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The Case of India

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The Case of India*

*Sunanda Sen***

*[**Abstract**: India has been experiencing rising inflows of overseas capital since the de-regulation of its financial sector. Often looked up as a 'success story' among other emerging economies, the country has been subject to pitfalls and trilemmas, which deserve attention. It has been officially recognized by the Governors of RBI that there was the "dirty face' of trinity and also that volatility in the market was caused by speculative capital in search of profit. However, eulogizing policies to combat, Joseph Stiglitz, goes as, "...your policy-makers, particularly the Reserve Bank of India, are already doing a great job. I wish the US Federal Reserve displayed the same understanding of the role of regulation that the RBI has done, at least so far." Recently a path-breaking move has been there in USA with the launching of the recent Bill on regulation of Wall Street, which was passed by a majority in the Senate on May 20, 2010. We urge upon a need for similar actions in India and other emerging economies, especially in view of the fact that the recent moves for financial deregulation in these countries have rather been in the opposite direction.*

Like a few other developing nations which are identified as 'emerging economies,' India has been experiencing rising inflows of overseas capital since the gradual de-regulation of its financial sector which started during the early 1990s. Unlike what is claimed by those who abide by the neo-liberal norm of 'efficiency' in de-regulated financial markets, what in reality is being experienced by these emerging economies is one ridden with pitfalls, with trade-offs and trilemmas, which come in the process, often causing a lot of concern. We propose to have a fresh look at related issues in India, a country often looked up as a 'success story' by many[1], not only in the context of the financial

* An earlier version of the paper was presented in a seminar at the Department of Economic and Social Affairs of the United Nations (UN/DESA) in New York. The author is grateful to the participants for useful comments and in particular, to Manuel Montes and Alex Izurieta for very useful comments.

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1 Stiglitz, Joseph, "India's well placed to take on Round 2 of recession", *The Times of India*, May 10, 2010. See also Stiglitz, Joseph, "India Still On Track for Growth", Columbia Business School Public Offering, http://www4.gsb.columbia.edu/publicoffering/topics/business

management policies during the Asian crisis, but even in terms of its handling the current global crisis. Contesting such claims, we would report in this paper the traps and pitfalls in such policies which deserve attention.

The paper has four major sections, followed by one which offers the conclusion. Section I deals with the pattern of India's integration with the global financial market since 1991, tracing back the policy-changes which made it possible. Section II dwells on the hurdles in the management of India's financial sector, focussing on the following as competing demands:

a) maintaining price stability by using controls on domestic monetary policy ,
b) achieving competitive real exchange rates, and
c) ensuring uninterrupted flows of capital from abroad.

Issues as above, often identified as "impossible trinity" in the literature[2], question the feasibility of achieving domestic targets in monetary and exchange rate policies along with that of maintaining free capital flows to/from abroad. Section III of the paper brings up two additional concerns, hardly noticed, relating to (a) the fiscal implications of monetary management, inflicting social costs to the economy, and, (b) financialisation in de-regulated markets which spills over to commodity markets with futures trading. As for the first, efforts to sterilise the cash flows in the domestic market as are caused by the rising capital inflows include the selling of government bonds which in turn inflates the interest burden in the fiscal budget. With fiscal deficit as proportion of GDP subject to compression in terms of the ongoing official Fiscal Responsibility and Budget Management Act (FRBMA), the primary deficit shrinks proportionately, given that it is even less than the fiscal deficit.[3] With defence expenditure subject to strategic concerns,

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[2] See for some comments:
Lemgruber, Antonio Carlos "The Impossible Trinity", *RGE Monitor*, May 16, 2008.
Venkatadri, Balasubramanian, "The Impossible Trinity: Why RBI has an impossible job", *BLAHLA*, August 13, 2007.
Mishra, Saurabh, "The impossible trinity", *CAC*, September 2, 2007, www.wordpress.com

[3] In terms of budget classification in India,
Fiscal Deficit = Total Expenditure – Total Receipts = [Revenue Expenditure +Capital Expenditure] – Total Receipts
Or,
Fiscal deficit = [interest payments +subsidies + defence expenditure + Capital Expenditure] – Total Receipts
Primary Deficit = Fiscal Deficit – interest payments = [subsidies + defence expenditure + Capital Expenditure] – Total Receipts

the end result is one where cuts take place in the other two components of expenditure in the primary budget, which include capital expenditure and subsidies. The consequences are no less a cause of concern than those for reasons as financial stability. As for financialisation, an aspect which deserves a mention, we draw attention to speculation, not only on equities, but also on commodities; with futures trading providing further opportunities for profits in the sharp uptrend and fluctuation in commodity prices. We provide a perspective in Section IV as to how the Indian policy moves are viewed by different commentators. It also provides a short account of the current moves and roadblocks in advanced countries in terms of re-instituting regulation in financial markets, which incidentally compares with the Indian scene. We end with a concluding note in Section V.

I. Financial De-regulation in India and Links to Global Financial Markets

Financial opening was initiated as part of a package of economic reforms launched in India in 1991. This brought an end to a policy regime which had been subject to segregated banking along with manifold restrictions on the flow of overseas capital. Successive reforms, implemented over the next decade and half, introduced several changes in India's financial sector[4]. The more important of those included the following:

a) Free access of FII investments to stock markets since 1992.
b) Bans on derivative trading were lifted in 1999. The latter henceforth were treated at par with securities in stock markets, thus ending the restrictions imposed earlier in terms of the Securities Contract and Regulation Act of 1956. Exchange traded derivative markets were simultaneously opened where options, futures and swaps on interest rates and currencies could be traded. These transactions were to be regulated by the Securities and Exchange Board of India (SEBI).
c) The ban on commodity futures was also lifted in 1999, followed by use of 'badla' (margin based trading) in 2001.
d) Over the Counter (OTC) trading was legalised in 2006 which included interest rate swaps and forward rate agreements subject to the condition that one of the parties had to be subject to RBI regulation.

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4 This section relies on an earlier paper by the author titled as "De-regulated Finance in Indian Economy" in *Alternative Economic Survey*, Delhi 2008; also as "La desregulació financier de la economía India", *Economía Informa numero, 355*, noviembre-diciembre de 2008, Universidad Nacional Autonoma Mexico.
See also for an overview, Sen, Sunanda (2007), *Globalisation and Development*, National Book Trust of India,

e) Interest Rate swaps (IRS) and Forward Rate Agreements (FRAs) under the OTC were to be regulated by the Centralised Clearing Corporation of India (CCIL) in 2007, thus providing Centralised Counterparty (CCP) guarantee.
f) Reduction of capital requirements for banks up to 80% (and for currency swaps up to 90%), which related to the eliminated counterparty risks as were there earlier on these OTCs. However, credit derivative swaps were not allowed.
g) Liberalised norms offered to corporates (and mutual fund) for overseas investments and external commercial borrowings (ECBs).
h) Exchange traded currency futures allowed in all stock exchanges which included the Multi Commodity Exchange (MCX).
i) Futures trade opened for a large number of commodities in commodity exchanges over the next few years.

Successive rounds of liberalisation, as above, have changed the pattern as well as the magnitude of turnover in India's financial sector. One thus observes (a) increased turnovers in the country's major secondary stock exchanges which include the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE); (b) volatility in stock turnovers and stock prices; (c) increased volume of trading of derivatives at stock exchanges, along with increased OTC trading for derivatives (firm data which is not available); (d) increased inflows of FII , both on a gross and net basis; (e) rise in P/E ratios of stocks traded, often at levels higher as compared to those in overseas stock markets; (f) value of stocks sold in the primary market at levels much lower than those sold in the secondary market; (g) rising trading activity in the commodity futures market for a large number of commodities.[5]

Observations in this section are based on statistics appended at end to the paper in Appendix Charts 1–7.

II. Managing the Financial Sector: Some Hurdles

As it has been the case with other emerging economies (which have been exposed to the recent turbulence in global financial markets), cross-border flows of capital, especially short-term, have today gained a large presence in India's capital market. Unlike what it is with flows of long-term foreign direct investments, short-term capital flows can cause a lot of problems to monetary authorities, especially in achieving the twin goals of managing a competitive real exchange rate along with some degree of autonomy in

[5] See for some details, Sen, Sunanda and Mahua Paul (2010), "Trading in India's Commodity Markets", ISID Working Paper, WP 2010/03, February.

maintaining autonomy in monetary policy, especially in catering to the goals set for the real activities in the domestic economy. As mentioned above, goals as above are often difficult to achieve in terms of what has been identified in the related literature as an 'impossible trinity'.[6]

With large inflows of short-term capital, which have been both unpredictable and large, monetary authorities in India have been active to arrest what they considered as untoward effects of these flows on money supply or exchange rates. The outcome has been a 'stop and go' strategy, which included the sterilising or injecting the related impact on money supply. However, policies to de-regulate and reform the financial sector, as documented above, initiated large inflows of FII investments of short-term variety, which were deployed to trade in India's secondary markets for equities (BSE and NSE). As it can be seen from the statistics provided in Table 3 and Charts 1 as well as 3–7 of the Appendix, these short-term flows of capital generated both wide swings and spurts, for equities and derivatives traded in stock markets. It is noticeable that the boom in the country's stock markets also spilled over to its commodity exchanges (including the MCX) trading, which had official sanction since 2003. Trade in derivatives (especially the currency futures) had a major presence in these transactions, both in stock markets as well as the MCX.

