

*Full Length Research Paper*

# Foreign capital flows into India: Compositions, regulations, issues and policy options

Sumanjeet Singh

Department of Commerce, Ramjas College, University of Delhi, Delhi-7, India. E-mail: [sumanjeetsingh@gmail.com](mailto:sumanjeetsingh@gmail.com).

Accepted 14 May, 2009

Existing studies reveals that the huge surge in international capital flows since early 1990s has created unprecedented opportunities for the developing countries like India to achieve accelerated economic growth. International financial institutions routinely advise developing countries to adopt policy regimes that encourage capital inflows. Since the introduction of the reform process in the early 1990s, India has witnessed a significant increase in capital inflows. The size of net capital inflows to India increased from US \$ 7.1 billion in 1990-91 to US \$ 108.0 billion in 2007-08. Today, India has one of the highest net capital inflows among the EMEs of Asia. Capital inflows, however, not an unmitigated blessing. The main danger posed by large and volatile capital inflows is that they may destabilize macroeconomic management. As evident, the intensified pressures due to large and volatile capital flows in India in the recent period in an atmosphere of global uncertainties has posed new challenges for monetary and exchange rate management. The present paper elaborates on various aspects of the capital inflows to India and their policy implications.

**Key words:** Capital inflows, policy, exchange rate, India.

## INTRODUCTION

Foreign capital has significant role for every national economy, regardless of its level of development. For the developed countries it is necessary to support sustainable development. For the developing countries, it is used to increase accumulation and rate of investments to create conditions for more intensive economic growth. For the transition countries [A transition country or transitional economy is an economy, which is changing from a centrally planned economy to a free market. Transition economies undergo economic liberalization (letting market forces set prices and lowering trade barriers), macroeconomic stabilization where immediate high inflation is brought under control, and restructuring and privatization in order to create a financial sector and move from public to private ownership of resources], it is useful to carry out the reforms and cross to open economy (Edwards; Solow, 1956), to cross the past long term problems and to create conditions for stable and continuous growth of GDP (Razin, 2001), as well as integration in world economy (Boskovska, 2006; Harris and Gurel, 1986; Lensik, 1999). But, to realize the potential exist in the developing

countries, foreign capital plays a very crucial role. Capital inflow [Capital inflow includes Foreign Direct Investment (FDI), Foreign Portfolio Investment (FPI), External Commercial Borrowing (ECBs), NRI Deposits and Social Deposits Schemes dominated that capital account] can help developing countries with economic development by furnishing them with necessary capital and technology. Capital flows contribute in filling the resource gap in countries where domestic savings are inadequate to finance investment. Capital inflows allow the recipient country to invest and consume more than it produces when the marginal productivity of capital within its borders is higher than in the capital-rich regions of the world. Capital inflows facilitate the attainment of the millennium development goals (MDGs) and the objective of national economic, empowerment and development strategy (NEEDs). As the economy becomes more open and integrated with the rest of the world, capital flows will contribute significantly to the transformation of the developing economy (Levin, 2001). Added to this, capital inflows are necessary for macroeconomic stability as capital inflows affect a wide range of macro economic variables such as exchange rates, interest rates, foreign exchange reserves, domestic monetary conditions as well as saving and investments. Some commonly obser-

ved effects of the capital inflows that have been documented in the recent studies (Calvo et al., 1994; Calvo and Reinhart, 2000; Hutchison, 2002 Schneider and Tornell, 2004; Ito, 2006; Jitter, 2003; Kaminsky, 2003 amongst others) include real exchange rate appreciation, stock market and real estate boom, reserve accumulation, monetary expansion as well as effect on production and consumption.

The paper has been arranged as follows: Section 1 provides an overview of foreign capital flows in the developing countries. Section 2 highlights composition of capital inflows in India. Section 3 gives an insight of government regulations to manage foreign capital in India. Section 4 highlights the some of the major issues and challenges for the central banks and suggests the policy options for foreign capital management. In the end, paper concludes with the future outlook.

### 1. Capital inflows in the developing countries

Capital flow in the forms of portfolio and foreign direct investment is not only an engine for globalization but also a catalyst for economic development for developing countries (Stiglitz and Andrew, 1981; Tesar, 1991; Tobin, 1983; Hutchison and Noy, 2006; Wade and Veneroso, 1998). However, capital flow from developed countries to developing countries has been skewed (Aghion et al., 2001). Only selected Asian and Latin American countries received capital from developed countries in a large scale. Most sub-Saharan African countries, which urgently needed foreign capital for economic betterment, have been excluded from globalized investment. Data indicate that in most countries, resurgence in economic growth and a marked accumulation of international reserves accompany the increased capital inflows. In Asia, measured either in current or constant US dollars; net private capital (Private equity is an asset class consisting of equity securities in operating companies that are not publicly traded on a stock exchange. Investments in private equity most often involve either an investment of capital into an operating company or the acquisition of an operating company. Capital for private equity is raised primarily from institutional investors. There is a wide array of types and styles of private equity and the term private equity has different connotations in different countries) inflows in the mid 1990s were unprecedented in terms of the size of the flow to emerging markets in the post-war period (Table 1).

Table 1 indicates that, in the mid-1990s inflows to Asia were larger (Mohamed, 2003), in both nominal and real terms, than the recycled petrodollar (In recent years, oil-exporting countries have experienced windfall gains with the rise in the price of oil. A look at how oil exporters "recycle" their revenues reveals that roughly half of the petrodollar windfall has gone to purchase foreign goods, especially from Europe and China, while the remainder has been invested in foreign assets. Although it is difficult to

determine where the funds are first invested, the evidence suggests that the bulk is ending up, directly or indirectly, in the United States) inflows to Latin America in the late 1970s and early 1980s. The flows to Asia were also large relative to the size of the recipient economies: while capital inflows in 1996 to the five affected Asian countries – Indonesia, Korea, Malaysia, the Philippines and Thailand – were less than half the size of flows into the United States, these countries' combined economies, credit systems and share markets were but a tenth of the size of those of the United States (Grenville, 1998). In the 1990s, foreign direct investment (Foreign direct investment is investment of foreign assets into domestic structures, equipment, and organizations. It does not include foreign investment into the stock markets. Foreign direct investment is thought to be more useful to a country than investments in the equity of its companies because equity investments are potentially "hot money" which can leave at the first sign of trouble, whereas FDI is durable and generally useful whether things go well or badly) (FDI) to emerging markets remained the most stable source of capital inflows, even at the peak of the financial crisis, while bank loans were the most volatile and underwent the most violent reversal (Arellano and Mendoza, 2002). Table 2 indicates that net capital flows to the developing countries have increased tremendously between 2000 - 2007. Net private direct investment has also registered rapid growth, whereas net private portfolio investment has remained highly volatile during the same period periods. Net other private capital flows registered positive growth starting from 2002 but again remained highly volatile.

The capital inflows into Asia through purchases of equities have become larger and more volatile over the years. The scale of the pullback by foreign investors from Asian equities in episodes of global volatility in equity markets has gotten larger over the years, as shown in Figure 1.

**Note:** Shaded areas refer to seven episodes of rising volatility since 1998: the Russian default (August 1998), September 11, 2001, June-July 2002, the May 2006 sell-off, the February 2007 sell-off, the Bear Stern hedge fund woes in August 2007 and the sub prime –related sell-off in November 2007. Data related to Korea, Indonesia, Taipei, China and Thailand in billion US \$

Source: Bloomberg; Korean Stock Exchange, Philippines Stock Exchange and BIS calculations.

