VI DEVELOPMENTS IN THE EXTERNAL SECTOR

6.1 The external sector position of the economy in 1997-98 continued to be strong, notwithstanding the deceleration in India's merchandise trade and episodes of foreign exchange market pressures. The foreign exchange market in the early months of the year was, in fact, characterised by excess supply conditions and a stable exchange rate facilitated, as it was, by purchases of foreign exchange from the market by the Reserve Bank. The market sentiment, however, changed in the second half of the year, largely attributable to nervous reactions to the South-East Asian financial crisis and uncertainties related to domestic developments. Thus, net purchases by the Reserve Bank from the foreign exchange market up to August 1997 gave way to net sales, both spot and forward, especially in large amounts in November 1997, up to mid-January 1998. However, intensification of the threat of the contagion necessitated recourse to strong monetary policy measures to squelch speculative activity and to ensure that orderly conditions prevail in the market. Reflecting the Reserve Bank's actions and the onset of stability in the exchange market, the foreign exchange reserves, which declined from a peak of US $ 30 billion in August 1997 to US $ 27.9 billion in November 1997 and further to US $ 27.4 billion in December 1997, increased to about US $ 29.4 billion in March 1998, the equivalent of seven months of imports.

BALANCE OF PAYMENTS

6.2 During the year, weaknesses in external demand and real domestic activity operated as constraints on export and import growth. While the softness in international PoL prices resulted in a saving on PoL imports, non-PoL imports recovered from a trough in the preceding year. The distinct slowdown in merchandise exports resulted in a somewhat larger trade deficit than in the preceding year. The net invisible surplus remained buoyant, unaffected by the depressed international environment. The current account deficit thus widened only modestly over the year. There was some dampening of capital flows, with portfolio investment and drawals under external commercial borrowings recording a slowdown in the second half of the year. Nevertheless, for the second year in succession, the balance of payments recorded an overall surplus of US $ 4,511 million (US $ 6,793 million in 1996-97) (Tables 6.1, 6.2 and Appendix Table VI.1).

Merchandise Trade

6.3 According to the provisional data released by the Directorate General of Commercial Intelligence and Statistics (DGCI&S), during 1997-98, India's exports at US $ 33,980 million showed a rise of 1.5 per cent, lower than that of 5.3 per cent growth rate registered during the preceding year. During the year under review, India's export growth in SDR terms decelerated to 6.7 per cent from 10.8 per cent witnessed during 1996-97. A host of internal and external factors, particularly, domestic infrastructural constraints, slackening of domestic economic activities, steep decline in manufactures' prices in dollar terms and the South-East Asian currency crisis contributed to the poor performance of exports.

6.4 The deceleration in India's exports during 1997-98 was, however, not uniform across all sectors. Manufactured exports, for instance, decelerated from 4.7 per cent during 1996-97 to 3.3 per cent in 1997-98, reflecting a sharp decline of 9.2 per cent in the international prices of manufactured exports in US dollar terms. Primary exports declined sharply by 7.0 per cent in 1997-98 in contrast to an increase of 10.7 per cent in the previous year (Appendix Tables VI.2 and VI.3).

6.5 During 1997-98, there was a decline in India's exports to the South-East Asian countries. In particular, India's exports to the countries most severely affected by the currency crises - *viz*., Indonesia, Republic of Korea, Malaysia and Thailand - declined by about US $ 423 million during 1997-98 as against an increase of about US $ 674 million

Table 6.1 : India's Overall Balance of Payments (Preliminary)

(US $ million)

Item	1997-98 April-September	1997-98 October-March	1997-98 April-March	1996-97 April-March
1	2	3	4	5
1. Current Account				
i) Exports, fob	17,527	17,322	34,849	34,133
ii) Imports, cif	24,485	26,641	51,126	48,948
iii) Trade Balance	-6,958	-9,319	-16,277	-14,815
iv) Invisibles, net	5,431	4,373	9,804	10,321
v) Current Account Balance	-1,527	-4,946	-6,473	-4,494
2. Total Capital Account	5,343	5,641	10,984	11,287
of which:				
i) External Assistance, net	90	809	899	1,109
ii) Commercial Borrowings, net	3,132	867	3,999	2,848
iii) NRI Deposits, net	321	804	1,125	3,350
iv) Foreign Investment, net	2,981	2,012	4,993	5,838
3. Overall Balance	3,816	695	4,511	6,793
4. Monetary Movements	-3,816	-695	-4,511	-6,793
5. IMF, net	-350	-268	-618	-975
6. Reserves and Monetary Gold (Increase - / Decrease +)	-3,466	-427	-3,893	-5,818

Note : Data on exports and imports differ from those given by DGCI&S (please see section on Merchandise Trade) on account of differences in coverage, valuation and timing.

and US $ 112 million during 1995-96 and 1996-97, respectively. India's exports in value terms to Japan, the US, the UK and Germany have been affected mainly on account of a fall in international prices of export goods.

6.6 During the 1990s so far, there has not been any significant change in the composition of India's export basket. The concentration of India's exports continued to be dominated by five major items, *viz*., gems and jewellery, engineering goods, readymade garments, cotton yarn, fabrics, made ups and chemicals and allied products. Their share in India's total exports hovered between 55 per cent and 60 per cent during this period.

6.7 During 1997-98, India's imports at US $ 40,779 million grew by 4.2 per cent as compared with 6.7 per cent during 1996-97. In SDR terms, imports decelerated to 9.6 per cent during the period under review from 12.3 per cent registered during the preceding year. It is significant to note that non-oil imports grew at 11.9 per cent in US dollar terms compensating for the reduction in oil imports by 18.1 per cent. Among the non-oil imports, capital goods imports declined reflecting subdued domestic industrial activity (Appendix Tables VI.2 and VI.4).

6.8 Although both exports and imports decelerated, the trade deficit enlarged from US $ 5,663 million during 1996-97 to US $ 6,799 million during 1997-98 (Appendix Table VI.2).

6.9 Data on the direction of India's foreign trade showed no significant shift during 1997-98. The Organisation for Economic Cooperation and Development (OECD) countries accounted for 55.7 per cent of India's exports and 50.8 per cent of India's imports. There was, however, a fall of 3.0 percentage points in the share of Organisation of Petroleum Exporting Countries (OPEC) in India's total imports, essentially reflecting the decline in international oil prices.

Invisibles

6.10 Invisibles transactions continued to be a durable source of support to the balance of payments, as reflected in a surplus of US $ 9,804 million in 1997-98 as against a surplus

Table 6.2 : India's Balance of Payments : Key Indicators

(Per cent)

Item	Preliminary 1997-98	1996-97	1995-96	1994-95	1990-91
1	2	3	4	5	6
a) Trade					
i) Exports/GDP	9.1	9.5	9.7	8.8	6.2
ii) Imports/GDP	13.4	13.6	13.1	11.7	9.4
iii) Import Purchasing Power of Exports	..	519.7	530.0	446.0	212.2
(Base: 1978-79=100)					
Annual Growth Rate	..	-1.9	18.8	19.5	0.2
iv) Exports Volume Growth	..	7.2	31.3	13.7	11.0
b) Invisibles					
i) Invisible Receipts/GDP	6.0	6.0	5.3	5.1	2.5
ii) Invisible Payments/GDP	3.5	3.1	3.7	3.2	2.6
iii) Invisible Net/GDP	2.5	2.9	1.6	1.9	-0.1
c) Current Account					
i) Current Receipts @ / GDP	15.1	15.4	14.9	13.7	8.5
ii) Current Receipts Growth @	4.2	11.3	18.2	24.9	6.6
iii) Current Receipts @ / Current Payments	89.2	91.9	88.9	91.7	71.5
iv) CAD/GDP	-1.7	-1.2	-1.8	-1.1	-3.2
d) Capital Account					
i) Foreign Investment/GDP	1.3	1.6	1.4	1.6	0.03
ii) Foreign Investment/Exports	14.2	17.1	14.4	17.9	0.6
e) Others					
i) Debt-GDP Ratio	26.4	26.2	28.3	32.3	30.4
ii) Debt-Service Ratio	19.5	21.2	24.3	26.2	35.3
iii) Liability Service Ratio	20.5	21.6	24.7	26.6	35.6
iv) Import Cover of Reserves (in months)	7.3	6.6	6.1	8.5	2.7

@ Excluding official transfers. .. Not Available.

