

# Capital Flows and External Vulnerability

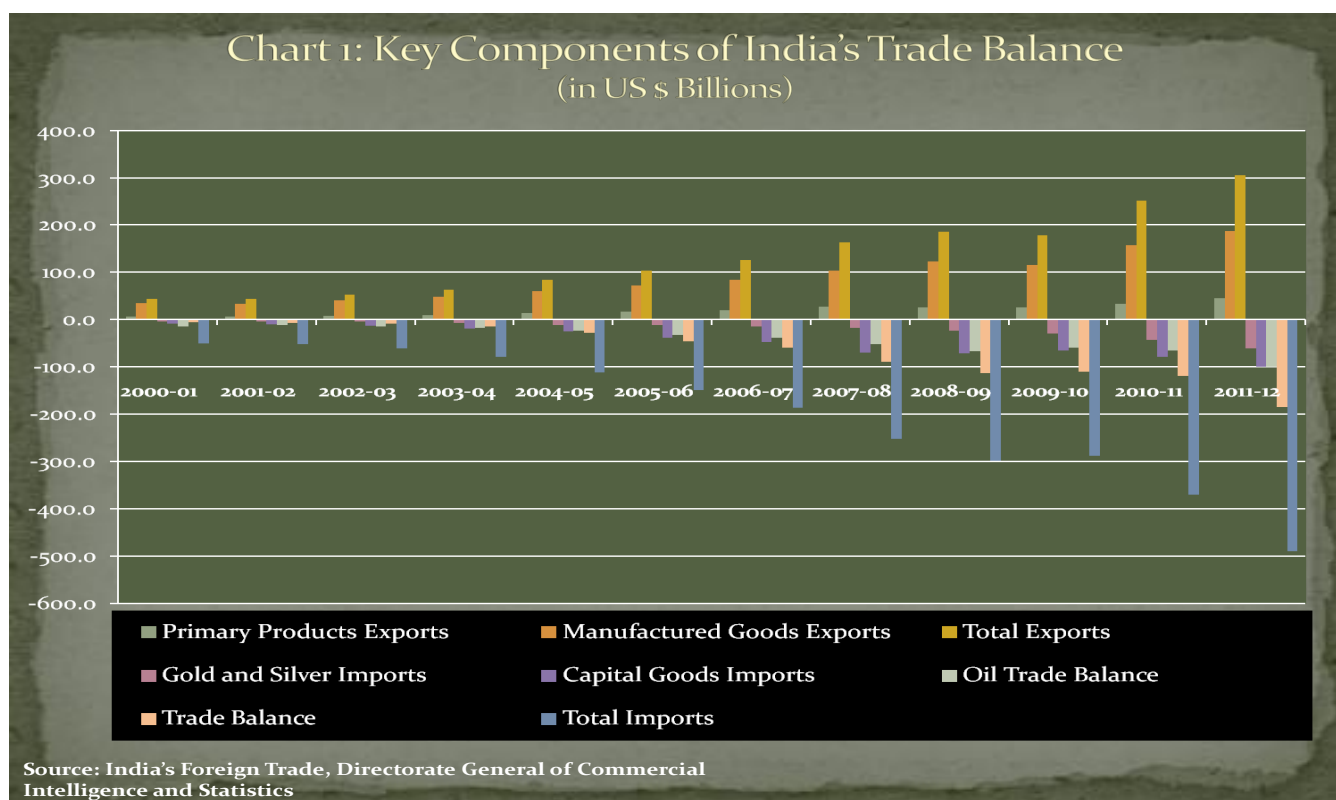
## Examining the Recent Trends in India

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After India's current account deficit (CAD) reached an "all-time high" of 4.2% of GDP in March 2012, the Annual Report of the RBI released in August 2012 noted that the "deterioration in external sector during 2011-12 caused concern". While the CAD had widened to \$ 78 billion in 2011-12, net capital inflows in 2011-12 amounted to around \$ 68 billion only, resulting in a net depletion of foreign exchange reserves by \$ 10 billion from 2010-11. The same trend has continued in the first half of 2012-13, with the CAD touching \$ 38.7 billion and as a consequence of the growth slowdown, crossing 4.6% of GDP. With net capital inflows failing to compensate for the CAD, there was a further depletion of \$ 0.4 billion in foreign exchange reserves during April-September 2012. The widening current account deficit and its financing pose a key challenge to India's macroeconomic and financial stability.

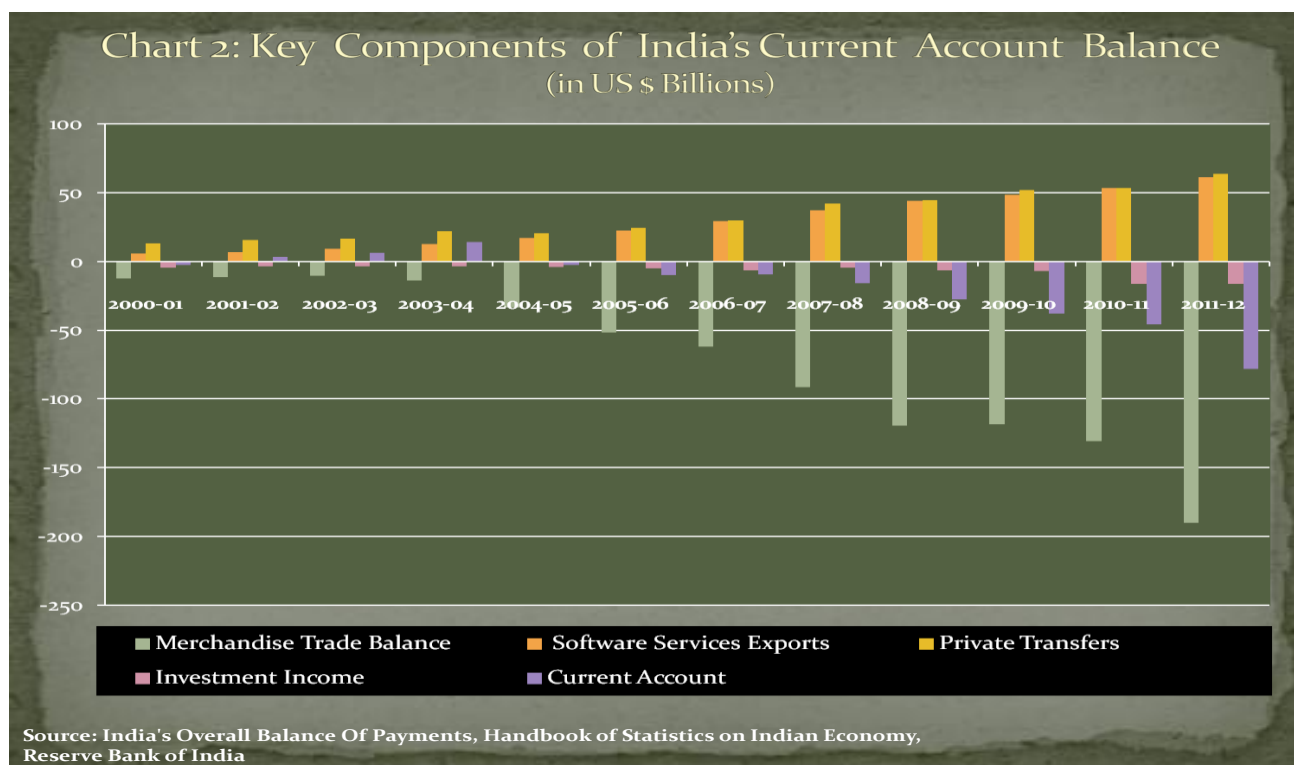
### Current Account Deficit: Main Drivers

A prime driver of India's current account deficit is the merchandise trade balance, which has deteriorated continuously over the last decade (chart 1). The trade deficit rose from \$ 6 billion in 2000-01 to \$ 185 billion in 2011-12. While the oil trade deficit – which contributes the most in India's trade deficit – worsened by \$ 85 billion from 2000-01 to reach \$ 99 billion in 2011-12, the non-oil trade deficit also worsened by a comparable \$ 78 billion over the same period to reach \$ 86 billion. Import of gold and silver doubled from \$ 30 billion in 2009-10 to cross \$ 60 billion in 2011-12 signifying a sharp increase of gold demand in India in recent times. Gems and jewellery exports, which rose from \$ 29 billion in 2009-10 to \$ 47 billion in 2011-12, cannot account wholly for the sharp rise in gold imports.



