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EDITORIAL,

Dear Readers,

This is the last issue for the year 2005. There are two observations and six papers in this issue.

Dr P A Rego from Mangalore University explores the impact of common currency EURO in Europe and writes that the main objective of the formation of EU is to create a Unique European Common Market and bring in the benefits of enhanced market competition and integration. Such European integration will have far reaching implications to India's foreign trade, capital inflows and growth prospects. The paper has been edited.

Dr. A. R Prasad from Banaras Hindu University, Varanasi writes that as the economy develops, the level of income of its people increases and they begin consuming larger quantity and superior quality products. This process though quite gradual brings about changes in the pattern of consumption over time. The pattern of private final consumption expenditure on food commodity group and specific food items gives a broad idea of the change in household consumption pattern and is a direct measure of the living standard of the people. It is, therefore, desirable to analyse the pattern of consumption expenditure and the present exercise, therefore, deals with the analysis of the responsiveness of consumption expenditure on specific food items to the change in total consumption expenditure on food commodity group during 1950-51 to 1999-2000.

Dr. Ram Krishan Mandal from D.N. Government College, Itanagar, Arunachal Pradesh analyses the state of power generation and some projects under progress in Arunachal Pradesh. Power stands at the root of today's modern civilization. Arunachal Pradesh, a hilly state of India possesses untapped estimated hydro power potential of 49,000 M.W. During 2002-03, 35 numbers of mini hydel projects with an installed capacity of 32.48 M.W. and diesel sets with an installed capacity of 27.12 M.W. are the main sources of power supply in the state though the actual power requirement is 95 M.W. When the hydro power potential is fully harnessed, the state will not only be self sufficient in meeting its own power requirement but at the sometime, it can also fulfil a major portion of demand of India and finally become a power house of the country.

Dr Santosh Nandal from M.D. University, Rohtak, Haryana describes initiatives in India to promote the political empowerment of women in local governance. Local governance interpreted as the active involvement of the local population within the territorial boundaries in local government in ensuring improved quality of services and leadership at the local government (level). In view of this, the paper focuses the 73rd Constitutional amendment i.e. political empowerment at local level giving 1/3 or 33 per cent reservation to women in 1992. It also present interventions promoted through local governments to reduce poverty and promote socio-economic development targeted at women and seeking to bridge gender gaps. In order to address some of the questions, the study was undertaken with a field survey of 131 women representatives, conducted a dialogue assessment and made few case studies. All the questions were not of a quantitative nature. Qualitative information was also collected such as opinions, experiences and future hope.

Dr. Renu Verma, a faculty from ICFAI Business School, Jaipur, analyses that by the middle 1990s several developing countries had almost fully integrated with international economy, making their current as well as capital account fully convertible. India also adopted partial convertibility on current account in 1992-93 and full convertibility on current account in 1994-95. In-fact, it is tempting to think of capital account convertibility as a natural follow up to the establishment of convertibility for current account transaction. Dr Renu Verma opines that if the full convertibility is introduced in haste and prematurely without fulfilling pre-conditions it might be disastrous.

Dr. U Arabi from Mangalore University discusses implications of financial liberalization and external sector management in the event of changing banking and other financial inflows to the economy. The development of financial openness in Indian Banking sector throws light on liberalization of openness of domestic banks, international banking by banks and foreign banks in India. This research paper assesses the amplitude of business cycles**,** sterilization operation of the Reserve Bank of India, India and major trading partners, and as sterilization through open market sales has been a key instrument, and an empirical exercise is undertaken to examine dynamics of the adjustment of monetary base and exchange rate in response to exogenous shocks to net foreign assets.

Observation by Mr.Ketan Duggal MIB student of ITM Business School, Kharghar Navi Mumbai regarding emerging Malls (integrated shopping complexes) in urban areas, depicts the impact of globalization in retail market culture.

Another observation by Mr. Ranjan Verma, EMBA student from ITM Business School Kharghar Navi Mumbai about rising Home loan industry depicts the changing pattern of credit delivery by banks to the most safe area as home loans. Mr. Ranjan Verma lists some of the strategies for the better service to clients by this industry.

Wishing you a prosperous and peaceful New Year 2006, Executive Editor

THE EURO AND INDIA - ANALYSIS OF IMPACT ON TRADE

Dr. P. A. Rego[1]

Introduction:

The European Union (EU), which came into existence 1st January 1993, is a major event in international political and economic relations and has caught the attention of the world. The collapse of the erstwhile U.S.S.R and the dramatic turn of events of Eastern Europe have significant bearings on North-South Relations as the countries of south undergo fundamental changes. Against the backdrop the formation of the E.U and its impact on developing economies in the context of changing North-South relations provide an interesting agenda for research in International trade and Finance.

The European Union (EU) is the association of countries formerly called the European Community (EC) and prior to that known as the European Economic Community (EEC). The EEC became the EC when the issues handled in common moved from main economic and trade matters to include social and political aspects. EC became the EU when common tariff levels were applied by all members to outside countries and when tariffs among the member countries were removed EC transformed into a customs union.

The process of the formation of the union involves radical changes in the economic, commercial, trade and external policies of the EU. These internal changes would have significant implications for all other countries in relation to the community, the issues in contemporary North-South relations and trade prospects of emerging economies at large.

Recently the EU facilitated the transition of the European currency (e) from a national accounting measure to its acceptance as legal tender in twelve member states from January 2002, with this EU transformed into a currency union. It has tremendous impact on European Union. A currency union goes much beyond a free trade zone or customs union like the North Atlantic Free Trade Zone (NAFTZ) and does away with the very notion of fluctuations across currencies and exchange risk involved. The main objective of such arrangement is to create a unique European common market and bring in the benefits of enhanced market competition and integration. Such European integration will have far reaching implications to India's Foreign trade capital flows and growth prospects since, the fifteen member European Union is India's major trading partner and source of investment and aid, after a head of Japan

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and U.S. It is in this context an attempt is made here to address some of these issues from the point of view of emerging challenges and opportunities for India's foreign sector and its growth prospects.

The paper is divided into four sections. The first section gives an account of European integration and its impact on India's business and industry. An attempt is made here to assess the implications on exporters and importers, exchange rate movements, currency risk and hedging prospects and the relevant strategic considerations for Indian Corporates. In the second section an attempt is made to analyze the possible implications to India's foreign trade, investment flows and growth prospects. The third section examines the mega implications of the European integration and macro economic policies pursued by the EU on global economic equity and bond markets in Europe and rest of the world and trade and investment flows into India. The fourth section gives an appraisal of the expected benefits and risks arising out of Euro for the E.U. itself. Also it critically examines the progress made by the Union towards a true integration, apart from providing summary and conclusion.

I: European Union, the Euro and the Indian Business

The implementation of European Monetary Union (EMU) and the introduction of the Euro are significantly transforming the business activities undertaken by the companies. Though Euro represents new business prospects, the companies must develop new skills and capabilities to tackle and effectively manage the changes in the areas of accounting, information technology, tax, treasury, legal and financial and other information systems.

Specific issues related to business and industry: Some of the challenges that Euro pose to the Indian Corporates are given below:

Invoicing and Pricing: Problem in pricing and invoicing occur when a company has to quote its products/services both in euro and the legacy currencies (or-in-currencies). While one-fifth of India's foreign trade is with Euro land, less than 10 per cent is invoiced in the EMU currencies. The immediate effect of the EMU will therefore be moderate, though there may be pressures from counter parties and banks to switchover to the Euro. Besides, it will be necessary to assess pricing and marketing policies followed by Corporates. As currency barriers have completely vanished by July 2002, transparency and efficiency gains for the markets will be enormous. Euro land contributes nearly 17.5 percent of world trade (compared to 15.9 percent of the U.S) and synergies will only improve their share in the world trade.

Risk Monitoring and Hedging: A common currency does effect transaction costs at the margins and influence trade and capital flows between India and Euro zone economies. It means Indian and European exporters and importers as well as European investors now need to hedge risk in one currency only, the Euro instead of a multiple currencies like the DM and FFr. This clearly reduces the cost of foreign exchange risk monitoring and hedging. However, given the share of India's trade with Euro land practices as mentioned above, the magnitude of this effect has been and is likely to remain moderate.

Effect on Rupee: There is not likely to be any significant impact on the rupee. We expect the U.S dollar to retain the 'intervention currency' status for the foreseeable period. However, as invoicing shifts to the Euro and its importance increases, the Euro-Rupee rate will be monitored more closely. For instance during 1st Jan 2001 to 15th January 2001, the rupee gained by Rs.0.72 and the U.S. dollar by about $0.05 against euro. This resulted into weakening of the Euro against the dollar and reduced the export competitiveness of Indian firms from the rupee's depreciation against the dollar.

Dollar-Rupee Risk Diversification: The majority of Indian firms have at least 80% of their foreign exchange transactions in US $s. This goes very much against the basic tenets of prudent Risk Management and Diversification. For example, during mid-June to 11th August 2002, US $ -Rupee rose 2.35%. An importer with 100% exposure to US $ saw its liabilities rise from a base of 100 to 102.35. Over the same period, when Euro-Rupee fell 4.73% an importer with 25% exposure to the Euro saw its liabilities rise from a base of 100 to only 100.60. By diversifying into a more liquid such as Euro-Dollar, the risk arising from the structure of the Indian rupee market (which is small, thin and illiquid with wide spreads) can be hedged. Trends in one strong currency, say US $, can be hedged by offsetting trends in another currency, say Euro.

Macro-environment, Forecasting and Budgeting: It is very essential to understand the economic impact of the Euro to enable intelligent forecasting and to have an understanding of overall economic performance of Euro-12 rather than on individual economies. Euro involves following a single monetary policy and a largely similar fiscal policy across the member-economies and also merging of capital markets. The Euro's performance on the foreign exchange markets mainly depends on the underlying strength of the euro-zone economy. Over the past three years, 1999-2001, the US has been a better place to invest because its economy has performed well. Capital over flowed into the U.S from Europe in 2001 because most investors thought the U.S. economy would recover from recession more strongly than the Euro-zone's. Consequently the dollar continued to strengthen against Euro, even though the Euro-zone did not show it as quickly as the U.S. This essentially reflects the role played by 'perceptions' of the market players about the macroeconomic fundamentals of respective economies within the region.

Re-conventioning and re-denominating: Outstanding debt in the 'in-currencies' need to be re-denominated into Euro, but it will be re-conventional in terms of floating rate indices, day count conventions, etc. The understanding is that the LIBOR (London Inter-Bank Offer Rate) for in-currencies will be replaced by the Euro LIBOR and that PIBOR, FIBOR (Paris/Frankfurt) etc will be replaced by the Euribor. The day count for bonds is expected to be Act/Act. These details should be agreed with one's counter parties. This holds good for derivatives as well. For option players, historical volatility measures for risk analysis are available, obtained by creation of a 'synthetic euro', tracked over a period of time.

Corporates-Size and Business Strategy: A currency union like the EU overcomes the trade barriers and the so-called 'home-country bias', created by exchange rate risk, facilitates a truly integrated market. Trade and investment flow within the region pickup with Corporates and countries competing purely on the basis of competitive strength.

II: Euro-Zone, the Euro and Indian Economy

The implications of Euro on India can be analyzed in terms of its effect on trade, foreign aid, external commercial borrowings, FDI and portfolio flows, banking related issues and technology.

1. Prospects for Foreign Trade

The EU is India's biggest trading partner and source of investment and aid exceeding the contribution of both Japan and U.S. Nearly 25% of our exports go to the region and imports from there make-up for about 30% of the total. Apart from the direct favourable impact on exchange risk monitoring and related costs (as mentioned in the above section), there is no immediate impact of Euro on India's exports and imports to, and from the Euro-zone. However, going by the trends in European corporate sector, it is quite possible that European firms will become more and more competitive as they would rationalize, streamline and become cost-efficient competitors. Further, the evolving markets of gigantic Euro land would enhance market access and open up new opportunities for commercial ventures. This would imply that Indian firms have larger opportunities to be proactive and competitive. Sectorally, there could be more scope for software exports to the Euro zone. As recent experience shows Indian software companies are already able to access and diversify exports to Euro-zone countries.

2. Trade Invoicing

Indian exporter and importers are currently invoicing nearly 80% of its total trade in US $s. Switching over to invoicing in euro by Indian firms depend on a number of circumstances. For example, POL products and fertilizers, which account for a major chunk of our imports, are denominated in US $s which is an international practice. Similarly, exporters and importers in other countries may still continue will US $

denomination. However, the European companies which were earlier invoicing in US $s prefer to shift to Euro. Indian firms would keep watch on international practices, preferences of their trading partners, possible natural hedge opportunities and their own consideration in such a shift in invoicing from US $ to Euro.

3. Foreign Currency Account/Deposits

These are basically Nostro accounts of banks, foreign currency accounts maintained in India by banks such as EEFC/RFC accounts and foreign currency deposit accounts (FCNR-B) in DM. During the period of transition (i.e. introduction of euro on 1st January, 2002 followed by complete withdrawal of national currencies by July 2002), banks could maintain Nostro accounts in “in-currencies” or and/ in euro. Banks in India were maintaining Nostro accounts in Euro. With respect to foreign currency accounts, banks were allowed to open accounts in euro also. Similarly, in the case of FCNR (B) deposits, banks were permitted to offer ‘Euro accounts’ in addition to DM during the transition phase. In the case of existing fixed rate (FCNR) (B) deposits, the interest rates will continue till maturity. For existing floating rate deposits, as they are linked to Libor, banks have been instructed to use Eurolibor, the successor index. And for new deposits, banks have allowed to link their interest rates either to Eurobor or Eurolibor.

4. Foreign Direct Investment (FDI) Flows

The Euro zone accounts for nearly 12% of the total FDI in India. Newly introduced Euro is unlikely to have an impact on existing investments, which are denominated in rupees. The investor can remit the funds in any convertible currency of his choice including euro. However, in the case of GDRs if they are denominated in any of the 12 national currencies, the issuer could re-denominate them into euro during the transition phase. The physical arrival of the Euro encouraged Euro-zone governments to push-through much needed structural reforms and a broader and deeper Euro market would make the euro more attractive to investors.

5. External Commercial Borrowings

The introduction of euro would go a long way in enhancing the financing opportunities for Indian firms which were largely tapping the markets for US. $s in the form of bonds and syndicated loans. With Euro becoming attractive, competition between US.$ and euro would become more intense and results in possible marginal reduction in spreads for Indian Corporates. Moreover, Indian borrowers will now have greater access to euro-zone markets in view of the larger investor base and a common financial market. For long-term financing, those firms, which have natural hedge in euro now find it attractive to borrow in euro and take advantage of lower costs. Also, there is a scope for raising dollar denominated and euro loans in Euro land now.

6. Legal and Information Technology Issues

There are no difficulties in Indian legal system regarding continuity of contracts per se. Under the existing foreign regulations, Reserve Bank of India (RBI) has notified euro as a permissible currency and hence settling payments in Euro is legal. However, a clause of continuity has been recommended for existing contracts, which goes beyond 2002. With regard to information technology, existing computer systems are already modified to recognize Euro, carry out and record relevant business transactions in the Euro. The modified systems must be able to provide a link between the in-currencies and the euro as all the in-currencies are connected through euro (at least till July 2002, when all in-currencies will be phased out). Thus, the systems will need to be made to handle orders in both the currencies, which will require a thorough understanding of user interfaces with other linked subsystems and ledgers to ensure consistency throughout the financial information system. The business may also require a system functionally to match in-currencies/euro receipts with national currency into invoices.

The significances attained more prominence as the IT impact of the changeover coincides over broadly the same period as the Y2K problem.

Overall, the influence of the Euro and the underlying monetary union on the global economy, asset markets and the structure of international banking are anything but moderate. However, there are effects, which Indian business, government and the banking sector need to monitor to explore the opportunities, given the size of the euro-zone market.

III : European Union, the Euro and World Economy: The Underlying Macroeconomics and Policy Implications

First, the impression among market analysts is that the euro would become a more attractive currency for bond issuers. In fact, in the first month of its introduction in 1999, the euro was the most popular currency for bonds issued in the international markets. It accounted for nearly 55% of the volume of new bond issues compared with 40% for the US \$. This was mainly due to initial euphoria about euro-denominated instruments.

Secondly, with euro, the notion of domestic currency becomes redundant and the dominant strategy for European banking heavy weights would be to increase market share in the par-European market. Thus, the persisting trend of M & As and consolidation is likely to continue in future. Size does matter, especially when domestic banks are loosing captive markets in the wake of Euro's introduction.

Thirdly, indications show that the Euro is likely become more attractive for the investment of Central Bank's Official reserves. Currently, the US \$ is by far the most important reserve currency world over. It is reported that well over half of official reserves are held in US $ denominated assets while about one-fifth are currently held in EMU currencies. According to Ashrof Laidi, Chief currency analyst at New York based MG Financial Group; some major Central Banks may decide to keep a larger part of their reserves in euro. The People's Bank of China, the Bank of Japan, the Central Bank of Taiwan, and the Bank of England have all indicated that they may now divest a part of their reserve holdings by acquiring the single currency. The shift to euro assets by Central Banks around the world would be motivated by its strength, its increasing use as a transaction currency and the more liquid and deeper bond markets, among other factors. And there are indications of supporting factors that should help in boosting the euro currency's value over both the medium term and long-term. The euro zone's 'basic balance' – i.e. the sum of its current account balance plus long-term capital flows – is growing and this indicates that during the course of 2002, the Euro might at last appreciate. Other factors are also supportive of euro like weaker oil prices, tumbling inflation rates, and an expected increase in acquisition of euro-zone companies by foreign institutions.

Fourth, the emergence of Euro, and the underlying EU will have far-reaching implications on major currencies (and the much-touted benefits of globalization) more particularly to the US $. Indeed, considering regional trading arrangements (RTAs) – such as NAFTA, EU, Mercosur in South America and ASEAN, more and more of international trade is occurring within regions. Statistics show that between 1982 to 1998, the proportion of U.S. trade with countries in North, Central and South America increased from 29.31% to 37.1% while Japan's trade with other Asian nations increased from 19.7% to 34.6% and Germany's trade with other European countries which was already at a record high of 64% has increased to 77.6%.

This trend toward regionalisation of trade has important currency implications, making it of paramount significance to international finance management. The Euro currency (earlier it was DM which played a dominant role in Europe) is likely to become more dominant as the settlement currency in Europe, with the same being true for Japanese Yen in Asia. It is quite possible that the euro could also emerge as an important anchor currency for other countries, particularly among countries in Central and Eastern Europe by virtue of their geographical proximity and possible economic linkages. Some of these countries may find it useful to peg their currencies formally or informally to the euro or a basket of currencies with euro carrying large weight ages. As a result, the role of US $, which has been the dominant global currency for price quotations and settlement of international payments likely to be diminished outside America in future.

Fifth, the euro is likely to become an alternate currency for invoicing next only to the US $. Approximately, 50% of the world exports is invoiced in US $s, almost four times the share of US in world trade, while nearly 20% of world exports are invoiced in EU currencies and 5% in Japanese Yen. In the long run, it is possible that euro would become an important alternate currency for the invoicing of international trade.

Sixth, it is quite possible that Corporates would find euro as a preferred currency for financial transactions. Trade finance could be more easily accessible to Corporates in India and abroad as the European banks compete purely on their competitive strength and able to extend loans at attractive rates. Further, in the case of long-term financing those firms that have natural hedge in euro may find it advantageous to borrow in euro and take advantage of lower costs.

Also, with the elimination of exchange risk and the emergence of a single currency market, the scope for sector-specific funds expected to be more attractive. Therefore, raising funds for sectoral projects like financing of infrastructure projects become easier with the single currency.

Last, but not least, issue is with respect to the underlying macroeconomics and policy implications of the euro on world trade, output and investments flows. With the advent of euro, national central banks of the member countries have ceded monetary control to the Europe and Central Bank (ECB) – based at Frankfurt. The German Bundesbank heavily influences the ECB's monetary stance with inflation control as the prime target. However, this is often at the cost of the real economy and its growth prospects. In spite of clear signs of global and European slow-down since the middle of 2000, the ECB foiled an interest rate out till May 2001 – its second out since inception. The Bank of England resorted to interest rate outs thrice during the same period. For the Global economy, in the long-term this king of 'tight' monetary stance would imply that there would be an upward pressure on interest rates and consequent tightness in liquidity. This would dampen both the equity and bond markets in Europe and the rest of the world. For the world economy as a whole, it could mean that expansion/revival in output would be more moderate. This bound to affect trade and investment flows into India, and hence its growth momentum.

Thus, the implication to the global economy thought to be difficult to assess accurately, the general perception is encouraging. How important is the role euro would pay and how fast it would impact on the global macro economy hinges on a variety of factors. More importantly, it would depend on how the expected benefits and risks evolve for all the players, and more particularly for the Euro zone economy itself (as examined below)

Benefits and Risks for European Monetary Union

There has been a lot of discussion about the possible benefits and risks arising out of euro for the EMU itself. There is even greater interest in the implications for the rest of the world. It may be useful to highlight the differing viewpoints in this regard.

Benefits

First, by eliminating different currencies, the euro eliminates foreign exchange risk, including to countries that are members of the EMU. Second, an immediate implication of the introduction of the single currency is the reduction in transaction costs. The costs associated with converting one currency into another, cross-border transfers by companies and hedging of risks are reduced. Third, the current nationally based bond markets are transformed into a single market with common norms. The integration of financial markets is expected to boost the supply of new issues and instruments. Fourth, the new funding and investment possibilities in the euro-region are expected to become more efficient and competitive. As a result increased price transparency and competition, financing costs of firms will probably scale down. Fifth, the higher yield corporate debt market will in all likelihood become much large in the euro with the elimination of foreign exchange risk. This will enable corporate credit risks to be priced more accurately. Sixth, elimination of exchange rate fluctuations between legacy currencies or in-currencies is expected to lead to a significant increase in trade and investment within the euro area. Seventh, it is argued that giving other countries the ability to peg their currencies to a basket of hard currencies (say a mix of US dollar and euro) might stabilize fixed exchange rate regimes.

