## II. INVISIBLES: ANCHORING CURRENT ACCOUNT SUSTAINABILITY

5.29 The experience of the 1990s has brought about a subtle shift in the reigning paradigm underlying the management of the current account. Increasingly, the concept of sustainability has focussed on the role of exports in modulating the size of the current account. In the second half of the 1990s, an operational rule has taken shape which suggests that the CAD/GDP ratio could be altered in consonance with the rate of growth of current receipts. Thus, higher the ratio of current receipts to GDP, the higher is the CAD/GDP ratio that can be sustained, given a desired level of the debt service ratio. *Per contra*, a lower current receipts to GDP ratio should be consistent with a lower CAD in terms of GDP (RBI, 1997). The impetus for formulating this dynamic operational rule for current account sustainability has emerged out of a resurgence of invisible exports in the 1990s from a depressed performance in the preceding decade. The renewed buoyancy in invisible exports has, to a great extent, dispelled the gloom associated with the inability to expand India's share in world merchandise exports even to the 1950s level of one per cent. The rapid rise in the share of services in the structure of the domestic economy has also contributed to this new optimism. In the context of the future prospects of invisible earnings, key issues that arise are: the degree of association and direction of causality between service orientation of the output structure and the share of services in international trade; and the competitiveness of India's exports of invisibles with a special focus on workers' remittances where India has emerged as the world leader.

### The International Evidence

5.30 The services sector accounts for over 50 per cent of output in EMEs and over 60 per cent in industrial countries. While the evidence from industrial countries is mixed, most EMEs record deficits in the invisibles account, indicative of the high income elasticity of demand for imports of services in intermediate stages of development. As production and consumption of services is normally simultaneous, services trade usually entails a significant transfer of technology and know-how. The notable exceptions are India, Philippines and Turkey, all of which share a common historical record of being large recipients of workers' remittances (Table 5.12).

5.31 Exports of services have been rising in importance globally, and particularly so for developing countries. They consist of transportation, travel, communication, construction, insurance, finance, computer and information services, royalties and license fees, other business services, personal and cultural services. Global exports of services have risen at a pace faster than merchandise exports between 1990 and 2002. World export of commercial services almost doubled between 1990 and 2001, accompanied by a marked shift from traditional elements such as travel and transportation to modern business services (Table 5.13). In the high-income countries, these new economy services dominate exports. In contrast, travel exports generally account for a major share of services exports of low and middle-income countries. South Asia is an interesting exception, largely on account of India's software export surge since the mid-1990s.

**Table 5.12: Net Invisibles Receipts: Cross-Country Comparison**

(Per cent to GDP)

| Country | 1980s (Average) | 1990-94 (Average) | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Argentina | -0.9 | -2.5 | -2.9 | -3.2 | -3.5 | -3.8 | -3.9 | -4.0 | -4.2 | -7.5 |
| Chile | -9.9 | -4.3 | -3.8 | -2.7 | -2.7 | -2.4 | -3.2 | -3.8 | -4.8 | -4.6 |
| China Mainland | 0.4 | 0.4 | -2.3 | -1.5 | -1.0 | -1.6 | -1.5 | -1.3 | -1.4 | -0.7 |
| Germany | -2.4 | -2.6 | -3.7 | -3.5 | -3.7 | -4.2 | -2.3 | -2.3 | -2.4 | -1.9 |
| **India** | **0.8** | **0.8** | **1.8** | **1.6** | **2.7** | **2.4** | **2.9** | **2.3** | **2.8** | **3.0** |
| Indonesia | -7.3 | -6.8 | -6.4 | -6.0 | -6.9 | -15.0 | -10.6 | -11.2 | -10.9 | .. |
| Japan | -0.7 | -0.5 | -0.4 | -0.4 | -0.1 | -0.1 | -0.2 | 0.1 | 0.4 | 0.5 |
| Malaysia | -11.3 | -8.6 | -9.6 | -8.3 | -9.4 | -11.0 | -12.7 | -13.7 | -12.6 | .. |
| Mexico | -4.4 | -2.6 | -3.0 | -2.7 | -2.1 | -1.9 | -1.8 | -1.8 | -1.3 | -1.0 |
| Philippines | 0.8 | 5.7 | 9.4 | 8.9 | 8.2 | 2.4 | 3.0 | 3.2 | 2.9 | 4.9 |
| Thailand | -0.3 | -1.8 | -3.3 | -2.9 | -3.0 | -1.8 | -1.3 | -1.9 | -2.0 | -1.7 |
| Turkey | 4.3 | 4.7 | 6.4 | 4.5 | 6.7 | 8.1 | 4.9 | 6.3 | 5.4 | 3.7 |
| UK | 1.2 | 0.0 | 0.4 | 0.7 | 1.3 | 2.0 | 0.9 | 1.2 | 2.1 | 2.5 |
| USA | 0.4 | 0.8 | 0.9 | 0.9 | 0.8 | 0.5 | 0.6 | 0.4 | 0.3 | 0.0 |

