VI - External Sector

6.1 The external sector recorded a distinct improvement in 2000-01. There was an accretion to the foreign exchange reserves of the order of US $ 4.2 billion with the level of the reserves crossing US $ 42 billion by end-March 2001, equivalent of around 9 months of imports. The current account deficit (CAD) narrowed over the year, reflecting robust merchandise export performance and subdued import demand. Another noteworthy aspect was the decline in the external debt in terms of its ratio to GDP and also in terms of the ratio of short-term debt to the level of foreign exchange reserves. The pressures on the balance of payments (BoP) in the first half of 2000-01 on account of the hardening of international oil prices, the massive downturn in international equity prices and successive increases in interest rates in the US economy and Europe eased with the mobilisation of funds under the India Millennium Deposits (IMDs) which brought about a turnaround in the BoP in the second half of the year. The exchange rate of the rupee remained broadly stable, except for a brief period during May-August 2000. During 2000-01, it depreciated by about 5.1 per cent against the US dollar but strengthened against other major currencies.

BALANCE OF PAYMENTS

6.2 The overall balance recorded a surplus for the fifth year in succession taking the level of foreign exchange reserves to US $ 42.3 billion by end-March 2001. The merchandise trade deficit, on BoP basis, declined to US $ 14.4 billion during 2000-01 from US $ 17.8 billion in the previous year. Export growth was higher at 19.6 per cent as against 9.5 per cent in 1999-2000 with buoyancy in all major categories of exports. Import growth, however, decelerated to 7.0 per cent from 16.5 per cent in 1999-2000, despite the increase in imports of petroleum, oil and lubricants (POL) by 24.1 per cent. The invisible account continued to provide support to the balance of payments with a net surplus of US $ 11.8 billion in 2000-01. Reflecting the improvement in the performance of exports, the CAD declined to 0.5 per cent of GDP in 2000-01 from 1.0 per cent in 1999-2000. Net capital flows were lower at US $ 9.0 billion as against US $ 10.4 billion recorded in 1999-2000.

6.3 Key monitoring indicators of the BoP point to a combination of improvement in fundamentals and the impact of cyclical factors. Notwithstanding a difficult international environment characterised by a sharp slowdown of the US economy, the growth in current receipts was robust, spread across both merchandise and invisibles. This was reflected in upward movements in the export/GDP ratio, the invisible receipts/GDP ratio and the current receipts/GDP ratio. The ratio of invisible payments to GDP increased moderately while that of imports to GDP remained almost unchanged. As a result, current receipts financed around 96 per cent of current payments in 2000-01, recording an improvement over the previous year. The decline in the CAD/ GDP ratio was thus primarily achieved on the strength of current receipts which grew by 17.1 per cent during 2000-01. Information on exports in terms of physical performance is not yet available; however, the decline in international prices of commodities and manufactures, excluding POL, as well as erosion in the terms of trade (ToT) facing developing countries in Asia reported in the World Economic Outlook (May 2001) of the International Monetary Fund (IMF) imply that the merchandise export growth recorded during 2000-01 might have been mainly driven by higher volume.

6.4 Net capital flows were lower with inflows under IMDs making up for the decline in external assistance and normal external commercial borrowings. The share of equity flows in net capital flows increased to 56.6 per cent in 2000-01 as compared with 49.7 in 1999-2000. The debt/GDP ratio declined to 21.4 per cent which is well below the conventional threshold of moderate indebtedness. The adequacy of reserves in terms of current and contractual obligations improved to around 9 months of imports/38 months of debt service payments/12 times the level of short-term debt (Table 6.1 and Appendix Table VI.1).

Table 6.1 : India's Balance of Payments : Key Indicators

(US $ million)

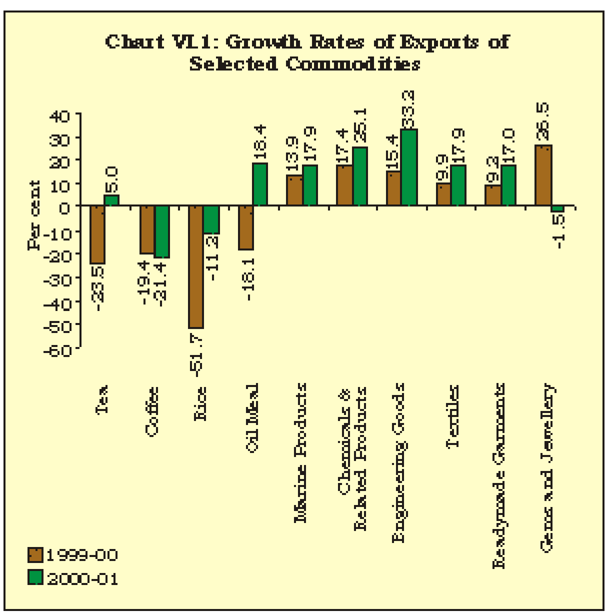
Variable	2000-01	1999-2000	1998-99	1997-98	1990-91
1	2	3	4	5	6
i) Trade Balance	-14,370	-17,841	-13,246	-15,507	-9,438
ii) Invisibles, net	11,791	13,143	9,208	10,007	-242
iii) Current Account Balance	-2,579	-4,698	-4,038	-5,500	-9,680
iv) Capital Account	9,023	10,444	8,435	9,844	7,056
v) Overall Balance # (iii+iv)	5,856	6,402	4,222	4,511	-2,492
vi) Reserves and Monetary Gold					
(Increase - , Decrease +)	-5,830	-6,142	-3,829	-3,893	1,278
Indicator					(Per cent)
1. Trade					
i) Exports / GDP	9.4	8.3	8.2	8.7	5.8
ii) Imports / GDP	12.4	12.3	11.4	12.5	8.8
iii) Income Terms of Trade (Base: 1978-79=100)	..	..	598.5	562.8	212.2
Annual Growth Rate	..	..	6.3	8.3	0.2
iv) Exports Volume Growth	..	..	3.4	-6.3	11.0
2. Invisibles Account					
i) Invisible Receipts / GDP	7.2	6.7	6.2	5.7	2.4
ii) Invisible Payments / GDP	4.8	3.8	4.0	3.2	2.4
iii) Invisibles (net) / GDP	2.5	2.9	2.2	2.5	-0.1
3. Current Account					
i) Current Receipts @ / GDP	16.6	14.9	14.3	14.3	8.0
ii) Current Receipts Growth @	17.1	12.9	2.1	6.2	6.6
iii) Current Receipts @ / Current Payments	96.4	93.0	93.2	90.9	71.5
iv) CAD / GDP	-0.5	-1.0	-1.0	-1.4	-3.1
4. Capital Account					
i) Foreign Investment / GDP	1.1	1.1	0.6	1.3	0.03
ii) Foreign Investment / Exports	11.4	13.8	7.0	15.1	0.6
5. Others					
i) Debt-GDP Ratio	21.4	21.9	23.4	24.3	28.7
ii) Debt Service Ratiox	17.1	16.2	17.8	18.9	35.3
iii) Liability Service Ratio	18.3	17.0	18.9	19.9	35.6
iv) Import Cover of Reserves (in months)	8.6	8.2	8.2	6.9	2.5

@ Excluding official transfers. .. Not available. # Includes errors and omissions.