The bouts of disinvestment that have occurred since the summer of 2007 have been unprecedented. In the face of losses on mortgage securities, liquidity blockages in major money markets and prospects for decelerating growth, foreign investors liquidated over US\$12 billion in August and November in six Asian markets with daily transaction reporting. These liquidations have reached such levels notwithstanding the fact that global volatility

**Table 1.** Net Private Capital Flows to Emerging Markets (Annual Average, US \$ Billion).

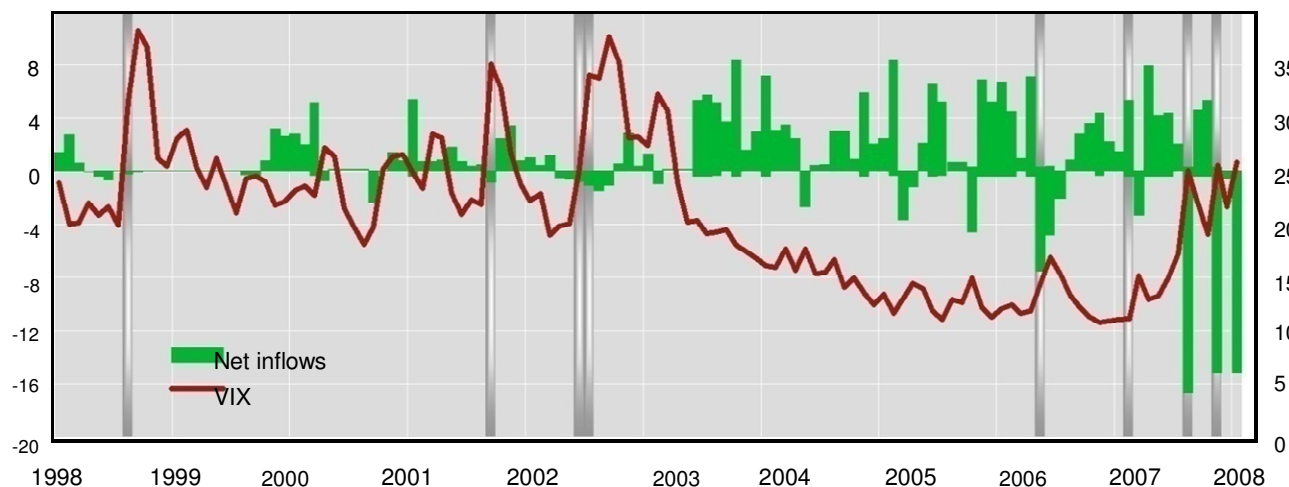
	1977–82	1983–89	1990–94	1995	1996	1997	1998–99
<b>Total private capital flows</b>	30.8	8.8	125.1	193.3	212.1	149.2	64.3
<b>By type:</b>							
-Net FDI	11.2	13.3	44.9	96.7	115.0	114.0	131.0
-Net portfolio investment	-10.5	6.5	64.9	41.2	80.8	66.8	36.7
-Bank loans and other	29.8	-11.0	15.2	55.4	16.3	-57.6	-103.5
<b>By region:</b>							
-Asia	15.8	16.7	39.1	95.1	100.5	3.2	-55.1
-Latin America	26.3	-16.6	40.8	38.3	82.0	87.3	69.0
-Other	-11.6	8.7	45.2	59.9	29.7	58.7	50.4

Source: IMF Various Issues; IMF 1995 for 1977–89 data; IMF 1999 for 1990s data, World Development Outlook

**Table 2.** Net Capital Flows to Emerging Markets (US \$ Billion).

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Net private capital flows (a+b+c)	74.8	79.5	89.8	169	242	252	232	605	331	442
Net private direct investment (a)	171	186	157	166	189	260	250	310	307	322
Net private portfolio investment (b)	15.9	-78.7	-92.2	-13.2	16.4	-19.4	-104	48.5	-72.2	31
Net other private capital flows (c)	-112	-27.1	25.1	17.1	38.5	13.3	87.5	249	98	90
Net official flows	-33.9	0.9	-0.6	-50	-70.7	-110	-160	-149	-162	-150

Source: World Economic Outlook, April 2007 and 2008; World Economic Outlook Update, July 2008, IMF, 2009.

**Figure 1.** Global Volatility and Asian Net Equity Inflows.

(as measured by the VIX index of option prices on the Standard and Poor's index of US equities) has not climbed to the levels reached earlier in the decade or at the time of the LTCM [Long-Term Capital Management (LTCM) was a U.S. hedge fund which used trading strategies such as fixed income arbitrage, statistical arbitrage, and pairs trading, combined with high leverage.

It failed spectacularly in the late 1990s, leading to a massive bailout by other major banks and investment houses, which were supervised by the Federal Reserve. LTCM was founded in 1994 by John Meriwether, the former vice-chairman and head of bond trading at Salomon Brothers. Board of directors' members included Myron Scholes and Robert C. Merton, who shared the

1997 Nobel Prize in economic science. Initially enormously successful with annualized returns of over 40% (after fees) in its first years, in 1998 it lost \$4.6 billion in less than four months following the Russian financial crisis and became a prominent example of the risk potential in the hedge fund industry. The fund folded in early 2000] and Russian defaults [The Russian financial crisis (also called "Ruble crisis") hit Russia on 17 August 1998. It was triggered by the Asian financial crisis, which started in July 1997. During the ensuing decline in world commodity prices, countries heavily dependent on the export of raw materials were among those most severely hit. Petroleum, natural gas, metals, and timber accounted for more than 80% of Russian exports, leaving the country vulnerable to swings in world prices. Oil was also a major source of government tax revenue]. Even before this most recent episode, these flows have drawn much market commentary and such interest led a number of stock exchanges to release daily data on non-resident flows. This has resulted in a number of careful studies that have shed much light on the relationship between capital flows and equity prices.

## 2. Composition of capital inflows in India

International capital flow such as direct and portfolio flows has huge contribution to influence the economic behavior of the developing countries positively. Prof. Krugman (1993) rightly pointed out; capital inflows play a very important role in capturing the benefits of globalization. Various studies (Buiter and Patel, 2006; Caballero, 2000) revealed that it is not so much the quantity but the quality of money that is making the difference. Whereas, the old two-gap theory suggests [The two-gap model is an extension of the Harrod-Domar growth model. The second "gap" (in addition to the savings gap) is found by introducing foreign trade and rephrasing the model such that:  $g = s/k + b/k$  Savings gap- domestic savings are inadequate to support the level of growth, which could be permitted given the import purchasing power of the economy and the level of other resources Foreign exchange gap- import purchasing power conferred by the value of exports plus capital transfers may be inadequate to support the level of growth permitted by the level of domestic saving. The two-gap theory purports that investment and development are restricted by level of either domestic saving or import purchase capacity] that it is quantity of money that counts. Now researchers are conscious about the technological and managerial skills, the work culture, and the synergies accompanying capital flows that seem to give a lot more contribution to growth. Even with regard to portfolio flow from Foreign Institutional Investors [FIIs (The term is used most commonly in India to refer to outside companies investing in the financial markets of India. International institutional investors must register with the Securities and Exchange Board of India to participate in the market. One of the

major market regulations pertaining to FIIs involves placing limits on FII ownership in Indian companies)], the way in which FIIs assess market practices in stock exchanges have enhanced our own practice and skill among participants to global standards (Mohan, 2008). So, one has to look at the capital flows in a broader sense rather than as mere numbers and in any case the issue has to be evaluated in the country context.

India is a developing country, like many other developing countries, international capital flows has significant potential benefit on the Indian economy (Dash and Sumanjeet, 2008). Under the liberalized foreign exchange transactions regime, the results were dramatic. The liberalization of the portfolio investment led to a surge in inflow of capital for investment (Mody and Murshid, 2002) in the primary and secondary market (Dash and Sumanjeet, 2005) for Indian equity and corporate (and subsequently sovereign) bond market. The composition of capital inflow has changed significantly over the years (Gopinath, 2004). Dependence on aid has vanished and foreign direct investment (FDI), foreign portfolio investment [FPI (Portfolio Investment represents passive holdings of securities such as foreign stocks, bonds, or other financial assets, none of which entails active management or control of the securities' issuer by the investor; where such control exists, it is known as foreign direct investment. Some examples of portfolio investment are: purchase of shares in a foreign company, purchase of bonds issued by a foreign government and acquisition of assets in a foreign country)], external commercial borrowings [ECB {External Commercial borrowing (ECB) is a term used to refer to commercial loans availed from non-resident lenders with a minimum average maturity of 3 years in the form of bank loans, buyers credit, suppliers credit, securitized instruments (e.g. floating rate notes and fixed rate bonds). A company is free to raise ECB from any internationally recognized source such as banks, export credit agencies, suppliers of equipment, foreign collaborators, foreign equity-holders, international capital markets etc. However, offers from unrecognized sources are not entertained. ECB can be accessed under two routes, Automatic Route and Approval Route. Under the Automatic Route, the approval of Reserve Bank of India (RBI) or the Governments approval are not required. However, in case of doubt regarding eligibility under the Automatic Route, applicants may take recourse to the Approval Route. The maximum amount of ECB that can be raised by an eligible borrower under the Automatic Route during one financial year is USD 500 million. NGOs engaged in micro finance activities have been permitted to raise ECB up to USD 5 million during a financial year for permitted end-use}] and nonresident Indians (NRI) deposits dominate the capital flows. Among these again, there has been a gradual shift away from debt components to equity flows (The proportion of non-debt has gone up from about 5% in the second half of the 1980). But, the period of 1990s show a radical transfor-