.. Not Available

**Source:** International Financial Statistics, IMF.

**Table 5.13: Composition of World Exports of Commercial Services, 2001**

| | Total Exports (US $ billion) | Percentage Share | | |
|---|---|---|---|---|
| | | Transport | Travel | Other Commercial Services* |
| 1 | 2 | 3 | 4 | 5 |
| **Low Income** | **39.0** | **18.8** | **32.6** | **48.6** |
| **Middle Income** | **209.6** | **20.6** | **48.0** | **31.4** |
| **Low & Middle Income** | **248.6** | **20.4** | **46.1** | **33.4** |
| *of which:* | | | | |
| East Asia & Pacific | 72.7 | 14.8 | 54.1 | 31.0 |
| Europe & Central Asia | 71.5 | 26.5 | 40.7 | 32.8 |
| Latin America & Caribbean | 48.3 | 20.2 | 49.9 | 29.9 |
| South Asia | 23.9 | 11.0 | 19.0 | 70.0 |
| **High Income** | **1,203.8** | **23.7** | **29.5** | **46.8** |
| *of which:* | | | | |
| EMU | 484.5 | 22.5 | 33.7 | 43.8 |
| **World** | **1,452.4** | **23.2** | **32.1** | **44.7** |

* Include such activities as insurance and financial services, international telecommunications, postal and courier services, computer data, news related services, construction services, royalties and license fees, miscellaneous business, professional and technical services, and personal, cultural and recreational services.

**Source:** World Development Indicators, World Bank, 2003.

5.32 The regional distribution of services exports shows that the top 10 countries which have maintained their position in services trade are the industrialised economies. A number of EMEs have improved their ranking in services exports since 1990. India occupied the 27th rank in services exports in 1990, which improved to 19th in 2001, accounting for 1.4 per cent of the global exports of services (Table 5.14). Among

**Table 5.14: Comparative Position of India in World Services Exports**

| Country | 1990 Amount (US $ billion) | 1990 Share in World Services Exports (per cent) | Country | 2001 Amount (US $ billion) | 2001 Share in World Services Exports (per cent) |
|---|---|---|---|---|---|
| USA | 147.4 | 17.1 | USA | 276.3 | 18.5 |
| France | 76.5 | 8.9 | UK | 110.6 | 7.4 |
| Germany | 66.6 | 7.7 | Germany | 87.5 | 5.9 |
| UK | 56.2 | 6.5 | France | 80.4 | 5.4 |
| Italy | 48.8 | 5.7 | Japan | 64.5 | 4.3 |
| Japan | 43.3 | 5.0 | Spain | 57.8 | 3.9 |
| Netherlands | 30.9 | 3.6 | Italy | 57.5 | 3.9 |
| Belgium-Luxembourg | 28.4 | 3.3 | Netherlands | 52.9 | 3.5 |
| Spain | 27.9 | 3.2 | Belgium-Luxembourg | 44.5 | 3.0 |
| Austria | 23.3 | 2.7 | Hong Kong | 41.4 | 2.8 |
| Switzerland | 18.9 | 2.2 | Canada | 36.6 | 2.4 |
| Canada | 16.3 | 1.9 | China | 33.3 | 2.2 |
| Sweden | 13.7 | 1.6 | Austria | 32.9 | 2.2 |
| Denmark | 12.8 | 1.5 | Korea | 29.6 | 2.0 |
| Singapore | 12.8 | 1.5 | Switzerland | 27.7 | 1.9 |
| Norway | 12.8 | 1.5 | Denmark | 26.9 | 1.8 |
| Korea | 11.2 | 1.3 | Singapore | 26.2 | 1.8 |
| Australia | 10.4 | 1.2 | Sweden | 22.0 | 1.5 |
| Mexico | 8.1 | 0.9 | **India** | **20.9** | **1.4** |
| Turkey | 8.0 | 0.9 | Ireland | 20.2 | 1.4 |
| Greece | 6.6 | 0.8 | Greece | 19.5 | 1.3 |
| Thailand | 6.4 | 0.7 | Norway | 18.0 | 1.2 |
| Egypt | 6.0 | 0.7 | Australia | 16.2 | 1.1 |
| China | 5.8 | 0.7 | Turkey | 16.1 | 1.1 |
| Portugal | 5.1 | 0.6 | Malaysia | 14.5 | 1.0 |
| Finland | 4.7 | 0.5 | Thailand | 13.0 | 0.9 |
| **India** | **4.6** | **0.5** | Mexico | 12.7 | 0.9 |
| Israel | 4.6 | 0.5 | Israel | 12.0 | 0.8 |
| Malaysia | 3.9 | 0.4 | Russia | 10.9 | 0.7 |
| Brazil | 3.8 | 0.4 | Poland | 9.8 | 0.7 |

**Source :** Balance of Payments Statistics Year Book, IMF.

**Table 5.15: Current Transfers/GDP: Cross-Country Comparison**

(Per cent)

| Country | 1990-94 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Argentina | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| Chile | 1.1 | 0.7 | 0.9 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 |
| China Mainland | 0.2 | 0.3 | 0.3 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 |
| Germany | 0.7 | 0.7 | 0.7 | 0.8 | 0.7 | 0.4 | 0.4 | 0.4 |
| **India** | **1.6** | **2.3** | **2.9** | **3.3** | **2.5** | **2.7** | **2.9** | **2.7** |
| Indonesia | 0.3 | 0.5 | 0.4 | 0.5 | 1.4 | 1.4 | 1.2 | 1.0 |
| Japan | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| Malaysia | 0.6 | 0.8 | 0.8 | 0.9 | 1.0 | 1.0 | 0.8 | .. |
| Mexico | 1.1 | 1.4 | 1.4 | 1.3 | 1.4 | 1.3 | 1.2 | 1.5 |
| Philippines | 1.6 | 1.5 | 1.4 | 2.0 | 1.2 | 0.8 | 0.7 | 0.7 |
| Thailand | 0.8 | 0.7 | 0.9 | 0.9 | 0.7 | 0.7 | 0.8 | 0.9 |
| Turkey | 2.7 | 2.7 | 2.5 | 2.6 | 2.9 | 2.9 | 2.7 | 2.7 |
| UK | 1.0 | 1.7 | 2.5 | 1.6 | 1.4 | 1.6 | 1.3 | 1.6 |
| USA | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |

.. Not Available

**Source :** Balance of Payments Statistics Yearbook, IMF, various issues.

developing economies, only China had larger exports of services than India in 2001.

5.33 Among invisibles, the most important element for India turns out to be workers' remittances. These earnings from the export of labour are recorded as private transfers by convention. In India, workers' remittances take the form of receipts for family maintenance either out of current incomes or savings, bullion and local disbursements out of non-resident deposits (Table 5.15).

5.34 Under the WTO characterisation, trade in services can be classified in to four modes: (i) cross-border supply (delivered by telecommunication, mail, embodied in goods or by a physical medium such as a computer diskette or drawings); (ii) consumption abroad (tourism, medical and educational services *etc.*, in which case the consumer moves to the country of production); (iii) commercial presence (banking, FDI related services); and (iv) movement of natural persons. Barriers to trade are essentially applied to the mode of delivery.

5.35 Progress towards a multilateral system of trade in services under the aegis of the WTO is significantly influenced by country-specific assessments of the costs and benefits of liberalisation of domestic barriers to trade in services (Box V.5).

**Box V.5**

**Static and Dynamic Benefits of Liberalising Trade in Services**

*Static Effects*

Analytically, the case for liberalising services inputs is no different from that relating to goods inputs. Liberalisation of trade in goods in the absence of services trade liberalisation could well result in negative effective protection for goods, since many services are key inputs in production processes. This highlights the need for liberalisation of trade in services to keep pace with that of goods. It has been argued that there are particularly large gains from eliminating barriers to trade in services like transport that facilitate trade (Deardoff, 2001). It is further argued that in addition to the reduced dead-weight loss in the services sector on account of liberalisation of trade, there are also efficiency gains resulting from lower trading costs for the user sectors.

*Dynamic Benefits*

The benefits of liberalising trade in services are increasingly being assessed in the context of growth. Spillovers of technology or skills embodied in service flows increase productivity of national factors of production and hence increase GNP. On the other hand, although scale of domestic activity (involving the sum of foreign and domestic factors) is likely to expand, employment of national factors of production need not. The impact on GNP growth will then comprise a factor effect which could be negative, and a productivity-enhancing effect, which will be positive.

Mattoo *et al.* (2001) analysed static and dynamic effects of liberalising services trade on economic growth and found some econometric evidence - relatively strong for the financial sector and less strong but nevertheless statistically significant, for the telecommunications sector - that openness in services trade influences long run growth performance. Countries with fully open telecom and financial services sectors grow up to 1.5 percentage points faster than other countries.

**Table 5.16: Growth of India's Trade in Services**

(Per cent)

| Period | Services Receipts | Services Payments |
|---|---|---|
| 1 | 2 | 3 |
| 1950s | 6.1 | 3.1 |
| 1960s | 0.8 | 4.8 |
| 1970s | 21.8 | 18.5 |
| 1980s | 8.9 | 11.4 |
| 1990s | 14.6 | 13.8 |
| 1950-2003 | 10.9 | 10.7 |

**Source :** Reserve Bank of India.

## India's Services Exports : Structural Aspects

5.36 Services exports from India comprise services such as travel, transportation, insurance, communication, construction, financial services, software, agency services, royalties, copyright and license fees and management services. Services exports from India emerged from a state of stagnation during the 1950s and the 1960s to post a strong growth in the 1970s, contributed mainly by travel services and other business services. The momentum of growth, however, could not be sustained and a general deceleration set in during the 1980s. The rejuvenation in the 1990s is mainly on account of exports of software and other IT-enabled services (Table 5.16 and Chart V.4).

**Chart V.4 : Composition of India's Exports**

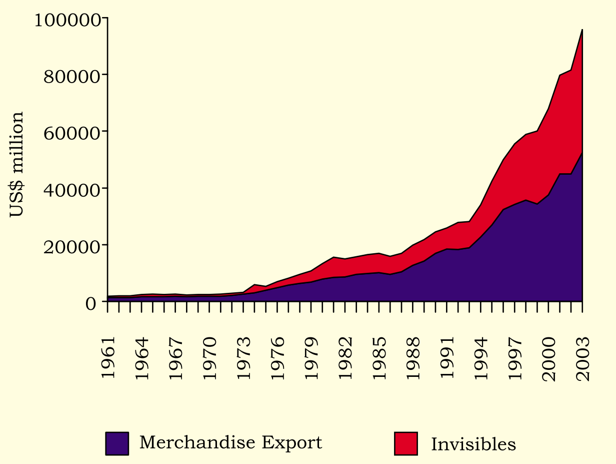


**Table 5.17: Changing Structure of Services Exports from India**

(Per cent to Total Services Exports)

| Year | Travel | Transpor-tation | Insurance | G.N.I.E. | Miscellaneous* |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1981 | 43.5 | 16.3 | 2.3 | 4.0 | 33.9 |
| 1986 | 29.3 | 14.9 | 1.9 | 2.9 | 50.8 |
| 1991 | 32.0 | 21.6 | 2.4 | 0.3 | 43.7 |
| 1996 | 36.9 | 27.4 | 2.4 | 0.2 | 33.1 |
| 2001 | 16.8 | 10.1 | 1.4 | 3.5 | 68.2 |
| 2003 | 12.1 | 10.1 | 1.5 | 1.2 | 75.1 |