Risks for EMU

First, it is held that different economies in the EMU are at different levels of business cycle, and hence there may be occasions when a single monetary policy appears inadequate to tackle the problem of growth and employment (\which is country specific) in a desired manner. Second the 'stability and growth pact' provides an excellent in-build mechanism to ensure fiscal discipline among the EMU countries. However, it is felt among some that the in-built mechanism may come under some stress during the initial periods. Third, some concern has been expressed by some regarding absence of clear rules on 'seignorage' sharing and open market operations. Fourth, since introduction of the euro, there has been degree of volatility and depreciation of euro, against the US dollar. However, it is too early to formulate any medium to long-term view based on ∈-US $ exchange rate movements in the short-term. Fifth, it is concerned that there would be significant reduction in transaction costs, but there are doubts about the extent to which this will get translated into cost reduction and efficiencies-given the fact that product and factor markets are still regulated in the euro-zone economies to a significant level.

IV: The Euro-zone and Prospects: Summary and Concluding Remarks

The primary objective of introducing a single currency is essentially to create a unique European common market and bring-in the benefits of enhanced market competition and integration for the Euro-zone economies. But the new currency has not really achieved the targeted objectives. In spite of its initiation and experimentation over the years not really contributed to transform Europe into a vibrant economic entity. The governments resist introducing structural/microeconomic reforms and industries are still protected from competition. Moreover, Europe's product and labour markets are highly regulated, which renders the very process of European Integration incomplete.

Coming to the macroeconomic management issues of integration, the reality is that different economies within the euro zone are at different phases of business cycle and therefore ECB's uniform monetary policy proves, sometimes inadequate to tackle the basic issues of low growth and unemployment (which are country-specific) in a desired manner. Especially since membership of the Union also comes with tight 'fiscal discipline' enshrined in the Maastricht criteria, which sets upper bounds on government budget deficits, and hence the ability to revive their flagging economies by pump-priming will be muted. The ECB refuses to lower interest rates and the member nations cannot raise public spending either since it might violate the Maastricht norms. In 2001, Ireland faced a similar situation. Its attempts to raise budget deficit attracted a severe reprimand form ECB. The Irish opposition did not loose the chance to criticize the government against the perceived 'loss of sovereignty'. The IMF advised the ECB to got a bit easy on fiscal targets.

Another problem lies at the heart of Europe, i.e Germany that is struggling to keep its budget deficit below 3% of GDP, in spite of impending recession. This is to adhere to 'the stability and growth pact' norms. The Pact, adopted at Germany's behest, provides that any country breaching the 3% ceiling could be subject to fines as big as 0.5% of GDP. Though there are let-out clauses for deep recessions, but Germany looks unlikely to qualify for such relaxations.

Is there a way out of this crisis-driven model of integration? Many eminent European leaders and policy-makers could come out with several solutions including a whole new round of political integration. One popular idea, promoted by both Lionel Jospin, the French Prime Minister and Romani Prode, the head of European Commission (EC), is the appointment of Mr. Euro who could represent the entire euro-zone in various international economic forums. Other suggestions include the harmonization of corporate and other taxes and the creation of a bail-out fund to help countries in economic trouble, because options open to countries with a national currency, notably devaluations and an independent monetary policy, are no longer open to members of the euro-zone. Hence Mr. Prodi suggests that the Union should greatly increase its central budget (implying that members pay taxes into a central pool), so that if a country hit by a shock specific to itself, then some of it could be transferred to help it tide-over the crisis. This federal fiscal structure is considered as the key to the success of the U.S., often touted as the oldest and the most stable currency union.

Though many eminent European leaders think that the logical end to the integration process is that of a closer 'political', but that is not to say that Europe must now proceed to closer political union. On the contrary, the union has a new currency to reckon with and a daunting task of adhering to the stability pact norms. In case if the breach of the limit norms went unpunished, the down-side risk is that the new currency could suffer a credibility loss. And the problem is that the stability pact, far from creating more of flexibility, actually creates less and out of the reach of a member country, as in the case of the recent German experience.

The true flexibility and endurance that Euro-zone economy badly needs at this juncture can only come from removing remaining barriers to competition and further deregulating product and labour markets. More importantly the governments including Germany's must go ahead with the structural reforms to make their economies more vibrant and contribute to the very process of heightened market competition and integration

Out of 15 nations which comprise the European Union (EU), only 11 (and later12) adopted the euro in January 1, 1999. The EMU is the largest single currency zone in the world with a GDP of eight trillion dollars. The new block will be an economic might accounting for 19.4% of the world GDP and 18.6% of the world trade is compared to the US which accounts for 19.6% of the world GDP 16.6% of the world trade and Japan which contributes only 7.7% of the world GDP and 8.8% of world trade. Also, the unification is expected to bring an additional growth in GDP (for the 11 member countries) of about 0.5-1% thus overtaking the US.

Key Statistics

	Area	**People**	**GDP**
1998	(000 km2)	(mn nos)	(mkrt pr)
EU-15	3191	376	7495
Euro-11	2364	292	5774
USA	9373	270	7592
Japan	378	127	3327

Apart from this the formation of EMU will take in many other benefits such as:

- Lower business costs with a single currency

- Rise in competition may reduce prices benefiting the consumers and making countries more competitive in the international markets
- Centralized fiscal and monetary policy will provide interest and inflation rates which are stable and under control
- Which will in turn encourage corporate investment

Rounding

"Monetary amounts to be paid or accounted for when a rounding takes place after a conversion into the euro unit shall be rounded up or down to the nearest cent. Monetary amounts to be paid or accounted for which are converted into a national currency unit shall be rounded up or down to the nearest sub-unit or in the absence of a sub-unit to the nearest unit, or according to national law or practice to a multiple or fraction of the sub-unit or unit of the national currency unit. If the application of the conversion rate gives a result which is exactly half-way, the sum shall be rounded up". The resulting amount must be rounded to the nearest number in the smallest subdivision of the currency (i.e 2 units to the right of the decimal). If the conversion results in an amount that is exactly the middle of the smallest subdivision of the currency, the amount is rounded up.

References:

Bairne, P.O.(1998) "Managing Risk in Euro Currency Conversions" IT journal, volume, XI, No.6.

Giri D.K. (2001) "European Union and India – A Study in North-South Relations" concept publications, New Delhi

Jon Bowen (1999) "What the Euro means for Indian Business" The Hindustan Times, Jan 17, 1999, New Delhi.

Levi D.Maurice (1996) "International Finance, The Markets and Financial Management of Multinational Business", Mc Grawhill International, New York

Meir G (1994) "Leading Issues in Economic Development" Oxford Press, New York.

Rajvade A.V (2002) "Issues in Asset Liability Management" Economic and Political Weekly, Vol. XXXVII No.9 March 2, 2002.

Ugur, M (2002) An open Economy Macroeconomics Reader, Edt. Routledge Publishers, London and NewYork.

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Observation

HOME LOANS INDUSTRY: FUTURE IMPERATIVES

Ranjan Varma•

Introduction

The importance of housing sector as the 'engine of growth' has been historically acknowledged in most of the developed nations of the world. In India, the housing finance business has assumed significance during the last 4-5 years, spearheaded by the keen interest evinced by the commercial banks in this sector. The growth potential further gathered momentum through continued fiscal and monetary fillips and budgetary provisions. The burgeoning middle class, increasing purchasing power, changing demographics and increasing number of nuclear families, scaling down of the real estate prices and a softer interest rate regime and traditionally low default rate resulting in low non performing assets as compared with the other sectors also enabled the housing finance sector to grow at a phenomenal rate of around 39% on the average during the last 3 years. However, this performance notwithstanding, the mortgage to GDP ratio stood at an abysmal 3% in India in 2001 when compared to 57% in UK, 54% in USA, 40% in EU, 7% in China, 17% in Thailand and 34% in Malaysia.

	1999-2000	***2000-01***	***2001-02***	***2002-03***
Banks**	3597.40	5553.11	8566.41	23553.37

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HFCs	9812.03	12637.85	14614.44	17832.01
ACHFs	700.86	867.72	677.58	641.48
Total	***14110.29***	***19058.68***	***23858.43***	***42026.86***

The disbursements towards housing finance by the Commercial Banks and Housing Finance Companies registered a growth of 29.25% with total disbursements of Rs.53, 678.62 crore during 2003-04. Substantial increase witnessed in the direct housing finance disbursements by the commercial banks for the third consecutive year. During the year commercial banks disbursed housing finance of Rs.32, 816.39 crore as against Rs. 23,553.37 crore in 2002-03, thereby registering a growth of 39.33%. During 2003-04, the aggregate housing finance disbursed by HFCs was Rs.20, 862.23 crore as against Rs.17, 832.01 crore in 2002-03 thus registering a growth of 16.99%. Similar trend, if not more, of robust growth is expected to be announced for the year 2004-05.

Investment requirement in the 10th V year plan.

PLAN	PUBLIC	PRIVATE	TOTAL
10th (2002-07)*	3,11,300	4,15,000	7,26,300

Housing being one of the basic needs of human beings assumes multi faceted significance in terms of degree of economic well being and human development as well as socio-cultural progression and political stability. The development of satisfactory housing has always been the priority in both policy formulation and its implementation.

The aggregate outstanding housing loans of all reporting HFCs, which were Rs.41843.65 crore as on 31st March, 2002 increased by 17.67% and stood at Rs. 49237.97 crore as on 31st March, 2003.

Recent reports (source RBI magazine on Banks) say that the total outstanding loan is approximately 74000 crore. This is only 8% of the total retail lending in the country.

One of the significant aspects of budding housing finance business in India in the last 2-3 years has been the increasing participation of the **commercial banks**. In the year 2002-03, the return on assets of the banking sector witnessed a marked improvement driven by increases in all major income categories. The spurt in the retail and housing segments mainly boosted both lending and fee incomes.
According to the reports of the Reserve Bank of India, fiscal 2002-03 witnessed a sharp pickup in housing loans,

Table 3.1 Housing Finance by Commercial Banks
(Amount in Rs. crore)

	1999-2000	2000-2001	2001-2002	2002-2003
Allocation	3051.52	3409.95	5159.22	8574.10
Achievement	9911.35	9787.24	14744.85	33840.53

Source: IECD, RBI (Achievement includes direct & indirect housing finance and investment in NHB/HUDCO bonds)

Responsibility of the future:

With robust growth comes a responsibility to sustain the growth in an efficient and effective manner. The key survival factors of a mortgage lender would depend on its ability to successfully manage the interest rate risk and maintain asset quality, to introduce and **adopt technology advancement**, to improve service range and quality while controlling the operating expenses.

The following passages discuss the understanding and use of effective IT implementation for sustaining the growth and becoming more competitive.

Impact Value Matrix of Information Technology.

With the aid of information technology, proficient managers can create new synergies between the various assets, both within and outside the organization. Peter Drucker had theorized the rise of the "knowledge worker" back in the 1950s. He described how fewer workers would be doing physical labor, and more would be applying their minds.

In 1984, John Nesbitt theorized that the future would be driven largely by information: companies that managed information well could obtain an advantage. Gloria Schuck (1985) and Shoshana Zuboff (1988) looked at the effect that IT had on individual workers, managers, and organizational structures and they largely confirmed Peter Drucker's predictions.

		VALUE		
		EFFICIENCY	Effectiveness	Innovation
IMPACT	TIME	Accelerate business process	Reduce information float	Create service excellence
	GEOGRAPHY	Recapture scale	Ensure management control	Penetrate new markets
	RELATIONSHIP	Bypass inter mediaries	Replicate scarce knowledge	Build umbilical cords

Though IT has pervaded every aspect of the housing industry, there are certain segments where there is still a lack of standard solutions. It is only through individual initiatives that this gap can be bridged

But unlike banking and insurance sectors, which have extensive IT implementations, the housing finance market is yet to be introduced to the benefits of IT. This can be seen from the lack of any clear standards in this space when it comes to the IT usage.

Key processes in Housing Finance:

Thanks to the fiscal and monetary policies of the government, housing is becoming more and more affordable. With the rise in volumes of credit off take, maintaining the efficiency level at the operating level has become a challenge. Also the entire process of getting finance for owning a home is very complex. Various steps of getting finance involves credit appraisal, valuation of property, title clearance of property, registration, among many others for the customer. The customer also has to be involved in the repayments covering upto 20 years. The company has to be constantly alert to the interest rate risks, asset quality, and various operational issues. Quality of portfolio and effective monitoring and collection methods impacts the financial health (profits) of the organization. To be a niche player, the company has to improve on "turn around time" (TAT) for the customers. Despite the complexities of the business, the following key processes can be identified for re engineering or improvement at the operational level.

- Back Office credit appraisal implementation.
- Application Process Management.
- Receivables Management.
- Delinquency Management.
- Marketing strategy

Methodology of process improvements.

Process improvements in any industry are a continuous process. The survival of a company depends on how well the company copes with the change in the market dynamics. Process improvements entail a change which is always resisted because the benefits of the change is not known and can only be visualized. It takes a brave effort to initiate process improvements. That is why the CEO of the company has to take initiative to kick starting the process. It should be aligned to the Vision and Mission of the company.

It is important to understand the flow chart of the methodology of process improvements or re engineering. One missing component of the methodology can lead to the failure of the entire exercise.

Enormous amount of thought has to precede the process reengineering. For guidance the following flow chart will be useful.

Ten commandments involved for Process Improvements

1. Defining the goal/strategy: Strategy formation and implementation is an on-going, never-ending, integrated process requiring continuous reassessment and reformation. CEO, possibly with the assistance of a strategic planning team, decides on the overall direction the company should take.
2. Selecting the process to be reengineered: Among a multitude of processes, the process to be reengineered is selected on basis of immediacy, cost and level of IT competency in the company.
3. Mapping the process: The process has to be defined in terms of flow chart, people involvement and technology requirement.
4. Benchmarking of the best practices: The best practices of the industry in the country/global level have to be identified.
5. Customer requirements/expectations: It is important to align the process improvements with the expectations of a customer. For example, Credit appraisal process implementation which is not tagged to the requirements of the customer is bound to bring brickbats for the company.
6. Determine the scope and focus of change: IT can be deployed with different roles, viz functional, decision support and strategic. Ultimately there will be a fully integrated business information system in which all types of business processes are seamlessly moved throughout the company. However we have to limit ourselves to the current requirements as decided earlier.
7. Redesign the process: After a thorough understanding of the project on the basis of above measures, it is critical to define the entire gamut of transactions which will go into the new process.
8. Identify barriers of implementation: Any change process has an inbuilt resistance mechanism emanating from the lack of understanding of the project. It is worthwhile to understand and articulate the barriers which will crop up during the implementation phase.
9. Implementation plan and execution: Though it is important to plan your work, it is critical that you work your plan too. Implementing new procedures, technologies, and overcoming resistance to change are fundamentally "people issues" and have to be dealt at the top level.
10. Monitor and review: Today the only truly sustainable competitive advantage is to build an organization that is so alert and so agile that it will always be

able to find an advantage, no matter what changes occur. Hence it is critical that the entire process management is closely monitored and reviewed.

Conclusions:

Process Improvements can be either reactive, in which case management is responding to changes in the macro environment (that is, the source of the change is external), or proactive, in which case management is initiating the change in order to achieve a desired goal (that is, the source of the change is internal). Change management should be conducted on a continuous basis, on a regular schedule (such as an annual review), or when deemed necessary on a program-by-program basis.

Housing & Construction industry impacts the economic growth of the entire nation. Growth of retail lending to home seekers will have an overall impact on the creation of wealth and well being of every Indian.

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Special Paper

ARUNACHAL PRADESH AS AN EMERGING POWER HOUSE

Dr. Ram Krishna Mandal[•]

The modern economic development involves large-scale use of power. Though the industrial sector is a major consumer of energy, the transport sector, agricultural sector and the household sector are also consuming major portion of energy. Regarding the set up of an industry the state needs first some infrastructural facilities. Power is one of the most urgent infrastructural facilities. Power stands at the root of all kinds of development.

Looking at the enormous hydro-electric potentials of Arunachal Pradesh, the power may be developed as industry and a substantial revenue can be earned by selling the power to other states of the country. If once, these hydro potentials are fully harnessed, it must turn the fate of the territory and serve the larger interest of the country. At the same time, the fund spent by the government to function the diesel generators will be saved and the pollution created by them will be stopped.

So far Arunachal economy is concerned, the consumption of commercial energy is a recent phenomenon. The consumption of commercial energy under industrial sector is at its lowest ebb. By and large, the industrial units are considerably small, where the use of manual labour is prominent. In some of the small scale industrial units and medium scale ones, the commercial energy is consumed. But such consumption accounts for insignificant quantity. During recent years, the use of commercial energy is noticed to have picked up. But the magnitude of the consumption of commercial energy under agricultural sector may be termed still insignificant.

Due to its geographical location and its hilly terrain, Arunachal Pradesh has an immense hydel potential to use the power of water to produce electricity in comparison to the other states of the country. The state is of turbulent perennial rivers and major streams, which possess enormous hydro-electric generation potential. The Central Water and Power Commission (C.W & P.C) had estimated in 1965, the hydel potential of the country to be about 84,000 M.W., of which Arunachal Pradesh alone accounts for about 27,000 M.W. i.e., more than 32 per cent of the total potentials of the country, that can be brought to use from the various tributaries of the Brahmaputra like Kameng, Ranganadi, Subansiri, Siang, Lohit and other rivers through the

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installation of hydel power projects. In addition to water resource, the stare has oil, natural gas and coal resources that can be used in the production of electricity.

All the previous development regarding electricity generation went a long way for creating supply of commercial energy. Today, all the administrative centres, other centres, police and military installations and almost all the towns declared by 2001 Census are lighted either through diesel sets or hydels.

Electricity in the state was introduced during the IInd plan period when 6 diesel sets were commissioned with an installed capacity of 250 KW at five district head quarters and at one sub-divisional head quarters. By 1973, installed capacity increased to 3160 KW, out of which 710 KW came from micro hydel while the rest came from diesel sets. The installed capacity of micro hydel sets increased to 23.65 MW and that of diesel generating sets increased to 15.80 MW by 1993-1994. Again there are so many problems created by the diesel sets as shown below.

PROBLEMS CREATED BY DIESEL SETS

The diesel power generators create many practical and financial problems.

1. The continuous rise in price of diesel is alarming us that the electricity is beyond the capacity to purchase by the general consumer. The subsidy already given by the government in the production of electricity by the diesel generators is going to be increased day by day.
2. The transportation of diesel set in different remote places is very difficult and costly and also the non-availability of major and minor spare parts of diesel sets creates problem.
3. The smoke expelled by the diesel set pollutes the surrounding area.

In view of the above problems, most of the diesel sets are led to operate maximum for five to six hours in the evening to provide power for domestic consumption only along with a few strategic street lights.

PRESENT STATUS

But presently, there is a vast gap between the availability and the requirement of power. As per 2001 Census, out of 2,12,615 households, only 116,275 households (54.7%) are having electricity facility and out of 3649 numbers of villages (as per 1991 Census), only 2339 numbers have been electrified accounting 64% of total villages till the end of March 2003. At present, the total un-exploited hydel potential of the state is estimated to be 49,000 MW. Even if a part of the available hydro potential is harnessed, the state will not only be self sufficient in meeting its own power requirement but at the same time it can earn revenue by supplying power to the other neighbouring states of the country. During 2002-03, 35 numbers of micro/mini hydel projects with an installed capacity of 32.48 MW and diesel sets with an installed capacity of 27.12 MW are the main sources of power supply in the state though the actual power requirement is 95 M.W. So the state is highly deficient in power generation.

Priority has been accorded by the state government in annual plans not only to meet increasing power demand within the State but also to bridge the gap of demand and supply in the region as a whole. But due to inadequate State's financial resources, the government is unable to materialize its ambition of financing large hydel projects. Therefore, the government is encouraging participation of private sector companies in hydro power development. At present the projects already functioning or under survey and investigation in Arunachal Pradesh are shown in Table 1:

TABLE 1
HYDRO ELECTRIC PROJECT UNDER SURVEY & INVESTIGATION IN ARUNACHAL PRADESH

Sl No	Name of project	Installed Capacity in (MW)	Location	Scheduled date Of submission Of DPR
1. CWC				
•	Sisiri Multipurpose Project	222	Dibang Valley District.	June 2001
•	Deopani Multipurpose Project:	20	Dibang Valley Distt.	March 2001
•	Nyukchrongchu **HEP** :	75	Tawang Distt.	March 2001
•	Water Resources Development		Tawang/West Kameng	June 2001
•	Project (Kameng/Tawang Basin):	150	Districts	June 2003
	TOTAL under (CWC) :	**467 MW**		
2. NEEPCO				
•	Ranganadi Stage-II	100	L/Subansiri Distt.	Inv.in progress
•	Dikrong HEP	100	P/Pare Distt.	-do-
•	Papumpare project	100	L/Subansiri Distt.	-do-
•	Pakke Project	105	Papumpare Distt.	–do-
•	Kameng **HEP**	600	W/Kameng Distt.	–do-
	TOTAL under NEEPCO:	**1005 MW**		
3. NHPC				
•	Subansiri Dam Project:			
•	a) Lower:	2800	L/Subansiri Distt.	March 2001
	b) Middle:	2000	L/Subansiri Distt	April 2002
	c) Upper :	2500	L/Subansiri Distt.	June 2002
•	Siang Dam Project:-			
	a) Lower:	1700	East Siang	June 2002
	b) Middle:	700	West Siang	June 2002
	c) Upper:	11000	Upper Siang	Dec. 2002
	Total under NHPC:	**20700 MW**		
4. BRAHMAPUTRA BOARD				
	Lohit Dam Project	3000	Lohit Distt.	March 2002
	Kameng Dam Project:	1100	W/Kameng Distt.	March 2002
	Noa-Dihing Dam Project:	75	Changlang Distt.	March 2006
	Dibang Dam Project:	2500	Dibang Valley Distt.	March 2007
	TOTAL under B.Board:	**6675 MW**		
	GRAND TOTAL :	**28847MW**		

Source: Deptt. of Power, Govt. of Arunachal Pradesh, Itanagar.