Merchandise Trade (as per DGCI&S Data)

6.5 According to the provisional data released by the Directorate General of Commercial Intelligence and Statistics (DGCI&S), exports at US $ 44.3 billion during 2000-01 recorded a growth of 20.4 per cent, surpassing the target of 18 per cent set by the Union Ministry of Commerce for the year and substantially exceeding the growth of 10.8 per cent attained during 1999-2000. On the other hand, imports at US $ 49.6 billion during 2000-01 remained broadly unchanged from those in the preceding year. Accordingly, the trade deficit declined substantially to US $ 5.3 billion during 2000-01 from US $ 12.9 billion during 1999-2000 (Appendix Table VI.2).

6.6 Commodity-wise data on India's foreign trade for 2000-01 showed a general buoyancy in exports in respect of all the major categories of exports, with the exception of gems and jewellery, handicrafts and carpets. The overall growth in manufactured exports at 16.1 per cent during 2000-01 was of a higher order than that in the previous year. The major categories of manufactured exports which recorded noteworthy improvement in performance during 2000-01 included engineering goods (33.2 per cent), chemical and related products (25.1 per cent), leather and leather manufactures (22.7 per cent) and textiles (17.9 per cent). Exports of gems and jewellery declined by 1.5 per cent during 2000-01 as against a growth of 26.5 per cent during 1999-2000, mainly on account of depressed demand conditions in major markets *viz.*, USA, Hong Kong, Japan and Israel. The exports of agriculture and allied products recorded a growth rate of 7.0 per cent during 2000-01 as compared with a decline of 7.1 per cent during 1999-2000. Within this group, the export performance of tea, oil meal and marine products improved while that of coffee and rice continued to decline (Appendix Table VI.3 and Chart VI.1).



6.7 The destination profile of exports shows improvement in the growth of India's exports to most of the major countries/groups. Exports to the developing countries in Asia posted an impressive growth of 21.8 per cent during 2000-01, up from 19.9 per cent during 1999-2000. Exports to the countries in the OPEC group also recorded a robust growth of 23.8 per cent during 2000-01 as compared with 9.6 per cent during the previous year. Among the advanced countries, exports to France, Germany, Italy, Japan and the UK showed improved growth during 2000-01 *vis-a-vis* the previous year. The growth in exports to North America, however, decelerated to 10.7 per cent during 2000-01 from 17.0 per cent during 1999-2000. Exports to the countries in Eastern Europe decelerated sharply to 1.1 per cent during 2000-01 as against the increase of 22.8 per cent during 1999-2000.

6.8 The decline in overall imports (0.2 per cent during 2000-01 as against an increase of 17.3 per cent during 1999-2000), despite an increase in POL imports (24.1 per cent), was essentially on account of the decline in non-oil imports reflecting weak domestic demand. The increase in POL imports was primarily due to the hardening of international crude oil prices. Non-POL imports declined by 8.5 per cent during 2000-01 as compared with the increase of 3.2 per cent during 1999-2000, notwithstanding the removal of quantitative restrictions on the imports of a large number of items. Commodity-wise data for 2000-01 show sharp declines in the imports of industrial raw materials/intermediate goods such as metalliferous ores and metal scrap (14.3 per cent), iron and steel (18.7 per cent), organic and inorganic chemicals (14.9 per cent) and artificial resins and plastic material (23.0 per cent), clearly bearing out the slackening in domestic demand. Imports of capital goods declined by 2.0 per cent during 2000-01 as against a large decline of 10.9 per cent in 1999-2000. Within this group, the import of machine tools, transport equipment and project goods declined by 16.5 per cent, 43.4 per cent and 35.6 per cent, respectively, during 2000-01. The imports of pearls, precious and semi-precious stones declined by 11.5 per cent during 2000-01 in contrast with the increase of 44.6 per cent in 1999-2000, broadly in line with the decline in exports of gems and jewellery. With improved domestic production, the import of fertilizers dropped by 46.7 per cent during 2000-01 as against the increase of 30.0 per cent during 1999-2000. The imports of gold and silver (excluding gold imports through passenger baggage) declined by 5.9 per cent during 2000-01 in continuation of the trend observed during 1999-2000 (Appendix Table VI.4 and Chart VI.2).

6.9 As per the provisional data of the DGCI&S, there was a deceleration in exports and decline in imports during the first quarter of 2001-02. Exports at US $10.5 billion recorded a low growth of 1.7 per cent as compared with 26.6 per cent during the corresponding period of the previous year. Imports during the first quarter at US $12.5 billion showed a decline of 2.4 per cent as against the growth of 19.6 per cent during the corresponding period of the previous year. Both POL and non-POL imports declined by 1.0 per cent and 3.0 per cent, respectively, during April-June 2001. The trade deficit during April-June 2001 at US $1.9 billion was lower than that of US $2.4 billion during the corresponding period of the previous year.