Note : Based on data given in Table 6.1 and Appendix Table VI.1.

of about US $ 9,300 million in 1996-97, adjusted for the transfer of India Development Bonds to residents of the order of about US $ 1,000 million (including such transfers, the surplus in the invisible account in 1996-97 was US $ 10,321 million) (Appendix Table VI.5). Software exports surged by about 55 per cent to an estimated US $ 1,700 million on top of a rise of 46 per cent in 1996-97. Earnings on account of technology-related and other private services also recorded a healthy improvement. Despite the resumption of trend levels under travel payments and technology transfer related service payments and a deceleration in tourist arrivals, net earnings from non-factor services were higher at US $ 1,143 million as against US $ 851 million in 1996-97. The strong growth of software exports is noteworthy in view of its imperviousness to exchange rate movements and depressed regional markets, in contrast to merchandise exports. This is indicative of a shift in competitiveness in favour of service intensive exports with implications for designing of India's export strategies in the medium-term. Private transfers continued to be buoyant. Net investment income payments increased moderately during 1997-98 due to higher interest payments on external borrowings outweighing higher earnings on the deployment of foreign exchange reserves.

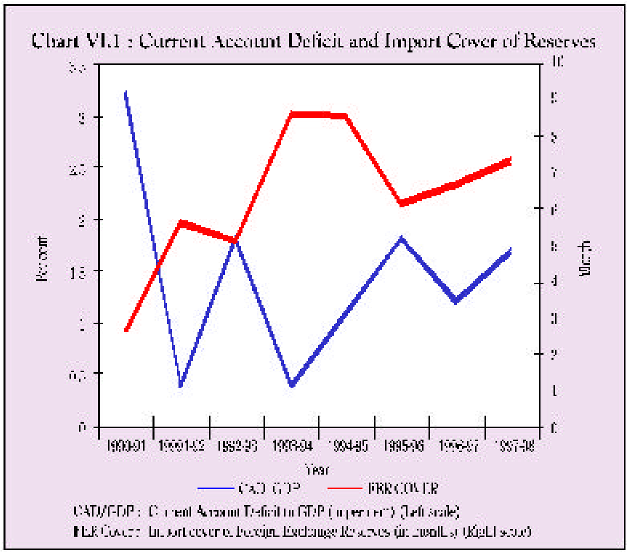


Chart VI.1 : Current Account Deficit and Import Cover of Reserves

Current Account

6.11 With the stable support provided by invisibles and with import growth keeping below the medium term trend rate, the current account deficit remained modest at US $ 6,473 million (1.7 per cent of GDP) in 1997-98 as against US $ 4,494 million (1.2 per cent of GDP) in 1996-97 (Tables 6.1 and 6.2, Chart VI.1 and Appendix Table VI.1). The current account deficit of this order was easily financed and could thus be regarded as viable in the current macroeconomic environment. There are, however, some areas of concern. The principal cause of widening of the current account deficit in 1997-98 was the continuing weakness in merchandise export performance. As a consequence, the current receipts to GDP ratio which had recorded a healthy rising trend over the period 1992-93 through 1996-97 declined in 1997-98. The sustainability of the current account deficit is essentially a reflection of the movements in current receipts relative to GDP. While the debt service ratio declined from 21.2 per cent in 1996-97 to 19.5 per cent in 1997-98 (Table 6.2 and Chart VI.2), this was mainly on account of a dip in amortisation. Nevertheless, there were several positive features in the current account outturn which provided strength to the balance of payments. The fortuitous softening of international crude oil prices provided a measure of saving in 1997-98; this is likely to continue in the immediate term. The continuing growth in invisible receipts, in particular, software exports, technology related services and workers' remittances compensated for the slackening of merchandise export growth and attested to the shifting profile of comparative advantage away from goods and towards services. The channel for liberalisation of gold and silver imports for Indians returning from abroad has enabled a progressive decline in the recourse to unofficial channels for transferring remittances. This was provided a further boost during the year by allowing eleven nominated agencies including eight banks and three canalising agencies to import gold and silver for sale in the domestic market. In the final analysis, a current account deficit of around 2 per cent of GDP can be regarded as sustainable in the context of the rate of growth of the economy and the requirement of external financing which does not impose a constraint in the form of unviable debt servicing. This essentially underscores the need for a sustained improvement in export performance.

Capital Account

6.12 Developments in the capital account in 1997-98 reveal three clear phases. The first phase encompassing the first half of the year was dominated by net capital inflows which at US $ 5,343 million were higher than in the first half of 1996-97 and far exceeded the current financing requirement. During the second phase, *i.e.*, between October 1997 to February 1998, exchange market turbulence dampened capital flows creating an external financing gap which was met by a drawdown of reserves. With the return of stability in the exchange market and the resumption of capital flows, reserve losses were recouped in March

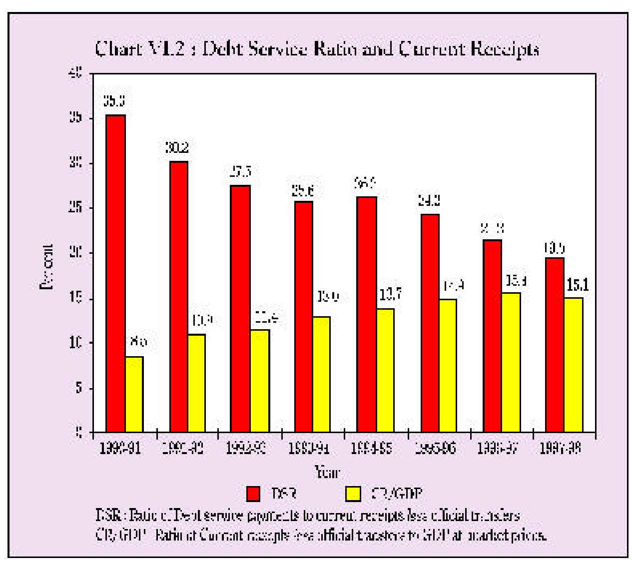
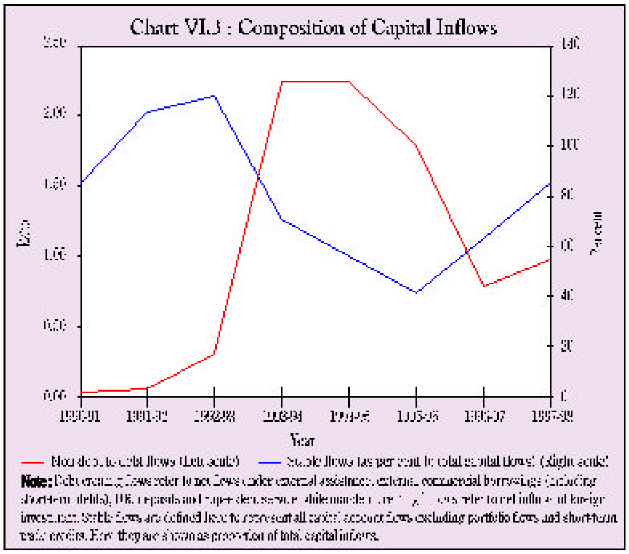
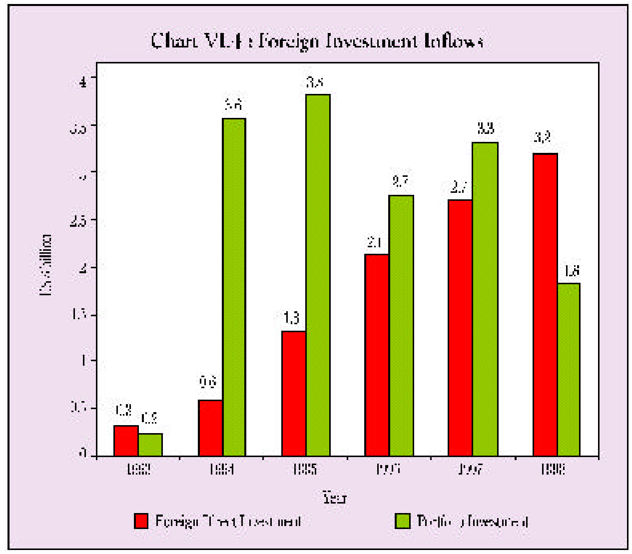


Chart VI.2 : Debt Service Ratio and Current Receipts





1998 which represented the third phase (Table 6.1). Exchange market developments brought about a distinct separation between relatively stable and other flows in the capital account (Appendix Table VI.6 and Chart VI.3). Items such as direct foreign investment, external assistance and external commercial borrowings withstood the sporadic speculative attacks on the exchange rate although some entities raising funds under the latter avenue revealed a preference for holding funds abroad, partly to avoid exchange risk and partly in response to sluggish industrial activity. On the other hand, portfolio investment by foreign institutional investors (FIIs) and inflows under various deposit schemes for non-resident Indians were adversely affected by a combination of exchange rate uncertainties, stock market pessimism and domestic slowdown, interlaced with negative reactions to the South-East Asian crisis.

