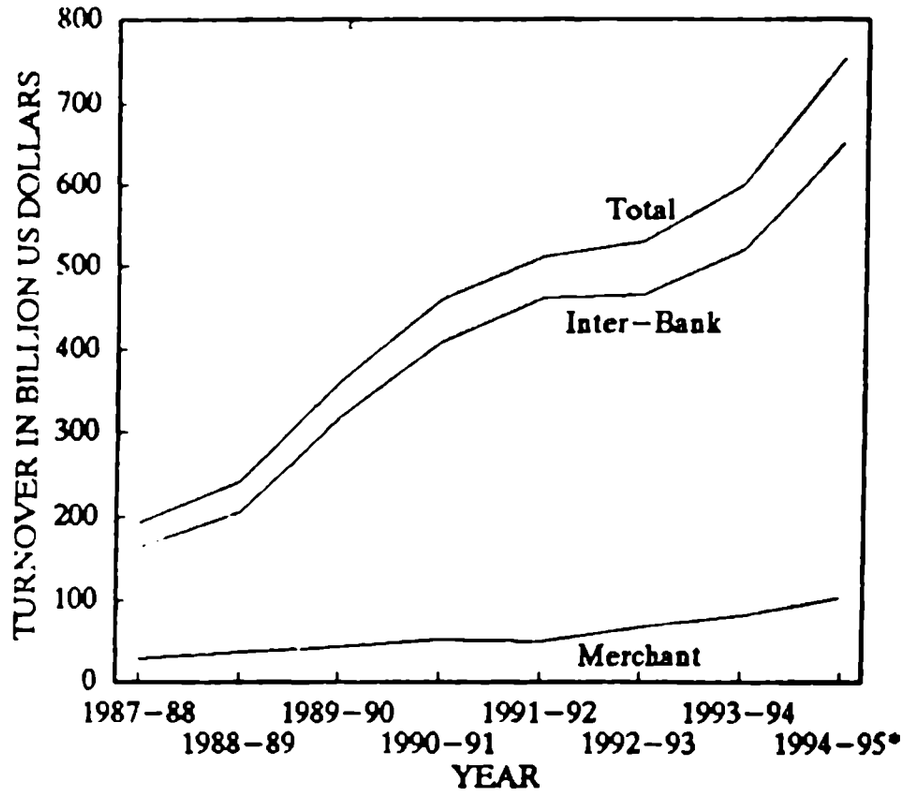
(i) Till February 1992, forward contracts were permitted only against trade related exposures and these contracts could not be cancelled except where the underlying transactions failed to materialise. In March 1992, in order to provide operational freedom to corporates, unrestricted booking and cancellation of forward contracts for all genuine exposures whether trade related or not, was permitted.

(ii) In February 1992, customers with cross currency exposures were permitted to split their cover through the dollar. Each component could be covered separately. In a further refinement, in December 1994, RBI permitted customers to take cover in a currency of their choice irrespective of the currency of receivable/payable.

(iii) The Indian market is illiquid beyond six months and forward contracts are ordinarily available only for periods upto six months though there are no restrictions on Authorised Dealers offering cover for longer periods. In cases where customers desire cover for longer period without periodical roll-overs and banks offer to provide cover using a structured rate, the RBI indicated in December 1992, its willingness to approve such proposals on a case-to-case basis.

(iv) In October 1992, RBI permitted resident corporates to hedge the remittable dividends on direct foreign investment after finalisation of the accounts.

EXHIBIT – A



* Provisional

(v) In December 1992, RBI decided to permit banks to provide cover for capital in respect of direct foreign investment in core sectors on a case to case basis.

2.4.2 Options :

In January 1994, customers were permitted access to another hedging product viz. options. Ideally, rupee based currency options would have been extremely useful. However,in the absence of a rupee yield curve, pricing of such options would have been rendered arbitrary. Hence banks were initially allowed to offer only cross currency options on a fully covered basis. The option could be cancelled once. The customer would not be permitted to rebook options against the same exposure. It could however hedge the exposure using the forward market.

2.4.3 Export Credit:

In January 1992,a scheme of`Post-shipment Export Credit denominated in foreign currency'(PSCFC) was introduced. In October 1993, banks were permitted to rediscount export bills abroad at rates linked to international rates. This was followed in November 1993 by another scheme, viz., "Pre-shipment Credit in Foreign Currency" (PCFC) . These schemes enabled the Indian corporates to access funds at internationally competitive rates.

2.4.4 Incentives for exchange earners:

Earners of forex were allowed in March 1992 to retain 15% of their earnings in any foreign currency in India to be used for certain approved purposes. This was subsequently raised to 25% in March 1994. Specified categories were entitled to a higher percentage.

2.4.5 Roll-over of forward contracts at historic rates:

In a bid to make balance sheets of market participants more transparent, the practice of rolling over forex forward contracts at historic rates was discontinued with effect from 16 January 1995.

2.4.6 Foreign Currency Non-Resident Account Schemes:

A major step taken by the RBI after floating the rupee for trade transactions, was the progressive shedding of its burden to provide exchange risk cover for FCNR deposits that were introduced in the early seventies. As a first step towards this, a new deposit scheme known as `Foreign Currency (Non-Resident) Accounts (Banks)' -[FCNR(B)] was introduced in May 1993, under which the banks were required to manage the exchange risk themselves. They were allowed as an incentive

to lend resources raised under this scheme to residents for their genuine forex needs, as well as to place, if they chose, these funds in the overseas markets. Simultaneously, maturities under the FCNRA Scheme under which exchange guarantee was provided by the RBI were progressively abolished culminating in the termination of the scheme in August 1994.

2.5 Constraints on the Market:

2.5.1 The market which is still in the early stages of development suffers from several deficiencies. Unlike developed markets where transactions are financially driven, our market is dominated by merchant flows. There is lack of depth and liquidity in the spot as well as forward markets. The forward rates reflect demand and supply rather than interest rate differentials due to absence of integration between the money and forex markets and restrictions placed on borrowing/lending in the international market as well as on running overdrafts in the nostro accounts for periods beyond five days. On account of ceilings on open position and gaps, there is a virtual absence of market making and position trading. The cross-currency market has not developed on account of prohibition on initiating transactions in the overseas markets. Besides forward contracts, there is no free access to other hedging products like swaps, forward rate agreements etc. which presently require Government of India/Reserve Bank of India permission on a case-to-case basis. Options have not picked up on account of high premiums having to be paid upfront, restrictions on cancellation and re-booking and most importantly absence of rupee based products. Measures are therefore called for to strengthen the institutional framework of the forex market by making it more competitive, improving market making, expanding geographical coverage and strengthening financial linkages.

CHAPTER - 3

Suggestions for relaxing certain regulations

.....

3.1 The opening up of the Indian economy since mid 1991 and the consequent exposure of Indian corporates to volatility in exchange rates and interest rates have created a demand for suitable hedging products which would enable the corporates to plan their operations in an efficient manner. With increasing inter-action between resident corporates and foreign markets and the easier access to information and state-of-the-art technology, there has arisen a compelling need for the banks in India to meet the challenge that globalisation poses. This would require certain relaxations in the existing regulations which, while bringing about qualitative improvement in the market mechanism, would instil dynamism in its functioning. These are discussed below :

3.2 Forward Exchange Cover :

At present exporters/importers are allowed to hedge their genuine forex exposures on production of documentary evidence, such as telex/FAX messages, copies of the order or Letters of Credit, etc. The merchant community has been experiencing administrative difficulties in producing actual documentary evidence and the banks were, at times, unable to critically verify such evidence at the time of booking the contract. Therefore, corporates may be permitted to hedge their genuine exposures on the basis of declaration signed by their authorised signatories instead of insisting on production of documents such as invoices/confirmed orders/letters of credit etc. The declarations from the corporates should also include a certificate to the effect that forward contracts have not been booked for the same exposure with any other authorised dealer. It is for the management of the company to ensure that the exposures hedged are need based and transaction related. Boards of the companies should fix limits for the authorised officers to book, cancel and rebook contracts to manage exchange risks and a copy of the Board's policy in this regard should be made available to the bank. This relaxation would enable customers to hedge their forex exposures more effectively. Banks should be able to fix limits for exposures for individual clients taking into account the Board's policy in this regard, the past forex turnover and the extant limits ir place for the respective clients.

3.3 Open Exchange Position :

Overnight open forex position against Indian rupees has been fixed by RBI at Rs. 15 crores, either overbought or oversold, uniformly for all Authorised Dealers with effect from May 1994. The trading volumes, size of merchant turnover, the owned funds position of banks, and other factors vary. Therefore, the current stipulation fixing a limit of Rs.15 crores for overnight overbought/oversold position may be withdrawn. Instead, open exposure position limits both overnight and intra-day may be fixed by the top management of the banks taking into account the guidelines given in Annexure 3(A) which inter-alia specify that capital to the extent of 5% of open exposure limit may be separately earmarked by banks. The open exposure limits fixed by banks may be submitted to RBI, who after scrutiny may either

accept or modify the limits on the basis of various factors such as size of the bank,number of position maintaining branches, size of the pipeline transactions, quality of dealers, merchant turnover, capital adequacy, infrastructure/communication facilities, etc.

3.4 Aggregate Gap Limit (AGL):

Currently the AGL for all Authorised Dealers is fixed at 6 times the owned funds or US$ 100 million whichever is lower. The AGL in its present form represents only the sum of the monthly mismatches and does not adequately take into account the period of the exposure and attendant interest rate risk. It is recommended that the authorised dealers' interest rate exposure should be reviewed with a view to extending the limits also to rupee transactions as a part of general banking supervision. This matter may therefore be further reviewed by RBI. For the present, it is recommended that the gap discipline may apply to foreign currency only and the top management of the banks may be permitted to fix the AGL & IGL in relation to their forex operations, risk taking capacity, etc. and advise the same to RBI, who may either accept or modify them depending on the latter's perception of the concerned bank's capabilities/ requirements.

3.5 Initiating cross currency positions abroad:

Presently, authorised dealers are not allowed to initiate a cross currency trading position in the overseas market and may go overseas only to square a position taken in the local forex market. It is recommended that authorised dealers who have the dealing skills, requisite infrastructure, risk control mechanism and who satisfy capital adequacy norms be permitted by RBI to initiate positions abroad within of course, the limits fixed by management and approved by RBI. Initially, the authorised dealers may be required to report periodically the volumes traded and profit/ loss figures to enable RBI to monitor cross currency dealings.

3.6 Nostro Cash Management :

Authorised Dealers are not presently allowed to overdraw on their Nostro accounts beyond a period of 5 days and surpluses in the account are allowed to be invested only on an over-night basis. Also, authorised dealers are permitted to invest funds arising out of EEFC/RFC etc. in specified investments.

With a view to hastening the integration of domestic and international markets and the alignment of forward margins in the local inter-bank forex market with interest rate differentials, authorised dealers may be permitted to lend/invest or borrow short term funds upto six months at market rates in the overseas market upto specified limits.

3.7 Increasing the number of participants :

Financial institutions like IDBI, ICICI, IFCI, SCICI and EXIM Bank who have restricted foreign exchange licence may be allowed to trade in the forex market so that these institutions who have large,

forex commitments are able to cover their exposures more efficiently. In other words, their licences be brought on par with those of commercial banks.

3.8 Intervention by Reserve Bank of India :

RBI has fixed buying/selling rates of rupee against USD at INR 31.37 and INR 31.53 respectively and had been continuously present in the market on the buying side upto February 1995. Although this policy has helped to keep the dollar-rupee level stable, it is market forces which should determine the value of home currency against the foreign currency. The intervention by the Central Banking Authority should be selective rather than continuous. It is therefore recommended that there should be no statutory obligation as it exists today on the RBI to fix its buying and selling rates on daily basis and instead it should be enabled to intervene only when required in keeping with the objectives of its policy. This approach will allow fluctuations on both sides depending on daily inflows/outflows and both importers/exporters will get opportunities to book their exposures, when rates are favourable. This will also lead to promotion of hedging instruments/products in the market.

As regards the forward forex differentials, one of the views expressed was that the RBI can influence the forward rates in the inter-bank market through forex exchange swaps. By quoting unattractive swap prices, they may discourage the growth in money supply and by quoting attractive prices they may encourage banks to undertake swaps to increase the money supply, thereby also helping the interest rates to get reflected in forward rates.

3.9 Rates on FCNR Deposits:

Currently, the interest rates and maturity profiles of FCNR Deposits are decided by the RBI. Authorised Dealers may be permitted to determine the interest rates and the maturity period of the FCNR(B) Deposits, subject to a cap defined with reference to the rates prevailing in the international market. Authorised Dealers would not normally accept FCNR Deposits which would overshoot the cost of their domestic deposits, except when they experience tight liquidity position.

3.10 EEFC Limits:

Exporters are presently allowed to retain upto 25% of their export receivables in foreign currency accounts in India (50% in the case of EOUs). It is recommended that exporters be allowed to retain their entire export earnings with an authorised dealer in India. This is based on the rationale that exporters will always undertake cost-benefit analysis based on their own perception of currency trends, interest rates etc. "Leads" and "Lags" is a common method of covering forex risk and, therefore, exporters in India should have the option to retain export proceeds subject to liquidation of outstanding advances against export bills.

3.11 Forward Cover for NRIs and FIIs:

Currently, forward cover facilities are not available for NRIs and FIIs. Although offering forward cover facilities to FIIs may expand the forex market, in the current scenario, it may accentuate the demand for USD in the forward market and result in the overshooting of premia. This facility is not provided in many countries as FIIs are expected to assume this risk. This relaxation can await introduction of convertibility of rupee on Capital Account. However, a view was also expressed by some members that this measure could push up forward premia thereby benefitting the exporters.

NRI's maintain two types of accounts in India, FCNR Accounts and Rupee accounts. NRIs carry exchange risk on their Rupee balances with banks in India and offering them facility of forward cover will again accentuate demand for USD in the forward market. As most of the balances in rupee accounts represent savings of non-resident Indians, unlikely to be repatriated, it is recommended that this proposal may also await the introduction of Capital Account convertibility.

3.12 Development of Rupee term market:

The absence of a deep and liquid domestic term money market acts as a major impediment to the orderly development of a proper forex forward and derivatives market in India. The inclusion of inter-bank borrowings in the computation of Demand and Time liabilities for the purpose of statutory pre-emption is the key constraint to the development of such a market. Therefore, there is an imperative need to exempt inter-bank borrowings from statutory pre-emption. A detailed paper prepared in this regard is given at Annexure III(B).

3.13 Quoting two-way price for rupee in the international markets:

Presently, authorised dealers are only allowed to sell spot rupees to overseas banks, but are not allowed to buy rupees freely in the international market.

A view was expressed that two-way prices for rupee be allowed to be quoted by banks in India in overseas markets. It was felt that in view of the current regulations on maintaining excessive balances in Vostro Accounts and prohibition on Overdrafts in Vostro Accounts, rupee is unlikely to be traded extensively in the international markets.

Two-way prices for the rupee in the international markets is a desirable long term objective. Perhaps the time is not opportune for such a move.

Chapter 4

Development of derivative products

4.1 Background

4.1.1 A derivative, simply stated, is a product derived from an underlying correlation of values or indices. It first began to be used as a hedging instrument in modern times in the commodities market. In fact, historians have found antecedents for the latter day option contracts in ancient Greek writings, and trading in commodity forwards and futures commenced fairly actively at the turn of the century. As foreign exchange rates were fixed by central banks and therefore were not subject to fluctuations, these instruments were not used in financial dealings. However, as if by premonition, the use of this genre of products in the financial markets was heralded by the launch of the exchange traded currency futures by the Chicago Mercantile Exchange in 1972 just before the collapse of Bretton Woods. Interest rate futures followed quickly and since the early 80's options, swaps and other related instruments have been fashioned and refined to suit every need.

4.1.2 Although the menu of derivative products now available looks bewilderingly long, all of these are engineered with two basic building blocks viz. forwards and options.

4.1.3 In India, for long, the only hedging instrument available was the forward exchange contract. As a first step towards development of other derivative products, the Reserve Bank organised a workshop in 1993 to examine the feasibility of introducing options. The consensus reached was that despite its immense utility, rupee-based options cannot be introduced owing to the absence of both a rupee yield-curve and log - normality in the distribution of rupee/dollar exchange rates rendering it difficult to price such options according to accepted models. Hence, to make a beginning, banks were permitted to write only cross-currency options on a fully covered basis. Cross-curreny options were thus introduced in the market in January, 1994. However, such options are yet to become popular. This is in part due to the restrictions imposed on cancellation and rebooking. The high cost involved by way of payment of premium upfront is another reason why options have not really taken off, in the absence of regulation permitting cost-effective option strategies (e. g.Range Forwards).

