# Report of the Sub-Group
# on
# Inflow of Foreign Savings:
# Twelfth Five-Year Plan (2012-13 to 2016-17)

**Constituted by**
**The Planning Commission**
**Government of India**
**New Delhi**
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**Report of the Sub-Group on Inflow of Foreign Savings:**
**Twelfth Five-Year Plan (2012-13 to 2016-17)**

## Executive Summary

I. The Sub-Group on Inflow of Foreign Savings for the Twelfth Five-year Plan assessed the projections of the predecessor Sub-Group with the actual outcome of the first four years (i.e., 2007-08 to 2010-11) of the Eleventh Plan for which data are available. An assessment of the estimates of the Eleventh Plan and the actual outcomes during the first four years of the Plan reveals that the actual exports and imports as a per cent of GDP turned out to be somewhat lower than that of the projections made under the baseline scenario. This largely reflected the lagged impact of the global crisis on India's merchandise trade. Nevertheless, India's export performance in the aftermath of the crisis has been better than the world growth reflecting the diversification of export basket in terms of products and destinations as well as the pick-up in global economic activity. The average growth in imports during the first four years of the Plan, however, continued to be higher than export growth emanating largely from the improved domestic economic activity coupled with higher international commodity prices, in particular crude oil prices. This has led to higher trade deficit particularly during the last three years. The invisibles account (comprising services, transfers and income), however, showed a marked improvement with net invisibles as a per cent of GDP turning out to be higher than the projections made under the baseline scenario primarily on account of private transfers. This could partly offset the higher trade deficit and as a result the actual current account deficit (CAD) during the first four years of the Plan remained almost at the same level as that of the projections under the baseline scenario. The current account deficit as a per cent of GDP for the Eleventh Plan (first four years) stood at around 2.2 per cent of GDP) almost matching with deficit target of 2.1 per cent in the baseline scenario, but generally lower compared to the alternative scenarios. Net capital flows as a per cent of GDP during the first four years of the Eleventh Plan period overshot the baseline projections, albeit with inter-year deviation. Actual ECB flows were in line with the projections, while FDI, portfolio investments and short-term credit were higher than the projected levels under the baseline scenario. Overall, actual net capital inflows were generally at higher levels than the projections under both the baseline and the four alternate scenarios.

II. The CAD, which acts as a proxy for foreign savings, is determined by a host of domestic and external factors. The present Sub-Group has followed similar approaches in estimating foreign savings as the previous Sub-Group. First, CAD has been projected from the demand side by empirically estimating its major components such as merchandise exports and imports as well as the invisibles through a regression based approach. Second, foreign saving has been projected from the financing side by estimating the sub-components of net capital flows. The baseline projection of CAD for the Twelfth Plan is based on the assumptions of 9 per cent real GDP growth and 5 per cent inflation rate. The estimated model indicates an average CAD-GDP ratio of 3.0 per cent under the baseline scenario. This level of CAD is projected to be financed through the capital inflows during the Plan period, which works out to around 3.7 per cent of GDP.

III. As suggested by the Working Group on Savings, the present Sub-Group has worked out four alternative scenarios based on the assumptions about various combinations of growth and inflation. The assumption of growth rate has varied between 8.5-9.5 per cent and inflation in the range of 5.0-6.5 per cent. In addition to these scenarios, the Sub-Group has added two more scenarios based on 8.0 per cent GDP growth with 6.0 per cent inflation and 7.0 per cent GDP growth with 5.0 per cent inflation.

IV. The CAD is estimated to be in the range of 1.4 per cent of GDP (under the assumption of 7.0 per cent GDP growth and 5.0 per cent inflation) to 3.8 per cent of GDP (under the assumption of 9.5 per cent GDP growth and 6.5 per cent inflation) under the six alternate scenarios as compared to the baseline scenario of CAD-GDP ratio of 3.0 per cent. From the financing side, these projected levels of CAD could be financed through capital flows under the alternate scenarios, with net capital flows as a per cent of GDP moving in the range of 2.4-3.9 per cent. However, the share of non-debt creating capital flows is projected to be lower in the range of 40-45 per cent during the Plan period. Taking into account the changing composition of capital flows, the Sub-Group views a CAD-GDP ratio of over 3 per cent as unsustainable. From the perspective of external sector sustainability, the Sub-Group is of the view that CAD should be contained within 3.0 per cent of GDP so that it could be financed through normal capital flows. Moreover, the Sub-Group underscores the need to increase the share of long-term stable flows such as FDI in the total capital flows through concerted policy efforts. In sum, the Sub-Group observes that there are limits on recourse to foreign savings as a source for financing higher investment rates in the economy in view of their implications for external sector sustainability. The various scenarios of balance of payments projections are given in the Annex IV appended to the Report.

## I. INTRODUCTION

In the context of the formulation of the Twelfth Five Year Plan (2012-2017), the Planning Commission has set up a Working Group on Savings, which in turn, constituted a few Sub-Groups. One among them was the Sub-Group on Inflow of Foreign Savings. The composition of the Sub-Group and its terms of reference are as given below.

### I.1 Composition

**I.1.1** The composition of the Sub-Group (after nominations from different organizations) is as follows:

| | | |
|---|---|---|
| 1. | Shri Anil Bisen<br>Economic Adviser, Ministry of Finance, New Delhi | Convener |
| 2. | Shri S.V.S. Dixit<br>Adviser, DEPR, RBI, Mumbai | Member |
| 3. | Shri M.C. Singhi<br>Economic Adviser, DIPP | Member |
| 4. | Prof. Pradeep Agarwal<br>Institute of Economic Growth, New Delhi | Member |
| 5. | Ms. Sutapa Majumdar<br>Director, Planning Commission, New Delhi | Member |
| 6. | Shri Prabhakar Patil<br>Joint Director, SEBI, Mumbai | Member |
| 7. | Ms. Rohini Malkani<br>Chief Economist, Citibank, Mumbai | Member |
| 8. | Shri Saugata Bhattacharya<br>Chief Economist, Axis Bank, Mumbai | Member |
| 9. | Shri Samir Kumar Bhattacharyya<br>General Manager, SBI, Mumbai | Member |

**I.1.2** The Secretarial support to the Sub-Group was provided by the Division of International Trade and Finance (DITF), Department of Economic and Policy Research (DEPR), Reserve Bank of India (RBI), Mumbai. The members of the Sub-Group wish to place on record the dedication and commitment displayed by the Secretariat officials *viz.*, Shri Rajan Goyal, Director, Shri M. Ramaiah, Shri Binod B. Bhoi, Shri A.K. Jha, and Shri Gopal Prasad, Assistant Advisers, Department of Economic and Policy Research (DEPR), RBI.

## I.2 Terms of Reference

**I.2.1** Based on the discussions of the first meeting of the Working Group on Savings, the following were decided as the terms of reference of the Sub-Group:

- To estimate the likely level of current account deficit during the Plan period under various scenarios.
- To assess the level of capital flows for financing the CAD by estimating the major sub-components.
- To explain the procedures followed for estimation.

## I.3 Broad Approach

**I.3.1** The Sub-Group held two meetings on May 23, 2011 and June 24, 2011 (Annex I). In the first meeting, an approach paper prepared by the Secretariat making an assessment of the actual outcome of the 11$^{th}$ Plan period for which data are available against the projections made for the Plan and the proposed methodology for estimating foreign savings was discussed. After discussion, it was agreed that similar approaches as followed by the earlier Sub-Group (i.e., estimating the CAD from the demand side and net capital flows from the financing side) would be followed and various refinements would be tried in terms of specification of the model for estimation purposes.

After deliberations, the Sub-Group agreed on the proposed specification of the model for estimating foreign savings and suggested the following points for consideration:

- A deeper analysis of exports may be undertaken taking into account the diversification of exports in terms of products and markets in view of recent surge in export growth in the aftermath of the crisis.
- Net oil imports should also be projected as increase in oil prices not only raises the oil import bill but also the value of oil exports, which has grown significantly in the recent years.
- Possibility of including interest rate differential, global liquidity conditions, and role of administrative factors may be explored in the modeling exercise of capital flows at the disaggregated level.
- Reviewing the baseline and the four alternative scenarios given by the Working Group, the Sub-Group felt that, against the backdrop of recent global crisis, two additional scenarios: (i) GDP growth of 8 per cent with inflation of

6 per cent and (ii) GDP growth of 7 per cent with inflation 5 per cent could also be worked out.

**I.3.2** In the second meeting of the Sub-Group, the preliminary results obtained from the empirical estimation of various components of the current account were discussed. The relevant parameters and assumptions about the various explanatory variables were considered for building alternative scenarios. It was agreed that the components of the current account would be considered in real terms in the modeling exercise, while capital flows items could be modeled in nominal terms under the proposed framework. Validation of the projections obtained from the estimated models could be cross-checked with trend analysis for ensuring robustness of the projections. The final results of the estimations reported below are based on the feedback from the members during the two meetings.

## II. THEORETICAL UNDERPINNINGS

**II.1** Net current account transactions under the Balance of Payments are considered as the mirror image of the domestic saving-investment balance of the National Accounts framework. The current account of the Balance of Payments (BoP) includes all the transactions (other than those in financial items) involving exchange of economic value which take place between resident and non-resident entities. The components of the current account also include offsetting entries to current economic values provided or acquired without a *quid pro quo, e.g.,* private transfers. Therefore, current account transactions are broadly classified as goods, services, income, and current transfers. Developing countries strive to finance the predominant portion of domestic investment with domestic savings. Gaps between domestic savings and investment are financed by foreign savings, while simultaneously ensuring current account sustainability. The linkage between key aggregates of national accounts and BoP flows can be expressed within a savings-investment framework in terms of a set of identities as detailed below:

GDP = C + G + I + $X–M$ (where $X–M$ = balance on goods and services in the BoP)
CAB = $X – M + NY + NCT$
GNDY = C + G + I + $CAB$
GNDY – C – G = S
S = I + $CAB$

S – I = *CAB (current account balance is the gap between saving and investment)*
S – I + NKT – NPNNA = *CAB + NKT–NPNNA* = NFI
(*NKT – NPNNA* = balance on the capital account of the BoP)

Where, C = private consumption expenditure, G = government consumption expenditure, I = gross domestic investment, S = gross domestic saving, X = exports of goods and services, M = imports of goods and services, NY = net income from abroad, GDP = gross domestic product, GNDY = gross national disposable income, CAB = current account balance in the BoP, NCT = net current transfers, NKT = net capital transfers, NPNNA = net purchases of non-produced, non-financial assets and NFI = net foreign investment or net lending/net borrowing *vis-à-vis* the rest of the world.

**II.2** The basic principle followed in the compilation of the BoP is the use of the internationally accepted convention of double-entry recording system. The principle of double-entry book keeping used in balance of payments implies that the sum of all international transactions – current, capital and financial, including reserve assets - is in principle equal to zero. However, since data for balance of payments are often derived independently from different sources, implementation of the double-entry recording system is not perfect. As a result, typically, there are net credits or net debits (i.e., net errors and omissions in the accounts). Assuming no errors or omissions, the balance of payments identity would signify that current account balance is necessarily equal (with sign reversed) to the net capital and financial account balance plus reserve asset transactions.

CAB = NKA+RT

NKA = net capital and financial account (i.e., all capital and financial transactions excluding reserve assets), and RT = reserve asset transactions.

**II.3** According to the System of National Accounts (SNA), conceptually, the rest of the world account is the same as the balance of payments and has the same sub-accounts, but its sub-accounts are aggregated differently for different purposes. The rest of the world account identifies:

a) Deficit or surplus with the rest of the world in trade in goods and services, current transactions and net lending (+) or net borrowing (-);

b) Capital and financial transactions with the rest of the world;

c) The international investment position, i.e., the holding of financial assets and liabilities vis-à-vis the rest of the world, essentially debt.

**II.4** The linkage between National Accounts and BOP are presented in the flow chart.

**Linkage between Balance of Payments and National Accounts**

| **National Accounts** | | **Balance of Payments** | |
|---|---|---|---|
| ***Goods and services*** | | ***Current account*** | |
| **Gross domestic product (GDP)** | **1700** | | |
| = Government final consumption expenditure (G) | 400 | | |
| + Non-government final consumption expenditure (C) | 800 | | |
| + Gross capital formation (I) | 400 | Goods and services | |
| + Exports of goods and services (X) | 500 | Credit (export) | 500 |
| – Imports of goods and services (M) | 400 | Debit (import) | - 400 |
| | | **Total** | **100** |
| ***Current and capital accounts*** | | | |
| | | + Income | |
| **GDP** | **1700** | Credit | 100 |
| + Net income from abroad | 50 | Debit | -50 |
| | | **Total** | **50** |
| + Net current transfers from abroad | 150 | + Current transfers | |
| | | Credit | 300 |
| **= Gross National Income** | **1900** | Debit | -150 |
| – Final Private consumption expend | 1200 | **Total** | **150** |
| **= Gross Savings** | **700** | = Balance on current account (CAB) | 300 |
| + Net capital transfers received from Abroad | 5 | ***Capital account*** Credit | 5 |
| | | Debit | -15 |
| – Net acquisition of non-produced, non-financial assets | -15 | **Total** | **-10** |
| – Gross capital formation | 400 | ***Financial account*** | |
| **= Net lending (+)/Net borrowing(-)** | **290** | Assets | 400 |
| | | Liabilities | 110 |
| ***Financial account*** | | **Total** | **290** |
| Net acquisition of financial assets less net incurrence of liabilities | 290 | | |

**II.5** In the Indian context, the BoP compilation is generally in accordance with international best practices. However it does not have a separate financial account, which is instead subsumed in the capital account. The IIP, too, is compiled along the

lines of international best practices. There is a broad correspondence between the BoP and IIP numbers.

**II.6** In the light of the above theoretical framework, in the case of India the estimates of CAD can be worked out based on two approaches:

**II.6.1** First, setting the required rate of investment and savings and treating current account deficit (i.e., foreign savings) as a residual component. Under a planned development approach, the target growth rate is fixed. Based on the target growth rate, with given incremental capital-output ratio (ICOR), the required rate of investment can be worked out. After determining the required rate of investment and the targeted mobilization of gross domestic savings, the resultant gap is attempted to be financed through the foreign savings. In the Indian context, historically these savings have been mobilized mainly through official debt flows, while more recently they have been dominated by private capital flows.

**II.6.2** Second, in an increasingly open economy framework, measuring the sustainable capital flows that an economy can attract for financing the current account deficit assumes importance. Accordingly, another approach could be to examine the trends in capital flows, since these represent the financing items of the CAD and mirror the foreign savings. This approach depends heavily on the presumption of autonomous nature of capital inflows for financing the CAD. However, within the conceptual framework of sustained autonomous capital flows to finance a given level of current account deficit, a distinction needs to be made between the short-term or volatile flows and the flows that are long-term and more stable.