Thus, total supply of electricity under CWC is more or less 467 MW and the project of the Kameng and Tawang Basin is likely to be functioned at full capacity. The investigation in progress under NEPCO is going on different projects and total installed capacity of NEPCO will be 1005 MW. All the projects will be functioning with full capacity within a very short period of time. Therefore, total installed capacity under CWC, NEEPCO, NHPC and Brahmaputra Board will be 28847 MW which will be surplus to the demand of Arunachal Pradesh within the specified time.

The National Hydro Power Corporation (NHPC) has undertaken survey and investigation works of Siang and Subansiri basin mega hydro power project with an estimated installed capacity of 20700 M.W.

In spite of having high potentiality of hydro power, to fulfil the present requirement of the power the state has to import of state's share from central sector and to purchase from Assam state Electricity Board (ASEB). But, in near future Arunachal Pradesh is expected to be made a Power Surplus State so much that after fulfilling the home demand it would earn much revenue by exporting power to rest of the country. The hydro-power potentialities of the major five rivers are shown Table 2.

TABLE 2

Major river basins & their potentials

Name of the River/Basin	Probable Hydro Potentials (MW)			Name of Districts
	ROR	Storage	Total	
Kameng	3799	847	4646	W&E/Kameng
Subansiri	10141	5050	15191	U&L/Subansiri/Kurung Kumey
Siang	3557	11700	15257	W&E/Siang U/Siang
Dibang	5946	1282	7228	U & L/Dibang Valley
Lohit	3594	3075	6669	Lohit
Total Potentials	27037	21954	48991	

Source: Deptt. of Power, Govt. of Arunachal Pradesh, Itanagar.

Therefore, Arunachal Pradesh, having untapped estimated hydro power potential of 49,000 MW, may emerge as Power House of India when this potential is fully harnessed. The state government has taken some power policies in order to become self sufficient in Power as discussed below.

Power Policy of the State Government

1. The State Government will encourage Private Sector participation (both Indian & Foreign) in the development of hydro electric/gas based power projects in the State.

2. The Private Sector companies can opt to execute such projects on Build, Own and Operate (BOO) or Build, Own and Transfer (BOT) basis. In both the cases, project financing shall be done by the Private Sector Companies. 12% power generated would be supplied to the State Government free as water royalty. The State Government, further reserve the right to purchase the power over and above the 12% free shares, if required by the State Government.

3. Land required for the project shall be acquired by the State Government, and given on lease to the private party for which premium and ground rent would be charged. The company can offer equity to the Government of Arunachal Pradesh in lieu of the payment of the cost of the land.

4. The State Government will assist the private party in obtaining all the statutory approvals required for the implementation of the project (s).

5. Issues regarding operation and maintenance of transmission lines belonging to the private party, evacuation of power outside the State, purchased by the State Government of the power generated in the project (s), above the free share (State's share of 12%), payments of taxes & duties etc. will be settled between the State Government and the private party on a mutually agreed basis.

6. Where the State Government has to purchase power generated in the Private Sector, it will enter into Power Purchase Agreement with the private party. Similarly, lease agreement will be signed between the two parties.

7. In all such cases, where the State Government will purchase power from the private developer, the State Government will give a guarantee, that all necessary payment for the purchase of the power will be made.

8. The Central Government, in turn will give a sovereign/counter guarantee to the private investor which will cover the state guarantee.

9. All other terms and conditions and matters not covered above will be in accordance with the policy guidance issued by the Central Government from time to time.

On the basis of the above power policy of the State Government of Arunachal Pradesh, the State is approaching as an emerging Power House very soon. The power sector will herald a golden era for Arunachal Pradesh once its hydel potential is harnessed to make it the power house of the country, said Raghunath Prasad Singh, general manager (E) of 405 MW Ranganadi Hydro Electric Plant (RHEP), the largest in the North Eastern region. He pointed out that besides economic development, such projects give a new thrust to the socio-economic development by constructing roads, schools, hospital etc. Again, the big dams minimize the impact of flood, a chromic problem of this region.

Power not only improves the domestic lives of the people but also serves as a first need for setting up of industries. Industries based on forest products should be set up on a priority basis throughout the hill region so as to engage the jhumias in the industrial work. The tendency to preserve forests will grow if the forest products will have a ready market. In fact the setting up of such industries will revolutionize the economy in the tribal areas and will have a negative impact upon the jhuming practice. The forest-based industries such as paper pulp, plywood, vineer, matches, saw mills, wooden railway slippers, etc. may be set up If once Arunachal Pradesh gets herself industrialized at least 25%, it would greatly help to achieve economic rehabilitation of the jhumias. When they will realize the potential value of bamboos, timber species, etc., which they will sell to the industrial authorities, they will automatically try to conserve these resources which will be a permanent source of income for them. The industrialization programme is a necessary and unavoidable part of overall planning for development of the region. Without an industrialization programme agricultural improvement programme cannot succeed. Industrialization programme would provide employment to surplus farm hands. This will reduce the excessive pressure of growing population on land. Again, industrialization programme would indirectly help soil conservation programme of the hill regions.

References:

Bhattacharjee, R.P.(2000), “Economic Development of Arunachal Pradesh”, Himalayan Publishers, Delhi, Itanagar.

Das, G.D. (1995), “Tribes of Arunachal Pradesh in Transition”, Vikas publishing house Pvt.Ltd. Jangpura, New Delhi, p.145.Jha S.D., (1985),”The Wealth of Arunachal Pradesh”, Mittal Publication, Delhi, P. 55, 60, 62.

Jha S.D.,(1986) “Arunachal Pradesh (Rich Land and Poor People” Omsons publications, New Delhi, Guwahati, P. 185, 189.

Govt. of Arunachal Pradesh, (2000—2003) “Economic Review of Arunachal Pradesh”, Directorate of Arunachal Pradesh, Itanagar.

Govt. of Arunachal Pradesh, “Hydro Power potential in Arunachal Pradesh”, Department of Power, Itanagar.

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Observation

THE MALL ENCHANTMENT

Ketan Duggal•

What makes a shopper's paradise? Multiple consumer items, infinite choices, excellent quality at competitive prices, congenial environment, hygienic ambience, attractive entertainment parlours, international standardized luxury floor space accompanied with multi-cuisine restaurants that gives shoppers a ritzy and convenient shopping experience. That is what the boom of malls in India comprises of and is the impact of global culture.

India's organized retail industry accounts for just 3% of the country's total retail sales, though it is poised to grow by 97% per year in the next five years to a staggering $24bn. India ranks top in The Global Retail Development Index for 2005 by the global management consultancy AT KEARNEY on the parameters of country risk, market attractiveness, market saturation and time pressure. This gives an impression of India as the most promising emerging market in the globe. Besides this, the biggest opportunity lies in the sectors of food and apparels.

Whether it is Metropolitan mall in Gurgaon, Centrestage mall in Noida or the super malls in Mumbai at Bandra, Parel, Mulund or Powai, the malls have certainly proven themselves magnet for the shoppers. The glistening and shimmering exterior of the malls generates the inferno among the youth who can be pretty much seen as the major chunk of the everyday gentry of these malls, partaking the experience of gawking at the luxury goods, cooling off in the air condition and comfortably enjoying the vicinity. One of the most significant factors for the rising graph of malls in India is that they offer shopping, entertainment and food all under one roof that attracts people from all walks of life. Through the right blend of huge structures, central location and top brands, malls like Sahara Mall in Gurgaon are able to draw in a plethora of shoppers and younkers from places like Delhi and Haryana. Can anybody imagine that relative real estate prices in Amritsar are the highest in Asia, owing to competitive conversion of prime residential bungalow plots into malls? Entry of Sahara into real estate has aggravated the situation.

A traditional quandary that the Indian retail industry has always faced was finding the right location and identifying what the people in the community want and then deliver them exactly just that. On the contrary, the Indian consumers have always been faced with the challenge of finding umpteen alternatives at competitive prices and quality packaging. The sync of the solutions of both these problems was never easy. However, the mushrooming of shopping malls and super markets has played a major role in transforming the consumers' perceptions which has

• MIB (2004-05), Global Leadership Centre, ITM Business School, New Mumbai

in turn changed their shopping habits. The successful Indian brand chains like Globus, Pantaloon, Shoppers Stop, Planet M, Westside and Big Bazaar, along with western and European brands like Benetton, Mango, Marks & Spencer, Swatch, Nike, Arrow, Swarowski, Lacoste, and so on render infinite offers. The array of these brand chains and stores does not only furnish quality products that are suitable for the pockets of all sorts of shoppers and customers but they also serve as an authentic place that reckons the preferences and tastes of the everyday population to these stores. Malls act as catalyst in aligning and synchronizing the consumers' search for the best buy and the retailers' efforts for consumers' predilection.

Another inquisitive factor that is significant in building and developing the overall theme of a mall is its vibrant ambience. The 'feel-good-factor' of any mall comprises of its ambience, entertainment zones and the eateries. Multiple escalators between floors, plasma screens, the latest technology fixtures, central air conditioning, capsule elevators, wide passages, gleaming floors and the cordial staff are some of the factors that stimulate the shoppers to these malls. Besides these, the constant efforts to ensure high standard of cleanliness, cardinal location and the overall architecture of the malls also serve in intensifying the vibrancy of the malls. Entertainment zones and movie theaters complete the overall scenario by fetching in teenagers, fast growing middle class and the rising women workforce that constitute the leading meat of the consumerism in India. Teenagers and younkers have immense buying power and are great influencers. Their ability to mold their parents' purchase and test new products are the two main reasons why the malls try to make themselves enticing for the young generation. According to AT KEARNEY, 24% of India's population is within the age group of 20-34 years and the GDP per capita is expected to rise by 4% a year for the next 10 years. This indicates that by 2010, 49% of households are expected to be classified as middle to high-income groups implying higher consumer spending which puts India as the most compelling opportunity for the retailers. Not only do these malls gain from the young crowd but they also affirm themselves with restaurants like Barista and Café Coffee Day as the rendezvous target for them to hang around with friends and relatives. Entertainment facilities like free children's play area, carousel and family entertainment centers are some of the strategic mixes that are used to stay competitive and tempt shoppers in the increasing experiential economy. Food courts, Indian eateries and the multinational food chains, promise vast cuisine and wide variety of meals and food at affordable prices in the malls. The Indian eateries play upon the price and nutrition factors while the international food chains like Subway, McDonalds, Domino's and Pizza Hut, offer great quality, exotic flavours and assortments and international standardized food.

Metamorphosis is in the air. As the supermarkets, hypermarkets, departmental stores and specialty stores foray in the Indian retail industry, they have summed up with the 'mall-ing' effect, dispersing significant growth in the organized retail industry. It all started when India first began opening its economy in 1980s. With the availability of land at prime locations coupled with cheaper real estate prices, textile sector was the first to tap the potential of the retail chains. However, it took two years for the upshot of recession to commence into major cities like Mumbai and Delhi and it was during this period of industry slump that the big business houses took notice of organized retailing caliber. Companies like Raymond's, Grasim, Bombay Dyeing and Titan were the first to take step in this direction by establishing dandy showrooms in 1980s. Over the period of time, in the latter half of 1990s, not only the manufacturers but also the pure retailers stepped in the arena, like Food World, Subshikha and Nilgiris in food and Planet M, Music World, in music and so on, trying to utilize this alternative channel of sales. However, the real momentum got triggered by the end of 2000 when a wave of players entered the industry and segments such as apparels, jewellery, consumer durables, footwear, personal care, luggage, books and music got filled with myriad of players of the industry. Since then, growing at the rate of 40% per annum for the last three years, the organized retail has shifted its gear and accelerated without any direct incentive by the government.

The mall fever is still on the rise. Even though the mall development suffers from certain pitfalls like long-term funding and development of retail infrastructure and planning; property dealers like Dubai-based Emaar Properties have shown substantial interest in investing in the India. The growing population of India with rising disposable income and the desire of the Indian middleclass to have better lifestyle are some of the reckoning features that are driving the foreign investors in India. It is yet to be seen whether these malls serve only the rising upper middle class only. Agriculture sector need special attention and can malls be direct selling centres for agricultural products giving direct benefit to marginal farmers?

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Special Research Paper

ENGEL'S LAW AND EXPENDITURE ELASTICITIES OF SPECIFIC FOOD ITEMS IN INDIA: 1950-51 to 1999-2000

A. R. Prasad*

I. INTRODUCTION

Economic development involves an increase in national and per capita income and the consequent changes in the consumption pattern. A notable change in the pattern of consumption expenditure is expected due to change in per capita income. The pattern of expenditure is a good indicator of the economic status and the standard of living of the consumer and also shows the relative importance of individual items in the consumption pattern. As the economy develops, the level of income of its people increases and they begin consuming larger quantity and superior quality products. This process though quite gradual brings about changes in the pattern of consumption over time. The pattern of private final consumption expenditure on food commodity group and specific food items gives a broad idea of the change in household consumption pattern and is a direct measure of the living standard of the people.

It is, therefore, desirable to analyse the pattern of consumption expenditure and the present exercise, therefore, deals with the analysis of the responsiveness of consumption expenditure on specific food items to the change in total consumption expenditure on food commodity group during 1950-51 to 1999-2000. Sign and magnitude of estimates of expenditure elasticities will prove to be useful in classifying the items of food into luxuries and necessities at a macro level.

II. DATA BASE AND DATA TRANSFORMATIONS

Most of the empirical studies relating to consumption patterns in India have used cross-sectional data[1] and have concentrated on estimation of expenditure elasticities for different commodity groups. There have been some statistical studies based on the data provided by the National Sample Survey[2]. The availability of time-series data on private final consumption expenditure on specific food item wise for the period 1950-51 through 1999-2000 provides an opportunity to estimate expenditure elasticities[3].

The present study is based on the Central Statistical Organisation (CSO) estimates of private final consumption expenditure in the domestic market[4] taking into account the specific food items of consumption expenditure and their related aggregates. Time-Series Data used in this study on private final consumption expenditure of specific

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food items in domestic market for 50 years (1950-51 through 1999-2000) and population for the corresponding years have been drawn from various publications of National Accounts Statistics[5].

While dealing with empirical analysis, it is often desirable to work upon an appropriate method of transforming available statistical information into a workable time-series data in keeping with the analytical framework, on the one hand, and the quality of the series on the other.

The private final consumption expenditure at current prices includes implicitly not only the effects of changes in quantities consumed but also the changes in prices. It, therefore, becomes necessary to correct the data to eliminate the effect of prices and obtain the series in real terms to make the PFCE estimate comparable over the period of time. The real time-series data on Private Final Consumption Expenditure of specific food items at constant (1993-94) prices are used in order to adjust the changes in prices and the estimates of parameters obtained provide correct idea about the nature of the commodity.

One important determinant of total consumption expenditure is population. Improvement in the economic well being of the average person in a developing country like ours depends on two factors: (i) growth in the total output of the economy, and (ii) growth in the population of the country. The per capita output of a nation can increase only if total output increases more rapidly than population. If population is growing at the same rate as total output, the economic well being of the average person remains unchanged. Per capita output can be increased also by a reduction in the population growth. An unfortunate characteristic of most less-developing countries is that they exhibit a relatively high population growth. For the time-series over a long period, the consumption behaviour should be corrected for population changes, so that we may isolate the effect of a rise in consumption expenditure owing to population changes. Thus, per capita consumption expenditure rather than the aggregate magnitudes are the relevant data to be used in estimating consumption expenditure elasticity. Dividing the private final consumption expenditure of specific food items by the population of the country for each year the estimates of per capita annual private final consumption expenditure at constant (1993-94) prices on each food item for the years 1950-51 to 1999-2000 have been obtained and used in the analysis.

III. SELECTED ALGEBRAIC EQUATION AND METHODS OF STUDY

The empirical laws governing the relation between income and particular categories of expenditure is expressed as

$$p_i x_i = \phi_i(y) \qquad \ldots(1)$$

where p_i represents the price of the i^{th} food item and is measured by total expenditures (called 'income') and not disposable income. Total expenditures, which are under the households' control, are probably a better proxy for this than the actual incomes, which may include all sorts of transitory (positive or negative) components. Furthermore, static demand theory defines y as total expenditure, not as disposable income (which includes savings). In Equation (*1*), all prices are supposed to be given and the consumers cannot influence them. Turning to *y*, the problem of how much to spend (and, therefore, how much to save) out of disposable income is not taken up here. We primarily concentrate our attention on the allocation of a given budget among *n* goods. Thus, *y* designates consumers' total expenditures called 'income'.

Several alternative forms of equations such as *linear* ($PCCE_i = \beta_0 + \beta_1 PCCEF$), *semi-log* ($PCCE_i = \beta_0 + \beta_1 \log_e PCCEF$) and *log-linear* ($\log_e PCCE_i = \beta_0 + \beta_1 \log_e PCCEF$) were fitted to time-series data. The choice of function was made on the basis of *theoretical criteria* (sign and magnitude of the regression coefficient and its economic interpretation), *goodness of fit* (the ratio of sum of squares of deviations of observed values from estimated values of sum of squares of deviations of observed values from mean), and *statistical significance* (low standard errors) of the regression coefficients that enabled us to select *log-linear* form (constant elasticity form) for the analysis. The log-linear form, however, does not satisfy adding-up criterion[6] and ignores the possibility of economies or diseconomies of scale in consumption expenditure[7].

Elasticity is a concept used to describe responsiveness. The empirical relationship between the increase in expenditure on particular food item with respect to an increase in the per capita food expenditure keeping other things the same can only be possible by examining the expenditure elasticity (η_E) of specific food items.

Expenditure elasticities were worked out using Engel functions. Per capita expenditure on specific food item (E_i) was used as dependent variable and the per capita total expenditure on food as the independent variable (E). Thus:

$$\eta_E = \frac{dE_i / E_i}{dE / E} \qquad \ldots(2)$$

is the elasticity of expenditure on specific food item (E_i) with respect to total expenditure on food commodity group (E).

The commonly used Engel function, namely, log-linear (constant elasticity form of equation) was fitted:

$$E_i = \beta_0 E^{\beta_1} \qquad \ldots(3)$$

where, E_i = expenditure on i^{th} food item, and

E = total food expenditure

β_1 = constant elasticity of E_i with respect to E

In this formulation, β_1 is the constant elasticity of expenditure on specific food item i with respect to total food expenditure.

The appropriate transformation of the estimation of the constant elasticity form is to take logarithms on both sides of the variables (to the base e), i.e.,

$$log_e E_i = log_e \beta_0 + \beta_1 log_e E$$

or, $$log_e E_i = \beta_0 + \beta_1 log_e E \qquad \ldots(4)$$

where, $\beta_0 = log_e\beta_0$

By the definition of expenditure elasticity,

$$\eta_E = \frac{\frac{dE_i}{E_i}}{\frac{dE}{E}} = \frac{dE_i}{E_i}.\frac{E}{dE} = \frac{dE_i}{dE}.\frac{E}{E_i} \qquad \ldots(5)$$

To obtain the first component of the expenditure elasticity (η_E) in (5), the derivative of the E_j function with respect to E in the constant elasticity function $E_i = \beta_0 E^{\beta_1}$ gives:

$$\frac{dE_i}{dE} = \beta_1\left(\beta_o E^{\beta_1 - 1}\right) = \beta_1\left(\beta_o E^{\beta_1}\right)E^{-1}$$

$Since\ E_i = \beta_o E^{\beta_1}$ in (3), we get,

$$\frac{dE_i}{dE} = \beta_1 (E_i) E^{-1} = \beta_1 \frac{E_i}{E}$$
$\ldots(6)$

Substituting (6) for $\frac{dE_i}{dE}$ in (5) in the elasticity expression, we find

$$\eta_E = \frac{dE_i}{dE}.\frac{E}{E_i} = \beta_1 \frac{E_i}{E} \cdot \frac{E}{E_i} = \beta_1 \qquad \ldots(7)$$

Thus, β_1 is the (constant) elasticity of E_i (consumption expenditure on the i^{th} food item) with respect to E (total expenditure on food commodity group).