6.13 Developments in the capital account during 1997-98 indicate compositional shifts which would endow the balance of payments with innate strengths in the coming years. Since 1996-97, the proportion of relatively stable flows to total capital flows has increased significantly compared to others *viz.*, portfolio investment and short-term credits. During 1997-98, there was also a healthy improvement in the ratio of non-debt to debt flows, indicative of an increasing reliance on stable elements in the capital account such as foreign direct investment (Appendix Table VI.6 and Chart VI.4). With regard to the debt flows, there has been a distinct lengthening of maturity which was reflected in the maturity profile of the debt stock.

Foreign Investment

6.14 While foreign investment flows, benefiting from a restructuring of external sector policies, have recorded a healthy rising trend since 1991-92 except for a moderate decline in 1995-96 on account of lower offerings of GDRs, the general uptrend was reversed by US $ 983 million, entirely on account of a large decline in net portfolio flows in 1997-98 (Table 6.3).

6.15 Developments in the domestic stock markets were reflected in the market for GDRs. As a result, the amounts raised under GDRs fell from US $ 1,366 million in 1996-97 to US $ 645 million in 1997-98. The GDR issues were dominated by offerings of MTNL reflecting divestiture of public ownership.

6.16 In the initial months of the year, investments by FIIs slackened in relation to the preceding year in view of the currency turmoil in South-East Asia and the rising stock prices in the US providing a safe haven. Deceleration in industrial activity and bearish sentiment in stock exchanges dampened the financial prospects of corporates and adversely affected FII activity. During the period of volatility in the foreign exchange market (*i.e.*, between November 1997 and February 1998), the decelerating FII investment turned into net outflows. Investments by FIIs during 1997-98 fell to about US $ 1.0 billion from US $ 1.9

Table 6.3 : Foreign Investment Flows by Category

(US $ million)

Item	1997-98P	1996-97	1995-96
1	2	3	4
A) Direct Investment	3,197	2,696	2,133
a) Government (SIA/FIPB)	2,754	1,922	1,249
b) RBI	202	135	169
c) NRI	241	639	715
B) Portfolio Investment	1,828	3,312	2,748
a) GDRs #	645	1,366	683
b) FIIs *	979	1,926	2,009
c) Offshore funds and others	204	20	56
C) Total (A+B)	5,025	6,008	4,881

P Provisional.

Represent the amount raised by Indian corporates.

* Represent fresh inflow of funds by FIIs.

Note : 1. GDRs : Global Depository Receipts.

2. FIIs : Foreign Institutional Investors.

3. Data on foreign investment presented here represent gross inflows into the country and may not tally with data presented in other tables which include direct imports against foreign investment, Indian investment abroad as well as disinvestment.

billion in 1996-97.

6.17 In contrast, inflows of foreign direct investment (FDI) of US $ 3.2 billion were well above US $ 2.7 billion in 1996-97 and US $ 2.1 billion recorded in 1995-96. FDI was allowed into the area of financial services during the year through the Foreign Investment Promotion Board. As in the earlier years, Mauritius and the US remained the two most important sources of FDI inflows for India. A striking feature of 1997-98 was the sharp increase in inflows from South Korea (from US $ 6.3 million in 1996-97 to US $ 333.1 million in 1997-98). FDI inflows from Germany, however, declined somewhat during 1997-98 (Table 6.4). Industry-wise, the electronics and electrical equipment sector exhibited the sharpest increase in FDI inflows and emerged as the most attractive sector during 1997-98. Engineering, services and chemical and allied products were the other important sectors in terms of attracting FDI inflows during 1997-98 (Table 6.5).

Non-Resident Deposits

6.18 Net inflows under non-resident deposit schemes declined to US $ 1,154 million in 1997-98 from US $ 3,314 million in 1996-97 (Table 6.6). With the unwinding of residual deposits under the discontinued FCNRA Scheme amounting to US $ 2,270 million, net inflows of around US $ 850 million recorded

Table 6.4 : Foreign Investment – Country-wise Inflows*

Source	(Rupees crore)			(US $ million)		
	1997-98	1996-97	1995-96	1997-98	1996-97	1995-96
1	2	3	4	5	6	7
Mauritius	3,346.3	3,004.7	1,697.0	900.4	846.4	507.3
U.S.A.	2,554.7	857.6	650.9	687.4	241.6	194.6
South Korea	1238.0	22.2	79.9	333.1	6.3	23.9
Japan	607.5	343.3	203.8	163.5	96.7	60.9
Netherlands	590.5	439.3	166.7	158.9	123.7	49.8
Germany	562.7	589.9	333.6	151.4	166.2	99.7
U.K.	467.7	192.4	237.1	125.8	54.2	70.9
Hong Kong	231.8	147.4	334.6	62.4	41.5	100.0
Italy	159.6	98.4	37.8	42.9	27.7	11.3
Others	1,227.1	1,616.8	1,001.6	330.2	452.7	299.6
Total	10,985.9	7,312.0	4,743.0	2,956.0	2,057.0	1,418.0

* Exclude inflows under the NRI direct investments route through the RBI.

Table 6.5 : Foreign Investment - Industry-wise Inflows*

Sector	(Rupees crore) 1997-98	1996-97	1995-96	(US $ million) 1997-98	1996-97	1995-96
1	2	3	4	5	6	7
Electronics & Electrical Equipment	2,395.6	545.4	433.6	644.6	153.6	129.6
Engineering	2,155.1	2,592.2	842.5	579.9	730.2	251.9
Services	1,194.1	53.9	336.0	321.3	15.2	100.4
Chemical & Allied Products	956.2	1,078.5	423.8	257.3	303.8	126.7
Finance	549.7	770.4	903.3	147.9	217.0	270.0
Computers	517.2	208.4	174.3	139.2	58.7	52.1
Food & Dairy Products	417.8	843.2	284.2	112.3	237.5	85.0
Domestic Appliances	222.8	53.5	1.6	59.9	15.1	0.5
Pharmaceuticals	125.6	169.0	183.2	33.8	47.6	54.8
Others	2,451.8	997.5	1,160.5	659.8	278.3	347
Total	10,985.9	7,312.0	4,743.0	2,956.0	2,057.0	1,418.0

* Exclude inflows under the NRI direct investments route through the RBI.

in the first quarter of 1997-98 for all the schemes taken together reversed into net outflows of an almost equivalent order in July-August 1997. The imposition of an incremental cash reserve ratio (CRR) of 10 per cent on non-resident deposit schemes in April 1997 began to take hold in July 1997 resulting in subdued net inflows under FCNR(B), NRERA and NR(NR)RD which turned into net outflows in August 1997. In the subsequent months, the deposit schemes exhibited differential sensitivities to exchange rate movements. Under the FCNR(B) scheme, where deposits are accepted and repatriated in foreign currencies, large net outflows were recorded in the period October 1997 to February 1998. Of the outstanding balances under the scheme, about 60 per cent were not swapped domestically nor lent to residents in foreign currency in response to sluggish domestic demand and unsettled exchange market conditions. The absence of exchange risk notwithstanding, the factor at work seemed to be the removal of the interest rate incentive with the linkage with the LIBOR in October 1997. On the other hand, the rupee deposit schemes *i.e.*, NRERA and NR(NR)RD, where the exchange risk is borne by the depositor, were relatively unaffected by exchange market activity and except for limited net outflows in August and November 1997, net inflows were recorded under both the schemes throughout the year. The freeing of interest rates under the NRERA, the facility of forward cover, the removal of incremental CRR on both NRERA and NR(NR)RD and the removal of multiple prescriptions for loans out of resources mobilised under the non-resident deposit schemes had the combined impact of effectively addressing the speculative sentiment and signalling confidence in rupee denominated

Table 6.6 : Balances under NRI Deposit Schemes

(US $ million)

Item	Balances End-March 1998	End-March 1997	Variations@ 1997-98	1996-97
1	2	3	4	5
1. FCNR(A)	36	2,306	-2,270	-1,949
2. FCNR(B)	8,467	7,496	971	1,773
3. NR(E)RA	5,637	4,983	1,197	1,244
4. NR(NR)RD	6,262	5,604	1,256	2,246
Total	20,402	20,389	1,154	3,314

@ All figures are inclusive of accrued interest and valuation arising on account of fluctuations in non-dollar currencies against the US dollar.

Note : 1. Variations do not match with the difference between outstanding stocks for rupee deposits on account of the exchange rate fluctuations during the year.

