V DEVELOPMENT AND REGULATION OF FINANCIAL MARKETS

The financial markets functioned smoothly during 2010-11. With a view to further strengthening the regulatory architecture while promoting greater efficiency in the financial markets, the Reserve Bank initiated policy measures to address certain regulatory gaps, promote transparency and improve liquidity in the money markets. The policy initiatives in the area of foreign exchange management were directed towards procedural simplifications and maintaining sustainability of the liberalisation process. In the derivatives market, the Reserve Bank persisted with a calibrated and sequential approach towards launching of new market instruments keeping a balance between financial stability issues and market efficiency.

V.1 Financial stability has been recognised as a key objective of the Reserve Bank's monetary policy. Financial stability entails stability of the financial markets and financial institutions. Financial market stability minimises uncertainties and facilitates investment decision making with due assignment of measurable risks. Market development augments market efficiency that reduces transaction costs, promotes transparency, establishes benchmarks for the purpose of pricing, and fosters long-term savings and investment for growth. Market instability affects risk taking behaviour and impedes sustained growth and hence financial market regulation is necessary for growth. Development and regulation of financial markets can, however, entail trade-offs at least in the short run, when the regulatory measures that are designed to promote financial stability impede market efficiency. Accordingly, the recognition of the trade-offs to achieve the best possible outcome is a requisite for a central bank that is vested with the responsibility of the development and the regulation of the various segments of the financial markets.

MONEY MARKET

V.2 The money market is an important segment of the financial market because it not only reflects the impact of liquidity mismatch in the system but also operates as the first leg in transmitting monetary policy changes to the other parts of the financial system. With liquidity transiting to a deficit mode in May 2010, policy measures during 2010-11 were aimed at ensuring smooth functioning of the markets so as not to destabilise economic activity. Against this macroeconomic backdrop, policy measures were taken with a view to addressing certain regulatory gaps, promote transparency and improve liquidity in the money market.

Regulation of NCDs of maturity up to one year

V.3 In order to address the regulatory gap that existed in the case of issuance of NCDs of maturity up to one year through private placement, the Reserve Bank issued Directions in terms of section 45W of the RBI (Amendment) Act, 2006 on June 23, 2010. The Directions provide for regulation of the issuance of NCDs of maturity up to one year, which are money market instruments. The Directions are applicable to both secured as well as unsecured NCDs. As per the Directions, NCDs cannot be issued for maturity less than 90 days and cannot have call/put options that are exercisable within 90 days from the date of issue. The eligibility criteria, rating requirements, *etc*., for these NCDs have been prescribed broadly in line with the extant guidelines on issuance of CPs. Taking into account the feedback received from the market participants, the Reserve Bank has issued an amendment Direction on December 6, 2010, *inter alia*, permitting financial institutions (FIs) to invest in NCDs of maturity up to one year; non-banking financial companies including Primary Dealers that do not maintain a working capital limit to issue NCDs of maturity up to one year; and FIIs to invest in NCDs of maturity up to one year subject to extant provisions of FEMA and SEBI guidelines issued in this regard.

Reporting platform for CDs and CPs

V.4 Towards transparency in the secondary market for CDs and CPs, the Reserve Bank introduced a reporting platform for all secondary market transactions in CDs and CPs. The reporting platform was operationalised by FIMMDA with effect from July 1, 2010. The Reserve Bank, SEBI and IRDA have mandated all their regulated entities to report their OTC trades in CDs and CPs on the FIMMDA reporting platform.

Repo in corporate bonds

V.5 As a measure aimed at provision of liquidity to the corporate bond market, the Reserve Bank had issued guidelines in January 2010, permitting repo in corporate bonds. To further facilitate repo transactions in corporate bonds, a review of the guidelines governing repo in corporate bonds was undertaken by the Reserve Bank in consultation with the market participants. Consequently, the minimum haircut applicable on the underlying collateral has been revised from 25 per cent to 10 per cent (in case of AAA-rated bonds), 12 per cent (AA+) and 15 per cent (AA). Further, settlement of repo trades in corporate bonds on a T+0 basis (in addition to T+1 and T+2) has also been permitted.

GOVERNMENT SECURITIES MARKET

V.6 The government securities market is a key segment of the financial market as it finances the fisc in a cost effective manner, provides reference points for the pricing of corporate debt, serves as a conduit for monetary policy transmission across the maturity spectrum and also provides the wherewithal for the central bank's liquidity management by way of open market operations. During 2010-11, the purchase of government securities from the market participants under the open market operations served to infuse liquidity and reduce the structural liquidity mismatches. During the recent years, the Reserve Bank has been taking a series of measures that has contributed to price discovery, widening of investor base, increasing transparency of the market and safeguarding the financial system. The initiatives regarding the development of the government securities market during 2010-11 were aimed at ensuring a balance between greater market liquidity and effective regulation.