In order to estimate the expenditure elasticities for specific food items, the constant elasticity form of equation given below has been fitted to time-series data using Ordinary Least Squares (OLS) method under the main assumption that there is one-way causation between per capita real consumption expenditure on i^{th} food item and per capita real total consumption expenditure[8] on food commodity group:

$$log_e \frac{TCE_i}{Pop} = \beta_0 + \beta_1 log_e \frac{TCEF}{Pop} \qquad ...(8)$$

or $$log_e PCCE_i = \beta_0 + \beta_1 log_e PCCEF \qquad ...(9)$$

where: $\frac{CE_i}{Pop} = PCCE_i$ = per capita real consumption expenditure on i^{th} food item

$\frac{TCEF}{Pop} = PCTCEF$ = per capita real total consumption expenditure on food commodity group (sum of the per capita real consumption expenditure on all specific food items under consideration)

Estimates of expenditure elasticities are relevant for producers of various goods and services. Knowledge of the expenditure elasticity of food commodity group and specific food items is also crucial for forecasting future expenditures for food. Since Engel curves for normal goods are positively sloped and for inferior goods are negatively sloped; it shows that expenditure elasticities of normal goods are positive and expenditure elasticities of inferior goods are negative. Economists divide normal goods into two subgroups: just normal and ultra-superior (also known as luxuries). Goods whose expenditure elasticity is between 0 and 1 are just normal, and goods whose expenditure elasticity is greater than 1 are normal, but they are also known as ultra-superior. In summary, we can state:

(a) A food item is considered to be normal (necessary), the expenditure elasticity is positive and lies between zero and unity $(0 < \eta_E < 1)$.

(b) If the food item is inferior, the expenditure elasticity is negative $(\eta_E < 0)$.

(c) A food item is considered to be a luxury (ultra-superior) if the expenditure elasticity is greater than unity $(\eta_E > 1)$.

IV. LIMITATIONS OF THE STUDY

The present study is based on the relationship between the per capita consumption expenditure of specific food items and total per capita food consumption expenditure under *ceteris paribus* clause (shift factors assumed to be constant). The results discussed below are, therefore, explanatory and tentative. Further, the aggregate analysis undermines the presence of differences in habits and social customs of the households belonging to different income groups and regions. Estimates of expenditure elasticities for specific food items by income group and region within the state and across the states would provide useful insights into heterogeneous consumption behaviour so as to perceive the nature of the food items.

V. ESTIMATES OF EXPENDITURE ELASTICITIES

The compound growth rate of specific food items and the estimates of expenditure elasticity (η_E) across specific food items during 1950-51 through 1999-2000 are set out in Table 1.

The commodity group per capita food consumption expenditure increased at the compound rate of 0.98 percent per annum. This growth rate is lower than the growth rate estimated for per capita total consumption expenditure (1.34 percent). The food items Cereals & Bread, Sugar & Gur and Oil & Oilseeds increased at the compound rate of 0.41 percent, 0.54 percent, and 0.75 percent and Pulses declined at the rate of 0.78 percent per annum, respectively. These growth rates are lower than the growth rate estimated for the commodity group food (0.98 percent) estimated for the period under consideration (1950-51 to 1999-2000). The rest of the food items Fruits & Vegetables, Potato & Other Tubers, Milk & Milk Products, Meat, Egg & Fish, Coffee, Tea & Cocoa, Spices and Other Food registered higher growth rates as compared to the growth rate of food commodity group during the reference period. Growth rate is accelerating, decelerating or stable depending on whether coefficient β_1 is significantly positive, significantly negative or insignificant statistically. Growth rates of Fruits and Vegetables, Potato and Other Tubers, Milk and Milk Products, Coffee, Tea and Cocoa and Spices have accelerated; items like Cereals and Bread, Meat, Egg and Fish and Other Food have been stable.

TABLE 1: EXPENDITURE ELASTICITIES FOR SPECIFIC FOOD ITEMS

Form of Equation (for expenditure elasticity): **Log-linear**

Equation: $\log_e PCCE_i = \beta_0 + \beta_1 \log_e PCCFE$

Sl. No.	*Food Items*	*Expenditure Elasticity Coefficient*	*Standard Error of Coefficient*	R^2	*CGR[@] (Percent)*
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
1.	**PER CAPITA BROAD COMMODITY GROUP CONSUMPTION EXPENDITURE**	—	—	—	**1.34**
2.1	Per Capita Cereals & Bread	0.4420 (8.0090)	0.0552	0.5631	0.41

Table 1 (Continued)

2.2	Per Capita Pulses	-0.6367 (-4.9219)	0.1293	0.3216	-0.78
2.3	Per Capita Sugar & Gur	0.5580 (5.5488)	0.1006	0.3781	0.54
2.4	Per Capita Oil & Oilseeds	0.7767 (8.2945)	0.0936	0.5805	0.75
2.5	Per Capita Fruits & Vegetables	1.6432 (15.0402)	0.1093	0.8213	1.74
2.6	Per Capita Potato & Other Tubers	1.6889 (14.9778)	0.1128	0.8201	1.79
2.7	Per Capita Milk & Milk Products	1.9301 (15.3244)	0.1260	0.8268	1.89
2.8	Per Capita Meat, Egg & Fish	1.1837 (9.5621)	0.1238	0.6486	1.04
2.9	Per Capita Coffee, Tea & Cocoa	1.7659 (11.7583)	0.1502	0.7369	1.73
2.10	Per Capita Spices	1.3594 (11.1997)	0.1214	0.7175	1.37
2.11	Per Capita Other Food	1.4191 (7.5917)	0.1869	0.5361	1.36

Note: 1. Figures in parentheses indicate t-values that are more than the tabulated value at 1 percent level of significance.
2. As the standard errors of individual coefficients are very low in all the cases, auto- correlation does not appear to be a serious problem in this exercise.
@. CGR = Compound growth rate estimated from $Log_e CE = \alpha + \beta t$.

The estimate of expenditure elasticity for food is found to be less than unity showing that it falls in the category of necessity. The magnitude of the food elasticity, which is less than unity (0.7209), states that the proportion spent on food is found to have declined as total expenditure increases. The magnitude of expenditure elasticity of demand for food during 1950-51 to 1999-00 conforms to the well-known Engel's Law.[9] It confirms that food is not only an important staple food of the households at a point in time but also over a period of time.

Expenditure on commodity group food is the sum of expenditure on different food items like Cereals and Bread, Pulses, Sugar and Gur, Oil and Oilseeds, Fruits and Vegetables, Potato and Other Tubers, Milk and Milk Products, Meat, Egg and Fish, Coffee, Tea and Cocoa, Spices and Other Food. The estimates of expenditure elasticities for food items like Fruits and Vegetables, Potato and Other Tubers, Milk and Milk Products, Meat, Egg and Fish, Coffee, Tea and Cocoa, Spices and Other Food are found to be greater than one, implying in economic jargon, that these items fall in the class of luxuries. The magnitude of these elasticities states that the proportion spent on these items are found to be increased as total food expenditure increased during 1950-51 through 1999-00. Surprisingly, it has been observed that the coefficient of the expenditure elasticity of pulses is negative. The negative sign of the elasticity implies that an increase in total per capita food expenditure resulted in decrease in per capita expenditure on Pulses. The aversion behaviour of the consumer towards consumption expenditure on Pulses means that this item is classified as inferior good (Table 2). Pulse is an important food item that helps meet out the nutritional requirement of protein in food content. The probable reason for the decline in consumption expenditure on pulses is with the increase in food consumption expenditure, people are increasingly using animal protein in their food content supplied by increase in per capita expenditure on item like Meat, Egg and Fish over time as is also indicated by its significant positive elasticity.

TABLE 2: CLASSIFICATION OF FOOD ITEMS BASED ON ESTIMATES OF EXPENDITURE ELASTICITIES

Sl. No.	*Food Items*	*Food Item Turned Out*
1.	Cereals and Bread, Sugar and Gur, Oil and Oilseeds	Necessary Food Items
2.	Pulses	Inferior Food Item
3.	Fruits and Vegetables, Potato and Other Tubers, Milk and Milk Products, Meat, Egg and Fish, Coffee, Tea and Cocoa, Spices, and other food.	Luxury (ultra-superior) Food Items

VI. CONCLUSIONS

Time series estimates of expenditure elasticities of demand for food, which is a staple item, is less than unity corroborating the fact that food is not only a necessity at a point in time across the households, as often revealed by cross-estimates of expenditure elasticities, but also over a period of time revealed by time-series estimates. The aversion behaviour of the households has been observed towards the consumption of pulses as the proportion spent on this item declined as total expenditure increased during 1950-51 to 1999-2000. The study has also shown that the demand for fruits and vegetables, potato and other tubers, milk and milk products, meat, egg and fish, coffee, tea and cocoa, spices, and other food was elastic.

REFERENCES

1. *Some of the relevant studies include*:

   Iyengar, N.S. (1967), *Some Estimates of Engel Elasticities Based on National Sample Survey Data*, Journal of the Royal Statistical Society, Part I, Series A (General), Vol.130, pp.84-97.

   Bhattacharya, N. (1973), *The Average Elasticity of Variable Elasticity Engel Curve*, Technical Report No. Eco/2/73, Indian Statistical Institute, Calcutta.

   Gupta, Devendra, B. (1973), *Consumption Pattern in India*, Tata McGraw Hill Publishing Company Ltd., New Delhi.

   Iyengar, N.S. and N. Bhattacharya (1978), Studies on Consumption Behaviour in India, *A Survey of Research in Economics, Econometrics*, Vol. III, pp.176-232, Allied Publishers, New Delhi. Coondoo, Dipankar, Robin Mukherjee and D.S. Prasad Rao (1982), Engel Curve Analysis with Non-monitised Consumption, Technical Report No. ERU/1/82, Indian Statistical Institute, Calcutta. Mazumdar, Amit (1983), *Consumer Expenditure Pattern in India*, Technical Report No.ERU/17/83, Indian Statistical Institute, Calcutta. Ghosh, Suchismita and N. Bhattacharya (1995), *Effect of Reference Period on Engel Elasticities of Clothing and Other Items: Further Results*, Sankhya, Vol.57, Series B, pp.433-449.

2. Paul, Pushpam and Rudra Ashok (1964), *Demand Elasticity for Foodgrains*, The Economic Weekly, November 28, pp.1893-94.

   Joseph, Pushpam (1968), Application of the Linear Expenditure System to NSS Data, *Economic and Political Weekly*, April 13, pp.609-15.

   Ray, Ranjan (1980), Analysis of a Time Series of Household Expenditure Surveys for India, *The Review of Economics and Statistics*, Vol. LXII, No.4, pp.595-602.

3. Prais, S.J. (1952-53), Non-linear Estimates of the Engel Curves, *The Review of Economic Studies*, Vol.20, pp.87-103.

   Stone, J.R.N. (1954), Linear Expenditure Systems and Demand Analysis: The Application to the Pattern of British Demand, *Economic Journal*, Vol.54, pp.511-527.

   Houthakker, H.S. (1957), An International Comparison of Household Expenditure Patterns, *Econometrica*, Vol.25, pp.532-551.

   Leser (1963), Forms of Engel Functions, *Econometrica*, Vol.29, pp.336-362.

   Liviation, N. (1961), Errors in Variables and Engel Curve Analysis, *Econometrica*, Vol.29, pp.336-362.

   Poddar, N. (1971), Patterns of Household Consumption Expenditures in Australia, *Economic Record*, Vol.47, pp.379-98.

   Singh, Amarjeet and Harmol Singh (1971), Changing Consumption Pattern in Punjab, *Economic and Political Weekly*, Vol.48, pp.31-40.

Coondoo, Dipankar (1972), A Comparison of Consumer Expenditure Pattern of Indian Middle Class and Working Class Families, Technical Report, No. Eco/18/72, Indian Statistical Institute, Calcutta.

Battese, George E. and Bruce P. Banyhady (1981), Estimation of Household Expenditure Functions, *The Economic Record*, Vol. 57, pp.80-85.

Roy, Thirthankar (1985), A Disaggregated Study of CSO and NSS Estimates of Private Consumption Expenditure, Technical Report No. ERU/9/85, Indian Statistical Institute, Calcutta.

4. The estimates of Private Final Consumption Expenditure (PFCE), as prepared by the Central Statistical Organisation, at current and constant prices are computed by including the household consumption expenditure, the expenditure of private non-profit institutions in domestic market and also by adding direct purchases abroad by resident households and by subtracting direct purchases in the domestic market by non-resident households (tourists and visitors) and extra territorial bodies (diplomatic staff and such other categories).
5. Annual estimates of private final consumption expenditure at constant (1993-94) prices relates to financial year (April to March) and is drawn from National Accounts Statistics Back Series (1950-51 to 1992-93), 2001, Central Statistical Organisation (CSO), Ministry of Statistics & Programme Implementation, Government of India, New Delhi.
6. The adding-up restriction on Engel function implies that the sum of the individual commodity group expenditure has to exactly equal the total expenditure
7. Economies of scale imply that a one percent increase in total expenditure and family size leads to increase the consumption on i^{th} items by less than one percent. Diseconomies of scale imply that a one percent increase in total expenditure and family size leads to increase the consumption on i^{th} items by more than one percent.
8. Per capita total expenditure is a suitable classifying variable as it is closely related to the permanent economic status of the households.
9. According to this [Ernst Engel (1821-1896)] law the proportion spent on food declines as income increases.

JGE

Special article

POLITICAL EMPOWERMENT OF INDIAN WOMEN AT LOCAL LEVEL –KEY OF SOCIAL AND ECONOMIC DEVELOPMENT

Dr. Santosh Nandal•

INTRODUCTION

The political empowerment can be defined as the degree of equality and freedom enjoyed by women in shaping and sharing of power and in the value given by society to this role of women. The recognition of women's political equality in the Indian constitution was a radical departure, not only from the inherited norms of traditional Indian society, but also from the political norms of most advanced countries at that time. Thus the women achieved the great political equality of franchise as well as right of being elected. In the constitution equality on the basis of sex becomes one of the fundamental rights.

Empowerment has several other dimensions like social empowerment, economic empowerment, besides, of course political empowerment. Social empowerment implies promotion of social capabilities such as education, health, cultural aspects and women's honour. Economic empowerment implies entitlement of employment, income, property, productive resources and benefit of development irrespective of gender difference. Political empowerment, of course, implies equal role in decision-making process in power structure from grass root level to national level. All these dimensions of empowerment are inter related with each other.

Amendment in Constitution in 1992 to strengthen the sharing of power by women at local level has opened a new chapter in the history of women's struggle for empowerment. The enactment of the 73rd constitutional amendment i.e. Panchayati Raj, in India is, no doubt a landmark event in this regard. It is important because of revolutionary measure by reserving 33 per cent seats for women at all levels in the local governance. Local governance interpreted as the active involvement of the local population within the territorial boundaries in local government is ensuring improved quality of services and leadership at

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the local government (level). This is a significant shift in the approach towards the well being of women from ‘Welfare during Fifties’ to ‘Development during Seventies’ and to Empowerment during Nineties’.

Political empowerment at local level i.e. Panchayati Raj assumes particular importance as a means of producing democratic functioning and decision making decentralized governmental power, thereby restructuring political institutions. This development i.e. amendment in the Constitution has brought the question of competitiveness of Indian women to the centre stage of controversy. In view of the majority of Indian rural women being illiterate and new in this role, this question has attracted the attention of a large number of commentators and researchers. In this paper an attempt is made to examine the competitiveness of some selected village panchayats headed by women in the light of empirical evidence of the work of the local government in this area. It also presents interventions promoted through local governments to reduce poverty and promote socio-economic development targeted at women and seeking to bridge gender gaps.

WOMEN IN POLITICAL ARENA

The principle of gender equality is enshrined in the Indian Constitution, in its preamble, fundamental rights, fundamental duties and directive principles. The Indian constitution guarantees equal rights to both women and men. But the representation of Indian women in politics at national level is lower than that of men. Although women constitute nearly half of the population, but politics has remained largely a monopoly of men because its condensation of power and authority mainly lies in the hand of this gender. At present, there is a controversy about the 33 per cent reservation for women in legislatures and in parliament. However, the failure of recent efforts to secure reservation for women in Parliament and Legislatures, because the government has appointed a committee for the empowerment of women. Through reservation, empowerment of women has a long way to go.

Curiously, I think, government feels that there should be a consensus if a Bill is to be passed. But, unfortunately, such sensitivity was not shown to provide reservation for Backward caste or even the Scheduled Castes and Tribes. At the time of election, every political party promises and assures the maximum representation of women. But, the women’s participation in politics has been very low in the past 57 years after gaining independence. In Lok Sabha women members did not turn up in good numbers until now. The figures of women members in the parliament from 1952 to 2004 are given below.

It was found that year 1977 shows the lower representation of women in Lok Sabha. If we have a look on the table, the year 2004 shows that 9.5 per cent women participated in Lok Sabha which is higher in all the Lok Sabha. Their lower participation in Lok Sabha ensures that women remain under-represented in politics at national level. Before independence, women constituted 10 per cent of those jailed for protesting British Rule, an important political activity at that time. But after 57 years of independence, women have never crossed 9.5 per cent in Lok Sabha. If women are marginalized at national and state level, they are practically absent in the villages, which are traditionally bound. In these circumstances, the amendment in Constitution seems a great importance. This is a historical step for the empowerment of women to ensure greater participation by rural women in political process at local level.

Table 1: Women's participation in parliament (Lok Sabha) in 1952-2004.

YEAR	No. of seats in Lok Sabha	Representation of Women in Lok Sabha	Percentage of Women
1952	499	22	4.4
1957	500	27	5.4
1962	503	34	6.7
1967	523	31	5.9
1971	521	22	4.2
1977	544	19	3.3
1980	544	28	5.1
1984	544	44	8.1
1989	529	28	5.2
1991	545	36	7.0
1996	545	39	7.2
1998	545	43	7.9
1999	545	49	8.9
2004	545	52	9.5

Source: Centre for study of developing societies.

FIELD STUDY

In order to address the above raised questions, the study has taken a field survey, conducted a dialogue assessment with elected women Sarpanch (Head of Village) in local government in Haryana State. All the questions were not of a quantitative nature. Qualitative information was also collected such as opinions, experiences and future hopes. As Laier (1997) noted, combining quantitative and qualitative methods is a useful way of both exploring issues in depth and obtaining a broader picture to generalize form. In the field survey, a sample of elected women representatives (heading the village panchayats) in local politics were interviewed. The sample consists of 131 women representatives in local politics. The case studies of few women representatives in local bodies were conducted to supplement the information collected from the field survey. After consulting the officials and public opinion, two categories of Panchayats were taken, one category, which were reportedly performing well and other category which were performing poor included in the sample. The socio-economic background of women i.e. education, family support, caste, family income and occupation is taken into consideration to throw light on the performance of women representatives in local politics.

Before throw light on socio-economic profiles and performance of women representatives, the researcher reflects on the number of women representatives anticipated to emerge as a result of the Constitutional amendment, which is shown in the following table.

Table 2: Women in Panchayati Raj Institutions

Local Institutions	Total No. of Seats	No. of seats reserved for women
Gram Panchayat (village level)	61,170	20,390
Panchayat Samiti (block level)	2,118	706
Zila Parishad (district level)	303	101

Table 3: Reservation of offices for women

Local Institutions	No. of positions	Position reserved
Gram Panchayat	5,720	1,906
Panchayat Samiti	111	37
Zila Parishad	19	6

The above tables reflect that 33 per cent or one-third of the total seats are reserved for women. In addition, one third offices of the chairpersons of the subject committee have also been reserved for women. Thus, the women who were insignificant at the grass root level became substantial power wielders overnight due to the reformation provisions of 73^{rd} amendment in the Indian Constitution.

PERFORMANCE OF WOMEN REPRESENTATIVES IN PANCHAYATS

Before assessing the performance of women representatives, it is important to know the socio-economic background of women representatives. The socio- economic background of sample can be helpful to assess the performance of women representative in right manner. The characteristics of women representative is shown in the following tables. It was found that 20.22 percent women representative fall in the age group of 32-38, 38.93 per cent in the age group of 39-45, 31.69 percent in the age group of 46-52, 3.82 percent in the age group of 53-59 and 5.34 percent in the age group of 59 and above (TABLE 4).

Table 4: Women representative and age.

Age group	Number	Percentage
32-38	27	20.22
39-45	51	38.93
46-52	41	31.69
53-59	5	3.82
59 and above	7	5.34
Total	131	100.00

Table 5: Women representatives and education level

Education	Number	Percentage
Illiterate	45	34.35
Primary (upto V)	37	28.24
Middle (upto VIII)	29	22.13
Matric level (upto X)	12	9.16
Secondary (upto XII)	8	6.12
Degree (B.A.)	0	0.00
Total	131	100.00

Table 6: Women representative by occupation

Category of occupations	Numbers	Percentage
House wife	69	52.67
Agriculture laborer	36	27.48
Social worker	5	3.82
Handicraft worker	11	8.39
Others	10	7.64
Total	131	100.00

Table 7: Women representative’s family income

Monthly income	Number	Percentage

Below 1000	15	11.45
1000-2500	37	28.24
2500-5000	53	40.46
5000 and above	26	19.85
Total	131	100.00

Regarding the education level, 34.35 per cent women were illiterate, 28.24 percent had education up to primary level, 22.13 percent women were middle pass, 9.16 percent were Matric and 6.12 percent had secondary education (Table 5). The present sample shows that high percentage of women had not the capacity to read and write but have the capacity to understand Panchayati Raj rules, regulations and other related matter of village.

It was found that more than half of women representatives (69 %) were housewives. These housewives were the managers of housekeeping doing every type of housework. The work of housewives is not considered as an economic activity. 27.48 percent of the sample were agricultural laborers belonged to the category of labor, 3.82 percent of sample were involved in social activity, 8.39 percent had their own work i.e. handicraft activities and 7.64 were involved in other activities (Table 6). Majority of women respondents reported that they do all domestic chores in the family and there is no much share of work by the male members of the family. They do all domestic activities like cooking, cleaning, washing clothes and caring for children and other family members. Most of the women representatives (40.46 %) had the family income in the range of rupees 2500-5000 per month. Nearly 12 per cent came from the family with less than rupees 1000 per month and only 20 percent of women representative had income above rupees 5000 per month (Table 7). As is evident, after the 73rd amendment in the Constitution, the agricultural laborers have also come forth to take up the new role of elected representatives in local bodies.