4.1.4 This chapter seeks to identify steps that could be taken to popularise the use of options and to suggest measures to be initiated to widen the scope and reach of derivatives in India. In this connection, it will be necessary to progress on a two phase plan to address respectively a limited set of immediate concerns for activating the existing market and a wider set of future concerns for the healthy and orderly development of a market for forex and, indeed, rupee derivatives.

4.1.5 The range and complexity of derivative instruments warrants considerable developmental effort by the market participants including investments in operating systems, risk management infrastructure and in hiring and training of front and back-office personnel. The lead time for building up of the required infrastructure could vary from a few months to several years for different banks. The formulation and widespread implementation of risk management is also an extensive task. Hence initially, efforts should be directed at simplifying and popularising, within the existing regulations and procedure, the usage of cross-currency derivatives by the banks and corporates.

4.1.6 It has to be recognised that the development of a vibrant derivatives market in India would ultimately rest on the introduction of rupee-based derivatives. A well developed and liquid forward dollar - rupee market is sine qua non for orderly development of a rupee derivatives market. Towards this end, the single most important requirement is the creation of a deep and liquid inter-bank term money market. The existing impediments in achieving this have already been discussed in Chapter 3.

4.2 <u>Short term measures (Phase-I)</u>

4.2.1 While corporates in India have free access to cross-currency options, other derivative products for liability management are at present permitted under an unwieldy procedure of general and specific approval from the Ministry of Finance with specific RBI approval required for remittances under such contracts. Documentation procedures are not uniform and often depart from internationally accepted practices. Therefore several steps are immediately called for to streamline and activate the derivatives market.

4.2.2 As per the existing regulations, customers are not permitted to freely cancel and rebook options. Therefore, for the customers, options do not offer the same flexibility as a forward contract. There appears no reason why similar flexibility should not be extended to options also which would enable the customers to manage their risk more dynamically. This facility should be available in respect of any hedge using other derivative products also.

4.2.3 The premia charged by the banks who sell options are high. This acts as a psychological barrier as the customers are unwilling to pay this amount up-front for uncertain future gains. It is possible that lower cost option-based hedging products may find better acceptance. If customers are allowed to sell options to the same bank at the same time for the same exposure that they are buying options, it would considerably reduce the costs and would enable the latter to structure different products. The customer would basically forgo part of his upside profits in exchange for lower or zero costs. "Range forwards" and "Ratio or Participative Forwards" are two such products that can be immediately thought of. These are explained with greater details at Annexure 4(A). Strategic hedging of position by customers by simultaneously booking forward contracts and buying out-of-the money options should also be allowed.

4.2.4 In this connection, it may be worth noting that there still exists considerable confusion among market participants as to whether option premia are subject to withholding tax or not. Withholding tax exemption on other derivatives is granted on a case-to-case basis even when the underlying loans enjoy such an exemption. There is also reportedly a move on the part of the Government to withdraw these exemptions altogether. Unless derivatives are exempted from withholding tax and the laws made adequately unambiguous, this will act as a major stumbling block to the development of the derivatives market. The matter may be taken up suitably with the Government of India.

4.2.5 The banks are presently not permitted to buy and cancel options or other derivatives for their own asset-liability management. It is recommended that banks in India be permitted to use options, Forward Rate Agreements (FRA's), swaps etc. for their own asset-liability management. This is considered all the more necessary for example, in the context of the interest rate risk on FCNR(B) deposits. Before commencing such activity, banks should be required to apply to RBI for general permission indicating the controls proposed to be put in place. A monthly report of such deals exceeding US$ 1 Million indicating currency, strike price/contract rate, expiration, maturity and amount should be submitted to RBI.

4.2.6 As per the existing regulations, the only contingent exposure which can be hedged using options is tender bids. It is recommended that other genuine contingent exposures be also permitted to be hedged with options, specifically foreign currency loan exposures between the time of signing of the loan and drawdown of funds.

4.2.7 In respect of approved transactions, presently the interest rates/currency swap deals entered into by corporates are parked in overseas books of banks. This gives advantage to a foreign bank or Indian bank having overseas branches. In order to ensure a level playing field, it is suggested that banks in India be allowed to offer currency and/or interest rate swaps to their corporate clients, on a fully hedged basis, putting such swaps on par with cross-currency options.

4.2.8 Banks should be permitted to offer derivative products like interest rate swaps, caps, collar, FRAs, etc. without having to get prior approval from Ministry of Finance/RBI. All such deals should, if necessary, require only post-facto reporting.

4.2.9 Corporates having EFFC accounts should be permitted to use amounts therein as margin for executing trades that will enable them access to hedging products overseas which are not available in the Indian markets. The leverage which is permissible in such transactions would enable the exporter to hedge a considerable portion of his underlying exposure against smaller outlay of funds. The risks to be hedged would relate to forex, interest rate and commodity prices. The Group however, does not favour permitting corporates to do `margin trading' purely for speculative purposes.

4.3 Long term measures (Phase II):

4.3.1 The focus of reforms in the long run should be the introduction of rupee-based derivatives in India. Subject to the recommendations in Chapter 3, particularly on reforms in the money markets and investment/borrowing of short term funds overseas, being found acceptable, the Group suggests that the RBI invite detailed proposals from banks for offering rupee-based derivatives.

4.3.2 As the market develops, banks in India should be free to offer all types of products to corporates to enable them to hedge their exposures more dynamically, without the requirement of these being offered only on a fully covered basis. No bank or financial institution should however be allowed to deal in these products without getting the prior approval of the RBI. The application should be supported by the Board of Directors' approval of the plan/strategy drawn up by the bank to deal in derivatives. The RBI should consider the capital of the financial institution, the management structure, the operating systems, the risk management process and the experience of the dealers before granting permission. Similar parameters need to be also examined by Corporate Boards and auditors. This should however be preceded by RBI formulating comprehensive risk management guidelines replacing the existing Internal Control Guidelines. The existing regulatory framework prescribes a uniform approach to risk management applicable to spot as well as forward forex markets. A refocussing of the regulations on risks rather than products would be advantageous in the course of the progress towards interest rate de-regulation and capital account convertibility. This approach would minimise the need for repeated amendments to the Exchange Control Manual and risk management guidelines for each new derivative product and allow the orderly and controlled development of the market. The new guidelines applicable to all the market participants should reflect the best practice and should be mandatory.

4.3.3 A positive consequence of the resurgence of regulatory concern on derivatives in the face of recent episodes of large losses on derivatives trading was the commissioning of several studies on managing derivatives risks which provide useful precedence for developing risk management guidelines. In particular, the Group has found appropriate and recommends adoption in its entirety for implementation in due course, the statement of the risk management process (section III of Basle Committee's (July 1994) Risk Management Guidelines for Derivatives), the requirements of Board and Management oversight of this process (section II, ibid), and the recommended scope of internal controls and audits (section IV, ibid). These sections of the Basle Committee's Guidelines are appended as Annexure 4(B).

4.3.4 The best practice for managing key risks faced by the market participants are detailed in Chapter 5. These risks are briefly described in Annexure 4(C).

4.3.5 It should be noted that the market risks can be magnified by illiquidity or shallowness in the market for the underlying or the derivative instrument. This is often referred to as "Market Illiquitity Risk". Similarly, market risks can be experienced in the extreme during market "shocks" or disruptions, which is sometimes referred to as "Event Risk ".

4.3.6 Some risks (particularly systemic risk and legal risk) are either too wide-ranging or too fundamental to be addressed adequately by any one market participant. These are best addressed through appropriate changes in regulation and adoption of appropriate market practices by derivatives dealers collectively, either through an association of professionals [such as International Swap Dealers' Association (ISDA)] or through a self-regulatory body (such as FEDAI)

4.3.7 The key concern is about legal risks, especially, (i) enforceability of derivatives contracts within and across jurisdictions, and (ii) the capacity of transacting counterparties to enter into derivatives contracts. These risks are to be addressed immediately by FEDAI or by a local chapter of ISDA. It is recommended that a process of legal due diligence be performed on standard ISDA documentation, and that subject to a positive result, the same be adopted for documenting derivatives written with dealers and end-users in India.

4.3.8 Risks of major disruptions to financial markets ("event risk") and risks of cascading financial market problems due to market disruptions or financial difficulties of some major market participants ("systemic risks") are also of concern to regulators and derivatives dealers. The key objective of future regulation should be to see that such risks are mitigated by the implementation of a robust and appropriate regulatory and risk management framework which ensures that derivatives dealers are adequately prepared for, and end-users are adequately conversant with, the risks respectively in trading and using forex and interest rate derivatives.

Chapter 5

Accounting standards, disclosure requirements and best practices in risk management

5.1 Two of the problems which need to be addressed to facilitate the orderly development of the forex market in India are: (i) the absence of internationally accepted accounting standards and (ii) the absence of adequate risk management practices to be followed by all market participants to handle new products on a "best efforts" basis.

5.2 This chapter addresses the following specific issues related to the development of the forex market in India.

(a) Accounting standards and procedures, including disclosure requirements, for all market participants;

(b) Internal controls and risk management requirements; and

(c) Issues related to the regulatory framework, such as capital adequacy, risk weights, etc.

5.3 Generic products that have been examined can be split into two categories:

(i) foreign exchange products

(ii) interest rate products

Foreign exchange products are those that deal mainly with transactions involving the exchange of currencies e.g. a USD/DEM forward cover or a USD/INR put option. Interest rate products are those that deal mainly with interest rate movements.

5.4 Accounting Standards

5.4.1 It is critical that internationally accepted and understood accounting standards and disclosure norms be established for proper development of forex derivatives business in India for all market participants. It should be noted that the discussion is very relevant to forward contracts as well - after all, forwards are the simplest type of derivative. It is further emphasised that there have been a growing number of cases across the world where inadequate accounting practices and disclosure norms have resulted in the concealment of large forex and interest rate losses, both to financial institutions and corporates.

5.4.2 In this context, the Group notes that with the relaxation of exchange control in recent years, many coporates have gone in for

active cancellation and rebooking of forward contracts. Some may have also converted the exposure management function into a profit centre. The Group feels that some of the corporates may not have adequate and well laid down policies, procedures and internal control systems, and would like to alert corporate managements as indeed their counterparty banks that this can be dangerous as too many companies the world over have found out. The Group cannot overemphasise the need for banks, corporate managements and statutory auditors to note that, in the liberalised environment, what is permitted need not necessarily be risk-free, and that if the scope of transactions is to extend beyond hedging to trading, great care needs to be taken to ensure that adequate control systems are in place.

5.4.3 Since the accounting treatment of a derivative transaction should depend on whether it is a trading or a hedge transaction, the difference between the two is worth noting. The generally accepted pre-requisites of a hedge transaction are:

- the exposure to be hedged creates risk and the hedge reduces that risk.

- the derivative is designated as a hedge at the outset.

- movement in the price of the hedged item and the hedge are strongly, and positively, correlated.

If all these criteria are not met, the derivative contracted would need to be treated as a trading position.

5.4.4 There are two groups of market participants,viz.,

(i) end - users

(ii) dealers

End-users are those who enter into derivatives transactions to hedge or to take positions in the normal course of their business. They would include banks, financial institutions, non-banking finance companies, corporates and other organisations like embassies, aid-bodies, etc. Dealers could be market makers, arbitrageurs or position takers. Such dealers would normally provide over-the-counter products to end-users with the expectation of earning transaction fees, bid-offer spreads and income from their trading activity. Dealers in international markets would include banks, financial institutions and securities firms. In respect of both the users and dealers, the types of risks relating to derivatives are similar, however the accounting aspects would differ depending upon the objectives with which such derivatives are used or dealt with, viz., whether for hedging or trading. Annexure 5(A) describes the broad accounting methods and Annexure 5(B) describes the three most common revaluation methods.

5.4.5 The Institute of Chartered Accountants of India (ICAI) has issued a revised Accounting Standard (AS) 11 (Annexure 5C) on

"Accounting for the Effects of Changes in forex Rates" which became mandatory for accounting periods commencing on or after April 1,1995. The International Accounting Standards Committee (IASC) has issued International Accounting Standard 21(IAS 21) on "The Effects of Changes in Foreign Exchange Rates". It was initially approved in 1983 and was revised in 1993. These standards are primarily concerned with accounting for transactions in foreign currencies. They do not cover accounting and disclosure requirements for trading portfolios, long term hedges and derivatives.

5.4.6 Commonly accepted international standards for the accounting and disclosure of forex and interest rate derivatives are yet to be developed. Accounting practices have not been codified to cover the constant evolution of these markets. Two widely accepted statements which seek to address this problem are the Statement of Recommended Practice (SORP) issued by the British Bankers' Association (BBA) (formally entitled "Off Balance Sheet Instruments and Other Commitments and Contingent Liabilities" or "BBA SORP") and the Exposure Draft 48 (ED 48) of the IASC on "Financial Instruments". Issues regarding the appropriate accounting method and the treatment of hedging transactions and portfolios still remain unsettled. Hence, it may be very ambitious to attempt to define comprehensive accounting standards and policies for specific products in India. Instead an attempt is made to develop broad accounting guidelines to address these concerns at least in the initial stages. Annexure 5(D) contains broad guidelines for accounting for derivatives. Annexure 5(E) outlines generally accepted accounting practice based on BBA SORP. The ICAI should, on the basis of these guidelines and practices, develop an AS to cover off-balance sheet products including derivatives. The relevant regulatory authorities should ensure that these become the minimum mandatory standards applicable to all derivatives market participants as soon as possible. Since ICAI is likely to take some time to develop the AS, as an interim measure, it should issue a Guidance Note or a SORP. In case an organisation using these products does not adhere to this Note or Statement, the auditor should, in the audit report, highlight the departure from the Guidance Note.

5.4.7 Market participants should be required to follow the mark-to-market valuation method for trading port-folios, with the resultant capital gain/loss being taken into current period profit and loss. In the case of hedge port-folios, the same accounting treatment should be followed as is used for the underlying exposure.

Provisioning Norms

5.4.8 Medium-term derivatives books are usually valued at "mid-market" rates based on prevailing exchange rates and interest rates in respective currencies. This results in all spreads (bid-offer spreads, credit spreads, etc.) built into the quoted price for the deal being booked as profit in the current valuation period. Contracts which have thus been marked to market, or on which up-front fee income has been collected, nevertheless require income in future years until final maturity,to service the risk-weighted assets that are generated, and to cover the credit risks and processing and settlement costs incurred over their residual maturity. The BBA SORP on this subject is an example of recommended accounting practice to address the risk of

effective profit/loss flows between accounting periods. The Group recommends equivalent accounting requirements for derivatives dealers in India.

5.4.9 The setting up of a reserve or provision for future capital servicing, credit and processing costs is an exercise which requires, in addition to regulatory acceptance, internal management approval, internal and external audit approval and finally, a tax treatment which is not unduly punitive of a prudent and desirable management discipline. Annexure 5(F) details the methodology for construction of a provision of this kind, and the Group recommends that the Central Board of Direct Taxes (CBDT) be approached to give a ruling on the tax deductibility thereof.

5.4.10 Alternatively, recommended accounting practice should incorporate the valuation of medium-term derivatives books on a bid-offer spread which incorporates appropriate margins for future credit risk, capital costs and processing costs. If this approach is adopted, adequate care must be taken to ensure that the accounting policy has Board approval, internal and external audit approval and that it does not result in adverse comment from tax authorities.

5.4.11 Appropriation should be made for future credit risks and capital costs in the foreign exchange, interest rate and derivative books of market participants. While this may contradict normal accounting principles, it does take into account the fact that some portion of the credit spread relates to credit risks and the cost of servicing capital in the future. The BBA "SORP" recommends this practice.

Disclosure Requirements

5.4.12 It is necessary that proper disclosures of interest rate and foreign exchange rate risks be made in the financial reports. Market participants should also disclose in their financial statements the objectives and key elements of their policy towards financial derivatives, including a clear statement of the risk management of derivatives and the accounting policies being followed. It is important that outstanding exposures as at the end of the period be revalued based on whether the exposure is a trading position or a hedge. It should be left to the auditor to comment on whether the revaluation method is satisfactory given the nature of the transaction.

