

**Accretion to Foreign Exchange Reserves in India:
Sources, Arbitrage and Costs - RBI Study**

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During the current fiscal year from April 1, 2002 to January 17, 2003, India's foreign exchange reserves have increased from US\$ 54.1 to US\$ 72.4 billion – an increase of US\$ 18.3 billion. Though welcome from the viewpoint of external security that it provides in India's external financial position, such large improvement in India's external position is unprecedented in India's own history. The story is also refreshingly different when compared with the current position of some of the other developing countries, barring some exceptions like China. It has, however, raised some statistical and analytical issues. These are:

- What are the sources of accretion to reserves?
- Are they on account of underlying arbitrage opportunities?
- What is the cost of these reserves?

The Department of Economic Analysis and Policy (DEAP) of the Reserve Bank of India undertook a study of these issues. The full study is available on the RBI website (www.rbi.org.in). Highlights of the study are:

Major Sources of Accretion

(figures in US\$ billion)

Item	April-November	
	2001	2002
I. Current Account Balance	-1.3	2.5
II. Capital Account Balance (Net)	6.2	8.0
Foreign Investment	2.7	1.9
Banking Capital : of which	3.6	4.0
NRI Deposits	2.2	2.1
Short Term Credit	-0.5	0.1
Other Capital	0.5	3.8
Commercial Borrowings	-0.9	-1.8
III. Valuation Changes	0.4	2.1
Total	4.5	12.6

Major sources of accretion of foreign exchange reserves during the current fiscal year till end-November have been:

- Surplus in current account
- Increase in "other capital"
- Valuation changes in reserves

The study has found that the increase in "other capital" has been on account of leads in export receipts due to rupee appreciation. Export receipts which may have been withheld earlier due to expectation of further depreciation of the rupee, are also being realised faster as the rupee

has appreciated. Valuation changes reflecting the appreciation of the Euro, GBP and Yen against the US dollar account for US\$2.1 billion in the value of forex reserves.

Arbitrage Opportunities

The interest rate offered at present on Non-Resident Foreign Currency Accounts {FCNR(B)} is 25 basis points **lower** than the LIBOR whereas the interest rates offered on Non-Resident Indian convertible rupee deposits (NRE deposits) are broadly in line with the rates offered on domestic deposits of similar maturity. The interest rates offered on NRE deposits for tenure of six months to one year for instance, range from 4.5 to 6 per cent; while the interest rates offered on domestic deposits of similar maturity range between 4.00 to 6.25 per cent.

However, there exists an interest rate differential of 3 to 4 per cent between the rates abroad and in India, given the lower interest rates abroad. There has been a net increase of US\$ 2.1 billion in NRI deposits during the period April-November 2002, similar to the increase of US\$ 2.2 billion in April-November 2001. This accretion also includes a drawdown of deposits in Non-Resident non-convertible rupee accounts (NRNR and NRSR accounts) which were discontinued in March 2002. Further, the inflows in NRI deposits since 1999-2000 have been in the range of US\$ 1.5 to 2.7 billion. In other words, the inflows through NRI deposits in the current fiscal have been consistent with the trends observed over the past few years. There is, thus, no evidence to show that available arbitrage opportunities have caused the accretion to foreign exchange reserves.

Cost of Reserves

An analysis of the sources of reserves indicates that a substantial portion of the fresh accretion has been by way of current account surplus (20 per cent), non-debt creating capital flows (40 per cent) and by way of currency valuation (17 per cent). The balance (23 per cent) which has come by way of debt creating capital inflows, includes non-resident deposits, "other assets" under banking capital and short term loans. Since the debt creating inflows are significantly low, it may be concluded that the cost of accretion to reserves is not very significant. Furthermore, almost the entire addition to reserves, in the last few years, has been made without increasing the overall level of external debt. Finally, the net earnings foreign exchange reserves during the year ended June 30, 2002 worked out to 4.1 per cent. This excludes valuation changes on account of exchange rate movements between rupee and foreign currencies in which foreign exchange reserves are held and gains/losses on account of movement in prices of gold. In other words, the return of 4.1 per cent on reserves is exclusive of the substantial gains accrued in dollar terms to foreign exchange reserves portfolio on account of appreciation of non-dollar currencies against the US dollar and gains from the rise in price of gold during the year.

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