\* Author acknowledges the generous grant provided by the Economic Research Foundation, New Delhi for conducting the study on the recent trends in capital flows in India.

The large deficit in merchandise trade has been moderated to some extent by the surplus in the “invisibles” component of the current account, with private transfers from abroad (mainly workers’ remittances) and export of software services rising from around \$ 30 billion in 2006-07 to over \$ 60 billion under each head in 2011-12 (chart 2).



The recent period has also seen a sharp rise in “Investment Income” payments, from around \$ 7 billion in 2009-10 to over \$ 16 billion, both in 2010-11 and 2011-12. Such payments, which add to the current account deficit, includes payments of interest on foreign loans like external commercial borrowings (ECBs), NRI deposits and trade credit, profit/dividend payment to FDI companies and FIIs, etc.

Capital inflows which finance the current account deficit in a given period carry payment obligations which burden the current account in the subsequent period. Around 20% of the \$ 78 billion CAD in 2011-12 was on account of the returns to capital inflows attracted in previous periods. The nature of capital inflows therefore assumes significance, as far as the sustainability of the CAD is concerned.

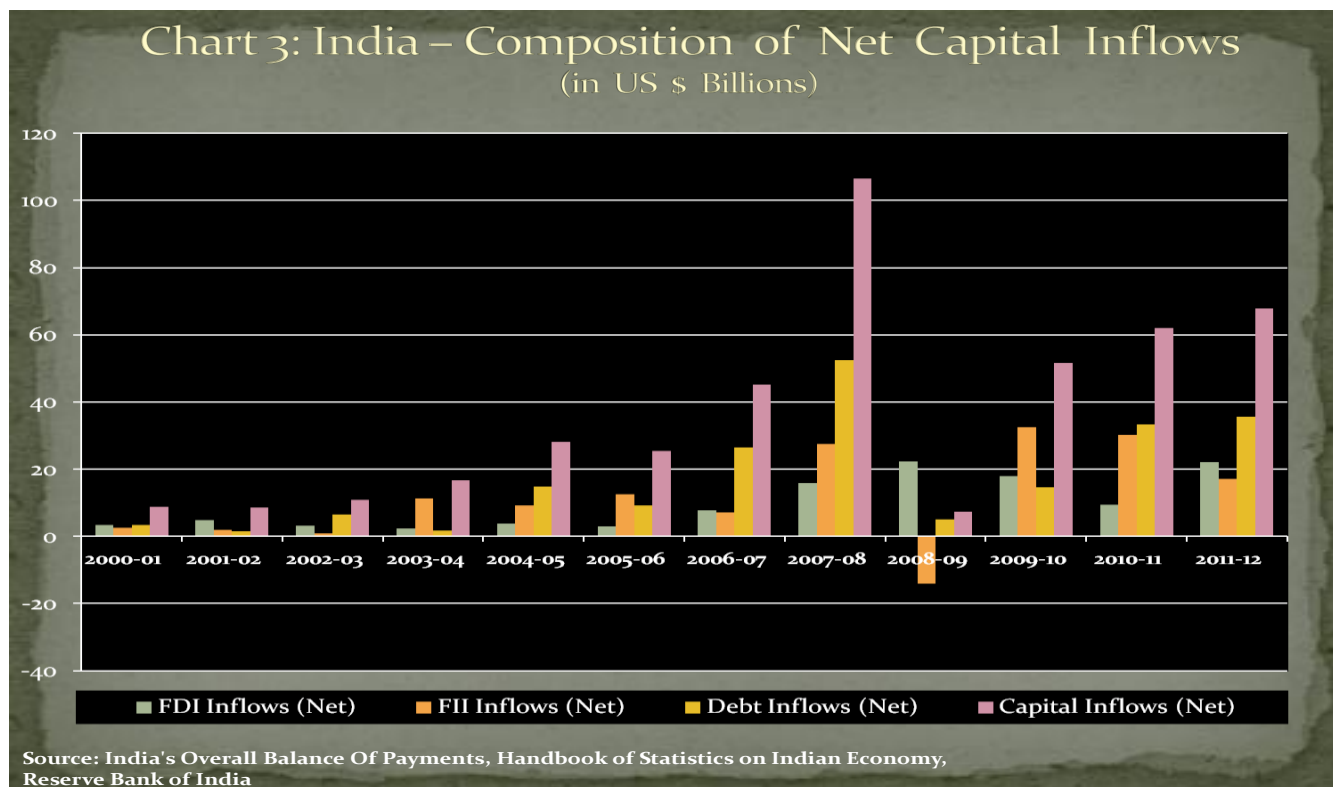
### Capital Flows: Recent Trends

The approach of the Reserve Bank of India towards the management of the capital account has evolved over time. Given its stated objective of maintaining financial and macroeconomic stability, the salient elements of RBI’s policy approach has been summarised as follows:

- i. “an explicitly stated active capital account management framework, based on the policy stance of encouraging non-debt creating and long-term capital inflows and discouraging debt flows;
- ii. having the policy space to use multiple instruments - quantitative limits, price based measures as well as administrative measures, particularly for foreign currency borrowing by corporates;
- iii. short term debt permitted only for trade transaction;
- iv. avoiding the ‘original sin’ of excessive foreign currency borrowings by domestic entities, particularly the sovereign;

- v. prudential regulations to prevent excessive dollarization of balance sheets of financial sector intermediaries, particularly banks;
- vi. cautious approach to liability dollarization by domestic entities and
- vii. significant liberalization of permissible avenues for outward investments for domestic entities.”<sup>1</sup>

Let us examine how far capital inflows to India have been “non-debt creating and long-term”. Net capital inflows to India peaked in 2007-8 crossing \$100 billion. Out of this over \$ 52 billion was in net debt inflows, which also peaked in the same year, dominated by external commercial borrowings by Indian corporates and banks (chart 3).