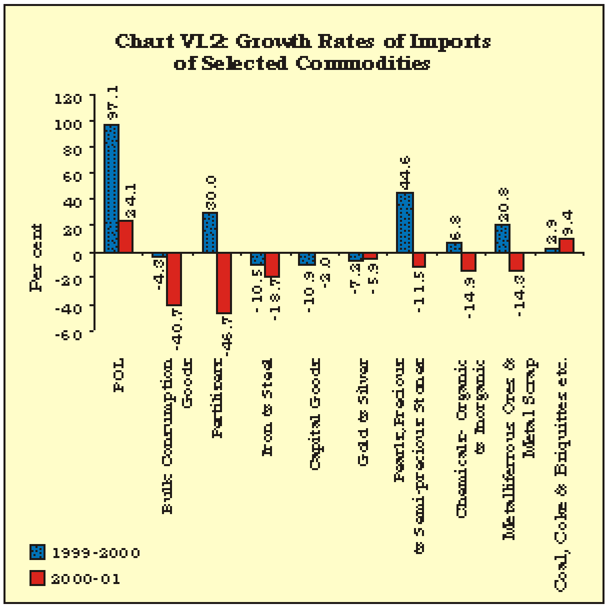


Chart VI.2: Growth Rates of Imports of Selected Commodities

Invisibles

6.10 The net surplus on the invisibles account was lower at US $ 11.8 billion in 2000-01 than that of US $ 13.1 billion in the previous year mainly on account of a decline of US $ 1.6 billion in net non-factor service earnings (Appendix Table VI.5). The decline in net non-factor services was spread over travel, transportation and miscellaneous accounts. Travel (net), in particular, suffered a sharp decline of US $ 0.6 billion in 2000-01 reflecting a higher outgo coupled with subdued tourist arrivals in India. On the other hand, net transfers continued to be buoyant, underpinned by the continuing resilience in private transfers which reached a level of US $ 12.8 billion in 2000-01.

6.11 Software exports recorded a significant growth of 57 per cent on the top of an increase of 53 per cent in the preceeding year to reach US $ 6.3 billion in 2000-01. The slowdown in the US economy and the decline in technology-laden international stock exchanges entailed a period of consolidation for the Indian software exporting companies and a restructuring of export strategies.

6.12 Non-factor service payments recorded a sharp rise of US $ 4.7 billion in 2000-01 under miscellaneous (US $ 3.2 billion), travel (US $ 0.7 billion) and transportation (US $ 0.8 billion) accounts. The impact of current account liberalisation is being reflected in rising outgoes in the form of technology related payments, imports of financial services, management fees payments for office expenses, advertising and other business and commercial services.

Current Account

6.13 Notwithstanding a sharp rise of US $ 3 billion in the POL import bill, the robust growth in merchandise exports, supported by the continuing buoyancy in private transfers and software exports, contained the current account deficit at US $ 2,579 million (0.5 per cent of GDP) during 2000-01 as compared with US $ 4,698 million (1.0 per cent of GDP) in 1999-2000.

6.14 The current account deficit has averaged 1.3 per cent of GDP over the 1990s in response to concerted efforts to bring strength and stability to the external sector in the wake of the crisis of 1990-91 when the current account deficit turned unsustainable at 3.1 per cent of GDP. The consolidation of the current account deficit in the ensuing period was accompanied by structural shifts in the financing of the current account gap with the growing dominance of private capital flows, mainly equity.

Capital Account

6.15 The uncertainty characterising international financial markets had a significant bearing on the developments in the capital account as reflected in the quantum and composition of the capital flows during 2000-01. The net capital flows were lower at US $ 9.0 billion than the previous year's level of US $ 10.4 billion. Inflows under external assistance and normal commercial borrowings remained subdued. External commercial borrowing in the form of trade credits, bonds, syndicated loans and other instruments showed a sharp decline which was more than compensated by the mobilisation of funds through the launching of IMDs. The proportion of relatively stable flows (i.e., all capital flows excluding portfolio flows and short-term trade credit) to total capital flows increased marginally to 68.2 per cent in 2000-01 from 67.4 per cent in 1999-2000 (Appendix Table VI.6). The recent developments in the capital account have necessitated a more active management of capital flows and the pace and sequencing of capital account liberalisation has to be constantly assessed.

Foreign Investment

6.16 Foreign investment flows showed a marginal decline from US $ 5,181 million in 1999-2000 to US $ 5,099 million in 2000-01 reflecting subdued industrial activity and a weak stock market performance. This decline was mainly due to a reduction in portfolio investment from US $ 3,026 million during 1999-2000 to US $ 2,760 million during 2000-01. Foreign institutional investment (FII) inflows declined to US $ 1,847 million during 2000-01 from US $ 2,135 million during 1999-2000. The amount raised through the GDR/ADR route at US $ 831 million was, however, higher than that in the previous year (US $ 768 million). There was also a marginal increase in foreign direct investment (FDI) from US $ 2,155 million during 1999-2000 to US $ 2,339 million during 2000-01 (Table 6.2). During the first quarter of 2001-02, foreign investment flows were higher at US $ 1,551 million than in the corresponding period of 2000-01 (US $ 1,451million) as portfolio investment flows increased from US $ 789 million during April-June 2000 to US $ 943 million during April-June 2001. Foreign direct investment inflows at US $ 608 million were, however, lower than those of US $ 662 million in the corresponding period of the previous year.

6.17 The source and direction of foreign direct investment flows remained, by and large, unchanged during the 1990s. Companies registered in Mauritius and the US were the principal source of foreign direct investment in India during 2000-01 followed by Japan and Germany (Table 6.3). The bulk of direct foreign investment was channeled into 'computers (hardware and software)' 'engineering industries', 'services', 'electronics and electrical equipment', 'chemicals and allied products' and 'food and dairy products' (Table 6.4).

Table 6.2 : Foreign Investment Flows by Category

(US $ million)

	Item	2000-01P	1999-00	1998-99
	1	2	3	4
A.	**Direct Investment**	2,339	2,155	2,462
	a) Government (SIA/FIPB)	1,456	1,410	1,821
	b) RBI	454	171	179
	c) NRI	67	84	62
	d) Acquisition of shares *	362	490	400
B.	**Portfolio Investment**	2,760	3,026	-61
	a) GDRs/ADRs #	831	768	270
	b) FIIs @	1,847@@	2,135	-390
	c) Off-shore funds and others	82	123	59
Total (A+B)		**5,099**	**5,181**	**2,401**

P Provisional.

* Relates to acquisition of shares of Indian companies by non-residents under Section 5 of FEMA, 1999.

\# Represents the amount raised by Indian corporates through Global Depository Receipts (GDRs)/ American Depository Receipts (ADRs).

@ Represents net inflow of funds by Foreign Institutional Investors (FIIs).

@@ The revisions were brought about as a result of reporting of revised data by some designated banks due to re-classification.