**Note** : G.N.I.E: Government Not Included Elsewhere

* Include services such as communication, construction, finance, software, news agency, royalties, copyright, license fees, management, advertising, office maintenance and exhibitions.

**Source :** Reserve Bank of India.

5.37 The emergence of the new avenues of services exports has brought about perceptible structural shifts. The traditional services have displayed sluggishness while services in the modern segments are rising in importance in the 1990s (Table 5.17).

## Services in the Domestic Economy and Exports

5.38 The relationship between the share of services in output and exports has drawn considerable attention in the literature. Mixed correlations are observed for a cross-section of developed and developing countries. India's services intensity of exports compares exceedingly well with the high service oriented countries (Table 5.18). India improved its rank in terms of services intensity of exports from 10 to 2 between 1990 and 2001. This is indicative of India's dynamic comparative advantage in the high-skilled labour force.

5.39 Ordinal ranks in world trade obtained from the foregoing analysis are tested in a framework of pooled regression covering 23 emerging market economies and industrial countries for the period 1998 to 2001. The results of a balanced panel fixed effects model indicate that services intensity of exports is significantly determined by the output structure of a country.[3] The fixed effects are high for countries such as India, Spain, Ireland, Austria, UK, US, Belgium and Australia, which also have high services intensity of exports *vis-à-vis* other countries.

[3] The results of balanced panel fixed effect model are set out below:

$Xser_{ij} = 0.16\ Yser_{ij} + 0.79\ AR(1)$

(9.43)*** (26.20)*** $\bar{R}^2 = 0.99$ DW = 2.09

*** Indicates significant at 1 per cent.

$Xser_{ij}$ = indicator of services intensity of exports of country i for year j measured as services exports/total exports;

$Yser_{ij}$ = indicator of output orientation of country i for year j measured as services GDP/total GDP.

**Table 5.18: Service Orientation and Export Intensity**

(Per cent)

| Services Orientation (Share of Services in GDP) | | | | Export Intensity (Services Exports/Total Exports) | | | |
|---|---|---|---|---|---|---|---|
| Country | 1990 | Country | 2001 | Country | 1990 | Country | 2001 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| USA | 70 | USA | 73 | Austria | 35.5 | Spain | 34.4 |
| Australia | 67 | UK | 72 | Spain | 33.2 | **India** | **31.9** |
| France | 66 | France | 72 | Philippines | 26.3 | Austria | 31.6 |
| Netherlands | 65 | Belgium-Luxembourg | 71 | France | 25.7 | UK | 28.3 |
| Belgium-Luxembourg | 65 | Netherlands | 70 | USA | 25.2 | USA | 26.2 |
| Mexico | 64 | Australia | 70 | UK | 22.5 | New Zealand | 23.8 |
| UK | 63 | Mexico | 69 | Italy | 22.2 | Belgium-Luxembourg | 20.5 |
| Italy | 63 | Argentina | 69 | Thailand | 21.4 | Australia | 20.0 |
| Austria | 62 | Italy | 68 | New Zealand | 20.5 | France | 19.9 |
| Germany | 60 | Germany | 68 | **India** | **20.4** | Ireland | 19.5 |
| Spain | 59 | Japan | 67 | Australia | 19.8 | Italy | 19.1 |
| Japan | 58 | Spain | 66 | Belgium-Luxembourg | 18.5 | Netherlands | 18.5 |
| Ireland | 56 | South Africa | 66 | Netherlands | 17.8 | Chile | 17.6 |
| Argentina | 56 | Austria | 65 | Chile | 17.6 | Thailand | 16.6 |
| South Africa | 55 | Chile | 57 | Argentina | 15.5 | Korea | 16.4 |
| Brazil | 53 | Brazil | 57 | Mexico | 15.1 | Japan | 13.6 |
| Thailand | 50 | Russia | 56 | Japan | 12.6 | Argentina | 13.5 |
| Chile | 50 | Ireland | 55 | Canada | 12.6 | South Africa | 13.4 |
| Korea | 48 | Philippines | 54 | Korea | 12.3 | Germany | 12.7 |
| Philippines | 44 | Korea | 54 | South Africa | 12.3 | Canada | 12.1 |
| **India** | **41** | Thailand | 49 | Ireland | 12.2 | Philippines | 8.8 |
| Russia | 35 | **India** | **48** | Germany | 10.9 | Mexico | 7.3 |

**Source** : Computed on the basis of data from World Development Indicators, World Bank.

5.40 The demand for tradable services depends on the level of domestic income, relative prices, demand for goods and the overall importance of domestic services in the economy. Preliminary econometric estimates for India validate the Krugman hypothesis - the income elasticity of services exports with regard to world income is greater than unity, while it is less than unity in case of services imports. This implies a strong potential for expansion of services exports from India as world output growth rises. At the same time, it also implies that India's services exports are sensitive to global output shocks.