Government Securities Act, 2006, Sections 27 & 30 - Imposition of penalty for bouncing of SGL forms

V.7 The guidelines for SGL transfer were reviewed in the light of the provisions of sections 27 and 30(3) of the Government Securities Act, 2006 and the existing regulatory penalty for SGL bouncing was replaced with a transparent and rule-based pecuniary penalty in July 2010. Under the revised guidelines, graded monetary penalties (subject to a maximum penalty of ₹5 lakh per instance) are charged for the first nine instances in a financial year while the tenth default would lead to debarment from undertaking short sales for the remaining part of the financial year. The permission to undertake short sales shall be restored in the next financial year subject to certain requirements in terms of improved internal controls, *etc*.

Extension of DvP III facility in the Government Securities market to Gilt Account Holders

V.8 The settlement of trades in Government securities through CCIL was shifted from DvP II to DvP III with effect from April 2, 2004. The DvP III facility was not, however, available to transactions by the gilt account holders. With the stabilisation of the transaction and settlement infrastructure, DvP III facility has been extended in July 2011 to transactions by the gilt account holders (excluding transactions between the gilt account holders of the same custodian) so that the gilt account holders get the benefit of efficient use of funds and securities.

FOREIGN EXCHANGE MARKET

V.9 During 2010-11, capital flows were largely absorbed by the current account deficit (CAD). FII investment, ECBs, external assistance and NRI deposits dominated capital flows during the year. However, the slowdown in inward FDI was a cause for concern, although inward FDI during 2011-12 (April-June) has been encouraging. The policy initiatives in the area of foreign exchange management during the year under review were directed towards procedural simplifications, stability of forex market and maintaining sustainability of the liberalisation process.

Current Account

V.10 The specific counter cyclical measures initiated during the crisis period were either scaled down or rolled back as part of the exit policy. The special rupee refinance facility to the EXIM Bank was discontinued with effect from April 1, 2010, and the swap facility to it was scaled down from US $ 1 billion to US $ 525 million (the outstanding level as on January 25, 2010) and the same was made available up to September 30, 2010.

V.11 With the continued recession in the advanced economies impacting India's exports in the immediate post crisis period, the relaxation allowed to exporters in realisation and repatriation of export proceeds within 12 months from the date of export of goods and services was extended up to September 30, 2011. In case of write-off of unrealised export bills, AD Category – I banks were advised not to insist on surrender of the proportionate incentives, subject to certain terms and conditions, other than those under the Duty Drawback Scheme, if availed of by the exporters under any of the Export Promotion Schemes under the Foreign Trade Policy 2009-14.

V.12 Acknowledging the importance of the services provided by the Online Payment Gateway Service Providers (OPGSPs) to the exporters in facilitating export transactions, particularly for small value goods and services, suitable guidelines to ensure orderly conduct of such transactions in line with the FEMA Regulations, have been issued to AD banks.

V.13 To facilitate greater use of Indian Rupee in trade transactions, non-resident importers and exporters have now been permitted to hedge their currency risk in respect of exports from and imports to India invoiced in Indian Rupees with AD category I banks in India.

V.14 The currency component of foreign exchange for visits abroad was reviewed and increased during the year to US $ 3,000 or its equivalent, as against US $ 2,000 earlier to a traveller proceeding to countries other than Iraq, Libya, Islamic Republic of Iran, Russian Federation and other Republics of Commonwealth of Independent States, without the prior permission from the Reserve Bank.

V.15 AD Category – I banks were required to obtain an unconditional, irrevocable standby Letter of Credit (LC) or a guarantee from an international bank of repute situated outside India or a guarantee of an AD Category – I bank in India, if such a guarantee is issued against the counter guarantee of an international bank of repute situated outside India, for an advance remittance for imports of goods exceeding US $ 100,000 or its equivalent. The limit has been enhanced to US $ 200,000 or its equivalent, for importers other than a Public Sector Company or a Department/Undertaking of Central/State Governments where the requirement of bank guarantee is to be specifically waived by the Ministry of Finance, Government of India for advance remittances exceeding US $ 100,000 or its equivalent.