**II.7** After an assessment of the baseline scenario with the actual outcomes of foreign savings for the first four years of the 11$^{th}$ Plan period for which data are available, the present Sub-group proposed to follow the same approaches for projecting foreign savings for the 12$^{th}$ Plan as followed by the Sub-Group for the 11$^{th}$ Plan. Accordingly, the present Sub-Group has followed a model-based approach to estimate foreign savings from the demand side by estimating the CAD and from the financing side by estimating the net capital flows. However, in order to

take into account the recent developments on the external front, especially in the aftermath of the global financial crisis, few changes have been introduced in the modeling exercise and some issues have been raised in the context of external sector sustainability.

## III. AN ASSESSMENT OF 11TH PLAN PROJECTIONS OF FOREIGN SAVINGS

**III.1** Until the 10th Plan, the domestic savings was largely adequate to meet the investment demand which, in turn, led to lower reliance on foreign savings barring the Second and Seventh Plans. However, with increasing integration of the Indian economy with the global economy coterminous with the rapid growth of the Indian economy led by higher investment demand *vis-à-vis* relatively lower domestic savings, there was a widening of current account deficit. There was some moderation in both domestic saving and investment during 2008-09 as an offshoot of global financial crisis with moderation being higher in the former than the latter with reduced domestic growth, which led to higher current account deficit. From the Balance of Payments (BoP) perspective, although exports have become resilient with increasing diversification in terms of products and destinations along with the thrusts of Government's trade policy, the domestic growth momentum has warranted relatively larger imports with increasing capacity of the economy leading to higher current account deficit during the first four years of the 11th Plan period. From the financing side, although capital inflows were adequate to finance the CAD, the composition of capital flows became a cause of some concern as volatile flows were higher than the stable flows such as FDI.

### III.2 Trends in Foreign Savings during Different Plan Periods

**III.2.1** A review of the evolution of foreign savings during successive Plan periods suggests that a CAD of more than 2 per cent of GDP was recorded only during the Second, Seventh and Eleventh (average of first four years) Plan periods (Table 1). A historical review of CAD in India reveals that expansion in economic activity, particularly during the Second, Third, Sixth, Seventh and first four years of Eleventh Plan was associated with higher financing through external sources which was reflected in larger CAD-GDP ratio. The CAD secularly narrowed down after

the Seventh Plan and turned into a surplus during the Tenth Plan. Lower recourse to external sources of financing was due mainly to the stagnation in investment rates. The developments during the Tenth Plan were distinct from those of the preceding Plans. During the Tenth Plan, despite a significant acceleration in domestic investment and growth rates, current account surpluses were recorded, implying outflow of savings. This phenomenon can be partly explained by acceleration in the rate of domestic savings, which rose from 23.3 per cent in the 9th Plan to 31.3 per cent during the 10th Plan aided by a turnaround in the public sector savings. Domestic savings further increased to 34.3 per cent during the first three years of the 11th Plan.

**Table 1: Gross Domestic Savings, Capital Formation and Current Account Deficits (Per cent to GDP)**

| ***Plan Period*** | ***Gross Domestic Savings**** | ***Gross Domestic Capital Formation**** | ***Saving - Investment Gap*** | ***Current Account Deficit***** |
|---|---|---|---|---|
| (1) | (2) | (3) | (4) | (5) |
| First Plan (1951-56) | 9.9 | 10.3 | -0.4 | -0.1 |
| Second Plan (1956-61) | 11.7 | 14.5 | -2.8 | -2.3 |
| Third Plan (1961-66) | 13.0 | 15.4 | -2.4 | -1.7 |
| Annual Plans (1966-69) | 13.7 | 15.9 | -2.2 | -2.0 |
| Fourth Plan (1969-74) | 16.1 | 16.9 | -0.8 | -0.3 |
| Fifth Plan (1974-79) | 20.4 | 19.9 | 0.5 | 0.1 |
| Annual Plan (1979-80) | 21.6 | 22.1 | -0.5 | -0.5 |
| Sixth Plan (1980-85) | 19.4 | 20.9 | -1.5 | -1.5 |
| Seventh Plan (1985-90) | 20.8 | 23.1 | -2.3 | -2.2 |
| Annual Plans (1990-92) | 23.5 | 25.5 | -2.0 | -1.7 |
| Eighth Plan (1992-97) | 23.9 | 25.3 | -1.4 | -1.2 |
| Ninth Plan (1997-02) | 23.3 | 24.1 | -0.8 | -0.8 |
| Tenth Plan (2002-07) | 31.3 | 31.2 | 0.1 | 0.2 |
| Eleventh Plan *(2007-2012)**** | *34.3* | *36.4* | -2.1 | *-2.2* |
| *2007-08* | *36.9* | *38.1* | -1.2 | *-1.3* |
| *2008-09* | *32.2* | *34.5* | -2.3 | *-2.3* |
| *2009-10* | *33.7* | *36.5* | -2.8 | *-2.8* |
| *2010-11* | - | - | - | *-2.6* |

* Based on National Account Statistics.
** Based on Balance of Payments data. *** Refers to only the first four years of the Plan.
**Source**: Central Statistical Organization & Handbook of Statistics on Indian Economy, Reserve Bank of India.

### III.3 Developments during the Tenth and Eleventh Plans

**III.3.1** A comparison of major components of the current account during the Tenth Plan period (2002-2007) reveals a marked shift in the structure of the CAD and its components. Both exports and imports witnessed substantial increase during the Tenth Plan period with annual average growths of 23.6 per cent and 28.2 per cent, respectively resulting in wider trade deficit at 4.4 per cent of GDP as compared to 3.2 per cent during the Ninth Plan period. A consistent increase in invisible receipts enabled financing of higher trade deficit during the Tenth Plan (Table 2). On an average, the current account recorded a surplus of 0.2 per cent of GDP during the 10th Plan period. The trends in the 11th Plan period so far (2007-08 to 2010-11) indicate that the CAD remained moderate in the initial year due to both higher savings and investment. The CAD, however, turned out to be higher in 2008-09 as there was moderation in savings and investment, while being sharper in the former than the latter as an offshoot of global financial crisis which resulted in subdued growth of the economy. The widening of CAD during 2009-10 was led by investment demand as there was a pick-up in economic activity.

**Table 2: Current Account Balance and Capital Inflows During Tenth and Eleventh Plans**
(Annual average for the Plan Period)

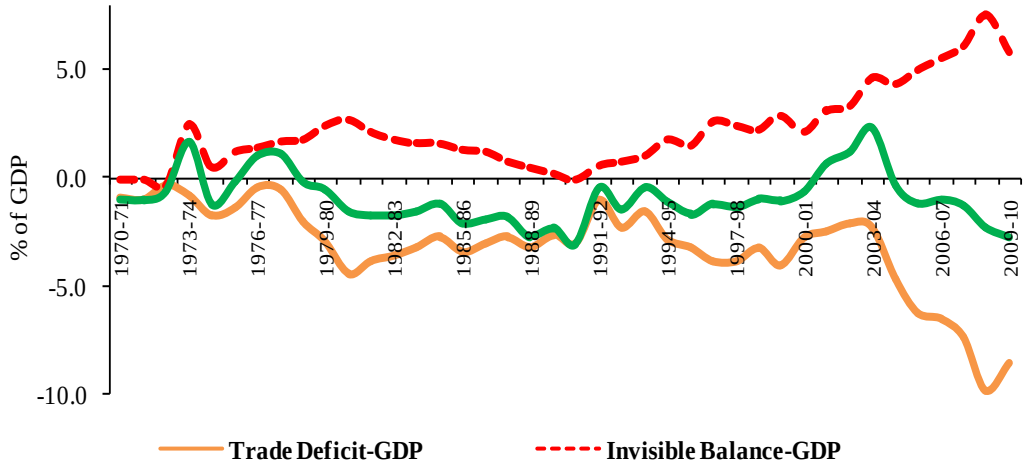
| ***Items*** | ***Tenth Plan (2002-03 to 2006-07)*** | ***Eleventh Plan (2007-08 to 2010-11)**** |
|---|---|---|
| (1) | (2) | (3) |
| Imports growth (%)# | 28.2<br>(16.3) | 19.8<br>(22.5) |
| Exports growth (%)# | 23.6<br>(11.9) | 19.1<br>(14.2) |
| Trade deficit (% to GDP) | -4.4 | -8.3 |
| Invisibles Surplus (% to GDP) | 4.6 | 6.1 |
| **Current Account Balance (% to GDP)** | **0.2** | **-2.2** |
| **Net Capital Inflows (US $ billion)** | | |
| FDI | 4.0 | 15.4 |
| NRI Deposits | 2.6 | 2.7 |
| External Commercial Borrowings | 3.8 | 11.1 |
| Portfolio Inflows | 8.2 | 19.0 |
| **Total capital flows (net)** | **25.3** | **56.6** |
| **Reserves Accretion** | **25.2** | **24.6** |

* : Covers only first four years of the Plan Period.
# : Figures in parentheses are as per cent to GDP.

## III.4 Main trends in External Current Account Transactions

**III.4.1** The trade deficit widened considerably over the years particularly in the post-liberalisation period reflecting growing economic activity as also growing integration of Indian economy with global economy. The positive spin-off from this process was rise in the net invisibles balance, broadly facilitated by exports of software and other business services and buoyant inflows of remittances from the migrant Indian workers, which offset the widened trade deficit thereby maintaining a sustainable level of current account deficit. The current account turned surplus during 2001-02 to 2003-04 as net invisibles balance outweighed the trade deficit. Invisibles receipts and payments had witnessed deceleration in growth during 2008-09 and 2009-10 mainly on account of decline in business, financial and communication services and investment income receipts (Chart 1).

**Chart 1: Current Account Balances in India**




### *III.4.2 Exports*

***III.4.2.1*** India's exports have grown at a higher rate than the world exports since 2002 onwards reflecting the resilience of India's exports emanating from the strategy of India's trade policy to mitigate the adverse effects of global shocks by diversifying trade in terms of commodities as well as destinations. While the share of OPEC and developing countries improved over the years, the share of OECD countries has been

declining gradually since 1990-91. In terms of products, the share of engineering goods and petroleum products improved considerably while the share of labour intensive goods declined (Chart 2 and 3). There was a decline in India's exports as well as the World in 2009 resulting from global financial crisis. However, the coordinated policies pursued by Governments and central banks to minimise the adverse impact of the crisis led to revival in world growth. Subsequently, the recovery in India's exports was sharper than the growth in world exports.

**Chart 2: Percentage Shares in India's Exports**

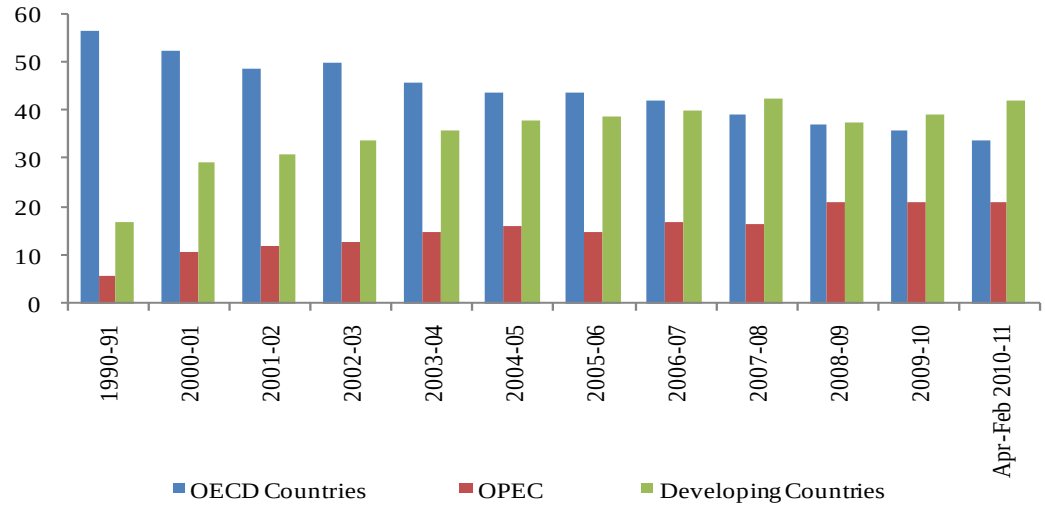
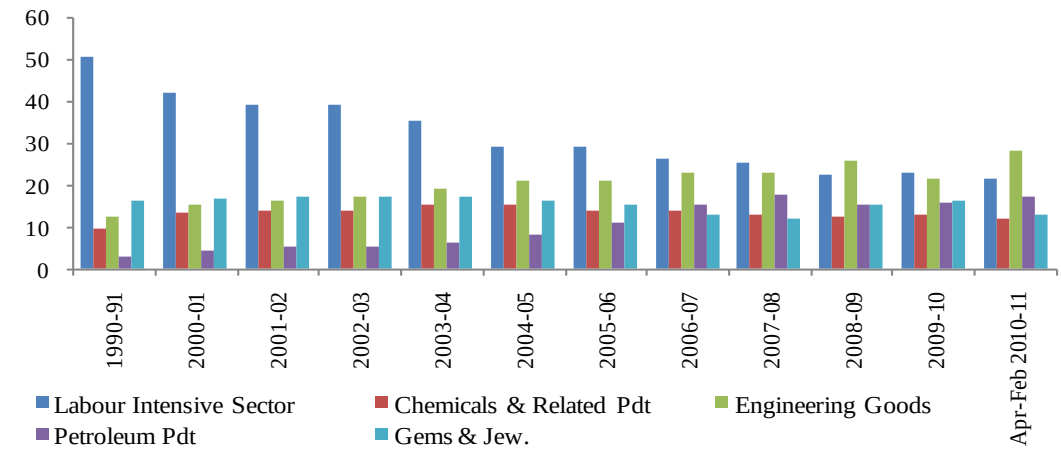
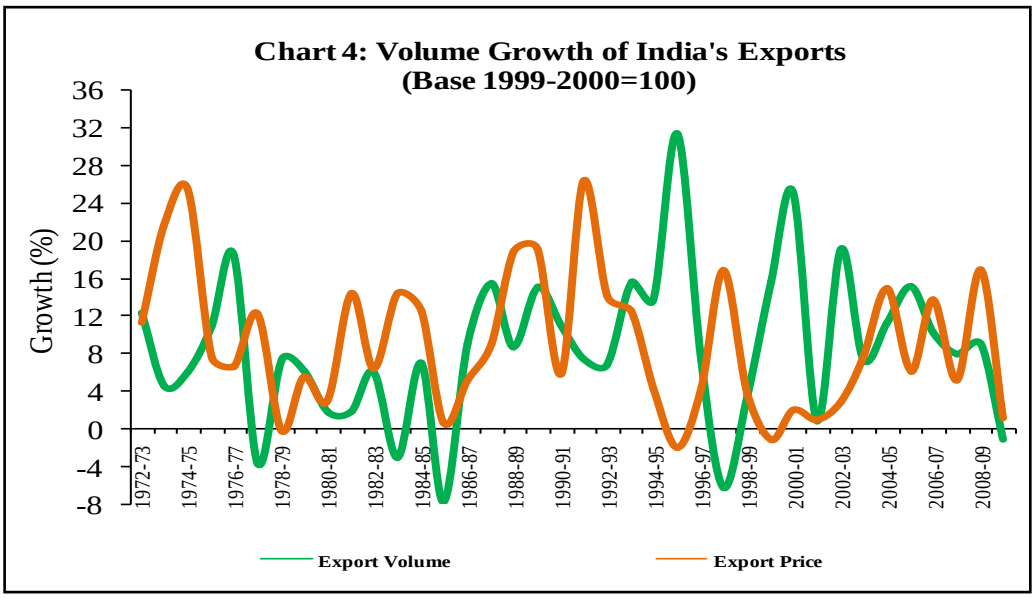