Monetary management in India: 1991–2008

Rising inflows of short-term capital, as mentioned above, started entering India's financial markets since the early 1990s, a development which prompted the monetary authorities to monitor and take the requisite steps to contain inflation as well as an appreciation of the real exchange rate. A tight monetary policy was adopted by the country's central bank, RBI, which initiated the Liquidity Adjustment Facility (LAF) in the year 2000. The step provided for RBI's control over liquidity in the market with frequent upward revisions in Repo and Reverse Repo rates[7] as were applicable to

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[6] See for some comments:
Palley, Tom (2009), "Rethinking the Economics of Capital Mobility and Capital Controls", PERI Working Paper No. 193, February.
Lemgruber, Antonio Carlos, "The Impossible Trinity", *RGE Monitor*, May 16, 2008.
Venkatadri, Balasubramanian, "The Impossible Trinity: Why RBI has an impossible job", *BLAHLA*, August 13, 2007, http://blahla.wordpress.com/2007/08/13/
Mishra , Saurabh, "The impossible trinity", *CAC*, September 2, 2007, www.wordpress.com

[7] Amongst its many functions, Reserve Bank of India also acts as the banker of last resort. In this role, the central bank has to ensure that it can inject funds into the system to help participants tide over temporary mismatches of funds. Refinance, as it used to happen earlier, was at a fixed

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commercial banks. Repos were the rates at which banks could refinance against securities used as collaterals with the RBI, and also to park funds with RBI to get back the securities. The opposite was the case with Reverse Repos, which were used to pay back to RBI. Upward revisions were there in the limits to LAF along with the frequent hikes in Repo as well as reverse Repo rates during the following years, which aimed to curtail excess liquidity in the market. Use also was made of the Monetary Stabilisation Scheme (MSS) with several measures which included (a) a steep rise in cash reserve ratios (CRR) from 4.50% in March 2004 to 9.0% in August 2008; (b) sale of government bonds to mop up excess liquidity via Open Market Operations (OMO) in the market; and (c) a raise in overnight call rates and cuts in bid-ask spread in call rates.[8] We provide in Tables 1–3 of the Appendix the details of the measures as well as their impact on liquidity, according to official estimates.

However, despite these measures, monetary authorities failed to achieve many of their goals. We notice, from available statistics, the upward trend in the real exchange rates of the rupee. Barring one or two years, and notwithstanding the efforts on part of the RBI to contain those movements by using LAF, MSS and even direct purchases of a part of the foreign currency inflows (which were absorbed in official reserves), real exchange rate appreciation of the rupee has been continuing since 1991 (see Appendix Chart 9). Again, accumulation of official reserves (of foreign exchange), which are part of reserve money, potentially contributed to expansions in the domestic money supply (M_2 as well as M_3) which called for further sterilisation. Moreover, selling government securities had to be competitive in the domestic market, thus setting a floor for the interest rate in the market. However, the upward push in interest rate was, to a certain extent, in accord with the dear money policy the RBI was pursuing since the mid-nineties, especially in the context of the surge in forex led expansion of domestic liquidity which continued till the

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rate which was largely divorced from the cost of equivalent short-term funds in the market. This gave rise to a non-egalitarian distribution of interest rates in the short end of the curve. Further, the amounts that could be borrowed were determined by a preset limit. To do away with the deficiencies, in 2000 the RBI moved to an auction system of repos and reverse repos to suck-out and inject liquidity to the market. The three broad objectives of LAF included a greater flexibility for the RBI in determining both the quantum of adjustment as also the rates by responding to the system on a daily basis; to ensure that the injected funds are being used to fund day-to-day liquidity mismatches and not to finance more permanent assets; and finally, to help RBI set a corridor for short-term rates, ideally governed by the reverse repo (top band), and repo (lower band) rates. This would impart greater stability to the markets. www.debtonnet.com

[8] "Consolidation in the Financial Sector", Speech by V. Leeladhar, Dy Governor, RBI, April 2008, www.rbi.org

onset of the global financial crisis during the third quarter of 2008. With moves as above defying other goals, domestic monetary policy became a captive of external economic developments, and far removed from what could otherwise be identified as an autonomous national policy.

With the successive de-regulation of the capital account which had led to excessive inflows of short-term capital to the country since the early nineties, policies in India to manage the financial sector actually restrained the officials from having a full sway over what could be considered as a more appropriate one: especially from the point of view of domestic output growth, employment or even distribution.[9] In addition, as already mentioned above, even the efforts to counter the impact of foreign currency inflows on the exchange rate of the domestic currency failed to arrest appreciations in the real exchange rate as took place over those years, thus undermining cost competiveness of Indian goods in the domestic as well as in the overseas markets. We would, in Section III of this paper, point at some other issues relating to financial management under de-regulated finance, which relate to the social cost of these measures .

Monetary Management in India since the Beginning of Global Crisis in October 2008

We now pay attention to more recent years of monetary management in India, starting from the bankruptcy of the US Lehman Brothers in the third quarter of 2008. Policies continued with similar strategies of monetary management as used earlier, but in a reverse gear, with the use of LAF, MSS and direct official intervention in the foreign exchange market. With global recession at the corner and dwindling capital flows creating downturns in stock markets, tools as used earlier now moved in the opposite direction, this time to revamp the sagging financial sector. Attempts were also made to arrest the volatility in interest rates, exchange rates and stock prices which was rising along with the crisis in the world economy.[10]

One notices that between the third quarter of 2008 (when the crisis in the US housing market was spreading all over) and the quarter ending in March 2010, several regulatory

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9 Thus, the distribution of bank credit in terms of the globalised norms of the risk-adjusted credit under Basel II intensifies financial exclusion, especially for the poor and SMEs in the country. See for details, Sen, Sunanda (2010), "Basel Norms in India and Brazil" in Ricardo Gottschalk (ed.) *Basel II and Developing Countries*, Palgrave Macmillan.

10 See RBI (2010), *Financial Stability Report,* www.rbi.org
See also, RBI (2009), *Forex Management Report: Half-Yearly Report on Management of Forex Reserves*, April–September, www.rbi.org

measures were introduced by the monetary authorities in India.[11] Thus with the LAF Repo rates were sharply downgraded from 9% to 4.25% between October 2008 and June 2009 while the Reverse Repos were lowered from 6% to 3.25% over the same period. Other measures to ease liquidity in the market included (a) the special 14 day Repo facilities up to $4bns which were allowed to Mutual Funds; and (b) permitting banks to use their SLR deposits with the RBI on a temporary basis. Use was also made of MSS to downgrade CRR and SLR, from 9% and 25% in October 2008 to 5% and 24% in June 2009. [The latter, according to official statement, added $50bn liquidity in the market.] Similar use was made of MSS in a reverse gear with the RBI buying back government securities from public. The MSS also included (a) capping of interest rates applicable to NRI deposits in order to discourage their outflow; (b) direct sales of dollar in the foreign exchange market to arrest untoward depreciation of the rupee; (c) rupee-dollar swap facilities for banks; (d) larger limits of remittances up to $100 thousand allowed to residents; and (e) corporate overseas investments up to 300% of their net worth.[12] [Details of some of these measures are provided in Tables 1–3 of the Appendix.]

Measures to steer through the crisis which erupted in 2008 (and even earlier when the country was experiencing the problems caused by excessive inflows of short-term capital) per force had to encounter what is identified in the literature as an 'impossible trilemma.' Difficulties of achieving the three targets (of maintaining monetary and exchange rate stability and free capital flows) were officially recognised even before the crisis, with the governor of RBI mentioning "the dirty face of trinity" in 2007![13] More recently the present RBI chief has come out openly on his concerns for what he observes as 'volatility of speculative capital flows in search of profit.'[14] Those capital flows of late have been far in excess of the current account deficit, thus affecting the stock market,

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11 "Impact of global crisis on RBI as a national regulator", Speech by Usha Thorat, Dy Governor, RBI, at Seoul, June 29, 2009, www.rbi.org
Also Reserve Bank of India (2009), *Annual Report*, www.rbi.org

12 "Globalisation and Monetary Policy: Some Emerging Issues", Speech by Y.S. Reddy, Governor RBI, in *RBI Bulletin,* April 2007, www.rbi.org
See also Subramanian, K., "One Face of the Impossible Trinity", *Hindu Business Line*, April 28, 2007, www.thehindubusinessline.com/2007/04/28/stories/2007042800360800.htm

13 Reddy, Y.S., April 2007, *op.cit*

14 "......India has experienced both 'floods' and 'sudden stops' of capital flows. Net capital flows to India increased from as low as US$ 7 billion in 1990–91 to US$ 45 billion in 2006–07, and further to US$ 107 billion during 2007–08, the year just before the crisis. They dropped to as low as US$ 7 billion in 2008–09 at the height of the crisis. Capital flows are estimated to have recovered to around US$ 50 billion in 2009–10." "Volatility in Capital Flows: Some Perspectives", Speech by Duvvuri, Subba Rao, Governor, RBI, delivered in Zurich on May 11, 2010, www.rbi.org

exchange rate and/or official reserves[15], with additions to reserves creating the need for monetary sterilisation. Policy measures have sought to plug in levers to control 'volatility in the debt side of the flows.' In our judgement one cannot expect much of a solution from those measures alone unless these also address the problems with short-term flows of portfolio capital!

On the whole, policies to manage the de-regulated financial sector in India had to face some hurdles, as was to be expected, with free movements of short-term capital across the board, which inflicted volatility in the foreign exchange market as well as in stock exchanges. A surge in capital inflows, matched by a current account deficit of smaller magnitudes, spilled over to the entire economy which started experiencing successive changes which include (a) appreciations in the real exchange rate, (b) a rise in official reserves, and (c) sterilisation of liquidity via OMOs, etc. (Appendix Charts 9–11). With uncertainty in de-regulated financial markets, changes as above create further opportunities for speculative profits, often laden with investments in derivative instruments[16] (Appendix Chart 6). The end result is often other than what is desired by the policy makers, a story which is unveiled by the Indian experience.

Summing up, analysis in this section indicates that (a) the nominal exchange rate of the rupee has been volatile with moderate appreciation, and also that the real rate has been steadily moving up; (b) additions to official reserves has continued unabated despite their use in stabilising the rupee rate with direct interventions in the foreign exchange market; (c) that FIIs have continued to impact the stock market, both in terms of higher turnover and increased volatility; (d) the P/E ratios of stocks have moved up accordingly; (e) attempts to sterilise additions to liquidity in the market by means of LAF as well as MSS contributed to sharp increases in publicly held rupee debt (Appendix Charts 5, 6, 7 and 9); (f) as a result, the rising debt service liabilities tend to pre-empt other heads of fiscal expenditure in the budget. Sale of government securities on a large scale also crowds out the debt market, often pitching the interest rate higher than what otherwise would have prevailed in the market; and (g) finally, the financialisation process also affects commodity prices, by spilling over to commodity futures market. The operation of the MCX in derivative trading on currency, mentioned above, provides an instance of the interlink between the commodity futures and the stock markets.

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[15] *Ibid*.

[16] See for an elaboration, Sen, Sunanda (2003), *Global Finance at Risk: On Real Stagnation and Instability,* Palgrave Macmillan, OUP 2004.
See also Sen, Sunanda (2010), "The Melt-down of the Global Economy: A Keynes-Minsky Episode", Mimeo.