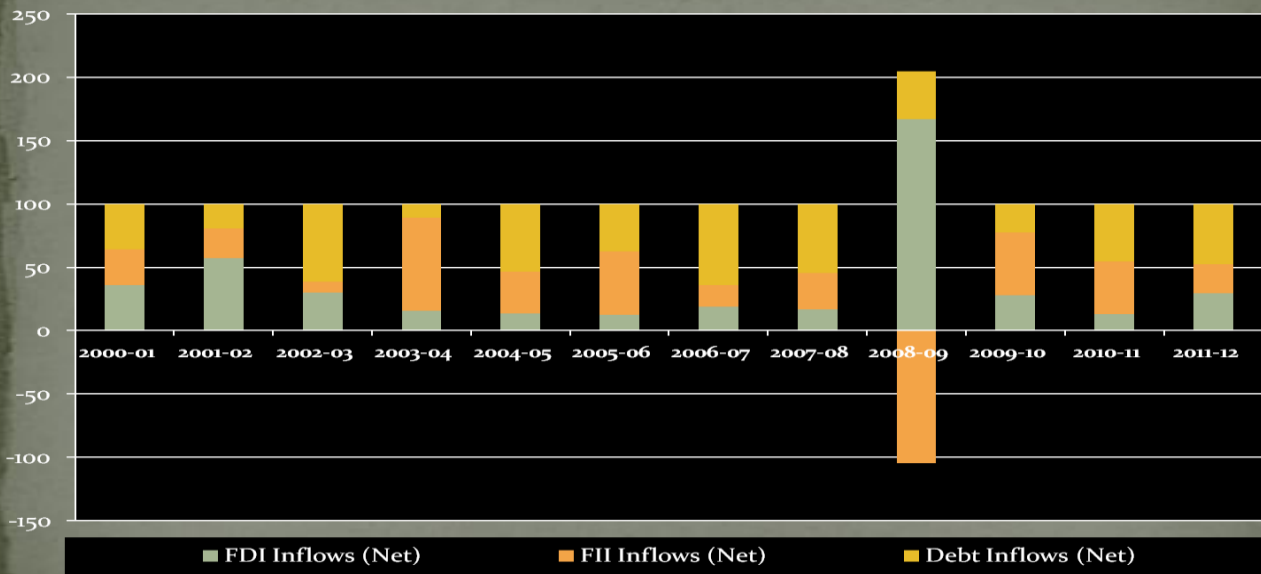


The global financial crisis caused a sharp drop in net capital inflows to India to around \$ 7 billion in 2008-09, with net FII outflows of \$ 14 billion. Interestingly, net FDI inflows peaked at \$ 22 billion in the same year, while net debt inflows were at \$ 5 billion. Since then net capital inflows have increased to \$ 68 billion in 2011-12, with net debt inflows accounting for \$ 35 billion, net FDI inflows \$ 22 billion and net FII inflows \$ 17 billion.

Since 2008-09 there are net outflows every year under “Other Capital” – which includes leads and lags in export receipts, funds held abroad by Indian companies (like ADR/GDRs, ECBs, software funds etc.), advance payments against imports etc. These outflows increased from \$ 6 billion in 2008-09 to \$ 13 billion in 2009-10, and were around \$ 7 billion in 2011-12. Excluding this net outflow under “other capital” from net capital flows, provides the net inflow on account of FDI, FII and debt inflows. Out of these net [debt + non-debt (FDI + FII)] inflows, net debt inflows accounted for 41% on an annual average between 2000-01 and 2011-12. Debt inflows rose to 64% of net [d+nd] inflows in 2006-07, then fell to 54% in 2007-8, 22% in 2008-09 and has since risen to 45% in 2010-11 and 47% in 2011-12 (chart 4).

<sup>1</sup> Keynote Address by Shyamala Gopinath, former Dy. Governor, RBI, at the Annual Conference of the Foreign Exchange Dealers’ Association of India (FEDAI) on February 18, 2011.

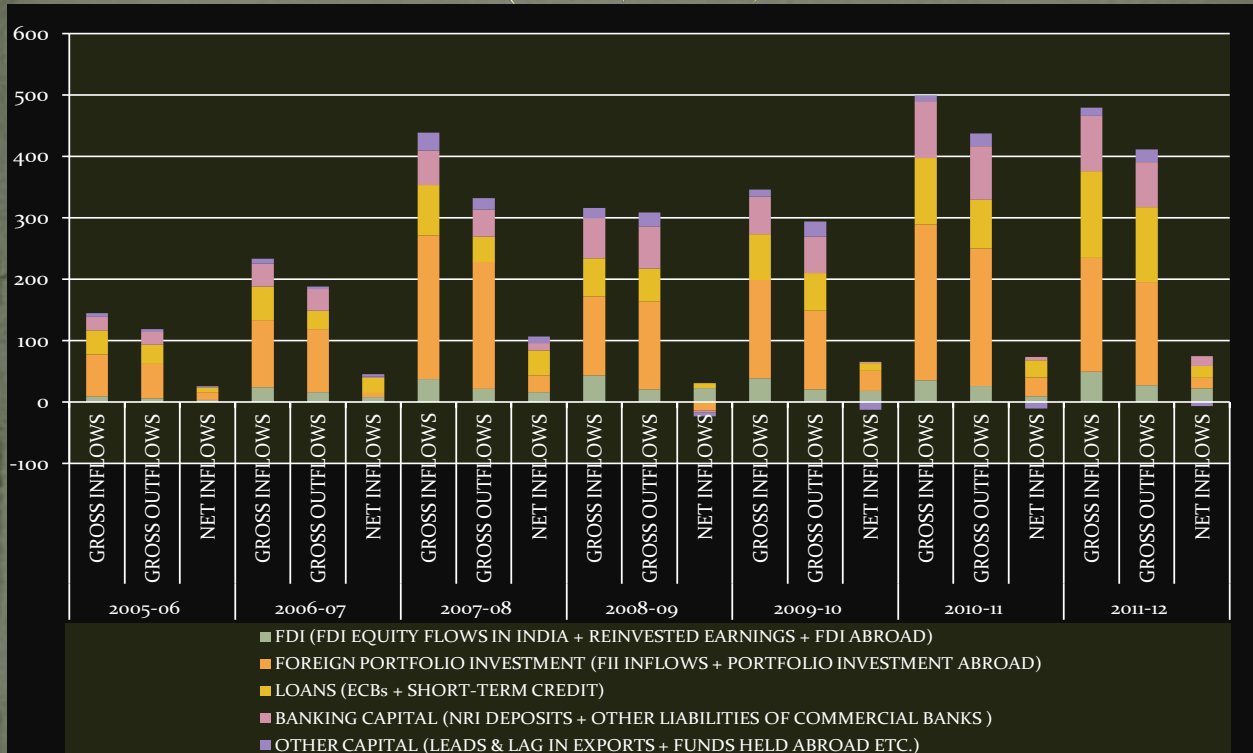
Chart 4: India – Composition of Net Capital Inflows  
(as % of Debt and Non-Debt Inflows)



Source: India's Overall Balance Of Payments, Handbook of Statistics on Indian Economy, Reserve Bank of India

Net FII inflows have been 23% of net [d+nd] inflows on an annual average between 2000-01 and 2011-12, and if 2008-09 is excluded (when there was net FII outflow on account of the global financial crisis), the annual average goes up to 34%. Net FDI inflows have been 36% of net [d+nd] inflows on an annual average, and if 2008-09 is excluded, the annual average comes down to 24%.