2. Variations presented in this table may differ from data presented in other tables against NRI deposits on account of valuation effects.

assets. The interplay of these factors brought about a compositional shift in the outstanding balances under all the schemes taken together. Deposits held in foreign currencies lost their share of nearly 50 per cent of total outstandings at end-March 1997 and amounted to little over 40 per cent by end-March 1998.

External Assistance

6.19 Net inflows (drawals *less* repayments) of external assistance were US $ 899 million during 1997-98 (Table 6.1 and Appendix Table VI.1). In recent years, net inflows under this head have been somewhat stagnant. The negative transfer of resources, measured as utilisation of loans and grants *less* repayments of principal and interest amounted to US $ 113 million in 1997-98, which highlights the need to accelerate utilisation of committed assistance even as the reliance on aid declines.

External Commercial Borrowings

6.20 The revival of demand for external commercial borrowings which was evident in the first half of the year owing to relatively lower costs, slumped in the second half on account of a sharp rise in forward premia reflecting the influence of monetary policy measures. Furthermore, the relative sluggishness in industrial activity dampened demand for external resources; of the commercial borrowings raised during the year, some amounts were in fact held abroad. Net inflows under external commercial borrowings amounted to US $ 3,999 million, significantly higher than that of US $ 2,848 million in 1996-97 on account of lower amortisation.

6.21 The policy for external commercial borrowing is subject to continuous review as part of a prudent external debt management strategy. The demand for external resources for new investment as well as for expansion of existing capacity is modulated through lengthening of the maturity profile of loans, annual ceilings on access, prioritisation of end-use and monitoring of costs. In the light of the South-East Asian financial crisis and its impact on international markets and considering the need for according importance to infrastructure and export sectors as thrust areas, shifts in the policy for external commercial borrowing were effected in April 1998. The average maturity for ECB for exporters and the shipping sector was reduced from 7 years to 5 years for proposals above US $ 15 million in view of the specific requirements of these sectors.

Overall Balance

6.22 Net capital flows at US $ 10,984 million exceeded the current account deficit for the second year in succession, posting the overall balance of payments into a surplus of US $ 4,511 million (1.2 per cent of GDP) in 1997-98 as against that of US $ 6,793 million (1.9 per cent of GDP) in 1996-97. The overall surplus in 1997-98 enabled repurchases from the IMF of US $ 618 million and accretion to the foreign exchange reserves, excluding valuation changes, of US $ 3,893 million (Table 6.1 and Appendix Table VI.1).

FOREIGN EXCHANGE RESERVES

6.23 India's foreign exchange reserves comprising foreign currency assets of the Reserve Bank, gold held by the Reserve Bank and SDRs held by the government increased by US $ 2,944 million from US $ 26,423 million (Rs.94,932 crore) as at the end of March 1997 to US $ 29,367 million (Rs.1,15,905 crore) by the end of March 1998. This increase was over and above the increase of US $ 4,736 million recorded during 1996-97 and occurred despite payments of US $ 2,243 million being effected directly from the reserves under FCNRA deposits (Table 6.7 and Appendix Table VI.8).

6.24 The reserve build up during 1997-98 was on account of the accretion to the foreign currency assets of the Reserve Bank by US $ 3,608 million. Capital inflows well in excess of the modest increase in the current account deficit created surplus conditions in the foreign exchange market during April-August 1997 leading to large net purchases of US $ 5,426 million by the Reserve Bank. Beginning with September, intense activity in the exchange market necessitated large spot market operations by the Reserve Bank from time to time to restore orderly conditions in the market and to quell adverse market expectations. By March 1998, normalcy was restored in the market and excess supply conditions enabled

Table 6.7 : Foreign Exchange Reserves and Use of IMF Credit

(In US $ million)

As at the end of	Gold	SDR	Foreign Currency Assets	Total (2+3+4)	Reserve Position in the Fund	Outstanding use of IMF Credit (Net)*
1	2	3	4	5	6	7
March 1992	3,499	90	5,631	9,220	—	3,451 (2,516)
March 1993	3,380	18	6,434	9,832	296	4,799 (3,433)
March 1994	4,078	108	15,068	19,254	299	5,040 (3,568)
March 1995	4,370	7	20,809	25,186	331	4,300 (2,755)
March 1996	4,561	82	17,044	21,687	310	2,374 (1,625)
March 1997	4,054	2	22,367	26,423	294	1,313 (947)
March 1998	3,391	1	25,975	29,367	283	664 (497)
June 1998P	3,020	81	23,933	27,034	282	563 (423)

P Provisional.

* Figures in brackets are in SDR million.

net purchases of US $ 1,449 million during the month. For the year as a whole, net purchases of US $ 3,869 million contributed to the accretion to foreign currency assets. Aid receipts of US $ 1,408 million, outflows of US $ 2,243 million under the FCNRA scheme and acquisition of SDRs equivalent of US $ 702 million to effect various payments to the IMF were the other major factors which affected the movement in the foreign currency assets during the year.

6.25 From the standpoint of achieving the goal of ensuring orderly conditions in the foreign exchange market as also to deal with situations arising on account of unanticipated and sudden reversals of capital flows, a level of reserve assets that could be considered as adequate needs to take into consideration a host of factors such as the cover for sufficient months of current payments, the stock of short-term and volatile external liabilities, shift in the pattern of leads and lags in payments/receipts during exchange market uncertainties along with the conventional norm of cover for sufficient months of imports. In the Indian context, as against an outstanding short-term debt of about US $ 5.0 billion, cumulative net inflows of about US $ 8.5 billion under portfolio investment by FIIs and cumulative issuance of GDRs of about US $ 6.0 billion up to March 1998, gross foreign exchange reserves stood at US $ 29.4 billion. Net of outstanding forward liabilities, the Reserve Bank's foreign exchange reserves at about US $ 27.6 billion were equivalent of more than six months of imports and adequate to deal with any external imbalances arising on account of fluctuations in capital flows.

6.26 Besides the size of reserves, the quality of reserves also assumes importance. Unencumbered reserve assets[1] must be available at any point of time to the authorities for fulfilling various objectives assigned to reserves. In India, the only encumberance is forward sales net of purchases. The Reserve Bank's accumulated forward liabilities which were US $ 40 million at the end of August 1997 rose to a peak of US $ 3,190 million or equivalent of 13 per cent of the corresponding gross reserves by the end of January 1998 and then declined to US $ 1,634 million at the end of June 1998. As a matter of prudent management of external liabilities, the Reserve Bank's policy is to keep forward liabilities at a relatively low level as a proportion of gross reserves. The level of net reserves, *i.e.*, gross reserves net of forward liabilities, increased significantly during 1997-98 from US $ 26,078 million (end-March 1997) to US $ 27,575 million (end-March 1998).

1. The unencumbered reserve assets are reserve assets net of encumberances such as forward commitments, lines of credit to domestic entities, guarantees and other contingent liabilities.

6.27 Special Drawing Rights (SDR) balances held by the Government amounted to US $ 1 million at the end of the year from US $ 2 million a year ago. For effecting various payments to the IMF (in the form of repurchases and payment of charges, inclusive of valuation factors) of US $ 701 million (SDR 512.2 million), SDRs equivalent of US $ 702 million (SDR 511.64 million) were purchased through the IMF using foreign currency assets.

6.28 The value of gold held by the Reserve Bank declined from US $ 4,054 million as at the end of March 1997 to US $ 3, 391 million by the end of March 1998, primarily on account of valuation losses resulting from the decline in international gold prices. Partial redemptions under the Gold Bond scheme also contributed to the decline in the value of Reserve Bank's gold holdings by about US $ 12 million. As a result, the quantity of gold held in the Reserve Bank fell from about 397.5 tonnes at the end of March 1997 to 396.2 tonnes at the end of March 1998.

EXTERNAL DEBT

6.29 The stock of external debt stood at US $ 94,404 million at the end of March 1998 as against US $ 93,431 million at the end of March 1997 (Table 6.8 and Appendix Table VI.9). The debt creating flows during 1997-98 amounted to US $ 3,286 million; however, the debt stock rose only by US $ 973 million over the year reflecting the impact of the appreciation of the US dollar against major international currencies on the stock of external debt expressed in terms of the US dollar.

6.30 The share of concessional debt in total debt was 39.2 per cent at end-March 1998 as compared with 42.3 per cent at end-March 1997. The proportion of rupee debt in total debt declined from 8.0 per cent at end-March 1997 to 6.3 per cent at end-March 1998. The share of government debt which has exhibited a steady decline since 1993 was 50.0 per cent at end-March 1998. Reflecting the policy of restricting the short-term component of the external debt liabilities within manageable limits, the share of short-term external debt in the total declined from US $ 6,726 million (7.2 per cent) at end-March 1997 to US $ 5,046 million (5.3 per cent) at end-March 1998, the bulk of the decline occurring under non-resident deposits.