We would discuss the last two aspects of monetary management as mentioned above in the following section, pointing at further problems and dilemmas which remain rather neglected in the literature.

III. Managing the Financial Sector: Some More Issues

Financialisation of markets, an offshoot of financial de-regulation, does not remain confined to financial assets alone, a fact which is evident in the much talked-about sub-prime loan crisis in the housing markets of US. As channels of speculation are opened up for short-term capital, it spills over across markets which include financial assets, real estate and commodity exchanges along with various types of OTCs.

Financialisation today pervades the commodity markets, thus affecting spot and futures trading in commodities.[17] As held by UNCTAD in its latest Trade and Development Report (2009), "…a major new element in commodity trading over the past few years is the greater presence on commodity futures exchanges of financial investors that treat commodities as an asset class. The fact that these market participants do not trade on the basis of fundamental supply and demand relationships and that they hold, on average, very large positions in commodity markets, implies that they can exert considerable influence on commodity price developments." The report points at the sharp rise in commodity prices between 2002 and mid-2008 which in turn has been followed by a reversal. The sequence, as pointed out, was related to the booming financial market and its crash by October 2008.[18] As pointed out, 'financialisation' also increases price volatility and "…hedging becomes more expensive and perhaps unaffordable for developing country users, as they no longer be able to finance margin calls".[19] The argument probably also holds for intra-country futures trade, where use of high margins can deter small traders or even producers, especially in developing countries.[20] Concerns over rising commodity prices in advanced countries like France have recently prompted the French ministry, led by Cristine Lagarde, to argue for "standardizing the principle of position limits" in "financialised" commodity markets "...not only to prevent market manipulations but also to reduce the macro-economic, even systemic risks." She also calls

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17 UNCTAD, *Trade and Development Report*, 2009.

18 *Ibid.*, p. 54.

19 *Ibid.*, p. 74.

20 See for a recent study which points at the inability of small traders and producers of soybean to gain access to commodity futures markets, Kumar, Richa, "Mandi Traders and the Dabba: Online Commodity Futures Markets in India", *Economic and Political Weekly*, Vol. 45, No. 33, August 14 –20, 2010

for an "…in-depth study on the use of margin call and capital requirement mechanisms as instruments to increase liquidity in the longest terms to maturity on the futures curve." The appeal suggests a new commodity market watchdog similar to the Commodity Futures Trading Commission of the US.[21]

Rise in commodity prices and the use of futures and forward trading in global markets have also been prominent in India. Thus one can observe parallel movements in commodity price indices in India and overseas, as reflected in the Multi Commodity futures exchange of India and the international commodity futures exchange (Appendix Chart 16).[22] The phenomenon seems to have pervaded the Indian commodity market, both by pushing up prices and by linking the commodity market to the market for financial stocks, via the portfolio decision of those who speculate on both. Equity and commodity futures markets often move together, especially as the financiers reallocate their respective portfolios by switching between the markets. In the study mentioned above, we tried to find the relation[23], if any, between movements in the TSE (total stock exchange) turnover and spot price indices for individual commodities in India (see Appendix Charts 15 and 16). Our tests of a regression analysis indicate strong negative relation between the two for urad, rice and wheat, if we consider the period from May 2008 to May 2009. Of the three commodities, futures market was open till January 2007 while trading in wheat is continuing till now. It may be mentioned here that this also covers the period when global stock markets collapsed, affecting the Indian market as well. Re-doing the exercise over a longer period from May 2003 to May 2009, during which the stock market was at its boom until the crash began in mid-2008, we got a positive link between the TSE and individual spot prices for the same set of commodities; with TSE regressed on the latter.[24] We observe, in Appendix Chart 15, strong parallels between the monthly vartions in Total Stock Exchange (TSE) variations and futures prices, for at least two items (potato and urad) during the first 10 months of the fiscal year 2006-07 when both were open to futures trading.[25]

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21 Deen, Mark, "France to Seek Commodity Position Limits, Margin Calls at G-20", *Bloomberg Businessweek*, April 15, 2010, www.Businessweek.com

22 See Sen, Sunanda and Mahua Paul, *op.cit*, ISID WP 2010/03.

23 *Ibid.*

24 *Ibid.*

25 Food items which in recent years have been traded in futures markets of India include, among others, coffee, barley, ground nuts, sugar, *desi tur*, *urad* and rice (till January 2007), castor seed, guargum, *gur*, *jeera*, maize, *masoor* gram, mustard seed, pepper, oil cake and soya oil (till January 2008), sugar (till January 2009) and finally, chilli, castor seed, coriander, potato, *dhania* and wheat (till now). Futures trading, in earlier months but discontinued now can still be

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An outcome as above can be related to the observations we made earlier in this paper relating to the 'financialisation' of the commodity market. Speculation and portfolio adjustments across markets on part of financial agents led, as a contagion, to spurts in commodity markets when financial market was at its boom. Thereafter the crash in financial asset prices and in its turnover has led the same agents look for commodities again as alternative sources of returns on their funds, with investments in commodity futures. The latter, as observed, pushed up the spot prices, implying a betting on rising prices with speculators holding long positions.[26]

Futures markets in agricultural commodities, especially in cereals, pulses and other essential food items are currently subject to public debates in India, especially when it relates to the fresh opening of those markets for essential food items which earlier had been de-listed. Even international organisations have drawn attention to the pitfalls as lie ahead for countries including India in trying to open futures trading in commodities. As held by the international think-tank IFPRI, for India "rising expectations, hoarding and hysteria played a role in increasing the level and volatility of food prices, as did the flow of speculative capital from financial investors."[27] A similar view was held by the Washington based Institute of Agriculture and Trade Policy.[28]

On the whole, official policies in India to manage the surges in speculative short-term capital inflows in the money market have not been able to arrest its spill-over to the commodity market, which continues to provide profits to financiers on futures and forward trading. The end result has been the unrelenting inflation as at present, in food prices which affects the survival for large sections of population in India

We now pay attention to one more effect of de-regulation in financial markets which, as we point out, has often been neglected. With increasing inflows of foreign exchange from abroad, the issue relates to interventions of monetary authorities, initially in the forex market (to acquire the additional supply of exchange in order to prevent appreciation of the domestic currency), and later in the domestic money market to mop up liquidity as

identified as factors explaining the current spate of price increases in the commodity markets. Speculation in commodity trading also has been a major component in the OTC trading with forward contracts which, as mentioned earlier, is legalized. Sunanda Sen and Mahua Paul, *op.cit*.

26 Suni, Paavo, "Commodity Futures Prices as Predictors of Future Spot Prices", etla.fi/files/1659_SUH_06_2

27 IFRI (2009), "When Speculation Matters", March (mimeo).

28 IATP (2008), "Commodities Market Speculation: The Rise to Food Security and Agriculture", November (mimeo).

may be generated by such additions to high powered money. The above involves sale of government securities which, sold at market rates, adds to the interest bill as a fixed charge under the head of the expenditure for the primary budget. With official commitments in India in terms of the Fiscal Responsibility and Budget Management Bill (FRBMB) which, since the year 2003, limits the size of the fiscal deficit as a proportion of GDP; a rising interest bill can only be met with a cut in other heads of expenditure in the primary budget. [It may be recalled here that the primary budget consists of the fiscal budget less expenditure on interest bill.] As defence turns out to be inflexible as a component of official expenditure, it continued around 9% of revenue expenditure since 2007–08[29]. This meant that cuts on other heads of expenditure in the primary budget had to fall on subsidies and capital expenditure, causing social concern (see Appendix Chart 18 for the sequences following capital account convertibility). One can figure out the large proportion of the interest related payments in non-Plan expenditure as compared to subsidies over 2004–5 to 2009–10 (see Appendix Chart 18). Comparing the ratios, major subsidies fell from 15.6% as proportions of revenue expenditure in 2008–09 to 11.8% in 2009–10. The ratio of aggregate subsidies to GDP has declined from 2.2% in 2008–09 to 1.7% in 2009–10.[30] Comparing the changes in expenditure between 2008–09 (April–December) and 2009–10 (April–December), interest payments have risen by 5.1% while major subsidies have dropped by 6.3%.[31] Accordingly the primary deficit, which measures the excess of aggregate public expenditure (on subsidies, capital expenditure and defence) over total public revenue, perforce fell relative to fiscal deficit as proportion of GDP. The more recent moves of the government to come out of the stimulus package which has sustained the fiscal deficit at higher levels over the last two fiscal years may further harden the picture. We provide the figures for the share of the primary as well as the fiscal deficit as proportions of GDP in Appendix Chart 17. One also gets an idea, in Chart 19, of the rising share on interest rate charges and debt servicing as a proportion of non-plan expenditure, especially in contrast to the low share of food subsidies.

Aspects as above deserve attention, and more so because when the benefits of financial deregulation remain confined to those who can speculate in markets, while the costs are borne by those who are affected by speculation on commodity prices and cuts in social sector spending by the government, as we point out above.

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29 Government of India, *Economic Survey 2009–10*, p. 49.

30 *Ibid.*, p. 50.

31 *Ibid.*, p. 54.

IV. Perspectives on Monetary Management in India

Of late India has been receiving considerable attention as one of the few countries which has managed to successfully withstand the consequences of the latest global crisis. Much of it remains attributed to successful management, by the country's monetary authorities including the country's central bank, the RBI. Thus a statement by one of the staunch critics of globalisation, Joseph Stiglitz, goes as, "...your policy-makers, particularly the Reserve Bank of India, are already doing a great job. I wish the US Federal Reserve displayed the same understanding of the role of regulation that the RBI has done, at least so far."[32] Stiglitz further remarks, " ... India was one of the countries that resisted the wholesale deregulation movement that the United States had been exporting......They (India) did it against political pressure … and now I think the financial markets are thankful that they did resist those pressures. The result is that India's financial markets are in better shape than they would have been if they had engaged in the kind of wholesale deregulation that the United States engaged in." [33] The argument rests on what he notices as India's ability to continue with regulations in the banking sector, in contrast to the wide-ranging de-regulations banking sector of US (and Europe as well)[34].