Table 8: Level of awareness about fund utilization and quality of leadership among Women representatives.

Quality of leadership			Funds utilization		
Leadership	No.	%	Awareness	No.	%
Improved	91	69.46	Fully aware	9	6.88
Not improved	6	4.58	Marginally aware	21	16.03
No change	3 4	25.96	Slightly aware	101	77.09
Total	131	100.00	Total	131	100.00

Quality of leadership and fund utilization is reported in table 8. Majority of women (69.46 %) reported that the quality of leadership has improved, 4.58 percent reported that quality of leadership has not improved and 25.96 percent reported that there is no change in the leadership. Regarding the utilization of funds, 6.88 percent of women representatives were fully aware, 16.03 were marginally aware and 77.09 percent were slightly aware. Some women admitted that regarding the funds, they were not consulted by male members. They knew only after the completion of work in the village like roads etc out of the panchayat funds. But after experience, they got involved themselves and began questioning about the allocation of panchayat funds. Women also realized that the funds available to the village panchayat were inadequate.

ECONOMIC EMPOWERMENT THROUGH PANCHAYATS

The impact of reservation on women in Panchayat bodies is instructive. Initially, the criticism was made that women were merely proxies for some male member of the family. We have found that in a few months or a year, the actual policies followed by the Panchayats have been much more sensitive to economic needs of the poor. In so far as the economic impact of such policies as family planning and conservation tend to be differently felt by the women. Human resource development being one of the major agenda in the plan of panchayats, all the development efforts were directed to empower women besides mainstreaming them into the national development. The emphasis in respect of women was to make them economically independent and self-reliant. It is observed that a woman is targeted after she has attained some economic independence. Women with land are targeted as being witches or sometimes being put to death. The women sarpanch paid special attention to this problem of violence, both domestic and social.

It is true that after being elected, there is no much change in the earnings of women representative. By increasing women's ability to take decisions, it increases their status in community and leads to greater input into family and community decision-making. In rural areas, where women were confined to the homes and men are traditionally considered the decision-makers in family and society, women's representation at local level play a crucial role to change the image of women. Thus, economic contribution by itself does not ensure a higher or improved status to woman. Status of women is a complex phenomenon determined mostly by socio-cultural set up of society, rather than by purely economic factors. Her role is recognized but status matching the role is not accorded. In other words, woman does not enjoy a status independently. She is still circumscribed by many restrictions placed by male dominated families and society in matters of job, control over family's earnings.

Even in terms of resource distribution, there are many instances of inequality. The senior male members get the lion's share of the resources, which is true across countries and cultures (Sen, 1990; UNDP, 1995). Moreover, not only families make an unequal distribution of resources, that distribution itself may get skewed according to who is in charge of those resources' distribution. Niela Kabeer (1993) has cited many examples from various parts of the world to show that as male income increases, more personal forms of consumption increases. They consist of alcohol, meals eaten out, cigarettes and 'female companionship' (Kabeer, 1993, p. 104). On the contrary, women spend a much higher part of their income on children, their nutrition and items for collective household consumption. An improved status may be found out by recognition given to her in taking decisions in all matters related to woman. Prosperity of any household or society depends on the resources pooled and decisions made by both men and women equally. Before the amendment of constitution, women have little voice in decision-making at village level, but now women representatives have been handling various economic and political issues coming up in the panchayat with confidence. Therefore, it is important that the political power of women be strong at least at the local level. Sen (1999a) also recognizes the importance of democratic institutions to development: "A variety of social institutions contribute to the process of development precisely through their effects on enhancing and sustaining individual freedom". He mentions in particular the role of democratic institutions in the formation of social norms, ethics, goals and oppression of women and the poor.

CONCLUSION

There is a growing realization among the women that local elections are a means to bring positive change in their lives. There is no doubt that the constitution contemplates a social revolution, brought about through the use of law as an instrument of directed social change. The attainment of equality of status of women was one of the specific objectives which is implicit in preamble, fundamental rights and the directive principles of state of policy. We have to achieve the goals and to go miles before we can sleep. Indian women have to march on the path of gaining literacy, health, employment, social and political recognition and status in due course. The struggle is not over. Certainly they will prove as a key in the process of economic development.

It was found that after three or four years of their leadership, they realized that the political parties are disregarding them for the sake of their vested interests. Lack of training, lack of knowledge and awareness seems the hindrance in the path of their leadership. The bureaucracy has not cooperated in assisting them. They also stated that they did not receive communication from the gram panchayat to attend the meetings. Male pardhan and husbands of some women pardhan did not allow them to attend the training camps. There is also a lot of resistance among male members of the village, as expected, due to their loss of power and significant positions in the affairs of the village. They are elected representatives, but being women, they feel neglected. Another point is

During dialogue with women, it was found that they had their own agenda of priority like girl's education, street lights, drinking water, development in village and self employment activities for women. The problems relating to gender issues like violence, dowry, child marriage, division of labor were also feature in Panchayat meetings. Most of women representative take up the issue like drinking habit of husband in gram sabha. In few villages the drinking habit of husband was corrected by women representative. Such successes have enhanced the self confidence of women in these areas.

Women both in traditional and modern social structure have always been the victims of exploitation. In third world countries like India, they are at the bottom of every hierarchy, oppressions are further magnified as they toil under the double burden of gender. Domestic activities are believed to be the sole responsibilities of women and sometimes due to these responsibilities, they do not go outside the village for meetings/trainings.

Now there has been tremendous efforts for giving one-third reservation to the women in the Indian political system at national level. Sooner or later this step will be proved as a mile-stone in the direction of not only women's development, but in the all round development of India as a whole. Now more than one-third population are living below the poverty line. We will have to make a continuous effort to guarantee equal participation of women in politics. Public health, education, education, employment, housing, sanitation or environment, all have their roles relating to women. It is essential to make the women full of rights for solving the problems relating to these roles. The main obstacles in making women full of rights is to change the existing social attitude. The women has become the prey of exploitation in almost all the political and economic system. It is essential to bring change in this mentality.

SUGGESTIONS

Training should be given to women for capacity building among them. They should be taught not to keep undue pressure of their family members. Workshops and seminars should be organized by the government for regular interactions among women representatives across districts and states. Such interactions would help them to exchange their ideas on performance and failure of panchayat.

In our survey, it was found that women were ignorant about some of the rural development programs. Therefore, adequate information relating to various programs and activities of panchayat should be available to women.

Majority of women had no independent source of earning. Money was one of the cause not to attend the meeting. They suggested that government should run such programs which can be helpful to enhance their income.

Women representatives are fully capable to fulfill the political responsibility. They suggested that their participation in local bodies should not merely based on reserved seats only. If a woman can look after house, bring up children, why she is on back seat in political arena. To further strengthen the effort of elected women representatives, the government should provide greater security to women from the anger of powerful vested interest interests who try to harm and harass them in various ways.

The cast system prevails in India. The scheduled caste women representatives are facing the problems. They are not allowed to go inside Chopal. They are insulted and humiliated by the higher caste people. However, some scheduled caste women representatives protested against it. Suman, a woman sarpanch held the meeting in chopal and refused to obey the order of high class people. Therefore, an environment needs to be created to promote gender sensitization, and human rights education for all.

REFERENCES

European Foundation for the Improvement of Living and Working conditions. 1995. Public Welfare Services and Social Exclusion: The development of consumer oriented initiatives in the European Union. Dublin: The Foundation.

Kabeer, Niela. 1993. Reversed Realities: Gender Hierarchies in Development Thought, Kali for women, New Delhi.

Laier, K. 1997. “Women’s Work and the Household in Latin America.A Discussion of the Literature”, CDR Working Paper, September.

Mahbub ul Haq. 1996. Reflections on Human Development, Oxford University Press, New Delhi.

Santosh Nandal. 2003. “Gender Justice: Some Issues”, Women’s Link, Vol. 9 No. 1, January – March.

----- 2003. “Reflections on New Partnership Between Women and Local Self – Government In India: A Rural Revolution?” Journal of International Women’s Studies, Vol 5 # 1 November.

----- 2003. “Women’s Empowerment Perspectives: A Critical Analysis”, Women’s Link, Vol. 9, No. 3, July – September.

Sen, Amartya K. 1990. "Gender and Cooperative Conflicts in Persistent Inequalities". Edited by Irene Tinker, Oxford University Press.
----- 1999a. Development as Freedom. New York: Random House.
UNDP. 1995. The Human Development Report, Oxford University Press, New Delhi.
World Development Report, 2001.

CAPITAL ACCOUNT CONVERTIBILITY: AN AGENDA FOR FUTURE

Dr. Renu Verma•

The process of globalization of the developing countries in the sense of their integration with the world economy accelerated in the last two decades. In response to the changes in the international economic environments, the developing countries gradually changed their policies and moved towards increasing globalization. By the end of 1980s, the policy paradigm of most developing countries had undergone a change, moving from inward looking to outward looking, market oriented export promotion policies. By the middle 1990s several developing countries had almost fully integrated with international economy, making their current as well as capital account fully convertible. Others kept some restrictions on their capital account while making their current account almost completely convertible.

India also adopted partial convertibility on current account in 1992-93 and full convertibility on current account in 1994-95. In fact, it is tempting to think of capital account convertibility as the natural follow up to the establishment of convertibility for current account transactions. India is moving step by step towards making the rupee convertible on capital account. The road of convertibility, in India, is a calculated gradual transition path started in the early 1990 just after the introduction of a market determined exchange rate (LERMS) in 1992 followed by full current account convertibility (UERS) in Aug., 1994. At the next stage, a 14 members Sodhani Panel, an expert group on foreign exchange was set up in November 1994. The Sodhani Committee report tabled in 1995 helped develop deepen and widen the forex market through introduction of various products.

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The third and final step towards forex liberalization was the set up of the committee on capital account convertibility by the Reserve Bank of India (RBI) in 1997 under the chairmanship of former RBI Deputy Governor S.S. Tarapore to "lay the road map" to capital account convertibility. The five members Tarapore Committee on capital account convertibility in May 1997 had chalked out three stages to be completed by 1999-2000. The committee had indicated certain guideposts or preconditions to be achieved for the introduction of capital account convertibility. The main preconditions are as follows:-

(1) Gross fiscal deficit to GDP ratio has to come down from a budgeted 4.5% in 1997-98 to 3.5% in 1999-2000.

(2) A consolidated sinking fund has to be set up to meet government's debt repayments needs, to be financed by increase in RBI's profit transfer to the government and disinvestment proceeds.

(3) Inflation rate should remain between an average of 3-5 percent for the three year period 1997-2000.

(4) Gross Non Performing Assets (NPAs) of the public sector banking system need to be brought down from the present 13.7% to 5% by 2000. At the same time, average effective CRR needs to be brought down from the current 9.3% to 3%.

(5) External sector policies should be designed to increase current receipts to GDP ratio and bring down the debt servicing ratio from 25% to 20% and there must be sustainable growth of exports of goods and services in India.

(6) RBI should have a monitoring Exchange Rate Band of plus minus 5% around a neutral Real Effective Exchange Rate (REER). RBI should be transparent about the changes in REER and should interfere only if it moves beyond the limit of (+) or (-) 5%.

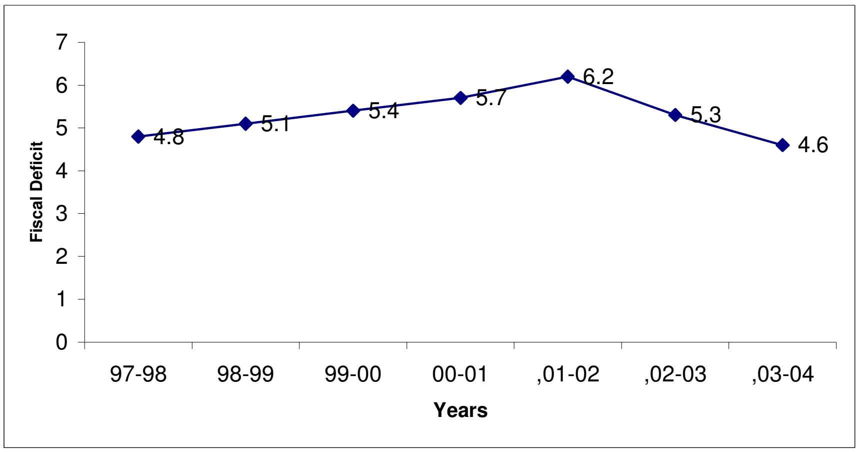
(7) Sound macro economic policy is also one of the preconditions which involve sustainable current account balance. Fiscal and monetary policies must be strong enough to create an environment of general macro economic stability conducive to successful reform programme. Strong and credible fiscal discipline generally requires budgetary process for controlling fiscal deficit. The importance of firm monetary policy in stabilization is also well documented.

(8) Adequacy of foreign exchange reserves in one of the conditions recommended by the committee. In the Indian context, foreign exchange reserves could well be at the current level of about six months imports plus minimum net foreign assets to currency ratio of 40% should be prescribed be law in the RBI act.

Present Scenario:- In this section it would be analyzed how far these preconditions have been fulfilled in Indian economy by now. On the basis of this analysis it could be concluded whether it is right time for India to introduce full convertibility on capital account or it should be postponed for future. Analysis of time behavior of each of them will throw light on the real situation.

Gross Fiscal Deficit:- The following graph reveals the time behavior of fiscal deficit of Govt. in India:

Trends in Fiscal Deficit of Central Government
(Fiscal Deficit as a % of GDP)



Note:

(1) The ratios to GDP at current market price.

(2) Fiscal deficit excludes, the transfer of states share in the small savings collections.

(3) Figures for 02-03 are accounts as reported in the interim budget 04-04 (Feb. 2004)

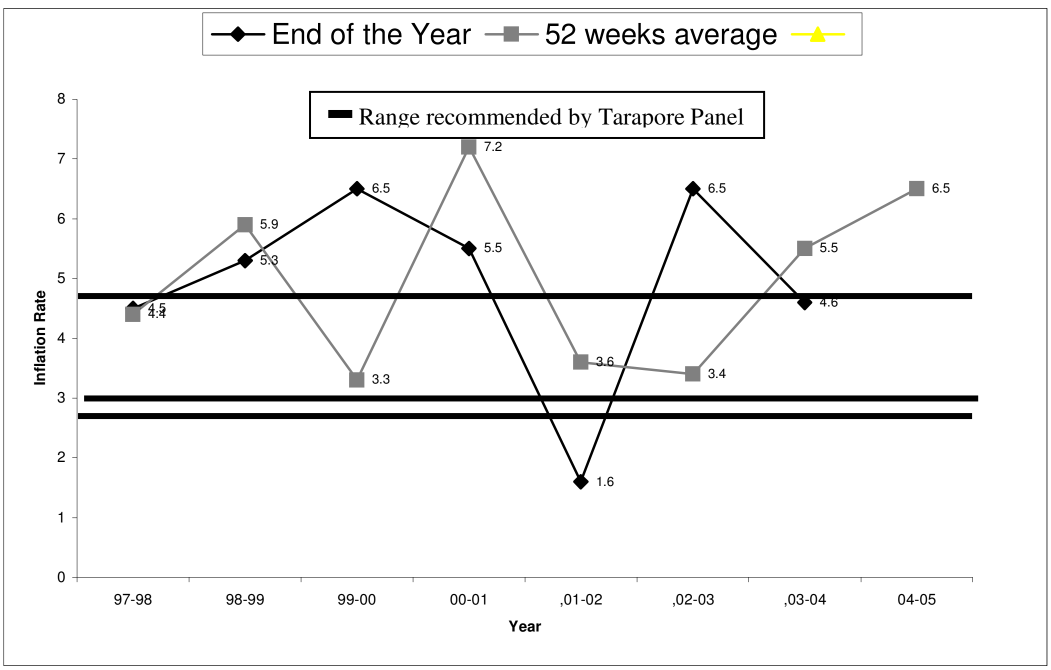
Source: Budget Documents of various years of Govt. of India.

Fiscal consolidation was integral part of economic reforms introduced in the early nineties. After a promising start in the early nineties progress in fiscal consolidation, it faltered somewhat from 1997-98. Fiscal deficit of the central government after declining from 6.6% to 4.1% in 1996-97 had risen to 4.8% of GDP in 1997-98 and thereafter maintained arising trend till 2001-02. However, there is some sign of renewed progress in this area in the most recent years but still governments' fiscal deficit is higher than the recommend level of deficit (3.5 % of GDP) by Tarapore Committee.

Though the deterioration in the fiscal situation has not shown up in a crisis, so far, because of the strong fundamentals of the economy, but the continuation of the present fiscal situation is likely to adversely affect the macro economic situation. To sustain the present growth momentum and to put the economy in a virtuous cycle, it is essential that renewed efforts are made towards fiscal consolidation. The enactment of the Fiscal Responsibility and Budget Management (FRBM) Act in 2003 marks the beginning of such concerted efforts. The FBRM Act mandates the central Government to take appropriate measures to reduce the fiscal deficit, to eliminate revenue deficit by 2007-08 and thereafter build up adequate revenue surplus.

Inflation Rate:- Price stability has been one of the primary objectives of reform process initiated in the early 1990s and also one of the preconditions for the introduction of full capital account convertibility. The following graph reveals the time behaviour of the inflation rate:

Annual Inflation rate based on Wholesale Price Index (base 1993-94 = 100)



Source: Economic Survey, Government of India 2004-05

The performance of the Indian Economy on the inflation front has been satisfactory particularly after the mid 1990s. The decline in inflation since the beginning of the 1990s has been most pronounced in the manufacturing sector. In fact domestic deregulation and tariff rationalization have resulted in greater competition, greater cost efficiency and moderation of upward pressure on prices. But it can be observed from the available data that the rate of inflation has been much higher that the ideal rate of inflation suggested by Trapore Committee, moreover it has been fluctuating during the last few years which is clear from the above graph. Thus the price stability, one of the preconditions for the introduction of the capital account convertibility, has not been fulfilled.

Gross Non-performing Assets (NPAs) of Public Sector Banks & level of CRR:-

A sound banking system is also very essential to introduce capital account convertibility. Tarapore Committee has suggested that gross NPAs of the public sector banking system needs to be brought down from the present 13.7% to 5% by 2000. The following table shows the status of gross NPAs of public sector banks:-

Non-performing assets of Public Sector Banks

Years	GNPAs (Rs. in Crores)	Percentage to gross advance	Percentage to total assets
1999-2000	53033	14.0	6.0
2000-2001	54672	12.4	5.3
2001-2002	56473	11.1	4.9
2002-2003	54086	9.4	4.2
2003-2004	51538	7.8	3.5

Source: Economic Survey, Government of India - various issues.

It is clear that the ratios of gross NPAs to advances and total asset have been declining in public sector banks. To reduce the level of NPAs in public sector banks, recovery management is being given top priority in recent years. measures taken to curtain NPAs include re-schedulement/restructuring at the bank level, corporate debt restructuring, recovery through Lok Adalats, Civil courts and Debt Recovery Tribunals and compromise settlements. Despite of satisfactory performance on this front NPAs of the public sector banks are higher by now.

As far as the level of CRR is concerned RBI has reduced it sharply in the phased manners. Indian economy was passing through a severe liquidity problem since 1995-96 which was adversely affecting investment and production. RBI reduced CRR successively to 8% in October 1997 and finally to 5% in June 2002. At present in 5% which is higher than the suggested level of 3.5% by Tarapore Committee.

External Sector: India's total foreign exchange reserves (including gold, special Drawing Rights [SDR] and reserves with the IMF) have increased from US$ 5.8

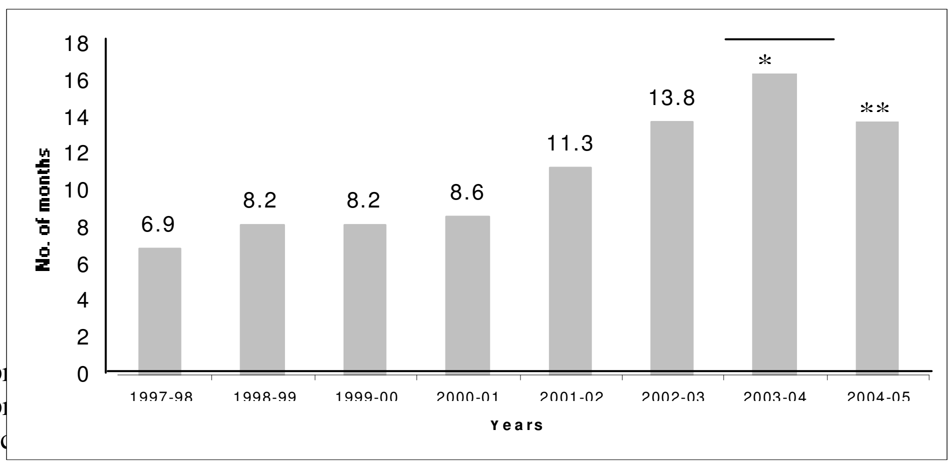
billion at the end of March 1991 to US$ 118.5 billion at the end of April 2004. The rate of accretion to total reserves has been particularly remarkable during the last three financial years. The spectacular rise in reserves has drawn attention to the issue of what is an 'adequate level' of reserves for the country. Certain common indicators can be used to determine the adequate level of reserves for an economy. These indicators aim to determine the extent of external i.e. vulnerability of a country and the capability of reserves in minimizing their vulnerabilities. These indicators are:

1. **Import adequacy:** The number of months of imports that can be financed by the reserves held by the country.
2. **Debt adequacy:** The ability of reserves to cover external payment obligations, particularly short - term debt liabilities. This is measured by the ratios of reserves to total external debt and short - term debt.
3. **Monetary adequacy:** The extent of capital flight that can occur in the event of a financial crisis. This is measured by the ratio of reserves to broad money and reserve money. All the three adequacy indicators would be analyzed how to judge the reserve adequacy.