Note : Data on foreign investment presented here represent gross inflows into the country and may not tally with the data presented in other tables which include direct imports against foreign investment, Indian investment abroad as well as disinvestments. They also differ from data relating to net investment in stock exchanges by

FIIs in Section V.

Non-Resident Deposits

6.18 The outstanding balances under nonresident deposit schemes continued their increasing trend, reflecting the overall confidence of non-resident Indians in the economy. Net inflows were higher at US $ 2,317 million in 2000-01 as against US $ 1,540 million in the previous year (Table 6.5).

Table 6.3 : Foreign Investment - Country-wise Inflows*

Source	(Rupees crore)			(US $ million)		
	2000-01P	1999-2000	1998-99	2000-01P	1999-2000	1998-99
1	2	3	4	5	6	7
Germany	516	135	478	113	31	114
Italy	131	548	486	29	125	116
Japan	711	622	989	156	142	235
Mauritius	3,853	2,187	2,482	843	501	590
Netherlands	348	358	224	76	82	53
South Korea	109	35	359	24	8	85
USA	1,464	1,551	1,905	320	355	453
Others	1,595	1,468	1,491	349	337	354
Total	**8,727**	**6,904**	**8,414**	**1,910**	**1,581**	**2,000**

P Provisional.

* Exclude inflows under the NRI direct investment route through the Reserve Bank and inflows due to acquisition of shares under Section 5 of FEMA, 1999.

Table 6.4 : Foreign Investment - Industry-wise Inflows*

	(Rupees crore)			(US $ million)		
Sectors	2000-01P	1999-2000	1998-99	2000-01P	1999-2000	1998-99
1	2	3	4	5	6	7
Chemical and allied products	626	523	1,580	137	120	376
Computers	1,397	433	447	306	99	106
Engineering	1,246	1,423	1,800	273	326	428
Electronics and electrical equipment	974	750	960	213	172	228
Finance	184	86	778	40	20	185
Food and dairy products	341	529	78	75	121	19
Pharmaceuticals	284	236	120	62	54	28
Services	1,031	506	1,550	226	116	368

Others	2,644	2,418	1,103	578	553	262
Total	**8,727**	**6,904**	**8,414**	**1,910**	**1,581**	**2,000**

P Provisional.

* Exclude inflows under the NRI direct investment route through the Reserve Bank and inflows due to acquisition of shares under Section 5 of FEMA, 1999.

External Assistance

6.19 Net inflow of external assistance (gross utilisation *less* repayments of principal) at US $ 546 million during 2000-01 was lower than that of US $ 1,000 million in the previous year, partly reflecting pre-payment of about US $ 290 million against eight fixed interest rate International Bank for Reconstruction and Development (IBRD) currency pool loans (at interest rates ranging between 9.25-11.6 per cent) during May 2000. In line with the trend holding over the past few years, there was a negative transfer of resources (sum of loans and grants *less* repayments of principal and interest) from the country to the tune of US $ 619 million during 2000-01 (Appendix Table VI.7).

Table 6.5 : Balances under NRI Deposit Schemes

(US $ million)

Scheme		Balance End-March		Variation @ 2000-01P	Variation @ 1999-2000
		2001P	2000		
	1	2	3	4	5
1.	FCNR(B)	9,076	8,172	904	337
2.	NR(E)RA	7,147	6,758	860	885
3.	NR(NR)RD	6,849	6,754	553	318
	Total	**23,072**	**21,684**	**2,317**	**1,540**

P Provisional

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

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

External Commercial Borrowings

6.20 The disbursements under external commercial borrowings increased to US $ 3,811 million (excluding IMDs) in 2000-01 from US $ 3,187 million in 1999-2000. The increase in disbursements was mainly on account of refinancing of loans which was also reflected in increase in amortisation payments to US $5,313 million from US $ 2,874 million. Net flows under ECBs (excluding IMDs) turned negative at US $ 1,502 million during 2000-01 as against US $ 313 million during 1999-2000. The normal flows under ECBs were supplemented by IMDs during the year. Funds mobilised under IMDs amounted to US $ 5.5 billion. Gross disbursements (including IMDs), therefore, increased from US $ 3,187 million during 1999-2000 to US $ 9,324 million during 2000-01 with net flows increasing from US $ 313 million to US $ 4,011 million.

Table 6.6 : Foreign Exchange Reserves and Use of IMF Credit

(US $ million)

As at the end of	Gold	SDRs	Foreign Currency Assets	Total	Reserve Position in Fund	Outstanding use of IMF Credit (net)*
1	2	3	4	5 = (2+3+4)	6	7
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	291	1,313 (947)
March 1998	3,391	1	25,975	29,367	283	664(497)
March 1999	2,960	8	29,522	32,490	663	287 (212)
March 2000	2,974	4	35,058	38,036	658	26 (19)
March 2001	2,725	2	39,554	42,281	616	0
June 2001	2,798	4	40,652	43,454	609	0

* Figures in bracket are in SDR million.

Overall Balance

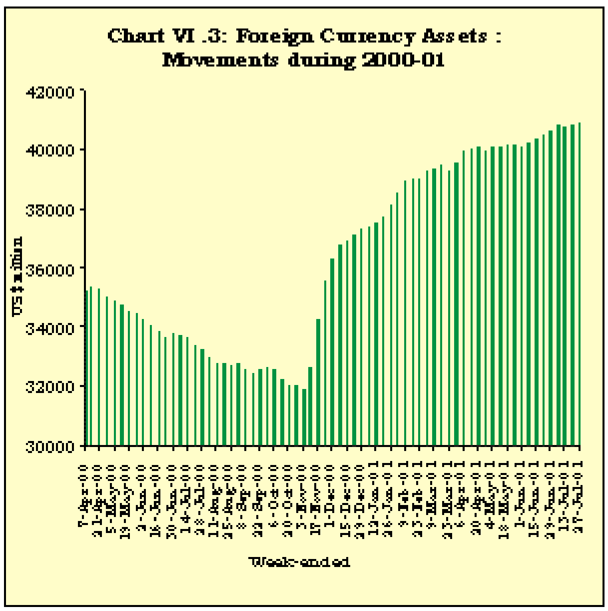
6.21 The overall balance recorded a surplus for the fifth year in succession at US $ 5.9 billion (1.3 per cent of GDP) during 2000-01 as against that of US $ 6.4 billion (1.4 per cent of GDP) in 1999-2000. The overall surplus during the year, net of repurchases of US $ 0.03 billion from the IMF, resulted in an accretion of US $ 5.8 billion (excluding valuation) to the foreign exchange reserves.