A view rather similar has recently been aired by Gerald Epstein, otherwise a leading critic of the theory behind financial de-regulation and its application in US and elsewhere. Mentioning the restraints in India on trading of derivatives by banks, Epstein commends the role of the RBI in monetary management, thus mentioning the RBI governor "…..Reddy who was the devil...now...has turned a hero who saved the Indian financial system."[35] The observation is based on what Epstein believes as the ability of the RBI, first, to judge the quality of new financial products (derivatives, etc.) in the market and issue approvals solely on that basis, and second, the monitoring by RBI of bank performance while issuing 'guidelines and safeguards.' Earlier, in a paper at end of the Asian crisis[36], India's strategy of capital flow management was appreciated as a

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32 Stiglitz, Joseph, "India's well placed to take on Round 2 of recession", *The Times of India*, May 10, 2010.

33 Stiglitz, Joseph, "India Still On Track for Growth", Columbia Business School Public Offering, http://www4.gsb.columbia.edu/publicoffering/topics/business

34 "RBI knows banking better than US Fed: Stiglitz", Text: Suman Guha Mozumder, New York April 15, 2009.

35 Epstein, Gerald, "A Financial Pre-Cautionary Principle: New Rules for Financial Product Safety", Power Point presentation, IDEAS Conference Chennai, India, January 24–27, 2010, www.networkideas.com

36 Epstein, Gerald, Ilene Grabel and K.S. Jomo, "Capital Management Techniques in Developing

contd...

success story by Epstein and Jomo. However, since then the pace of de-regulation in the financial sphere has been much faster and more pervading, a fact which speaks for the discordant notes we have offered in this paper.

Observations as above underestimate the potentials of a systemic risk and its social cost as are embedded in India's liberalised financial sector. Our analysis of the successive stages in the near full liberalisation of capital flows and the domestic financial market, with explosion of short-term flows of capital as are driven by speculation, across markets of financial assets and commodities, the wide-ranging use of exchange traded as well as OTC derivatives and the incidence of financial liberalisation in terms of cuts in social sector spending bear testimony to the lack of reality of those positions.

However, there is unanimity on the volatility aspect of short-term capital flows. Related concerns are shared by Stiglitz as he points out that "..... this crisis should send three strong messages to India. One, think very carefully about financial market regulation. Full capital market liberalisation should clearly be put off. Two, be prepared to take offsetting actions to counter volatility flowing in from abroad. Finally, pursue growth from a diversified economic base, which includes developing countries and your own huge domestic potential."[37] Epstein also concludes on a discerning note on risky toxic assets as he points out "...If you cannot figure out how risky the asset is within reasonable limits, do not approve it."[38] It resonates with the cautionary note from George Soros, the billionaire investor in capital markets, that derivatives (and specially the credit-default swaps) are "weapons of mass destruction." The warning, initially put forth in 2003, was recently reiterated by Soros in 2006. [39] Concerns as above, on the current volatility of capital flows, is recognised in India, with the present RBI chief publicly acknowledging the dangers with volatile capital flows,[40] mentioned earlier in this paper. Others also come up with anxiety on the volatility aspect of capital flows, especially with crisis in global markets.[41] It requires, however, action which is more than a recognition,

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Countries: Managing Capital Flows in Malaysia, India and China", *Capital Market Liberalization and Development*, May 2008, Pp. 139–170 (32), Oxford Scholarship Online Monographs.

37 Stiglitz, *The Times of India*, May 2010, *op.cit*

38 Epstein, *op.cit*

39 "Soros slams 'instruments of destruction", CNNMONEY.com, June 12, 2009: 6:46 AM ET

40 "Volatility in Capital Flows: Some Perspectives", Speech by Duvvuri Subba Rao, Governor, RBI, delivered in Zurich on May 11, 2010, www.rbi.org

41 Panagariya, Arvind, "India's Financial Secret Weapon", *Foreign Policy Magazine*, www.brookings.edu

especially from official agencies, to manage and counter the consequences of excess capital inflows subject to volatility.

We may mention here a path-breaking move in USA with the recent Bill in US on regulation of Wall Street which was passed by a majority in the Senate on May 20, 2010. As put by a commentator, "...prodded by national anger at Wall Street, the Senate on Thursday passed the most far-reaching restraints on big banks since the Great Depression."[42] The Bill, accepted by the House, will be a landmark victory of regulatory bodies over the free for all rein of speculation in USA's financial market, by restraining banks from dealing in risky assets and providing a lot of protection to the retail investor or the individual house owner on mortgages. As put by President Obama, "Over the last year, the financial industry has repeatedly tried to end this reform with hordes of lobbyists and millions of dollars in ads, and when they couldn't kill it they tried to water it down. ... Today, I think it's fair to say these efforts have failed."[43]

We draw attention to the above step taken by US administration in order to urge upon a need for similar actions in India and other emerging economies where the recent moves for financial deregulation have rather been in the opposite direction.

V. Conclusion

What can be concluded from our analysis of monetary management since the start of financial de-regulation in India? We think it can be summed up in the following six observations and policy conclusions:

a) Extent of monetary management in India has <u>not</u> been in keeping with the need to control the rising inflows of short-term capital, often led by the FIIs, which destabilises stock markets and the exchange rate of the domestic currency.
b) Net flows of overseas capital, in excess of the sum absorbed to finance current account deficit, has put upward pressures on the real exchange rate of rupee. To counter the latter, monetary authorities have been mopping up foreign currency with direct purchases along with sales of government securities to absorb excess liquidity. While purchase of foreign currency contributes to rising official reserves (and thus to high powered money), it has the potential of adding further to money supply. As for

[42] Kuhnhenn, Jim, Associated Press Writer, "Senate passes massive Wall Street regulation bill", abcnews.go.com/Business/wireStory?id=10696150 - 76k

[43] Drawbaugh, Kevin and Andy Sullivan, "Senate Approves Sweeping Wall Street Bill", May 22, 2010, 3:12am IST, in.reuters.com/article/idUSTRE64I5JQ20100521

absorption (or sterilisation) of liquidity by selling securities to public, the act adds to interest bill for the government in its budget, which in turn entails social costs by inducing cuts in public expenditure on social expenditure and investments, with ongoing restraints on the fiscal deficits.

c) Sterilisation of excess liquidity by means of sales of government securities (or borrowing) to be attractive needs to be offered at interest rates which make those saleable in the credit market. This constrains the national autonomy of authorities to fix interest rates at levels otherwise considered desirable in the interest of real activities.
d) Sterilisation by means of adjustments in the Repo and Reverse Repo rates further limits autonomy in monetary policy, by pitching the rates higher/lower according to whether capital inflows are considered to be drying up or excessive. Changes as above are guided by circumstances in global financial markets rather than by domestic exigencies.
e) Monetary management in India has not been able to control the flow of funds to finance derivatives, both exchange traded and OTCs, which also enters the commodity futures and forward markets. As in other countries, commodity markets today are heavily financialised, with free flow of excess short-term funds in search of profit. This entails further social costs, with futures prices pushing up spot prices of commodities in markets for daily necessities.
f) Monetary management has not been able to prevent steady appreciation in the real exchange rate of rupee, which can be seen in the appreciation of the REER. This has made Indian goods less competitive in relation to foreign products, both with exports in overseas markets and with imports in domestic markets.

Concluding, one does not see much of a logic or social concern in pushing further the agenda of monetary management in the direction of full capital account convertibility in India. To allow free flow of finance to feed transactions in the country's secondary stock markets and to permit the use of derivative instruments to hedge and speculate creates further space for those who want to use money to make more money while contributing little to growth and stability in the real economy.

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Appendices

Table-1
Movement in Repo Rates and Reserve Requirments in per cent

Effective since	*Reverse Repo Rate*	*Repo Rate*	*Cash Reserve Ratio*	*Statutory Liquidity Ratio*
March 31, 2004	4.50	6.00	4.50	25
September 18, 2004	4.50	6.00	4.75 (+0.25)	25
October 2, 2004	4.50	6.00	5.00 (+0.25)	25
October 27, 2004	4.75 (+0.25)	6.00	5.00	25
April 29, 2005	5.00 (+0.25)	6.00	5.00	25
October 26, 2005	5.25 (+0.25)	6.25 (+0.25)	5.00	25
January 24, 2006	5.50 (+0.25)	6.50 (+0.25)	5.00	25
June 9, 2006	5.75 (+0.25)	6.75 (+0.25)	5.00	25
July 25, 2006	6.00 (+0.25)	7.00 (+0.25)	5.00	25
October 31, 2006	6.00	7.25 (+0.25)	5.00	25
December 23, 2006	6.00	7.25	5.25 (+0.25)	25
January 6, 2007	6.00	7.25	5.50 (+0.25)	25
January 31, 2007	6.00	7.50 (+0.25)	5.50	25
February 17, 2007	6.00	7.5	5.75 (+0.25)	25
March 3, 2007	6.00	7.5	6.00 (+0.25)	25
March 30, 2007	6.00	7.75 (+0.25)	6	25
April 14, 2007	6.00	7.75	6.25 (+0.25)	25
April 28, 2007	6.00	7.75	6.50 (+0.25)	25
August 4, 2007	6.00	7.75	7.00 (+0.50)	25
November 10, 2007	6.00	7.75	7.50 (+0.50)	25
April 26, 2008	6.00	7.75	7.75 (+0.25)	25
May 10, 2008	6.00	7.75	8.00 (+0.25)	25
May 24, 2008	6.00	7.75	8.25 (+0.25)	25
June 11, 2008	6.00	8.00 (+0.25)	8.25	25
June 25, 2008	6.00	8.50 (+0.50)	8.25	25
July 5, 2008	6.00	8.50	8.50 (+0.25)	25
July 19, 2008	6.00	8.50	8.75 (+0.25)	25
July 30, 2008	6.00	9.00 (+0.50)	8.75	25
August 30, 2008	6.00	9.00	9.00 (+0.25)	25
October 11, 2008	6.00	9.00	6.50 (-2.50)	25
October 20, 2008	6.00	8.00 (-1.00)	6.50	25
October 25, 2008	6.00	8.00	6.00 (-0.50)	25
November 3, 2008	6.00	7.50 (-0.50)	6.00	25
November 8, 2008	6.00	7.50	5.50 (-0.50)	24 (-1.00)
December 8, 2008	5.00 (-1.00)	6.50 (-1.00)	5.50	24
January 05,2009	4.00 (-1.00)	5.50 (-1.00)	5.50	24
January 17,2009	4.00	5.50	5.00 (-0.50)	24
March 05,2009	3.50 (-0.50)	5.00 (-0.50)	5.00	24
April 21,2009	3.25 (-0.25)	4.75 (-0.25)	5.00	24

Note: 1. With effect from October 29, 2004, the nomenclature of repo and reverse repo was changed keeping with international usage. Now, reverse repo indicates absorption of liquidity and repo signifies injection of liquidity. Prior to October 29, 2004, repo indicated absorption of liquidity while reverse repo meant injection of liquidity. The nomenclature in this Report is based on the new usage of terms even for the period prior to October 29, 2004.