<u>Import Adequacy</u>:

The Tarapore Committee recommended that foreign exchange reserves should be sufficient for 6 months imports in India for the introduction of full capital account convertibility. This trend can be shown in following diagram :-

<u>Import Coverage of FERs (No. of months)</u>



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There has been remarkable progress on this front during last few years. The import cover of reserves has increased from just over five months in 1991-92 to 2004-05 is much much higher than the level suggested by Tarapore Committee. Over the same period, the reserves to short term debt ratio has gone up from 130.4% in 91-92 to 1650% 2003-04 The ratios of reserves to reserve money and broad money have improved from 24% and 7.5% respectively in 1991-92 to 97.1% and 20.8% respectively in 2002-03.

Besides the above, the following indicators are also very critical to determine the external vulnerability of a country:-

Some Indicators of External Sector

(Based on US Dollar Values)

Year	Growth of exports BOP (1)	Debt service payments of current	Short term debt FER (1)
1990-1991	9.0	35.5	146.5
1996-1997	5.6	23.0	25.5
1997-1998	4.5	19.5	17.2
1998-1999	-3.9	18.8	13.2
1999-2000	9.5	17.1	10.3
2000-2001	19.6	16.2	8.6
2001-2002	0.0	13.4	5.1
2002-2003	16.9	15.8	6.0
2003-2004*	12.5	18.1	5.7

*Calculated on the basis of figures upto Apr.2003 to Dec. 2003-04

Notes:FER: Foreign Exchange Reserves including gold and SDR.

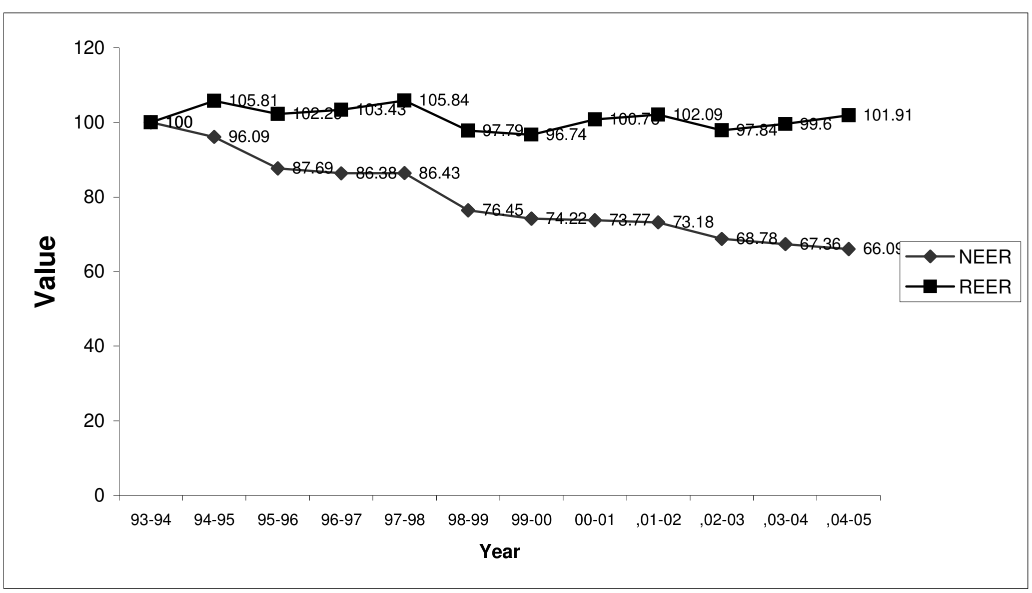
Source: Economic Survey, Govt. of India various issues.

On the basis of the above analysis it might be concluded that India has improve a lot in terms of the main indicators related to external sector. For example, in terms of indebtedness classification, the World Bank, in its Global Developments Finance 2004, has categorized India as a less indebted country for the year 2002. In 1998, India was considered a moderately indebted country. Among the top fifteen debtor countries of the world in the last decade, India improved its position from being third after Brazil and Mexico in 1991 to eight in 2002. In terms of external debt indicators like short - term debt to foreign exchange reserves ratio, India's position is quite encouraging among the top 15 debtor countries. The short term debt to total external debt ratio for India is the lowest at 4.4% whereas China and Thailand have higher ratio at 28.5% and 20.1% respectively. Again the ratio of short term debt to foreign exchange reserves is lowest for India at 6.4% as compared to 141.4% for Argentina and 72.8% for Indonesia. In fact, a prudent external debt management policy pursued over the last decade has improved the country's external debt position to a comfortable level. But current account deficit particularly deficit in trade account is a matter of concern and needs concrete efforts.

While the level of foreign exchange reserves held by India at present can be termed comfortable in terms of all commonly applied adequacy indicators, it is also important to reflect upon the cost of holding reserves Two issues are significant in this regards. These are the return earned from deploying the reserves in various securities (according to the guidelines laid down by the RBI Act, 1934) vis-a-vis the interest paid on external debt and the cost of building up reserves through sustained open market operations. While the first - issue entails the direct economic cost of holding reserves, the second apart from involving costs of inter-mediation for the banking system; includes the consequences of prolonged sterilization on domestic money supply and price level. Given the trends of sustained accretion; the issue of reserve adequacy requires to be addressed in the light of the costs & benefits likely to manifest from holding on to the current high level of reserves.

<u>Exchange Rate Movements</u>: Exchange rate stability is also very necessary if we want to introduce full capital account convertibility. The management of Indian Rupee continues to remain broadly market determined with the RBI intervening only in the event of smoothing excessive volatilities in the foreign exchange market. Trends in the annual average exchange rate of the Indian rupee has been shown in the following graph:

Effective exchange rate (NEER) of the Indian Rupee (5 country trade based weights) Base 1993-94=100



Note: Rise in indices indicate appreciation of rupee and viceversa.

Source: RBI Bulletin.Varios issues.

The above table reveals the movement in REER & NEER. They have been fluctuating throughout the period of study. If the above table is analyzed carefully, it might be asserted that rupee has been fluctuating beyond the range of plus & minus 5%. While Tarapore Committee suggested that limit of (t) and (7.5% would be ideal to introduce the full convertibility on capital account.

Conclusions :

Having analyzed all the macro economic indicators or precondition essential for the introduction of full capital account convertibility, the desirability of full capital account convertibility in India can be questioned by various economists and scholars. Joseph Stiglitz (1999) raised a voice of concern and concluded that volatile markets were inescapable reality developing countries need to manage them. They will have to consider policies that put some limit on capital flows.

In fact, the benefits of capital account liberalization can be attained only when the capital controls are lifted at a particular pace when certain preconditions are met. In general, it has been observed that capital account liberalization and full convertibility of exchange rate succeeds when it follows fiscal reform, price stability, financial sector reforms, BOP stability etc. i.e. all the precondition recommended by Tarapore Committee. Thus problem of convertibility can not be analyzed in isolation. In India very few of these conditions have been fulfilled by now. Thus India will have to gradually move towards the full capital account convertibility step by step when all the above preconditions are fulfilled as Dr. Y.V. Reddy, the Governor of RBI, put it as "In India, it is recognized that the pace of liberalization of capital account would depend on both domestic factors, especially progress in the financial sector reforms and the evolving of international financial architecture". India should not move towards full capital account convertibility in haste but should wait for the appropriate time. The point to note is that although the core conditions of Tarapore Panel have not been met, the RBI has gone ahead charting its own courne. But It has been observed, whenever this convertibility was introduced in haste and prematurely it had been disastrous. The experience of East Asian Countries can be quoted here. At last, it might be concluded that we must chart our own course very rationally regarding the full convertibility of rupee on capital account because a well defined plan of action is the right way of preparing and discussing the national strategies.

References:

1. Ahmed Danish, Convertibility of rupee, Yojna Oct., 1999.
2. Das, Anita, India's BoP related variables Asian Electronics & Review, 1997.
3. Kumari, Rashmi, "Full convertibility and capital management" Third concept Nov., 1998.
4. Patil R.H., "Risks of Capital account convertibility Economic and political weekly, Jan., 1999.
5. Rangrajan C., "Capital flows : Another Look, Economic and Political weekly, Dec., 2000.
6. Sen, Sunands, " Economic Turmoil in Asia" Economic and Political weekly July, 1999.
7. RBI Monthly Bulletin (Various issues).
8. RBI, Report on currently and financial(varios issues) .
9. Government of India, Ministry of Finance ,Economic Survey various issues.

15. MR. GANGADHAR B. SONAR

Special article

FINANCIAL OPENNESS AND EXTERNAL SECTOR MANAGEMENT: THE INDIAN EXPERIENCES

Dr.Arabi. U[•]

Introduction

In the context of maximizing benefits of financial integration and minimizing the risks, the link with the external sector and its management has become very crucial since the inception of financial sector reforms in India. Even though in India reforms in financial sector started in the early reform cycle which imparts significant efficiency and stability to the financial sector, the financial sector can add competitive strength and growth if reforms in the financial and real sector keep space. Thus, a major agenda for reform at this juncture for India relates to the structure and functioning of institutions.

The financial sector of an economy, comprising institutions, markets and instruments, is multi-dimensional in nature with both domestic and external facets. The broad contours of financial liberalization approach include, viz., (i) withdrawal of credit controls and excessively high reserve requirements; (ii) interest rate deregulation; (iii) privatization; (iv) deregulation and development of markets; (v) lowering of entry barriers, limits on participation of foreign banks, and restrictions on specialization or diversification of banks; and (vi) easing of restrictions on international financial transactions, such as on current and capital account convertibility, and the use of multiple exchange rates. Thus, financial openness is a subject of features, characterizing financial liberalization.

Even before the introduction of financial reforms in a country like India, McKinnon and Shaw (1973) had indicated the prevalence of financial repression in developing countries. Certainly, theories and cross-country evidence have shown that financial repressions are harmful for economic growth. Across the world, it has been observed that, financial reforms mainly involved elimination of financial repression with steps to contain the vulnerability of the financial system. It has also been observed that trade openness is correlated with financial market development, especially when cross-border capital flows are free, and that changes in openness are correlated with changes in the size of financial markets (Rajan, Zingales, 2001).

While it is widely accepted that reduction or removal of the financial repression and financial openness enhances efficiency and potential growth of an economy, however, there is no such unanimity regarding the pace and sequence of reforms. Though, the

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initial condition of the economy undoubtedly would influence the pace and sequence of desirable policy changes or reforms, this also calls for a detailed discussion of the benefits and cost of reforms in charting out the optimal pace and roadmap.

Benefits and Costs of Financial Sector Openness: theoretical perception

The benefits of opening up of the economy are varied. Financial openness permits domestic firms to finance investment projects with rates of return greater than the costs of borrowing, and makes higher yielding assets accessible to savers. As long a the, marginal return on investments is at least equal to the cost of capital, net resource inflows can supplement the domestic savings, a binding constraint to higher growth in developing countries. Openness also provides to the residents the gains of greater portfolio diversification. This would increase levels of physical capital per worker. The potential benefits are particularly large for certain types of capital inflows like FDI. By facilitating the transfer of managerial and technological know-how, and by improving the skills composition of the labour force, FDI may have significant positive long-run effects on growth. World capital markets play a counter-cyclical role as a country can borrow from abroad in bad times and lend at good times. Opening up would thus permit an improved inter-temporal allocation of consumption. This counter-cyclical role is justified if shocks are temporary in nature. By increasing the rewards of good policies and reduce the frequency of policy mistakes. To the extent that greater policy discipline translates into greater macro-stability, it may also facilitate higher rates of growth.

On the impact on banks, it has been observed that opening of the economy, among others, results in more competition and greater banking efficiency and stability. It enables the banks to reap economies of scale and scope. It helps in diversification of risks. Foreign bank penetration improves the quality and availability of domestic financial services by increasing competition and enabling the application of more sophisticated banking techniques and technology. The risk management capabilities are upgraded. It serves to stimulate the development of domestic bank supervisory and legal framework. It enhances a county's access to international capital, either directly or through their parent banks. It contributes to the stability of the domestic financial system; if, for example, during turbulent times depositors shift their funds to foreign institutions that are perceived to be stronger than local banks, instead of transferring their assets abroad. Empirical evidences in Asia support the view that presence of foreign financial intermediaries leads to decline in cost of financial intermediation and improvement in quality of financial services.

The capital flows can be harmful also. The ability to monitor the financial system gets eroded with increasing capital flows. Large capital inflows can lead to rapid monetary expansion, inflationary pressures, and real exchange rate appreciation. Under a fixed exchange trade regime loss in competitiveness and external imbalances may eventually lead to currency crisis. Many countries can borrow in world capital markets in good times, whereas in unfavourable times, they face credit constraints.

Pro-cyclicality, particularly of short-term flows, as well as herding, contagion and volatility of capital flows expose the economy to greater instability. The capital inflows may finance low quality investments, such as speculation in the real estate sector, which would have limited impact on growth and may increase instability. Low-productivity investments in the non-tradable sector may reduce over time the economy's capacity to export and lead to growing external imbalances.

Entry of foreign banks may lead to relatively greater flow of resources to large firms while the flow of resources to small firms may be rationed. This would have adverse impact on output and employment. The foreign banks may enjoy regulatory advantages and the possibility of domestic savings fleeing the economy also increases. Mergers, resulting from increased competitiveness, may create banks that are too big to fail and lead to greater moral hazards. Opening up of the economy and greater competition also impel domestic banks and firms to take on greater foreign exchange risks and riskier projects than domestic financial liberalization. By calling loans and drying up credit lines, foreign banks may aggravate a shock. They can also propagate the crisis by calling loans elsewhere.

Based on cross country experience in 1980s and 1990s, it has been observed that instability of banking systems distinguishes economic crisis from ordinary recessions. Some of the suspected reasons for banking crisis were found to be lending booms, exchange rate regime, destabilizing external factors, rapid financial liberalization, inadequate prudential supervision and weakness in the legal and institutional framework. Robust causes of banking crises have been found to be rapid domestic credit growth, large bank liabilities relative to the reserves, and deposit rate control. There is little evidence of any particular relationship between the exchange rate regime and banking crisis. The relationship that weak institutional environment causes greater risks of financial liberalization was empirically found to be weak. The relationship between deposit insurance and crisis risks in emerging markets was also not well established (Eichengreen and Arteta, 2002).

Evolution of Financial Openness in India

In India unlike in most other countries, liberalization of the financial sector was initiated simultaneously with liberalization of the real sector and led the latter in terms of the extent of reforms undertaken. Opening up of the financial sector in terms of entry of foreign entities and easing of restrictions on international transactions took place within the broader process of reforms. The constant policy concern in this respect has been that of preparing the financial sector for global competition and taking preventive measures for the potential vulnerabilities that it might engender. Notwithstanding their extensive branch network, the biggest banks in India are miniscule compared to most multinational banks, in terms of standard parameters like assets or deposits. Illustratively, India accounted for 1.1 per of world's bank deposits in 2000. Hence, the initials focus of reforms in the financial sector has been to strengthen the domestic financial infrastructure, make it more competitive and to provide banks greater freedom in their foreign operations. While there has been a significant progress towards globalization in the recent past in India, the extent to which India is globalized is considerably low as compared with other emerging economies. This indicates not only the existence of enormous opportunities but also challenges in terms of transition from low base. More importantly, the issue of financial integration and in particular the integration of banking sector has to be considered in terms of overall sequencing in the process of integration with the rest of the world.

Policies towards Developing and Strengthening Financial Infrastructure

Given that inherent soundness of bank balance sheets, presence of well -established institutions, presence of adequate safety nets and vigilant supervision are the pre-requisites for successful financial liberalization, the reform process in India within the banking system sought to strengthen the balance sheets of individuals banks, empower banks to respond in the most optimal manner to market stimuli and to establish institutions to ensure a level playing field for all Market participants and provide a back-up system for contingencies.

Measures to strengthen the financial sector include capital adequacy requirements, prudential norms and means to enhance transparency in the balance sheets of banks and financial institutions by appropriate disclosures. With greater integration of financial markets and institutions, steps have been taken towards consolidated accounting and supervision and standardization of accounting norms. Prudential norms have progressively been brought closer to international best practices and the process of convergence continues. Higher provisioning norms, tighter asset classification norms, dispensing with concept of 'past due' for recognition of NPAs guidelines in respect of debt restructuring/rescheduling /renegotiating, and lowering of ceiling on exposure to a single borrower are among the important measures in this area.

Measures enable banks to operate freely in a commercially justifiable manner and competitive environment include the reduction of statutory pre-emptions, deregulation of interest rates and giving banks greater autonomy and flexibility in day-to-day operations. Other measures in this direction include greater streamlining of the operations of development financial institutions and deregulation of the capital market. Competition has been infused into the financial system by licensing new private banks since 1993. Foreign banks have also been given more liberal entry. The Union Budget 2002-03 announced the intention to permit foreign banks, depending on their size, strategies and objectives, to operate either as branches of their overseas parent, or, as subsidiaries in India. The latter would impart greater flexibility to their operations and provide them with a level-playing field vis-à-vis their domestic counterparts. Progress has also been generated through demonstration and spread effects of advanced technology and risk management practices accompanying new privat3 banks and foreign banks. Given the fiscal constraint being faced by the

Government and in keeping with the evolving principles of corporate governance, the Government permitted public sector banks to raise fresh equity from markets to meet their capital shortfalls or to expand their lending. Several public and private sector banks have accessed the domestic equity market. Public sector banks have also raised capital through GDR/ADRs while many banks have raised subordinated debt through the private placement route for inclusion under tie-II capital.

The quality of financial regulation and supervision as well of information and the legal system are important for reaping the benefits of globalization. Hence, enactment of enabling legislation has been a priority area of the reforms. With the switchover to international best practices on income recognition, asset classification and provisioning, the problem of non-performing loans (NPL) assumed critical importance. It was widely perceived that the level of NPLs in India was high by international standards. The problem needed to be tackled urgently and from different fronts. A menu approach has been adopted to tackle this major constraint confronting the banking sector. These policy measures have resulted in reduction in gross NPAs in the banking system from about 15 per cent of gross advances at end-March 1999 to 8.8 per cent at end March 2003.

The need for monitoring and supervising becomes even more important systemically with the opening up of the economy. Thus, the prudential regulations were fortified by reorientation of 'on-site inspections' and introduction of 'off-site surveillance'. The focus of inspection has shifted from ensuring appropriate credit planning and credit allocation under a closed economy framework to assessment of the bank's safety and soundness and to identify areas where corrective action is needed to strengthen the institution and improve its performance. The Board for Financial Supervision (BFS) was constituted in 1994, with the mandate to exercise the powers of supervision and inspection in relation to the banking companies, financial institution s and non-banking financial companies.

Financial Openness in Indian Banking:

1. Liberalization of Openness of Domestic Banks

The process of opening up is reflected in the foreign exchange related operations of the domestic banks. Authorized dealers (ADs) have been given substantial autonomy to conduct foreign currency business by augmenting the delegated powers vested with them. Between 1998-99 and 202-03, turnover in foreign exchange business of banks has increased at nearly five per cent per annum in US dollar terms. It is important to note that merchant banking business of the ADs has grown much faster than inter-bank transactions. **(Table-1)**

Table-1: Growth in Foreign Exchange Turnover of ADs

	Merchant		Inter-Bank		Total	
	Purchase	Sale	Purchase	Sale	Purchase	Sale
1998-99	20.6	20.2	-3.1	-0.7	0.4	2.9
1999-00	4.8	-4.7	-13.8	-12.8	-10.5	-11.2

2000-01	7.7	15.4	26.7	20.7	22.7	19.6
2001-02	1.3	-7.2	2.4	8.5	2.2	5.3
2002-03	22.7	19.1	3.2	3.5	6.8	6.3
Annual Average	11.4	8.6	3.1	3.8	4.3	4.6

Source: Report on Currency and Finance -2002-03

2. International Banking by Banks in India

In view of the growing liberalization of the external sector, monitoring of the cross-border flow of funds has assumed importance. The Reserve Bank now compiles and disseminates international banking statistics (IBS) on the lines of the reporting system devised by the Bank for International Settlements (BIS).

Table-2:

Classified types of International Liabilities of Banks in India (Rs. in crore)

Liability type	Amount outstanding during		
	2000-01	2001-02	2002-03
1. Deposits and Loans	1,04,148	1,20,604	1,25,930
of which:			
foreign Currency Non-Resident Bank (FCNR (B)) scheme	37,991	39,636	43,989
Foreign currency Borrowings	1,222	5,514	18,411
Non-resident External Rupee (NRE) Accounts	29,413	33,233	53,124
Non-Resident Non-Repatriable (NRNR) Rupee Deposits	25,867	27,181	15,207
2. Own Issues of Securities Bonds (including IMD/RIBs)	43,652	43,582	44,087
3.Other Liabilities	4,580	7,150	10,475
ADRs/GDRs	850	1,862	3,833
Equities of banks held by non-residents	382	547	556
Capital/remittable profits of foreign bank in India and other unclassified international liabilities	3,348	4,741	6,086
Total International Liabilities	1,52,380	1,71,336	2,00,493
Memo:			
International Liabilities as per cent of Total Liabilities Scheduled Commercial Banks	11.8	11.2	11.8

Source: Report on Currency and Finance-2003-04

The locational banking statistics (LBS) provide the gross position of international assets and international liabilities of all banking offices located in India. They report exclusively banks' international transactions including the transactions with any of their own branches/subsidiaries/joint ventures located outside India. International liabilities of banks recorded a sharp increase during both 2001-02 and 2002-03 driven by their large-scale foreign currency borrowings. **(Table 2).**

The share of international liabilities in the total liabilities of scheduled commercial banks hovers above 11 per cent. There was a change in the composition of banks' international assets, with a large scale substitution on *nostro* balances, including term deposits with non-resident banks, with foreign currency loans to residents, reflecting higher domestic demand for relatively cheaper foreign currency loans. The consolidated claims of banks based on immediate country risk as at end-March 2003 were mainly concentrated on the US, Hong Kong and the UK. The distribution of consolidated international claims of banks on various countries, other than India, according to residual maturity reveals that banks continue to prefer to invest/lend for short-term purposes although there was a slight shift to longer-term maturities during 2002-03.