Table 6.8 : India's External Debt

(US $ million)

Item	At the end of March 1998 P	At the end of March 1997 R
1	2	3
1. Multilateral	29,572	29,200
2. Bilateral	17,180	17,492
3. IMF	664	1,313
4. Commercial Borrowings (including trade credits) $	24,044	20,177
5. NRI Deposits	11,948	11,012
6. Rupee Debt	5,950	7,511
7. Long-term Debt (1 to 6)	89,358	86,705
8. Short-term Debt*	5,046	6,726
9. Total Debt (7+8)	94,404	93,431

P Provisional. R Revised.

$ Includes net investment in debt instruments by foreign institutional investors.

* Excludes LC-based trade credit for which no estimates are available.

6.31 Judged by the standard indicators of external debt sustainability, the country's external debt position showed improvement. The debt service ratio (defined as the ratio of total debt service, *i.e.*, both principal repayments and interest payments to current receipts *less* official transfers) declined from 21.2 per cent during 1996-97 to 19.5 per cent during 1997-98 (Table 6.9). The debt to GDP ratio, however, rose marginally to 26.4 per cent as at end-March 1998 from 26.2 per cent as at end-March 1997. Following the compositional shift in the capital account of the country's balance of payments in favour of non-debt creating flows, servicing of non-debt liabilities also assumes importance for assessing sustainability.

6.32 The strategy guiding the external debt management continues to be one that emphasises maintenance of an appropriate maturity profile and currency composition of the external debt while at the same time minimising the cost of external finance to the country. The recent crisis in South-East Asia highlights the importance of prudent external debt management for a country's sustainable growth.

EXCHANGE RATE MANAGEMENT

6.33 The year 1997-98 and the first quarter of 1998-99 posed severe challenges to exchange

Table 6.9 : Debt Service Payments

(US $ million)

Item	Preliminary						
	1997-98	1996-97	1995-96	1994-95	1993-94	1992-93	1991-92
1	2	3	4	5	6	7	8
1. External Assistance @	3,234	3,319	3,283	2,897	2,753	2,541	2,447
2. External Commercial Borrowing *	4,725	4,948	4,696	4,715	3,500	2,707	2,830
3. IMF #	667	1,061	1,860	1,368	387	614	697
4. NRI Deposits (Interest Payments)	1,807	1,627	1,247	1,046	905	918	1,036
5. Rupee Debt Service	767	727	952	983	1,053	878	1,240
6. Total Debt Servicing	11,200	11,682	12,038	11,009	8,598	7,658	8,250
7. Total Current Receipts $	57,538	55,240	49,636	41,988	33,629	27,839	27,307
8. Debt Service Ratio (6/7 %)	19.47	21.15	24.25	26.22	25.57	27.51	30.21
9. Interest Payments to Current Receipts Ratio	7.76	7.26	8.75	9.75	10.50	12.49	12.98
10. Debt to Current Receipts Ratio	164.07	169.14	187.33	235.80	275.64	323.37	312.32
11. Liability Service Ratio (%)	20.5	21.6	24.7	26.6	25.9	27.9	30.6

@ Inclusive of non-government account.

* Inclusive of interest on medium, long term and short term credits.

Excluding charges on net cumulative allocation.

$ Excluding official transfers.

Note : In this Table, total current receipts from the year 1992-93 include private transfers with *contra* entry against gold and silver imports. The liability service ratio represents debt service and remittances of profit and dividend payments taken together as a ratio of current receipts.

rate management in the face of the threat of external contagion and other uncertainties (Box VI.1). Four distinct phases of exchange rate movements are clearly discernible: i) April to August 1997 when calm prevailed in the foreign exchange market, ii) September 1997 to mid-January 1998 when acute exchange market pressure was staved off through exchange market operations and monetary policy measures of the Reserve Bank, iii) mid-January to April 1998 which marked the return of calm and iv) May to June 1998 when the foreign exchange market was characterised by considerable uncertainties in India as well as abroad. These phases were followed by stable foreign exchange rates in July 1998.

Phase I

6.34 Excess supply conditions in the foreign exchange market which characterised 1996-97 spilled over into the period April-August 1997. Sluggish import demand and buoyant capital inflows brought to bear upward pressure on the exchange rate, imposing upon the Reserve Bank the need to maintain a delicate balance between the potential loss of external competitiveness and the goal of price stability. During this period, the Reserve Bank had to undertake large net purchases of foreign currency. A measure of market surplus is given by the net cumulative purchases of US $ 5.4 billion by the Reserve Bank during April-August 1997 (Table 6.10). While nominal appreciation was prevented, the rupee appreciated in real terms. With forward purchases by banks exceeding their forward sales in the face of excess supply of forward foreign exchange, there was a steady decline in premia up to July (Table 6.11).

Phase II

6.35 Despite strong fundamentals, the rupee weakened in the last week of August, partly as a result of spillover effects of currency

Box VI.1
Leading Indicators of Currency Movements

Predictability of currency movements has been a critical area of research since long, both at the empirical and theoretical level. In the aftermath of the South-East Asian crisis there has been a resurgence of research interest in this area. As exchange rate attacks in an open trade and financial system may not always be necessarily in response to sustained macro economic imbalances, a ‘leading indicator’ approach could be a useful tool that makes currency attacks potentially predictable. Developments relating to movements in leading macroeconomic variables which have a direct or indirect bearing on the exchange rate could signal, if not predict, the likely course of the future exchange rate. Market expectations, which initiate the attack, are also expected to be based partly, if not entirely, on the most recent behaviour of the leading macroeconomic variables and, therefore, it may appear that periodic surveys of market expectations could be useful in predicting the crisis. Goldfajn and Valdes (1997), however, found that market expectations may often fail to incorporate information on misalignments contained in the leading indicators. According to their study on Mexico, prior to the currency crisis in December 1994, currency forecast surveys predicted that the peso would remain at 3.4 per US dollar in January 1995 whereas the rate actually fell to 5.7 pesos per US dollar in January. Similarly in Thailand, prior to the currency attack in June 1997, expectation surveys showed that the baht would remain at 25.8 per US dollar in July 1997 whereas the external value of the baht actually fell to 31.2 per US dollar. Despite the failure of the market to interpret the behaviour of the leading indicators adequately in forming their expectations, empirical research suggests that some of the leading indicators could be good out of sample predictors of exchange rate movements.

In the literature, there are several and often divergent views on the right selection of leading variables. In the classic theoretical model of Krugman (1979) applicable to fixed exchange rate regimes which was extended later to crawling peg regimes by Connolly (1986), and to currency bands by Krugman and Rotemberg (1991), fiscal and monetary expansions, declining price competitiveness, current account deficits, and losses in international reserves are cited as leading variables. In the second generation models of Obstfeld (1986) and Flood and Garber (1984), however, behaviour of macro variables during a period leading up to an attack may not be very relevant since multiple equilibria exist in foreign exchange markets because of the contingent nature of the authorities’ policy rule resulting in the possibility of self-fulfilling speculative attacks. In the latter type of models, often mentioned as the second generation models, currency attacks are, however, followed by major monetary and fiscal policy shifts reflecting more accommodative policies consistent with lower levels of exchange rate. Eichengreen, Rose and Wyplosz (1994) found that pre - ERM attack behaviour of monetary and fiscal variables were consistent with the first generation models. They, however, failed to find strong evidence favouring the second generation model since significant shifts in the behavior of macroeconomic variables in the wake of speculative attacks were not visible. Multiple equilibria and self-fulfilling attacks appear to have existed only in special cases and under special assumptions. Highlighting this aspect, Krugman (1996) observed that multiple equilibria are more likely when fundamentals are actually strong. As when fundamentals are clearly in severe imbalance, unidirectional market perception quickly converges to the equilibrium at which the currency is attacked and devalued. When fundamentals are strong, however, the eventuality of a crisis becomes highly uncertain resulting in multiple equilibria. Under such conditions, since authorities’ preferences are not known to the public, attacks may be unsuccessful but as a result of the attack the authorities’ preferences are revealed to the public. With good fundamentals, averting self-fulfilling attacks would thus necessitate significant enhancement of the credibility of the central bank. Despite strong economic fundamentals and high level of central bank credibility, a country may not escape the dangers of currency attacks due to spread of contagion effects. According to Eichengreen, Rose and Wyplosz (1996), however, there are basically two channels for contagion to spread *i.e.* trade links and co-movement in macroeconomic policies and conditions. The leading indicator approach, thus, may help in assessing the extent of exposure of an economy to the dangers of contagion.