5.4.13 It is also necessary that Schedule VI of the Companies Act and Schedule III (Forms A & B) of the Banking Regulations Act be amended making it mandatory to disclose in the financial statements, exposures to foreign exchange and interest rate movements in respect of the balance sheet as also off-balance sheet items including derivatives. For banks, in addition to the notional principal amounts, the replacement cost and the risk weighted amount should also be

disclosed in the financial statements as shown below:

	Interest Rate Related		Exchange Rate Related	
	Current Year	Previous Year	Current Year	Previous Year
Notional Principal amounts				
Gross replacement cost				
Risk-weighted amount				

For the present, corporates should be required to disclose at least the notional principal amounts.

5.4.14 Notional principal amounts represent the total of outstanding transactions. Gross replacement cost measures credit risk and is the sum of positive replacement values (i.e. where the deal has a positive value to the financial institution and where it would incur a cost if the contracts were to be replaced). Risk-weighted amounts should be calculated according to the rules specified by the RBI and after taking into consideration the gross replacement cost, the potential future exposure and the nature of the counterparty.

5.5 Taxation

5.5.1 Due to the constant development of new products, there are many tax-related issues which are currently not addressed and it is recommended that these issues be tackled at the earliest to facilitate the growth of this business and to avoid any major problems in the future. Specifically these cases relate to:

a) withholding taxes,

b) premium and margin payments,

c) foreign exchange and interest rate losses and

d) speculative losses.

5.5.2 The accounting practices recommended by the ICAI should be accepted by the tax authorities for the determination of business profits/losses for all market participants. Eventhough the present legal position under Section 145 of the Income-tax Act requires business profits to be computed in accordance with the method of accounting regularly employed by the tax payer, the Group is concerned that 'grey' areas in the tax legislation may inhibit the growth of the off-balance sheet business. It is therefore recommended that the matter may be taken up with the Government.

5.6 Risk Management

While RBI should be the regulatory authority for the forex and derivatives activities of banks and financial institutions, the primary responsibility will necessarily be with the Board of Directors of all market participants.

5.7 Best practice for dealers

The Group recommends the following "best practice" to address the key risks faced by dealers:

5.7.1. Credit Risk

Best practice in developed markets is to :-

(i) set limits on booking business based on expected credit exposure, quantified using either historic price data or market modelling methods, with appropriate criteria on levels of confidence,

(ii) "mark-to-market" all outstanding forex and derivative contracts, to measure aggregate current or existing counterparty credit exposure, and use appropriate exposure factors for potential or future exposure.

(iii) strive to mitigate counterparty default risk by setting up payment netting and, for professional counterparties, economic exposure netting arrangements.

5.7.2 Spot risk/Exchange risk

The managements following "best practice" should consider their capitalization, or prior year forex profits, or their budgeted forex earnings, and prescribe limits such that only a fraction thereof is set at risk from overnight exchange rate movements. The same could be applied for fortnightly movements if the Basle Committee (April 1993) approach to risk quantification is followed. Therefore it is necessary to set limits by using concepts like earnings at risk [Annexure 5(G)].

5.7.3 Gap risk/Interest rate risk

Measurement or management of forex Gap risks through the existing "AGL"/"IGL" approach does not recognize relative price volatility across maturities, historic volatility in USD/INR forwards, historic volatility in cross-currency interest rate differentials, quality of risk management systems, foreign exchange earning capacity, and the extent of capital backing for losses. Therefore, it is recommended that :

(i) "Earnings at Risk" limits are implemented by bank managements, based on (a) 95% confidence levels on historic price data and (b) appropriate loss bearing capacity expressed as a percentage of forex earnings or of Capital.

(ii) Standard risk factors for forex gaps in various maturities(separately for USD and for other currencies) to be used [Annexure 5(H)] by banks not already possessing risk management systems based on (i) above, and standard potential loss limits to be prescribed for these banks expressed as a percentage of prior year forex earnings or of capital.

5.7.4 Basis risks

Derivatives dealers running multi-product books may use distinct forex and interest rate derivative products (as well as physicals) as hedges against each other so that no spot/exchange risk or gap/interest rate risk remains, but there is nevertheless residual risk due to divergence in prices of these `hedged' instruments. "Best practice" is to set exposure limits based on historic overnight movements in the respective "basis" or "spread". However, if such correlation statistics are not available, or if such risks are not material, it is usually acceptable for management to set absolute volume limits on the principal amounts and maturities upto which one product may be used as a "hedge" for another.

5.7.5 Volatility risk

Most professional market participants set exposure limits for their currency options books based on, for example, a 1 % adverse change in implied volatility, together with one to two standard deviations in spot rate change. This sensitivity measure covers all components of volatility risks, including the so-called "Vega" and "Gama" risks. The worst combination of results from such volatility changes and spot rate changes are usually limited, on this basis, to a dollar amount specified by management [Annexure 5(I)]. It should be noted that spot and forward physical hedges in the options portfolio are included for such sensitivity analysis and risk measurement. Sensitivity to interest rate movements is accounted for separately, as delta-equivalent forward forex gaps are to be included in the risk management of forex gaps.

5.7.6 Operating risks

Managements must ensure that their derivatives activities are undertaken by a sufficient number of skilled and experienced professionals. These professionals include specialists who transact and manage the risks involved, as well as those in "back-office" (processing and delivery) and "mid-office" (risk reporting, controlling, auditing) functions. Systems for data capture, processing, settlement and management reporting must be proven, robust, and adequately supported and serviced. Risk measurement and management reports must also be generated by these systems. Whilst the front office may generate their own risk management reports independently for the sake of timeliness and effectiveness, the same must be checked against system generated output.

5.7.7 Transaction Appropriateness

Derivatives dealers are advised to evaluate the purpose of derivatives transactions offered to end-users,and to ensure that these are appropriate in the context of the business objectives and risk management policy of the customer. Annexure 5(J) describes how derivatives dealers may assess transaction appropriateness and contains the Group's recommendations for this purpose.

5.8 Best Practice for end-users.

5.8.1 Eventhough the end-user does not face derivatives risks to the same degree as a "dealer", the former can-not be excluded from the purview of risk management disciplines and appropriate regulation. Risk management for end-users focusses on formulating and implementing internal policy and controls in respect of derivatives, ensuring (a) legal enforceability, (b) availability of adequate systems for recording and processing transactions and (c) the adoption of appropriate norms for accounting and disclosure.

5.8.2 The Board of Directors of the end-user should approve and implement a policy for the use of derivatives for financial risk management, which sets the boundaries of the company's derivatives operations. The Board should pass a resolution putting these policies into effect before the company transacts derivatives. These policies should be reviewed as business and market conditions change. It is also recommended that appropriate changes be made to the Memorandum and Articles of Association to empower the Company to transact derivatives. Senior management should be delegated appropriate authority to transact derivatives within such policy. Senior management should approve and implement internal procedures and controls to ensure adherence to these policies and to manage derivatives risks within stated limits. Responsibilities for transacting derivatives on the one hand, and for processing and risk controlling on the other, should be delegated by senior management to independent units or persons.

5.8.3 End-users should follow the same risk management and valuation practices as dealers, as appropriate to the nature, size and complexity of their derivatives activities. Specifically, they should regularly mark-to-market their derivatives positions (even if taken and accounted as hedges) for risk management, and periodically forecast their cash investment and funding requirements arising from derivatives. They should also give independence and appropriate authority to the function which ensures adherence to derivatives policy and enforces risk management procedures and controls.

5.8.4 Credit exposure on derivatives must be measured and controlled against credit limits. Credit risk monitoring must be independent of the derivatives transacting function.

5.8.5 Standard master documentation (e.g. 1992 ISDA multicurrency, cross border agreement) must be signed with acceptable counterparties to document existing and future deals. Master documentation should provide for payment netting and economic exposure netting using a full two-way payments approach.

5.8.6 End-users must also ensure that their derivatives activities are undertaken by professionals with appropriate experience, skills, and specialisation, not only amongst those transacting derivatives but also those processing, accounting for and controlling risks on these transactions.

5.8.7 Systems for data capture, delivery, and valuation must be adequate for the end-user, taking into account the nature, size and complexity of derivatives transactions.

5.8.8 A Check List for any organisation entering into derivatives transactions as an end-user is given in Annexure 5(K). In view of the constantly changing market scenario, it should be noted that the "best practices" described above would require to be continually reviewed and updated . It is recommended that RBI could address itself to this task periodically.

5.8.9 It is also important that the statutory auditors have specific Treasury knowledge and be skilled in Treasury Audit. This is necessary to ensure that the Treasury function be audited efficiently by an external body. The ICAI will need to constantly update the guidance to its members, given the complexity of these products and the lack of awareness of the inherent risks.

5.9 Netting

It is recommended that the netting of settlement and the related pre-settlement risks be legally enforceable. This will facilitate the sustainable development of this business, given the prevailing constraints on counterparty limits and capital adequacy requirements. Issues relating to bankruptcy proceedings have to be addressed also. The BBA has prepared an interim report and the Basle Committee is coming out with a detailed recommendation. The RBI/FEDAI should set up a study group to examine the issue of netting in all its ramifications.

5.10 Capital requirements:

It is expected that the recommendations and methodology of the Basle Committee's consultative proposal (April 1993), when finalised and issued in the form of guidelines will be adopted by most national regulators. To ensure that banks and others contemplating derivatives dealing activity are not unprepared for the potential capital requirements that may be applied, the Group has determined appropriate quantification methodologies for such capital requirements, which are summarised as follows:

(i) for Spot positions : 5 % of overnight limit [note that the

Basle Committee in April 1993 recommended 8% of spot position, which the Group considers difficult to implement - see Annexure 5(L) for rationale and methodology]

(ii)for Forward Gaps : Equal to overnight "EAR" limit determined by management and to be calculated using the standard exposure factors [as derived in Annexure 5(H)] for limiting overnight exposure, multiplied by a factor of 4 to take in the effects of holding adverse positions upto a fortnight.

(iii)for Volatility positions : Equal to the spot/ volatility overnight exposure limit set for the currency options book, based on adverse change in implied volatility and 1.25% adverse movement in spot exchange rates (note: consistent with capital requirement for spot risk, and should not be double-counted).

5.11.Reporting Requirements

5.11.1 Reporting to the Board of Directors of the "dealer" in derivatives, and to the RBI, constitute key controls on the proper conduct of derivatives trading activity.

5.11.2 Periodic reports to the RBI are recommended on the following

(i) outstanding total market risk (split into spot, interest rate/gap, volatility, basis, and other exposures as classified by the dealer's risk management system) on all forex and forex derivatives books.

(ii) outstanding notional principal amounts of forex derivatives contracts

(iii) transacted volumes in forex derivatives contracts during the specified reporting period.

5.11.3 Periodic reports (monthly, or to coincide with board meetings) should be submitted to the local Board of Directors of the dealer in derivatives, covering the items (i), (ii) and (iii) above as submitted to the RBI, as well as

(iv) a monthly statement of the total risk-weighted assets (RBI/BIS norms)

(v) a monthly summarised Profit and Loss statement for derivatives dealing.

CHAPTER 6

Miscellaneous

6.1 Setting up of a Forex Market Committee :

Presently,a Standing Consultative Committee on Exchange Control comprising various trade bodies advises the RBI on problems encountered in implementing exchange control regulations. It is recommended that a forex market committee be set up in India to advise RBI on an on-going basis on :

(a) policy issues and to make recommendations and prepare issue papers on specific market related topics,

(b) effecting improvements in the quality of risk management.

The committee could consist of three to four persons selected for their deep knowledge and understanding of forex and forex markets and chosen in a manner that ensures fair representation and consideration of all points of view and interests. The committee may meet at least once in a quarter.

6.2 Setting up of off-shore banking units in Bombay:

6.2.1 An off-shore banking centre does, on a limited and controlled scale, increase the domestic market's linkages with the international market. For a country like India which has only an emerging exchange market, total financial integration with the international market at this juncture may prove to be economically de-stabilising. However, the setting up of Off-shore Banking Units(OBUs) instead of a full-fledged centre could facilitate this financial integration.

6.2.2 For setting up an OBU, there is no need to carve out a separate geographically distinct zone. OBUs can be a part of the existing bank branch, though its business and books of account will be wholly segregated from the business of the on-shore office. The advantage of this model is obvious : it is a low cost option. Investment in property/real estate would be minimal; since Bombay already has well-developed telecommunica-tion facilities, only strategic and selective upgradation may be necessary. As regards the cost of setting up a bank-supervision system, this is unlikely to assume disturbing proportions; besides, the license fee payable by OBUs will go to offset the additional supervisory costs. However, it would be prudent, atleast to start with, to restrict the licensing of OBUs only to well-capitalised banks already located in Bombay. This will contain the pressure on the regulatory authorities without in any way detracting from the growth prospects and market efficiency of the proposed OBU -since Bombay is already well-endowed in terms of bank-offices. Brief details are given in Annexure 6(A).

6.3 **Market data :**

As of now very little data is available on a regular and timely basis about the transaction volumes in the Indian market. As will be appreciated, such information is very important to analysts -and also of interest to the supervisory authorities.

While accurate and full data may take time, it should be possible to collate and publish daily approximate data based on information from the 10 or 12 largest participants in the market. (These would perhaps cover 80 or 90% of the total volumes). Once the participants to be included are decided, their central treasuries could be requested to furnish to RBI the following data on fax/telephone every day by 4.00 P.M.

INR/USD transactions : interbank summary

(USD in million)

	Sales	Purchases
Cash		
Tom		
Spot		
Forwards		
Total		

The RBI should collate the information and issue a press note every day stating that the data is based on information collected from _____ banks. If a particular bank is late, the press note should not be delayed -- but should contain a remark that information from x/y/z bank(s) was not received in time and is not included. The adverse publicity through such remarks will ensure that banks will make every effort to give information in time.

6.4 **Forex Clearing**

It is understood that RBI is setting up a forex clearing house in Bombay for the settlement of inter-bank forex transactions. Such a set-up would lead to a substantial reduction in the cost of settlement on account of netting of transactions within India and consequential reduction in the number of nostro account entries. The Group recommends early introduction of forex clearing.

6.5 Role of FEDAI

In the context of changing forex market scenario, the role of FEDAI may be reviewed and enlarged to specifically focus on training and preparing the stage for further relaxations in the forex/derivatives market. Further, with a view to developing risk measurement and management techniques in the banking industry, financial market research facility should be made available at FEDAI.

6.6 Finer rates of exchange

The grievance expressed by entities in smaller cities that the rates of exchange offered to them are not fine enough was examined by the Group. It was felt that with a view to offer the best possible rates, banks should endeavour to keep their forex dealing branches updated on rate variation periodically and for branches to make every effort to ascertain on-going rates before quoting to customers. Alternatively, banks may consider decentralising their dealing operations, whereever feasible.

Chapter-7

Summary of major recommendations

Relaxations to existing regulations

1. Corporates should be permitted to take a hedge upon declaring the existence of a genuine exposure. (Paragraph 3.2)

2. The banks may be permitted to decide open position limits subject to their earmarking capital to the extent of 5% of open exposure limit. The current cap of Rs.15 crores on open exchange position may be withdrawn. (Paragraph 3.3)

3. The discipline relating to aggregate gap limits, ideally, should encompass rupee transactions also. While this is the ultimate goal, to begin with, the banks should be permitted to fix their own gap limits based on capital, risk bearing capacity etc. (Paragraph 3.4)

4. Authorised Dealers may on application to RBI be permitted to initiate cross currency positions overseas. (Paragraph 3.5)

5. In order to impart depth and liquidity to the forward markets, banks should be allowed to lend or borrow short-term funds upto six months in the overseas markets upto specified limits. (Paragraph 3.6)

6. The number of market participants should be increased by permitting financial institutions like IDBI, IFCI etc. to trade in the forex market. (Paragraph 3.7)

7. Market intervention by RBI should be selective rather than continuous. Forex swaps may be used as a tool by RBI to control the forward margins. (Paragraph 3.8)

8. Banks should have the freedom to determine the interest rates and maturity period of FCNR(B) deposits subject to a cap being put in place by RBI (Paragraph 3.9)

9. Exporters should, subject to liquidation of outstanding advances, be permitted to retain 100% of export earnings in foreign currency in India (Paragraph 3.10).