FOREIGN EXCHANGE RESERVES

6.22 India's foreign exchange reserves comprising foreign currency assets, gold held by the Reserve Bank and Special Drawing Rights (SDRs) held by the Government increased by US $ 4,245 million (including valuation changes) during 2000-01 to US $ 42,281 million by end-

March 2001 as against an increase of US $ 5,546 million during 1999-2000 (Table 6.6 and Appendix Table VI.8). The Reserve Bank's forward liabilities remained low, declining from US $ 2,225 million in August 2000 to US $ 1,259 million at end-March 2001. Net of outstanding forward liabilities and use of IMF credit, foreign exchange reserves increased by US $ 3,687 million to US $ 41,022 million as at end-March 2001.

6.23 The increase in the foreign exchange reserves during 2000-01 was entirely on account of expansion of foreign currency assets by US $ 4,496 million as the value of gold - the other major component of reserves - declined by US $ 249 million during the year. The first seven months of the year witnessed a loss of foreign currency assets of US $ 2,967 million. From November 2000 onwards there was a turnaround with the inflows under the IMDs and a revival of FII inflows leading to the restoration of investor confidence. The foreign currency assets increased by US $ 7,463 million between end-October 2000 and end-March 2001, of which almost US $ 2 billion was made up of inflows other than the IMDs (Chart VI.3).



6.24 During 2001-02 up to August 10, the foreign exchange reserves increased by US $1,854 million to US $ 44,135 million as foreign currency assets increased by US $1,801 million to US $ 41,355 million.

6.25 Balances under the SDRs held by the Government amounted to SDR 2 million (US $ 2 million) as at end-March 2001 as compared with SDR 3 million (US $ 4 million) as at end-March 2000. A total amount of SDR 38 million (US $ 50 million) was purchased from the IMF while SDR 12 million (US $ 15 million) were credited on account of various other receipts from the IMF.

6.26 The value of gold held by the Reserve Bank declined by US $ 249 million during the year to US $ 2,725 million at end-March 2001. During the year, the value of gold holdings fluctuated between US $ 2,948 million (end-June 2000) and US $ 2,711 million (end-February 2001). The decline in the value reflected essentially the movements in international gold prices as the quantity of gold held was almost unchanged during the year (357.761 tonnes at end-March 2001 as against 357.763 tonnes as at end-March 2000). The gold holdings amounted to US $ 2,771 million as on August 10, 2001 reflecting an increase of US $ 46 million over the end-March 2001 level.

6.27 The overall approach to the management of India's foreign exchange reserves in recent years has reflected the changing composition of the capital account of the balance of payments and the "liquidity risks" associated with different types of flows within the parameters of reserve adequacy. The policy for reserve management is built upon factors and contingencies such as the size of the current account deficit, the size of short-term liabilities (including current repayment obligations on long-term loans), the potential variability in portfolio investment and other types of capital flows and unanticipated external shocks. The policy objective is to ensure that, excluding short-term variations in response to market movements, the quantum of reserves in the long-run is in line with the growth of the economy and the size of risk-adjusted capital flows.

6.28 With the changing profile of capital flows, the traditional approach of assessing reserve adequacy in terms of import cover has been broadened to include a number of parameters which take into account the size, composition and risk profiles of various types of capital flows as well as the types of external shocks to which the economy is vulnerable (Box VI.1).

Box VI.1
Adequacy of Reserves

In India, various measures have been employed to judge reserve adequacy. The High-Level Committee on Balance of Payments (Chairman: Dr. C. Rangarajan, 1993) recommended that the target level of reserves should be determined in terms of payment obligations in addition to the traditional measure of import cover of 3 to 4 months. The Reserve Bank operationalised this concept and stressed in its Annual Report for 1996-97 that the level of reserves should be assessed in relation to stock of short-term debt and portfolio flows. The Committee on Capital Account Convertibility (Chairman: Shri S.S. Tarapore, 1997) suggested four alternative measures of adequacy of reserves : (i) import cover of not less than 6 months, (ii) reserves should not be less than 3 months of imports plus 50 per cent of annual debt service payments plus one month's imports and exports to take into account the possibilities of leads and lags, (iii) a ceiling of 60 per cent in the ratio of short-term debt and portfolio stock to reserves and (iv) a net foreign exchange assets to currency ratio (NFA/Currency ratio) of not less than 40 per cent but the objective should be to maintain it at around 70 per cent.

In the recent period, the empirical assessment of reserve adequacy has been influenced by the measure proposed by Pablo Guidotti, the Deputy Finance Minister of Argentina at the G-33 Seminar in Bonn, which lays down a simple guideline for the policy makers in emerging market economies. Countries should manage their external assets and liabilities in such a way that they are always able to live without new foreign borrowing for up to one year. This implies t hat the usable foreign exchange reserves should exceed scheduled amortisation of foreign currency debts (assuming no rollovers) during the following year. The Guidotti rule received the support of Alan Greenspan, Chairman of the Board of Governors of the US Federal Reserve System. He suggested a "Liquidity at Risk" rule that would also take into account the foreseeable risks that a country could face. Accordingly, a country's liquidity position could be calculated under a range of possible outcomes for relevant financial variables (exchange rates, commodity prices, credit spreads, *etc*.). While the concept of liquidity at risk has been broadly discussed at different fora, no specific methodology has been outlined. It has been left to the institutions and countries to develop their own approaches.

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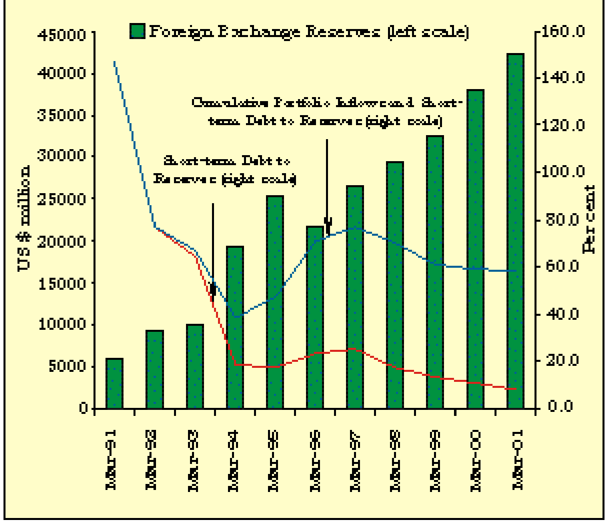
3. Reserve Bank of India, *Annual Report,* 1996-97.