More recent empirical findings on the appropriateness of using the leading indicator approach, however, emphasise that certain key leading variables must be regularly monitored by the authorities and in response to the early warning signals provided by the behaviour of these variables timely corrective measures must be instituted to avoid the occurrence of the crisis. A number of alternative variables have been used in the studies by Eichengreen, Rose and Wyplosz (1995), Frankel and Rose (1996), Kaminsky and Reinhart (1996), Kaminsky, Lizondo and Reinhart (1997) and Sachs, Tornell and Velasco (1995) but the behaviour of real exchange rate, international reserves, fiscal deficit, current account deficit, growth in domestic credit, interest rates, inflation and export growth were considered in most of these studies. According to these analyses potential causes and symptoms of currency crises can be identified *a priori* by observing the behaviour of the leading indicators and at the policy level it would involve attaching threshold levels to each indicator. Anytime an indicator exceeds the threshold limit the authorities should get the warning of a possible currency crisis in the coming months. The fixing of threshold limit is however a complex task for the authorities since unless the right balance is maintained there is the risk of getting false warning signals when the threshold is set low and of missing warning signals when the threshold is set high.

References

1. Eichengreen, Barry, Andrew K. Rose and Charles Wyplosz, (1996), ‘Contagious Currency Crises’, *NBER Working Paper No. 5681*, July.
2. Goldfajn, Illan and Rodrigo O. Valdes, (1997), ‘Are Currency Crises Predictable?’, *IMF Working Paper*, December.
3. Kaminsky, Graciela, Saul Lizondo and Carmen M. Reinhart, (1997), ‘Leading Indicators of Currency Crises’, *IMF Working Paper*, July.

Table 6.10 : Purchases and Sales of Foreign Currencies by the Reserve Bank

(US $ million)

Year/ Month	Sales(-)/ Purchases (+)*	Cumulative since April 1997	Outstanding Forward Sales (-)/Purchases (+)#
1	2	3	4
1997			
April	641	641	+25
May	1,393	2,034	+112
June	1,335	3,369	+158
July	1,185	4,554	+40
August	872	5,426	-40
September	-978	4,448	-944
October	189	4,637	-663
November	-1,590	3,047	-1,396
December	-407	2,640	-1,956
1998			
January	422	3,062	-3,190
February	-642	2,420	-2,373
March	1,449	3,869	-1,792
April	201	4,070	-1,427
May	-754	3,316	-1,815
June	-1,627	1,689	-1,634

Outstanding at the end of the month.

* Include spot, swap and forward transactions of the RBI.

turbulence in South-East Asian markets. The demand–supply position in the spot exchange market began to even out and in September the position reversed with merchant purchases, for the first time in the year, falling below merchant sales. Inter-bank turnover rose sharply in September (Table 6.13). With inter-bank spot purchases (excluding sales by the Reserve Bank) exceeding inter-bank sales by a significant margin, the Reserve Bank sold foreign exchange of US $ 978 million in September. In the forward market, excess demand conditions which emerged in August expanded into a mismatch exceeding US $ 2 billion in September as importers rushed for cover and exporters cancelled forward contracts. As the premia spurted reflecting both demand – supply mismatches and a hardening of domestic interest rates, the Reserve Bank sold foreign exchange in the forward market and as a result its outstanding forward liabilities rose by US $ 904 million in September.

Table 6.11 : Forward Premia (Monthly Average)

(Per cent per annum)

Month/Year	1-month	3-month	6-month
1	2	3	4
1997			
March	6.02	6.72	6.87
April	3.17	4.74	5.49
May	3.11	4.11	4.77
June	2.57	3.47	4.23
July	2.70	3.13	3.63
August	5.07	5.19	5.50
September	6.90	6.82	6.63
October	4.23	5.08	5.52
November	6.51	6.90	6.89
December	9.42	9.22	8.60
1998			
January	21.05	15.82	12.79
February	12.70	15.85	14.57
March	8.81	9.10	9.58
April	3.67	5.31	6.91
May	6.49	7.37	8.20
June	9.59	10.23	10.10

6.36 In October 1997, there was a brief respite and a resumption of capital flows allowed both spot purchases and liquidation of forward liabilities. Thereafter, however, the foreign exchange market was ruled by persistent excess demand conditions and considerable volatility. Market sentiment weakened sharply during this phase from November 1997 onwards. Profit taking by FIIs on the stock exchanges added to the pressure on the rupee in November. The market was driven by downside expectations created largely in the backwash of the currency turmoil in South-East Asia and political developments within the country. Excess demand conditions reflected in the spot merchant transactions intensified from very marginal levels during October 1997 to around US $ 1.5 billion in the following months of the quarter (Table 6.12). The volatility in the exchange market and the swing in the market sentiments were reflected in the significant spurt in inter-bank and merchant turnover by November and December 1997 in relation to April-June 1997 levels. Over the quarter October-December 1997, there was a nominal depreciation of the spot exchange rate by about 7.6 per cent.

Table 6.12 : Merchant Transactions in the Foreign Exchange Market

(US $ million)

Year/Month	Spot			Forward			Merchant turnover*
	Purchases	Sales	Net	Purchases	Sales	Net	
1	2	3	4	5	6	7	8
1997P							
April	4,182	3,995	187	1,431	1,278	153	13,301
May	4,658	4,467	191	1,704	1,003	701	15,016
June	4,573	4,221	352	1,694	1,072	623	15,561
July	5,118	4,385	733	1,662	1,601	61	17,561
August	4,218	3,833	385	2,134	2,619	-485	17,529
September	4,643	5,126	-483	1,593	3,607	-2,014	20,076
October	4,504	4,518	-14	1,519	2,085	-566	16,721
November	4,034	5,587	-1,553	1,681	4,221	-2,541	19,832
December	4,637	6,083	-1,446	1,519	3,149	-1,630	19,006
1998P							
January	4,098	5,521	-1,423	1,907	3,604	-1,697	19,005
February	4,064	4,622	-558	1,345	1,991	-646	15,662
March	5,961	5,514	448	1,779	2,183	-404	20,288
April	4,807	4,680	127	1,513	2,538	-1,025	17,786
May	4,081	5,071	-990	1,532	3,624	-2,093	18,470
June	4,610	5,634	-1,024	1,367	4,773	-3,406	23,045

P Provisional.

* Include cross-currency (*i.e.*, foreign currency to foreign currency, both spot and forward) transactions and cancellation/re-booking of forward contracts.

Table 6.13 : Inter-bank Transactions in the Foreign Exchange Market

(US $ million)

Year/Month	Spot			Forward/Swap			Inter-bank turnover*
	Purchases	Sales	Net	Purchases	Sales	Net	
1	2	3	4	5	6	7	8
1997P							
April	6,980	6,791	188	14,806	14,746	60	72,805
May	7,444	8,091	-647	11,530	11,256	274	73,187
June	7,653	8,022	-369	13,233	13,076	157	80,337
July	7,268	7,658	-390	13,865	13,061	804	86,090
August	9,756	9,710	45	18,879	17,276	1,603	99,609
September	12,932	10,972	1,960	23,179	21,240	1,939	1,18,748
October	9,168	9,280	-112	20,838	18,356	2,482	94,062
November	14,622	11,696	2,926	22,976	20,952	2,024	96,026
December	14,060	12,771	1,289	23,657	21,991	1,666	92,869
1998P							
January	13,343	11,866	1,477	23,566	21,544	2,022	94,138
February	9,514	8,855	659	19,845	19,460	385	86,597
March	11,579	12,482	-903	23,604	23,493	111	1,01,462
April	7,980	7,719	261	17,777	17,769	8	77,677
May	11,839	10,258	1,580	27,229	26,511	718	1,05,032
June	15,207	13,403	1,805	34,418	23,052	1,366	1,31,006

P Provisional.

* These data are on gross basis and include cross-currency (*i.e.*, foreign currency to foreign currency, both spot and forward) transactions.

6.37 In the forward segment of the market there was a significant spurt in the demand for forward cover during the quarter to hedge large exposures which had remained uncovered in the earlier phase in view of the reasonable stability of the exchange rate. The forward premia in the Indian market are largely determined by the demand and supply positions and do not necessarily reflect interest rate differentials. As demand (*i.e.* forward sales by ADs) exceeded supply (*i.e.* forward purchases by ADs) by a significant margin, the average one-month forward premia rose from 4.23 per cent in October 1997 to 9.42 per cent in December 1997. Forward premia for other maturities also exhibited a similar pattern.