10. Inter-bank borrowings should be exempt from statu-tory pre-emptions to help the emergence of a rupee term money market and a deep and liquid debt/forex market. (Paragraph 3.12)

Derivative Products, Risk Management and Accounting

11. Corporates should be permitted to cancel and re-book option contracts and hedge any genuine contingent exposure using options. (Paragraph 4.2.2, 4.2.6)

12. Banks should be permitted to offer lower cost option strategies like "range forwards" and "ratio range forwards". (Paragraph 4.2.3)

13. Tax laws relating to withholding tax should be unambiguous and derivative transactions should not be subject to any withholding tax. This matter may be taken up with the Government of India. (Paragraph 4.2.4)

14. Banks should have greater freedom to use derivative products for their own asset - liability management. (Paragraph 4.2.5)

15. Banks can be given general permission to offer hedging products like caps, floors, swaps etc. subject to post-facto reporting. (Paragraph 4.2.8)

16. Corporates having EEFC accounts should be permitted to use amounts therein as margin for executing trades that will enable them access to hedging products overseas which are not available in India. (Paragraph 4.2.9)

17. Subject to reforms in the money market and permitting short term investments/borrowings overseas, RBI may invite proposals from banks for offering rupee-based derivatives. (Paragraph 4.3.1)

18. In the long run, authorised dealers may be permitted to offer all types of derivative products subject to their putting in place comprehensive risk management systems on the basis of RBI guidelines. A fresh set of guidelines for forex and derivatives risk management should be framed by the RBI to replace the existing Internal Control Guidelines. (Paragraph 4.3.2)

19. In view of the complexity of derivative products and attendant risks, an association of professionals or FEDAI should ensure that uniform documentation and market practices are followed by all the market participants. (Paragraph 4.3.7)

20. The Group has apprehensions that some of the corporates have converted exposure management function into a profit centre without having adequate control systems. It is therefore imperative that all market participants should put in place risk management policies and

internal control systems before being allowed to transact in forex and interest rate derivative products. (Paragraph 5.4.2)

21. Accounting of derivative transactions (including forwards) should specifically differentiate between its use for trading from hedging. (Paragraph 5.4.4, 5.4.7)

22. Accounting standards for all market participants should be developed by the Institute of Chartered Accountants of India (ICAI) for forex /derivative products to cover accounting and disclosure norms. As an interim measure, ICAI should issue a guidance note or statement of recommended practices (SORP) covering accounting and disclosure norms. In case an organisation does not adhere to the guidance note, the departure should be suitably commented upon by the auditor.(Paragraph 5.4.6).

23. Proper disclosure of interest rate and forex rate risks should be made in the financial report. The disclosure should include a clear statement on the risk management of derivatives and the company's accounting policy for derivatives. (Paragraph 5.4.12).

24. The accounting practices recommended by the ICAI should be accepted by tax authorities for the determination of tax incidence. (Paragraph 5.5.2).

25. All market participants may follow the recommended "best practices" for managing various risks while undertaking forex/derivative transactions. Boards of Directors of end-users should approve and implement a policy for the use of derivatives for financial risk management which sets the boundaries of their derivatives operations.(Paragraph 5.7, 5.8).

26. The netting of settlements and the related pre-settlement risk should be made legally enforceable. A study group may be set up to examine the issue in all its ramifications. (Paragraph 5.9)

27. To ensure that banks and others contemplating derivatives dealing activity are not unprepared for the potential capital requirements for market price risks, as and when Basle Committee finalises the same, appropriate quantification methodologies as recommended should be followed by all the authorised dealers permitted to deal in derivatives. (Paragraph 5.10)

Miscellaneous

28. RBI may set up a foreign exchange market committee to advise it on policy issues relating to foreign exchange, effecting improvements in the quality of risk management and preparing issue papers on specific market related topics. (Paragraph 6.1)

29. Off-shore banking units may be set up in Bombay. (Paragraph 6.2)

30. RBI should take the initiative in collecting and publishing on a daily basis critical data on foreign exchange transactions. (Paragraph 6.3)

31. The proposed Forex Clearing House in Bombay may be set up early considering the substantial benefits this could offer to banks. (Paragraph 6.4)

32. FEDAI's role may be reviewed and enlarged specifically to focus on training and preparing the stage for further relaxations in the forex/derivatives market. (Paragraph 6.5)

33. With a view to offer the best possible exchange rates to smaller entities, banks should keep their forex dealing branches updated on rate variations or consider decentralising dealing operations. (Paragraph 6.6)

1. Shri O. P. Sodhani

2. Shri V. Ananthakrishnan

3. Shri S. A. Ramath

4. Shri Pradeep Pain

5. Shri Pavan Sukhdev

6. Smt. L. Gupte

7. Shri Kiran Umrootkar

8. Shri Jamal Mecklai

9. Shri A. V. Rajwade

10. Shri R. Sridharan

11. Shri B. K. Pal

12. Shri P. R. Anantharaman

13. Smt. Shyamala Gopinath

14. Shri D. S. R. Simhudu

27th June 1995

ANNEXURE I(A)

MEMORANDUM

RESERVE BANK OF INDIA

EXPERT GROUP ON FOREIGN EXCHANGE MARKETS IN INDIA

It has been decided to set up an Expert Group on Foreign Exchange Markets in India to examine issues relating to products available for hedging forex risks, scope for further development of forex markets in India and introduction of new derivative products and other related matters with the following terms of reference:

1) To review the existing forex markets in India and products available for hedging forex risks.

2) To consider relaxations that would be needed in exchange control and monetary control to facilitate the development of forex markets.

3) To examine the scope for further development of forex markets in India including derivative products.

4) To recommend the type/nature of products (including derivatives) that are considered appropriate and the measures necessary to impart sufficient liquidity to the markets in these products.

5) To consider permitting 'margin trading' in forex by corporates in India.

6) To consider the accounting standards and procedures that should be followed for these products by the market participants and the minimum requirement for disclosure in the annual accounts.

7) To make recommendations regarding the internal control systems for measurement and control of risk for financial institutions offering these products.

8) To make recommendations for the prudential regulatory framework (including capital adequacy norms, appropriate risk weights etc.) for an orderly development/functioning of the forex markets.

9) To make any other suggestions/recommendations having a bearing on the above terms of reference.

The Expert Group consists of the following members:

1.	Shri O. P. Sodhani Executive Director Reserve Bank of India Central Office Bombay 400 023	Chairman
2.	Shri V. Ananthakrishnan Chief Executive Foreign Exchange Dealers Association of India Bombay	Member
3.	Shri S. A. Kamath Executive Director Union Bank of India Bombay	Member
4.	Shri Pradeep Pain General Manager State Bank of India Bombay	Member
5.	Shri Pavan Sukhdev Head of Treasury Deutsche Bank Bombay	Member
6.	Smt. L. Gupte Executive Director ICICI Bombay	Member
7.	Shri Kiran Umrootkar Chief Executive Paterson & Co. Bombay	Member
8.	Shri Jamal Mecklai Partner Mecklai & Mecklai Bombay	Member
9.	Shri A. V. Rajwade Forex Consultant Rajwade & Co. Bombay	Member

10.	Shri R. Sridharan Officer on Special Duty (External Equity) Ministry of Finance Government of India New Delhi - 110 001	Member
11.	Shri B. K. Pal Controller Exchange Control Department Reserve Bank of India Bombay	Member
12.	Shri P. R. Anantharaman Chief Officer Department of External Investments & Operations Reserve Bank of India Bombay	Member
13.	Smt.Shyamala Gopinath Joint Chief Officer Department of Banking Operations & Development Reserve Bank of India Bombay	Member
14.	Shri D.S.R.Simhudu Additional Controller Exchange Control Department Reserve Bank of India Bombay	Member-Secretary

The Expert Group may co-opt any other person if necessary.

The Expert Group should submit its report within three months.

Sd/-
(C.Rangarajan)
Governor

RESERVE BANK OF INDIA
CENTRAL OFFICE
BOMBAY 400 001.

November 22,1994.

ANNEXURE - I(B)

LIST OF PERSONS WHO WERE ASSOCIATED WITH THE GROUP

1. Shri N.V. Iyer - M/s. C.C.Choksi & Co.
2. Shri N. Seshadri - M/s. Arthur Andersen
3. Shri Girija P. Pande - ANZ Grindlays Bank
4. Shri Shailendra Bhandari - HDFC Bank Ltd.
5. Shri Luis Miranda - HDFC Bank Ltd.
6. Smt. Michelle de Sa - Chase Manhattan Bank
7. Shri G. Subramaniam - Reliance Industries Ltd.
8. Shri Y.M. Deosthalee - Larsen & Toubro Ltd.
9. Shri N. Balasubramanian - ICICI
10. Shri M.V.Raghavachari - Reserve Bank of India
11. Shri A.M.M.Sharma - -do-
12. Shri A. K. Batra - -do-
13. Smt. Usha Thorat - -do-
14. Shri S. D. Datar - -do-
15. Shri V. S. Sharma - -do-
16. Shri Michael D. Patra - -do-
17. Shri G. Padmanabhan - -do-
18. Shri P. Oommen Joseph - -do-

ANNEXURE 3(A)

GUIDELINES FOR FOREIGN EXCHANGE EXPOSURE LIMITS OF AUTHORISED DEALERS

1. Coverage

For the purpose of risk limits for banks incorporated in India, the limits fixed by Management should include all branches including those abroad. For foreign banks, the limits should cover only branches in India.

2. Capital base

The capital base should be taken as per RBI definition of Tier I capital.

3. Open position in a single currency

The open position must first be measured separately for each foreign currency in which the institution is performing transactions. The open position in a single currency is the sum of (a) the spot position, (b) the forward position and (c) the options position.

a) Spot position

The spot position is the difference between the assets and the liabilities as they appear on the balance sheet. This includes, in particular, accrued income and expenses, interest on loans and interbank borrowing and other income earned but not yet received, and interest due to depositors and interbank providers of funds as they appear in the relevant accounts of a bank applying the accrual principle.

b) Forward position

The forward position includes all amounts to be received less all amounts to be paid in the future as a result of forex transactions which have already taken place. These transactions are recorded in the off-balance sheet section of the bank's books. This includes :

i) spot forex transactions which are not yet settled.

ii) forward forex transactions.

iii) guarantees and similar commitments denominated in

foreign currencies under which claims have been made which are likely to be irrecoverable.

iv) all amounts to be received less all amounts to be paid in future as a result of transactions in currency futures, and the principal on currency futures, and the principal on currency swaps. For the present, this is relevant for foreign branches of Indian banks.

c) Options position:

The options position is the "delta-equivalent" spot currency position as reflected in the AD's options risk management system, and includes any delta hedges in place which have not already been included under 3(a) or 3(b)(i) and (ii).

4. Overall open position

Definition - Once the exposure has been determined in each single currency, the second step consists in measuring the bank's overall exposure to foreign exchange risk. The "shorthand method", as defined by the Basle Committee on Banking Supervision in its April 1993 proposals, should be preferred.

This would involve :

i) The aggregate of all foreign currency short positions and of all foreign currency long positions;

ii) Comparison of the two totals, and selection of the greater of the two, which is defined as the over-all exposure of the bank. This overall exposure must be kept within the open position limit.

5. Capital requirement

The banks should earmark as capital 5% of the open position limit fixed in accordance with the "shorthand method" referred above. Further, in general, overall open position limit should have a reasonable relation to the capital of the bank.

6. Control requirement

ADs must continue to comply with weekly reporting requirements to RBI for open positions monitored against approved limits. Weekly POS statement will follow a revised format which reflects the above changes in definition of open position.

ANNEXURE 3(B)

DEVELOPMENT OF A TERM MONEY MARKET IN INDIA

Objectives of the money market:

The Working Group on the Money Market (Vaghul Committee) has listed three broad objectives of the money market:

i) It should provide an equilibrating mechanism to even out short term surpluses and deficits;

ii) It should provide a focal point for central bank intervention for influencing liquidity in the economy; and

iii) It should provide reasonable access to users of short term money to meet their requirements at realistic price.

Among the strategies emphasised to achieve the objectives were, steps to increase the number of participants, development of new instruments, a move to market determined rates and creation of an active secondary market.

The achievement of the objectives stated by the Vaghul Committee, depends to a large extent on the ability of the RBI to signal interest rate changes through money market operations. Related to this is the establishment of credible short-term benchmark interest rates-inter-bank as well as Government rates. The convergence of such short-term rates will result in the formation of a proper `yield curve' in Rupees which will engender transparent and cost-effective pricing of the entire range of financial assets and liabilities.

Features of Money Market in India:

The main instruments in the money market are `call' money limited to banks as lenders as well as borrowers and Mutual Funds and Financial Institutions (FIs) as lenders only, T-bills upto 364 days, CDs issued by banks and FIs and bills rediscounted. The call money market has been characterised by marked volatility and sudden variation in banking system liquidity over the past years (Oct 90, April 91,1992, Sep 94, Dec 94 and Jan 1995). The money market does not seem to smoothen out short term surpluses and deficits. With

the deregulation of interest rates (excepting `deposits' from public for which a maximum rate is still specified) and consequent interest rate risk there is no money market instrument which can be used by banks to hedge the risks. The use of the T-bill cut-off yields as a signalling mechanism for the RBI has been constrained because of the excess liquidity between August and November 1994 which led to decrease in cut-off yields and the tightness in the market in December1994/January 1995 which led to increase in yields. Investor interest in auctions has fallen off due to the widening differential between the primary cut- off yields and the secondary market yields. With further deregulation of interest rates on the deposit side, proper asset-liability management becomes essential, i.e planning of `core' liquidity gaps and maturity gaps over a time period. This would require the emergence of an inter-bank term money market for different periods up to one year. The `call' market should typically equilibrate only overnight liquidity mismatches and not liquidity mismatches across the entire spectrum of maturities.

Deterrents to development of term money market:

At present banks have to maintain CRR on their demand and time liabilities as on the reporting Friday. DTL is taken as `liabilities to others (A) + Liabilities to banks (B) -Assets with banks (C)'. While for the system as a whole, (B) would normally `net off' against (C), for individual banks where (C) is more than (B) it is ignored. Thus for the system as a whole the inter-bank liabilities do not get netted against the inter-bank assets. This leads to a situation where banks desist from borrowing on reporting Fridays whatever may be their inter-bank borrowings on other days. It also deters them from borrowing for any period more than 13 days, such as 1 month, 2 months etc. since such borrowings if outstanding beyond 13 days would be reckoned in the DTL for the reporting Friday. It could be argued that banks can price the `cost of reserves' in the rate they would charge on their lendings. This, however, would make `bid-offer' spreads extremely large and inhibit net borrowers. Furthermore, large `bid-offer' spreads prevent any serious profit-making interest from professional market participants, who would also not accept the prospect of reporting Friday illiquidity or unprofitable deployment of borrowed funds. Even the recently introduced requirements of maintaining on daily basis minimum level of 85 per cent of CRR balances has not helped significantly in reducing the volatility in the call money market although it may have reduced the volatility in the maintenance of cash reserves.

In this context, it is worthwhile recalling the Vaghul Committee recommendations relating to inter-bank Participating Certificates (PCs). While stating that there were good reasons for taking measures which put a virtual end to PCs from institutions, the Group was of the view that there was a case for development of inter-bank PC market to even out short term liquidity within the banking system. It was recommended that the inter bank PC should not be subject to reserve requirements.

Another aspect which needs to be pointed out is that as an alternative to inter- bank borrowings, it could be argued that banks can `repo' their surplus SLR securities against cash and show this as a `sale' transaction. This `repo' will not add to their DTL and will not be subject to reserve requirements. However, the bank has actually contracted to buy back at a difference representing the money market rate. Thus inter-bank repos are a means of reserve-free inter-bank borrowings but for the specific purpose of funding excess SLR securities eligible for `repos'. The mechanism of `repos' in Government securities was used by banks earlier to circumvent reserve requirements. This only points out with added emphasis that repos cannot be a general substitute for a term money market which must be developed in a transparent manner.

The argument used normally for subjecting inter-bank borrowings to reserve requirement is that it would otherwise lead to dilution of monetary control. In other words, there would be an impact on money supply if such pre-emption is not done. It is recognised that this impact operates through the money multiplier. However, in actual practice, as banks have to maintain CRR on the net DTL on the reporting Friday they ensure that their borrowings are reduced to a minimum on reporting Fridays. Data obtained by the Expert Group revealed that the net inter bank contribution to total DTL has been between 1.57 per cent and 2.07 per cent during the period January to October 1994. The reduction in statutory pre-emption on account of this (if these liabilities were exempt) would be around Rs.1200 crores. The "dilution" of monetary control on account of removing the reserve requirement could be compensated by either increase in overall CRR or bringing other exempted categories under the CRR.