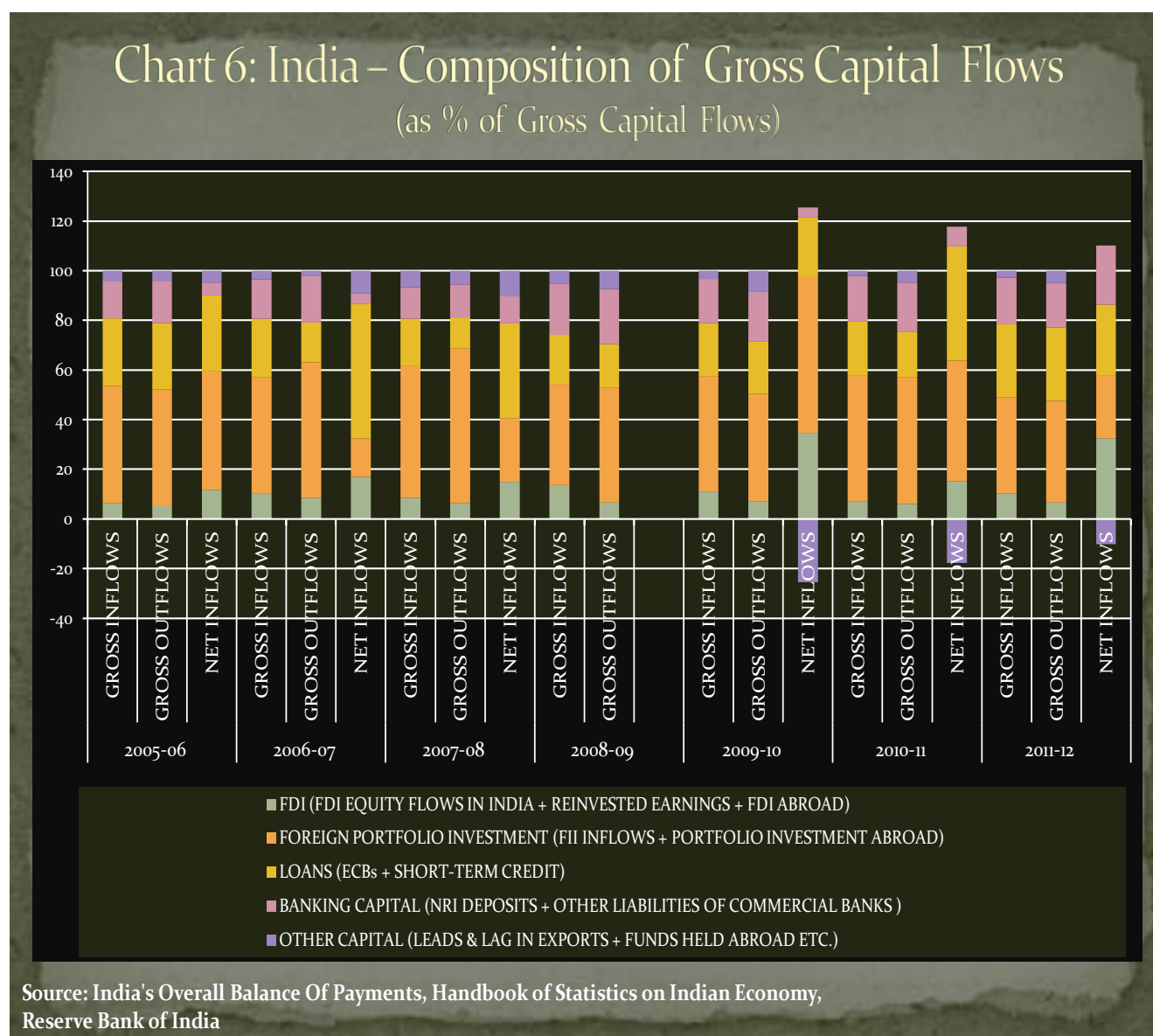
Chart 5: India – Composition of Gross Capital Flows  
(in US \$ billions)



Source: India's Overall Balance Of Payments, Handbook of Statistics on Indian Economy, Reserve Bank of India

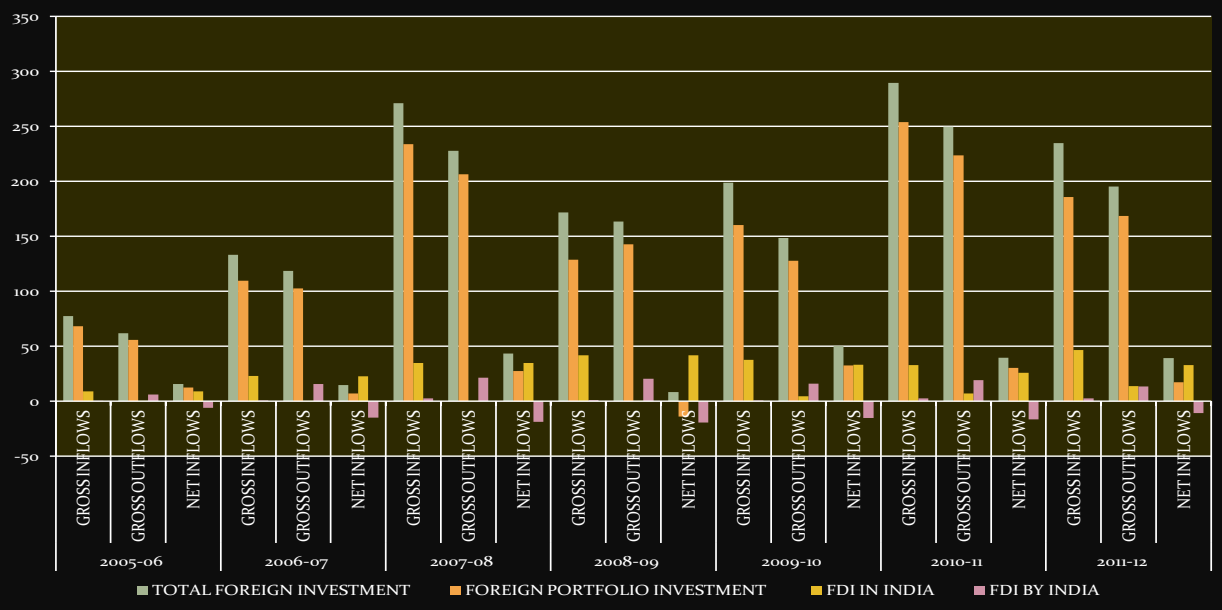
That FDI is the least significant component of capital inflows to India can be further seen through an examination of gross capital flows between 2005-06 and 2011-12. While net capital inflows to India peaked in 2007-08 at \$ 100 billion, gross capital inflows fell from \$ 438 billion that year to \$316 billion in 2008-09, only to rise to \$ 500 billion in 2010-11 and were at \$ 479 billion in 2011-12. The rise in gross capital inflows since 2008-09 was also accompanied by a rise in gross capital outflows, from \$ 308 billion that year to \$ 437 billion in 2010-11 and stood at \$ 411 billion in 2011-12 (chart 5).

FII flows dominated gross capital flows, accounting on average for 45% of annual gross inflows and almost 50% of annual gross outflows (average for 2005-06 to 2011-12). FDI flows on average accounted for only around 10% of annual gross inflows and 7% of outflows (chart 6).



Annual gross FDI inflows have on average been only around \$ 40 billion. Another noteworthy feature is that gross FDI outflows on account of repatriation of FDI have increased sharply since 2009-10 averaging over \$ 8 billion annually. Outflows on account of Indian FDI abroad have also increased since 2007-08, averaging over \$ 17 billion annually. Gross FDI flows are dwarfed by the more short-term gross FII flows, which account for bulk of gross foreign capital flows. Gross FII inflows peaked at \$ 253 billion in 2010-11, alongwith gross outflows at \$ 223 billion (chart 7).