6.38 The liabilities of the Reserve Bank in terms of net forward market commitments rose from US $ 944 million as at the end of September 1997 to US $ 1,956 million as at the end of December 1997. Exchange market operations of the Reserve Bank in the spot and forward segments of the exchange market were supplemented by several monetary measures in December 1997. With a view to reducing opportunities for making profits through arbitrage, the interest rate on fixed rate repos was raised to 5 per cent from 4.5 per cent and the cash reserve ratio (CRR) on net demand and time liabilities of scheduled commercial banks was raised by 0.5 percentage point. Incremental CRR of 10 per cent on NRERA and NR(NR) deposits were removed with effect from the fortnight beginning December 6, 1997. With a view to containing the spurt in activities in the forward segment of the market, the facility granted to ADs in April 1997 for offering forward contracts on the basis of past performance and declaration of exposure was suspended. ADs were thus restricted from offering forward contracts based only on documentary evidence. As leads and lags in import payments and export realisations widened, several measures affecting the cost of rupee funds to exporters and importers were introduced. The interest rate on post-shipment export credit in rupees for periods beyond 90 days and up to six months was raised from 13 per cent to 15 per cent. Subsequently, in respect of overdue export bills a minimum interest rate of 20 per cent per annum was prescribed. An interest rate surcharge of 15 per cent on lending rate (excluding interest tax) on bank credit for imports was introduced. In order to provide relief to exporters, the hike in the interest rate for post-shipment rupee credit was withdrawn on January 1, 1998.

6.39 After a short period of normalcy, however, nervous sentiment began to flare up in the foreign exchange market in reaction to intensification of the crisis in South-East Asia, bearishness in domestic stock exchanges, uncertainties created by internal developments and the strengthening of the US dollar against major international currencies. The Reserve Bank undertook stringent monetary measures (detailed in Section I) in order to reduce volatility, curb speculative activity and ward off any threat of contagion.

Phase III

6.40 Towards the end of January 1998 stability returned to the exchange market. A measure of confidence in exchange rate management was visible in the modest resumption of capital flows. By March 1998, the mismatch between demand and supply in the merchant section of the spot market balanced out. In the inter-bank section there were net sales after a hiatus of four months and the excess supply conditions in the market contributed to a healthy accretion to the reserves. This enabled the reduction of forward liabilities of the Reserve Bank from a peak of US $ 3.2 billion at the end of January 1998 to US $ 1.4 billion by April 1998. In the forward market, during March 1998, there was a decline in the forward premia for all maturities. Net of outstanding forward sales, the foreign currency assets were US $ 24.2 billion as on March 31, 1998 as against US $ 22.0 billion as on March 31, 1997 showing an increase of US $ 2.2 billion over the year. In the last quarter of the year (January-March 1998), there was an increase in gross reserves by US $ 2,012 million and in net terms (net of forward sales) by US $ 2,176 million. The exchange rate moved in a narrow range around Rs.39.50 per US dollar in March-April 1998. These developments enabled rolling back of tight monetary measures introduced in January 1998.

Phase IV

6.41 As normalcy continued to prevail in the foreign exchange market, the easing of monetary measures continued. The interest rate on fixed rate repos was reduced further to 7 per cent as on April 2, 1998 and to 6 per cent on April 29, 1998. On April 29, the export refinance limit was also restored from 50 per cent to 100 per cent of the incremental export credit eligible for refinance. From early May, however, uncertainties in market expectations because of domestic and international developments affected the exchange market in the second half of May 1998 even though net sales by the Reserve Bank of about US $ 754 million almost entirely covered the deficit in the merchant segment of the market in May 1998. In the inter-bank segment, on the other hand, demand exceeded supply by almost US $ 1.5 billion largely reflecting the changing market perceptions. An outflow of about US $ 137 million under FIIs during the month also contributed to the adverse sentiments. In June 1998, net spot operations by the Reserve Bank amounted to about US $ 1,408 million up to June 10, 1998 and to support net spot operations by the Reserve Bank several measures were announced by the Reserve Bank to reverse the mismatch in the foreign exchange market. The Reserve Bank announced its readiness to sell foreign exchange in the market to meet any mismatch between supply and demand. Exporters were advised not to delay export realisations and monitoring of the 'overdue' export receipts was strengthened so as to ensure timely realisation of export receipts. With a view to enabling exporters to access cheaper credit in foreign currency for their entire volume of exports banks were advised to charge a spread of not more than 1.5 per cent above LIBOR as against the earlier norm of not exceeding 2-2.5 per cent over LIBOR. With a view to aligning the pattern of imports with the normal demand pattern for credit and foreign exchange on account of import transactions and to discourage undue build up of inventories, banks were advised to monitor their credit utilisation and advance payments by the importers. Banks were permitted to approach the Reserve Bank to buy foreign exchange directly at the market rate on behalf of their FII clients intending to repatriate their sale proceeds. This measure was intended to minimise the direct impact of FII outflows on the exchange rate. With a view to enabling FIIs operating in India to manage their exchange risk exposure they were permitted to hedge their "incremental investments" over the level of investment in equity at the end of the business on June 11, 1998 in the forward market. FIIs were also permitted to invest in Treasury Bills. Indian financial institutions were permitted to reap potential benefits of low prices through buying back Indian paper in the international markets. The Reserve Bank would also more closely monitor open positions and *nostro* balances of the ADs who were advised not to arbitrage between the money market and the foreign exchange market. The exchange market reacted positively in response to these measures and the exchange rate appreciated to Rs.41.96 per US dollar on June 12, 1998 and thereafter traded in a range of Rs.42.07 per US dollar to Rs.42.36 per US dollar up to June 19, 1998. However, the market sentiments again turned adverse with the downgrading of India's sovereign rating to non-investment grade by one of the international rating agencies. The rupee depreciated to Rs.42.92 per US dollar on June 23, 1998 but then appreciated to Rs.42.47 per US dollar by the end-June 1998.

6.42 The foreign exchange market responded positively to the various measures announced by the Reserve Bank on June 11, 1998. Over July 1998, the exchange rate appreciated modestly. Trading within a narrow range around Rs.42.50 per US dollar, the rupee edged up to a range of Rs.42.39-42.53 per US dollar by the third week of the month. Despite the onset of corporate demand in the closing days of the month, the exchange rate movements were relatively stable. Reflecting the easing of pressure in the spot segment of the foreign exchange market, swap premia declined for all maturities during July.

INTERNATIONAL DEVELOPMENTS

6.43 The year 1997 was marked by currency crises and stock market crashes in the South-East Asian region. Their contagion and spillover effects spread to many other economies and affected global economic growth. The origin of the South-East Asian crises could be traced to Thailand when the first speculative attack on the Thai baht took place in February 1997. With heavy intervention, the Bank of Thailand managed to hold parity and it quickly put in place a co-operative agreement with other central banks in the region to assist each other and provide resources for intervention. As the problem was more structural in nature, the baht came under pressure again in May 1997. The authorities ultimately gave up the fixed exchange rate regime and announced the floating of the baht in July 1997. The Philippino peso immediately came under speculative attack resulting in record foreign exchange turnover. This was followed by the fall of the Malaysian ringgit. Indonesia's rupiah which was believed to be relatively stable also came under the domino effect and eventually fell sharply in September 1997. The ASEAN contagion soon engulfed the East Asian countries like Hong Kong in the form of a crash in the stock market and renewed attacks on the Hong Kong dollar and Taiwan dollar. The decline of the Hang Seng Index shook the investors' confidence and had immediate impact on the currencies of the affected economies of the ASEAN. Although Hong Kong survived the contagion due to active intervention in the forex market made possible by healthy reserves with the Monetary Authority, Taiwan let its currency slip in spite of its huge reserves. In December 1997, the South Korean won came under severe attack, since it was facing a short-term liquidity crisis due to excessive short-term borrowings by the private sector.

6.44 The South-East Asian crisis has reinforced the need for complementarity between macroeconomic stability and financial stability. However, the factors, domestic and external, that contributed to the crises in the countries in question varied in intensity. Among the domestic factors relevant to the crisis were i) fundamental weakness in the financial structure arising from non-observance of prudential lending norms, ii) highly leveraged borrowing by corporates at low interest rates, with unhedged positions based on perceived exchange rate guarantees, iii) large real exchange rate appreciation caused by nominal pegs in many cases, iv) widening of current account deficits with investments financed by large capital inflows, an overheated domestic economy and expenditures supported by extra-budget fiscal transactions and v) inadequately transparent statistical reporting systems, especially in respect of forward liabilities of foreign currency reserves of the central bank. The external factors leading to the crises include: i) failure of private market participants to adequately price risks in these markets, ii) appreciation of US dollar from mid-1995 causing currency mis-alignments in cases where exchange rates were pegged, iii) excess supply of exportables shifting the terms of trade, iv) sluggishness of Japan's economic growth and v) impact on capital flows on the region from exchange rate and interest rate fluctuations in Europe and the US. Sentiments of the market participants played a major role in triggering the crisis in South-East Asia. To some extent, the inadequacy of domestic and international arrangements to contain financial panic was reflected in the speed with which contagion occurred once a sudden shift in investors' perceptions and expectations took place about these economies.