CONCLUSION

Subjecting inter-bank liabilities (including CDs and Deposits) to CRR has deterred the emergence of a deep and liquid term money market in India as the surpluses and deficits tend to get equilibrated at the very short end resulting in high volatility of the `call' market and all inter-bank activity getting restricted to 13 days. The absence of such a market inhibits the RBI from using the market to transmit signals relating to its interest rate policy. It also results in difficulties in banks managing their asset liability mismatch and hedging their interest risk

It is recommended that CRR requirements on net inter bank liabilities be removed to foster the development of term money market. This would no doubt imply that inter-bank assets cannot be off-set for purposes of reserve requirements. However, as observed earlier, the `netting' concept is not significant at the level of the individual banks where net inter-bank assets are more than inter-bank liabilities, as in such cases `inter-bank liabilities' are treated as zero rather than `negative'. Once the reserve requirement is removed, participants other than commercial banks may also be allowed to access the market for borrowings.

ANNEXURE 4(A)

"RANGE FORWARDS" & "RATIO RANGE FORWARDS"

The outright purchase of "vanilla" options (calls and puts) entails a cost (option premium) payable by the buyer. High option premium cost still represents a barrier to customers undertaking a scenario and cost-benefit analysis, thus inhibiting customers from the use of these hedging instruments.

Take, for example, a DEM importer who has a DEM 10,000,000 payable 6 months from today.

Spot USD/DEM : 1.5125

6 month forward USD/DEM : 1.5015

Cost of purchasing a vanilla DEM Call @ 1.5015 expiry 6 months : DEM 300,000

RANGE FORWARDS

"Range Forwards" are option strategies consisting of call and puts, one purchased and the other sold.

Range Forwards help to overcome the high cost of buying "vanilla" options: For example:-

Cost of purchasing a DEM Call for DEM 10,000,000 @ 1.5015 expiry 6 months: DEM 300,000.

Premium received by selling DEM Put for DEM 10,000,000 @ 1.5315 expiry 6 months: DEM 200,000

Net Premium Payable : DEM 100,000

On Expiry -

If USD/DEM is below 1.5015, the customer exercises the DEM Call @ 1.5015.

If USD/DEM is between 1.5015 and 1.5315, the customer buys the DEM in the market.

If USD/DEM is above 1.5315, the customer gets exercised on the DEM Put and has to buy DEM at 1.5315.

RATIO RANGE FORWARD

This is a more flexible variation of the range forward discussed above. The main difference is that the

amounts of the option bought (call in the cited example) are different. The ratio of the two amounts can be so chosen as to bring the upfront cost down to the desired level. For example:-

Cost of purchasing a DEM Call for DEM 5,000,000 @ 1.5015 expiry 6 months: DEM 150,000

Premium received by selling DEM Put for DEM 10,000,000 @ 1.5515 expiry 6 months: DEM 150,000

Net Premium Payable : Nil

On Expiry -

If USD/DEM is below 1.5015, the customer exercises the DEM 5,000,000 Call @ 1.5015 and purchases DEM 5,000,000 at the prevailing market rate.

If USD/DEM is between 1.5015 and 1.5515, the customer buys the DEM 10,000,000 in the market.

If USD/DEM is above 1.5515, the customer gets exercised on the DEM 10,000,000 Put and has to buy DEM at 1.5515.

ANNEXURE 4(B)

BASLE COMMITTEE'S JULY 1994 "RISK MANAGEMENT GUIDELINES FOR DERIVATIVES" SECTION II, III AND IV

II Oversight of the risk management process

1. As is standard practice for most banking activities, an institution should maintain written policies and procedures that clearly outline its risk management guidance for derivatives activities. At a minimum these policies should identify the risk tolerances of the board of directors and should clearly delineate lines of authority and responsibility for managing the risk of these activities. Individuals involved in derivatives activities should be fully aware of all policies and procedures that relate to their specific duties.

Board of directors

2. The board of directors should approve all significant policies relating to the management of risks throughout the institution. These policies, which should include those related to derivatives activities, should be consistent with the organisation's broader business strategies, capital strength, management expertise and overall willingness to take risk. Accordingly, the board should be informed regularly of the risk exposure of the institution and should regularly re-evaluate significant risk management policies and procedures with special emphasis placed on those defining the institution's risk tolerance regarding these activities. The board of directors should also conduct and encourage discussions between its members and senior management, as well as between senior management and others in the institution, regarding the institution's risk management process and risk exposure.

Senior management

3. Senior management should be responsible for ensuring that there are adequate policies and procedures for conducting derivatives operations on both a long-range and day-to-day basis. This responsibility includes ensuring that there are clear delineations of lines of responsibility for managing risk, adequate systems for incurring risk, appropriately structured limits on risk taking, effective internal controls and a comprehensive risk-reporting process.

4. Before engaging in derivatives activities,

management should ensure that all appropriate approvals are obtained and that adequate operational procedures and risk control systems are in place. 'Proposals to undertake derivatives activities should include, as applicable:

- a description of the relevant financial products, markets and business strategies;

- the resources required to establish sound and effective risk management systems and to attract and retain professionals with specific expertise in derivatives transactions;

- an analysis of the reasonableness of the proposed activities in relation to the institution's overall financial condition and capital levels;

- an analysis of the risks that may arise from the activities;

- the procedures the bank will use to measure, monitor and control risks

- the relevant accounting guidelines;

- the relevant tax treatment; and

- an analysis of any legal restrictions and whether the activities are permissible.

5. After the institution's initial entry into derivatives activities has been properly approved, any significant changes in such activities or any new derivatives activities should be approved by the board of directors or by an appropriate level of senior management, as designated by the board of directors.

6. Senior management should regularly evaluate the procedures in place to manage risk to ensure that those procedures are appropriate and sound. Senior management should also foster and participate in active discussions with the board, with staff of risk management functions and with traders regarding procedures for measuring and managing risk. Management must also ensure that derivatives activities are allocated sufficient resources and staff to manage and control risks.

7. As a matter of general policy, compensation policies - especially in the risk management, control and senior management functions - should be structured in a way that is sufficiently independent of the performance of trading activities, thereby avoiding the potential incentives for excessive risk taking that can occur if, for example, salaries are tied too closely to the profitability of derivatives.

Independent risk management functions

8. To the extent warranted by the bank's activities, the process of measuring, monitoring and controlling risk consistent with the established policies and procedures should be managed independently of individuals conducting derivatives activities, up through senior levels of the institution. An independent system for reporting exposures to both senior-level management and to the board of directors is an important element of this process.

9. The personnel staffing independent risk management functions should have a complete understanding of the risks associated with all of the bank's derivatives activities. Accordingly, compensation policies for these individuals should be adequate to attract and retain personnel qualified to assess these risks.

III The risk management process

The primary components of a sound risk management process are the following : a comprehensive risk measurement approach; a detailed structure of limits, guidelines and other parameters used to govern risk taking; and a strong management information system for controlling, monitoring and reporting risks. These components are fundamental to both derivatives and non-derivatives activities alike. Moreover, the underlying risks associated with these activities, such as credit market, liquidity, operations and legal risk, are not new to banking, although their measurement and management can be more complex. Accordingly, the process of risk management for derivatives activities should be integrated into the institution's overall risk management system to the fullest extent possible using a conceptual framework common to the instituion's other activities. Such a common framework enables the institution to manage its risk exposure more effectively, especially since the various individual risks involved in derivatives activities can, at times, be interconnected and can often transcend specific markets.

2. As is the case with all risk-bearing activities, the risk exposures an institution assumes in its derivatives activities should be fully supported by an adequate capital position. The institution should ensure that its capital position is sufficiently strong to support all derivatives risks on a fully consolidated basis and that adequate capital is maintained in all group entities engaged in these activities.

Risk measurement

3. An institution's system for measuring the various risks of derivatives activities should be both comprehensive and accurate. Risk should be measured and aggregated across trading and non-trading activities on an institution-wide basis to the fullest extent possible.

4. While the use of a single prescribed risk measurement approach for management purposes may not be essential, the institution's procedures should enable management to assess exposures on a consolidated basis. Risk measures and the risk measurement process should be sufficiently robust to reflect accurately the multiple types of risks facing the institution. Risk measurement standards should be understood by relevant personnel at all levels of the institution - from individual traders to the board of directors- and should provide a common framework for limiting and monitoring risk taking activities.

5. With regard to dealer operations, the process of marking derivatives positions to market is fundamental to measuring and reporting exposures accurately and on a timely basis. An institution active in dealing foreign exchange, derivatives and other traded instruments should have the ability to monitor credit exposures, trading positions and market movements at least daily. Some institutions should also have the capacity, or at least the goal, of monitoring their more actively traded products on a real-time basis.

6. Analysing stress situations, including combinations of market events that could affect the banking organisation, is also an important aspect of risk measurement. Sound risk measurement practices include identifying possible events or changes in market behaviour that could have unfavourable effects on the institution and assessing the ability of the institution to withstand them. These analyses should consider not only the likelihood of adverse events, reflecting their probability, but also "worst case" scenarios. Ideally, such worst case analysis should be conducted on an institution-wide basis by taking into account the effect of unusual changes in prices or volatilities, market illiquidity or the default of a large counterparty across both the derivatives and cash trading portfolios and the loan and funding portfolios.

7. Such stress tests should not be limited to quantitative exercises that compute potential losses or gains. They should also include more qualitative analyses of the actions management might take under particular scenarios. Contingency plans outlining

operating procedures and lines of communication, both formal and informal, are important products of such qualitative analyses.

Limiting risks

8. A sound system of integrated institution-wide limits and risk taking guidelines is an essential component of the risk management process. Such a system should set boundaries for organisational risk-taking and should also ensure that positions that exceed certain predetermined levels receive prompt management attention. The limit system should be consistent with the effectiveness of the organisation's overall risk management process and with the adequacy of its capital position. An appropriate limit system should permit management to control exposures, to initiate discussion about opportunities and risks and to monitor actual risk taking against predetermined tolerances, as determined by the board of directors and senior management.

9. Global limits should be set for each major type of risk involved in an institution's derivatives activities. These limits should be consistent with the institution's overall risk measurement approach and should be integrated to the fullest extent possible with institution-wide limits on those risks as they arise in all other activities of the institution. Where appropriate, the limit system should provide the capability to allocate limits down to individual business units.

10. If limits are exceeded, such occurrences should be made known to senior management and approved only by authorised personnel. These positions should also prompt discussions about the consolidated risk taking activities of the institution or the unit conducting the derivatives activities. The seriousness of limit exceptions depends in large part upon management's approach toward setting limits and on the actual size of individual and organisational limits relative to the institution's capacity to take risk. An institution with relative conservative limits may encounter more exceptions to those limits than an institution with less restrictive limits.

Reporting

11. An accurate, informative and timely management information system is essential to the prudent operation of derivatives activities. Accordingly, the quality of the management information system is an important factor in the overall effectiveness of the risk management process. The risk management function

should monitor and report its measures of risks to appropriate levels of senior management and to the board of directors. In dealer operations, exposures and profit and loss statements should be reported at least daily to managers who supervise but do not, themselves, conduct those activities. More frequent reports should be made as market conditions dictate. Reports to other levels of senior management and the board may occur less frequently, but the frequency of reporting should provide these individuals with adequate information to judge the changing nature of the institution's risk profile.

12. Management information systems should translate the measured risk for derivatives activities from a technical and quantitative format to one that can be easily read and understood by senior managers and directors, who may not have specialised and technical knowledge of derivatives products. Risk exposures arising from various derivatives products should be reported to senior managers and directors using a common conceptual framework for measuring and limiting risks.

Management evaluation and review

13. Management should ensure that the various components of the institution's risk management process are regularly reviewed and evaluated. This review should take into account changes in the activities of the institution and in the market environment, since the changes may have created exposures that require additional attention. Any material changes to the risk management system should also be reviewed.

14. The risk management functions should regularly assess the methodologies, models and assumptions used to measure risk and to limit exposures. Proper documentation of these elements of the risk measurement system is essential for conducting meaningful reviews. The review of limit structures should compare limits to actual exposures and should also consider whether existing measures of exposure and limits are appropriate in view of the institution's past performance and current capital position.

15. The frequency and extent to which an institution should re-evaluate its risk measurement methodologies and models depends, in part, on the specific risk exposures created by their derivatives activities, on the pace and nature of market changes and on the pace of innovation with respect to measuring and managing risks. At a minimum, an institution with significant derivatives activities should review the underlying

methodologies of its models at least annually - and more often as market conditions dictate - to ensure they are appropriate and consistent. Such internal evaluations may, in many cases, be supplemented by reviews by external auditors or other qualified outside parties, such as consultants who have expertise with highly technical models and risk management techniques. Assumptions should be evaluated on a continual basis.

16. The institution should also have an effective process to evaluate and review the risks involved in products that are either new to it, or new to the market place and of potential interest to the institution. It should also introduce new products in a manner that adequately limits potential losses and permits the testing of internal systems. An institution should not become involved in a product at significant levels until senior management and all relevant personnel (including those in risk management, internal control, legal, accounting and auditing) understand the product and are able to integrate the product into the institution's risk measurement and control systems.

IV Internal controls and audits

1. Policies and related procedures for the operation of derivatives activities should be an extension of the institution's overall structure of internal controls and should be fully integrated into routine work-flows. A sound system of internal controls should promote effective and efficient operations; reliable financial and regulatory reporting; and compliance with relevant laws, regulations and policies of the institution. In determining whether internal controls meet those objectives, the institution should consider the overall control environment of the organisation; the process for identifying, analysing and managing risk; the adequacy of management information systems; and adherence to control activities such as approvals, confirmations and reconciliations. Reconciliation control is particularly important where there are differences in the valuation methodologies or systems used by the front and back officies.

2. An important step in the process of reviewing internal controls is the frequency, scope and findings of independent internal and external auditors and the ability of those auditors to review the institution's derivatives activities. Internal auditors should audit and test the risk management process and internal controls on a periodic basis, with the frequency based on a careful risk assessment. The depth and frequency of internal audits should be increased if weaknesses and significant issues are discovered, or if significant changes have been made to product lines,

modelling methodologies, the risk oversight process, internal controls or the overall risk profile of the institution. The facilitate the development of adequate controls, internal auditors should be brought into the product development process at the earliest possible stage.

3. Internal auditors are expected to evaluate the independence and overall effectiveness of the institution's risk management functions. In this regard, they should thoroughly evaluate the effectiveness of internal controls relevant to measuring, reporting and limiting risks. Internal auditors should evaluate compliance with risk limits and the reliability and timeliness of information reported to the institution's senior management and board of directos.

4. The internal auditors' assessment of the adequacy of internal controls involves a process of understanding, documenting, evaluating and testing an institution's internal control system. This assessment should include product or business line reviews which, in turn, should start with an assessment of the line's organisational structure. Especially for dealer operations, the auditors should check for adequate separation of duties (particularly between market-making personnel and functions of internal control and risk management), adequate oversight by a knowledgeable manager without day-to-day responsibilities in the dealer operation and the presence of separate reporting lines for risk management and internal control personnel on one side and for market-making personnel on the other. Product-by-product reviews of management structure should supplement the overall assessment of the organisational structure of the institution's derivatives business.

5. The institution should establish internal controls for key activities. For example, for transaction recording and processing, the institution should have written policies and procedures for recording trades, assess the trading area's adherence to policy and analyse the transaction processing cycle, including settlement, to ensure the integrity and accuracy of its records and management reports. The institution should review the revaluation process in order to assess the adequacy of written policies and procedures for revaluing positions and for creating any associated revaluation reserves. The institution should review compliance with revaluation policies and procedures, the frequency of revaluation and the independence and quality of the sources of revaluation prices,

especially of instruments originated and traded in illiquid markets. All significant internal controls associated with the management of market risk, such as position versus limit reports and approval policies and procedures for limit exceptions, should also be reviewed. The institution should also review the credit approval process to ensure that the risks of specific products are adequately captured and that credit approval procedures are followed for all transactions. In this connection, institutions should recognise their combined credit exposure to a given counterparty that arise from transactions conducted throughtout the bank.

ANNEXURE 4(C)

KEY RISKS FACED BY MARKET PARTICIPANTS

CREDIT RISK

The risk of loss in case of counterparty default.

Principal Risk -includes loan equivalent on Historic Rate Rollovers, mismatched payment swaps etc.

Mark-to-Market Risk -Fluctuating exposure from changing market price.

Trading Risk -Function of market appetite for an issuers securities the bank is trading in.

Delivery Risk -Arises from settlement of transactions.

EXCHANGE RISK

The risk of loss on open spot forex positions (be they arisen through spot trades, or through forward trades, or through delta equivalence of option trades) due to adverse movements in spot exchange rates.

Risk factors- size of the position and volatility of exchange rates.

INTEREST RATE RISK

The risk of loss on mismatched forward cash flows due to adverse movements in interest rates, and in the case of currency pairs with opposing cash flows, due to adverse movements in implied or actual interest rate differentials. This risk may arise through forex forwards, synthetic agreements on foreign exchange, (SAFE's). Future rate agreements (FRA's), delta equivalence of option trades and other such derivatives.