**Chart 3: Percentage Shares in India's Exports**



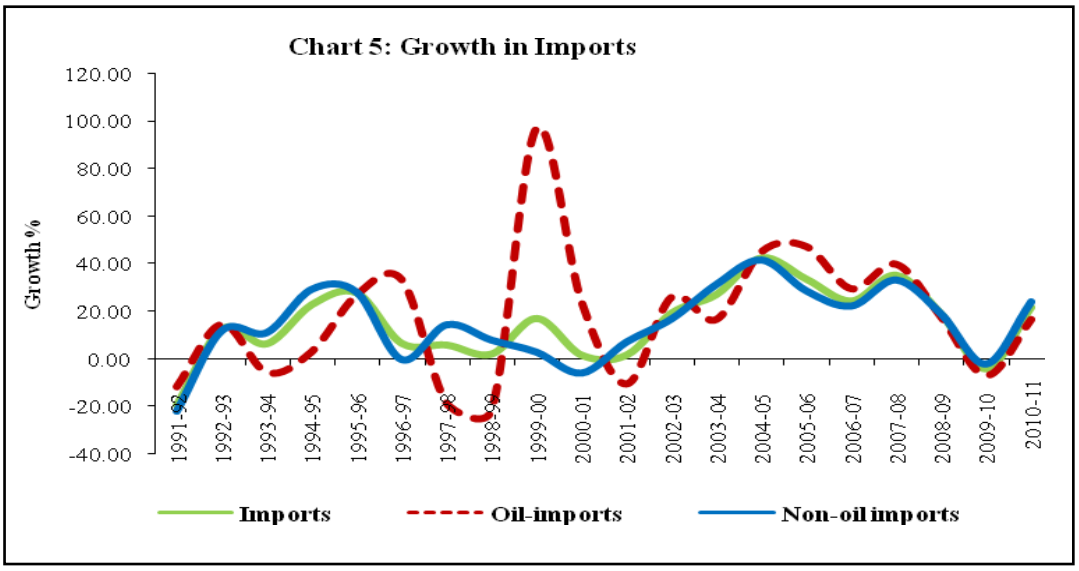

**III.4.2.2** The trends in export volume, measured as Quantum Index of Exports, during the last three decades indicate an annual average growth of about 8 per cent. The average underlying growth rate of export prices in terms of Unit Value Index

(UVI) of exports has been about 9 per cent during the same period. Quantum export during the Tenth Plan period moderated as compared to Ninth Plan period, however, export prices (UVI) during the Tenth Plan witnessed substantial increase over the Ninth Plan indicating higher value addition in exports. During the first three years of Eleventh Plan period both quantum index as well as value index, on an average basis, witnessed growths of 5.3 per cent 7.7 per cent, respectively, indicating continued value addition during the period (Chart 4).

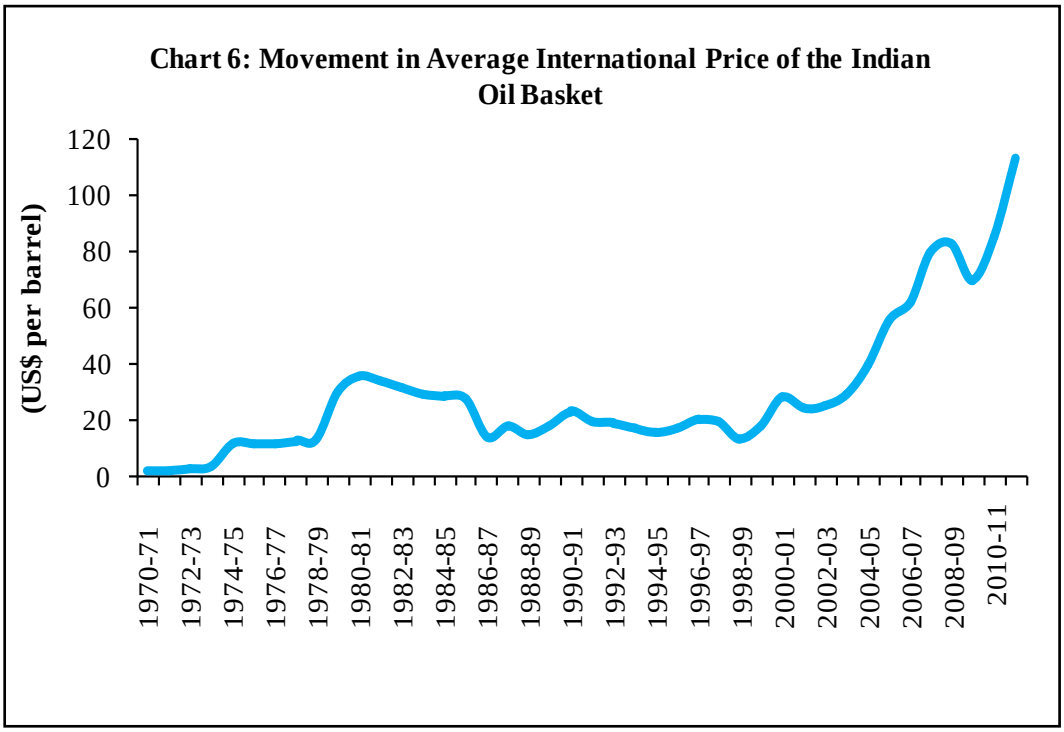



### *III.4.3 Imports*

**III.4.3.1** Overall imports during the Tenth Plan period witnessed an annual average growth of around 29 per cent mainly driven by high growth in oil imports. Within the imports, while non-oil imports mainly signify the demand for capital and intermediate goods, oil imports represented the demand for POL products. The average growth in non-oil imports during the Tenth Plan which was around 27 per cent, moderated to 21 per cent during the first four years of Eleventh Plan mainly due to deceleration in capital goods and oil imports (Chart 5). On account of pick-up in industrial production, non-oil imports have increased significantly since 2000-01 until the emergence of the global crisis. Subsequently, the growth momentum in these segments moderated during the first four years of Eleventh Plan period due to sharp decline in global trade resulting from the impact of global financial crisis.




**III.4.3.2** The share of oil imports in total imports rose from 27.6 per cent in 2005-06 to 29.8 per cent during 2009-10. While the share and absolute value of these imports showed sharp fluctuations over the years, mainly on account of the large variations in international crude prices, the volume of such imports has grown significantly due to increase in domestic consumption and the stagnation in domestic crude oil production. The international oil price of the Indian basket, which averaged around US$ 85 per barrel during 2011-12, rose to an average of US$ 113 per barrel during the first quarter of 2011-12 (Chart 6).



**III.4.3.3** The volatility in the price of Indian basket of crude oil has a direct bearing on the value of imports as well as the current account deficit. The substantial increase in the average price of Indian basket has led to a concomitant rise in the current account deficit in the respective years. Oil imports constitute nearly one third of total imports and accounts for almost half of the trade deficits (Table 3).

**Table 3: Export and Import of Crude Oil Products**

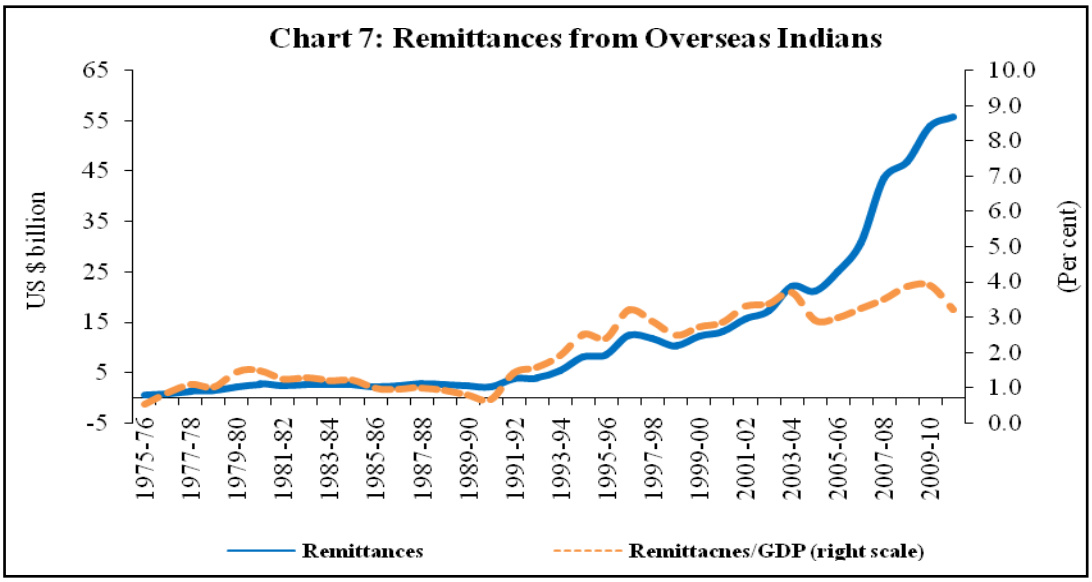
**(US$ billion)**

| Year | Exports | Imports | Average Prices of Indian Basket Crude Oil (US$ per barrel) | CAD# |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 2001-02 | 2.1 | 14.0 | 22.5 | -3.4 |
| 2002-03 | 2.6 | 17.6 | 26.7 | -6.3 |
| 2003-04 | 3.6 | 20.6 | 28.0 | -14.1 |
| 2004-05 | 7.0 | 29.8 | 39.2 | 2.5 |
| 2005-06 | 11.6 | 44.0 | 55.7 | 9.9 |
| 2006-07 | 18.6 | 56.9 | 62.5 | 9.6 |
| 2007-08 | 28.4 | 79.6 | 79.3 | 15.7 |
| 2008-09 | 27.5 | 93.7 | 83.6 | 27.9 |
| 2009-10 | 28.0 | 87.1 | 69.8 | 38.4 |
| 2010-11 | 42.5 | 101.6 | 85.1 | 44.3 |

**Source**: Directorate General of Commercial Intelligence and Statistics (DGCI&S).
# : Negative numbers in column 5 (CAD) indicate surplus.

### *III.4.4 Invisibles*

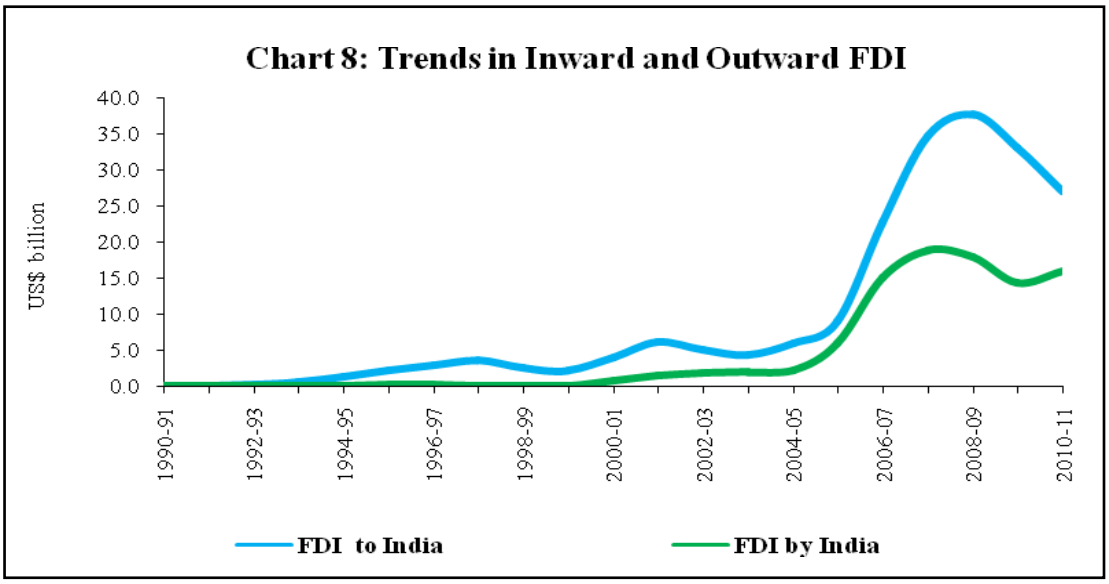
**III.4.4.1** Over the years, invisibles receipts have grown substantially mainly on account of steady growth in software exports, travel receipts and remittances. Private transfers (remittances from overseas Indians) have emerged as a stable source of financing current account deficit, hovering around 4 per cent of GDP (Chart 7). Services imports have also gone up due to growing import of management consultancy and technology related services.




## III.5 Main trends in Capital Account Transactions

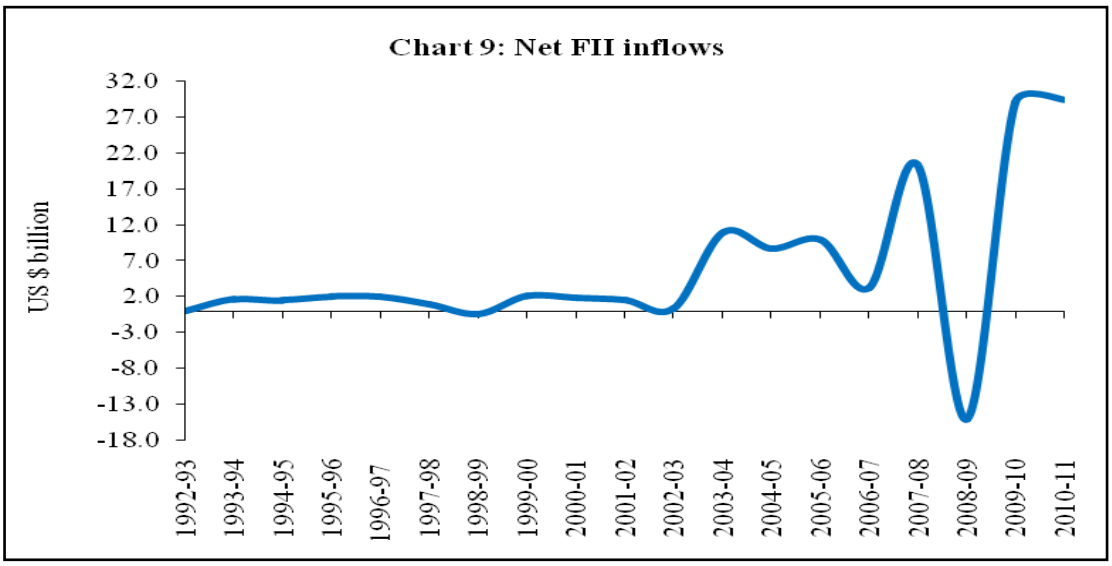
### *III.5.1 FDI*

**III.5.1.1** With the gradual liberalisation of the capital account, the share of net FDI into India as a proportion to GDP has gone up from 0.2 per cent in 1993-94 to 1.0 per cent in 2005-06 and further to 1.4 per cent during 2009-10. Simultaneously, there has been a substantial rise in the outward FDI by Indian companies due to liberalisation of outward investment flows. This has led to pick-up in outward FDI since 2006-07. There was, however, some moderation in both inward and outward FDI as per cent to GDP during 2009-10 and 2010-11 partly due to the base effect reflecting higher level of GDP and partly on account of uncertainties surrounding the global financial crisis (Chart 8).