6.29 The increase in India's foreign exchange reserves by US $ 4,245 million during 2000-01 was on the top of an increase of US $ 16,349 million during the period 1996-2000. The import cover of reserves increased from 6.0 months at end-March 1996 to 8.6 months as at end-March 2001. The ratio of short-term debt to foreign exchange reserves declined from 23.2 per cent at end-March 1996 to 8.2 per cent at end-March 2001. Similarly, the ratio of volatile capital flows (defined to include cumulative portfolio inflows and short-term debt) to reserves declined from 71.1 per cent as at end-March 1996 to 58.5 per cent as at end-March 2001 (Chart VI.4).

EXTERNAL DEBT

6.30 During the 1990s, there has been a consolidation of external debt. The sustainability of external debt improved with robust growth in current receipts, containment of the CAD, capping of short-term debt flows and predominance of equity flows in the capital account. Moreover, capital flows were used to build up the foreign exchange reserves instead of financing current import requirements.

Chart VI.4: Foreign Exchange Reserves and Adequacy Indicators



6.31 India's external debt increased by 2.1 per cent from US $ 98,158 million as at end-March 2000 to US $ 100,255 million as at end-March 2001 (Table 6.7 and Appendix Table VI.9). The increase in external debt during the year was mainly on account of the accretion of US $ 5.5 billion under IMDs. However, the overall increase in external debt during the year could be contained at US $ 2.1 billion in view of sluggishness in normal commercial borrowings and valuation factors. While the proportion of multilateral (excepting IMF) and bilateral debt in the total debt declined to 47.6 per cent as at end-March 2001 from 50.5 per cent as at end-March 2000, that of rupee debt fell to 3.7 per cent from 4.5 per cent over the same period. The share of commercial borrowings (including long-term trade credits) in total external debt at 29.9 per cent as at end-March 2001 was higher than that of 27.1 per cent at end-March 2000 reflecting accretions on account of IMDs. The proportion of long-term non-resident deposits also increased to 15.4 per cent from 13.8 per cent over the same period.

Table 6.7 : India's External Debt

(US $ million)

Item		At the end of March 2001	2000
1		2	3
1.	Multilateral	31,103	31,438
2.	Bilateral	16,624	18,176
3.	IMF	0	26
4.	Commercial Borrowings (including trade credits) #	29,941	26,634
5.	NRI Deposits	15,432	13,562
6.	Rupee Debt	3,693	4,389
7.	Long Term-Debt (1to 6)	96,793	94,225
8.	Short-Term Debt *	3,462	3,933
9.	Total Debt (7+8)	100,255	98,158

Includes net investment by 100 per cent FII debt funds.
* Excludes suppliers' credits of up to 180 days.

6.32 The key indicators of external debt sustainability point towards further consolidation. Notwithstanding the increase in the absolute level of external debt, the external debt-GDP ratio declined from 21.9 per cent as at end-March 2000 to 21.4 per cent as at end-March 2001. The ratio of debt to current receipts fell from 145.5 per cent at end-March 2000 to 126.9 per cent at end-March 2001 (Table 6.8). The proportion of short-term debt to total external debt declined from 4.0 per cent at end-March 2000 to 3.5 per cent at end-March 2001. As a result, the ratio of short-term debt to foreign exchange reserves declined from 10.3 per cent as at end-March 2000 to 8.2 per cent at end-March 2001. The interest service ratio continued its downward trajectory, declining from 7.3 per cent during 1999-2000 to 6.4 per cent during 2000-01. The debt service and liability service ratios at 17.1 per cent and 18.3 per cent, respectively, during 2000-01 were marginally higher than that of 16.2 per cent and 17.0 per cent during 1999-2000. The increase in the debt service and liability service ratios during the year was essentially on account of prepayments of external assistance and refinancing of commercial debt.

Table 6.8 : External Debt Service Payments

(US $ million)

	Item	2000-01	1999-00	1998-99
	1	2	3	4
1.	External Assistance @	3,729	3,442	3,144
2.	External Commercial Borrowing *	7,383	4,704	4,530
3.	IMF #	26	267	419
4.	NRI Deposits (Interest Payments)	1,737	1,791	1,719
5.	Rupee Debt Service	617	711	802
6.	Total Debt Servicing	13,492	10,915	10,614
7.	Total Current Receipts**	79,003	67,472	59,760
8.	Debt Service Ratio (6/7%)	17.1	16.2	17.8
9.	Interest Payments to Current Receipts Ratio (%)	6.4	7.3	7.8
10.	Debt to Current Receipts Ratio (%)	126.9	145.5	162.1
11.	Liability Service Ratio (%)	18.3	17.0	18.9

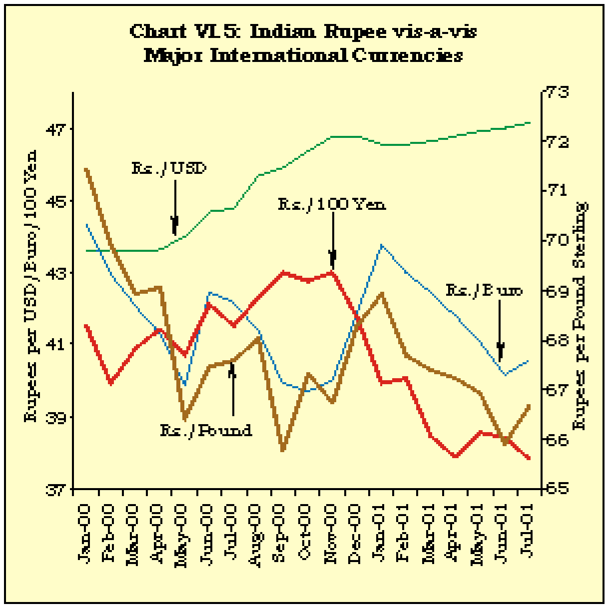
@ Inclusive of non-Government loans.
* Inclusive of interest on medium, long term and Short term credits.
# Excluding charges on net cumulative allocation.
** Excluding Official Transfers.