Directional -Risk of parallel shift in the yield curve.

Yield Curve -Risk of change in slope or new twist in the yield curve.

Net Interest Differential -Differences in interest rates for different currencies affect the forward swap points and thus forward FX prices.

Financing and Reinvestment Risk -Risk of loss due to an unexpected increase in short term funding costs.

BASIS RISK

Risk from hedging exposures using instruments with different characteristics such as different rate indices, markets, currencies, maturities. Risk is that the actual correlation between the instruments will be different from the anticipated.

Spread -Risk of change in correlation between zero coupon and govt yield curve.

Repricing Risk -Unfavourable rate movement causes reprice of a variable rate instrument to negatively impact the instruments market value.

Index Risk - Measuring a product using an index not aligned with hedging instrument.

Cash Basis -Risk that prices in cash and futures will not converge as expected.

Cross Market - Risk that movements in one market/ currency will not be offset by movements in other markets/currencies as anticipated.

VOLATILITY RISK

The risk of loss on open positions due to adverse movements in traded implied volatility.

LEGAL RISKS

Risk that a transaction is not valid and enforceable under applicable law.

Risk that netting arrangements and other rights provided for in standard derivative master agreements may not be honoured in the event of counterparty default or bankruptcy.

Risk that the customer does not have the power and authority to transact derivatives.

SYSTEMIC RISK

Risk that financial difficulties in one institution or a major market disruption will cause uncontrollable financial harm to other institutions or prevent the effective operation of the financial system generally.

OPERATIONAL & TECHNOLOGY RISK

Internal and External Authorisation- Risk that transactions have not been adequately authorised by the bank/customer.

Documentation Risk- Incomplete, missing or incorrect documents will impede the ability to enforce a valid claim against a customer.

Production Disruption Risk - Software, equipment failure, strikes, natural disasters.

Third Party Risk - Third party services will not perform as expected.

Annexure 5(A)

ACCOUNTING METHODS

There are two broad accounting bases that are being used:

. Cash basis; and

. Accruals basis.

1.Cash basis

Under this, transactions are recognised only when cash is actually received or paid. This method is simple but is not recommended since it provides opportunities for the manipulation of results by deferring or bringing forward settlements.

2. Accruals basis

This is the preferred and most popular basis of accounting. Transactions are recorded at their original costs but profits or losses are recognised when incurred. Several methods exist for recognising the gains or losses arising from transactions, including straight line (amortised cost), mark-to-market and lower of cost or market.

Under the straight line method, the gain or loss arising out of a contract is quantified at inception and recognised over the term of the contract. This method is adopted where reliable market prices do not exist. Under the mark-to-market method, gains or losses are recognised by revaluing the contracts at regular intervals at the prevailing market prices. The lower of cost or market (LOCOM) method is a hybrid method used in many countries. It is conservative since revaluation losses are recognised but revaluation gains are not.

ANNEXURE 5(B)

REVALUATION METHODS

There is an impact on the profit and loss account because of forward contracts that will mature after the reference date (i.e. the date as on which the profit or loss is calculated).

There are three revaluation methods that are generally followed to value these forward positions. They are as follows:

. Straight-line method;

. Rebate method; and

. Net Present Value method.

1. Straight line method

This generally applies to markets that are illiquid and where market prices are not available. In this case the premium or discount is recognised at the time of booking and is amortised over the life of the exposure on a straight line basis. This method is not recommended for markets that are liquid and where appropriate market prices are available for forward positions since it does not correctly reflect the mark-to-market value of forward positions.

2. Rebate method

Under this method the position is revalued at the current forward mid-rate (appropriately interpolated). This would reflect the impact of market changes on the relevant gap. The opening gap positions for the next period are valued at the market rates prevailing at the end of the prevailing period.

3. Net Present Value method

The gaps are revalued as under the rebate method. However, the results are then discounted using appropriate discount rates to reflect the cost of funds in the respective currency for the respective tenor. This method is the recommended one since it considers the net present value of the gaps and takes into account the time value of money. The profit or loss is not realised until the position matures, and it would therefore be wrong to book these revaluation amounts without discounting them.

It should be noted that in case gap positions do not exceed one year, it may be adequate to follow the rebate method since impact will not be material.

It is recommended that forward positions should not be aggregated month-wise for revaluation purposes since results could be manipulated. For example, if the forward points for one month are 7 and for two months is 14, it is possible for a trader to go long for one month and one day at say 8 points. If that gap is revalued against the market rate for two months it would show a profit of 6 points, which is not correct. Hence, forward positions should be revalued by interpolating the relevant month-end market rate for the appropriate forward. In case the systems of the financial institution do not permit such an evaluation, then an alternative would be to record forward positions in weekly buckets, which can be revalued using appropriate market rates.

It is important that all revaluations use the true market rates. In this regard it is recommended that FEDAI or any other appropriate body publish rates as is done for, say, LIBOR, where the rates of certain large players are averaged with outliers not being considered. Inter-bank rates should be used for both the spot and forward values.

It is recommended that forward positions be revalued daily on a memorandum basis. At least once a month this revaluation should be reflected in the books of accounts by crediting or debiting the "Income From Forex Account" for revaluation profits or losses respectively, and correspondingly debiting or crediting a "Revaluation Account For Forward Contracts".

ANNEXURE 5(C)

ACCOUNTING STANDARD 11 (REVISED)

Accounting for the effects of changes in forex rates

The following is the text of Accounting Standard AS(11), `Accounting for the Effects of Changes in Foreign Exchange Rates', issued by the Council of the Institute of Chartered Accountants of India.

This standard will come into effect in respect of accounting periods commencing on or after 1-4-1995 and will be mandatory in nature.

Objective

An enterprise may have transactions in foreign currencies or it may have foreign branches. Foreign currency transactions should be expressed in the enterprise's reporting currency and the financial statements of foreign branches should be translated into the enterprise's reporting currency, in order to include them in the financial statements of the enterprise.

The principal issues in accounting for foreign currency transactions and foreign branches are to decide which exchange rate to use and how to recognise in the financial statements the financial effect of changes in exchange rates.

Scope

1. This Statement should be applied by an enterprise:

   (a) in accounting for transactions in foreign currencies and

   (b) in translating the financial statements of foreign branches for inclusion in the financial statements of the enterprise.

Definitions

2. The following terms are used in this Statement with the meanings specified:

Reporting currency is the currency used in presenting the financial statements.

Foreign currency is a currency other than the reporting currency of an enterprise.

Exchange rate is the ratio for exchange of two currencies as applicable to the realisation of a specific asset or the payment of a specific liability or the recording of a specific transaction or a group of inter-related transactions.

Average rate is the mean of the exchange rates in force during a period.

Forward rate is the exchange rate established by the terms of an agreement for exchange of two currencies at a specified future date.

Closing rate is the exchange rate at the balance sheet date.

Monetary items are money held and assets and liabilities to be received or paid in fixed or determinable amounts of money, e.g., cash, receivables, payables.

Non-monetary items are assets and liabilities other than monetary items e.g. fixed assets, inventories, investments in equity shares.

Settlement date is the date at which a receivable is due to be collected or a payable is due to be paid.

Recoverable amount is the amount which the enterprise expects to recover from the future use of an asset, including its residual value on disposal.

FOREIGN CURRENCY TRANSACTIONS

Exchange Rate

3. A multiplicity of foreign exchange rate is possible in a given situation. In such a case, the term `exchange rate' refers to the rate which is applicable to the particular transaction.

4. The term 'exchange rate' is defined in this statement with reference to a specific asset, liability or transaction or a group of inter-related transactions. For the purpose of this statement, two or more transactions are considered inter-releated if, by virtue of being set off against one another or otherwise, they affect the net amount of reporting currency that will be available on, or required for, the settlement of those transactions. Although the exchange rates applicable to realisations and disbursements in a foreign currency may be different, an enterprise may, where legally permissible, partly use the receivables to settle the payables directly, in which case the payables and receivables are reported at the exchange rate as applicable to the net amount of receivable or payable. Further, where realisations are deposited into, and disursements made out of, a foreign currency bank account, all the transactions during a period (e.g. a month) are reported at a rate that approximates the actual rate during that period. However, where transactions cannot be considered inter-related as stated above, by set-off or otherwise, the receivables and payables are reported at the rates applicable to the respective amounts even where these are receivable from, or payable to, the same foreign party.

Recording Transactions on Initial Recognition

5. A transaction in a foreign currency should be recorded in the reporting currency by applying to the foreign currency amount the exchange rate between the reporting currency and the foreign currency at the date of the transaction, except as stated in para 4 above in respect of inter-related transactions.

6. A transaction in a foreign currency is recorded in the financial records of an enterprise as at the date on which the transaction occurs, normally using the exchange rate at that date. This exchange rate is often referred to as the spot rate. For practical reasons, a rate that approximates the actual rate is often used, for example, an average rate for all transactions during the week or month in which the transactions occur. However, if exchange rates fluctuate significantly, the use of the average rate for a period is unreliable.

Reporting Effects of Changes in Exchange Rates Subsequent to Initial Recognition

7. At each balance sheet date:

(a) monetary items denominated in a foreign currency (e.g. foreign currency notes, balances in bank accounts denominated in a foreign currency, and receivables, payables

and loans denominated in a foreign currency) should be reported using the closing rate. However, in certain circumstances, the closing rate may not reflect with reasonable accuracy the amount in reporting currency that is likely to be realised from, or required to disburse, a foreign currency monetary item at the balance sheet date, e.g., where there are restrictions on remittances or where the closing rate is unrealistic and it is not possible to effect an exchange of currencies at that rate at the balance sheet date. In such circumstances, the relevant monetary item should be reported in the reporting currency at the amount which is likely to be realised from, or required to disburse, such item at the balance sheet date;

(b) non-monetary items other than fixed assets, which are carried in terms of historical cost denominated in a foreign currency should be reported using the exchange rate at the date of the transaction;

(c) non-monetary items other than fixed assets, which are carried in terms of fair value or other similar valuation, e.g. net realisable value, denominated in a foreign currency should be reported using the exchange rates that existed when the values were determined (e.g.if the fair value is determined as on the balance sheet date, the exchange rate on the balance sheet date may be used); and

(d) the carrying amount of fixed assets should be adjusted as stated in paragraphs 10 and 11 below:

Recognition of Exchange Differences

8. Paragraphs 9 to 11 set out the accounting treatment required by this Statement in respect of exchange differences on foreign currency transactions.

9. Exchange differences arising on foreign currency transactions should be recognised as income or as expense in the period in which they arise, except as stated in paragraphs 10 and 11 below.

10. Exchange differences arising on repayment of liabilities incurred for the purpose of acquiring fixed assets, which are carried in terms of historical cost, should be adjusted in the carrying amount of the respective fixed assets. The carrying amount of such fixed assets should, to the extent not already so adjusted or otherwise accounted for, also be adjusted to account for any increase or decrease in the liability of the enterprise, as expressed in the reporting currency by applying the closing rate, for making payment towards the whole or a part of the cost of the assets or for repayment of the whole or a part of the monies borrowed by the enterprise from any person, directly or indirectly, in foreign currency specifically for the purpose of acquiring those assets.

11. The carrying amount of fixed assets which are carried in terms of revalued amounts should also be adjusted in the manner described in paragraph 10 above. However, such adjustment should not result in the net book value of a class of revalued fixed assets exceeding the recoverable amount of assets of that class, the remaining amount of the increase in liability, if any, being debited to the revaluation reserve, or to the profit and loss statement in the event of inadequacy of absence of the revaluation reserve.

12. An exchange difference results when there is a change in the exchange rate between the transaction date and the date of settlement of any monetary items arising from a foreign currency transaction. When the transaction is settled within the same accounting periods as that in which it occured, the entire exchange difference arises in that period. However, when the t ansaction is not settled in the same accounting period as that in which it occurred, the exchange difference arises over more than one accounting period.

Forward Exchange Contracts

13. An enterprise may enter into a forward exchange contract, or another financial instrument that is in substance a forward exchange contract, to establish the amount of the reporting currency required or available at the settlement date of a transaction. The difference between the forward rate and the exchange rate at date of the transaction should be recognised as income or expense over the life of the contract, except in

respect of liabilities incurred for acquiring fixed assets in which case such difference should be adjusted in the carrying amount of the respective fixed assets.

14. The difference between the forward rate and the exchange rate at the inception of a forward exchange contract is recognised as income or expense over the life of the contract. The only exception is in respect of forward exchange contracts related to liabilities in foreign currency incurred for acquisition of fixed assets.

15. Any profit or loss arising on cancellation or renewal of a forward exchange contract should be recognised as income or as expense for the period, except in case of a forward exchange contract relating to liabilities incurred for acquiring fixed assets, in which case, such profit or loss should be adjusted in the carrying amount of the respective fixed assets.

Depreciation

16. Where the carrying amount of a depreciable asset has undergone a change in accordance with paragraph 10 or paragraph 11 or paragraph 13 or paragraph 15 of this Statement, the depreciation on the revised unamortised depreciable amount should be provided in accordance with Accounting Standard (AS) 6, Depreciation Accounting.

TRANSLATION OF THE FINANCIAL STATEMENTS OF FOREIGN BRANCHES

17. The need for foreign currency translation arises in respect of the financial statements of foreign branches of the parent enterprise.

18. The financial statements of a foreign branch should be translated using the procedures in paragraphs 19 to 25 of this Statement.

19. Revenue items, except opening and closing inventories and depreciation, should be translated into reporting currency of the reporting enterprise at average rate. In appropriate circumstances, weighted average rate may be applied, e.g., where the income or expenses are not earned or incurred evenly during the accounting period (such as in the case of seasonal business) or where there are exceptionally wide

fluctuations in exchange rates during the accounting period. Opening and closing inventories should be translated at the rates prevalent at the commencement and close respectively of the accounting period. Depreciation should be translated at the rates used for the translation of the values of the assets on which depreciation is calculated.

20. Monetary items should be translated using the closing rate. However, in circumstances where the closing rate does not reflect with reasonable accuracy the amount in reporting currency that is likely to be realised from, or required to disburse, the foreign currency item at the balance sheet date, a rate that reflects approximately the likely realisation or disbursement as aforesaid should be used.

21. Non-monetary items other than inventories and fixed assets should be translated using the exchange rate at the date of the transaction.

22. Fixed assets should be translated using the exchange rate at the date of the transaction. Where there has been an increase or decrease in the liability of the enterprise, as expressed in Indian rupees by applying the closing rate, for making payment towards the whole or a part of the cost of a fixed asset or for repayment of the whole or a part of monies borrowed by the enterprise from any person, directly or indirectly, in foreign currency specifically for the purpose of acquiring a fixed asset, the amount by which the liability is so increased or reduced during the year, should be added to, or reduced from, the historical cost of the fixed asset concerned.

23. Balance in `head office account', whether debit or credit, should be reported at the amount of the balance in the `branch account' in the books of the head office after adjusting for unreponded transactions.

24. The net exchange difference resulting from the translation of items in the financial statements of a foreign branch should be recognised as income or as expense for the period, except to the extent adjusted in the carrying amount of the related fixed assets in accordance with paragraph 22 above.

25. Contingent liabilities should be translated into the reporting currency of the enterprise at the closing rate. The translation of contingent liabilities does not result in any exchange difference as defined in this Statement.

Disclosures

26. An enterprise should disclose -

(i) the amount of exchange differences included in the net profit or loss for the period;

(ii) the amount of exchange differences adjusted in the carrying amount of fixed assets during the accounting period; and

(iii) the amount of exchange differences in respect of forward exchange contracts to be recognised in the profit or loss for one or more subsequent accounting periods, as required by paragraph 13.

27. Disclosure is also encouraged of an enterprise's foreign currency risk management policy.

ANNEXURE 5(D)

ACCOUNTING FOR DERIVATIVES:

HEDGE ACCOUNTING

Definition

- a method of accounting for hedge instruments and the underlying hedged items that departs from normal accounting so that the books reflect the reduction in exposure to risk

.Example

- in order to guard against a fall in the value of a bond held, a company purchases a hedge
- fall in the value of the bond will be countered by a rise in the value of the hedge
- under normal accounting, only the unrealised loss on the bond is recognised; unrealised gain on the hedge is ignored
- Under hedge accounting both the unrealised loss and gain are recognised so that the presence of a hedge is reflected

.Criteria for adopting hedge accounting

the financial transaction/instrument must

- be designated as a hedge at the time it was entered into/purchased
- reduce exposure to a risk
- have a high level of correlation with the hedged item

Accounting for futures contracts

Accounting issue	Accounting practice
Hedge Contracts	
Treatment of initial margin	Treated as a prepayment and reversed on withdrawal.
Valuation of the underlying exposure	Valued at the exercise price of the futures contract unless required, by law, to be marked-to-market.