### Competitiveness of India's Exports of Services

5.41 The relative competitiveness of a country can be evaluated by computing an index of relative comparative advantage (RCA). An exercise was undertaken to compute RCA for different categories of services. RCA is measured as an economy's share in total world exports in a given sector divided by the economy's average export share in all sectors (Table 5.19).[4]

5.42 In the case of transportation services, the relatively lower comparative advantage of India's exports is attributable to the slowdown in merchandise

**Table 5.19: India: Indices of Relative Comparative Advantage (RCA)**

| Year | Transportation | Passenger | Freight | Travel | Other Services* |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1989-90 | 0.79 | 0.01 | 1.49 | 1.11 | 1.22 |
| 1990-91 | 0.82 | 0.02 | 1.53 | 1.06 | 1.23 |
| 1991-92 | 0.73 | 0.02 | 1.35 | 1.29 | 1.09 |
| 1992-93 | 0.87 | 0.01 | 1.66 | 1.39 | 0.85 |
| 1993-94 | 1.16 | 0.02 | 1.91 | 1.32 | 0.75 |
| 1994-95 | 1.12 | 0.02 | 1.76 | 1.21 | 0.86 |
| 1995-96 | 1.12 | 0.44 | 1.90 | 1.16 | 0.90 |
| 1996-97 | 1.12 | 0.18 | 1.99 | 1.20 | 0.85 |
| 1997-98 | 0.84 | 0.63 | 1.38 | 0.99 | 1.11 |
| 1998-99 | 0.65 | 0.41 | 0.95 | 0.73 | 1.35 |
| 1999-00 | 0.48 | 0.24 | 0.83 | 0.61 | 1.53 |
| 2000-01 | 0.44 | 0.18 | 0.79 | 0.54 | 1.60 |
| 2001-02 | 0.42 | 0.17 | 0.75 | 0.46 | 1.71 |

* Include mainly the business services.

[4] RCA >1 for a particular service implies that the country has relative comparative advantage in exports of that service. Patra (1999) has estimated RCA for a number of services exports of India.

**Table 5.20: Travel Services Receipts: Cross-Country Comparison**

(Per cent to GDP)

| Country | 1990-94 (Average) | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Argentina | 0.5 | 0.9 | 1.0 | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 |
| Chile | 1.7 | 1.3 | 1.2 | 1.3 | 1.4 | 1.2 | 1.1 | 1.3 |
| China Mainland | 0.8 | 1.2 | 1.2 | 1.3 | 1.3 | 1.4 | 1.5 | 1.5 |
| Germany | 0.8 | 0.7 | 0.7 | 0.8 | 0.9 | 0.4 | 0.5 | 0.5 |
| **India** | **0.7** | **0.7** | **0.7** | **0.7** | **0.7** | **0.7** | **0.7** | **0.6** |
| Indonesia | 2.2 | 2.6 | 2.7 | 3.1 | 4.5 | 3.1 | 3.3 | 3.6 |
| Japan | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Malaysia | 3.7 | 4.5 | 4.4 | 3.7 | 3.3 | 4.5 | 5.2 | .. |
| Mexico | 1.8 | 2.2 | 2.0 | 1.8 | 1.8 | 1.5 | 1.4 | 1.3 |
| Philippines | 1.6 | 1.5 | 1.9 | 2.8 | 2.2 | 3.4 | 2.8 | 2.4 |
| Thailand | 4.6 | 4.8 | 5.0 | 5.1 | 5.5 | 5.7 | 6.1 | 6.1 |
| Turkey | 2.3 | 2.9 | 3.1 | 3.7 | 3.6 | 2.8 | 3.8 | 5.6 |
| United Kingdom | 1.4 | 1.8 | 1.8 | 1.7 | 1.7 | 1.6 | 1.5 | 1.3 |
| United States of America | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 |

.. Not Available

**Source:** Computed from Balance of Payments Statistics Yearbook, IMF, 2002.

exports under the impact of the synchronised global downturn. The deterioration in comparative advantage of travel exports is a matter of concern, given that travel services accounted for a significant share of India's invisible exports till the 1990s. Travel receipts in India, as a proportion to GDP, have stagnated during the 1990s (Table 5.20). India, however, appears to have a distinct advantage in other services, which comprise business and professional services. The RCA for such services improved steadily between 1990-91 and 2001-02 (Table 5.21).

5.43 The rising prominence of business services reflects the high skill intensity of the Indian workforce. This is largely on account of exports of software services which have overwhelmed other exports in this category – communication, construction, financial, news agency, royalties, copyright, license fees, management, advertising and office maintenance – since the mid-1990s. The distinct competitive advantage in software services is mirrored in the trebling of the RCA between 1993-94 and 2001-02. Given the availability of large pool of skilled workers in India, it is necessary that comprehensive and strategic labour export policies should be fashioned to maximise gains from the export of these services by targeting categories of labour demand as well as markets (Patra, 1999). The RCA is also high (RCA > 1.0) in communication, construction and other business services but indicates a comparative disadvantage in exports of financial services (Table 5.21).