### *III.5.2 Portfolio Flows*

**III.5.2.1** Net FIIs inflows have increased in line with improved economic performance since the early 2000s. Net FIIs inflows increased to US$33.1 billion in Tenth Plan period as compared to US$6.1 billion during the Ninth Plan period. With regard to the Eleventh Plan, the year 2008-09 could be treated as an outlier as it was a crisis year witnessing net outflows. Excluding 2008-09, the average net FII inflows during Eleventh Plan worked out to over US $ 26 billion (Chart 9). It may also be noted that the increase in the limit of FII investments in debt securities covering Government and corporate debt to US $ 50 billion in March 2011 is likely have a positive impact on FII flows.



### III.6 Assessment of Actual Outcome vis-à-vis Projections for the Eleventh Plan

**III.6.1** An assessment of the estimates of the Eleventh Plan and the actual outcomes during the first four years of the Plan reveals that the actual exports and imports as a per cent of GDP turned out to be somewhat lower than that of the projections made under the baseline scenario. This largely reflected the lagged impact of the global crisis on India's merchandise trade. Nevertheless, India's export performance in the aftermath of the crisis has been better than the world growth reflecting the diversification of export basket in terms of products and destinations as well as the pick-up in global economic activity. The average growth in imports during the first four years of the Plan, however, continued to be higher than export growth emanating largely from the improved domestic economic activity coupled with higher international commodity prices, in particular crude oil prices. This has led to higher trade deficit particularly during the last three years. The improvement in net invisibles (as a per cent of GDP) worked out to be more than the projections made under the baseline scenario primarily on account of improvement in private transfers. This has enabled in offsetting partly the higher trade deficit as a result the actual CAD during the first four years remained almost at the same level as that of the projections under baseline scenario (Table 4).

**Table 4: Current Account Balance for the Eleventh Plan : Projections and Actual (Annual averages for the Plan Period)**

| | ***Projections*** | | | | | ***Actual*** |
|---|---|---|---|---|---|---|
| ***Items*** | ***Baseline*** | ***Scenario I*** | ***Scenario II*** | ***Scenario III*** | ***cenario IV*** | ***Average (2007-08 to 2010-11)*** |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| *Real GDP Growth Rate (%)* | *8.0* | *7.0* | *8.5* | *9.0* | *8.0* | *8.2* |
| *Average (WPI) Inflation Rate (%)* | *5.0* | *5.0* | *5.0* | *5.0* | *5.0* | *6.5* |
| *Crude Prices, Indian Basket (US$/Barrel* | *72.5* | *72.5* | *72.5* | *72.5* | *80.0* | 79.4 |
| ***As Per cent to GDP*** | | | | | | |
| Exports | 15.3 | 15.7 | 15.1 | 14.9 | 15.3 | 14.2 |
| Imports | 22.9 | 23.1 | 22.9 | 23.5 | 23.2 | 22.5 |
| Oil Import | 5.2 | 5.3 | 5.1 | 5.1 | 5.5 | 6.6 |
| Non-oil Import | 17.7 | 17.8 | 17.8 | 18.4 | 17.7 | 15.9 |
| Trade Balance | -7.5 | -7.3 | -7.8 | -8.4 | -7.9 | -8.3 |
| Invisible Balance | 5.4 | 5.9 | 5.4 | 5.2 | 5.4 | 6.1 |
| *of which : Pvt. Transfers* | 2.9 | 3.0 | 3.0 | 3.0 | 3.0 | 3.6 |
| *Services* | 3.5 | 3.8 | 3.4 | 3.3 | 3.4 | 3.2 |
| *Investment Income* | -0.9 | -0.9 | -0.9 | -0.9 | -0.9 | -0.6 |
| **Current Account Balance** | **-2.1** | **-1.4** | **-2.4** | **-3.2** | **-2.5** | **-2.2** |

**III.6.2** The net capital flows were higher by almost one per cent of GDP than the baseline projection. This was mainly contributed by higher FDI, portfolio investments and short-term credit. However, there was some moderation in NRI deposits. At the aggregate level capital flows were higher than the baseline scenario, although portfolio investments were characterized by significant year to year volatility (Table 5).

**Table 5: Net Capital Flows for the Eleventh Plan : Projections and Actuals (Annual averages for the Plan Period)**

| | ***Projections*** | | | | | ***Actuals*** |
|---|---|---|---|---|---|---|
| ***Items*** | ***Baseline*** | ***Scenario I*** | ***Scenario II*** | ***Scenario III*** | ***Scenario IV*** | ***Actuals (2007-08 to 2010-11*** |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| *Real GDP Growth Rate (%)* | *8.0* | *7.0* | *8.5* | *9.0* | *8.0* | *8.2* |
| *Average (WPI) Inflation Rate (%)* | *5.0* | *5.0* | *5.0* | *5.0* | *5.0* | *6.5* |
| ***As per cent to GDP*** | | | | | | |
| FDI, net | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 1.2 |
| NRI deposits | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.2 |
| ECBs | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| *of which: Disbursement* | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| *Repayment* | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Portfolio Investments | 0.6 | 0.5 | 0.7 | 0.8 | 0.6 | 1.3 |
| External Assistance, net | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| Banking Capital excluding NRI deposits | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 |
| Short Term Credit, net | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.6 |
| **Net Capital Flows** | **3.2** | **3.1** | **3.4** | **3.5** | **3.2** | **4.1** |
| *Memo:* | | | | | | |
| **Stable Flows*** | **2.4** | **2.4** | **2.5** | **2.5** | **2.4** | **2.2** |

***:** Stable flows are defined to represent all capital flows excluding portfolio flows and short-term trade credits.

## SECTION IV: APPROACH TO ESTIMATE FOREIGN SAVINGS DURING 12th PLAN

**IV.1** Taking into account the growing integration of the Indian economy with the rest of the world, the estimates of CAD can be determined by a host of external and domestic factors, financial variables and policy instruments. The task could be addressed broadly through two approaches. First, CAD could be projected by empirically estimating its major components such as merchandise exports and imports as well as the invisibles through a regression based approach. Second, it can be

estimated by projecting the sub-components of net capital flows that an economy can attract to finance the current account deficits.

### IV.1 (a). Regression-based Approach

***Exports***

Beginning with the trade account, merchandise exports are postulated to be determined by world demand conditions (represented by world GDP), domestic export prices and competitiveness of exports represented by the movement in real effective exchange rate (REER).

*Exports= f (World GDP, REER)*

***Imports***

Import demand can be estimated separately for oil and non-oil components. Non-oil import is expected to be determined by domestic economic activity (proxied by real GDP) and relative attractiveness of imports due to relative movement in exchange rate and prices. The latter is captured by the movement in REER.

*Non-oil Imports = f (domestic GDP, REER)*

*Net Oil Imports = f (domestic GDP, crude oil prices)*

***Invisibles***

***Private Transfers*** reflect the income receipts from Indians staying abroad and are mainly in the form inward remittances for family maintenance and local withdrawals from rupee denominated NRI deposits. Private transfers could be estimated as:

*Net Pvt. Transfers = f (World GDP, growth differential, trend)*

***Services exports*** (receipts) could be expected to be determined by growth in world GDP as well as movement in exchange rates. On the other hand, s*ervices imports* (i.e., payments) could be determined by domestic economic activities (i.e., domestic GDP) and relative movement in exchange rate.

*Services Receipts = f (World GDP, REER)*

*Services Payments = f (Domestic GDP, REER)*

***Investment income receipts*** depend on a host of factors such as level of foreign currency assets (FCA) of RBI, rate of interest, dividends/ profits received by Indians on foreign investment and reinvested earnings of Indian FDI companies abroad. As the interest and discount earned on FCA is the major part, investment income receipts can be assumed to be determined by the level of FCA and interest rates prevailing abroad (proxied by the yield on medium term US Government bonds).

*Investment Income Receipts = f (FCA, interest rate on US Govt. bond)*

***Investment income payments*** represent the servicing of capital account transactions (both debt and non-debt) in the form of interest, profits and dividend payments. Therefore, investment income payments could be influenced by both debt and non-debt liabilities. Payments related to debt liabilities can be assumed to be determined by the LIBOR and those related to non-debt liabilities would relate to growth rate of the domestic economy.

*Investment Income Payments = f (external debt, domestic GDP growth)*

From the above behavioural equations the net *invisibles*, can be calculated as:
*Invisibles (net) = Net Pvt Transfers + [Services Receipts - Services Payments] + [Investment Income Receipts - Investment Income Payments]*

Again, the current account balance is obtained through the following transformations:
*CAB = (X-M) + Invisibles (net)*

## IV.1 (b). Financing Approach

As noted earlier, the level of CAD that can be sustained over the medium term can be worked out from estimating the likely behavior of various debt and non-debt components of capital flows. The size of major components of capital flows e.g foreign direct investment, external commercial borrowing and NRI deposits can be empirically estimated as follows.

### *Foreign Direct Investment (FDI)*

FDI inflows to India could be driven by a range of factors including openness of the economy, growth differential, international investment position, gross fiscal

deficit, exchange rate and some proxy indicator of ease of doing business. FDI outflows could be assumed to be related to the degree of openness of the economy (i.e., ratio of current and capital account transactions to GDP) and its own lag which reflect the clustering effects.

*Inward FDI = f (Growth differential, IIP/GDP, GFD/GDP, exchange rate, time taken to start a business in India)*

*Outward FDI = f (Openness, Lagged outward FDI)*

***FII Flows***

As the FII flows are highly volatile and are also driven by market sentiments, it is difficult to capture their movements through a structural equation. Therefore, it is proposed to project FII flows through trend analysis.

***NRI Deposits***

Non-resident deposits depend upon the income of the host countries. As the Indian diaspora is diversifying into high skilled jobs and increasingly migrating to advanced economies, the growth in world income could be a significant determinant. Besides, the impact of income in Gulf countries could also be significant as a sizable proportion of NRI deposits originate from this region.

*NRI Deposits = f (Interest rate differential, world GDP, exchange rate)*

***External Commercial Borrowings (ECBs)***

Inflows under ECBs are expected to be determined by both demand and supply side factors, apart from the considerations of cost effectiveness. Accordingly, ECBs could be assumed to be determined by domestic demand (proxied by imports or non-food credit), global liquidity conditions (proxied by money supply growth in advanced economies or money market spread in international financial markets) and interest rate differential.

*ECB Inward = f (Imports, interest rate differential)*

***Other Components of Capital Flows***

Other components of capital flows *viz.*, external assistance, ADRs/GDRs, outflows under ECBs, short-term trade credit could be estimated based on their past trends.

The estimated equations are at Annex II.

## SECTION V: EMPIRICAL ESTIMATION OF FOREIGN SAVINGS FOR THE 12th PLAN

**V.1** The Current Account Deficit (CAD) has been projected from the demand side by empirically estimating its major components such as merchandise exports and imports as well as the invisibles through a regression based approach. From the financing side, foreign saving has been projected by estimating the sub-components of net capital flows. The baseline projection of CAD for the Twelfth Plan is based on the assumptions of 9 per cent real GDP growth and 5 per cent inflation rate. The estimated model indicates an average CAD-GDP ratio of 3.0 per cent under the baseline scenario (Table 6). This is based on the assumed level of international crude oil prices at US$ 110 per barrel. The detailed assumptions underlying the projections are set out at Annex III.

**Table 6: Projections of Current Account Balance for the 12th Plan - Baseline Scenario**
*(Assumptions: GDP growth 9.0 per cent and Inflation 5.0 per cent)*
*(Annual averages for the Plan Period)*

| **Items** | **US$ billion** | **Per cent to GDP** |
|---|---|---|
| 1. Non-oil Exports | 490 | 15.7 |
| 2. Non-oil Imports | 653 | 20.9 |
| 3. Net oil Imports | 110 | 3.6 |
| **A. Trade Balance (1-2-3)** | -272 | -8.9 |
| **B. Net Invisibles (4+5+6)** | 181 | 5.9 |
| 4. Services | 79 | 2.6 |
| 5. Transfers | 112 | 3.6 |
| 6. Income | -10 | -0.4 |
| **Current Account Balance (A+B)** | **-91** | **-3.0** |

**V.2** Based on different combinations of growth and inflation, the CAD is estimated to be in the range of 1.4 per cent (under the assumption of 7.0 per cent GDP growth and 5.0 per cent inflation) to 3.8 per cent (under 9.5 per cent GDP growth and 6.5 per cent inflation) of GDP under the six alternate scenarios as compared to the baseline scenario of 3.0 per cent of GDP (Table 7). Statements 1A to 7A and 1B to 7B given at Annex IV put out the component-wise details of current and capital account transactions under the various scenarios.