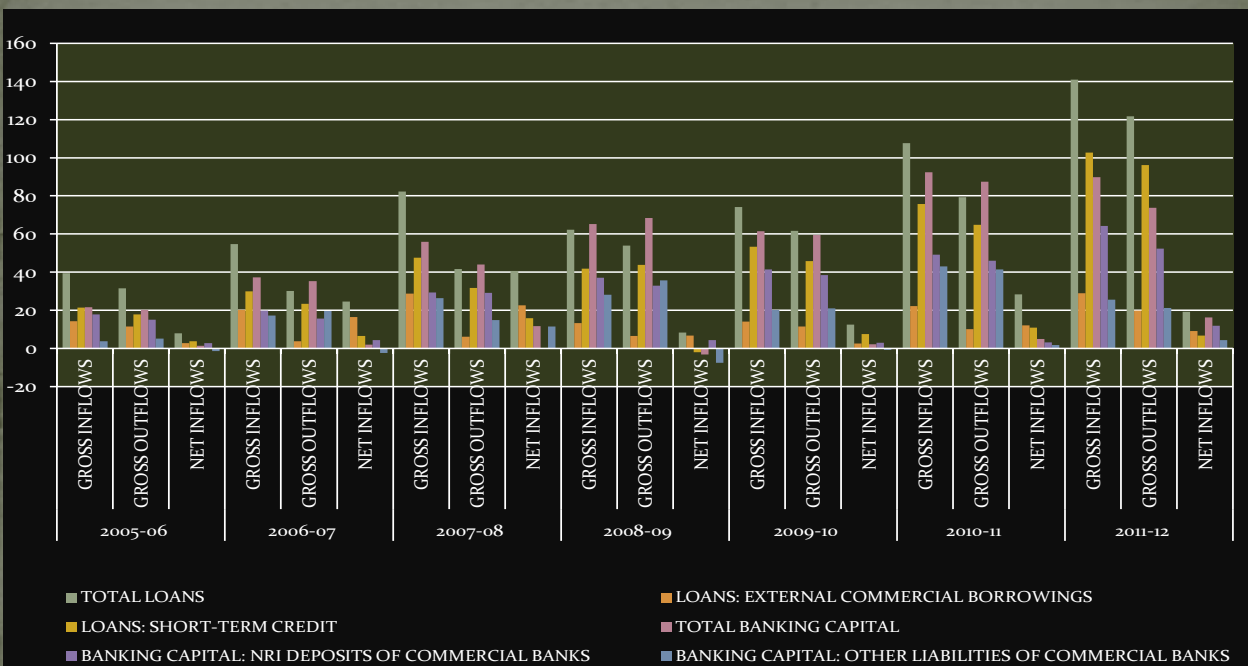
Chart 7: India – Gross Foreign Investment Flows  
(in US \$ billions)



Source: India's Overall Balance Of Payments, Handbook of Statistics on Indian Economy, Reserve Bank of India

Debt flows (Loans and Banking Capital) on average accounted for around 40% of annual gross capital inflows as well as outflows. Gross inflow on account of ECBs doubled from \$ 14 billion in 2005-06 to \$ 28 billion in 2007-08, dipped to \$13 billion in 2008-09 and has risen continuously since then to reach \$29 billion in 2011-12. Gross outflows on account of ECBs repayments also reached a high of \$ 20 billion in 2011-12 (chart 8).

Chart 8: India – Gross Debt Flows  
(in US \$ billions)



Source: India's Overall Balance Of Payments, Handbook of Statistics on Indian Economy, Reserve Bank of India



Gross inflows of short-term loans (trade credit) increased from \$21 billion in 2005-06 to \$ 47 billion in 2007-08, dipped to \$ 41 billion in 2008-09 (net inflows of trade credit turned negative that year), and has increased steadily since then to reach \$103 billion in 2011-12. Gross outflows on account of short term credit also reached \$96 billion in 2011-12 (chart 8).

The key findings of our examination of the trends in capital flows are as follows:

- i. Net debt inflows accounted for 41% of the net debt and non-debt [d+nd] inflows, on an annual average between 2000-01 and 2011-12.
- ii. Net FII inflows have been 23% of net [d+nd] inflows on an annual average between 2000-01 and 2011-12, and if 2008-09 is excluded the annual average goes up to 34%.
- iii. Net FDI inflows have been 36% of net [d+nd] inflows on an annual average, and if 2008-09 is excluded, the annual average comes down to 24%.
- iv. FII flows dominated gross capital flows, accounting on average for 45% of annual gross inflows and almost 50% of annual gross outflows between 2005-06 and 2011-12.
- v. FDI flows on average accounted for only around 10% of annual gross inflows and 7% of outflows between 2005-06 and 2011-12.
- vi. Debt flows (Loans and Banking Capital) on average accounted for around 40% of annual gross capital inflows as well as outflows between 2005-06 and 2011-12.
- vii. The share of short-term credit in gross inflows on account of loans increased from around 54% in 2005-07 to 73% in 2011-12 and its share in gross outflows increased from 55% in 2005-07 to 79% in 2011-12.

Therefore, despite RBI's stated policy stance of "encouraging non-debt creating and long-term capital inflows and discouraging debt flows", debt and short term capital flows have dominated the flow of capital in and out of India over the past few years. Not only have FDI inflows been modest, but outflows on account of repatriation of FDI, outward FDI by Indians and profit income from FDI have further moderated the impact of FDI inflows. The CAD being financed primarily through debt creating and short term capital inflows has led to a steady increase in India's external indebtedness.

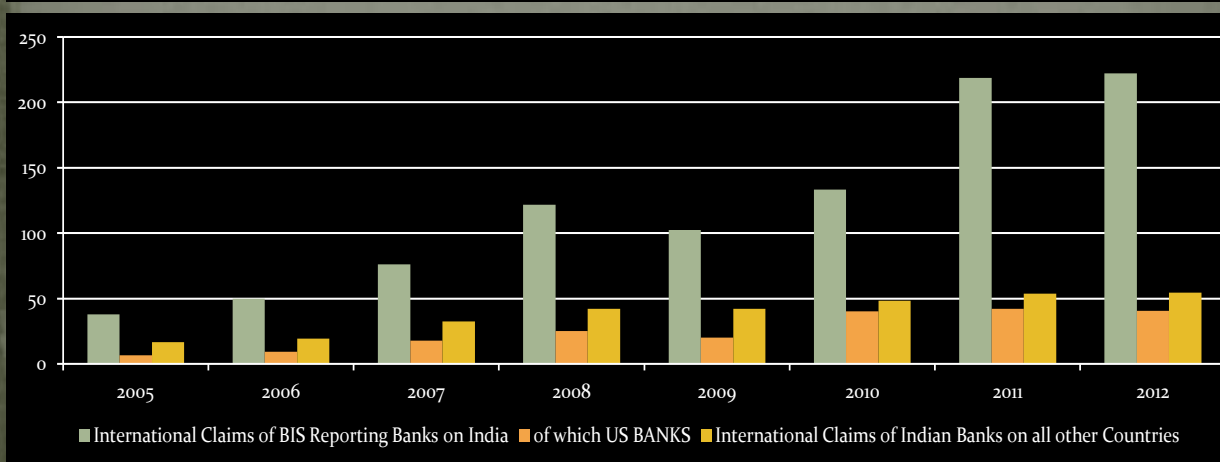
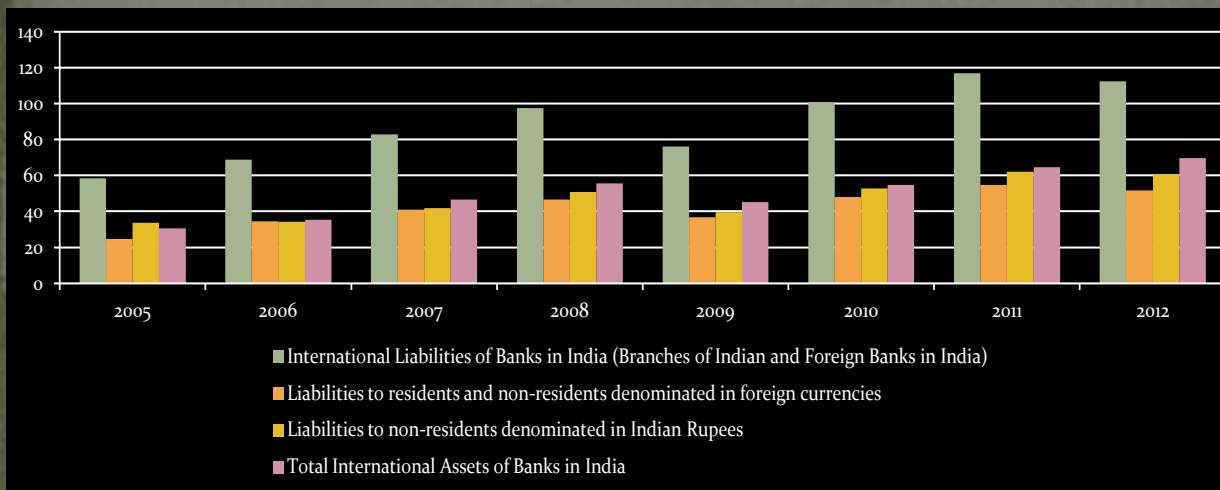
#### *Banking Sector: Increasing International Liabilities*