5.44 Exports of software and IT-enabled services grew at an average rate of 46 per cent since the mid-1990s. Within this sector, IT enabled services (ITES) and the Business Process Outsourcing (BPO) segment have emerged as the main drivers of growth.[5] With the

**Table 5.21: Index of Relative Comparative Advantage of Indian Exports of Business Services**

| Year | Communication | Construction | Financial | Royalties | Software | Other Business Services* |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1989-90 | – | – | – | 0.004 | – | 2.03 |
| 1990-91 | – | – | – | 0.002 | – | 3.25 |
| 1991-92 | – | – | – | 0.002 | – | 2.90 |
| 1992-93 | – | – | – | 0.002 | – | 2.04 |
| 1993-94 | – | – | – | 0.000 | 6.77 | 1.52 |
| 1994-95 | – | – | – | 0.001 | 6.81 | 1.49 |
| 1995-96 | – | – | – | 0.002 | 9.10 | 1.54 |
| 1996-97 | – | – | – | 0.007 | 12.55 | 1.11 |
| 1997-98 | 1.11 | 0.78 | 0.78 | 0.017 | 13.66 | 1.10 |
| 1998-99 | 2.04 | 0.76 | 0.49 | 0.010 | 14.01 | 1.74 |
| 1999-00 | 3.84 | 1.15 | 0.46 | 0.026 | 14.52 | 1.65 |
| 2000-01 | 3.95 | 4.52 | 0.65 | 0.024 | 19.86 | 1.19 |
| 2001-02 | 2.44 | 0.86 | 0.69 | 0.029 | 18.66 | 1.42 |

* Include services such as management, agency services, advertising and office maintenance.

[5] ITES-BPO involves outsourcing of such processes that can be enabled with information technology involving transfer of ownership and management of the processes from the customer to the service provider. The key segments in the Indian ITES-BPO industry are customer care (database marketing, web sales/ marketing), back-office finance (billing services, accounting transactions, financial analysis), human resource hiring, payment services and other administrative services.

global IT market focussing on maximisation of return on investment and reduction of costs, there has been an increasing trend towards outsourcing to low cost offshore centres. India has remained an attractive venue because of low cost of operations, high quality of product and services and readily available skilled manpower. This has enabled the Indian software industry to continuously increase its market shares in global IT spending from around 1.5 per cent in 2000-01 to an estimated 2.8 per cent in 2002-03, despite a slowdown in world IT spending.

5.45 The rapid growth of the ITES-BPO segment has led to a sharp rise in its share in total revenues of India's software and services exports (Table 5.22). Various IT service companies have expanded their offerings to include ITES-BPO by creating their own capacities or by acquiring ITES-BPO players *via* mergers and acquisitions. Within ITES service lines, customer care and finance have been the two fastest growing segments, with growth rates of 100 per cent and 70 per cent, respectively, during 2002-03.

5.46 An interesting development in this area has been offshoring by both existing and new customers (ITES-BPO services are predominantly delivered offshore) driven by drastic cost-cutting measures undertaken by the corporates in the industrial countries, mainly the US (NASSCOM, 2003). The onsite-offsite ratio of Indian software and services exports is currently at 43:57 as compared with a ratio of 80:20 a few years ago.

5.47 India has emerged over the last decade as the most preferred destination for outsourcing of IT services by clients in the US and the UK, with the US alone accounting for around 67 per cent of India's total software exports during 2002-03. Proficiency in the English language provides the cutting edge to India's exports *vis-à-vis* China and Mexico. Ireland, which was the biggest hub of ITES, has been surpassed by India mainly on account of the latter's large supply of IT professionals. Following the slowdown in the US economy and a reduction in IT spending by US corporations since 2001, Indian software companies are increasingly diversifying into markets in Europe, Asia (Japan and Singapore) and Australia. To preserve and build on its lead in IT services and BPO, it is essential for India to expand the domestic market by expediting deregulation and privatisation in key sectors such as telecom, financial services and retail, and by tapping emerging growth areas in the field of technology such as product data management, content management, business intelligence and wireless applications and verticals such as utilities, retail and healthcare (NASSCOM, 2003). Besides, India needs to diversify into exports of computer hardware and achieve vertical integration, thereby providing a fillip to software exports.

**Table 5.22: Indian Services and Software Market**

(US $ million)

| Year | Domestic Market | Software and Services Exports | Total | Exports of ITES-BPO Services |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 = (2+3) | 5 |
| 1994-95 | 298 | 489 | 787 | – |
| 1995-96 | 499 | 754 | 1,253 | – |
| 1996-97 | 730 | 1,100 | 1,830 | – |
| 1997-98 | 1,220 | 1,750 | 2,979 | – |
| 1998-99 | 1,560 | 2,600 | 4,160 | – |
| 1999-00 | 1,680 | 3,962 | 5,642 | 565 |
| 2000-01 | 2,160 | 6,217 | 8,377 | 930 |
| 2001-02 | 2,420 | 7,680 | 10,100 | 1,495 |
| 2002-03 | 2,500 | 9,500 | 12,000 | 2,335 |

**Source:** Strategic Review, NASSCOM, various issues.

5.48 The growing tradability of services has provided opportunities to many developing countries to expand export potential in services such as travel, information technology and other professional services. The cross-country evidence suggests that the service orientation of countries has also been reflected in greater tradability of services. A higher income elasticity of demand for services exports *vis-à-vis* services imports in India implies that there is considerable potential for expansion of exports in tandem with global demand. A strong comparative advantage has emerged in business services, especially software and other IT-enabled services.