Note: **1.** Debt service payments in this table follow accrual method of accounting consistent with balance of payments compilation and may, therefore, vary from those recorded on cash basis.
2. Liability-service ratio represents debt service payments and remittances of profits and dividends taken together as a ratio of total current receipts.

EXCHANGE RATE DEVELOPMENTS

6.33 The exchange rate of the Indian rupee *vis-a-vis* the US dollar traded within a range of Rs.43.61-Rs.46.89 during 2000-01. While the rupee traded within a wide range of Rs.43.65-Rs.46.85 during May-October 2000, the movements were confined to a narrow range of Rs.46.35-Rs.46.89 during the period November 2000-March 2001.

6.34 For the financial year 2000-01 as a whole, the exchange rate averaged Rs.45.68 per US dollar recording a depreciation of about 5.1 per cent over the average of Rs.43.33 per US dollar during the previous year. The rupee strengthened against other major currencies reflecting the movements of the US dollar *visa-vis* other major international currencies. The rupee appreciated by 3.4 per cent and 8.0 per cent during 2000-01 against the Pound Sterling and the Euro, respectively (Chart VI.5).



6.35 As a result of the divergent movements in the exchange rate of rupee vis-a-vis other major currencies, the effective exchange rate was broadly stable during the year with the 5-country nominal effective exchange rate (NEER) depreciating by 0.6 per cent during 2000-2001 (Appendix Table VI.10, Chart VI.6).

6.36 The developments in the forward premia during the period May-September 2000 mirrored developments in the spot exchange rate. The six-month forward premia increased from 2.5 per cent in May 2000 to 4.9 per cent in September 2000. With the return of normalcy, forward premia generally remained stable from October 2000 under all maturities in the remaining part of the year (Chart VI.7).

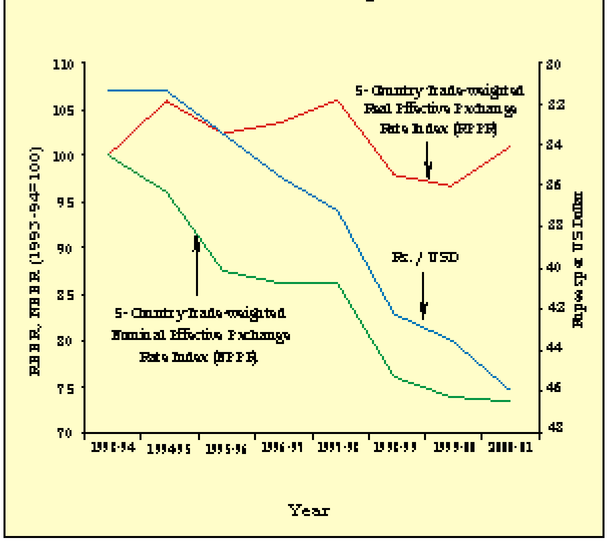


Chart VI.6: Movements in the Exchange Rate of the Rupee

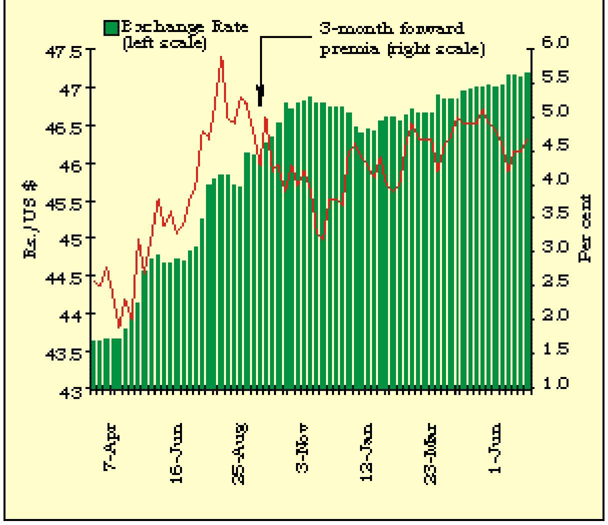


Chart VI.7: Exchange Rate and Forward Premia (Weekly Movements during 2000-01)

6.37 The developments in the foreign exchange market during 2000-01 reflected the policy stance of focusing on managing volatility while allowing the underlying demand and supply conditions to determine the exchange rate movements.

6.38 The orderly conditions witnessed in the foreign exchange market since November 2000 have continued in 2001-02 so far. The spot exchange rate of the rupee *vis-a-vis* the US dollar moved in a range of Rs. 46.56-47.18 per US dollar during the period April 2001 to August 10, 2001. The exchange rate was Rs. 47.12 per US dollar as on August 10, 2001. Excess supply conditions resulted in net purchases from the market amounting to US $ 487 million during April-June 2001. The 6-month forward premia were broadly stable during the period and averaged 4.7 per cent during July 2001 as against 4.6 per cent during March 2001. The 6-month forward premia was 4.8 per cent as on August 10, 2001.

INTERNATIONAL DEVELOPMENTS

6.39 Global economic activity decelerated significantly in the second half of 2000. According to the World Economic Outlook (May 2001) of the IMF, although some slowdown from the rapid growth in late 1999 and early 2000 was desirable and expected, the actual outturn was much steeper than anticipated earlier. World output growth is projected to decelerate to 3.2 per cent in 2001. Unlike the previous downturn which largely reflected the effects of the financial crises in several emerging markets, the current slowdown is due to weakening growth prospects of the advanced economies, led by a marked deceleration in the US economy amidst faltering recovery in Japan and signs of moderation in the Euro area. While the advanced economies are projected to grow at half the rate of 4.1 per cent recorded in 2000, the US economy is projected to decelerate to 1.5 per cent in 2001 as against 5.0 per cent in 2000. According to the World Bank estimates (Global Development Finance, April 2001), the deceleration in the US may be much steeper -from 5.0 per cent in 2000 to 1.2 per cent in 2001. Given the present favourable inflation environment and the projected decline in inflation in 2001 in both advanced and developing economies, there appears to be considerable room for more flexible use of counter-cyclical monetary policy in most of the countries. In fact, several central banks of advanced economies have already reduced their policy interest rates in the first few months of 2001 (Table 6.9). The improved fiscal positions of many advanced economies in the recent years may also facilitate some fiscal easing as a second line of defense. Under these conditions, expectations gain ground that the slowdown may be short-lived.