3. Foreign Banks in India

Minimum capital requirements have been stipulated for foreign banks with the additional requirement that the capital be brought into the country before the start of banking operations. Additional branches are permitted after monitoring performance of existing branches of the banks, their financial results, inspection findings, etc. The number of licenses offered per year is fixed in conformity with India's commitment made to the World Trade Organization (WTO). As on March 31, 1993, there were 24 foreign banks operating in India with 138 bank offices. By end-September 2003, the number increased to 35 with 207 branches. Foreign banks have also set up representative offices in India. As on September 30, 2002, there were 26 representative offices in India. They are essentially metropolitan based and cater to large corporate.

An analysis of the performance of foreign banks in India during the 1990s reveals that the share of foreign banks increases during the 1990s. In the last two years, however, due to the merger of large financial institutions (FI) to a new private sector bank, the share of foreign banks has declined. **(Table-3)**

Table-3: Share of Banking Market (per cent)

Year	Bank Group	Assets	Loans	Deposits
1991	Private sector Banks	90.1	91.6	90.9
	Private Banks			
	Old	3.6	3.4	4.1
	New	-	-	-
	Foreign Banks	6.3	5	5.1
1996	Public sector Banks	82.4	82.2	85.4
	Private Banks			
	Old	6.2	1.9	1.3
	New	1.5	7	6.7
	Foreign Banks	7.9	8.9	6.6
1999	Public sector Banks	81	80.4	82.6
	Private Banks			
	Old	6.9	7.5	7.3
	New	4.1	4.1	4
	Foreign Banks	8.1	8	6.2
2002	Public sector Banks	75.2	74.4	80.3
	Private Banks			
	Old	6.1	6.6	6.7
	New	11.4	11.5	7.4

	Foreign Banks	7.3	7.5	5.6
2003	Public sector Banks	75.7	74.2	79.6
	Private Banks			
	Old	6.2	6.7	6.7
	New	11.3	12.1	8.5
	Foreign Banks	6.8	7	5.2

Source: Report on Currency and Finance-2003-04

To sum up, cross-country empirical evidence has shown that the cost of financial intermediation declines and quality of financial services improves with opening of the economy. Openness should, however, be preceded by deregulation and strengthening of institutional framework in order to limit contagious influences. The strategy adopted in India was to maximize the beneficial effects of openness while minimizing the adverse consequences. Financial crisis, internally or from contagious influences in the neighbourhood, have been averted, while the financial system has been progressively deregulated and strengthened. The convergence of the domestic prudential norms with international best practices and of the performance of domestic banks vis-à-vis foreign banks in the domestic sector has provided the ground for further openness with minimization of potential vulnerabilities. The policy of gradualism that has been followed by India focuses on evolution of appropriate institutional framework and the sequencing of reforms based on the experience gained as reforms progress. Recent studies have also lent support to this approach towards reforms.

In context of maximizing benefits of financial integration and minimizing the risks, the link with the real sector cannot be lost sight of. In India, reforms in financial sector started early in the reform cycle which imparts significant efficiency and stability to the financial sector. The financial sector can add competitive strength and growth if reforms in the financial and real sectors keep apace. In other words, flexibility in product and factor markets plays a part not only in capturing the gains from financial sector reforms but also more generally from globalization. A major agenda for reform at this juncture for India, given the impressive all-round confidence in the economy, relates to the structure and functioning of institutions and in particular lowering the high transaction costs prevalent in our systems. There are several dimensions to the transaction costs-ranging from legal provisions, the judicial system and procedures to attitudes.

External sector management under financial openness regime

Structural reforms initiated in the Indian economy during the 1990s virtually encompassed all areas of the economy. At the same time, reforms were marked by a sense of gradualism (Mohan, 2004c). In regard to financial markets, a number of measures have been taken to widen, deepen and integrate various segments of the financial markets. These, measures have imparted efficiency to the financial system and are expected to increase the efficiency of monetary policy signals to the real sector. At the same time, financial markets are often characterized by herd behaviour and contagion from abroad can be destabilizing and lead to overshooting. Since the capacity of economic agents in developing economies to manage volatility is highly constrained, ensuring orderly conditions in various segments of the markets-money, debt, forex and credit markets-has been a key objectives of monetary policy in India.

As apart of the reform process, widespread and extensive reforms in the external sector have transformed India from a relatively closed economy to a fairly open economy. In the external sector, as in other areas, India has followed a cautious approach to capital account convertibility, exchange rate management, and trade liberalization. Careful monitoring of capital account transactions has been advocated to ensure an orderly process of liberalization and macroeconomic stability, with a view to maintaining sustainability of the balance of payments and overall macroeconomic stability. In particular the Indian approach to exchange rate management has focused on managing volatility.

External demand conditions, capital flows and exchange rates affect the Indian economy much more now than during the 1980s. Empirical evidence confirms that global business cycles have a relatively larger influence on the Indian economy than was the case during the 1980s and exports and industrial production have started exhibiting co-movement with global business cycles. Remittance and trade in services have further augmented the linkages between India and the rest of the world. As regards capital flows, although the period since 1993-94 has been largely marked by persistent surpluses in the balance of payments, the period also witnessed a number of shocks such as the Asian financial crisis, sections resulting from the nuclear explosions, credit rating downgrades and the bursting of the information technology bubble in the US. These episodes have had repercussions on capital flows and exchange rates. Swings in capital flows, exchange rates and external demand conditions affect not only output and inflation, but also impact upon banking and financial stability. More recently, the unprecedented volume of capital flows during 2003-04 threw new challenges for the conduct of monetary policy. Excessive capital flows can be inflationary as well as can lead to a surge in credit booms. In this milieu, while price stability remains a key objective, ensuring financial stability has also emerged as a key consideration in the conduct of monetary policy in India.

With the growing openness of the Indian economy, the conduct of monetary policy has undergone significant shifts in operating procedures, instruments and timing. In this regard, the year 1991-92 marks a threshold in the conduct of monetary policy. Sweeping changes in the environment in which it operates were brought on by the unpresented balance of payments crisis of 1990-92. From being operated almost exclusively in a closed economy context, monetary policy had to contend with the pressures of the open economy dynamics. Three overarching features market the transition:

(i) The exchange rate, which was hitherto administered, became market determined and ensuring orderly conditions in the foreign exchange market became an objective of exchange rate management.

(ii) The vicissitudes in capital flows came to influence the conduct of monetary policy; and

(iii) Lessons of the balance of payments crisis highlighted the need to maintain adequate level of foreign exchange reserves and this in turn both enabled and constrained the conduct of monetary policy.

Initial conditions for the transformation were, in a sense, brought together by the response to the crisis in 1991-92 to achieve macro-economic stabilization and structural adjustment. A two -step toward adjustment in the exchange rate of the rupee was affected in July 1991. This was accompanied by simultaneous tightening of monetary policy wit increase in Bank Rate, deposit and lending rates and refinance rates. Along with the exchange rate adjustment, significant structural reforms were affected in trade policy so as to liberalize the system from administrative controls and licenses. On the trade front, tariffs were reduced sharply and quotas have been phased out. The peak rate of customs duty has declined from 150 per cent in 1991-92 to 20 per cent in 2004-05. The openness of the economy-merchandize exports and imports as a proportion of GDP has increased significantly from 15 per cent in 1990-91 to 24 per cent by 2003-04. A more striking feature has been the opening up of the economy to financial flows-direct as well a portfolio investment flows and debt flows.

Since 1991, there has been a continuous move towards integration of the Indian economy with the world economy. During this continuum of reforms, four distinct phases are clearly discernible in terms of the underlying balance of payments conditions, shifts in monetary conditions and the policy responses. These briefly discussed in the following paragraphs.

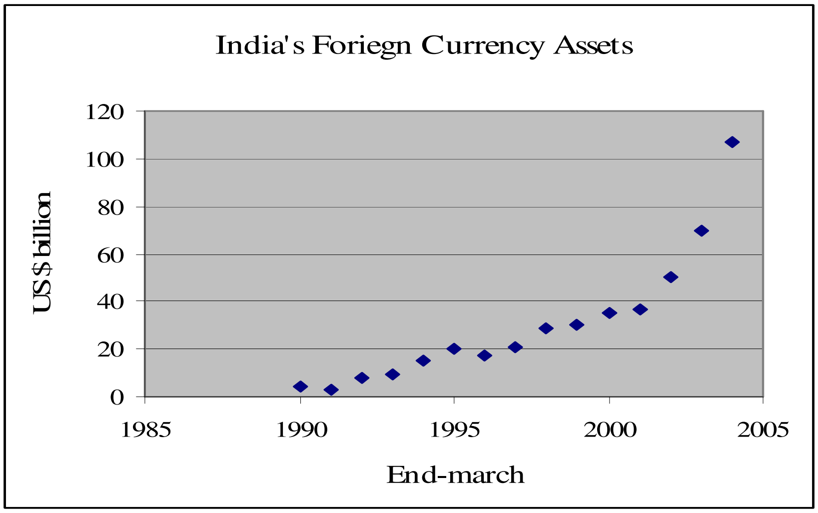
The first phase-the period 1993-95-was characterized y strong capital inflows accompanied with stability in the exchange rate. During this period, foreign investment inflows-in particular, portfolio investment in the form of foreign institutional investors' (FII0 inflows and global depository receipts (GDRs)-increased sharply. Net portfolio inflows increased from negligible levels to more than US$ 3 billion in each of the two years. Coupled with curtailment of the current account deficit, there were large overall surpluses in the balance of payments and this led to a significant increase in foreign exchange reserves from their extremely low levels of the crisis period. During this period, the rupee witnessed a remarkable stability vis-à-vis the US dollar. The Reserve Bank's passive intervention was motivated by the need to protect export competitiveness by preventing an appreciation of the rupee which would in any case have been against fundamentals (RBI, 1994).

Large accretions to the foreign exchange reserves led to a transformation in the composition of the Reserve Bank's balance sheet and, hence the dynamics of the money supply process. In contrast to the trend of the 1980s, net foreign exchange assets emerged as a key driver of reserve money. As capital flows continued, a number of steps were undertaken to sterilize the monetary impact of capital flows. In the second half of 1993-94, indirect instruments of monetary policy were activated and the Reserve Bank undertook large open market sales of Government securities from its portfolio. Nonetheless, increase in monetary aggregates was higher than that anticipated and excess liquidity led to inflationary pressures in the economy. With average inflation rate at 10.9 per cent during 1994-95, a package of measures was undertaken to sterilize the impact of external flows. These included an increase in the cash reserve ratio and a reduction in export refinances limits. The deceleration in capital inflows in the latter half of 1994-95 reduced the strain on sterilization of capital inflows and consequently open market operations remained subdued in 94-95.

The second phase-the year, 1995-96-was characterized by a deceleration in capital inflows and widening of the current account deficit. There was a turnaround in the foreign exchange market and the prolonged stability in the exchange rate of the rupee witnessed from March 1993 came under stress in the second half of 1995-96. In response to the upheavals, the Reserve Bank intervened in the market to signal that the fundamentals are in place and to ensure that market correction of the overvalued exchange rate was orderly and calibrated. Exchange market intervention by the Reserve Bank in the spot market was initially supported by a withdrawal of liquidity from the money market to prevent speculative attacks on the exchange rate. These measures were successful in ensuring an orderly correction ion the overvaluation of the rupee.

The third phase -1996-2001-witnessed return of capital in flows. Although each of the years in this period was characterized by an overall surplus in the balance of payments, the phase was also marked with a few episodes, albeit brief, of heightened volatility in capital flows. The volatility was on account of both international and domestic factors-the Asian financial crisis, the spread of contagion to other markets such as Russia and Brazil, border tensions and sanctions imposed after the nuclear tests. This necessitated policy initiatives to manage the volatility in capital inflows, including monetary measures (such as increases in Bank Rate, the repo rate and the cash reserve ration), sales of foreign currency in the market to meet temporarily demand-supply mismatches and administrative measures. Monetary measures were temporary, often reversed within a period of 2-3 months, consistent with the policy objectives of ensuring orderly conditions. Recourse was also taken to mobilize deposits from non-residents through special schemes such as Resurgent India Bonds and India Millennium Deposits. Notwithstanding brief episodes of volatility, capital flows remained vastly in excess of current account deficits-which remained moderate in the face of low domestic absorption. As a result, the foreign exchange reserves increased, on an average, by nearly US$4.1 billion per year. During this phase, changes in reserve money were, therefore, largely dominated by the accretions to net foreign exchange assets of the Reserve Bank. As a result, the ratio of net foreign assets to reserve money increased from 38 per cent at end -March 1996 to 65 per cent by end-March 2001.

The fourth phase, 2001-02 onwards-posed new challenges for the conduct of monetary policy. This period has been marked by susta8ined surges in capital in flows coupled with surpluses in current account in the balance of payments. The turnaround in the current account balance was mainly due to a higher invisible surplus. On the capital account, there was unprecedented volume of net inflows. Even as debt creating flows ebbed in response to policy changes such as prepayment of high cost official debt and rationalization of interest rates on NRI deposits, non-debt creating flows, particularly portfolio investment surged ahead. With both current and capital accounts in surplus, foreign exchange markets were marked by persistent excess supply conditions. These excess supplies were absorbed by the Reserve Bank and as a result, its foreign exchange reserves more than doubled during the 3-years period from US $ 42.3 billion at end -March 2001 to US $ 113.0 billion at end -March 2004-an average increase of US $ 23.6 billion per annum (**Chart 1).**



Source: Report on Currency and Finance-2003-04, pp-99

Concomitantly, the ratio of net foreign assets to reserve money increased from 65 per cent at end -March 2001 to more than 100 per cent by end -March 2004. The concomitant excess supply in the foreign exchanger market-reflected in the overall balance of payments surpluses-was absorbed by the Reserve Bank in line with its exchange rate and foreign exchange reserves policies. The level of reserves held by any country is, of course, really a consequence of the exchange rate policy being pursued (RBI, 2004a). The overall approach to the management of India's foreign exchange reserves in recent years has reflected the changing composition of capital account of the balance of payments and the liquidity risks associated with different types of flows within the parameters of reserve adequacy. The policy for reserve management is built upon factors and contingencies such as the size of the current account deficit, the size of short term liabilities (including current repayment obligations on long term loans), the potential variability in portfolio investment and other types of capital flows and unanticipated external shocks. The policy objectives is to ensure that excluding short-term variations in repose to market movements, the quantum of reserves in the long run is in line with the growth in the economy and the size of risk adjusted capital flows. With the changing profile of capital flows, the traditional approach of assessing reserve adequacy in terms of import cover has been broadened to include a number of parameters which take in to account the size, composition and the risk profiles of various types of capital flows as well as the types of external shocks to which the economy is vulnerable. There is considerable merit in taking a national balance sheet approach to the external sector and to provide cushions through official reserves I response to increasing external liabilities on account of the private sector. Further, it is useful to recognize the comfort and the confidence provided to the investors by the level of reserves in the context of volatility in capital flows (RBI, 2004b).

A number of steps have been taken to offset the expansionary impact of external flows on domestic money supply. These include:

i) Increase in the minimum maturity of non-resident deposits to one year to attract stable flows as also to minimize the county's short-term external debt.

ii) LIBOR-linked interest rate ceiling on foreign currency denominated deposits since 1997.

iii) LIBOR-linked interest rate ceilings on non-resident rupee deposits effective July 2003 to provide consistency in the interest rates offered to non-resident Indians. The ceiling was initially fixed at 250 basis points above LIBOR. It was tightened and reduced to only 100 basis points above LIBOR effective September 15, 2003 and to 25 basis points above LIBOR effective October 18, 2003. The ceiling was tightened further to the LIBOR itself, effective April 17, 2004. More recently, the ceiling has been relaxed to 50 basis points above LIBOR, effective October 26, 2004. Available empirical evidence suggests that non-resident deposits are influenced by standard risk and return variables. In particular, these deposits respond favorably to changes in relative interest rates (Gordon and Gupta, 2004; Mohanty, Kapur and Sahoo, 2000).

iv) Substantial expansion of the automatic route of FDI abroad by Indian residents.

v) Greater flexibility to corporate on pre-payment of their external commercial borrowings.

vi) Liberalization of surrender requirements for exporters enabling them to hold up to 100 per cent of their proceeds in foreign currency accounts.

vii) Extension of foreign currency account facilities to other residents.

viii) Allowing banks to liberally invest abroad in high quality instruments.

ix) Pre-payment of US$ 6.9 of debt owed to multilateral and bilateral agencies by the Government of India during 2002-03 and 2003-04.

x) An increase of 50 basis points in the cash reserve ratio (CRR) from 4.5 per cent to 5.0 per cent, effective October 2004.

xi) Finally, appreciation of the nominal exchange rates of the rupee vis-à-vis the US dollar.

Notwithstanding these measures, the overall balance of payments surpluses not only persisted but also widened in each of the years since 2001-02. Accordingly, a key instrument of managing capital flows has been sterilization through outright open market sales of Government of India securities by the Reserve Bank from its portfolio. In recent years, these have been supported by sucking of liquidity through operations under the Liquidity Adjustment Facility. Although balance of payments had been recording an overall surplus in each of the years since 1993-94 (with exception of one year, 1995-96), outstanding NRBICG also increased in all years except one even as open market operations were undertaken. In contrast, in the most recent phase, NRBICG has recoded sharp declines. Illustratively, the NRBICG declined from Rs. 1, 67. 308 crore at end -May 2001 to Rs. 4, 626 crore by December 10, 2004 **(Table 4)**

Table-4: Sterilization Operation of the Reserve Bank of India

Year	Increase in Foreign Currency Assets	Net Open Market Sales	Outstanding Amount Absorbed under Liquidity Adjustment Facility (end-period)	Balance under Market Stabilization Scheme (end-period)	Outstanding Net Reserve Bank Credit to Centre (end-period)
1996-97	21,922	6,885	-	-	1,20,702
1997-98	22,139	-5,414	240	-	1,33,617
1998-99	22,905	-11,857	200	-	1,45,416
1999-2000	27,512	8,370	325	-	1,39,829
2000-01	31,558	-11,827	400	-	1,46,534
2001-02	64,636	1,443	3,510	-	1,41,384
2002-03	92,358	17,605	2,415		1,12,985
2003-04	1,24,739	20,349	34,645	-	36,920
2004-05 (up to December 10)	85,836	603	15,820	51,334	4,626

Source: Reserve Bank of India

The finite stock of the Government of India securities with the Reserve Bank brought into sharp focus the limitations on the Reserve Bank's ability to sterilize capital flows in future and its implications for liquidity management and inflation. For instance, the Reserve Bank's Annual Policy Statement for the year 2004-05 observed: "the lagged effect of persistence of excess liquidity on aggregate demand cannot be ignored as it could have some potential inflationary impact". At the same time, the challenge of sterilization, in the Indian case, is not very acute, per se, because the large order of fiscal deficit allows the banking system to park the surplus liquidity emanating from capital flows in gilt-edged paper (Jadhav, 2003).

Against this backdrop, the Reserve Bank constituted an internal Working Group on Instruments for Sterilization (RBI, 2003d). The Group recommended, inter alia, that use of CRR as an instrument of sterilization, under extreme conditions of excess liquidity and when other options are exhausted, should not be ruled out altogether by a prudent monetary authority ready to meet all eventualities. The Group stressed the need to take into account the consolidated balance sheet of the Government and the Reserve Bank as it is immaterial as to whether sterilization costs are borne by the Reserve Bank to the Government since, in the consolidated balance sheet framework, the net cost is the same. Accordingly, the Group strongly recommended against the introduction of central bank bills/bonds, in the context of current fiscal situation and considerations of market fragmentation. A key recommendation of the Group was the introduction of Market Stabilization Bills/Bonds (MSBs) for mopping up liquidity from the system. The Group also recommended that surplus balances of the Government may be maintained with the Reserve Bank without any payment of interest so as to release securities for open market operations.

Following these recommendations, a Market Stabilization Scheme (MSS) was introduced in April 2004 wherein Government of India dated securities/Treasury Bills are being issued to absorb liquidity. These dated securities/Treasury Bills are the same as those issued for normal market borrowings and this avoids segmentation of the market. By December 10, 2004, the outstanding issuances under MSS were Rs. 51, 334 crore. This issuance of securities under the MSS is expected to enable the Reserve Bank to improve liquidity management in the system, to maintain stability in the foreign exchange market and to conduct monetary policy in accordance with the stated objectives (Reddy, 2004b). Moreover, the MSS scheme will bring transparency in regard to costs associated with sterilization operations. Hitherto, the costs of sterilization were fully borne by the Reserve Bank in the first instance and its impact was transmitted to the Government in the form of lower profit transfers. With the introduction of the MSS, the cost in terms of interest payments would be borne by the Government itself in a transparent manner.