**Table 3.** Capital Flows into India after 1990's (US \$ million).

Year	FDI	FPI	FII	NRI	GDR/ ADR	Offshore funds and Others
1990-91	97	6	-	-	-	-
1991-92	129	4	-	-	-	-
1992-93	315	244	1	42	240	-
1993-94	586	3567	1665	89	1520	-
1994-95	1314	3824	1503	171	2082	-
1995-96	2144	2748	2009	169	683	56
1996-97	2821	3312	1926	135	1366	20
1997-98	3557	1828	979	202	645	204
<b>1998-99</b>	<b>2462</b>	<b>-61</b>	<b>-390</b>	<b>179</b>	<b>270</b>	<b>59</b>
1999-00	2155	3026	2135	171	768	123
2000-01	4029	2760	1847	67	831	82
2001-02	6130	2021	1505	35	477	39
2002-03	5035	979	377	NA	600	2
2003-04	4322	11377	10918	NA	459	-
2004-05	6051	9315	8686	NA	613	16
2005-06	8961	12494	9926	NA	2552	14
2006-07	22079	7062	3225	NA	3776	2
2007-08	32435	29395	20328	NA	8769	298

Source: Hand Book of Statistics, Reserve Bank of India (RBI).

mation in the nature of capital flow into India. From a mere absence of any capital flow till 1992 (except those by non residents Indian), today such inflows represent a dominant proportion to total flows (Chakraborty, 2001). The official flow shows an external assistance, that is, grants and loans from bilateral and multilateral sources represented 75 - 80% flow till 1991. By 1994, this has come down to about 20% and has further fallen to below 5% by late 1990's. About 460 FIIs have been allowed to enter the Indian market and together have brought in more than US \$ 14 billion GDR [Global Depository Receipt means any instrument in the form of a depository receipt or certificate created by the overseas depository bank outside India and issued to non- resident investors against the issue of ordinary shares or Foreign Currency Convertible Bonds of issuing company. Among the Indian Companies, Reliance Industries Ltd. was the first company to raise funds through a GDR issue] (Global Depository Receipts) and ADR [An American Depository Receipt (or ADR) represents the ownership in the shares of a foreign company trading on US financial markets. The stock of many non-US companies trades on US exchanges through the use of ADRs. ADRs enable US investors to buy shares in foreign companies without undertaking cross-border transactions. ADRs carry prices in US dollars, pay dividends in US dollars, and can be traded like the shares of US-based companies] (American Depository Receipts) floated by Indian corporate sector brought in the remaining portfolio inflows. Table 3 provides an overview of the total foreign capital that India attracted during the 1991-92 to 2007-08 period.

As the Table shows, India has attracted about \$22 billion in portfolio investments since 1993-94 and more than \$18 billion in FDI. These portfolios flows began in 1993 when India attracted more than \$5 billion in few months and continued at the level of \$ 2-3 billion per year till the Asian crises. The year 1998 witnessed a marginal out flow from the Indian stock market but soon the inflows went back to the US \$ 2-3 billion per year level. By the end of year 2004, India has attracted more than US \$ 40 billion of foreign investment. Foreign capital inflows were highly volatile in the 2004-05 fiscal. However net inflow was almost same as 2003-04. But in next three years net capital inflows were increased significantly. In the year 2007-08, FDI reached at \$ 32435 million. FPI and FII, which were at slide in the year 2006-07, reported a significant increase in the year 2007-08. In the fiscal year of 2006-2007, FDI inflows reported sharp and significant increase. Although FDI inflows are affected by when mega projects come into, the inflows between 2006 and 2007 based on the fiscal year show approximately 200% of growth that is compared to the previous year [U.S.A, U.K and Singapore hold 62% of the FDI inflows. These countries have much higher inflows of FDI in comparison with other countries. Moreover, U.S.A has been interested in entry of Wal-Mart in India and Nuclear Agreement. U.S.A continuously has made a contribution to not only IT industry but also large number of entities in U.S is going to invest in the service sector afterwards. Singapore recently has been outstanding in real estate sector and accelerating to Indian investment. After the year of 2000, six countries have had over US\$ 1 billion of FDI inflows

**Table 4.** Capital Outflows from India (in US billion \$).

<b>Investment</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>
<b>FDI</b>	1.5	2.0	2.1	2.4	3.2	12.0
<b>FPI</b>	7.3	7.9	16.9	31.6	55.6	102.6

Source: Reserve Bank of India.

**Table 5.** FIIs Inflow Data since January 2008.

<b>Months</b>	<b>FIIs in Crore</b>	<b>Direction of Flow</b>
January	17227	Negative
February	4882.6	Positive
March	124.5	Positive
April	975.2	Positive
May	4672.2	Negative
June	10577.5	Negative
July	1012.7	Negative
August	2065.7	Negative
September	7936.6	Negative
October	14248.6	Negative
November	3362.1	Negative
December 17	1629.3	Positive
<b>Total</b>	<b>5349</b>	<b>Negative</b>

Source: Compiled by Researchers.

and approximately 23 countries have been expanding their FDI equity over \$0.1 billion so that relatively the amount of FDI inflows are not enough in real situation]. Again structure of foreign capital inflow is highly volatile in the current fiscal. India has received \$14.6 billion FDI during April-August 2008. FDI to India surged to \$2.56 billion in September, up 9% over the same month last year. But, since the beginning of year 2008, FIIs have till date sold \$ 13.00 billion- a far cry from inflow of \$17.23 and \$8 billion in 2007.

Table 4 depicts the outflow of capital from Indian market. FDI outflow was almost stagnant between 2002-03 to 2005-06. But, FPI statistics shows sharp increasing trend. In fiscal 2001-02 where it was only \$ 7.3 billion has touched the mark of \$102.6 billion at the end of fiscal 2006-07. In 2008, there is sudden outflow of FIIs. Added to these FIIs inflow has also declined after April 2008. Table 5 indicates the sharp decline in FIIs inflow in India during 2008.

However, FIIs are turning positive on India as the calendar year is coming to an end. FIIs pumped in more than Rs 1,629.30 Crore in the Indian stock market till December 1, 2008, thus maintain a positive flow for the first half of the month after a long time. There have been three occasions this year when a month started with the net inflows, but ended with the net outflow.

If we measure net flow of foreign capital in GDP, then net capital flows stagnated at roughly 2.5% of GDP from 1993 to 2000, and has since risen sharply to 5.4% of

GDP by 2007 (Table 6).

This has partly reflected a rise in equity flows, which were encouraged by policy makers, and went from 0.25% of GDP in 1993 to 1.24% of GDP in 2000 to 1.87% of GDP in 2007. India's policy makers have believed that debt flows are dangerous, and at first, debt inflows dropped from 3% of GDP in 1993 to 0.9% of GDP in 2000. However, by 2007, debt inflows were back to 2.98% of GDP.

### 3. Current regulations to manage capital inflows in India

Capital flows contribute in filling the resource gap in country like India where the domestic savings are inadequate to finance investment (Ghose, 2004; Dasgupta and Ratha, 2000). Today, India requires approximately 500 billion US \$ investment in infrastructure sector alone in the next 5 years for sustaining present growth rate of approximately 8 – 9%. This amount is around 2.5 times more than the 10<sup>th</sup> Plan. Added to this, already, several infrastructure projects have reportedly been shelved and indefinitely delayed. Such huge mobilization of resources is not possible from India's internal resources (Mohan, 2008). Therefore, India need for capital in the form of ECBs and other foreign loans and aids. Keeping in view the growing requirements of foreign capital in India, Indian government has comp up with many policies and liberalized regulations to

**Table 6.** Net Capital Inflows into India to GDP (in percentage).

Year	Debt	Equity	Other	Total
1993	2.99	0.25	-0.97	2.27
2000	0.89	1.24	0.35	2.47
2007	2.98	1.87	0.55	5.40

Source: RBI Bulletin

manage foreign capital in India. Some of the important and recent measures taken by Indian government to manage foreign investments in India are as under:

### Foreign direct investment

FDI [FDI is widely recognized as a composite bundle of capital inflows, knowledge and technology transfer. Hence the impact of FDI on growth is expected to be manifold. (Chakraborty and Peter, 2008)] is permitted under the Automatic Route in items/ activities in all sectors up to the sectoral caps except in certain sectors where investment is prohibited. Investments not permitted under the automatic route require approval from Foreign Investment Promotion Board (FIPB). The receipt of remittance has to be reported to RBI within 30 days from the date of receipt of funds and the issue of shares has to be reported to RBI within 30 days from the date of issue by the investee company.

**Advance against equity:** An Indian company issuing shares to a person resident outside India can receive such amount in advance. The amount received has to be reported within 30 days from the date of receipt of funds. There is no provision on allotment of shares within a specified time. The banks can refund the amount received as advance, provided they are satisfied with the bonafides of the applicant and they are satisfied that no part of remittance represents interest on the funds received.