### Workers' Remittances: Lending Enduring Stability

5.49 Workers' remittances are linked to labour migration and in more recent times, to the economy's ability to locate labour overseas as a trade strategy. The "Migrant Syndrome" (Reichart, 1981) or the "Dutch Disease" considers migration as depleting the labour and capital resources of the source countries. Per capita income in the migration source areas can, in fact, fall and the inward remittances resulting from migration can only partially compensate for the loss of human capital. A contrasting perspective is provided by the New Economics of Labour Migration (NELM) (Stark and Bloom, 1985), which considers migration as an integral part of the household's objective to enhance income levels, investment capacity and acquire insurance against risk. It is argued that remittances can ease production and investment constraints. In a life cycle perspective, remittance inflows can be negative during the initial period of migration of workers to defray the initial cost of migration to be borne by the source household. This phase is followed by increasing flow of remittances as the migrant worker starts generating income. Subsequently, the decision of migrant worker to settle down in the destination country can reduce the flow of remittances.

5.50 Workers' remittances, placed in a macroeconomic context, are closely linked to export of a number of professional and business services such as software, which entail natural movement of persons to render such services abroad. The surge in workers' remittances to India during the decades of the 1970s through the 1990s has resulted in India becoming the highest remittance receiving country in the world.[6] Workers' remittances financed almost the entire trade deficits of Bangladesh, India, Morocco, Pakistan and Sri Lanka in 2001 (Table 5.23).

5.51 There has been a structural shift in the regional sources of remittance flow to India during the 1990s, responding to the changing pattern of demand from predominantly unskilled/semi-skilled to highly skilled labour. As the oil boom in the Middle East countries slowed down, the contribution of the region attracting unskilled/semi-skilled labour has significantly come down between 1997-98 and 2002-03 (Table 5.24). However, the slowdown in such remittance flows has not impacted on aggregate remittance inflows to India, which are sustained by higher inflows from America and Europe.

**Table 5.23: Workers' Remittances for Select Labour Exporting Countries**

| Country | Remittance/trade deficit | (Per cent) |
|---|---|---|
| | 1991 | 2001 |
| 1 | 2 | 3 |
| Bangladesh | 55.5 | 102.2 |
| Egypt | 71.5 | 42.0 |
| **India** | **109.5** | **95.4** |
| Jordan | 38.2 | 90.2 |
| Mexico | 33.2 | 89.4 |
| Morocco | 112.8 | 107.9 |
| Pakistan | 67.8 | 240.3 |
| Philippines | 10.2 | – |
| Sri Lanka | 54.9 | 203.3 |
| Turkey | 38.4 | 61.4 |

**Source:** International Financial Statistics and Balance of Payments Yearbook, IMF.

**Table 5.24: Source Regions of Workers' Remittances to India**

(Per cent to total)

| Year | Africa | America | Asia | Europe | International Institu-tions | Total (US $ Million) |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1997-98 | 2.3 | 37.1 | 31.3 | 26.0 | 3.3 | 11,875 |
| 1998-99 | 1.7 | 36.7 | 37.1 | 23.6 | 0.9 | 10,341 |
| 1999-00 | 1.0 | 45.5 | 31.9 | 20.6 | 1.0 | 12,290 |
| 2000-01 | 1.3 | 44.9 | 34.3 | 19.0 | 0.5 | 12,873 |
| 2001-02 | 4.5 | 48.2 | 23.0 | 23.2 | 1.1 | 12,192 |
| 2002-03 | 0.6 | 51.1 | 22.0 | 25.8 | 0.5 | 15,174 |

5.52 The distribution of Indians residing abroad is highly skewed in favour of developing countries, particularly Asia and Middle-East. In Asia, the concentration of Indian population is more in Myanmar, Malaysia, Fiji and Singapore. In the Middle-East, the largest proportion of Indians is concentrated in Saudi Arabia followed by United Arab Emirates, Oman, Kuwait, Bahrain, Yemen and Qatar. South Africa and Mauritius comprise the bulk of Indian emigrants to Africa (Table 5.25).

5.53 Workers' remittances are recognised as a relatively reliable source of external finance as compared with capital inflows. In India, the volatility of workers' remittances, measured in terms of the coefficient of variation (CV), marginally increased in the recent period (1991-92 to 2002-03) as compared with the earlier period from 1975-76 to 1989-90 (Table 5.26). Among the components, local withdrawals from NRI deposits showed relative stability (Jadhav, 2003). This

**Table 5.25: Estimated Size of Overseas Indian Community: Country-Wise**

(Numbers in Million)

| Region/Country | Overseas Indian |
|---|---|
| I. Industrial Countries | 4.5 |
| United States | 1.7 |
| Euro Area | 0.5 |
| United Kingdom | 1.2 |
| Others | 1.1 |
| II. Developing Countries | 12.1 |
| Africa | 2.0 |
| Asia | 5.5 |
| Middle East | 3.5 |
| Latin America | 1.1 |

**Source:** Report of the High Level Committee on the Indian Diaspora, December, 2001.

[6] A comparison of the Indian and Chinese experience provides an interesting contrast. India receives significantly higher workers' remittances whereas the FDI flows are comparatively low. On the other hand, in the case of China, workers' remittances are relatively lower but FDI flows are significantly higher (see Chapter VI).