Capital Account

V.16 ECB policies have been progressively liberalised to channelise more external funds to the infrastructure sector. The recent liberalisation measures include expansion of the definition of infrastructure to include "cold storage or cold room facility, including for farm level pre-cooling, for preservation or storage of agricultural and allied produce, marine products and meat", allowing Infrastructure Finance Companies (IFCs) for availing ECBs for on-lending to the infrastructure sector, facility of credit enhancement for raising debt through capital market instruments by entities in the infrastructure sector and the scheme of take-out finance through ECB under the approval route for refinancing of rupee loans availed from domestic banks for development of new projects in the sea port and air port, roads including bridges and power sector. Corporates engaged in the development of integrated township were permitted to avail of ECB, under the approval route, up to end-December 2010. Corporates in select services sectors, such as software, hospital and hotel have been allowed to avail ECB above US $ 100 million under the approval route.

V.17 The facility of premature buyback of FCCBs which was available up to end-June, 2011 has been extended up to end-March, 2012 with reduced minimum discount rates. In order to meet the redemption obligations, Indian companies have been allowed to raise fresh ECBs/FCCBs as per the extant ECB guidelines under the automatic route to refinance their outstanding obligations, subject to certain conditions.

V.18 Keeping in view the requirement of huge funds for the infrastructure sector and to enable the development of government securities and corporate bond markets in the country in a calibrated manner, the FII investment limits were enhanced from US $ 5 billion to US $ 10 billion in respect of government securities and from US $ 15 billion to US $ 40 billion in respect of corporate bonds issued by companies in the infrastructure sector, subject to the condition that the incremental limit should be earmarked for investment in corporate bonds with a residual maturity of over five years. The incremental limit in corporate bonds will have to be earmarked for investment in the corporate bonds issued by the companies in the infrastructure sector, as defined under the ECB policy. This measure, besides augmenting the flow of finance to the infrastructure sector, would also enhance the liquidity of long-term papers.

V.19 Keeping in view the utility and usage of the instrument of performance guarantees in project executions abroad and also considering the risks associated with such guarantees *vis-a-vis* financial guarantees, henceforth only 50 per cent of the amount of the performance guarantees would be reckoned for the purpose of computing financial commitment to its JV/WOS overseas, within the 400 per cent of the net worth of the Indian Party. Irrespective of whether the direct subsidiary is an operating company or a SPV, the Indian promoter entity may extend corporate guarantee on behalf of the first generation step down operating company under the Automatic Route, within the prevailing limit for overseas direct investment. Further, the areas relating to restructuring of the balance sheet of the overseas entity involving write-off of capital and receivables and disinvestment by the Indian Parties of their stake in an overseas JV/WOS involving write-off were liberalised.

V.20 Non-resident investors (other than SEBI registered FIIs and SEBI registered FVCIs) who meet the KYC requirements of SEBI, have been permitted to purchase on repatriation basis rupee denominated units of equity schemes of domestic MFs, within an overall ceiling of US$ 10 billion. These investors have also been allowed to invest up to an additional amount of US$ 3 billion in units of debt schemes of domestic MFs which invest in infrastructure (as defined under the ECB norms) with a minimum residual maturity of 5 years, within the existing ceiling of US$ 25 billion for FII investment in corporate bonds issued by infrastructure companies.

V.21 Recognising the important contribution of non-resident Indians (NRIs) and persons of Indian origin (PIOs) in India’s growth process and the need for facilitating genuine foreign exchange transactions by non-resident Indians (NRIs) as well as resident individuals under the current regulatory framework of FEMA, a committee (Chairperson: Smt. K.J. Udeshi) has been constituted in April 2011 to identify areas for streamlining and simplifying the procedure so as to remove the operational impediments, and assess the level of efficiency in the functioning of authorised persons, including the infrastructure created by them. The Committee submitted its report in August 2011. The recommendations of the Committee are under examination.

DERIVATIVES MARKET

V.22 Derivatives can serve as important instruments in the development of the financial markets when these instruments permit portfolio diversification and risk hedging, thereby ensuring financial stability. Derivatives can, however, turn out to be a double-edged sword as the global financial crisis would testify. During the post-crisis period, instead of addressing the risks, derivatives emerged as the source of off balance sheet and hidden exposures of banks and financial institutions. In India, the Reserve Bank has persisted with a calibrated and sequential approach towards launching of new market instruments in recognition of the trade-offs between financial stability issues and market efficiency.

Introduction Interest Rate Futures (IRF) on 91-Day T-Bills

V.23 The Interest Rate Futures contract on 10-year notional coupon bearing Government of India security was re-introduced on August 31, 2009. Based on the market feedback and the recommendations of the Technical Advisory Committee (TAC) on the Money, Foreign Exchange and Government Securities Markets, it was decided to introduce short-tenor IRF contracts. Accordingly, in order to provide participants with additional instruments to manage volatility in the short-term interest rates, IRFs on 91-day Treasury Bills were permitted since March 2011.