**Table 7: Projections of Current Account Balance for the 12th Plan - Alternate Scenarios**

*(Annual averages for the Plan Period)*

| ***Items*** | ***Scenario I (GDP growth 8.5 per cent; Inflation 5.0 per cent)*** | | ***Scenario II (GDP growth 9.0 per cent; Inflation 6.0 per cent)*** | | ***Scenario III (GDP growth 9.5 per cent; Inflation 5.0 per cent)*** | | ***Scenario IV (GDP growth 9.5 per cent; Inflation 6.5 per cent)*** | | ***Scenario V (Additional) (GDP growth 8.0 per cent; Inflation 6.0 per cent)*** | | ***Scenario VI (Additional) (GDP growth 7.0 per cent; Inflation 5.0 per cent)*** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | US$ billion | % to GDP | US$ billion | % to GDP | US$ billion | % to GDP | US$ billion | % GDP | US$ billion | % to GDP | US$ billion | % to GDP |
| 1. Non-oil Exports | 483 | 15.7 | 486 | 15.1 | 498 | 15.7 | 492 | 14.8 | 472 | 15.1 | 461 | 15.7 |
| 2. Non-oil Imports | 639 | 20.8 | 653 | 20.3 | 668 | 21.1 | 668 | 20.2 | 624 | 20.1 | 597 | 20.4 |
| 3. Net oil Imports | 108 | 3.6 | 110 | 3.5 | 111 | 3.6 | 111 | 3.5 | 107 | 3.5 | 104 | 3.6 |
| A. **Trade Balance (1+2+3)** | -264 | -8.7 | -277 | -8.7 | -281 | -9.0 | -287 | -8.8 | -259 | -8.5 | -239 | -8.3 |
| B. **Net Invisibles (4+5+6)** | 187 | 6.1 | 173 | 5.5 | 176 | 5.6 | 163 | 5.0 | 185 | 6.0 | 203 | 6.9 |
| 4. Services | 85 | 2.8 | 71 | 2.3 | 73 | 2.4 | 60 | 1.9 | 82 | 2.7 | 101 | 3.4 |
| 5. Transfers | 112 | 3.7 | 112 | 3.5 | 112 | 3.6 | 112 | 3.4 | 112 | 3.6 | 112 | 3.9 |
| 6. Income | -10 | -0.4 | -10 | -0.3 | -10 | -0.3 | -10 | -0.3 | -10 | -0.4 | -10 | -0.4 |
| **Current Account Balance (A+B)** | -77 | -2.6 | -103 | -3.3 | -106 | -3.4 | -125 | -3.8 | -75 | -2.5 | -36 | -1.4 |

**V.3** From the financing side, the projected level of CAD-GDP ratio of 3.0 per cent under the baseline scenario is estimated to be financed through normal capital inflows during the Plan period, which works out 3.7 per cent of GDP (Table 8).

| **Table 8: Projections of Net Capital Flows for the 12th Plan: Baseline Scenario**<br>*(GDP growth 9 per cent and, Inflation 5 per cent)*<br>*(Annual averages for the Plan Period)* | | |
|---|---|---|
| | **US$ Billion** | **Per cent to GDP** |
| FDI Inward | 65 | 2.1 |
| FDI Outward | 35 | 1.1 |
| ***Net FDI*** | 30 | 1.0 |
| ***Net Portfolio Flows*** | 33 | 1.1 |
| ***Of Which***<br>***Net FII inflows*** | 30 | 1.0 |
| ECB Inflows | 51 | 1.6 |
| ECB Outflows | 31 | 1.0 |
| ***Net ECBs to India*** | 20 | 0.7 |
| ***Net Short-term*** | 25 | 0.8 |
| ***Net External Assistance*** | 3 | 0.1 |
| Net NRI Flows | 4 | 0.1 |
| Others | -2 | -0.1 |
| **Net Capital Flows** | 113 | 3.7 |

**V.4** The projected level of CAD under the alternative scenarios, which moves in the range of (-) 1.4 per cent of GDP and (-) 3.8 per cent of GDP, are estimated to be financed with net capital flows, which as a per cent GDP is projected to vary between 2.4-3.9 per cent (Table 9). However, the composition of capital flows with the share of debt creating capital flows projected to be in the range of 55-60 per cent poses some concerns regarding financing of CAD on a sustained basis. Taking into account the changing composition of capital flows, the Sub-Group views a CAD-GDP ratio of over 3 per cent as unsustainable.

**Table 9: Projections of Net Capital Flows for the 12th Plan: Alternate Scenarios**
*(Annual averages for the Plan Period)*

| | **Scenario I** | | **Scenario II** | | **Scenario III** | | **Scenario IV** | | **Scenario V (Additional)** | | **Scenario VI (Additional)** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | GDP 8.5%, Inflation 5% | | GDP 9%, Inflation 6% | | GDP 9.5%, Inflation 5% | | GDP 9.5%, Inflation 6.5% | | GDP 8%, Inflation 6% | | GDP 7%, Inflation 5% | |
| | US$ Billion | % to GDP | US$ Billion | % to GDP | US$ Billion | % to GDP | US$ Billion | % to GDP | US$ Billion | % to GDP | US$ Billion | % to GDP |
| FDI Inward | 63 | 2.1 | 63 | 2.0 | 67 | 2.1 | 64 | 1.9 | 59 | 1.9 | 58 | 2.0 |
| FDI Outward | 35 | 1.1 | 35 | 1.1 | 35 | 1.1 | 35 | 1.1 | 35 | 1.1 | 35 | 1.2 |
| ***Net FDI*** | 29 | 0.9 | 28 | 0.9 | 32 | 1.0 | 29 | 0.9 | 25 | 0.8 | 23 | 0.8 |
| ***Net Portfolio Flows*** | 28 | 1.0 | 28 | 0.9 | 38 | 1.3 | 31 | 1.0 | 18 | 0.6 | 13 | 0.5 |
| Of which Net FIIs | 25 | 0.9 | 25 | 0.8 | 35 | 1.2 | 28 | 0.9 | 15 | 0.5 | 10 | 0.4 |
| ECB Inflows | 50 | 1.6 | 51 | 1.6 | 52 | 1.7 | 52 | 1.6 | 49 | 1.6 | 47 | 1.6 |
| ECB Outflows | 30 | 1.0 | 31 | 1.0 | 31 | 1.0 | 31 | 0.9 | 32 | 1.0 | 33 | 1.1 |
| ***Net ECBs to India*** | 20 | 0.7 | 20 | 0.6 | 21 | 0.7 | 21 | 0.6 | 17 | 0.6 | 14 | 0.5 |
| ***Net Short-term*** | 24 | 0.8 | 25 | 0.8 | 25 | 0.8 | 25 | 0.8 | 20 | 0.6 | 15 | 0.5 |
| ***Net External Assistance*** | 3 | 0.1 | 3 | 0.1 | 3 | 0.1 | 3 | 0.1 | 3 | 0.1 | 3 | 0.1 |
| **Net NRI Flows** | 4 | 0.1 | 4 | 0.1 | 4 | 0.1 | 4 | 0.1 | 4 | 0.1 | 4 | 0.1 |
| ***Others*** | -2 | -0.1 | -2 | -0.1 | -2 | -0.1 | -2 | -0.1 | -2 | -0.1 | -2 | -0.1 |
| **Net Capital Flows** | 105 | 3.5 | 106 | 3.4 | 121 | 3.9 | 110 | 3.4 | 84 | 2.7 | 69 | 2.4 |

## SECTION VI: SUSTAINABILITY OF CURRENT ACCOUNT DEFICIT: ISSUES AND IMPLICATIONS

**VI.1** As discussed earlier, a higher level of CAD with increasing share of debt creating flows in total capital flows poses risks to sustainability. From this perspective, the Sub-Group is of the view that CAD should be contained within 3.0 per cent of GDP so that it is financed through normal capital flows.

VI.2 Conceptually, sustainability refers to the ability of a nation to finance its current account deficit on an ongoing basis. Therefore, the level of current account balance that could be financed on a continuous basis without resulting in any external payment difficulties is termed as the sustainable level. Generally, the sustainable level of current account deficit (CAD) is measured in terms of net external liabilities (NEL) relative to the size of the economy. The level of Current Account Balance (CAB) that stabilises the net external assets/liabilities in relation to the size of the economy is

considered as sustainable. Based on the empirical exercise, CAD in the range of 2.7 to 3.0 per cent is considered to be sustainable subject to the conditions as set out below:

- Capital flows should be enough to meet financing requirement and to maintain an adequate import cover. Accordingly, net inflows should range between 4.0 per cent to 4.5 per cent of GDP.
- Current policy of restraining debt creating flows should be continued. Policy should ensure that more than 50 per cent of the capital flows is continued to be non-debt creating in nature. Historically, during the last ten years on an average 58 per cent of the net capital flows was non-debt variety. Interest rate differentials need to be monitored closely.
- Non-debt creating flows moderate the net negative spread of average return on external assets over the average interest payments on external liabilities. This spread in the long run should be targeted close to 150 bps.

  Against this backdrop, it may be noted that as capital flows as a per cent of GDP remains much below the required level for ensuring sustainability, the Sub-Group underscores the need for concerted efforts to augment the size of capital flows, and in particular, the share of long-term stable flows. Accordingly, the Sub-Group feels that there are limits on recourse to foreign savings as a source for financing higher investment rates in the economy in view of their implications for external sector sustainability.

## SECTION VII: CONCLUSION

The baseline projection of CAD for the Twelfth Plan is based on the assumptions of 9 per cent real GDP growth and 5 per cent inflation rate. The estimated model indicates an average CAD-GDP ratio of 3.0 per cent under the baseline scenario. This level of CAD is projected to be financed through the capital inflows during the Plan period, which works out to around 3.7 per cent of GDP.

Under the alternate scenarios, the CAD is estimated to be in the range of 1.4 per cent of GDP (under the assumption of 7.0 per cent GDP growth and 5.0 per cent inflation) to 3.8 per cent of GDP (under the assumption of 9.5 per cent GDP growth and 6.5 per cent inflation). From the financing side, these projected levels of CAD could be financed through capital flows, with net capital flows as a per cent of GDP moving in the range of 2.4-3.9 per cent. However, the share of non-debt creating capital flows is projected to be lower in the range of 40-45 per cent during the Plan period.

Taking into account the changing composition of capital flows, the Sub-Group views a CAD-GDP ratio of over 3 per cent as unsustainable. From the

perspective of external sector sustainability, the Sub-Group is of the view that CAD should be contained within 3.0 per cent of GDP so that it could be financed through normal capital flows. In sum, the Sub-Group observes that there are limits on recourse to foreign savings as a source for financing higher investment rates in the economy in view of their implications for external sector sustainability.

## ANNEX I: PROCEEDING OF THE MEETINGS OF THE SUB-GROUP ON FOREIGN SAVINGS

### A) First Meeting of the Sub-Group on Inflow of Foreign Savings – Twelfth Five Year Plan (2012-2017) held on May 23, 2011: Minutes

The first meeting of the Sub-Group on Inflow of Foreign Savings was held on May 23, 2011 at the Conference Room No. 3, 15th floor, Reserve Bank of India, Central Office Mumbai. The meeting was chaired by Shri Anil Bisen (Convenor), Economic Adviser, Ministry of Finance, Government of India. A detailed list of participants is provided at the end.

At the outset, Shri S.V.S. Dixit, Adviser, RBI welcomed the participants and explained the background on the formation of the Sub-Group and the mandate delegated by the Planning Commission and requested Shri Anil Bisen, Economic Adviser, Ministry of Finance, Government of India to Chair the Meeting. After a brief introduction of the participants, reference was invited to the background material circulated among the Members, *viz.*, Draft Report of the similar Sub-Group for the 11th Plan and an Approach Paper prepared by the Secretariat of the Sub-Group for the 12th Plan. This was followed by a presentation made by the Secretariat on the methodology to be followed by the Sub-Group for estimating foreign savings in the light of an assessment of 11th Plan projections vis-a-vis the actual outcomes of current account and capital flows during the first three years of the 11th Plan. During the presentation, members deliberated on the proposed estimation methodology and provided suggestions on the modeling of some of the key components of current and capital account items. After discussions, the Sub-Group agreed on the proposed specification of the model for estimating foreign savings and suggested the following points for consideration:

- The Sub-Group agreed that the same approach of 11th Plan should be adopted for estimating foreign savings for the 12th Plan with duly taking into account the external sector dynamics in the aftermath of the global financial crisis. Accordingly, it was agreed to estimate foreign savings based on two approaches, *i.e.,* from the demand side by estimating the CAD and from the financing side by estimating the net capital flows.
- The Sub-Group also agreed to the proposal of including interest rate differential, global liquidity conditions, and role of administrative factors in the modeling exercise of capital flows at the disaggregated level.
- The Sub-Group suggested that a deeper analysis of exports may be undertaken taking into account the diversification of exports in terms of products and markets. In view of recent surge in export growth in the aftermath of the crisis, the Sub-Group suggested that the impact of three or four major export destinations based on their share in total exports may be build into the model.
- As increase in oil prices not only raise the oil import bill but also the value of oil exports, which has grown significantly in the recent years, the Sub-Group suggested that net oil imports should also be taken into account for the estimation purpose.
- In view of the dominant shares of Gulf countries and the US in net private transfers, the Sub-Group suggested that, it would be better to include separately the GDP of these host countries as explanatory variables.

Otherwise, the top ten countries' GDP in terms of their contributions to private transfers may be used as an explanatory variable.

- Investment income payments may be estimated as a function of domestic GDP growth and scheduled debt service payments.
- As regards FDI inflows, the Sub-Group agreed on the proposed estimation equation. However, it was suggested to build into the optimistic scenario the likely impact of possible government policy initiatives to open up the retail sector to FDI.
- It was suggested to model FIIs inflows separately for equity and debt flows. Equity flows may be linked to GDP and relative valuation of Sensex/Nifty vis-à-vis S&P 500 proxied by the P/E ratios. On the other hand, debt flows may be related to interest rate differential and recent policy measures.
- Reviewing the five alternative scenarios given to the Sub-Group by the Main Group, the Sub-Group observed that the scenarios are optimistic against the backdrop of recent global crisis. Accordingly, the Sub-Group agreed to build two more pessimistic scenarios: (i) GDP growth of 8 per cent with inflation of 6 per cent and (ii) GDP growth of 7 per cent with inflation 5 per cent.
- The Sub-Group also suggested that the recent target set by the Ministry of Commerce to double the export to US$500 billion by 2013-14 may be taken into account in the super optimistic scenario. Regarding the assumptions about oil prices, the Sub-Group felt that the projections given by WEO, IMF may be taken as the baseline and the highest level seen so far under the worst scenario.
- The Sub-Group suggested that an analysis of external sector sustainability indicators in the draft report should be incorporated.

The meeting ended with a vote of thanks proposed by Shri S.V.S. Dixit, Adviser, Reserve Bank of India.

**List of Members/Invitees who attended the Meeting**

1. Shri Anil Bisen, Convener, Economic Adviser, Ministry of Finance
2. Shri S.V.S. Dixit, Member Adviser, DEPR, RBI, Mumbai
3. Prof. Pradeep Agarwal, Member Institute of Economic Growth
4. Ms. Sutapa Majumdar Member, Director, Planning Commission
5. Shri Prabhakar Patil, Member Joint Director, SEBI
6. Ms. Rohini Malkani, Member Chief Economist, Citibank, Mumbai
7. Shri Saugata Bhattacharya, Member, Chief Economist, Axis Bank, Mumbai
8. Shri Samir Kumar Bhattacharyya, Member, General Manager, SBI, Mumbai
9. Shri Rajan Goyal, Director, DITF, DEPR, RBI, Mumbai
10. Shri M. Ramaiah, Assistant Adviser, DITF, DEPR, RBI, Mumbai
11. Shri Binod B. Bhoi, Assistant Adviser DITF, DEPR, RBI, Mumbai
12. Shri Arvind K Jha, Assistant Adviser, DITF, DEPR, RBI, Mumbai
13. Shri Gopal Prasad, Assistant Adviser, DITF, DEPR, RBI, Mumbai

**Second Meeting of the Sub-Group on Inflow of Foreign Savings – Twelfth Five Year Plan (2012-2017) held on June 24, 2011: Minutes**

The second meeting of the Sub-Group on Inflow of Foreign Savings was held on June 24, 2011 at the Conference Room, 2nd floor, Reserve Bank of India, Regional Office New Delhi. The meeting was chaired by Shri Anil Bisen (Convenor), Economic Adviser, Ministry of Finance, Government of India. A detailed list of participants is provided at the end.

**Main Points of Discussion**

The following points emanated from the Second meeting:

- Taking into account the suggestions of the Members during the first meeting, the models were estimated and the preliminary results obtained from the empirical estimation of various components of the current account were discussed.
- The relevant parameters and assumptions about the various explanatory variables were considered for building alternative scenarios.
- It was agreed that the components of the current account would be considered in real terms in the modeling exercise, while capital flows items could be modeled in nominal terms under the proposed framework.
- Validation of the projections obtained from the estimated models could be cross-checked with trend analysis for ensuring robustness of the projections. The following results are based on the feedback received from members during the two meetings.