### Foreign portfolio investment

**FII:** FIIs Investment by non-residents is permitted under the Portfolio Investment scheme to entities registered as FIIs and their sub accounts under SEBI [SEBI, established in 1988 and became a fully autonomous body by the year 1992 with defined responsibilities to cover both development and regulation of the market. SEBI has to be responsive to the needs of three groups, which constitute the market: the issuers of securities, the investors and the market intermediaries. SEBI has three functions rolled into one body quasi-legislative, quasi-judicial and quasi-executive. It drafts regulations in its legislative capacity, it conducts investigation and enforcement action in its executive function and it passes rulings and orders in its judicial capacity. Though this makes it very

powerful, there is an appeals process to create accountability. There is a Securities Appellate Tribunal which is a three member tribunal and is presently headed by a former Chief Justice of a High court - Mr. Justice NK Sodhi. A second appeal lies directly to the Supreme Court. SEBI has enjoyed success as a regulator by pushing systemic reforms aggressively and successively (e.g. the quick movement towards making the markets electronic and paperless rolling settlement on T+2 basis). SEBI has been active in setting up the regulations as required under law] (FII) regulations. Investment by individual FIIs is subject to ceiling of 10% of the PUC (Pollution under Control) of the company and limit for aggregate FII investment is subject to limit of 24% of PUC of the company. This limit can be increased by the company subject to the sectoral limit permitted under the FDI policy. The transactions are subject to daily reporting by designated ADs (Authorized Dealers) to RBI for the purpose of monitoring the adherence to the ceiling for aggregate investments.

**NRIs:** The investment by NRIs under the Portfolio Investment Scheme is restricted to 5% by individual NRIs/OCBs (not incorporated in Bangladesh and Pakistan) and 10% in aggregate (which can be increased to 24% by the company concerned).

**ADR/GDR:** Indian companies are allowed to raise resources through issue of ADR/GDR and the eligibility of the issuer company is aligned with the requirements under the FDI policy. The issues of sponsored ADR/GDR require prior approval of ministry of finance.

### Foreign venture capital investors

FVCIs (Foreign Venture Capital Investors) registered with SEBI are allowed to invest in units of venture capital funds any limit. FVCI investment in equity of Indian venture capital undertakings is also allowed. The limit for such investments would be based on the sectoral limits under the FDI policy. FVCIs are also allowed to invest in debt instruments floated by the IVCUs (InVacare Corporation-US). There is no separate limit stipulated for investment in such instruments by FVCIs.

### External commercial borrowings

Under the Automatic Route, ECB up to US \$500 million per borrowing company per financial year is permitted only for foreign currency expenditure for permissible end-uses of ECB. Borrowers in infrastructure sector may avail ECB up to US \$100 million for Rupee expenditure for permissible end-uses under the Approval Route. In case of other borrowers, the limit for Rupee expenditure for permissible end-uses under the Approval Route has been enhanced to US \$50 million from earlier limit of US \$20 million. Entities in the services sector, viz., hotels, hospi-

tals and software companies have been allowed to avail ECB up to US \$100 million, per financial year, for the purpose of import of capital goods under the Approval Route. The all-in-cost interest ceiling for borrowings with maturity of 3-5 years has been increased from 150 basis points over 6-month LIBOR [The LIBOR is the world's most widely used benchmark for short-term interest rates. It's important because it is the rate at which the world's most preferred borrowers are able to borrow money. It is also the rate upon which rates for less preferred borrowers are based. For example, a multinational corporation with a very good credit rating may be able to borrow money for one year at LIBOR plus four or five points] (London Inter-bank Offered Rate) to 200 basis points over 6-month LIBOR. Similarly, the interest ceiling for loans maturing after 5 years period has been raised to 350 basis points over 6-month LIBOR from 250 basis points over 6-month LIBOR.

#### Investment by NRIs in immovable properties

The NRIs are permitted to freely acquire immovable property (other than agricultural land, plantations and farmhouses). There are no restrictions regarding the number of such properties to be acquired. The only restriction is that where the property is acquired out of inward remittances, the repatriation is restricted to principal amount for two residential properties. There is no such restriction in respect of commercial property. NRIs are also permitted to avail of housing loans for acquiring property in India and repayment of such loans by close relatives is also permitted.

Added to the above-mentioned developments in the regulatory framework, recently the government of India has decided to restrict the entry of foreign investors (effective from 31<sup>st</sup> March 2009) in some sector like multi-brand retail, atomic energy, lottery, gambling and betting. Added to this, the government has also decided to restrict the entry of foreign investors up to a specified level (Table 7).

**Note:** FDI\*+FII\*\* up to 49% is automatic, beyond 49% requires the government approval

Source: Compiled by Researcher from various sources.

In one stroke, the move will raise the level of foreign investment in a score of Indian companies and thereby crimp their ability to raise resources from overseas investors, especially in sectors with foreign investment caps. It will also allow overseas firm entry into restricted sectors like multi-brand retail and increase their exposures in sectors like the media where there is a limit on foreign investment. At present some sectors differentiate between foreign direct investment and foreign institutional investment while computing foreign investment. Sectors like banking and DTH [DTH stands for Direct-To-Home television. DTH is defined as the reception of satellite

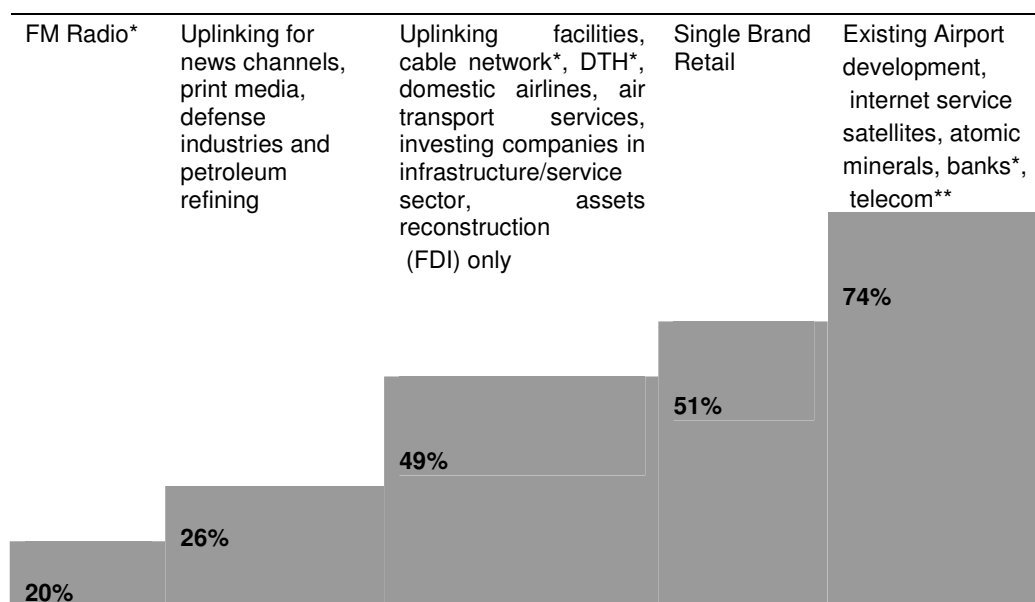
programmes with a personal dish in an individual home. DTH does away with the need for the local cable operator and puts the broadcaster directly in touch with the consumer. Only cable operators can receive satellite programmes and they then distribute them to individual homes] broadcast services take into account both forms while calculating the foreign investment. But in sectors like assets reconstruction only FDI is included. Under the new norms, all forms of overseas investment will be included while computing the foreign investment.

#### 4. Issues and management of capital inflows in India

The East Asian crisis of 1997-98 and the Mexican crisis of 1994 generated much concern among policy analysts regarding the role of macroeconomic policies in the management of capital inflows. A series of economic reform measures including liberalization of foreign capital inflows were initiated in India since the early nineties. After the liberalization of the exchange rate regime in the 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 as 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 (Figure 2). 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 smoothen 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 (Kohli, 2003). As a result of these timely and coordinated measures, India was successful in containing the contagion effect 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 (Gupta and Sahay, 2003); and absence of asset price inflation or



**Table 7.** Restricted Entry Level for Foreign Investors.

credit boom (Rangarajan, 2000). 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 non-bank entities (RBI, 2004). But, the incomplete sterilization [To ease the threat of currency appreciation or inflation, central banks often attempt what is known as the "sterilization" of capital flows. In a successful sterilization operation, the domestic component of the monetary base (bank reserves plus currency) is reduced to offset the reserve inflow, at least temporarily. In theory, this can be achieved in several ways, such as by encouraging private investment overseas, or allowing foreigners to borrow from the local market. The classical form of sterilization, however, has been through the use of open market operations, that is, selling Treasury bills and other instruments to reduce the domestic component of the monetary base. The problem is that, in practice, such sterilization can be difficult to execute and sometimes even self-defeating, as an apparently successful operation may raise domestic interest rates and stimulate even greater capital inflows. Unfortunately, many developing countries also lack the tools available to run a classical sterilization policy, or find it simply too costly to do so. This is often the case wherever the financial system is not fully liberalized] in the post-2004 period has led to a pronounced acceleration of reserve money growth. During that period real interest rates have been very low when compared with other Asian countries. With low real rates, the stance of monetary policy has been expansionary. While the wholesale

Price Index is widely watched in India, the Consumer Price Index is a better measure of inflation. It has risen after 2004, and has remained stubbornly high when compared with the aspirations of politicians and policymakers (Shah and Patnaik, 2008). Thus, even though capital inflows are supplying much-needed financing to Indian corporates and banks, they are also making monetary and exchange rate policy more challenging. In the recent period, in India, one of the most serious challenges to the conduct of monetary policy emerge from capital flows in view of the significantly higher volatility of such flows as well as the fact that capital flows in gross term are much higher than those in net terms. Largely due to the burgeoning foreign capital inflows, the rupee, during April 07 - January 08, appreciated against the dollar by anywhere between 11 - 15% comparison with the same period last year. The reduction in inflows in the last two months arrested the double-digit appreciation witnessed until then (Table 8).