2. Figures in parentheses indicate changes in policy rates/ratios

Table-2
Reserve Bank's Liquidity Management Operations

Item	*2007-08*	*2008-09*	*2009-10*
RBI's net purchases from Authorised Dealers	3,12,054	-1,78,592	-12,520
Management of Liquidity	-1,17,743	2,35,209	1,32,109

Source: RBI

Table-3
Monthly Primary Liquidity Flows and Open Market Operations (Rupees crore)

Month	*RBI's Net Foreign Currency Assets #*	*Month*	*Net Repos under the LAF*	*Month*	*Net Open Market Operations*	*Month*	*Market Stabilisation Scheme*
2007-08 Apr	11935	2007-08 Apr	-19189	2007-08 Apr	-313	2007-08 Apr	-12951
2007-08 May	8138	2007-08 May	-5306	2007-08 May	-680	2007-08 May	-11395
2007-08 Jun	27655	2007-08 Jun	-7687	2007-08 Jun	-252	2007-08 Jun	4702
2007-08 Jul	25219	2007-08 Jul	-3	2007-08 Jul	-664	2007-08 Jul	-2410
2007-08 Aug	38817	2007-08 Aug	-13855	2007-08 Aug	-498	2007-08 Aug	-21407
2007-08 Sep	54039	2007-08 Sep	22925	2007-08 Sep	-398	2007-08 Sep	-25039
2007-08 Oct	52372	2007-08 Oct	-24205	2007-08 Oct	-531	2007-08 Oct	-42804
2007-08 Nov	29994	2007-08 Nov	9425	2007-08 Nov	-146	2007-08 Nov	-1103
2007-08 Dec	18521	2007-08 Dec	31080	2007-08 Dec	4597	2007-08 Dec	12716
2007-08 Jan	45251	2007-08 Jan	-34305	2007-08 Jan	680	2007-08 Jan	1607
2007-08 Feb	38428	2007-08 Feb	3850	2007-08 Feb	2321	2007-08 Feb	-14031
2007-08 Mar	20181	2007-08 Mar	58435	2007-08 Mar	1809	2007-08 Mar	6697
2008-09 Apr	15059	2008-09 Apr	-83115	2008-09 Apr	-111	2008-09 Apr	-4052
2008-09 May	9447	2008-09 May	3155	2008-09 May	-54	2008-09 May	-2918
2008-09 Jun	-8971	2008-09 Jun	34610	2008-09 Jun	8860	2008-09 Jun	929
2008-09 Jul	-33674	2008-09 Jul	29325	2008-09 Jul	9488	2008-09 Jul	2993
2008-09 Aug	15580	2008-09 Aug	-26725	2008-09 Aug	1883	2008-09 Aug	-2218
2008-09 Sep	-13547	2008-09 Sep	48880	2008-09 Sep	-836	2008-09 Sep	-146
2008-09 Oct	-42465	2008-09 Oct	-67285	2008-09 Oct	-1	2008-09 Oct	8617
2008-09 Nov	-47375	2008-09 Nov	6785	2008-09 Nov	-7	2008-09 Nov	22821
2008-09 Dec	-2262	2008-09 Dec	-1670	2008-09 Dec	7677	2008-09 Dec	22316
2008-09 Jan	10557	2008-09 Jan	-48915	2008-09 Jan	6621	2008-09 Jan	11286
2008-09 Feb	6022	2008-09 Feb	-5215	2008-09 Feb	5801	2008-09 Feb	6773
2008-09 Mar	-8679	2008-09 Mar	58335	2008-09 Mar	55227	2008-09 Mar	13914
2009-10 Apr	-1971	2009-10 Apr	-1,06,945	2009-10 Apr	18591	2009-10 Apr	17861
2009-10 May	-7519	2009-10 May	-26410	2009-10 May	16959	2009-10 May	30326
2009-10 Jun	3245	2009-10 Jun	555	2009-10 Jun	6451	2009-10 Jun	17000
2009-10 Jul	23592	2009-10 Jul	-5405	2009-10 Jul	5243	2009-10 Jul	1827

Source : RBI

Chart 1
Foreign Investment Inflows (Rs Crores)

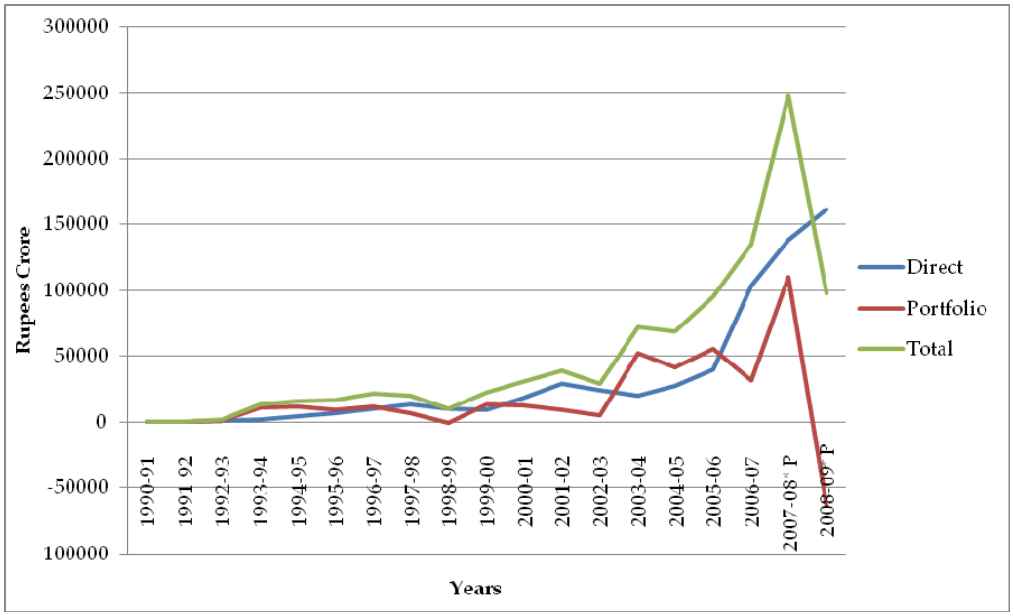
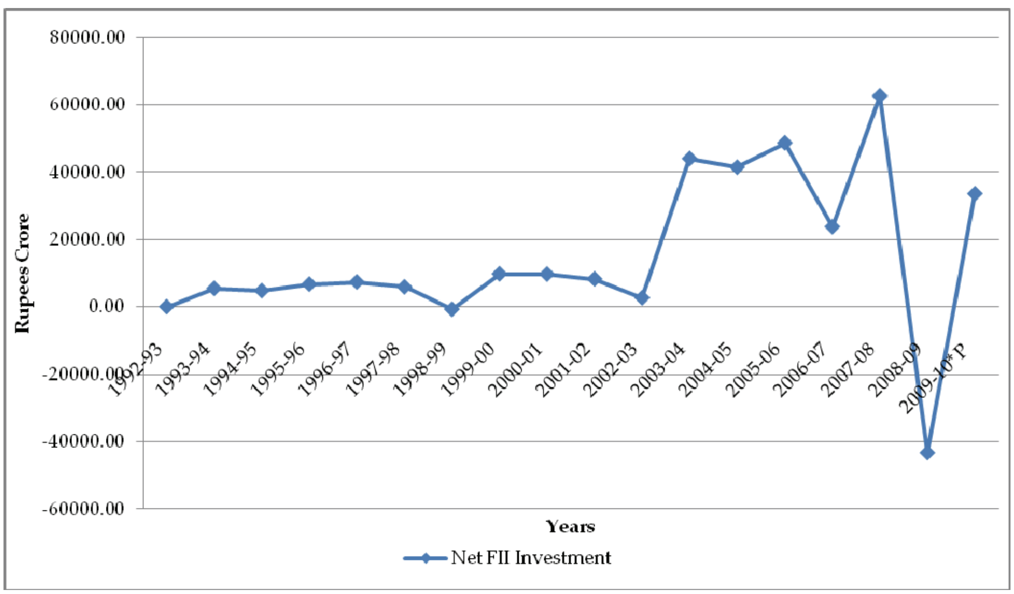
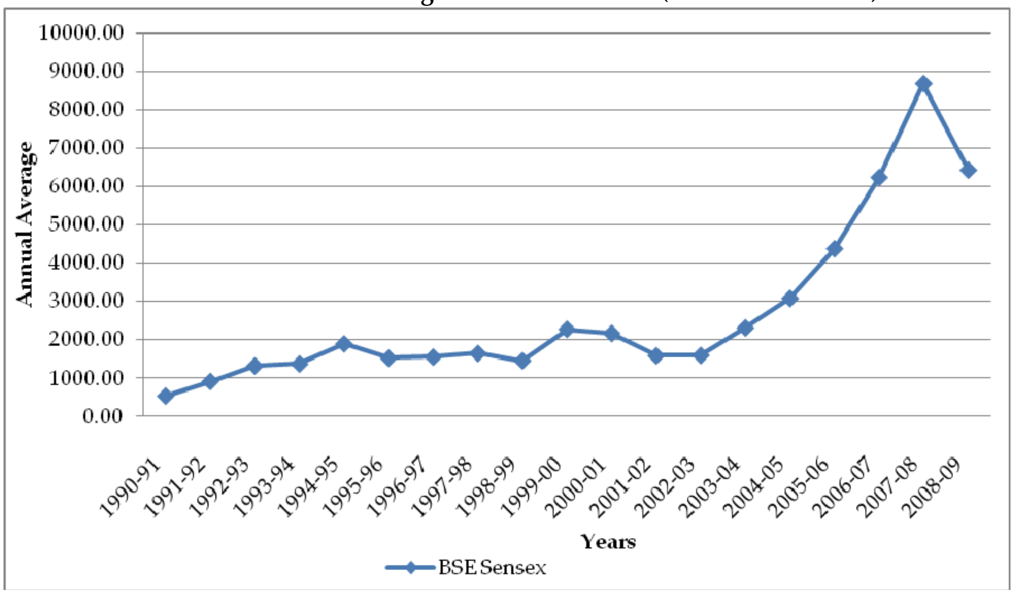