**List of Members/Invitees who attended the Meeting**

1. Shri Anil Bisen, Convener, Economic Adviser, Ministry of Finance
2. Shri S.V.S. Dixit, Member Adviser, DEPR, RBI, Mumbai
3. Prof. Pradeep Agarwal, Member, Institute of Economic Growth
4. Shri Prabhakar Patil, Member Joint Director, SEBI
5. Shri Samir Kumar Bhattacharyya, Member, General Manager, SBI, Mumbai
6. Shri Rajan Goyal, Director, DITF, DEPR, RBI, Mumbai
7. Shri Binod B. Bhoi, Assistant Adviser DITF, DEPR, RBI, Mumbai

# ANNEX II: EMPIRICAL RESULTS OF ESTIMATED MODELS

**1. Non-Oil Real Exports**

LNONOILREALEXP = -43.15 + 3.03 LWGDPCONS - 0.39 LREEREXP(-1) + 0.14 DUM 96 + 0.54AR(1)
**(13.13) (19.18) (-2.27) (2.70) ( 4.62)**

$\overline{R}^2$ = 0.99; DW = 1.97; N=27.

NONOILREALEXP= Non-oil real exports, WGDPCONS=world real GDP, REEREXP= Real effective exchange rate (export weighted)
L stands for logarithm

**2. Non-Oil Real Imports**

LNONOILREALIMP = -14.73 + 1.51LGDPFCCONS - 0.05LOG(REERTR) + 0.49AR(1)
**(-3.99) (10.07) (-0.11) (2.66)**

$\overline{R}^2$ = 0.96; DW 1.41; N=26.

NONOILREALIMP= Non-oil real imports, GDPFCCONS=India real GDP, REERTR= Real effective exchange rate (trade weighted); L stands for logarithm

**3. Net Oil Real Imports**

LNOM = 4.79+0.94 log(GDPCONS(-1)) -0.11log(IOP) -0.14D80 -0.32D90 +0.16D95 +0.14D 99
**(3.34) (7.90) (-2.01) (-2.0) (-4.45) (2.03) (1.86)**

$\overline{R}^2$ = 0.88; DW 1.66; N=31.

NOM = Net Oil Imports, GDPFCCONS=India real GDP, IOP= Price of Indian Basket Crude Oil, L stands for logarithm

**4. Real Service Exports**

LOG(REALSEREXPFC) = -58.93 + 4.01 LOG(WGDPCONS) - 0.26LOG(REERTR) + 0.24 DUM2005 + 0.88 AR(1)
**(-4.39) (5.19) (-0.69) (1.92) (10.13)**

$\overline{R}^2$ = 0.99; DW = 1.75; N=34.
REALSEREXPFC = Real services exports, WGDPCONS=World real GDP, REERTR= Real effective exchange rate (trade weighted)

**5. Real Service Imports**

LOG(REALSERIMP) = -31.99 + 2.11 LOG(GDPFCCONS) + 1.17 LOG(REERTR)
**(-16.62) (27.79) (6.26)**

$\overline{R}^2$ = 0.99; DW = 1.60; N=35.

REALSERIMP = Real services imports, GDPFCCONS=India's real GDP, REERTR= Real effective exchange rate (trade weighted)

**6. Investment Income Receipts**

LOG(INVINRT) = -3.15 + 0.74LOG(FCA(-1) + 0.54 LOG(USGBY) + 0.30LOG(INVINRT(-1))
**(-5.52) (9.99) (4.13) (3.59)**

$\overline{R}^2$ =0.99; Durbin-h=0.35; N=26.

INVINRT = Investment income receipts, FCA(-1)=Lagged Foreign currency assets, USGBY= US govt. bond yields (5 year)

**7. Investment Income Payments**

LOG(INVINPT) = -7.08 + 0.54LOG(EXDEBT(-1)) + 0.74LOG(GDPFCD) - 0.23 DUM201011
**(-5.93) (2.31) (5.17) (-2.04)**

$\overline{R}^2$ =0.97; DW=1.50; N = 20.
INVINPT = Investment income payments, EXDEBT(-1)= India's external debt (lagged), GDPFCD=India's GDP in US dollar term.

**8. Net Private Transfers**

LOG(TRAN_EXP+TRAN_IMP) = -2.41 + 1.04LOG(WGDPCURR(-1) +0.09GDIFF+0.09@trend+0.41 DUM97
**(-0.58) (2.49) (2.49) (4.16) (3.03)**

$\overline{R}^2$ =0.98; DW=1.68; N = 19.

TRAN_EXP+TRAN_IMP = Net Private Transfers, GDIFF=Growth differential

**9. FDI inflows as a proportion of GDP**

FDIABS/GDPCONS = -0.41 + 0.06TRADEGDP*100 - 0.003TSFBR + 0.20GFDY +0.11GDIFF +0.05IIPY
**(-0.48) (6.12) (-1.92) (13.87) (6.28) (5.46)**
+6.44FDIEMERG/FDITOT
**(3.64)**

$\overline{R}^2$ =0.93; DW =1.71; N=10.

FDIABS/GDPCONS = FDI/GDP Ratio, TRADEGDP= Trade-GDP Ratio, TSFBR=Time taken to start a business in India, GFDY=Gross fiscal deficit as a ratio to GDP, GDIFF=Growth differential between India and the rest, IIPY= India's net international investment position as a per cent to GDP, FDIEMERG/FDITOT=FDI to EMEs as a ratio to l World FDI flows

**10. FDI outflows**

LOG(FDIOUT) = -5.4 + 2.20LOG(CURCAP_GDP) +0.53LOG(FDIOUT(-1)) -2.17 DUM1998
**(-1.77) (2.24) (3.11) (3.71)**

$\overline{R}^2$ = 0.94; Durbin-h = 0.43; N=16.

FDIOUT = FDI by India, CURCAP_GDP= FDIOUT(-1) FDI by India in preceding year,

**11. ECB to India disbursements**

LOGECBCR = -3.15 + 0.75LOG(BOPIMP) + 0.10ECBRATE - 0.73DUM2004Q2QA3 -0.48DUM2008Q29Q2
**(-3.0) (4.92) (2.52) (-3.09) (-2.93)**

+0.34LOG(ECBCR(-1))
**(2.96)**

$\overline{R}^2$ = 0.87; Durbin-h =-1.65; N=39.

ECBCR = External Commercial Borrowings Disbursement, BOPIMP= Import on BoP Basis, ECBRATE= Interest rate on ECBs, ECBCR(-1) = ECB disbursement in preceding year

**12. NRI inflows**

LOG(NRIREV1) = -7.24+0.34LOG(NRIINTDIFF1Y) + 0.80LOG(WGDP) -0.59DUM200811 - 0.71DUM2005
**(1.60) (2.61) (2.86) (-3.00) (-5.13)**
+0.51LOG(ERAV)
**(2.04)**

$\overline{R}^2$ =0.69 DW=2.15; N=20

NRIREV1 = Non-Resident Indian Deposits Inflows, NRIINTDIFF1Y Difference between Interest rate on NRI deposits and LIBOR, WGDP= World Gross Domestic Product, ERAV= Average Exchange Rates

**Note**: Figures in parentheses below the estimated coefficients are T-values. DW=Durbin-Watson Statistics; N= Number of observations used in the estimation.

## ANNEX III: ASSUMPTIONS UNDERLYING EXPLANATORY VARIABLES

### Growth and Inflation

- The various combinations of growth and inflation in India for constructing the alternative scenarios are as under:

| Assumptions for Constructing Alternative Scenarios | | |
|---|---|---|
| | Growth Rate (%) | Inflation Rate (%) |
| **Base Line** | **9.0** | **5.0** |
| Scenario I | 8.5 | 5.0 |
| Scenario II | 9.0 | 6.0 |
| Scenario III | 9.5 | 5.0 |
| Scenario IV | 9.5 | 6.5 |
| Scenario V (Additional) | 8.0 | 6.0 |
| Scenario VI (Additional) | 7.0 | 5.0 |
| **Note**: Apart from the four alternative scenarios given by the Working Group, the Sub-Group agreed to have two additional scenarios in its first meeting held on May 23, 2011. | | |

### World GDP

- World GDP is simulated by taking the growth rates of real GDP as projected by the IMF in its World Economic Outlook (WEO), April 2011. WEO has projected real world GDP growth in the range of 4.51-4.73 per cent during 2012-2016.

### World Inflation

- World inflation used for the estimations is based on the IMF's projections in its WEO, April 2011. WEO has projected world inflation in the range of 3.4-2.9 per cent (moderation) during 2012-2016.

### International Crude Oil Price

- International crude oil prices are assumed to be around its current level of US$ 110 per barrel during the Plan period.

### Foreign Currency Asset (FCA)

- FCA is assumed to increase by 4 per cent each year during the Plan period reflecting anticipated increase in the capital inflows.

### Exchange Rate

- The nominal average Rupee-US dollar exchange rate is assumed to be around its current level (i.e., the average level of 2010-11). On the other hand, the real

effective exchange rate (REER) is assumed to appreciate to the extent of changes in the inflation differential between India and the world.

**External Debt**

- India's external debt is assumed to increase by 4 per cent during each year of the Plan period on account of anticipated increase in debt creating capital inflows.

**Global Interest Rate**

- The LIBOR as projected by the WEO is used for 2011 and 2012 and thereafter assumed to increase by 50 basis points in 2013 and by 25 basis points each year during the rest of the Plan. Similar assumptions hold for the US bond yields.

**International Crude Oil Price**

- The international crude oil price of the Indian basket is assumed to remain at the current average level of US$ 110 per barrel during the plan period.

**Domestic Interest Rate**

- The domestic interest rates with respect to NRI deposits and ECBs are assumed to move in a direction so that the interest rate differential remains at the present level during each year of the plan period.

**World Export Price and Import Price**

- World export prices and import prices are assumed to grow as per the past trend during the plan period.

## ANNEX IV: ALTERNATE SCENARIOS – CURRENT ACCOUNT

**Statement 1A: Projections of Current Account Balance for the 12th Plan - Baseline Scenario**

*(Assumptions: GDP growth 9.0 per cent and Inflation 5.0 per cent)*

| Items | 2010-11 (Actual) | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|---|---|---|---|---|---|---|
| **(US$ billion)** | | | | | | |
| 1. Non-oil Exports | 209 | 309 | 380 | 469 | 579 | 716 |
| 2. Non-oil Imports | 279 | 417 | 511 | 627 | 769 | 943 |
| 3. Net oil Imports | 60 | 93 | 100 | 109 | 118 | 128 |
| **A. Trade Balance (1-2-3)** | -130 | -200 | -231 | -267 | -308 | -356 |
| **B. Net Invisibles (4+5+6)** | 86 | 124 | 148 | 176 | 210 | 249 |
| 4. Services | 48 | 57 | 66 | 77 | 90 | 106 |
| 5.Transfers | 53 | 78 | 93 | 110 | 129 | 152 |
| 6. Income | -14 | -12 | -11 | -10 | -9 | -8 |
| **Current Account Balance (A+B)** | **-44** | **-77** | **-83** | **-90** | **-98** | **-107** |
| **(Per cent to GDP)** | | | | | | |
| 1. Non-oil Exports | 12.1 | 13.4 | 14.5 | 15.6 | 16.8 | 18.2 |
| 2. Non-oil Imports | 16.2 | 18.1 | 19.4 | 20.8 | 22.3 | 23.9 |
| 3. Net oil Imports | 3.4 | 4.0 | 3.8 | 3.6 | 3.4 | 3.3 |
| **A. Trade Balance (1-2-3)** | -7.5 | -8.7 | -8.8 | -8.9 | -9.0 | -9.0 |
| **B. Net Invisibles (4+5+6)** | 5.0 | 5.4 | 5.6 | 5.9 | 6.1 | 6.3 |
| 4. Services | 2.8 | 2.5 | 2.5 | 2.6 | 2.6 | 2.7 |
| 5.Transfers | 3.1 | 3.4 | 3.5 | 3.6 | 3.8 | 3.9 |
| 6. Income | -0.9 | -0.5 | -0.4 | -0.3 | -0.3 | -0.2 |
| **Current Account Balance (A+B)** | **-2.6** | **-3.3** | **-3.2** | **-3.0** | **-2.9** | **-2.7** |

## ANNEX IV: ALTERNATE SCENARIOS (CURRENT ACCOUNT)(cont.)

**Statement 2A: Projections of Current Account Balance for the 12th Plan – Scenario I**
*(Assumptions: GDP growth 8.5 per cent and Inflation 5.0 per cent)*

| Items | 2010-11 (Actual) | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|---|---|---|---|---|---|---|
| **(US$ billion)** | | | | | | |
| 1. Non-oil Exports | 209 | 307 | 377 | 463 | 568 | 699 |
| 2. Non-oil Imports | 279 | 414 | 504 | 614 | 749 | 912 |
| 3. Net oil Imports | 60 | 92 | 99 | 107 | 116 | 125 |
| **A. Trade Balance (1-2-3)** | -130 | -199 | -227 | -259 | -296 | -338 |
| **B. Net Invisibles (4+5+6)** | 86 | 125 | 151 | 181 | 217 | 261 |
| 4. Services | 48 | 58 | 68 | 82 | 98 | 118 |
| 5.Transfers | 53 | 78 | 93 | 110 | 129 | 152 |
| 6. Income | -14 | -12 | -11 | -10 | -9 | -8 |
| **Current Account Balance (A+B)** | **-44** | **-74** | **-76** | **-78** | **-79** | **-77** |
| **(Per cent to GDP)** | | | | | | |
| 1. Non-oil Exports | 12.1 | 13.4 | 14.5 | 15.6 | 16.8 | 18.2 |
| 2. Non-oil Imports | 16.2 | 18.1 | 19.4 | 20.7 | 22.2 | 23.7 |
| 3. Net oil Imports | 3.4 | 4.0 | 3.8 | 3.6 | 3.4 | 3.3 |
| **A. Trade Balance (1-2-3)** | -7.5 | -8.7 | -8.7 | -8.7 | -8.8 | -8.8 |
| **B. Net Invisibles (4+5+6)** | 5.0 | 5.5 | 5.8 | 6.1 | 6.4 | 6.8 |
| 4. Services | 2.8 | 2.5 | 2.6 | 2.8 | 2.9 | 3.1 |
| 5.Transfers | 3.1 | 3.4 | 3.6 | 3.7 | 3.8 | 3.9 |
| 6. Income | -0.9 | -0.5 | -0.4 | -0.3 | -0.3 | -0.2 |
| **Current Account Balance (A+B)** | **-2.6** | **-3.2** | **-2.9** | **-2.6** | **-2.3** | **-2.0** |