Table indicates that buoyant capital inflows have pushed up the value of the rupee [On 27th February rupee plunged to a record low of 51.17 per dollar, hit by importers demand for dollar and share market losses after data showed to its weakest in nearly six years at the end of 2008. The partially convertible rupee closed at 51.10/12 per dollar, 1.3% weaker than 25th February close of 50.45/47 tackling its losses in 2009 to 4.7%], despite significant intervention by the Reserve Bank of India. This has raised concerns about India's competitiveness, particularly in the labor-intensive textile, garment, and leather industries (Sumanjeet, 2007). Capital inflows have also increased the money supply, which then raised inflationary pressure (Figure 3).

In short, India is facing the policy challenges of the

**Table 8.** Movements of Indian Rupee.

Year	Range (Rs. per US\$)	Average (Rs. per US\$)	Standard Deviation <sup>a</sup>
1993-94	31.21-31.49	31.37	0.05
1994-95	31.37-21.97	31.40	0.12
1995-96	31.37-37.97	33.45	0.56
1996-97	34.14-35-96	35.50	0.21
1997-98	35.70-40.36	37.36	0.37
1998-99	39.48-43.42	42.07	0.24
1999-00	42.44-43.64	43.33	0.10
2000-01	43.61-46.89	45.68	0.15
2001-02	46.56-48.85	47.69	0.13
2002-03	47.51-49.06	48.40	0.07
2003-04	43.45-47.46	45.92	0.19
2004-05	43.36-46.46	44.95	0.31
2005-06	43.30-46.33	44.28	0.22
2006-07	43.14-46.97	45.28	0.27
2007-08	39.26-43.15	40.24	0.38

**a:** A low standard deviation indicates that the data points tend to be very close to the same value (the mean), while high standard deviation indicates that the data are "spread out" over a large range of values.

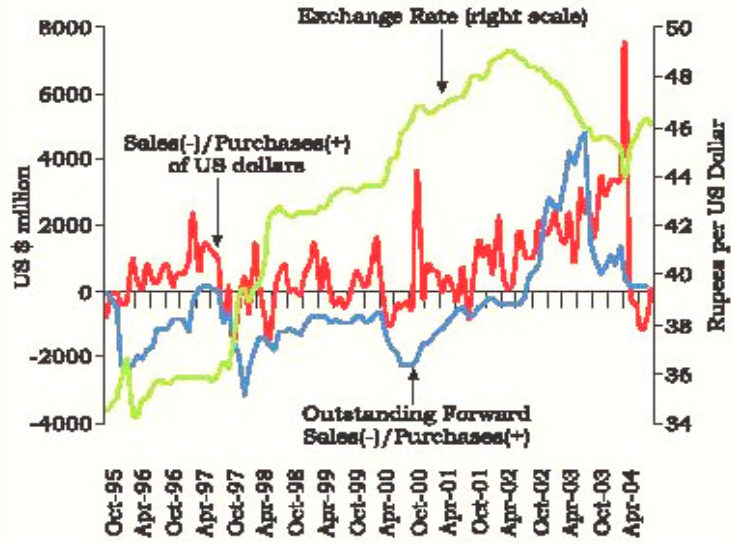
Source: Reserve Bank of India.

"impossible trinity": when there is free movement of capital, it is impossible to both target the exchange rate and maintain an independent monetary policy (Richter, 2008). The other major macroeconomic problem caused by capital inflows is that they may build up a level of debt that the country finds it difficult to service on the contractually agreed terms, as happened throughout Latin America in 1982 (and again in Mexico in the early 1990s). This raises two issues: identifying how much debt a country can prudently take on and limiting borrowing to a prudent level when the market wants to lend more. A number of other problems are sometimes also mentioned as possible undesirable consequences of large capital inflows. Inflows may, for example, lead to a speculative bubble in the stock market (Figure 4) as various studies concluded that there is link between performance of stock market and flow of foreign capital (Henry, 2000; Beer and Vaziri, 2004; Harris, 2004; Jobson and Korkie, 1981; Scholes, 1972; Wang and Shen 1999).

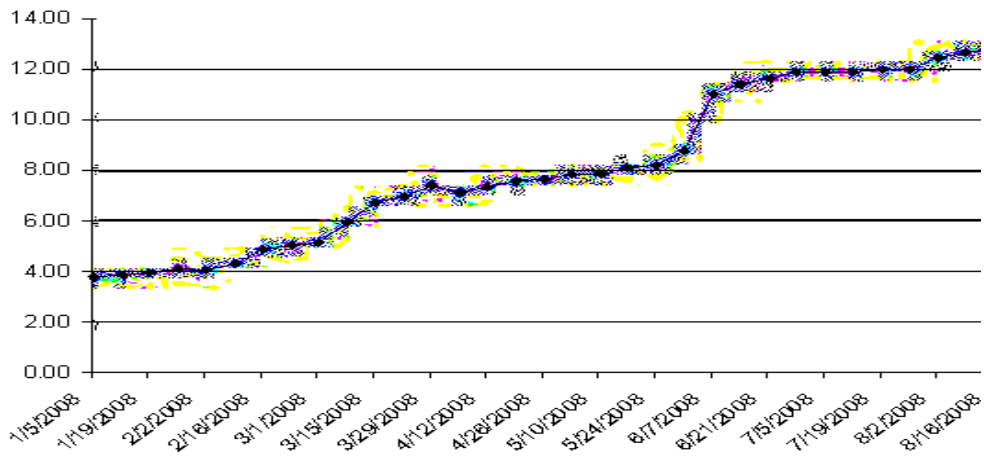
Figure 4 clearly shows that since the beginning of year 2008, Indian stock market is declining; however this decline is primarily due to the outflow of FII from the Indian stock market (Sumanjeet, 2009). One undesirable consequence of such a bubble is typically a decline in the local savings rate, as individuals discover that their asset

accumulation objectives are being achieved without the need for anything so tedious as abstaining from consumption. Another undesirable consequence can be a financial crisis, and the danger of a recession, when the bubble bursts. Capital inflows may also involve the loss of local control over economic decision-making: this is clearest in the case of majority-owned direct investment, although direct investment carries offsetting benefits in terms of access to technology and markets, and the loss of control can in any event often be avoided through joint ventures. Problems may also arise to some degree in the case of portfolio equity investment, if concentrated shareholding is allowed, and even loans, where powerful foreign creditors (notably the IMF when times get difficult) expect to be consulted about the course of economic policy. Further, Large capital inflows, can impact macroeconomic aggregates not only through the exchange rate, but also trade and monetary variables, according to Report of Reserve Bank of India. On the domestic front, the biggest challenge is the management of capital flows and the attendant implications for liquidity and overall stability.