Introduction of Credit Default Swaps (CDS)

V.24 Lack of instruments to manage credit risk was a long-felt need and to address the same the introduction of credit default swaps was taken up in 2003 and further followed up in 2007. However, the initiatives had to be put on hold in view of the unfolding of the global financial crisis. Taking into account the lessons learnt from global financial crisis, it was decided to permit CDS on corporate bonds and the final guidelines in this regard were issued in May 2011 (Box V.1).

Exchange Traded Currency Derivatives

V.25 The currency futures market remained active during 2010-11. The average daily turnover in currency futures on the three active exchanges (NSE, MCX-SX and USE) stood at US $ 8.0 billion in March 2011 as against US $ 7.1 billion in March 2010. Increased globalisation of the economy increases the foreign exchange exposure of Indian firms and individuals with exchange rate risk arising from domestic and global financial market developments. This has necessitated introduction of various instruments by the Reserve Bank to hedge the exchange exposure by the residents. Currently, residents in India are permitted to trade in futures contracts in four currency pairs on recognised stock exchanges.

V.26 In order to expand the menu of tools for hedging currency risk, recognised stock exchanges were permitted to introduce plain vanilla currency options on spot US Dollar/Rupee exchange rate for residents. The exchange traded currency options market is functioning subject to the guidelines issued by the Reserve Bank and the Securities and Exchange Board of India (SEBI) from time to time.

V.27 In view of the large positions held by the FIIs and considering the increased depth of the Indian forex market to absorb the impact on the exchange rate, FIIs have now been permitted to cancel and rebook up to 10 per cent of the market value of the portfolio as at the beginning of the financial year as against 2 per cent that was permitted earlier.

Non-deliverable Forwards Market

V.28 NDF market exists mostly in non-convertible or in currencies with limited on-shore hedging options. With increasing capital flows to the EMEs, the NDF market offers a convenient hedging mechanism for foreign investors who may not have full access to the onshore market of the concerned currency due to restrictions or may prefer to transact in an international financial centre they are familiar with for the sake of convenience. Though comprehensive information is not available on the global NDF market, Brazilian Real, Chinese Renminbi, Taiwanese dollar, South Korean Won and the Indian Rupee reportedly account for the major share. The major centres for the Indian Rupee NDF market are reportedly Singapore, London, New York and Hong Kong. In India, the linkage between the NDF market and the domestic financial markets remains weak (Box V.2).

Box V.1
Guidelines on Credit Default Swaps (CDS) for Corporate Bonds

Introduction of credit derivatives in India was actively examined in the past to provide the market participants tools to manage credit risk. Accordingly, draft guidelines on introduction of CDS were issued in 2003 and 2007. However, taking into account the status of the risk management practices then prevailing in the banking system and also the experiences relating to the financial crisis, the issuance of final guidelines was deferred.

The matter was reviewed and the Second Quarter Review of Monetary Policy of 2009-10 had proposed introduction of plain vanilla OTC single-name CDS for corporate bonds subject to appropriate safeguards. Accordingly, an internal Working Group was constituted to finalise the operational framework for the introduction of single-name CDS for corporate bonds in India. The Group submitted its final report in February, 2011. Based on the recommendations of the report, the draft guidelines on CDS were prepared and placed on the Bank's website on February 23, 2011 for public comments. Taking into account the feedback received from the market participants and other stake holders, the final guidelines on CDS were issued on May 23, 2011 and would become effective from October 24, 2011.

The salient features of the guidelines are as under:

- The CDS shall be permitted on listed corporate bonds, unlisted but rated bonds of infrastructure companies and unlisted/unrated bonds issued by the Special Purpose Vehicles (SPVs) set up by infrastructure companies as reference obligations.
- The reference entities shall be single legal resident entities.
- The permitted participants have been categorised into:
  - a) Market Makers: Participants such as Commercial Banks, NBFCs and stand-alone Primary Dealers are permitted to undertake both protection buying and protection selling subject to satisfying the prescribed eligibility norms. Insurance Companies and Mutual Funds would be allowed to act as market-makers subject to the approval of their respective regulators.
  - b) Users: Participants permitted only to hedge their underlying exposures, such as, Commercial Banks, Primary Dealers, NBFCs, Mutual Funds, Insurance Companies, Housing Finance Companies, Provident Funds, Foreign Institutional Investors (FIIs) and listed corporates.
- Users cannot purchase CDS without having the underlying exposure and the protection can be bought only to the extent (both in terms of quantum and tenor) of such underlying risk.
- For users, physical settlement is mandatory. Market-makers can opt for any of the three settlement methods (physical, cash or auction settlement), provided the CDS documentation envisages such settlement.
- The CDS contracts shall be standardised in terms of coupon, coupon payment dates, *etc*.
- Bankruptcy, Failure to pay, Repudiation/moratorium, Obligation acceleration, Obligation default, Restructuring approved under Board for Industrial and Financial Reconstruction (BIFR) and Corporate Debt Restructuring (CDR) mechanism and corporate bond restructuring are the eligible credit events for CDS.
- As CDS markets are exposed to various risks, such as, sudden increases in credit spreads resulting in mark-to-market losses, jump-to-default risk, basis risk, counterparty risks, *etc*., market participants are required to take these risks into account and build robust and appropriate risk management system to manage such risks. The guidelines specifically prescribe for having counterparty credit exposure limits, PV01[1] limit and an independent risk management framework for reporting, monitoring and controlling all aspects of risks, assessing performance, valuing exposures, monitoring and enforcing position and other limits for CDS.
- Market-makers shall report their CDS trades with both users and other market-makers on the reporting platform of CDS trade repository within 30 minutes from the deal time. The trade repository would disseminate key information on market participants' positions and help regulators and market participants gain a clear and complete snapshot of the market's overall risk exposure to CDS.

OTC Foreign Exchange Derivatives

V.29 The comprehensive guidelines on OTC foreign exchange derivatives and overseas hedging of commodity price and freight risks were issued in December 2010. The important elements of the revised guidelines, which became effective in February 2011 are: (i) AD Category I banks can only offer plain vanilla European cross currency options; (ii) allowing embedded cross currency option in the case of foreign currency-rupee swaps; (iii) permitting use of cost reduction structures, both under the

[1] Change in price of Rs.100 nominal bond for one basis point change in yield.

Box V.2

NDF Market and its Implications for the Domestic Financial Markets

A non deliverable forward (NDF) refers to an OTC forward transaction that is settled not by delivery but by exchange of the difference between the contracted rate and some reference rate. Such transactions usually involve a non-convertible (with some degree of capital control) or in currencies with limited on-shore hedging options and take place in an offshore location either in order to overcome on-shore regulations or because it is convenient for the transacting parties. The contract is for a fixed amount (of the non-convertible currency), on a specific due date, and at an agreed forward rate. At maturity, the prevailing spot rate (reference rate) is compared with the contracted NDF rate. The difference is usually paid in the convertible currency on the maturity date. There is no delivery of the reference or domestic currency on the maturity date. No payment or account movement takes place in the non-convertible currency. When a NDF transaction is agreed, the parties must also agree on a way to determine the reference rate (at maturity). This might be the daily rate fixed by the central bank in question, or an average rate published by several banks. NDFs require a special contract that meets the provisions of the internationally recognised International Swaps and Derivatives Association (ISDA).

NDF market in Indian Rupee

The demand for Rupee NDF may arise from many sources, *e.g.*

1. Hedge funds/FIIs for hedging potential future exposure to Indian equity/bond market (since the present dispensation allows hedging only of actual, but not potential, exposures);
2. MNCs having manufacturing or business interests in India, who do their invoicing in Indian Rupee but are not allowed to hedge their rupee exposure; and
3. Directional bet by the speculators on the Indian Rupee without any underlying exposure.

The linkage between the NDF market and the domestic market may come from banks and corporates who have global books and can, therefore, take offsetting positions in their foreign and Indian books. This linkage would transmit the price movement in the NDF market to the domestic market or *vice versa*. However, the linkage is weak because corporates' domestic forex forward transaction is based on underlying exposure and there is a limit on the aggregate (cash and derivative) positions that banks can take. The empirical analysis also brings out a weak causality between the NDF and domestic market rates.

Reference :

Padmanabhan, G. (2011), 'Forex Market Development - Issues and Challenges: Thoughts of a Returning Forex Market Regulator,' Keynote address at the seminar of Forex Association of India, Singapore, August 13.

contracted exposures and past performance routes, subject to certain safeguards; and (iv) allowing swaps to move from rupee liability to forex liability, subject to certain safeguards.

V.30 With the return to normalcy in the financial markets, the Reserve Bank persisted with its objective of maintaining an appropriate balance between its market development objectives and effective regulation in order to promote financial stability which is a precondition for long term sustainable growth. Policy measures were taken with a view to addressing certain regulatory gaps, promoting transparency and improving liquidity in the financial markets. The Reserve Bank's calibrated and sequential approach towards the introduction of new market instruments in recognition of the trade-offs between financial stability issues and market efficiency has contributed to the stability of financial markets.