The banking sector in India reflects the trend of growing external indebtedness. Gross debt inflows under banking capital increased from \$ 21 billion in 2005-06 to \$ 65 billion in 2008-09, dipped by \$ 4 billion in 2009-10 and has since increased to around \$90 billion both in 2010-11 and 2011-12. Gross outflows of banking capital, signifying withdrawals from NRI deposits and loan repayments by banks, also increased from \$ 20 billion in 2005-06 to \$ 87 billion in 2010-11 and stood at \$ 74 billion in 2011-12. Within gross flows under banking capital, NRI deposits accounted for 63% of the average annual inflows and 60% of average annual outflows from 2005-06 to 2011-12. The rest was in the form of foreign liabilities of Indian banks to non-resident banks and official and semi-official institutions (chart 8).

The result of such borrowings can be seen in the increase in international liabilities of banks in India, from \$ 58 billion in end-March 2005 to \$ 117 billion in end-March 2011 before dipping slightly to \$ 112 billion in end-March 2012. 46% of the Indian banks' liabilities were in foreign currencies. International assets of Indian banks increased from \$ 30 billion in 2005 to \$ 70 billion in 2012. Thus, while international liabilities of banks in India rose by \$ 54 billion between 2005 and 2012, assets grew only by \$ 40 billion (chart 9).

## Chart 9: India – Banking Sector Liabilities and Assets

(in US \$ billions)



Source: International Banking Statistics, Reserve Bank of India Bulletin, Various Issues

The trend of increasing liabilities is further confirmed by the international claims of BIS reporting banks on India, which increased from \$ 38 billion in 2005 to \$ 222 billion in 2012, i.e. by \$ 184 billion. In contrast, the international claims of Indian banks on all other countries increased from \$ 16 billion in 2005 to \$ 54 billion in 2012, i.e. by \$ 38 billion only. It is clear that the nature of capital inflows to India is such which is increasing the leverage of Indian banks, while the claims of foreign banks on Indian assets are also rising steadily.

### *External Debt and Vulnerability*

India's external debt stock rose from \$ 224.5 billion in 2008-09 to \$ 345.7 billion in 2011-12 and has further increased to \$ 365.3 billion in end-September 2012. The external debt-GDP ratio has touched 20% in 2011-12 and is likely to increase further in 2012-13. Ratio of foreign exchange reserves to total external debt peaked at 138% in 2007-08 and has since fallen steadily to around 85% in 2011-12 and further to around 81% in end-September 2012. The proportion of short-term debt in total debt has also risen continuously from 3.9% in 2003-04 to 22.6% in 2011-12 and further to 23.1% in end-September 2012. Ratio of short-term debt to total foreign exchange reserves crossed 26% in 2011-12 has risen to 28.7% in end-September 2012 (table 1).



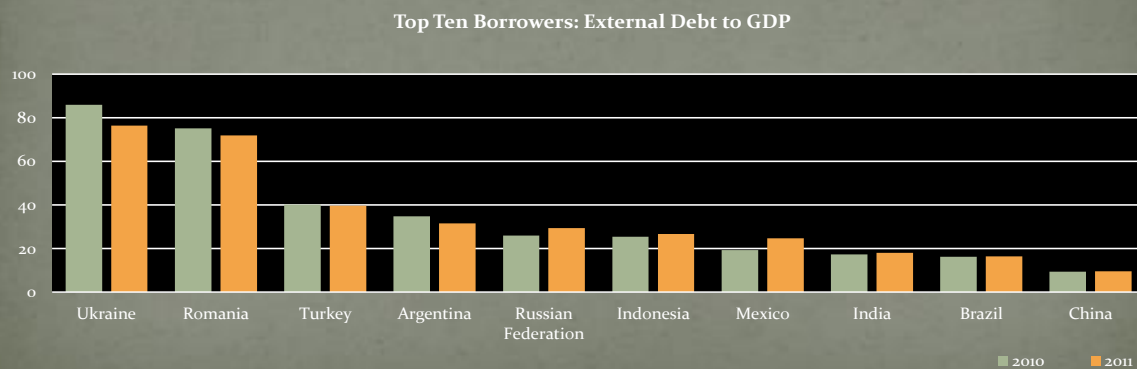
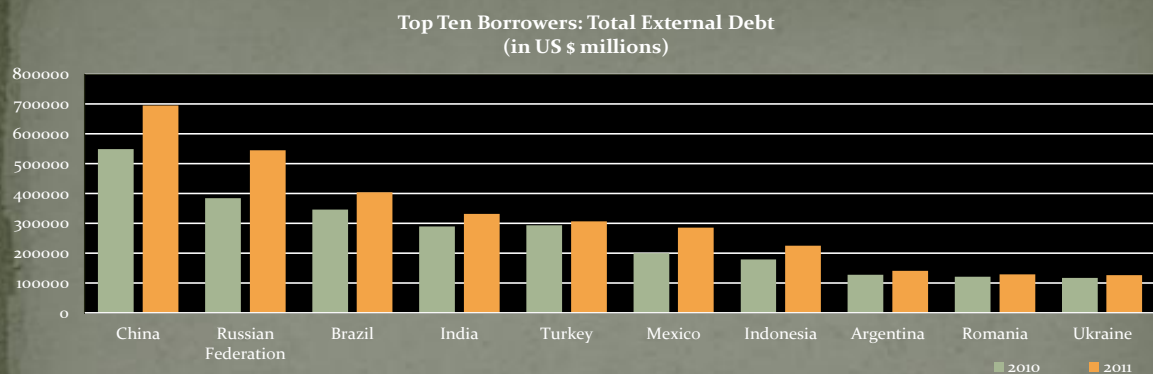
Table 1: Selected External Debt Indicators of India