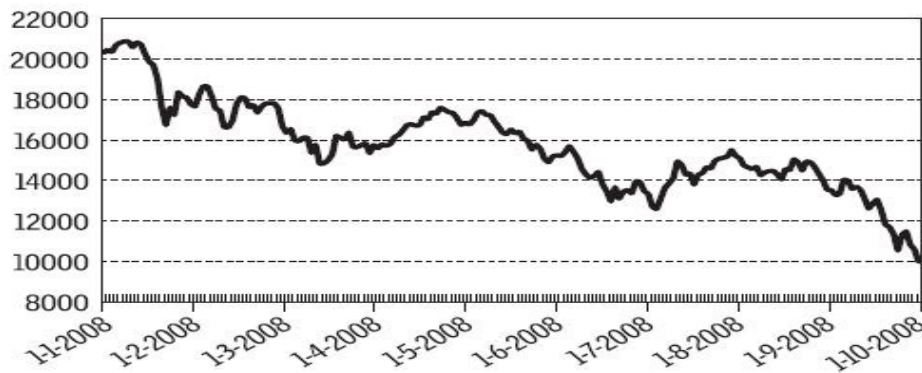
If there is a slowdown in capital inflows then it create many difficulties to the developing countries like lower growth rate, loss of forex reserves [According to data



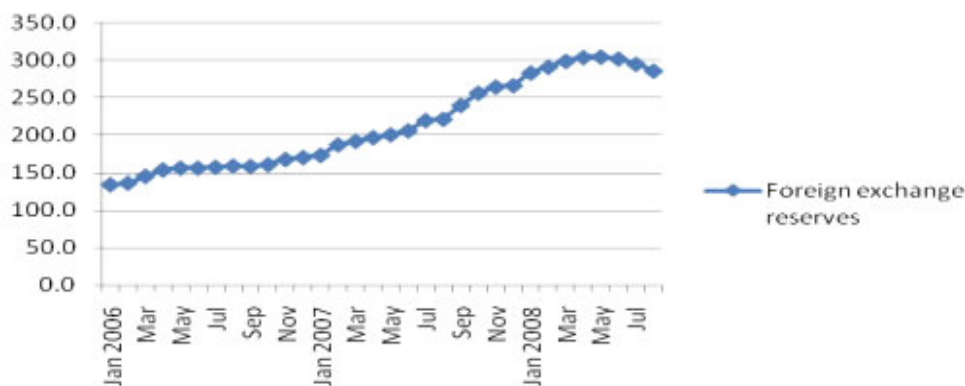
**Figure 2.** Foreign Exchange Market Operations of the RBI.  
Source: Reserve Bank of India.



**Figure 3.** Inflation rates of India.  
Source: Reserve Bank of India.



**Figure 4.** Performance of Indian Stock Market since the Beginning of Year.



**Figure 5.** Movement of Foreign Exchange Reserves.  
Source: Reserve Bank of India

released by RBI, forex reserves dipped \$165 million during the week ended February 20, 2009 to \$249.5 billion largely because of revaluation of non-dollar assets such as Euro, Sterling Pound and the Japanese Yen vis-à-vis the US dollar. While foreign currency assets dipped \$165 million, the value of gold and SDR-the currency with the IMF-remained unchanged during the week. The reserve with the IMF dipped \$9 million during the week] (Figure 5), low employment opportunities [A number of studies, which consider this issue include – although not limited to – those by Jones (1984); Beladi and Marjit (1992); Chao and Yu (1994 and 1995); Marjit and Beladi (1996); Olarreaga (1996); Marjit et al. (1997); etc] etc. So, the large increase or decrease in capital inflows has generated the need of management of capital inflows in developing countries. To, manage capital inflows, emerging market economies choose among three policy options:

- i.) A larger current account deficit through trade liberalization or exchange rate appreciation.
- ii.) Restrictions on the capital inflows either through direct controls, a tax or a widening of exchange rate band.
- iii.) Offsetting capital outflows either through reserve accumulation or the promotion of private sector outflows.

On the basis of above discussion on the issues relating to capital inflows, the researcher suggest that management of capital inflows in India should be done through the following policy options:

- i.) Sterilized intervention is very useful to counter undesirable exchange-rate movements. RBI occasionally intervenes in the foreign exchange market to curtail the exchange rate volatility. In India, intervention operations by the Reserve bank of India in the foreign exchange market are not essentially a phenomenon of the early 1990s, that is, post economic liberalization of 1992. However, intervention operations did increase substantially since the introduction of the Unified Exchange Rate System in March 1993 which made the Indian Rupee convertible on

the Current Account. Studies of foreign exchange intervention generally distinguish between intervention that does or does not change the monetary base. The former type is called unsterilized intervention while the latter is referred to as sterilized intervention. Sterilized intervention keeps the money supply more or less unchanged. Hence, unsterilized intervention is supposed to be more effective in influencing the exchange rates. Central banks aim at sterilizing their intervention operations because unsterilized interventions go against the monetary policy objectives pursued by the central banks. A related issue is whether there should be sterilized intervention [It consists of a direct intervention of RBI in the foreign exchange market by selling foreign exchange in order to prevent depreciation. Sterilized intervention policies can permanently influence the exchange rate under the assumption of imperfect substitution] and if so, the timing and quantum of such interventions. So, reduce sterilization and concentrate on improving the credit pass through of monetary policy. The credit starvation of small and medium enterprises must be eliminated. Adequate absorption of foreign capital cannot be ensured by growth in service exports alone.

- ii.) As far as the exchange rate is concerned, the large inflow of remittances and major and sustained growth in software exports coupled with capital inflows have the potential for possible overvaluation of the currency and the resultant erosion of long term competitiveness of other traditional goods sectors- a problem popularly known as Dutch disease [Dutch disease is an economic concept that tries to explain the apparent relationship between the exploitation of natural resources and a decline in the manufacturing sector combined with moral fallout. The theory is that an increase in revenues from natural resources will de-industrialize a nation's economy by raising the exchange rate, which makes the manufacturing sector less competitive and public services entangled with business interests. However, it is extremely difficult to definitively say that Dutch disease is the cause of the decreasing manufacturing sector, since there are many other factors at play in the very complex global

economy. While it most often refers to natural resource discovery, it can also refer to "any development that results in a large inflow of foreign currency, including a sharp surge in natural resource prices, foreign assistance, and foreign direct investment]. So, Exchange rate protectionism should be gradually eliminated and the currency should be allowed to appreciate in response to capital inflows. Protectioning the exchange sensitive sector should not be overriding concern of policy.

iii.) For improving the position of foreign capital in India, trade liberalization should continue to stimulate absorption of foreign exchange. But the process should be carefully managed and monitored; otherwise surge in consumption imports will render CAD (Current Account Deficit) unsustainable.

iv.) Shed the reluctance to check the torrent of FII, explore effective methods of restricting this flow rather than novel methods of sterilization. Due to the thinness of market (and its susceptibility to manipulation) large portfolio flows may cause equity bubbles. Reduction in non-FDI flows will reduce the need for large unproductive reserves.

v.) Investment in infrastructure in general (and not only in telecom) must increase to boost domestic investment and attract FDI in manufacturing.

vi.) A further challenge for policy in the context of fuller capital account openness will be to preserve the financial stability of the system as greater deregulation is done on capital outflows and on debt inflows. So, the approach to capital account convertibility should continue to be cautious until the crucial preconditions are fulfilled.

vii.) Another aspect of greater capital market openness concerns the presence of foreign banks in India. With fuller capital convertibility and greater presence of foreign banks over time, a number of issues will arise. First, if these large global have emerged as a result of real economies of scale and scope, how will smaller national banks compete in countries like India, and will themselves need to generate a larger international presence? Second, there is considerable discussion today on overlaps and potential conflicts between home country regulators of foreign banks and host country regulators: how will these be addressed and resolved in the years to come? Third, given that operations in one country such as India are typically small relative to the global operations of these large banks, the attention of top management devoted to any particular country is typically low. Consequently, any market or regulatory transgressions committed in one country by such a bank, which may have a significant impact on banking or financial market of that country.

viii.) A healthy financial system is critical if growing economy is to attract foreign investment. At the heart of financial system is the banking system. To prevent catastrophes from happening countries like India need to take steps to ensure that the banking system is adequately capitalized and regulatory regime of banking supervision

is strong and well regulated.

ix.) Following the advice of Feldstein (1998), a part of the reserves may be invested in higher-yield (higher-risk) securities [Feldstein considers traditional austerity measures as sufficient to end the crisis in Indonesia. In particular, he denies the need for a comprehensive restructuring of the Indonesian economy to restore access to international capital markets. As safeguard against inappropriate interference into the domestic affairs of developing countries, Feldstein proposes three questions that the IMF should ask when deciding whether to insist on a particular measure. Is this reform really needed to restore the country's access to international capital markets? Is this a technical matter that does not interfere unnecessarily with the proper jurisdiction of a sovereign government? If the policies to be changed are also practiced in the major industrial economies of Europe, would the IMF think it appropriate to force similar changes in those countries if they were subject to a fund program? (Feldstein, 1998). Feldstein answers no to all three questions: the reforms are not needed to restore access to international capital markets; they interfere with Indonesia's sovereignty; and the IMF is biased, pushing for structural reforms in developing countries without promoting similar measures in Europe].

x.) As India is not untouched by the wave of global financial slowdown, there is need to create a stable financial environment. The key to stability is establishing a track record of low inflation [Low inflation depends critically on low money supply growth, which in turn depends on the public sector deficit being under control, and the government refusing to monetize short term capital inflows. If government fails to achieve this then excess money supply growth will fuel asset prices, boost the short term growth of economy but create a growing current account deficit, and finally cause inflation itself to rise], which in turn means a low fiscal deficit and monetary policy aimed at preventing credit expansion. Low inflation means low interest rates, better industrial relations and more stable exchange rates. Foreign investors view low inflation as the bedrock on which to build a market economy.