Chart 2
Net FII Investment in Stock Market (Rs. Crore)



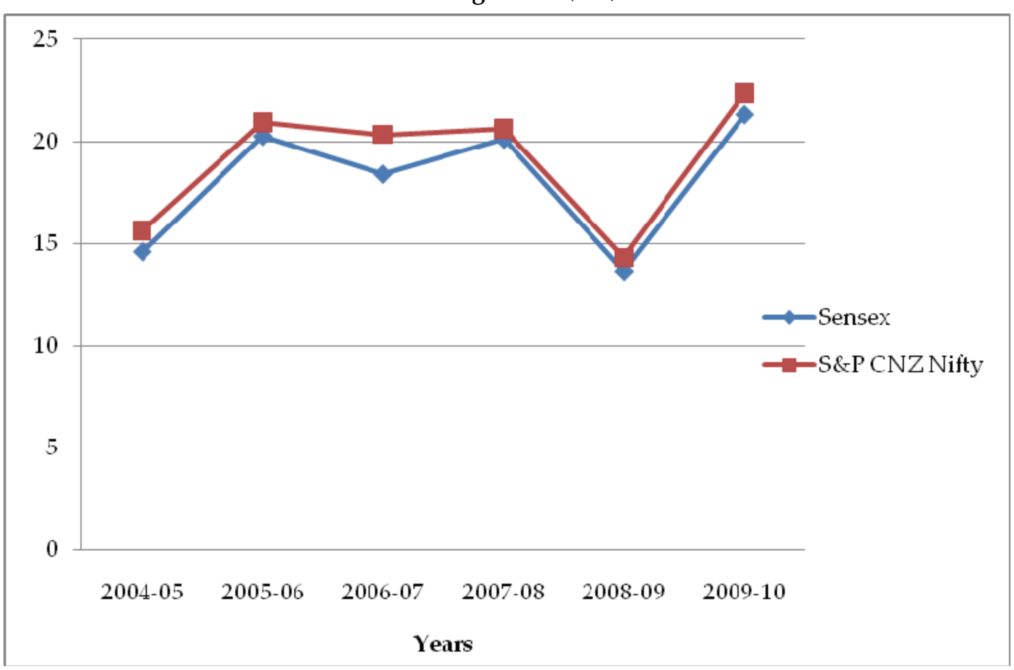
Note: *P: Provisional.
Source: RBI, *Hand Book of Statistics on Indian Economy*, 2008-09

Chart 3
BSE Sensex Annual Averages Share Price Index (Base: 1983-84 = 100)



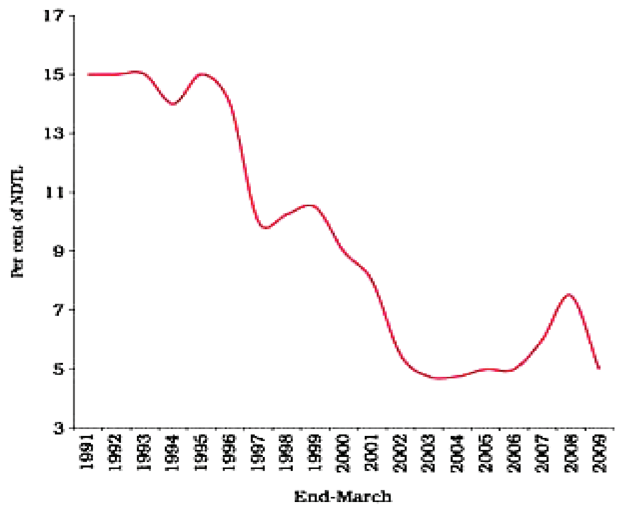
Source: RBI, HandBook of Statistics for Indian Economy 2008-09

Chart 4
Price-Earning Ratios (P/E) of Stocks



Note: As on the last trading day of the financial year.
Compiled from SEBI Bulletin, November 2009 and April 2010.