6.40 The current phase of economic slowdown in global activity has encountered significant volatility in the exchange rates of major international currencies, a large fall in equity prices and a major terms-of-trade shock in the form of high oil prices. The impact of these developments on different countries has been varied, depending on their cross-border linkages, domestic economic structures and policies. In emerging Asia, GDP growth is expected to decline to 5.9 per cent in 2001 from 6.9 per cent in 2000. This decline reflects a series of domestic and external shocks including higher oil prices, slowing growth in the US, fall in equity prices largely in response to the correction in TMT (Telecommunication, Media and Information Technology and Software) stocks in the US, downturn in the global electronics cycle, and concerns about the sagging pace of corporate and financial restructuring. Net private capital flows to the emerging markets are projected to recover in 2001 from the steep fall of 2000, although they are way below the peak levels recorded in the pre-Asian crisis period. More strikingly, emerging markets recorded large current account surpluses in 2000. As a result, surpluses in the current account and net capital inflows were entirely absorbed in the form of reserve build-ups. The impact of the large correction of technology stocks on the financial markets across the globe, particularly in terms of volatility spillovers and negative wealth effec ts, may compress domestic demand.

6.41 The unwinding of large current account imbalances among major advanced countries may occur in a disorderly fashion, affecting the prospects for capital flows and the direction of movement in the exchange rate of the US dollar. Large misalignments in the exchange rates among major currencies may at times contribute to volatility in the currencies of developing countries.

Table 6.9 : Interest Rate Stance of Some Major Central Banks in 2001

Country	Policy Rate	Change in rate	From - To	General Government fiscal balance position in 2000 (as proportion of GDP)
1	2	3	4	5
US	Federal Funds Rate			1.7
January 3, 2001		-0.5	6.50 - 6.00	
January 31, 2001		-0.5	6.00 - 5.50	
March 20, 2001		-0.5	5.50 - 5.00	
April 18, 2001		-0.5	5.00 - 4.50	
May 15, 2001		-0.5	4.50 - 4.00	
June 27, 2001		-0.25	4.00 - 3.75	
UK	Repo Rate			5.9
February 8, 2001		-0.25	6.00 - 5.75	
April 5, 2001		-0.25	5.75 - 5.00	
May 10, 2001		-0.25	5.50 - 5.25	
August 2, 2001		-0.25	5.25 - 5.00	
Canada	Bank Rate			3.4
January 23, 2001		-0.25	6.00 - 5.75	
March 6, 2001		-0.50	5.75 - 5.25	
April 17, 2001		-0.25	5.25 - 5.00	
May 29, 2001		-0.25	5.00 - 4.75	
July 17, 2001		-0.25	4.75 - 4.50	
Euro-area (ECB)	Main Refinancing Rate			0.3
May 11, 2001		-0.25	4.75 - 4.50	
Japan	Official Discount Rate			-8.2
February 9, 2001		-0.15	0.50 - 0.35	
February 28, 2001		-0.10	0.35 - 0.25	
Australia	Cash Rate Target			1.1
February 7, 2001		-0.50	6.25 - 5.75	
March 7, 2001		-0.25	5.75 - 5.50	
April 4, 2001		-0.50	5.50 - 5.00	
New Zealand	Official Cash Rate			0.3

March14, 2001	-0.25	6.50	-	6.25
April 19, 2001	-0.25	6.25	-	6.00
May 16, 2001	-0.25	6.00	-	5.75

6.42 The impact of the significant terms-of-trade shock emanating from a more than tripling of fuel prices in just about one year has generally been interpreted to be moderate in terms of output loss and increase in inflation. In many emerging market economies, however, external sector vulnerability has increased, highlighting the need for introduction of specific standing international measures and internal supply management strategies. South Asia continues to be the most energy-intensive region among all developing regions in the world and, therefore, the vulnerability of these economies to a major oil shock could be substantial. It is estimated that South Asia recorded a CAD/GDP of 2.2 per cent in 2000, which is the highest for the region in the last decade.

6.43 The growth in world trade volumes is projected to decelerate from 12.4 per cent in 2000 to 6.7 per cent in 2001 (according to the World Bank estimates, the deceleration could be steeper at 5.5 per cent in 2001). As regards non-fuel exporters among developing countries, the decline in growth in export volume could be more pronounced (from 19.0 per cent in 2000 to 6.9 per cent in 2001). The terms of trade for this group of countries, however, may show a modest improvement of about 1 per cent in 2001 as against the continuous deterioration experienced in the second half of the 1990s. Estimates prepared by the Institute of International Finance in May 2001 indicate that emerging market export growth may fall to below 4.4 per cent in 2001 from 22 per cent in 2000.

6.44 Net private capital flows to these economies (excluding Argentina and Turkey), in turn, are expected to record a modest increase. Net private flows may be of the order of US $ 153.0 billion in 2001 as against US $ 147.0 billion in 2000. The benign international interest rate environment, however, may not help in reducing the cost of foreign capital for the emerging markets if the risk premia demanded by international investors start increasing. In the aftermath of the developments in Turkey and Argentina, external financing conditions for emerging markets tightened somewhat reflecting a rise in investor risk aversion.

6.45 Major international currencies exhibited volatility during 2000-01. The Euro fell consistently from US $ 1.17 when it was introduced on January 1, 1999 to US $ 0.83 by October 2000, representing a fall of almost 30 per cent. The Euro recovered somewhat in the subsequent months (trading in a range of US $ 0.90-0.95), but fell below 0.85 again in May 2001 before rising again to about 0.89 in the first half of August 2001. The Japanese Yen appreciated from about 120 Yen per US dollar in June 1999 to 105 Yen per US dollar by June 2000. Since then it has depreciated gradually and in the first half of August 2001 it traded around 123 Yen per US dollar. According to the World Economic Outlook (WEO) of the IMF, in the face of the significant increase in the US current account deficit, net equity flows primarily explain the recent movements in the euro-dollar exchange rate. Net portfolio flows to the US in the form of investments in US Government bonds and notes, corporate bonds and equities rose from less than US $ 25 billion in the early 1990s to US $ 500 billion in 2000. Long-term interest rate differentials - as opposed to short-term differentials - continue to explain the behaviour of the three major international currencies.