xi.) On the fiscal front, further consolidation remains important to sustain growth and manage financial globalization. Despite India's impressive revenue performance, fiscal consolidation has stalled and public debt remains high, squeezing the fiscal space needed for public investment in physical and social infrastructure. Both expenditure and revenue measures are needed, including rationalizing subsidies, cutting tax exemptions, enhancing tax administration, and broadening the tax base. A tighter fiscal stance could also limit the inflationary impact of capital inflows.

xii.) Sound reserve management practices are important for the developing countries like India because they can increase a country's or region's overall resilience to shocks. Through their interaction with financial markets,

reserve managers gain access to valuable information that keeps policy makers informed of market developments and views on potential threats. The importance of sound practices has also been highlighted by experiences where weak or risky reserve management practices have restricted the ability of the authorities to respond effectively to financial crises, which may have accentuated the severity of these crises. Moreover, weak or risky reserve management practices can also have significant financial and reputational costs. Several countries, for example, have incurred large losses that have had direct, or indirect, fiscal consequences. Accordingly, appropriate portfolio management policies concerning the currency composition, choice of investment instruments, and acceptable duration of the reserves portfolio, and which reflect a country's specific policy settings and circumstances, serve to ensure that assets are safeguarded, readily available and support market confidence. Sound reserve management policies and practices can support, but not substitute for, sound macroeconomic management. Moreover, inappropriate economic policies (fiscal, monetary and exchange rate, and financial) can pose serious risks to the ability to manage reserves.

Last but not the least, international experience shows that the more open the country's capital account and the more volatile the capital flows in the global economy, the more binding is the constraint on national policymakers (see what happened with policymakers in Southeast Asian countries in the 1997 financial crisis as currencies collapsed on the back of massive capital outflows [The Asian currency crisis was originated in the private sector. Among others, the most critical factors were over-expansion of corporate credit with un-hedged short-term borrowing from abroad; large amounts of unproductive capital investments; and speculation on overvalued assets and large trade deficits. July 2, 1997 marked the devaluation of the Thailand baht, triggered by a series of banking bail-outs by the central government. The central bank was forced to mobilize its resources to cover for excessive property lending by commercial banks. The increasing financial pressure stemming from the country's exceptional infrastructure building programs had finally damaged confidence in the baht. The IMF moved in with a \$17.2 billion rescue program. The danger was that with Thailand's currency crashing against the dollar, the rest of the rapidly growing Asian tigers would also be affected. Following Thailand's baht, Malaysia, Indonesia and the Philippines' currencies all were hit as well. Furthermore, even South Korea and Taiwan were affected. The perception is that the 'new tiger' economies are financially overleveraged. In actuality, starting in 1996, a mix of domestic and external shocks revealed weaknesses in the Thai economy that until then had been masked by their rapid economic growth and the weakness of the US dollar to which the Thai currency was pegged. To an extent, Thailand's difficulties resulted from its earlier economic success. Strong growth and generally

prudent macroeconomic policy had attracted large capital inflows, much of them short-term and many of them attracted by the establishment of the Bangkok International Banking Facility in 1993. While these inflows had permitted faster growth, they had also allowed domestic banks to rapidly expand lending, generating imprudent investments and unrealistic increases in asset prices. Past success also may have contributed to a sense of ignorance by the Thai authorities about the seriousness of Thailand's problems and the need for policy action. Finally, without the convincing policy action and after a desperate defense of the currency by the central bank, the crisis broke). The impossibility of this trinity [A key insight of open economy macroeconomics, which has come to prominence in recent decades, has been the idea of the 'impossible trinity' (Mundell, 1961)] stems from the fact that if CAC (Capital Account Convertibility) is accepted, according to theory, you either have the choice of giving up monetary independence or giving up the stable currency objective and letting the exchange rate float freely so that monetary policy can then be directed to inflation control. There is another related issue of whether CAC [In the buoyant situation that India currency finds itself, it is quite likely that residents will take on foreign currency dominated liabilities. Indeed, it would be a surprise and counter to the interest parity condition, if liability dollarization did not happen. The future consequences will depend on risk management practices in the private sector. The more sophisticated these are, the more likely that companies will hedge some or all of their foreign currency exposure. In this case, there might be fewer risks associated with CAC] will lead to the type of dollarization [Since the abandonment of the gold standard at the outbreak of World War I and the Bretton Woods Conference following World War 2, some countries have been desperately seeking ways to promote global economic stability and hence their own prosperity. For the majority of these countries, the optimal way to obtain currency stability has been to peg the local currency to a major convertible currency. However, another option is to abandon the local currency in favor of the exclusive use of the U.S. dollar (or another major international currency, such as the euro). This is known as 'full dollarization'] that could blunt the exchange rate as an effective instrument to boost demand and tradable sector. Some experts (Subramanian, 2008) argued that India, which has had a flexible exchange rate for much of its history, can continue to have monetary independence even with CAC. But the problem will arise when there are significant upward pressures on exchange rate as a result of capital inflows. In this case, government might want to resist this pressure for the sake of preventing undue pressures on the tradable sector. In other words, it might *de facto* want to maintain a fixed or a semi fixed exchange rate, and the trilemma [This suggests that greater exchange rate flexibility need per se address the problem of capital flow induced threats to the

competitiveness] (impossible trinity) will then bite. India has a managed float with no fixed rate targets for rupee movements. Daily movements are, however, watched very closely by the RBI. Our markets are relatively thin and the declared policy of the RBI is to meet temporary demand supply imbalances that arrive from time to time. The RBI's objective is also to keep market movements orderly and ensure that there is no liquidity problem or rumour or panic induced volatility. In such a case, whether to go for full convertibility makes sense for an emerging market like India is a case that requires deeper discussion. However, we still believe that the partial move towards full convertibility on the capital account is a step in the right direction towards aligning with the globalization mantra that we have practiced so closely. But, once full convertibility is achieved, investors in all asset classes (debt, equity, real estate) might have to bear additional bouts of volatility as the Indian currency will then be more aligned to the world financial markets and thus be more prone to 'jerks' in the global system.

## Conclusion

Foreign capital has a key role to play in the economic development of India. Indian government has been continuously proceeding for economic reforms and is quiet assured to secure legislation to allow more foreign investment in various sectors. The size of net capital inflows to India has increased significantly in the post reform period. Total foreign investments into India in 2007-08 stood at US \$59288 million (about Rs 2.5 lakh crore), up by a whopping 162% over the previous year. October 2007 witnessed the highest inflow - US \$11591 million (Rs 48682 crore), CMIE data shows. July, September, December and January too witnessed heavy investments and these months brought in about 50% of the total inflows for 2007-08. Capital inflows, however, are not an unmitigated blessing. The management of capital inflows is a complex process encompassing a spectrum of policy choices, which inter alia include: the appropriate level of reserves, monetary policy objectives related to liquidity management and maintenance of health financial market conditions with financial stability. Large capital inflows often are associated with inflationary pressures, a real exchange rate appreciation, and deterioration in the current account. In addition, the history of Latin America provides ample evidence that massive capital inflows also may contribute to stock market bubbles and lead to an excessive expansion in domestic credit, jeopardizing the financial system's stability. Short term capital inflows intensify these problems as the probability of an abrupt and sudden reversal increases. Not surprisingly, therefore, effective buttressing of these capital inflows is a key economic policy issue today. Countries with sound macroeconomic policies and well-functioning institutions are in the best position to reap the benefits of capital flows and minimize the risks. India's

inability to deal with capital inflows is partly a result of the government doing less of what it should do more of, and doing more of what it should do less of. There is precious little in terms of economic reforms, but the government has gone to great lengths to encourage more capital inflows. Of course, it is a different matter that it was totally overwhelmed when it got what it had wished for. It is important for the government to move forward by adequately preparing the economy for capital inflows. Not doing anything is not an option, and such an approach risks the government being blamed for spoiling the India story. Undertaking more economic reforms is not easy but has to be done: the government can either manage the process or competitive forces will bring it upon us in a lopsided manner. The ball is in the government's court. Countries that permit free capital flows must choose between the stability provided by fixed exchange rates and the flexibility afforded by an independent monetary policy.

## ACKNOWLEDGEMENTS

While bearing full responsibility for any mistakes, I wish to thank Prof. L. N. Dahiya and Prof. S. D. Vashistha for reading the earlier versions of this paper and making a number of helpful comments and constructive criticisms. I also thank the comments and suggestions of anonymous referees, which were also of great assistance. However, I am alone responsible for all the remaining errors and inadequacy.