6.45 In the face of such adverse international developments, the Reserve Bank responded to the significant pressures on the exchange rate of the rupee in the second half of the year by altering the monetary policy. A package of measures was introduced on January 16, 1998 as mentioned earlier. These measures were successful in restoring orderly conditions in foreign exchange markets, thus enabling the Reserve Bank to partially reverse the January 1998 measures, including those relating to the Bank Rate and CRR.

6.46 The contagion from the South-East Asian markets affected several emerging markets. In India, the impact was limited as a result of strong fundamentals of the economy and prudent policies. The CAD/GDP ratio in India was well below 2.0 per cent of GDP since 1991-92. For Thailand, it averaged nearly 7.0 per cent of GDP during 1990-96 and for Malaysia the ratio touched 10.0 per cent of GDP in 1995. The external debt service/GDP ratio for India was a little over 3.0 per cent in 1997, whereas it ranged between 6.0 per cent and 11.0 per cent in case of Thailand, Malaysia, Indonesia and Philippines. The proportion of short-term debt to total external debt was also very small in case of India. Other macroeconomic fundamentals including controls on credit expansion were also favourable.

6.47 As regards movements in major currencies during 1997-98, the US dollar appreciated *vis-a-vis* the DM and the yen from DM 1.7919 in July 1997 to DM 1.8267 per US dollar in March 1998 and from yen 115.16

to yen 128.69 per US dollar, during the period. The pound sterling weakened *vis-a-vis* the US dollar from US $ 1.6713 in July 1997 to US $ 1.6611 per pound sterling in March 1998.

6.48 Net long term resource flows to developing countries rose to US $ 300.3 billion in 1997 from US $ 281.6 billion in 1996. Net official development finance picked up in 1997 to aggregate US $ 44.2 billion (US $ 34.7 billion in 1996). Net private capital flows to developing countries which had increased spectacularly in the early part of the 1990s rose moderately from US $ 246.9 billion in 1996 to US $ 256 billion in 1997. While FDI flows at US $ 120.4 billion was a shade higher in 1997, portfolio equity flows declined from US $ 45.8 billion in 1996 to US $ 32.5 billion in 1997, reflecting liquidation of investment in crisis-ridden South-East Asian countries. World output and trade growth in 1998 are expected to suffer because of spillover effects of South-East Asian crises. The present best estimate pegs them at 3.1 per cent and 6.4 per cent, respectively (Appendix Table VI.10). However, the outturn hinges on recovery prospects of Japan in particular and the course and effects of the crises. While no growth is expected in the combined output of the most affected countries – Indonesia, Korea, Malaysia, the Philippines and Thailand – the impact of the South-East Asian crises on the output expansion of advanced economies is said to be marginal. The fall out of the crises on the 'Middle East and Europe' and the 'Western Hemisphere' is also expected to be limited. Africa is the only region where a strengthening of growth is still foreseen for 1998, if secondary effects of the crises such as slow down of foreign investment flows from Asia to the region, do not occur.

6.49 The year 1997 also witnessed a range of activities in relation to the formation of the European Economic and Monetary Union (EMU). The European Union Council approved in May 1998 the recommendations of the European Commission and the European Monetary Institute for launch of an 11-member EMU on January 1, 1999. The 11 member states are Belgium, Germany, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal and Finland, which are deemed to have achieved a high degree of sustainable economic convergence as laid down in the Maastricht Treaty. Two countries – Greece and Sweden – are considered to have not met the necessary conditions for joining the EMU. Two other members – Denmark and the UK – have exercised their rights under the Treaty not to participate in EMU for the time being. Further, the Council decided to adopt current central parities for irrevocable fixing of parities for the currencies of the EMU participants for determination of the ecu to be converted into the euro. The introduction of the euro will have implications for India and the rest of the world (Box VI.2).

Box VI.2

Implications of the Euro for India

During Stage III (January 1999 to July 2002) of the EMU, the formation of monetary union and the introduction of a single currency will be complete. The integration process in Stage III will take place in three phases as follows:

January 1, 1999 : Stage III A of the EMU begins. Euro becomes a legal currency of all EMU countries. The exchange rates of the currencies of participating states will be irrevocably locked, the ecu value will be determined and ecus would be converted to euros at the rate of 1:1. The European Central Bank (ECB) and the European System of Central Banks (ESCB) will be established and would take control of the monetary policy. Open market operations, new public debt issues and foreign exchange payments will be in euros. The TARGET payment system will become operational. Systems eligible as EU Securities Settlement Systems (SSSs) and approved by ECB to join ESCB's settlement systems. The principle of 'no compulsion-no prohibition' will apply for three years, implying that individuals, corporates and institutions will be free to decide whether to switch to euro immediately or anytime later in the next three years.

January 1, 2002 : Stage III B of the EMU begins. Introduction of euro banknotes and coins. All accounting to be converted from old national currencies to euro. SSSs must meet intraday DvP settlement facilities. Likely date for the expansion of EMU. Under the Treaty, re-examination of non-participating member states for entry to EMU can take place at 2-year intervals or upon request.

July 1, 2002 : Former national currencies cease to be legal tenders six months after the introduction of euro banknotes and coins. Single currency is achieved.

(Contd. ......)

(......Concld.)

The emergence of the euro will have enormous repercussions on international financial and exchange markets. While it is difficult at this stage to assess the impact of the euro on India, its probable impact could be broadly gauged in terms of its influence on exchange rate, foreign trade, international reserves, foreign investment, official loans, external debt and the banking sector.

Exports : Although, India's exports to European Union (EU) amounted to one-fifth of our total exports, invoicing in EU currencies accounts for only 7.2 per cent of the trade. To the extent trade is with euro countries or countries whose currencies move closely with euro, invoicing in euro is likely to minimise risk, given the expectations of a strong euro. From the European perspective, India still remains a marginal player in European trade, accounting for only 0.5 per cent in the total imports of the EU countries in 1993. While relative price elasticities for majority of India's exports to EU were large, the income elasticities for most of the commodities were quite low. The key to boost our exports to EU destinations will crucially depend on the movement of income elasticities of dominant (textiles, leather & pearls) and promising (chemicals, machinery, footwear, animal & vegetable products) class of India's exports to EU. The commercial policy constraints from the EU side in the form of tariffs, quantitative restrictions, technical barriers including product standards and anti-dumping investigations will have a bearing on India's exports.

Foreign Exchange Market and Foreign Currency Reserves : The disappearance of 'in' currencies from the international financial markets has implications for reserves management. The Reserve Bank has been following a pro-active policy in this regards in managing its foreign exchange reserve portfolio. The emergence of the euro may create a shift in the holding pattern of international reserves in its favour. The investment strategy of reserves held in euro, however, depends upon availability of short and long-term instruments available in the euro and the yield thereon.

Foreign Investment : The momentum of private investment inflows from EU countries is set to be sustained. Of the total foreign direct investment in India as at the end of March 1993, EU countries accounted for around 65 per cent and the share of Union members in the total portfolio investment in India as at the end of March 1995 was around 50 per cent.

Official Loans : Official loans from EU countries, which have experienced an increasing trend since 1990, may suffer a reversal because of their long-term adjustment needs like moving over to zero-budget deficits, reducing labour-market rigidities and increasing demand for public spending in social sectors within the EU. In 1994-95, EU countries accounted for 35 per cent of bilateral assistance to India under external assistance programme.

External Debt : The effect of the euro on external debt hinges again on the possibility of a strong/weak euro *vis-a-vis* the US dollar. Around 13 per cent of our external debt is denominated in the EU currencies. Transformation of the euro-financial market into a broader, deeper and more liquid one is likely to offer more avenues for cheaper finance to India's corporates.

India's Banking System : Operational and systems changes in the Indian banking sector along with a review of its correspondent banking strategy throughout the 15 EU countries will be required to facilitate transactions in the euro. From the viewpoint of continuity of contracts, all existing individual or corporate contracts in any one of the 'in' currency can continue in the existing currency till 2002, though through mutual agreement they may be re-denominated in the euro from January 1999. Inter-bank transactions will, however, be compulsorily settled in the euro after January 1, 1999.

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