Treatment of variation margin receipts and payments	If the underlying exposure is carried at the exercise price of the futures contract, then variation margin receipts and payments are recorded as liabilities and assets respectively. If the underlying exposure is marked-to-market, then variation margin receipts and payments are recognised in the profit and loss account.

Trading contracts

Treatment of variation margin receipts and payments	Should be recognised in the profit and loss account.

Accounting for swap contracts

Hedge Contracts

Valuation of underlying exposure	Valued at the swap rate, unless required, by law, to be marked-to-market.
Valuation of the swap contract	Valued on the same basis as the underlying exposure
Recognition of arrangement fee	Should be recognised over the life of the swap

Trading contracts

Valuation of the swap contract	Should be marked-to-market
Recognition of arrangement fee	Should be recognised immediately

Accounting for option contracts

Hedge Contracts

Valuation of underlying exposure	Valued at original cost, unless required, by law, to be marked-to-market.

Treatment of option premium	Capitalised as a prepayment and either amortised over the life of the option(purchased options) or deferred till maturity (written options).
Valuation of the option	Valued on the same basis as the underlying exposure
Trading Contracts	
Valuation of the option	Should be marked-to-market

ANNEXURE 5(E)

GENERALLY ACCEPTED ACCOUNTING PRACTICE

The accounting practice described below is based on the Statement of Recommended Practices ('SORP') of the British Bankers' Association ('BBA'); accounting rules recommended or mandated by other bodies may vary.

Risk management

A derivative transaction used to hedge existing assets, liabilities, other off-balance sheet positions or future cash flows should be accounted for using hedge accounting principles, provided it satisfies the following criteria for qualifying as a hedge:

* the derivative transaction should be intended to be a hedge and must, in fact, provide a reasonable hedge
* the hedging transaction must match or eliminate a substantial portion of the market risk inherent in the hedged position
* adequate evidence of such intention to hedge should be established at the outset of the transaction.

Hedge accounting is necessary to deal with market risks connected with assets or liabilities that are accounted for using historical cost accounting. The effect of the hedge must be reflected in earnings in the same period as is the income on the item being hedged.

Hedge accounting criteria and application

To qualify for hedge accounting, a derivative transaction must meet the following three criteria:

a) The transaction should be intended to be a hedge and must in fact, provide reasonable hedge.

To qualify for hedge accounting, a hedge is supposed to reduce the organisation's exposure to unprotected adverse changes in market values. If assessment at the organisation level is not practicable, however, risk reduction can also be assessed at a business unit level. The hedge under consideration need not be a precise hedge but must match or eliminate a substantial portion of the market risk inherent in the asset, liability or position.

Unlike most accounting treatments, the use of hedge accounting is elective. To apply it, the organisation must designate a derivative

as a hedge. Even if a derivative functions as an economic hedge of a qualifying exposure, hedge accounting may not be used if the organisation has not designated the derivative as a hedge. In considering whether or not the derivative represents a hedge, it is necessary to have regard to the intention at the time the hedging transaction was entered into (or transferred from a separate portfolio) and whether or not it provides a reasonable hedge to the underlying exposure. Adequate evidence of such intention to hedge should be established at the outset of the hedging transaction and there should be clearly defined procedures in place for identifying such transactions.

b) The hedging transaction must match or eliminate a substantial portion of the market risk inherent in the hedged position.

The ability to use hedge accounting rests on whether changes in the market value of a hedge moves in an inverse direction to changes in the market value of the item being hedged. A derivative need not be based on the same index as the underlying item being hedged, but the two must nonetheless be highly correlated.

c) Adequate evidence of such intention to hedge should be established at the outset of the transaction.

Where an entity elects to designate a derivative transaction as a hedge, there must be adequate documentary evidence, at the time the transaction was entered into (or transferred from a separate portfolio), of the intention to hedge.

Hedge accounting mechanics

The following principles apply when hedge accounting is being followed in respect of a derivative transaction qualifying as a hedge:

* The hedging transaction should be valued on an equivalent basis to the item being hedged. It should therefore be marked-to-market, except where the item being hedged is being carried at original cost, in which case profits or losses should be spread or deferred in such a way as to match income with expenditure.

* Fees received at the outset of a hedging transaction, in substitution for a reduced income in future, should be spread over the life of the transaction.

* Fees or brokerage costs incurred on the transaction should be recognised in the same period as the income or a expenditure of the underlying item being hedged.

* Income and expenses related to the hedging transaction should be included in the same category of the profit and loss account as the income or expenses of the underlying item being hedged.

* Where a transaction originally designated as a hedge is superseded by a more precise hedge, the original hedge should be marked-to-market. Similarly, a hedge which ceases to be effective should be marked-to-market. In both cases, the profit or loss on revaluation should be amortised over the remaining life of the item being hedged.

* Where aggregate net losses are expected on any discrete group of transactions inclusive of their hedges, these losses should be recognised in full immediately.

Other uses

A derivative transaction that does not satisfy the hedge accounting criteria should be valued on the following principles:

* A derivative transaction that does not satisfy the hedge accounting criteria (i.e. which is bought or sold for trading or speculative purposes) should be marked-to-market, with the change in value reflected in current earnings in each reporting period.

* Where the market price is quoted as a range of prices, with a 'bid' and 'offer' spread, active participants may use the mid-market price (i. e. the average of the bid and offer prices), while other participants should use only the more prudent of the bid and offer prices.

* Where market prices are not available for a specific instrument but an active market exists for each of its components, the market price may be constructed from their quoted prices. However, an appropriate discount should be applied to such constructed prices. Likewise, where a market exists for an instrument but is not deep and liquid, or can be significantly affected by the position held, an appropriate discount should be applied to the market price.

* In case the transaction is not realisable in cash until maturity, such as forward foreign exchange, an appropriate discount rate should be applied to anticipated cash flows. In choosing an appropriate discount rate, account should be taken of the market interest rate for the relevant currency and the relevant period.

* A portion of the up-front trading profit is often deferred and amortised to cover credit costs, operational costs and other items. For more complex products, the uncertainties of valuing less liquid instruments have led some organisations to defer the full initial trading profit and to take it instead into income over the life of the contracts.

* Fees representing remuneration for services rendered, whose receipt

is not in doubt, should be recognised immediately. Fees representing remuneration for credit risk borne should be apportioned over the period that this risk is expected to be borne. Fees for arrangement of swaps and brokerage costs for forex transactions should normally be recognised immediately.

* Transfers from the trading portfolio to the hedge portfolio should be effected at market prices.

Other points

* Where it is considered doubtful that the counterparty to a derivative transaction will meet its future obligations, account should be taken of the cost of replacing the transaction when establishing specific provisions for credit loss.

* Setting off of transactions with negative values against those with positive values is not permitted unless

  - there is a legal right of set off

  - the transactions are with the same counterparty.

* The financial statements of the organisation should contain a disclosure of the accounting policies followed for valuation and income recognition. A note should be given if derivative contracts are classified, at the balance sheet date, as having been made for hedging or trading (or both).

* In addition to the notional principal amounts, the replacement cost and the credit risk-weighted amount should also be disclosed in the financial statements as shown below:

	Notional principal amount	Replacement equivalent amount	Risk weight	Risk weighted amount
Exchange rate and interest rate contracts	XXXX	XXXX	X-X%	XXX

ANNEXURE 5(F)

PROVISIONING FOR FUTURE CREDIT RISKS AND CAPITAL COSTS OF DERIVATIVES BOOKS

Regular "mark-to-market" valuation of medium term derivatives books is recommended, both for risk management and accounting purposes. However, it is recognized that as an accounting process this is at odds with two fundamental concepts - matching of costs and revenues, and prudence in income recognition. Marking to market, especially at mid-market rates, results in front-ending of unearned credit spreads and does not recognize future operating costs, hedging or close-out costs, and the cost of servicing capital required against risk weighted assets arising in future periods due to transactions booked in the current period.

Major bank participants in the derivatives market do, therefore, make allowance for credit risks, capital costs and other costs through provisioning mechanisms such as setting aside (and subsequently accruing) unearned credit spreads, adjusting (widening) bid/offer spreads for valuation purposes, and establishing specific reserves for capital and other costs. Recent regulatory guidance also points in the same direction.

In November 1991, the British Bankers' Association ("BBA") issued a Statement of Recommended Accounting Practice ("SORP") entitled "Off-balance sheet Instruments and Other Commitments and Contingent Liabilities". This BBA "SORP" recommends [para.41 (b)] for medium-term derivatives that "..A proportion of the net present value of any expected future profits...should be spread over the life of the transaction. In determining this proportion, banks should take account of all likely costs, including the cost of maintaining capital and of any continuing credit and other risks."

In the working paper of the Valuation and Market Risk Management Sub-committee of the Global Derivatives Study Group, issued as part of the Study on "Derivatives : Practices and Principles" by the Group of Thirty, it is headlined (Recommendation 3) that " Mid-market valuation adjustments should allow for expected future costs such as unearned credit spread, close-out costs, investing and funding costs, and administrative costs." The following paragraphs explain our recommended formula for a Valuation Reserve.

Unearned credit spread represents the amount set aside to cover expected credit losses and provide a return on credit exposure. It may be expressed as an appropriate fraction ("D" in the formula below) of the expected credit exposure on a derivative during its life ("CEA" in the formula below).

Derivatives dealers will expect to achieve a targeted return on notional capital ("RONC") on their derivatives books. In the absence of an appropriate reserve dealers with growing derivatives books would face a growing burden of risk - weighted assets from previous years derivatives deals. This problem would be accentuated if the BIS "Current Exposure" method is used, as risk-weighted asset levels would grow with time due to market rate movements. It is therefore recommended the valuation reserve should include a component [1(a) in the formula] for meeting "RONC" objectives in future years.

It is difficult to quantify the future costs of hedging and risk management (including the cost of "closing out" open exposures and managing the re-investment/borrowing of swap cash flows). The G-30 Working Paper referred to above states that there are a number of approches to adjusting for close-out costs. This points to the potential for wide variation in methodology, and the resultant risks of mis-statement of earnings for profit smoothing, etc. Furthermore, as part of the ongoing book management activity, such costs are likely to be covered out of general risk management earnings. A separate reserve for these hedging/funding costs is therefore not recommended. However, administrative or future processing costs may be estimated and reserved ("C" below).

VALUATION RESERVE FORMULA

1. Approach

Valuation Reserves consist of three elements:

(a) income set aside to meet a specified after-tax return on risk-weighted assets which will be generated in future accounting periods by medium-term transactions written in the current period.

(b) an allowance for future credit risk on credit equivalent amounts.

(c) anticipated future processing costs.

2. Definitions

(i) VR = Valuation Reserve (i.e. profit before tax withheld)

(ii) CEA = The sum of the anticipated future credit equivalent amounts for each year of the remaining life of the instrument, computed using BIS portfolio methodology and market, exchange and interest rate volatilities.

(iii) RW = Average BIS risk weighting (20% or 50%) on CEA.

(iv) RONC = Required after-tax return on notional capital.

(v) I = Assumed interest rate on notional capital (needed for RONC calculation).

(vi) CAR = Assumed capital adequacy ratio (needed for RONC calculation).

(vii) T = Tax rate (needed for RONC calculation).

(viii) D = Additional allowance for future credit risk.

(ix) C = Estimated future processing costs.

3. **Formulae**

For 1(a) above, (a) = $\frac{\text{CEA x RONC x RW x CAR}}{(I-T)}$

- CEA x RW x CAR x 1

For 1(b) above, (b) = CEA x D

For 1(c) above, (c) = C

Finally, total valuation reserve

VR = (a) + (b) + (c)

ANNEXURE 5(G)

EARNINGS AT RISK

Risk can be defined as the uncertainty of the outcome of a business activity that could result in a loss. Since risk is determined by probability of outcome, it can be measured and analysed using statistics. The probability distribution relates the magnitude of an uncertain outcome to the probability of its occurrence. The primary goal of risk measurement is to produce an accurate and unbiased estimate of future probability distribution. In the absence of a better alternative, historic data is used to estimate the future probability distribution. The historic time interval used should only include very recent past data that reflects the current volatility of the market.

Risk dollars represent a measure of the amount of potential loss that could arise for a given position over a 24-hour period in a normal market, based upon statistical analysis of the variability of past returns. Market prices for a recent period (e.g.the last 100 days) are studied - the mark-to-market value of the position is calculated using the past 100 days prices. The volatility of the resultant profit and loss is calculated within a two standard deviation confidence band as a measure of "risk dollars". The computed amount is a relative measure and is meant to provide a level of comfort to management as to the approximate level of risk in Profit/Loss terms. It is not an absolute measure as the actual amount of loss may be greater than the given risk dollars under extraordinary circumstances. On an average, the decline in value of the position is not expected to exceed risk dollars in more than 2.5% of the cases.

The following factors determine risk dollars for an individual position:

Size of the position.

Sensitivity of the positions market value to changes in market factors. For example, market factors for forex (FX) forward contracts are forex spot rates and interest rate differentials.

Volatility of the markets.

Take for example, the dollar risk on a GBP/USD 1,000,000 spot position. Based on historic data the dollar value of the position can be calculated

Date	Exchange Rate	$ Value = (Position x Exchange Rate)	Daily change
Day1	1.6810	$ 1,681,000	
Day2	1.6800	$ 1,680,000	- 1,000
Day3	1.6930	$ 1,693,000	+ 13,000
Day4	1.6740	$ 1,674,000	- 19,000
...	...	...	...
...	...	...	...
Day100	1.6587	$ 1,658,700	- 13,000
		Standard Deviation	11,400

The risk dollar total of the currency position is calculated as two standard deviations of the daily change in dollar value of the position for the last 100 days i.e. (2 x 11,400) = $ 22,800. In other words, in 97.50% of the cases, the maximum potential loss on a spot position of GBP/USD 1,000,000 held over a 24-hour period is USD 22,800.

The risk dollar equivalent can be calculated for any pair of currencies. Once the management has decided the amount of dollars they are willing to put at risk, either as a percentage of recent earnings or as a percentage of capital, using the risk dollar system, a total overnight limit can be established.

ANNEXURE 5(B)

EARNINGS AT RISK FOR FORWARD FOREX (FX) GAPS.

The risk dollar system can be used to measure potential loss that could arise for a given forward gap over a 24-hour period in a normal market. As illustrated in Annexure 5(G), market forward prices for 100 days are studied. The mark-to-market value of the forward position is calculated using the past 100 days prices. The volatility of the resultant profit and loss is calculated within a two standard deviation confidence band as a measure of "risk dollars".

Take for example the dollar risk on a USD/INR 1,000,000 spot-1 month forward position. Based on historic data the dollar value of the position can be calculated. All conversions are at the average forward USD/INR 1 month rate for the 100 day period of 31.43.

Date	IM Swap Rate	INR Value = (Position x Swap Rate)	Daily change	USD equiv of Daily change
Day1	5.50	INR 55,000	-	
Day2	5.75	INR 57,500	+ 2,500	+ 79.54
Day3	6.25	INR 62,500	+ 5,000	+ 159.00
Day4	5.50	INR 55,000	- 7,500	- 238.00
...				
...				
Day100	10.75	INR 107,500	- 10,000	- 318.00
		Standard Deviation		397.70

The risk dollar total of the currency position is calculated as two standard deviations of the daily change in dollar value of the position for the last 100 days i.e. (2 x 397.70) = USD 795.40. In other words, in 97.50% of the cases, the maximum potential loss on a 1 month forward position of USD/INR 1,000,000 held over a 24-hour period is USD 795.40.

The risk dollar equivalent can be calculated for any maturity. Once the management has decided the amount of dollars they are willing to put at risk, either as a percentage of recent earnings or as a percentage of capital, using the risk dollar system, a forward gap limit can be established.

Annexure 5(I)

EARNINGS AT RISK LIMITS ON CURRENCY OPTIONS BOOKS

Annexure 5(G) explains the general methodology to be followed for setting up an "earnings at risk" limit (also referred to in the business as "money at risk" or "risk dollar" limits) by using spot exchange risk as an example. Annexure 5(H) extends this methodology to forex forward gaps. The purpose of this annexure is to illustrate how such methodology may be used for currency options books.