## ANNEX IV: ALTERNATE SCENARIOS (CURRENT ACCOUNT)(cont.)

| **Statement 3A: Projections of Current Account Balance for the 12th Plan – Scenario II** *(Assumptions: GDP growth 9.0 per cent and Inflation 6.0 per cent)* | | | | | | |
|---|---|---|---|---|---|---|
| Items | 2010-11 (Actual) | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| **(US$ billion)** | | | | | | |
| 1. Non-oil Exports | 209 | 309 | 379 | 466 | 573 | 706 |
| 2. Non-oil Imports | 279 | 417 | 511 | 627 | 769 | 943 |
| 3. Net oil Imports | 60 | 93 | 100 | 109 | 118 | 128 |
| **A. Trade Balance (1-2-3)** | -130 | -200 | -232 | -270 | -314 | -366 |
| **B. Net Invisibles (4+5+6)** | 86 | 122 | 144 | 170 | 198 | 231 |
| 4. Services | 48 | 55 | 62 | 70 | 79 | 88 |
| 5.Transfers | 53 | 78 | 93 | 110 | 129 | 152 |
| 6. Income | -14 | -12 | -11 | -10 | -9 | -8 |
| **Current Account Balance (A+B)** | **-44** | **-78** | **-88** | **-100** | **-116** | **-134** |
| **(Per cent to GDP)** | | | | | | |
| 1. Non-oil Exports | 12.1 | 13.3 | 14.1 | 15.1 | 16.0 | 17.1 |
| 2. Non-oil Imports | 16.2 | 18.0 | 19.1 | 20.3 | 21.5 | 22.8 |
| 3. Net oil Imports | 3.4 | 4.0 | 3.7 | 3.5 | 3.3 | 3.1 |
| **A. Trade Balance (1-2-3)** | -7.5 | -8.7 | -8.7 | -8.7 | -8.8 | -8.9 |
| **B. Net Invisibles (4+5+6)** | 5.0 | 5.3 | 5.4 | 5.5 | 5.5 | 5.6 |
| 4. Services | 2.8 | 2.4 | 2.3 | 2.3 | 2.2 | 2.1 |
| 5.Transfers | 3.1 | 3.4 | 3.5 | 3.5 | 3.6 | 3.7 |
| 6. Income | -0.9 | -0.5 | -0.4 | -0.3 | -0.3 | -0.2 |
| **Current Account Balance (A+B)** | **-2.6** | **-3.4** | **-3.3** | **-3.2** | **-3.2** | **-3.3** |

## ANNEX IV: ALTERNATE SCENARIOS (CURRENT ACCOUNT)(cont.)

**Statement 4A: Projections of Current Account Balance for the 12th Plan – Scenario III**
*(Assumptions: GDP growth 9.5 per cent and Inflation 5.0 per cent)*

| Items | 2010-11 (Actual) | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|---|---|---|---|---|---|---|
| **(US$ billion)** | | | | | | |
| 1. Non-oil Exports | 209 | 310 | 384 | 475 | 589 | 732 |
| 2. Non-oil Imports | 279 | 419 | 518 | 639 | 790 | 975 |
| 3. Net oil Imports | 60 | 93 | 101 | 110 | 120 | 131 |
| **A. Trade Balance (1-2-3)** | -130 | -202 | -235 | -274 | -320 | -374 |
| **B. Net Invisibles (4+5+6)** | 86 | 123 | 145 | 172 | 202 | 237 |
| 4. Services | 48 | 56 | 63 | 72 | 82 | 93 |
| 5.Transfers | 53 | 79 | 93 | 110 | 129 | 152 |
| 6. Income | -14 | -12 | -11 | -10 | -9 | -8 |
| **Current Account Balance (A+B)** | **-44** | **-80** | **-90** | **-103** | **-119** | **-137** |
| **(Per cent to GDP)** | | | | | | |
| 1. Non-oil Exports | 12.1 | 13.4 | 14.5 | 15.6 | 16.8 | 18.2 |
| 2. Non-oil Imports | 16.2 | 18.2 | 19.5 | 21.0 | 22.5 | 24.2 |
| 3. Net oil Imports | 3.4 | 4.0 | 3.8 | 3.6 | 3.4 | 3.2 |
| **A. Trade Balance (1-2-3)** | -7.5 | -8.8 | -8.9 | -9.0 | -9.1 | -9.3 |
| **B. Net Invisibles (4+5+6)** | 5.0 | 5.3 | 5.5 | 5.6 | 5.8 | 5.9 |
| 4. Services | 2.8 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 |
| 5.Transfers | 3.1 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 |
| 6. Income | -0.9 | -0.5 | -0.4 | -0.3 | -0.3 | -0.2 |
| **Current Account Balance (A+B)** | **-2.6** | **-3.5** | **-3.4** | **-3.4** | **-3.4** | **-3.4** |

## ANNEX IV: ALTERNATE SCENARIOS (CURRENT ACCOUNT)(cont.)

| **Statement 5A: Projections of Current Account Balance for the 12th Plan – Scenario IV** *(Assumptions: GDP growth 9.5 per cent and Inflation 6.5 per cent)* | | | | | | |
|---|---|---|---|---|---|---|
| Items | 2010-11 (Actual) | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| **(US$ billion)** | | | | | | |
| 1. Non-oil Exports | 209 | 310 | 382 | 471 | 580 | 717 |
| 2. Non-oil Imports | 279 | 419 | 518 | 639 | 790 | 975 |
| 3. Net oil Imports | 60 | 93 | 101 | 110 | 120 | 131 |
| **A. Trade Balance (1-2-3)** | -130 | -202 | -237 | -279 | -329 | -389 |
| **B. Net Invisibles (4+5+6)** | 86 | 120 | 140 | 161 | 184 | 209 |
| 4. Services | 48 | 54 | 58 | 62 | 64 | 65 |
| 5.Transfers | 53 | 79 | 93 | 110 | 129 | 152 |
| 6. Income | -14 | -12 | -11 | -10 | -9 | -8 |
| **Current Account Balance (A+B)** | **-44** | **-82** | **-97** | **-118** | **-145** | **-180** |
| **(Per cent to GDP)** | | | | | | |
| 1. Non-oil Exports | 12.1 | 13.2 | 14.0 | 14.8 | 15.6 | 16.6 |
| 2. Non-oil Imports | 16.2 | 17.9 | 19.0 | 20.1 | 21.3 | 22.5 |
| 3. Net oil Imports | 3.4 | 4.0 | 3.7 | 3.5 | 3.2 | 3.0 |
| **A. Trade Balance (1-2-3)** | -7.5 | -8.6 | -8.7 | -8.8 | -8.9 | -9.0 |
| **B. Net Invisibles (4+5+6)** | 5.0 | 5.1 | 5.1 | 5.1 | 5.0 | 4.8 |
| 4. Services | 2.8 | 2.3 | 2.1 | 1.9 | 1.7 | 1.5 |
| 5.Transfers | 3.1 | 3.4 | 3.4 | 3.5 | 3.5 | 3.5 |
| 6. Income | -0.9 | -0.5 | -0.4 | -0.3 | -0.3 | -0.2 |
| **Current Account Balance (A+B)** | **-2.6** | **-3.5** | **-3.6** | **-3.7** | **-3.9** | **-4.2** |

## ANNEX IV: ALTERNATE SCENARIOS (CURRENT ACCOUNT)(cont.)

**Statement 6A: Projections of Current Account Balance for the 12th Plan – Scenario V (Additional)**
*(Assumptions: GDP growth 8.0 per cent and Inflation 6.0 per cent)*

| Items | 2010-11 (Actual) | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|---|---|---|---|---|---|---|
| **(US$ billion)** | | | | | | |
| 1. Non-oil Exports | 209 | 306 | 372 | 453 | 552 | 674 |
| 2. Non-oil Imports | 279 | 411 | 497 | 602 | 729 | 882 |
| 3. Net oil Imports | 60 | 92 | 99 | 106 | 114 | 123 |
| **A. Trade Balance (1-2-3)** | -130 | -197 | -224 | -255 | -291 | -331 |
| **B. Net Invisibles (4+5+6)** | 86 | 124 | 149 | 179 | 214 | 256 |
| 4. Services | 48 | 57 | 67 | 80 | 95 | 113 |
| 5.Transfers | 53 | 78 | 93 | 110 | 129 | 152 |
| 6. Income | -14 | -12 | -11 | -10 | -9 | -8 |
| **Current Account Balance (A+B)** | **-44** | **-73** | **-75** | **-76** | **-76** | **-75** |
| **(Per cent of GDP)** | | | | | | |
| 1. Non-oil Exports | 12.1 | 13.3 | 14.2 | 15.1 | 16.0 | 17.1 |
| 2. Non-oil Imports | 16.2 | 17.9 | 18.9 | 20.0 | 21.2 | 22.4 |
| 3. Net oil Imports | 3.4 | 4.0 | 3.8 | 3.5 | 3.3 | 3.1 |
| **A. Trade Balance (1-2-3)** | -7.5 | -8.6 | -8.5 | -8.5 | -8.4 | -8.4 |
| **B. Net Invisibles (4+5+6)** | 5.0 | 5.4 | 5.7 | 6.0 | 6.2 | 6.5 |
| 4. Services | 2.8 | 2.5 | 2.6 | 2.6 | 2.7 | 2.9 |
| 5.Transfers | 3.1 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 |
| 6. Income | -0.9 | -0.5 | -0.4 | -0.3 | -0.3 | -0.2 |
| **Current Account Balance (A+B)** | **-2.6** | **-3.2** | **-2.8** | **-2.5** | **-2.2** | **-1.9** |

## ANNEX IV: ALTERNATE SCENARIOS (CURRENT ACCOUNT)(concluded)

| **Statement 7A: Projections of Current Account Balance for the 12th Plan – Scenario VI (Additional)** *(Assumptions: GDP growth 7.0 per cent and Inflation 5.0 per cent)* | | | | | | |
|---|---|---|---|---|---|---|
| Items | 2010-11 (Actual) | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| **(US$ billion)** | | | | | | |
| 1. Non-oil Exports | 209 | 303 | 367 | 444 | 538 | 653 |
| 2. Non-oil Imports | 279 | 405 | 484 | 578 | 690 | 824 |
| 3. Net oil Imports | 60 | 91 | 97 | 103 | 110 | 117 |
| **A. Trade Balance (1-2-3)** | -130 | -193 | -215 | -238 | -263 | -289 |
| **B. Net Invisibles (4+5+6)** | 86 | 128 | 158 | 195 | 240 | 295 |
| 4. Services | 48 | 61 | 76 | 95 | 120 | 152 |
| 5.Transfers | 53 | 78 | 93 | 110 | 129 | 151 |
| 6. Income | -14 | -12 | -11 | -10 | -9 | -8 |
| **Current Account Balance (A+B)** | **-44** | **-66** | **-57** | **-43** | **-23** | **6** |
| **(Per cent of GDP)** | | | | | | |
| 1. Non-oil Exports | 12.1 | 13.4 | 14.5 | 15.6 | 16.8 | 18.2 |
| 2. Non-oil Imports | 16.2 | 18.0 | 19.1 | 20.3 | 21.6 | 23.0 |
| 3. Net oil Imports | 3.4 | 4.0 | 3.8 | 3.6 | 3.4 | 3.3 |
| **A. Trade Balance (1-2-3)** | -7.5 | -8.6 | -8.5 | -8.4 | -8.2 | -8.0 |
| **B. Net Invisibles (4+5+6)** | 5.0 | 5.7 | 6.2 | 6.8 | 7.5 | 8.2 |
| 4. Services | 2.8 | 2.7 | 3.0 | 3.4 | 3.8 | 4.2 |
| 5.Transfers | 3.1 | 3.5 | 3.7 | 3.9 | 4.0 | 4.2 |
| 6. Income | -0.9 | -0.5 | -0.4 | -0.4 | -0.3 | -0.2 |
| **Current Account Balance (A+B)** | **-2.6** | **-2.9** | **-2.2** | **-1.5** | **-0.7** | **0.2** |

## ANNEX IV: ALTERNATE SCENARIOS (CAPITAL ACCOUNT)

| **Statement 1B : Projections of Net Capital Flows for the 12th Plan – Baseline Scenario** *(Assumptions: GDP growth 9.0 per cent and Inflation 5.0 per cent)* | | | | | | |
|---|---|---|---|---|---|---|
| | **2010-11** | **2012-13** | **2013-14** | **2014-15** | **2015-16** | **2016-17** |
| **(US$ Billion)** | | | | | | |
| FDI Inward | 23 | 43 | 53 | 65 | 79 | 87 |
| FDI Outward | 16 | 23 | 28 | 34 | 40 | 48 |
| ***Net FDI*** | 7 | 19 | 25 | 31 | 38 | 38 |
| ***Net Portfolio Flows*** | 30 | 33 | 33 | 33 | 33 | 33 |
| ***Net FII*** | 29 | 30 | 30 | 30 | 30 | 30 |
| ECB Inflows | 21 | 33 | 40 | 49 | 60 | 74 |
| ECB Outflows | 10 | 20 | 24 | 29 | 36 | 44 |
| ***Net ECBs to India*** | 12 | 13 | 16 | 20 | 24 | 29 |
| ***Net Short-term*** | 11 | 17 | 20 | 24 | 28 | 34 |
| ***Net External Assistance*** | 5 | 3 | 3 | 3 | 3 | 3 |
| Net NRI Flows | 3 | 4 | 4 | 4 | 4 | 4 |
| ***Others*** | -8 | -2 | -2 | -2 | -2 | -2 |
| **Net Capital Flows** | 60 | 86 | 98 | 112 | 128 | 139 |
| **(Per cent to GDP)** | | | | | | |
| FDI Inward | 1.4 | 1.9 | 2.0 | 2.2 | 2.3 | 2.2 |
| FDI Outward | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 |
| ***Net FDI*** | 0.4 | 0.8 | 0.9 | 1.0 | 1.1 | 1.0 |
| ***Net Portfolio Flows*** | 1.8 | 1.4 | 1.3 | 1.1 | 1.0 | 0.8 |
| Net FIIs | 1.7 | 1.3 | 1.1 | 1.0 | 0.9 | 0.8 |
| ECB Inflows | 1.2 | 1.4 | 1.5 | 1.6 | 1.7 | 1.9 |
| ECB Outflows | 0.6 | 0.9 | 0.9 | 1.0 | 1.0 | 1.1 |
| ***Net ECBs to India*** | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 |
| ***Net Short-term*** | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 |
| ***Net External Assistance*** | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Net NRI Flows | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| ***Others (residual)*** | -0.5 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| **Net Capital Flows** | 3.5 | 3.8 | 3.7 | 3.7 | 3.7 | 3.5 |