## REFERENCES

- Aghion P, Bacchetta P, Banerjee A (2001). "A corporate balance-sheet approach to currency crises", *J. Econ. Theory* 119: 6-30.
- Arellano C, Mendoza E (2002). "Credit Frictions and Sudden Stops in Small Open economies: An Equilibrium Business Cycle Framework for Emerging Markets Crises". NBER Working Paper 8880.
- Beer FM, Vaziri M (2004). "The federation of Euro-Asian stock exchanges: Returns distribution, volatilities and performance". *J. Am. Acad. Bus.* 5: 276-285.
- Beladi H, Marjit S (1992). "Foreign Capital and Protectionism", *Can. J. Econ.* 25: 233-38.
- Boskovska D (2006), "The Role of the Foreign Capital in the Integration Process of Republic of Macedonia", *The Amfiteatru Econ. J.* 8:114-121.
- Buiter WH, Patel UR (2006). "Excessive Budget Deficits, A Government Abused Financial System and Fiscal Rule", *India Policy Forum*, 2:1-38.
- Caballero R (2000). "Macroeconomic Volatility in Latin America: A View and Three Case Studies", *Economia*, 1: 31-108.
- Calvo G, Reinhart C (2000). "When capital inflows come to a sudden stop: consequences and policy options", in: Kenen, P., Swoboda, A. (Eds.), *Reforming the International Monetary and Financial System*. The International Monetary Fund, Washington, DC.
- Calvo G, Leiderman L, Carmen RM (1994), "The Capital Inflows Problem: Concept and Issues", *Contemporary Economic Policy*. 12: 112-132.
- Chakraborty C, Peter N (2008). "Economic Reforms, FDI and Economic Growth in India: A Sector Level Analysis", *World Dev.* 36: 1192-1213.
- Chakraborty I (2001). "Economic Reforms, Capital Inflows and Macro Economic Impact in India", *CDS Working Paper* 311: 123-32.
- Chao C, Yu E (1994a). "Foreign Capital Inflows and Welfare in an

- Economy with Imperfect Competition", *J. Dev. Econ.* 45: 141–54.
- Chao C, Yu E (1995). "Export Share Requirements and Welfare in LDCs: A Three-sector General Equilibrium Analysis", *J. Int. Trade. Dev.* 3: 33-45.
- Dasgupta D, Ratha D (2000). "What Factors Appear to Drive Private Capital Flows to Developing Countries? And How Does Official Lending Respond?", Policy Research Working Paper No. 2932, World Bank, Washington, D.C.
- Dash R, Sumanjeet (2006). "Impact of Stock Market Reforms on Liquidity: Evidence from Bombay Stock Exchange", *J. Indian. Sch. Polit. Econ.* 15:124-45.
- Dash R, Sumanjeet (2008). "Explaining the Cross Section of Expected Stock Return: An application of Fama and French Model in India", *Finance India*, 22: 923-35.
- Edwards S (2004). "Financial Openness, Sudden Stops and the Current Account Reversal", *Ame. Econ. Rev.* 94: 59-64.
- Ghose AK (2004). "Capital Inflows and Investment in Developing Countries", Employment Strategy Paper, Employment Strategy Department, No 2004/11.
- Gopinath G (2004). "Lending booms, sharp reversals and real exchange rate dynamics" *J. Int. Econ.* 62: 1-23.
- Grenville SA (1998). "Capital Flows and Crisis", Reserve Bank of Australia Bulletin December . pp. 16-31.
- Gupta P, Mishra D, Sahay R (2003). Output Response to Currency crises. IMF Working Paper WP/03/230.
- Harris LE, Gurel E (1986). "Price and Volume Effects Associated with Changes in the S&P 500 List: New Evidence for the Existence of Price Pressures". *J. Financ.* 4: 803-815.
- Henry PB (2000a). "Do stock market liberalizations cause investment booms?". *J. Financ. Econ.* 58: 289-301.
- Hutchison M, Noy I (2002) "Output costs of currency and balance of payments crises in emerging markets". *Comparative Econ. Studies.* 44: 27– 44.
- Hutchison M, Michael, Noy Ilan (2006). "Sudden Stops and Mexican Wave: Currency Crises, Capital Flow Reversals and Output Loss in Emerging Markets". *J. Econ. Dept.* 79: 225-248.
- Ito T (2006). "Sudden Stops in Capital Flows: When the Center Spreads the Virus", presented in the conference on 'Global Imbalances and Risk Management: Has the Center Become the Periphery?' Madrid, Spain, 16-17<sup>th</sup> May.
- Jalan B (1999). "International financial Architecture: Developing country's Perspective", RBI Bulletin.
- Jitter R (2003). "Sudden Stop in Capital Inflows and the Design of Exchange Rate Regime", HWWA Discussion Paper No. 213, European Central Bank.
- Jobson JD, Korkie BM (1981). "Performance hypothesis testing with the Sharpe and Treynor measures", *J. Financ.* 36: 877- 889.
- Jones RW (1984). 'Protection and the Harmful Effects of Endogenous Capital Flows', *Econ. Lett.* 15: 325–30.
- Kohli R (2003) "Capital Flows and Domestic Financial Sector in India", *Econ Pol. Wkly.* Feb. 22: 761-68.
- Krugman P (1993). "International finance and economic development", in A.Giovannini (ed.), *Finance and development: issues and experience*, Cambridge University Press, Cambridge, pp. 11-24.
- Lensik R, Oliver M, Osei R (1999). "The Impact of Uncertain Capital Flows on Economic Growth in Developing Countries: An Empirical Analysis For the 1999's", Paper Presented in University of Groningen.
- Levin R (2001). "International financial liberalization and economic growth", *Rev. of Int. Econ.* 9: 668-702.
- Marjit S, Beladi H (1996). "Protection and the Gainful Effects of Foreign Capital". *Econ. Lett.* 53: 311-16.
- Marjit S, U Broll, S Mitra (1997). "Targeting Sectors for Foreign Capital Inflow in a Small Developing Economy". *Rev. Int. Econ.* 5: 101-05
- Mody A, Murshid AP (2002). "Growing Up With the Capital Flows", IMF Working Paper Series WP/02/75, Washington DC.
- Mohamed W (2003) "The Impact of Foreign Capital Inflow on Savings, Investment and Economic Growth Rate in Egypt: An Econometric Analysis". *Sci. J. of King Faisal University* 4: 279-308.
- Mohan R (2008). "Capital Flows to India". RBI Monthly Bulletin, 2048, December.
- Mohan R (2008). Capital Flows to India". Paper presented by at the annual meeting of Deputy Governors held at the Bank for International Settlement, RBI, February.
- Mundell R (1961). "The International Disequilibrium System", *Kyklos* 14:154–172.
- Olarreaga M (1996). "Tariff Reductions in the Presence of Foreign Direct Investment". *Rev. Int. Econ.* 4: 263–75.
- Rangarajan C (2000). "Capital Flows: Another Look". *Econ. Pol. Wkly.* Dec. 9: 4421-27.
- Razin A, Sadka E (2001). "Country risk and capital flow reversals." *Econ. Lett.* 72: 73–77.
- Richter A (2008). 'India's Record High Capital Inflows Pose Policy Challenges'. IMF Asia and Pacific Department, International Monetary Fund.
- Schneider M, Tornell A (2004). "Balance sheet effects, bailout guarantees and financial crises". *Rev. Econ. Stud.* 71: 883–913.
- Scholes MS (1972) "The market for securities: Substitution versus price pressure and the effects of information on share prices". *The J. of Business.* 45: 156-179.
- Shah A, Patnaik (2008). "Managing Capital Flows: The Case of India". Working Paper Series. 2008-52. National Institute of Public Finance and Policy.
- Solow M (1956). "A Contribution to the Theory of Economic Growth". *Quarterly J. Econ.* 70: 123-145.
- Stiglitz J, Andrew W (1981). "Credit Rationing in the Markets with Imperfect Information", *Ame. Econ. Rev.* 71: 393-410.
- Subramanian A (2008). *India's Turn: Understanding the Economic Transformation.* Ox. Uni. Press, New York.
- Sumanjeet (2007). "Appreciation of Indian Currency: Implications on the Indian Economy". *World Affairs. J. of Int. Issues.* 11:52-69.
- Sumanjeet (2009). Depreciation of Indian Currency: Implications for the Indian Economy". Accepted Working Paper Series, American International University (AIU)
- Tesar L (1991). "Saving Investment and International Capital Flows". *J. Int. Econ.* 31: 56-75.
- Tobin J (1983). "Comment on Domestic Savings and International Capital Movements in the Long Run and short Run". *Euro. Econ. Rev.* 21: 123-56.
- Wade R, Veneroso (1998). "The Asian Financial Crisis: The High Debt Model and Unrecognized Risk of the IMF Strategy". Working Paper No. 128. New York. Russell Sage Foundation.
- Wang LR, Shen CH (1999). "Do foreign investments affect foreign exchange and stock markets: The case of Taiwan". *Appl. Econ.* 31: 1293- 1303.