Sterilization operations, as discussed above have been a key instrument of managing capital flows. Reflecting these operations, the net Reserve Bank credit to the Central Government has declined in the recent years while net foreign assets have been increasing. In this context, a critical issue is: whether it is the reduction in net domestic assets (NDA) that caused subsequent capital inflows or whether the reduction in NDA offset the previous capital inflows. The former view would suggest that capital inflows reflect higher money demand by residents and, if so, sterilization operations are ineffective. This would occur if sterilization operations place upward pressure on interest rates and the assets are perfect substitutes. In this case, even a small rise in domestic interest rates would attract large capital inflows rendering sterilization operations effective (Kouri and Porter, 1974; Schandler et al., 1993). For India, evidence suggests that sterilization operations have been effective. Over the period 1995-2004, close to two -thirds of capital flows wee sterilized by the Reserve bank through open market sales/repo operations. This enabled the Reserve Bank to keep base money growth close to the desired trajectory

Exchange Rates Management

The day-to-day movements in exchange rates have been largely market determined. The objective of exchange rate management has been to ensure that the external value of the rupee is realistic and credible as evidenced by a sustainable current account deficit and manageable foreign exchange situation. Subject to this predominant objective, the exchange rate policy is guided by the need to reduce excess volatility, prevent the emergence of destabilizing speculative activities, help maintain adequate level of reserves, and develop an orderly foreign exchange market. However, the foreign exchange market in India, like other developing countries, is not yet very deep and broad and is characterized by uneven flow of demand and supply over different periods. The market is also characterized by a few major players and lumpy public sector demands particularly on account of payments of oil imports and servicing of public debt. This can lead to adverse expectations, which tend to be self-fulfilling in nature, given their effect on "leads and lags" in payments and receipts. Often, a self-sustaining triangle can develop comprising the supply-demand mismatch, incased inter- bank activity to take advantage, and accentuated volatility triggered by negative sentiments. In thin and underdeveloped markets dominated by few leading operators, there is a natural tendency to do what everyone else is doing in the event of any adverse development rather than taking a contra position (RBI, 2001). The consequent volatility that sets in may not be in tune with the fundamentals.

It is essential to recognize that the capacity of economic agents in developing economies, particularly poorer segments, to manage volatility in all prices, goods or foreign exchange is highly constrained and there is a legitimate role for non volatility as a public good (Reddy, 2004a). After the liberalization of the exchange rate regime in mid 1990s, the Reserve Bank had, therefore, to chart its own course of exchange rate management, learning from the contemporary experiences. There is now a well-laid out policy response to sudden changes in capital flows so s to stabilize markets: on demand -side, including monetary tightening and changes in the cost of import finance as well as on supply-side, including the Reserve Bank's operations in the foreign exchange market and changes in the cost of delaying export proceeds (Jadhav, 2003). The Reserve Bank has been prepared to make sales and purchases of foreign currency in order to even out lumpy demand and supply in the relatively thin forex market and to smooth jerky movements. However, such intervention is not governed by a predetermined target or band around the exchange rate (Jalan, 1999).

The broad principles that have guided India after the Asian crisis of 1997 are: (i) careful monitoring and management of the exchange rate without a fixed or pre-announced target or a band;(ii) flexibility in the exchange rate together with ability to intervene, if and when necessary; (iii) a policy to build a higher level of foreign exchange reserves which takes into account not only anticipated current account deficits but also 'liquidity at risk' arising from unanticipated capital movements; and (iv) a judicious management of the capital account (Jalan, 2002).

India's exchange rate policy of focusing on managing volatility with no fixed rate target while allowing the underlying demand and supply conditions to determine the exchange rate movements over a period in an orderly way has stood the test of time as a result of these timely and coordinated effects of the Asian crisis. In addition, safeguards developed over a period of time also helped in limiting the contagion; these included: low current account deficit; comfortable foreign exchange reserves; low level of short-term debt; and absence of asset price inflation or credit boom. These positive features were the result of prudent policies pursued over the years notably, cap on external commercial borrowings with restrictions on end-use, low exposure of banks to real estate and stock market, insulation from large intermediation of overseas capital by the banking sector, close monitoring of off-balance sheet items and tight legislative, regulatory and prudential control over on-bank entities (RBI, 2004a). The Indian approach to exchange rate management has been describes as ideal for Asia (Jalan, 2003). The India experience highlights the need for emerging market economies to allow greater flexibility in exchange rates but the authorities should also have the capacity to intervene in foreign exchange markets in view of herding behaviour. A key lesson is that flexibility and pragmatism are required in the management of exchange rate in developing countries, rather than adherence to strict theoretical rules (RBI, 2004a).

A key part of the policy package, as noted earlier, is the use of monetary measures to ensure orderly conditions in the foreign exchange market. This paper briefly addressees the efficiency of such measures in influencing the exchange rate. According to the uncovered interest parity (UIP) condition, an increase in the domestic interest rate should be associated with a depreciation of the domestic currency to equalize returns on domestic and foreign assets. However, cross-country empirical evidence strongly rejects UIP. The failure of UIP provides a rationale for monetary measures to influence exchange suggests that positive monetary policy shocks, inter alia, induce an appreciation of the domestic currency (Christianio et al. 1999; Peersman and Smets, 2001). In the Indian context, existing studies also indicate that monetary policy tightening measures have been successful in restoring orderly conditions in the foreign exchange market (Pattanaik and Mitra, 2001; Pattanaik, Kapur and Dhal, 2003). Both these studies find that increase in interest rates has the expected effected of strengthening the exchange rate in the short-run; over time, however, the effect peters out, consistent wit the theory.

Impulse responses based on a 5-variable VAR-industrial production, wholesale price index, Bank Rate broad money and exchange rate-show that interns rate increases temporarily in response to an exogenous positive exchange rate shock. Similarly, impulse responses indicate that exchange rate appreciates in response to a positive interest rate shock. The results, thus, suggest that monetary policy measures taken to ensure orderly conditions in the foreign exchange market have the desired impact.

In brief, in the face of sustained capital flows and, in the recent years, surpluses on the current account, the foreign exchange market has been characterized by excess supply conditions. Authorities in India have responded to these excess supplies through a multi-pronged approach. In the context of large forex inflows, an ongoing view is taken for operational purposes on: (a) the extent of forex market intervention and consequent build-up of reserves; and (b) whether to sterilize or not and if so, to what extent. Operations involving sterilization are undertaken in the context of a policy response which has to be viewed as a package encompassing exchange rate policy, level of reserves, interest rate policy along with considerations related to domestic liquidity, financial market conditions as whole, and degree of openness of the economy. The policy response depends on several considerations involving trade-offs between the short term and the long term; judgment on whether capital flows are temporarily or enduring; as well as on the operation of self-correcting mechanisms in the market and market responses in terms of sentiments. Whereas the distinction between short term and long term flows is conceptually clear, in practice, it is not always easy to distinguish between the two for operational purposes. Moreover, at any given time, some flows could be of an enduring nature whereas others could be short term and, hence, reversible. More important, what appears to be short term could tend to last longer and vice versa, imparting a dynamic dimension to judgment about their relative composition (RBI, 2003d). In a scenario of uncertainty facing the authorities in determining temporary or permanent nature of inflows, it is prudent to presume that such flows are temporarily till such time that they are firmly established to be o a permanent nature (RBI, 2004c).

Notwithstanding the large scale capital inflows, sterilization operations coupled it other measures to manage the capital account has been largely able to keep money supply in line with desired trajectory. Furthermore, in contrast to experiences and fears often expressed with sterilization, interest rates in India softened over the period across the spectrum. Illustratively, the Bank Rate has halved from 12 per cent to six per cent between March 1997 and March 2004. The yields on Government of India securities (10-year paper) fell from 13.4 per cent to 5.2 per cent over the same period although these have increased somewhat in the subsequent months.

Business Cycle Synchronization

Apart from influences operating through movement of capital inflows and outflows, external demand and supply shocks can impact upon the domestic economy, especially in view of the growing openness of the economy. Illustratively, domestic prices of key commodities/groups such as iron and steel exhibited co-movements with international prices during 2003-04. Inflation, therefore, in the short-run can be influenced by external developments. Variations in external demand conditions coupled with exchange rate movements affect exports and imports and therefore, domestic demand and output. In view of the growing openness, there has been a renewed interest to assess the degree of synchronization of output in India with that in its major trading partners.

Business cycles abroad have a relatively larger influence on the Indian economy than was the case during the 1980s and exports and industrial production have started exhibiting co-movement with global business cycles (RBI, 2002). Mall (2001) finds that the Indian output cycles are positively correlated with the UK and the US cycles especially during the post-1980s. Exogenous oil shocks were found to be more important than non-oil global shocks, which, in turn, were stronger than country-specific shocks. Moreover, correlation between investment and private consumption cycles of India and those from each of the select countries-US, UK, Japan and Germany -magnitude, in the ppost-1980 period. Cyclical output of advanced economies has a unidirectional casual effect on India's cyclical output (Chitre, 2003). According to Dua and Banerji (2001a, 2001b), business cycles in India are more similar in character to those of the market economies in the post-1991 liberalization phase. The cycles were, however, driven more by endogenous factors than by exogenous shocks. As regards co-movement with ASEAN countries, although there is evidence of synchronization of growth cycles, similarity seemed to be purely coincidental and driven by domestic factors rather than greater inter-linkages with the ASEAN countries. The cyclical downturn of the Indian economy in synchrony with the East Asian crisis of 1997 is thus to be seen in this light (Mukherjee, 2003).

Table-5: Bilateral Correlation of India's Business Cycles with its Major Trading Partners

	1980-2003			1980-1990			1991-2003		
	GDP	Non agrl GDP	Industrial GDP	GDP	Non Agricultural GDP	Industrial GDP	GDP	Non Agricultural GDP	Industrial GDP
Australia	0.42	0.45	0.29	0.15	0.26	-0.05	0.72	0.67	0.60
Belgium	0.19	0.21	0.01	0.12	0.09	-0.25	0.21	0.24	0.11
Brazil	-0.23	0.08	-0.07	-0.54	-0.12	-0.59	0.26	0.40	0.59
Canada	0.41	0.44	0.27	0.26	0.26	-0.05	0.53	0.59	0.49
China	-0.16	-0.13	-0.08	-0.29	-0.33	-0.41	0.06	0.06	0.30
Germany	-0.02	-0.20	-0.21	0.31	0.04	-0.05	-0.28	-0.35	-0.33
Hong Kong	-0.04	-0.05	0.10	-0.09	-0.11	-0.01	0.02	-0.02	0.20
Indonesia	0.07	0.11	0.26	0.10	0.08	-0.03	0.07	0.13	0.35
Japan	0.40	0.20	0.19	0.54	0.37	0.11	0.27	0.08	0.20
Korea	0.17	0.17	0.36	0.25	0.09	0.53	0.12	0.18	0.30
Malaysia	0.21	0.12	0.30	0.39	0.10	0.35	0.15	0.14	0.30
New Zealand	0.17	0.34	0.44	-0.40	-0.23	-0.15	0.62	0.65	0.80
Philippines	0.40	0.39	0.48	0.31	0.30	0.46	0.65	0.65	0.80
Singapore	0.31	0.20	0.39	0.39	0.15	0.48	0.26	0.26	0.37
Thailand	0.33	0.28	0.47	0.58	0.38	0.41	0.25	0.24	0.48
U.K	0.43	0.49	0.49	0.13	0.24	0.23	0.69	0.67	0.69
U.S.A	0.43	0.35	0.24	0.23	0.21	0.10	0.63	0.48	0.35
World	0.52	0.50	0.40	0.22	0.29	-0.01	0.72	0.60	0.61
Memo:									
Advanced Economies	0.51	0.42	0.30	0.39	0.38	0.12	0.59	0.45	0.40
Middle East	-0.36	-0.31	-0.26	-0.40	-0.17	-0.10	-0.37	-0.50	-0.46
Newly industrialized	0.14	0.16	0.32	0.05	0.05	0.35	0.19	0.20	0.31
Asian economies									
Other EMEs, developing countries	0.37	0.45	0.40	-0.19	0.01	-0.31	0.67	0.61	0.70

Source: Computed from World Economic Outlook Database, IMF, September (2004).

The updates analysis during the period 1980-2003 has undertaken by RBI (2004a) to examine the degree of synchronicity of the Indian business cycle with world output as well as its major trading partners-developed as well as emerging economies. The empirical analysis apart from using overall GDP, non-agricultural GDP and industrial GDP are also used to capture co-movement, since agricultural sector-largely weather driven -still has a significant share in the Indian GDP. Thus, the results show that the synchronicity of the business cycles in India with the world, as a whole, has increased in the post-opening phase (1991-2003) vis-à-vis the pre-opening phase (1980-90) **(Table-5).**

Further, amongst major trading partners, cyclical synchronicity of India appears to have strengthened with most of the advanced economies during the post-1990 period vis-à-vis the pre-1990 period. Amongst developing country partners, synchronicity was lower with the East Asian partners during the 1990s. This decline in synchronicity with the East Asian trading partners could perhaps be reflecting the aftermath of the Asian financial crisis; India was relatively unaffected, in large part due to prudent macroeconomic policies adopted by India since the early 1990s. Amongst other major economies, there is evidence of co-movement with China during the 1990s vis-à-vis negative correlation in the 1980s.

In addition to analysis of correlation of business cycles, an examination of their amplitudes is useful as it is indicative of the severity of expansion and contraction of activities. Amplitude is influenced, inter alia, by the degree of openness of an economy. Often globalization is held responsible for increasing volatility of business cycles (Buch, 2002). Theoretically, however, the effects of integration on business cycle volatility are not clear. Increased volatility could as well be an outcome of the rapidly and badly coordinated capital account liberalization across the countries. For India, results suggest that the amplitude of the business cycle was higher in the post-1990 period, albeit still lower than some of its key trading partners **(Table- 6).**

The evidence on business cycles thus indicates that co-movement of output in India with the world output has increased in the 1990s. Domestic macroeconomic policies have, therefore, to take into account impact of such developments abroad on the domestic economy. As the Reserve Bank's Monetary and Credit Policy Statement of 2001-02 noted: "…… Monetary management has now become much more complex than was t case even a few years ago. This is because of several factors, such as, the on-going integration of financial markets across the world, the phenomenal increase in financial he

Table-6: Amplitude of Business Cycles: India and Major Trading Partners (percent)

	1980-2003	1980-90	1991-2003
Australia	1.7	2.1	1.4
Belgium	1.3	1.4	1.3
Brazil	3.5	4.8	1.9
Canada	2.1	2.4	1.8
China	2.8	3.6	1.8
Germany	1.3	1.3	1.4
Hong Kong SAR	3.8	4.4	3.3
India (GDP)	1.4	1.3	1.5
India (Non-agricultural GDP)	1.5	1.0	1.9
India (Industrial GDP)	3.1	2.3	3.7
Indonesia	3.9	2.2	5.1
Japan	1.4	1.4	1.5
Korea	3.5	2.8	4.2
Malaysia	3.8	3.0	4.4
New Zealand	2.1	2.3	2.1
Philippines	3.3	4.5	2.0
Singapore	3.4	3.6	3.5
Thailand	3.8	2.4	4.7
U.K	1.6	1.8	1.5
U.S.A.	1.7	2.0	1.4
World	0.9	0.9	0.9
Memo:			
Advanced economies	1.0	1.1	0.9
Middle East	1.9	2.3	1.5
Newly industrialized Asian economies	2.4	2.3	1.5
Other emerging market and developing countries	1.0	0.9	1.1

Source: Computed from World Economic Outlook Database, IMF, September (2004)

turnover, liberalization of the economy, and the rapidity wit which unanticipated domestic and international tremors get transmitted to financial markets across the world because of the new technology…... The need t quickly change the policy stance in the light of emerging situation has also been the experience of other monetary authorities including the US and European central banks… Keeping these realities in view, it is particularly important for banks and financial institutions to make adequate allowances for unforeseen contingencies in their business plans, and fully take into account the implications of changes in the monetary and external environment on their operations….” (RBI, 2001).

Conclusion

The decade of the 1990s has witnessed a further spread of globalization. World trade has continued to expand at a rate higher than that of the world output. A more striking phenomenon during the 1990s was the increased financial openness which has led to a sharp surge in capital flows but with concomitant elevated volatility. Greater trade and financial openness can increase cross-linkages and interdependence between economies. Monetary policy authorities are, therefore, required to make an assessment of these developments on domestic output and inflation in formulation of their policies. As it is, monetary policy operates in an uncertain environment. These uncertainties are exacerbated in an environment of greater trade and financial integration.

A particular aspect of globalization that has heavily dominated the conduct of monetary policy in the emerging market economies (EMEs) in recent years has emanated from the behavior of capital flows. Boom -bust pattern of capital flows to the EMEs has brought into sharp focus the constraints imposed by the 'impossible trinity'. The EMEs have been juggling to prevent excessive monetary expansion even as they pursue an open capital account and attempt to modulate the speed of change in the value of the local currency. In the process, the central banks in these economies have mainly relied on sterilization as the policy response and build-up substantial reserves in episodes of punitive capital flows. Foreign exchange reserves reflect a precautionary demand and self-insurance necessitated by volatility of capital flows. This response of EMEs may be all the more appropriate since capital flows in the past 3-4 years are believed, in a large part, due to "push" factors. Another cause of concern fro monetary authorities, at the present juncture, emanates from global imbalances, in particular, the US twin deficits. At some stage, the large US current account deficit would have to undergo correction. The concern mainly arises from the consequences for the global economy as the US current account adjusts towards sustainable levels.

Like other EMEs, India too has attracted large capital flows, the effect of which has been augmented, in recent years, by surpluses in the current account. Capital flows have been largely stable, reflecting a cautious approach to capital account liberalization. Nonetheless, there have been a few episodes of volatility in capital flows. Overall, however, the period since 1993-94 has witnesses' persistent surpluses balance of payments. External sector developments have therefore, come to influence dynamics of monetary base and monetary aggregates. A multi pronged approach has been followed to manage the external flows to ensure domestic economic and financial stability. The key features of the package of measures include: liberalization of policies in regard to capital account outflows; encouraging pre-payment of external borrowings; alignment of interest rates on non-resident deposits; and, greater flexibility in exchange rate. These measures have been supplemented wit sterilization operations to minimize the inflationary impact of the flows and to ensure domestic financial stability.

Operations involving sterilization are undertaken in the context of a policy response which has to be viewed as a package encompassing exchange rate policy, level o reserves, interest rate policy along wit considerations related to domestic liquidity, financial market conditions as a whole, and degree of openness of the economy. Notwithstanding the large scale of sterilization operations, interest rates in India have softened across the spectrum.

The recent experience with exchange rates highlights the need for developing countries to allow great flexibility in exchange rates but the authorities should also have the capacity to intervene in foreign exchange markets in view of herd behaviour. With progressive opening of the emerging markets to financial flows, capital flows are playing an increased role in exchange rate determination and often reflected in higher exchange rate volatility. Against these backdrops, India's exchange rate policy of focusing on managing volatility with no fixed rate target while allowing the underlying demand and supply conditions to determine the exchange rate movements over a period in an orderly way has stood the test of time. A keyless on of the Indian approach is that flexibility and pragmatism are required in the management of exchange rate in developing countries, rather than adherence to strict theoretical rules.

In retrospect, thus, the opening up of the Indian economy to external flows had a significant impact on the conduct of monetary policy.

First, apart from price stability and credit availability, financial stability has gradually emerged as a key consideration in the conduct of monetary policy.

Second, the instruments and operating procedures of monetary policy had to be constantly refined to meet the challenges thrown up by the vicissitude of capital flows and a market-determined exchange rate.

Existing arrangements to modulate liquidity had to be supplemented with innovations such as Market Stabilization Scheme to absorb liquidity. These refinements coupled with prudential external sector management have indeed helped India to maintain monetary as well as financial stability even as the 1990s witnessed severe financial crisis in many developing and emerging economies.

References:

1. Arabi. U (2003a), "Capital Account Liberalization and Management of Capital Funds" Productivity, Volume 44, No.3.
2. Arabi. U (2005b) "The Foreign capital inflows and Indian Financial Systems: The Emerging Horizons" in Banking Sector Reform in India, (edited) Dr. Odeyar D.Heggade, Published by Centre for Human Development Studies, Mysore
3. Anderson, H.M. N.S. Kwark and F. Vahid (1999), "Does International Trade Synchronize Business Cycles?" Monash Econometrics and Business Statistics Working Paper No 8/99, Department of Econometrics and Business Statistics, Monash University.

4. Ball, L. (1998), "Policy Rules For Open Economies", NBER Working Paper No. 6760.
5. Bergin, P.R. and O. Jordan (2004), "Measuring Monetary Policy Interdependence", Journal of International Money and Finance, Vol. 23.
6. Jadhav, Narendra (2003) "Central Bank Strategies, Credibility and Independence: Global Evolution and the Indian Experience", RBI Occasional Papers, Vol.24, Nos.1 and 2.
7. Jalan, Bimal (1999) "International Financial Architecture: Developing Countries' Perspectives" RBI Bulletin.
8. Khan, Mohsin, S. and Carmen, M. Reinhart (1995) "Capital Flows in the APEC Region", IMF Occasional Papers 122, International Monetary Fund.
9. Lee, Jang-Yung (1996) "Implications of a Surge in Capital Inflows: Available Tools and Consequences for the Conduct of Monetary Policy" IMF Working Paper No. 96/53.
10. Mukherjee, S. (2003) "Cyclical Fluctuations in ASEAN and India". In Economic Reforms and Development, (ed.) R.K. Sen, Deep & Deep Publications (P) Ltd., New Delhi.
11. RBI. (2004), "Report on Currency and Finance" (2002-2003), pp; 50-71
12. RBI. (2005), "Report on Currency and Finance" (2003-2004), pp; 171-192

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