## ANNEX IV: ALTERNATE SCENARIOS (CAPITAL ACCOUNT)(cont.)

| **Statement 2B : Projections of Net Capital Flows for the 12th Plan – Scenario I** *(Assumptions: GDP growth 8.5 per cent and Inflation 5.0 per cent)* | | | | | | |
|---|---|---|---|---|---|---|
| | **2010-11** | **2012-13** | **2013-14** | **2014-15** | **2015-16** | **2016-17** |
| **(US$ Billion)** | | | | | | |
| FDI Inward | 23 | 42 | 52 | 63 | 76 | 84 |
| FDI Outward | 16 | 23 | 28 | 34 | 40 | 48 |
| ***Net FDI*** | 7 | 18 | 24 | 30 | 36 | 35 |
| ***Net Portfolio Flows*** | 30 | 28 | 28 | 28 | 28 | 28 |
| Net FIIs | 29 | 25 | 25 | 25 | 25 | 25 |
| ECB Inflows | 21 | 33 | 40 | 48 | 58 | 71 |
| ECB Outflows | 10 | 20 | 24 | 29 | 35 | 43 |
| ***Net ECBs to India*** | 12 | 13 | 16 | 19 | 23 | 28 |
| ***Net Short-term*** | 11 | 17 | 20 | 23 | 28 | 33 |
| ***Net External Assistance*** | 5 | 3 | 3 | 3 | 3 | 3 |
| Net NRI Flows | 3 | 4 | 4 | 4 | 4 | 4 |
| ***Others (residual)*** | -8 | -2 | -2 | -2 | -2 | -2 |
| **Net Capital Flows** | 60 | 80 | 91 | 104 | 120 | 129 |
| **(Per cent to GDP)** | | | | | | |
| FDI Inward | 1.4 | 1.8 | 2.0 | 2.1 | 2.3 | 2.2 |
| FDI Outward | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 1.3 |
| ***Net FDI*** | 0.4 | 0.8 | 0.9 | 1.0 | 1.1 | 0.9 |
| ***Net Portfolio Flows*** | 1.8 | 1.2 | 1.1 | 0.9 | 0.8 | 0.7 |
| Net FIIs | 1.7 | 1.1 | 1.0 | 0.8 | 0.7 | 0.6 |
| ECB Inflows | 1.2 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| ECB Outflows | 0.6 | 0.9 | 0.9 | 1.0 | 1.0 | 1.1 |
| ***Net ECBs to India*** | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 |
| ***Net Short-term*** | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 |
| ***Net External Assistance*** | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Net NRI Flows | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| ***Others (residual)*** | -0.5 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| **Net Capital Flows** | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.4 |

## ANNEX IV: ALTERNATE SCENARIOS (CAPITAL ACCOUNT)(cont.)

| **Statement 3B: Projections of Net Capital Flows for the 12th Plan – Scenario II** *(Assumptions: GDP growth 9.0 per cent and Inflation 6.0 per cent)* | | | | | | |
|---|---|---|---|---|---|---|
| | **2010-11** | **2012-13** | **2013-14** | **2014-15** | **2015-16** | **2016-17** |
| **(US$ Billion)** | | | | | | |
| FDI Inward | 23 | 42 | 52 | 63 | 76 | 83 |
| FDI Outward | 16 | 23 | 28 | 34 | 40 | 48 |
| ***Net FDI*** | 7 | 18 | 23 | 29 | 35 | 35 |
| ***Net Portfolio Flows*** | 30 | 28 | 28 | 28 | 28 | 28 |
| Net FIIs | 29 | 25 | 25 | 25 | 25 | 25 |
| ECB Inflows | 21 | 33 | 40 | 49 | 60 | 74 |
| ECB Outflows | 10 | 20 | 24 | 29 | 36 | 44 |
| ***Net ECBs to India*** | 12 | 13 | 16 | 20 | 24 | 29 |
| ***Net Short-term*** | 11 | 17 | 20 | 24 | 28 | 34 |
| ***Net External Assistance*** | 5 | 3 | 3 | 3 | 3 | 3 |
| Net NRI Flows | 3 | 4 | 4 | 4 | 4 | 4 |
| ***Others (residual)*** | -8 | -2 | -2 | -2 | -2 | -2 |
| **Net Capital Flows** | 60 | 80 | 92 | 105 | 120 | 131 |
| **(Per cent to GDP)** | | | | | | |
| FDI Inward | 1.4 | 1.8 | 1.9 | 2.0 | 2.1 | 2.0 |
| FDI Outward | 0.9 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 |
| ***Net FDI*** | 0.4 | 0.8 | 0.9 | 0.9 | 1.0 | 0.8 |
| ***Net Portfolio Flows*** | 1.8 | 1.2 | 1.0 | 0.9 | 0.8 | 0.7 |
| Net FIIs | 1.7 | 1.1 | 0.9 | 0.8 | 0.7 | 0.6 |
| ECB Inflows | 1.2 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| ECB Outflows | 0.6 | 0.9 | 0.9 | 1.0 | 1.0 | 1.1 |
| ***Net ECBs to India*** | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 |
| ***Net Short-term*** | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 |
| ***Net External Assistance*** | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Net NRI Flows | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| ***Others (residual)*** | -0.5 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| **Net Capital Flows** | 3.5 | 3.5 | 3.4 | 3.4 | 3.4 | 3.2 |

## ANNEX IV: ALTERNATE SCENARIOS (CAPITAL ACCOUNT)(cont.)

| **Statement 4B : Projections of Net Capital Flows for the 12th Plan – Scenario III** *(Assumptions: GDP growth 9.5 per cent and Inflation 5.0 per cent)* | | | | | | |
|---|---|---|---|---|---|---|
| | **2010-11** | **2012-13** | **2013-14** | **2014-15** | **2015-16** | **2016-17** |
| **(US$ Billion)** | | | | | | |
| FDI Inward | 23 | 44 | 54 | 67 | 81 | 90 |
| FDI Outward | 16 | 23 | 28 | 34 | 40 | 48 |
| ***Net FDI*** | 7 | 20 | 26 | 33 | 41 | 41 |
| ***Net Portfolio Flows*** | 30 | 38 | 38 | 38 | 38 | 38 |
| Net FIIs | 29 | 35 | 35 | 35 | 35 | 35 |
| ECB Inflows | 21 | 33 | 41 | 50 | 62 | 76 |
| ECB Outflows | 10 | 20 | 24 | 30 | 37 | 46 |
| ***Net ECBs to India*** | 12 | 13 | 16 | 20 | 25 | 30 |
| ***Net Short-term*** | 11 | 17 | 20 | 24 | 29 | 35 |
| ***Net External Assistance*** | 5 | 3 | 3 | 3 | 3 | 3 |
| Net NRI Flows | 3 | 4 | 4 | 4 | 4 | 4 |
| ***Others (residual)*** | -8 | -2 | -2 | -2 | -2 | -2 |
| **Net Capital Flows** | 60 | 92 | 105 | 120 | 137 | 150 |
| **(Per cent to GDP)** | | | | | | |
| FDI Inward | 1.4 | 1.9 | 2.0 | 2.2 | 2.3 | 2.2 |
| FDI Outward | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 |
| ***Net FDI*** | 0.4 | 0.9 | 1.0 | 1.1 | 1.2 | 1.0 |
| ***Net Portfolio Flows*** | 1.8 | 1.6 | 1.4 | 1.2 | 1.1 | 0.9 |
| Net FIIs | 1.7 | 1.5 | 1.3 | 1.1 | 1.0 | 0.9 |
| ECB Inflows | 1.2 | 1.4 | 1.5 | 1.6 | 1.8 | 1.9 |
| ECB Outflows | 0.6 | 0.9 | 0.9 | 1.0 | 1.1 | 1.1 |
| ***Net ECBs to India*** | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.9 |
| ***Net Short-term*** | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.9 |
| ***Net External Assistance*** | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Net NRI Flows | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| ***Others (residual)*** | -0.5 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| **Net Capital Flows** | 3.5 | 4.0 | 3.9 | 3.9 | 3.9 | 3.7 |

## ANNEX IV: ALTERNATE SCENARIOS (CAPITAL ACCOUNT)(cont.)

| **Statement 5B : Projections of Net Capital Flows for the 12th Plan – Scenario IV** *(Assumptions: GDP growth 9.5 per cent and Inflation 6.5 per cent)* | | | | | | |
|---|---|---|---|---|---|---|
| | **2010-11** | **2012-13** | **2013-14** | **2014-15** | **2015-16** | **2016-17** |
| **(US$ Billion)** | | | | | | |
| FDI Inward | 23 | 42 | 52 | 64 | 77 | 85 |
| FDI Outward | 16 | 23 | 28 | 34 | 40 | 48 |
| ***Net FDI*** | 7 | 19 | 24 | 30 | 36 | 36 |
| ***Net Portfolio Flows*** | 30 | 31 | 31 | 31 | 31 | 31 |
| Net FIIs | 29 | 28 | 28 | 28 | 28 | 28 |
| ECB Inflows | 21 | 33 | 41 | 50 | 62 | 76 |
| ECB Outflows | 10 | 20 | 24 | 30 | 37 | 46 |
| ***Net ECBs to India*** | 12 | 13 | 16 | 20 | 25 | 30 |
| ***Net Short-term*** | 11 | 17 | 20 | 24 | 29 | 35 |
| ***Net External Assistance*** | 5 | 3 | 3 | 3 | 3 | 3 |
| Net NRI Flows | 3 | 4 | 4 | 4 | 4 | 4 |
| ***Others (residual)*** | -8 | -2 | -2 | -2 | -2 | -2 |
| **Net Capital Flows** | 60 | 84 | 95 | 109 | 125 | 137 |
| **(Per cent to GDP)** | | | | | | |
| FDI Inward | 1.4 | 1.8 | 1.9 | 2.0 | 2.1 | 2.0 |
| FDI Outward | 0.9 | 1.0 | 1.0 | 1.1 | 1.1 | 1.1 |
| ***Net FDI*** | 0.4 | 0.8 | 0.9 | 0.9 | 1.0 | 0.8 |
| ***Net Portfolio Flows*** | 1.8 | 1.3 | 1.1 | 1.0 | 0.8 | 0.7 |
| Net FIIs | 1.7 | 1.2 | 1.0 | 0.9 | 0.7 | 0.6 |
| ECB Inflows | 1.2 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| ECB Outflows | 0.6 | 0.9 | 0.9 | 0.9 | 1.0 | 1.1 |
| ***Net ECBs to India*** | 0.7 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 |
| ***Net Short-term*** | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 |
| ***Net External Assistance*** | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Net NRI Flows | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| ***Others (residual)*** | -0.5 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| **Net Capital Flows** | 3.5 | 3.6 | 3.5 | 3.4 | 3.4 | 3.2 |

## ANNEX IV: ALTERNATE SCENARIOS (CAPITAL ACCOUNT)(cont.)

| **Statement 6B: Projections of Net Capital Flows for the 12th Plan – Scenario V (Additional)** *(Assumptions: GDP growth 8.0 per cent and Inflation 6.0 per cent)* | | | | | | |
|---|---|---|---|---|---|---|
| | **2010-11** | **2012-13** | **2013-14** | **2014-15** | **2015-16** | **2016-17** |
| **(US$ Billion)** | | | | | | |
| FDI Inward | 23 | 40 | 49 | 59 | 71 | 78 |
| FDI Outward | 16 | 23 | 28 | 34 | 40 | 48 |
| ***Net FDI*** | 7 | 17 | 21 | 26 | 31 | 29 |
| ***Net Portfolio Flows*** | 30 | 18 | 18 | 18 | 18 | 18 |
| Net FIIs | 29 | 15 | 15 | 15 | 15 | 15 |
| ECB Inflows | 21 | 33 | 39 | 47 | 57 | 69 |
| ECB Outflows | 10 | 21 | 25 | 31 | 37 | 45 |
| ***Net ECBs to India*** | 12 | 11 | 14 | 16 | 20 | 24 |
| ***Net Short-term*** | 11 | 14 | 16 | 19 | 22 | 27 |
| ***Net External Assistance*** | 5 | 3 | 3 | 3 | 3 | 3 |
| Net NRI Flows | 3 | 4 | 4 | 4 | 4 | 4 |
| ***Others (residual)*** | -8 | -2 | -2 | -2 | -2 | -2 |
| **Net Capital Flows** | 60 | 64 | 73 | 83 | 96 | 102 |
| **(Per cent to GDP)** | | | | | | |
| FDI Inward | 1.4 | 1.7 | 1.9 | 2.0 | 2.1 | 2.0 |
| FDI Outward | 0.9 | 1.0 | 1.1 | 1.1 | 1.2 | 1.2 |
| ***Net FDI*** | 0.4 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| ***Net Portfolio Flows*** | 1.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 |
| Net FIIs | 1.7 | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 |
| ECB Inflows | 1.2 | 1.4 | 1.5 | 1.6 | 1.6 | 1.7 |
| ECB Outflows | 0.6 | 0.9 | 1.0 | 1.0 | 1.1 | 1.1 |
| ***Net ECBs to India*** | 0.7 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 |
| ***Net Short-term*** | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 |
| ***Net External Assistance*** | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Net NRI Flows | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| ***Others (residual)*** | -0.5 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| **Net Capital Flows** | 3.5 | 2.8 | 2.8 | 2.8 | 2.8 | 2.6 |

## ANNEX IV: ALTERNATE SCENARIOS (CAPITAL ACCOUNT)(concluded)

| **Statement 7B: Projections of Net Capital Flows for the 12th Plan – Scenario VI (Additional)** *(Assumptions: GDP growth 7.0 per cent and Inflation 5.0 per cent)* | | | | | | |
|---|---|---|---|---|---|---|
| | **2010-11** | **2012-13** | **2013-14** | **2014-15** | **2015-16** | **2016-17** |
| **(US$ Billion)** | | | | | | |
| FDI Inward | 23 | 39 | 48 | 58 | 70 | 75 |
| FDI Outward | 16 | 23 | 28 | 34 | 40 | 48 |
| ***Net FDI*** | 7 | 16 | 20 | 24 | 29 | 27 |
| ***Net Portfolio Flows*** | 30 | 13 | 13 | 13 | 13 | 13 |
| Net FIIs | 29 | 10 | 10 | 10 | 10 | 10 |
| ECB Inflows | 21 | 32 | 38 | 45 | 54 | 64 |
| ECB Outflows | 10 | 23 | 27 | 32 | 38 | 45 |
| ***Net ECBs to India*** | 12 | 10 | 11 | 14 | 16 | 19 |
| ***Net Short-term*** | 11 | 11 | 13 | 15 | 17 | 20 |
| ***Net External Assistance*** | 5 | 3 | 3 | 3 | 3 | 3 |
| Net NRI Flows | 3 | 4 | 4 | 4 | 4 | 4 |
| ***Others (residual)*** | -8 | -2 | -2 | -2 | -2 | -2 |
| **Net Capital Flows** | 60 | 53 | 61 | 70 | 80 | 84 |
| **(Per cent to GDP)** | | | | | | |
| FDI Inward | 1.4 | 1.7 | 1.9 | 2.0 | 2.2 | 2.1 |
| FDI Outward | 0.9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.3 |
| ***Net FDI*** | 0.4 | 0.7 | 0.8 | 0.9 | 0.9 | 0.7 |
| ***Net Portfolio Flows*** | 1.8 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 |
| Net FIIs | 1.7 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 |
| ECB Inflows | 1.2 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| ECB Outflows | 0.6 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 |
| ***Net ECBs to India*** | 0.7 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 |
| ***Net Short-term*** | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 |
| ***Net External Assistance*** | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Net NRI Flows | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| ***Others*** | -0.5 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 |
| **Net Capital Flows** | 3.5 | 2.4 | 2.4 | 2.5 | 2.5 | 2.3 |