Chart 5
Cash Reserve Ratio



Source: RBI, Annual Report 2010

Chart 6
Reer Neer 1993–94=100

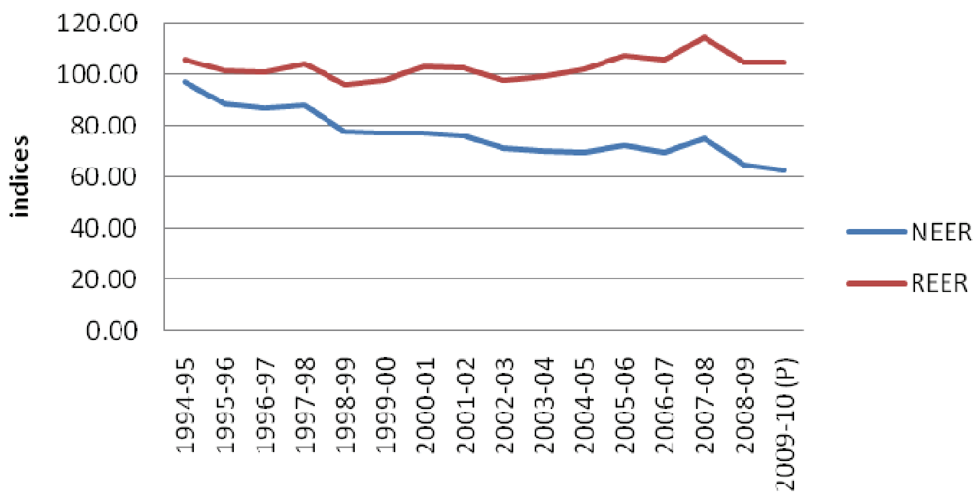


Chart 7
Turnover in the Equity Derivatives Market

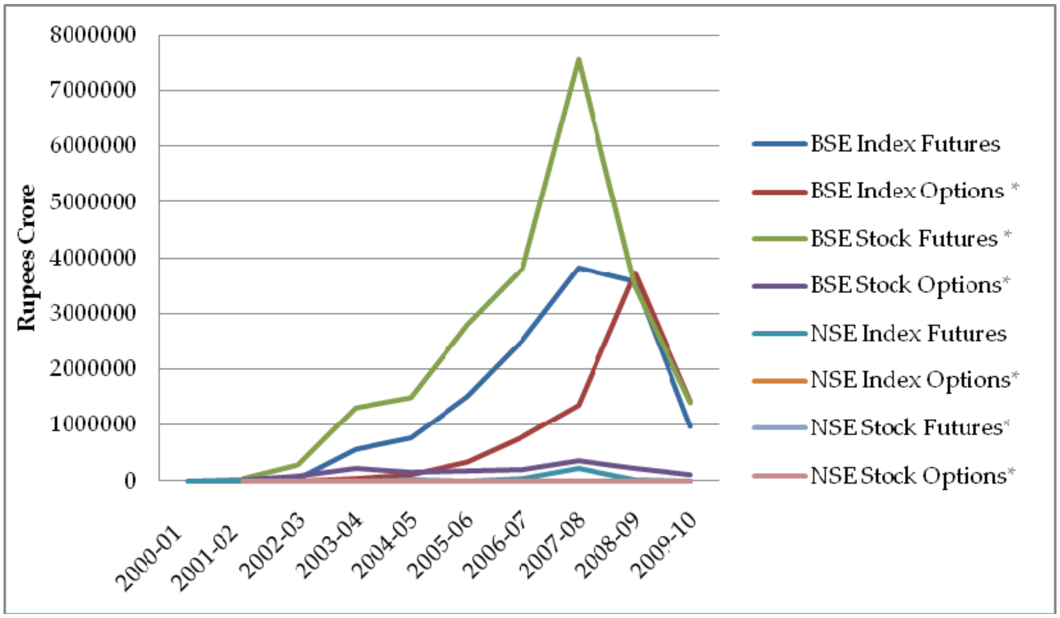


Chart 8
SD of Monthly Turnover in the Equity Derivatives

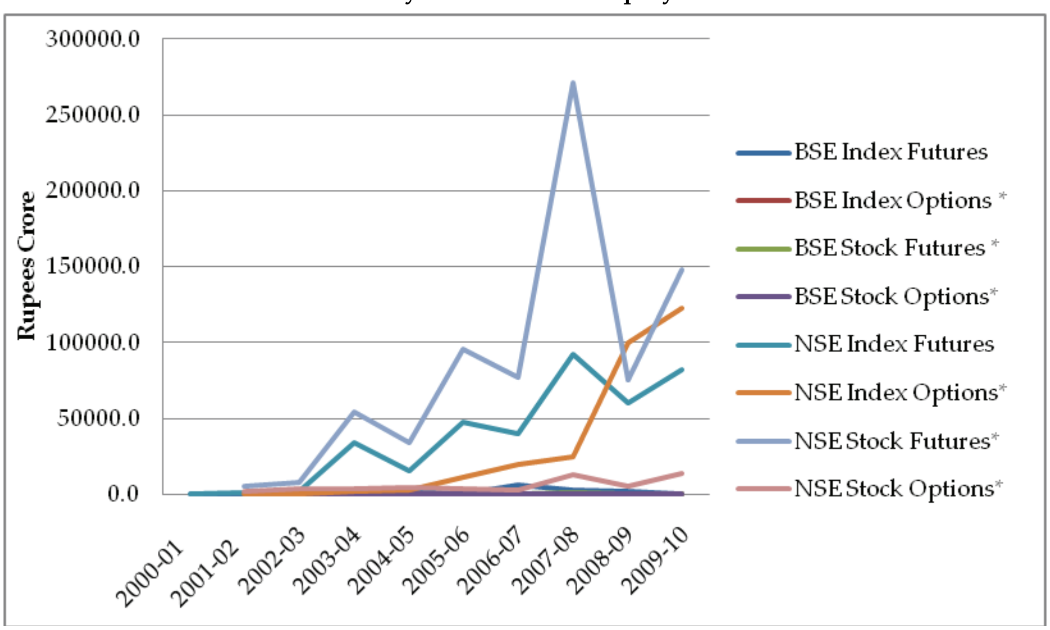


Chart 9
Monthly RBI's Net Foreign Currency Assets Inflow#

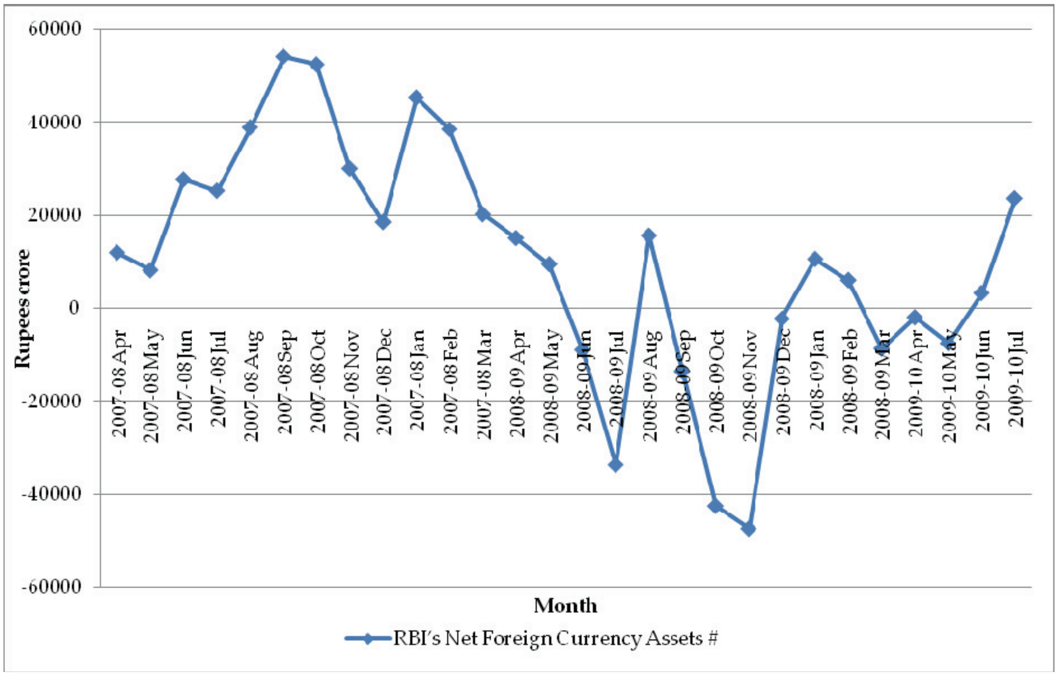


Chart 10
Net Repos under the LAF

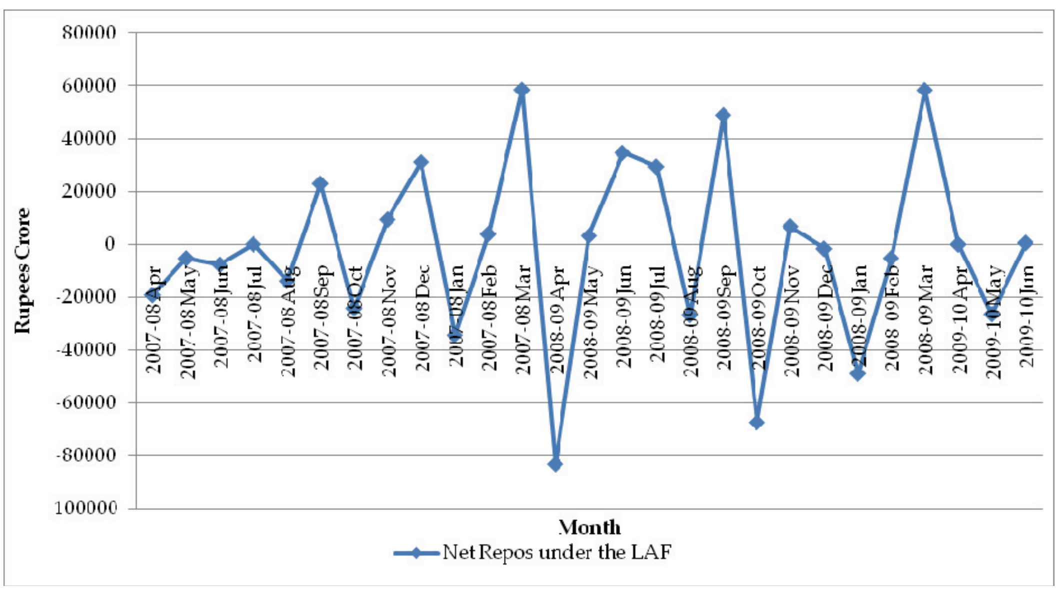


Chart 11
Monthly Net Open Market Operations Inflow

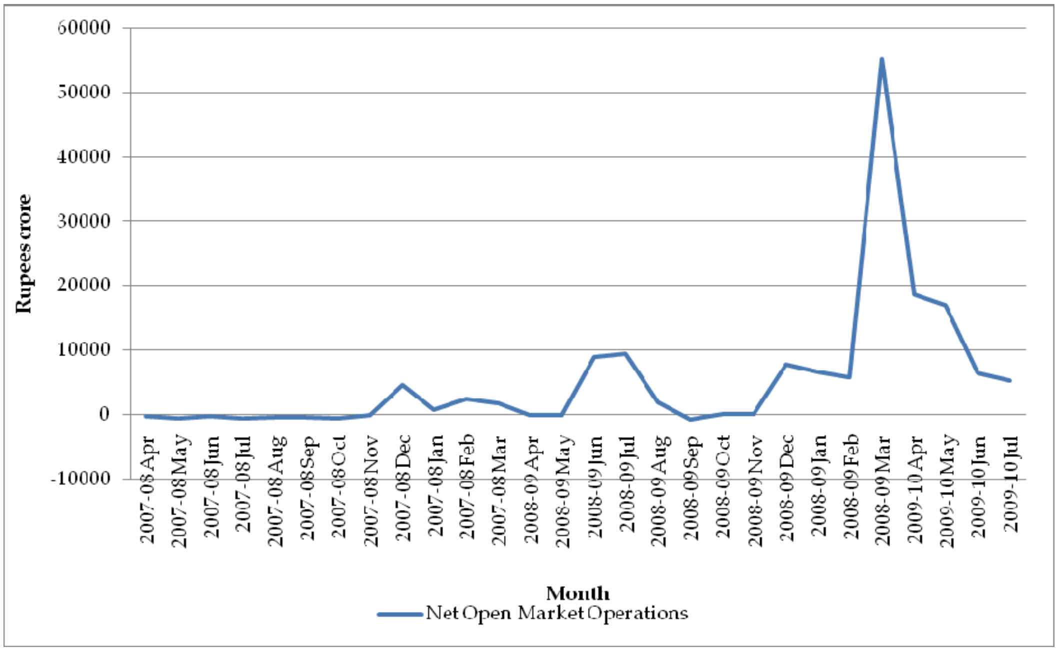


Chart 12
Monthly Market Stabilisation Scheme

Chart 13
Turnover in the Equity Derivatives Market

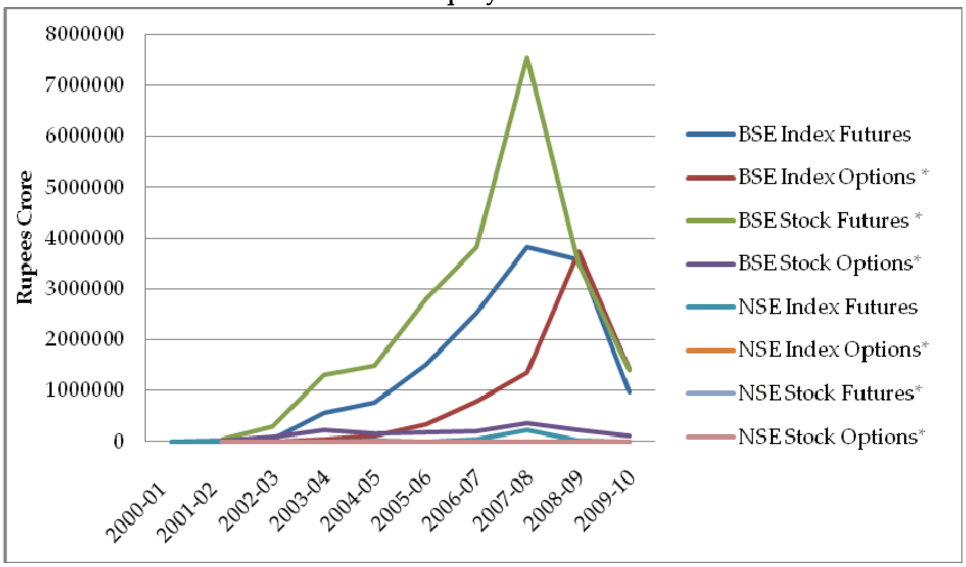
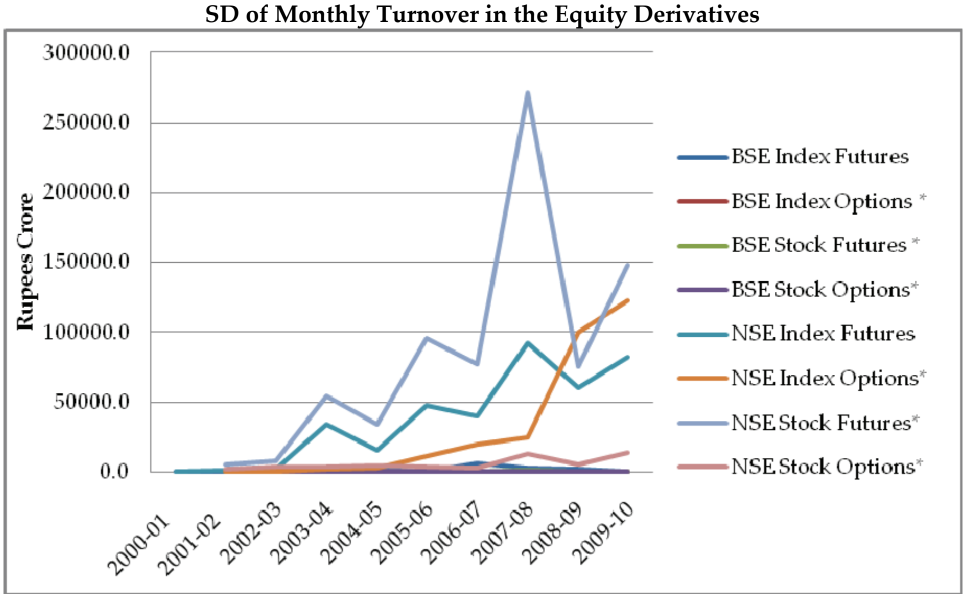