YEAR	EXTERNAL DEBT (US \$ BILLION)	EXTERNAL DEBT TO GDP (%)	FOREIGN EXCHANGE RESERVES TO TOTAL DEBT (%)	SHORT-TERM DEBT TO FOREIGN EXCHANGE RESERVES (%)	SHORT-TERM DEBT TO TOTAL DEBT (%)
1990-91	83.8	28.7	7	146.5	10.2
1995-96	93.7	27	23.1	23.2	5.4
2000-01	101.3	22.5	41.7	8.6	3.6
2001-02	98.8	21.1	54.7	5.1	2.8
2002-03	104.9	20.3	72.5	6.1	4.5
2003-04	112.6	18	100.3	3.9	3.9
2004-05	134	18.1	105.6	12.5	13.2
2005-06	139.1	16.8	109	12.9	14
2006-07	172.4	17.5	115.6	14.1	16.3
2007-08	224.4	18	138	14.8	20.4
2008-09	224.5	20.3	112.1	17.2	19.3
2009-10PR	260.9	18.3	106.8	18.8	20
2010-11PR	305.9	17.8	99.6	21.3	21.2
2011-12PR	345.7	20	85.1	26.6	22.6
End-September 2012 QE	365.3	20.1	80.7	28.7	23.1

QE: Quick Estimates; PR: Partially Revised.  
Source: Ministry of Finance, Government of India and Reserve Bank of India.

India ranked 4<sup>th</sup> behind China, Russia and Brazil in the list of top 10 debtors in 2011 among the “developing countries”, as defined by the 2012 Global Development Finance Report, World Bank. Indian policymakers are drawing comfort from the fact that India’s external debt-GDP ratio at around 20% ranked 8<sup>th</sup> among the top 10 debtors (chart 10).

Chart 10: Developing Countries - Top Ten Borrowers, 2011



Source: World Bank, Quarterly External Debt Statistics, Global Development Finance and World Development Indicators

However, the fast dwindling ratio of foreign exchange reserves to total debt and the rising proportion of short-term debt to foreign exchange reserves cause concern. India's stock of short-term debt, which has crossed \$ 84 billion in end-September 2012, is the 3<sup>rd</sup> largest among the developing countries, after China and Turkey.

The extent of external vulnerability can be better understood by looking at external debt and the CAD taken together. The IMF defines *gross external financing need* (GEFN) for a country as the sum of its current account deficit, amortization on medium-and long-term debt, and short-term debt at end of previous period. Comparisons of the GEFN for the top 10 borrowers among the developing countries for 2009-2012 have been made in table 2 below, compiled from the Debt Sustainability Assessments made by the IMF.

**Table 2: Top Ten Borrowers – Gross External Financing Need**

	Russia	Brazil	India*	Turkey	Mexico	Indonesia	Argentina	Romania	Ukraine	China
<b>2009</b>	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Estimates)	(Actual)	(Actual)	(Actual)
Gross External Financing Need# (in US \$ billions)	98.6	143	129.7	113.3	61.7	38	31.5	34.9	47.9	...
Gross External Financing Need (percent of GDP)	8.1	8.8	9.4	18.4	7	7	10.3	29.5	40.8	...
Current Account Deficit, excluding interest payments (percent of GDP)	-5.9	0.5	2.3	0.7	-0.6	-2.7	3.7	1.8	-4.5	-5.2
External Debt (percent of GDP)	38.2	12.2	18.5	43.7	21.8	32.1	38.6	68.6	88	8.6
# Defined as current account deficit, plus amortization on medium-and long-term debt, plus short-term debt at end of previous period.										
*Data pertains to financial year 2009-10										
Source: IMF External Debt Sustainability Assessments, Annexure to Article IV Consultation Reports for all countries except Argentina; data for Argentina from Country Risk Service, Economist Intelligence Unit										

**Gross External Financing Need – Contd.**

	Russia	Brazil	India*	Turkey	Mexico	Indonesia	Argentina	Romania	Ukraine	China
<b>2010</b>	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Projected)	(Actual)	(Projected)	(Actual)
Gross External Financing Need# (in US \$ billions)	75.4	154.1	160.6	132	57.8	52.8	29.2	32.1	43.2	...
Gross External Financing Need (percent of GDP)	5.1	7.2	10.1	17.9	5.6	7.5	7.94	25.9	31.7	...
Current Account Deficit, excluding interest payments (percent of GDP)	-6.3	1.5	2.9	5.4	-0.7	-1.3	1.96	2	-3.1	-4
External Debt (percent of GDP)	32.9	12	18.4	39.5	23.1	28.6	34.7	74.5	82.8	9.3
# Defined as current account deficit, plus amortization on medium-and long-term debt, plus short-term debt at end of previous period.										
*Data pertains to financial year 2010-11										
Source: IMF External Debt Sustainability Assessments, Annexure to Article IV Consultation Reports for all countries except Argentina; data for Argentina from Country Risk Service, Economist Intelligence Unit										

## Gross External Financing Need – Contd.

	Russia	Brazil	India*	Turkey	Mexico	Indonesia	Argentina	Romania	Ukraine	China
<b>2011</b>	(Actual)	(Actual)	(Projected)	(Projected)	(Projected)	(Actual)	(Projected)	(Actual)	(Projected)	(Actual)
Gross External Financing Need# (in US \$ billions)	42.5	159.5	194.5	194.9	77.3	72.5	32.2	37.8	47.4	...
Gross External Financing Need (percent of GDP)	2.3	6.4	11.2	25.1	6.6	8.6	7.23	27.7	30.1	...
Current Account Deficit, excluding interest payments (percent of GDP)	-6.2	1.4	3.3	9.2	0	-0.7	1.01	2.2	-3	-2.8
External Debt (percent of GDP)	27.6	12	19.2	42.9	22.1	26.6	31.5	72.1	77.4	10.4

# Defined as current account deficit, plus amortization on medium-and long-term debt, plus short-term debt at end of previous period.

\*Data pertains to financial year 2011-12

Source: IMF External Debt Sustainability Assessments, Annexure to Article IV Consultation Reports for all countries except Argentina; data for Argentina from Country Risk Service, Economist Intelligence Unit

## Gross External Financing Need – Concluded

	Russia	Brazil	India*	Turkey	Mexico	Indonesia	Argentina	Romania	Ukraine	China
<b>2012</b>							...			...
							...			...
Gross External Financing Need# (in US \$ billions)	62.2	142	224.5	194.6	85	101.9	...	41.1	51	...
Gross External Financing Need (percent of GDP)	3.2	5.2	11.8	24	6.8	11.3	...	30.3	30	...
Current Account Deficit, excluding interest payments (percent of GDP)	-5.5	2	3.2	7	0.1	1.5	...	2	-3.1	...
External Debt (percent of GDP)	27.7	13.5	20.2	44.7	21.9	26.1	...	71.1	76.5	...

# Defined as current account deficit, plus amortization on medium-and long-term debt, plus short-term debt at end of previous period.