An open position in a currency options book is exposed to price movements in the respective currency's spot exchange rate, interest rate differential, and traded implied volatility. We have already illustrated how statistical analysis of the last 100 overnight movements enables us to quantify a "Two Standard Deviation" price movement to be used to measure exposure from an open position at a very high (97.5%) level of confidence. The same logic can be applied to overnight movements in traded implied volatility, for typical option expiration periods such as 1 month, 3 months, 6 months to maturity. There will undoubtedly be variations across maturities, but for simplicity it may be preferable to define just one number. For the purpose of illustration, we take this as 1% p.a. across all maturities, although we note that there exist some off-the-shelf options risk management packages which enable the risk manager to input different overnight variabilities in volatility across option maturities.

The loss potential is not a simple or a linear function of spot rates and implied volatility prices, but rather a complex and inter-related function. For example, a change in implied volatility will alter the delta equivalence of an open options position, thus also changing its sensitivity to spot rate changes. It is therefore recommended that a risk management report be used to measure exposure which is in the form of a "matrix" of changes in the underlying exchange rate as well as implied volatility.

It will usually be found that, so long as the delta-equivalent forward forex gaps arising from options books are either extracted and included in the overall forex forward gap risk reports or controlled within forex forward sub-limits for the options book, it suffices to have a risk management report which is a "matrix" of just two variables mentioned above - spot exchange rate and implied volatility.

An example of such a "Risk Dollars" or "Earnings at Risk" matrix is given below:

Horizon: Overnight Current Rates: Spot =y, Implied Volatility = x

Volatility / Spot rate:	x - 1%	x %	x + 1%
y + 2 std. dev.	- 6,500	- 8,500	- 10,000
y + 1 std. dev.	6,000	4,500	2,000
y	11,500	7,000	4,000
y - 1 std. dev.	- 3,000	- 6,000	- 9,000
y - 2 std. dev.	-18,000	- 18,500	- 19,000

In this example, the " Earnings at Risk" is USD 19,000 which is the worst loss arising out of this matrix of possible changes in spot rate (plus/minus 2 std. deviations) and implied volatilities (plus/minus 1% p.a.). This exposure must be within the Earnings at Risk limit set by Senior Management as a percentage of capital or recent earnings.

Annexure 5(J)

TRANSACTION APPROPRIATENESS

It is recommended that dealers in derivatives follow the practices described herein to protect themselves from relationship risks as well as any possibility of recourse from end-users who have not followed their own policies, or have acted outside delegated authorities in transacting derivatives. This guideline is not intended to be, nor must it be construed as, an umbrella for inappropriate use of derivatives by end-users.

The "appropriateness standard" serves to ensure that banks make credit decisions for derivatives activities based upon the same principles as for non-derivative transactions. As in any credit transaction, the bank would evaluate the purpose of the derivative transaction and make an assessment as to whether its terms are appropriate given the counterparties business objectives, plans and strategies.

In every case, banks should explain each transaction to the customer so that the customer understands the transaction as well as the risks inherent in it. A derivative transaction should be viewed as appropriate for a customer if it

meets with a customer's needs

does not involve undue risks and

is consistent with the customers' policies and procedures as they are known to the bank.

The following should be considered:

The business risks the customer faces which can be managed by using derivatives

The risk involved in the transaction and their potential effect on the customer's ability to perform its obligations to the bank.

The customer's business or industry.

The customer's operational capabilities.

The ability of its officers to understand and manage risk positions.

It is expected that transactions a bank determines inappropriate would be originated by the customer rather than the bank.

Reasonable measures should be taken to determine whether a customer is sophisticated or not. A sophisticated customer is one who is knowledgeable about financial matters such that he/she can independantly evaluate derivative transactions. If the customer is not sophisticated and the bank is recommending a structure, the bank should have adequate information regarding the customer on which to base its recommendation.

The following additional action should be taken depending on the sophistication of the customer and the appropriateness of the transaction

1. Customer sophisticated, transaction appropriate

No additional documentation or disclosure required.

2. Customer sophisticated, transaction <u>not</u> appropriate

Additional information about the risks inherent in the transaction should be provided to the customer. The banks' analysis of the transaction and the information provided to the customer should be documented.

3. Customer <u>not</u> sophisticated, transaction appropriate.

Additional steps to ensure the customer understands the general market risk profile of the transaction and how the transaction will achieve the counterparty's objective. Written transaction descriptions should be provided to the customer. Copies of these as well as memo's summarising any verbal information provided to the customer should be filed.

4. Customer <u>not</u> sophisticated, transaction <u>not</u> appropriate.

Each bank must determine whether it will execute such transactions. A bank that executes such a transaction must document copies of the written description of the transaction given to the customer, memos summarising any verbal information provided to the customer, reasons why it believes such a transaction is inappropriate and details of the individuals involved in the discussions (both customer and bank).

ANNEXURE-5(K)

CHECKLIST FOR END-USERS

Before any organisation is permitted to enter into derivatives transactions, the following points should be properly addressed and appropriate policies and procedures established.

Senior management and treasury

* To what extent and how frequently an independent risk management group will measure the risks and value of derivatives positions.

* How much of the organisation's exposure treasury can hedge.

* How much derivatives market risk an organisation is willing to take on. Limits should include:

  - mark-to-market limits, which restrict further activity once losses have reached a certain level.

  - sensitivity limits, which limit estimated exposures to price movement.

* Which individuals are permitted to enter into derivatives transactions, and for what amount.

* How the organisation will measure its exposure to derivatives and how the exposure will be compared to market risk limits.

* Standards and guidelines for reporting to management on derivative positions and risk strategy effectiveness and the results of performance measurement.

Credit

* The type of counterparty with which an organisation is willing to engage in derivatives transactions and how the counterparty is approved.

* The maximum allowable market exposure to a counterparty.

* When collateral or other credit enhancements are required.

* Procedures to review regularly counterparty exposures and creditworthiness.

Processing and settlement

* How transactions with counterparties are confirmed, this should be done by a group independent of treasury.

* How confirmations and position statements from counterparties are reconciled with the records; this should also be done by an independent group.

* Who is responsible for recording derivatives activity and how the activity is recorded in the books and records.

* Identification of transactions that are settling, notifying the counterparty and the organisation's bank of impending settlements, controls over bank wires and comparison of expected with actual settlements.

Finance

* Establishing accounting requirements for derivatives.

* Accounting and financial statement treatment and disclosure of derivatives transactions.

* Tax treatment for compliance reporting.

This should suffice so long as the number of derivatives transactions remain low.

Organisations with extensive or increasing risk management activities should evaluate their long-term systems needs. A number of firms provide derivatives or risk management software packages. The most sophisticated packages include risk measurement, accounting and back office modules.

ANNEXURE 5(L)

COMMENTARY ON BASLE COMMITTEE'S (APRIL 1993) CONSULTATIVE PROPOSALS - CAPITAL REQUIREMENTS FOR FOREIGN EXCHANGE RISK

The Basle Capital Accord of July 1988 established a common measurement system and a minimum standard for the capital adequacy of international banks in the Group of Ten countries. These arrangements came into force at the end of 1992 and were also recommended by the Reserve Bank of India in April 1992, for gradual implementation across various groups of banks in India during the period 1993 to 1996.

The Basle Committee's recommendations focussed upon credit risk as the major source of exposure to bank profitability, and set out a comprehensive framework to capture in an equitable manner the credit risk inherent in a range of balance sheet and off- balance sheet products. The Basle Capital Accord was silent on two major issues, which had been considered but set aside for subsequent development and consultation. One of these issues was the treatment of various forms of netting, and the precise circumstances in which banks may be permitted to net the credit risk arising from trading in certain financial instruments such as interest rate and forex derivatives. The other issue, which is of primary importance for our Phase II planning, was the prescription of capital requirements for market price risks on open positions carried on banks' trading portfolios of debt and equity securities, foreign exchange and their respective derivatives. The Basle Committee (April 1993) circulated a consultative proposal on the treatment of netting and market price risk which details their recommendations for capital requirements in these areas.

The rationale for a capital charge for forex risk is self-evident. Exchange rates are volatile and open short or long currency positions can lead to sizeable losses, for which capital needs to be held. The Basle Committee addresses three tasks -measurement of currency exposure for a single currency, measurement of exposures for a bank's mix of long and short positions in different currencies, and determination of an appropriate capital charge.

The Committee defines the "Shorthand method" for calculating capital charge as a straight 8% of forex open position. In calculating the capital charge, the test applied by the Basle Committee is that the capital required should cover adequately a high proportion of losses that would have arisen in any 14-day holding period in a range of representative portfolios over the last five years. This rationale lends itself most naturally to the "simulation method" of determining forex exposure. This method entails the calculation of "simulated" losses which would have arisen historically had the given set of currency positions been carried through the chosen period. The magnitude of loss which is at a 95% confidence level is chosen as representing the capital required. The Committee also recommends the addition of a 3% "scaling factor" to the 95% confidence level of loss thus established.

The Committee's recommendations on measurement of currency position is based on the assumptions that (a) capital is put at risk only by existingcurrency positions rather than potential currency positions permitted by management and (b) that the measurement of actual positions on specific reporting dates does not materially differ from the average Foreign Exchange Risk carried by the institution.

It is the view of the group that these assumptions are not valid for the following reasons. Firstly, the nature of the Forex position is fluid, unlike a corporate asset or a guarantee which once booked, will remain on the books of the bank. The ability to vary the Forex position is delegated by Management to dealing desks, and the only conservative measure of potential risk is thus the overnight limit on Forex positions, and not the actual position. Secondly, it is not always feasible for a multi-branch organisation to measure its open Forex positions with accuracy (a fact recognised by the Basle Committee in its footnote No.29 on Section 4, paragraph 19 of the April 1993 consultative proposal). Thirdly, it is a concern in a developing market (such as India) that the possible reliance by some managements on a strategy to bring down Forex positions on specific reporting dates could allow a much higher level of risk to be carried on average without supporting capital, which could add to systemic risk.

It is not surprising that the Basle Committee finds that a "scaling factor" of 3% is required to "deliver approximate equivalence" [Section 4 (Forex Risk) paragraph 30] between the "simulation method" and the "shorthand method". Working backwards from the shorthand method ratio of 8%, subtracting the 3% scaling factor, and using a "Black-Scholes" based model for spot Forex markets, one can deduce that the approximate historic fortnightly volatility required for "approximate equivalence" is 12% to 13% per annum. This is in line with typical observed currency volatilities.

In the light of the above analysis the "scaling factor" could be seen as a "plug figure" which increases the risk assessment using simulation methodology (95% confidence/market movements over a fortnight) in order to equate it to the 8% "shorthand" number. Such an upward adjustment calls into question the Committee's argument (Market Risks, section 4, p ragraph 26) for a two week "holding period". In effect, the Committee has built in either a confidence level greater than 95%, or, at 95% confidence, an implied "holding period" greater than one month, which does not appear reasonable.

For the reasons above, the Group recommends that any capital charge should be applied to the Forex open position ("overnight") limits delegated to senior management of the dealing institution's treasury function. These limits are delegated, in so far as Authorised Dealers in India are concerned, with specific reference to and approval of the Reserve Bank of India and this practice should continue. It is also recommended that excesses over these limits continue to be reported to the RBI. This will enable the Control to question excessively frequent limit excesses which may be an indicator that there is inadequate capital to support currency speculation.

The Group agrees with and recommends for adoption, the "shorthand method" as a standard for stating the forex open position limit by ADs, for the purposes of RBI overnight position approval and for the purpose of calculating the capital charge. Whilst the "simulation method" described by the Basle Committee is the more appropriate system the Group does not recommend its inclusion in our plan as it may prove too difficult to administer in India, or detract from the objective of a "level playing field" for capital requirements amongst market participants, or both.

The Group recommends a factor of 5% of the forex open position limit as against 8% proposed under the "shorthand method". This 5% factor is closer to the expected result from following the "simulation method", but without the added conservatism of 3% "scaling factor" recommended by the Basle Committee.

ANNEXURE 6(A)

OFF-SHORE BANKING UNITS

The long term objective of economic reforms and reforms in the financial sector is the eventual globalisation of the financial markets through integration of the domestic and international financial markets. This objective is sought to be achieved in a phased manner for a smoother transition. Setting up of a centre within India to encourage off-shore transactions is considered an important step towards development of a centre as a financial centre - particularly for countries which have not yet achieved capital account convertibility.

Off-shore banking centres (or international banking facilities) have been set up even by countries such as United States and Japan, which have no exchange control regulations to encourage flows of foreign trade/investments. Similarly, Singapore has been able to derive all the advantages of a developed financial centre without internationalising its currency fully through the 'Off-shore route'. Bangkok has been similarly promoting iteself as an offshore centre by permitting such entities on a controlled and restricted basis.

Despite the long held perception that there are no clear advantages in establishing such a centre with the attendant pressure to liberalise Domestic Foreign Exchange Markets prematurely, there is evidence now to suggest a multitude of benefits such as (a) increase in skilled employment (both direct and with multiplier effects); (b) imparting of valuable training and exposure to international banking for local Financial Institution(s); (c) increasing depth and scope of services available to exporters/importers/investors; (d) increased investment in world class infrastructure and transfer of latest banking technology, especially Treasury skills and products on an ongoing basis. In addition several other indirect benefits like attracting regional (South Asian) Foreign Exchange business and improved international perceptions of the country with foreign investors/ institutions are envisaged.

It is consequently recommended that:

1. Off-shore Banking Units (OBU) may be allowed to be set up by scheduled commercial banks operating in India as part of and within the existing bank titled "domestic OBUs". Foreign banks not operating in India will not be permitted to operate only as domestic `OBU'.

2. The unit shall maintain its own separate accounting which will be audited separately and strictly.

3. The OBU may be allowed to undertake the following business:

Sources of funds

i) Acceptance of deposits or borrowings in foreign currency from non-residents including foreign entities and other foreign branches of Indian banks and issuance of Foreign Currency Certificates of Deposits. [The Reserve Bank of India (RBI) would lay down account opening criteria. etc.]

ii) Acceptance of funds as deposits/borrowings from only those residents who are eligible to hold foreign currency accounts such as EEFC/RFC. Although these funds cannot strictly be deemed as off-shore funds, the objective of permitting this to be held in "off-shore books", is to increase the source of foreign currency funds which are free of reserve requirements so that liquidity and pricing of these is more in line with international rates and are competitive. This will greatly benefit exporters.

iii)Taking deposits from other domestic OBUs in India.

Deployment of funds

The funds can be deployed by way of:

i) Lending to any non-resident.

ii) Specific category of investments permitted by RBI.

iii) Loans to other domestic OBUs.

iv) Loans to domestic entities in foreign currency for project/ infrastructure finance under RBI's general or specific permissions.

Other business

These domestic OBUs should also be permitted to:

i) Undertake Foreign Exchange dealings with Non-Residents, other domestic OBUs and Authorised Dealers not involving local currency.

ii) Issue Guarantees and do other business not involving domestic currency/local exposure.

iii) Loan syndication and management in foreign currency for loans raised abroad or booked in their own books.

iv) Opening, advising, negotiating and confirming LCs in Foreign Currencies where both the parties are Non-Residents.

v) Financial Advisory Services.

4. The OBU will be subject to strict regulation by the RBI including capital adequacy, exposure norms, accounting standards, gap limits etc. Besides prescribing eligibility criteria for allowing setting up of such units, RBI may also specify a limit on the total assets/liabilities. The limit will be subject to review from time to time.

5. For this suggestion to take off, the following minimum measures will be necessary:

a) The liabilities of the OBU will have to be exempt from CRR/SLR requirements. RBI may however prescribe minimum liquid assets requirement for prudential reasons if felt necessary.

b) The income tax should be very low not exceeding 10%

c) There should be no Withholding Tax on deposits raised from Non-Residents.

d) Stamp duty should be exempt.

These conditions would enable such units to be competitive with other such regional centres so as to attract Non-Resident business for its growth. The clear identification/separation of funds flow in the domestic OBUs and the parent bank will ensure that foreign currency flows do not impact domestic monetary aggregates. This itself will justify exemption from CRR/SLR requirements.

Setting up domestic OBUs are seen as an interim (but necessary) step towards development/sophistication of the Indian Foreign Exchange Markets. Any future plans of full convertibility of the Indian Rupee are greatly dependant on narrowing the gap between International Financial Markets and Domestic Markets. Domestic OBUs offer the benefit of providing Indian Financial Institutions global know-how / human skills/technology/infrastructure in a relatively controlled environment prior to opening up the Foreign Exchange Markets to full impact of convertibility.

Consequently, this step should be viewed as an interim but a "safer" alternative as a pre-requisite to global integration of our hitherto insulated Foreign Exchange Markets.