Chart 14
SD of Monthly Turnover in the Equity Derivatives



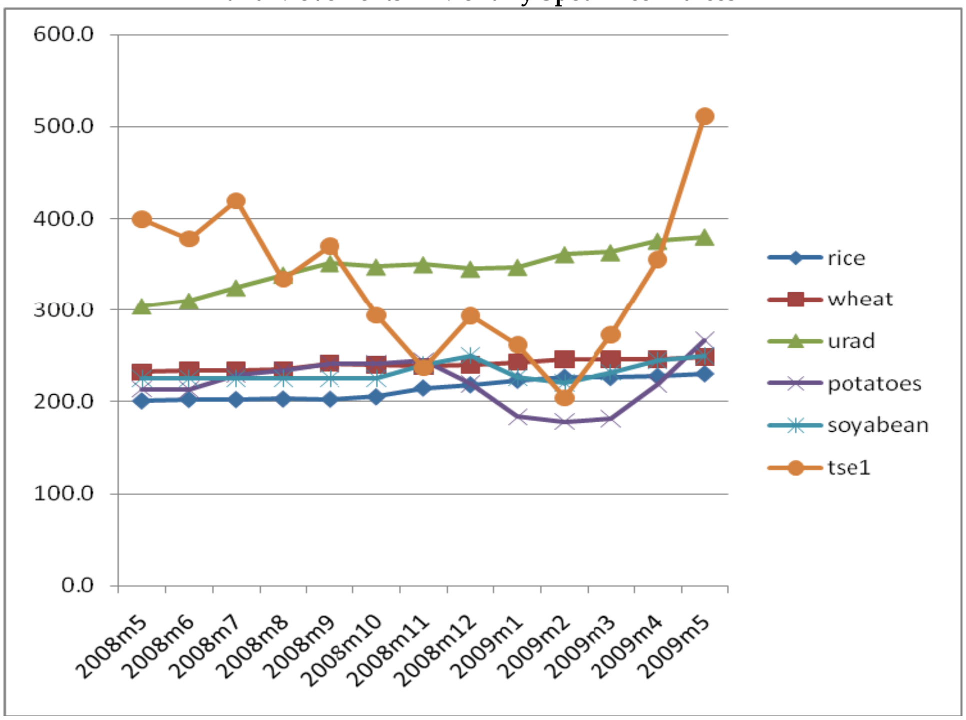
Note: *P: Provisional.

2. Data from 1995-96 onwards include acquisition of shares of Indian companies by non-residents under Section 6 of FEMA, 1999. Data on such acquisitions are included as part of FDI since January 1996.
3. Data on FDI have been revised since 2000-01 with expanded coverage to approach international best practices. Data from 2000-01onwards are not comparable with FDI data for earlier years.
4. Negative (-) sign indicates outflow.
5. Direct Investment data for 2006-07 include swap of shares of 3.1 billion.

Source: RBI, *Hand Book of Statistics on Indian Economy*, 2008-09

Chart 15

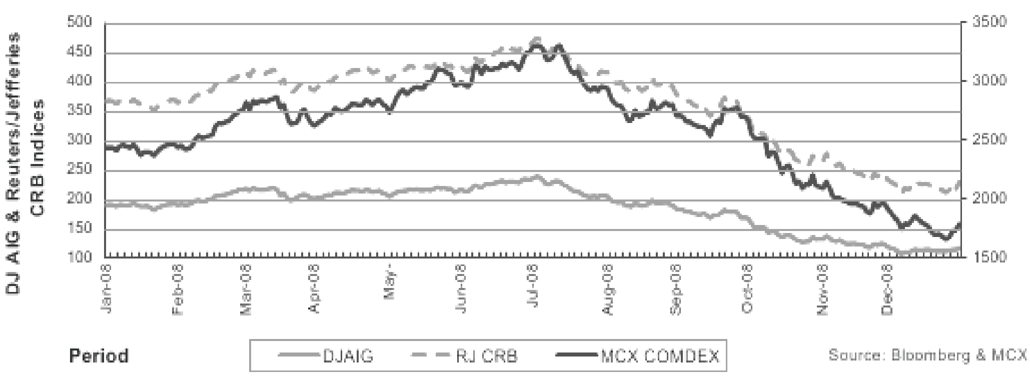
Monthly Variations in Total Stock Exchange Turnovers (Rs billions) and Movements in Monthly Spot Price Indices



Sources: TSE (sum of BSE and NSE turnovers): Economic Survey, Government of India
Future prices: NCDEX website

Chart 16

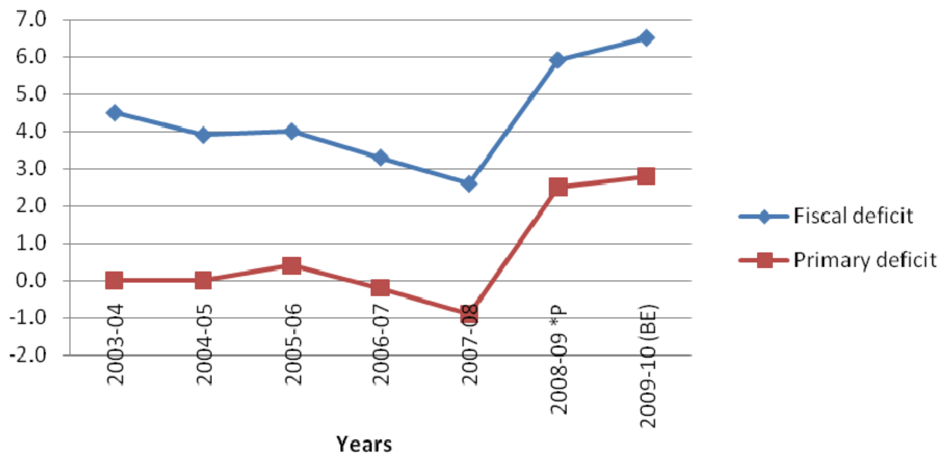
Movements in Commodity Indices



DJAIG: Dow Jones AIG Commodity Index
RJCRB: Reuters Jefferys Commodity Research Bureau
MCX COMDEX: Multi Commodity future exchange India
Source: Charts 9-10: Economic Survey of India 2008-09

Chart 17

Fiscal and Primary Deficit as percentage of GDP (Enactment of FRBMA)



BE: Budget estimate; *P: Provisional

Source: Economy Survey of India 2009-10

Chart 18

Consequences of Capital Account Convertibility

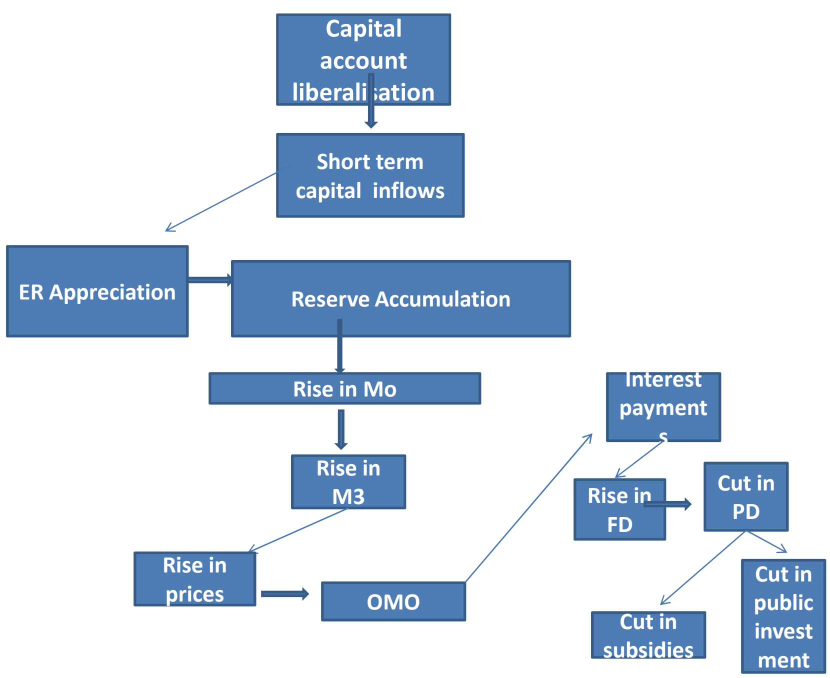
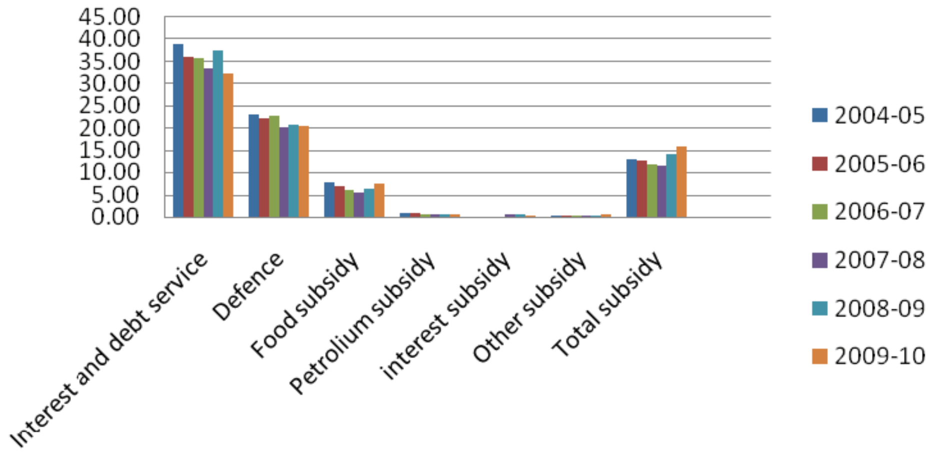


Chart 19

Percentages of Non-Plan Expenditure



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