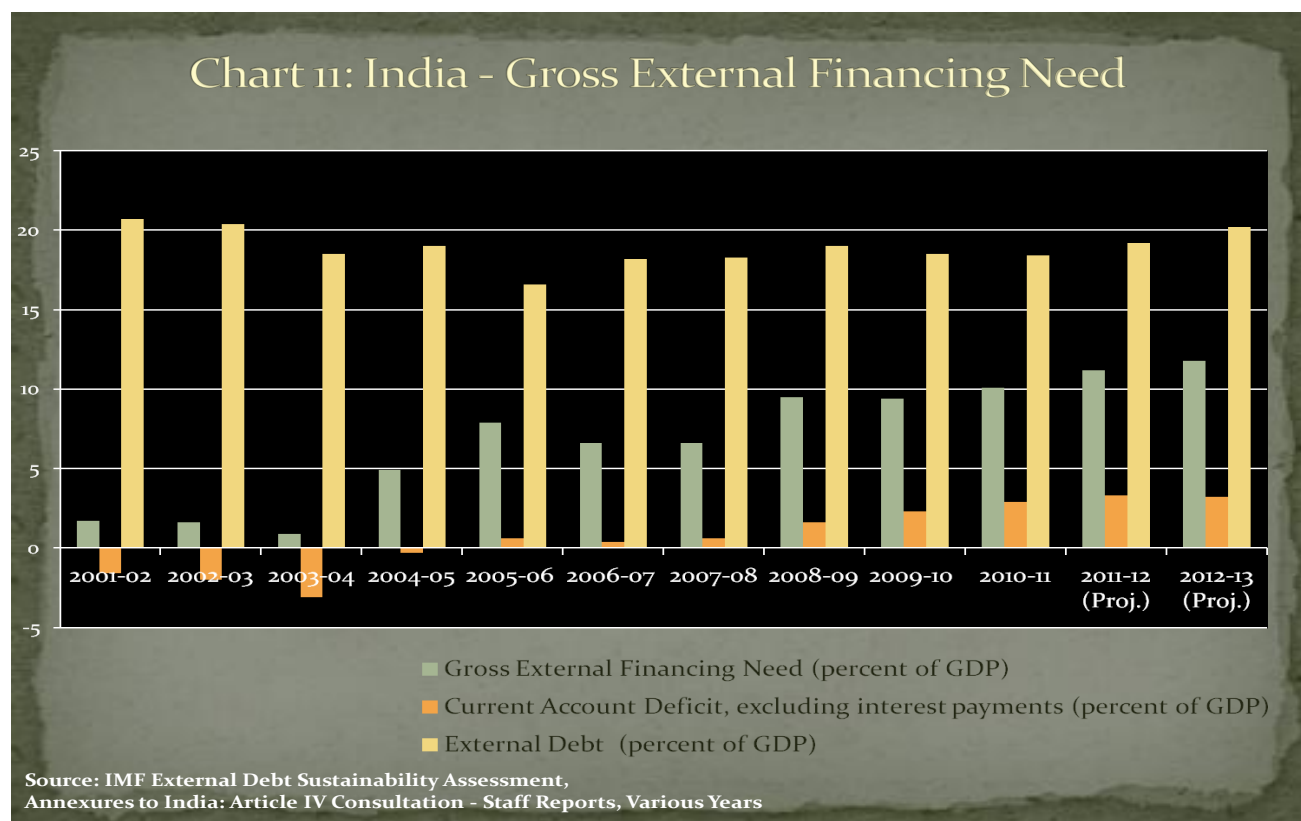
\*Data pertains to financial year 2012-13

Source: IMF External Debt Sustainability Assessments, Annexure to Article IV Consultation Reports for all countries; No Projections for China and Argentina

China's export surplus (negative current account deficit) and its foreign exchange reserves of over \$ 3 trillion provide adequate cover for its external debt and therefore, there is no external financing requirement. The *gross external financing need* (GEFN) to GDP ratio is projected to fall between 2009 and 2012 for Russia, Brazil, Argentina and Ukraine, remain at the same level for Mexico and Romania and rise for India, Turkey and Indonesia.

India's GEFN was around \$ 130 billion in 2009, 2<sup>nd</sup> highest behind Brazil. This rose to \$160 billion in 2010 and is projected to reach around \$ 225 billion in 2012, the highest among the top 10 borrowers. India's GEFN to GDP ratio is projected to rise to 11.8% in 2012, 4<sup>th</sup> highest behind Romania (30.3%), Ukraine (30%) and Turkey (24%). Indonesia is 5<sup>th</sup> at 11.3%. Romania and Ukraine had to seek IMF bailout loans in the recent past. In the backdrop of a high GEFN, Turkey has been able to reduce its CAD significantly in 2012. India's CAD on the other hand, has continued to rise, causing a steady increase in its GEFN.

India's GEFN rose from \$ 5.2 billion in 2003-04 to \$ 62.6 billion in 2006-07, to \$ 160.6 billion in 2010-11 and is projected to rise to \$224.5 in 2012-13. GEFN /GDP had fallen to 0.9% in 2003-04 in the backdrop of the current account surplus of over 3% of GDP. With the current account deficit reappearing since 2005-06, GEFN/GDP rose from 7.9% in that year to 10.1% in 2010-11 and is projected to reach 11.8% in 2012-13.



It is noteworthy that while external debt/GDP was over 20% during 2001-03, the GEFN/GDP ratio fell because of the current account surplus. What is worrisome in the trend since 2010-11 is a rise in the external debt/GDP along with a rising current account deficit. The actual GEFN/GDP in 2011-12 and 2012-13 will be higher than the IMF projections since the GDP growth rate and current account deficit/GDP assumed for making the projections were around 8% and 3%, respectively. Actual GDP growth in 2010-11 was 6.5% and current account deficit/GDP over 4%.

### Concluding Observations

In June 2012, the Indian government relaxed norms to allow Indian manufacturing and infrastructure companies to avail ECBs for repayment of outstanding rupee loans or fresh capital expenditure, with an overall ceiling of \$ 10 billion. The existing limit for FIIs inflows in government securities has also been enhanced from \$ 15 billion to \$ 20 billion. Terms have been relaxed for FIIs and QFIs inflows in infrastructure debt and NRI inflows in Infrastructure Development Funds. These measures seek to attract more debt inflows to India, taking advantage of the low interest rate regimes prevailing in the advanced countries following the recession.

The domestic credit scenario points towards certain risks. A Credit Suisse report released in August 2012 noted that the growth in advances by Indian banks has been driven by a few corporate groups. The aggregate debt of the top 10 borrowing corporate groups has increased five times between 2006-07 and 2011-12 and accounted for 13% of all bank loans in March 2012,

signifying high concentration risk.<sup>2</sup> Moreover, there has been an extraordinary rise in the volume of restructured corporate debt in recent times. Between March 2009 and March 2012, while total gross advances of the banking system grew at around 20% (CAGR), restructured standard advances grew by over 40%. As a result, the proportion of restructured advances to gross advances increased from 3.45% in March 2011 to 4.68% in March 2012.<sup>3</sup> This indicates rising stress levels in corporate debt.

In this backdrop, the measures to attract more debt inflows into the Indian economy do not seem to be a prudent strategy. These not only go against RBI's stated objective of "discouraging debt flows", but attracting additional debt inflows to finance a rising current account deficit will also enhance India's external vulnerability.

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<sup>2</sup> Credit Suisse Equity Research, "India Financial Sector: House of Debt", August 2012

<sup>3</sup> "Corporate Debt Restructuring – Issues and Way Forward", Address by Dr. K. C. Chakrabarty, Deputy Governor, Reserve Bank of India at the Corporate Debt Restructuring Conference 2012 organised by Centrum Group at Mumbai on August 11, 2012.