**Table 5.26: Volatility of Various Types of External Flows to India**

| Item | 1975-76 to 1989-90 | | 1991-92 to 2002-03 | |
|---|---|---|---|---|
| | CV (per cent) | Mean (US $ billion) | CV (per cent) | Mean (US $ billion) |
| 1 | 2 | 3 | 4 | 5 |
| Private Transfers | 34.2 | 2.1 | 38.7 | 9.8 |
| Workers' Remittances (Including Local Withdrawal from NRI Deposits) | 43.9 | 1.5 | 54.7 | 7.6 |
| *Current Account Flows* | | | | |
| Services | 41.2 | 2.7 | 60.2 | 11.6 |
| Income | 42.6 | 0.5 | 66.1 | 1.5 |
| *Capital Flows* | | | | |
| NRI Deposits | 100.5 | 0.8 | 62.6 | 1.6 |
| Foreign Investment | – | – | 59.2 | 3.7 |

**Note :** CV : Coefficient of Variation

phenomenon is related to the overall policy approach of switching the composition of non-resident deposits in favour of rupee denominated schemes and realignment of maturity and interest rates. It needs to be emphasised that workers' remittances have witnessed the lowest volatility among all components of current receipts, after merchandise exports, as well as in comparison with capital flows such as non-resident deposits and foreign investment during the period 1991-92 to 2002-03.

5.54 The level of workers' remittances is determined by the migrants' educational level, incomes and motivation to transfer the accumulated capital for investment in the home country (Brown, 1997). The implicit loan by family to the migrant worker, the implicit rate of interest and the expected payback period are also recognised as the determinants of the remittance flows. In sharp contrast to capital flows, remittance flows are neither affected by the variations in the exchange rate nor the real rate of return on investment (Straubhaar, 1986). This underpins the relatively stable behaviour of remittances *vis-à-vis* other capital flows.

5.55 A significant share of workers' remittances to India continues to be contributed by inflows from the oil exporting countries of Middle East. Thus, the behaviour of remittances to India is likely to be influenced by growth patterns in these countries, best represented in the form of oil price behaviour. Another important source of remittance inflows to India is the US. It is expected that cyclical fluctuations in US GDP, particularly the GDP originating from services will impact on remittance flows to India. As regards sensitivity to interest rate movements, the Indian experience merits special attention. A major part of funds remitted by expatriate workers is channelised through inflows to non-resident deposits in the form of local withdrawals. The available body of literature on interest rate differential (also the exchange rate) impacting on remittance flows is, however, inconclusive.[7]

5.56 Exploring these conceptual issues in identifying the determinants of workers' remittances in the Indian context, Jadhav (2003) finds that the remittance inflows to India are determined by the level of economic activity in the host country. While the exchange rate elasticity is found to be significant, interest rate differentials, unlike in the case of private capital flows, do not have a significant impact on remittance inflows. This also strengthens the argument that private remittances are a stable source of developmental finance.

5.57 In sum, workers remittances are found to be counter-cyclical and as such they have provided some element of stability to the current account balance of recipient countries. India's overwhelming comparative advantage reflects the vast pool of skilled and semi-skilled labour and technical manpower in the country and the ability to successfully locate labour overseas. Workers' remittances are almost three per cent of India's GDP and have provided considerable support to India's balance of payments. They have offset India's merchandise trade deficit to a large extent, thereby keeping current account deficits modest through the 1990s and posting modest surpluses in 2001-02 and 2002-03. Moreover, workers remittances have exhibited the lowest volatility among all categories of current receipts, after merchandise exports. Unlike the capital flows, interest rate differentials are not found to be significant in determining workers remittances, underlining the stable nature of these flows.

## III. GENERAL AGREEMENT ON TRADE IN SERVICES AND INDIA

5.58 The General Agreement on Trade in Services (GATS) is the first set of international rules for trade in services. India has been a signatory since its inception in 1995. The mandated negotiations under the

[7] Swamy (1981) found that the interest rate differentials between the host and the destination countries and exchange rates were not significant variables in affecting remittance flows. Straubhaar (1986) also provides empirical support to such observations.

framework of GATS aim to liberalise all services sectors and all modes of supply under multilateral rules for trade in services, while allowing each member to choose the sectors and modes in which it would offer trading commitments. Under the Uruguay Round, India has scheduled commitments in a few sectors, namely, Engineering, Computer, Telecom, R&D, Audio Visual, Financial, Hospital and Tourism Services. A 'bottom-up' and 'positive listing' approach has been followed in the trade negotiations. Under this approach, members have the choice regarding the services for which they can make binding commitments for trade liberalisation. Negotiations proceed on the basis of requests and offers.

5.59 India has already submitted requests to its trading partners in accounting, computer related services, architecture services, health services, audio visual services, construction services, tourism services, maritime services, financial services as well as in movement of natural persons. In response, India received requests from 27 countries in respect of services such as legal services, health and social services, consulting services, placement and supply services, packaging services and printing and publishing and computer related services, audio visual services, education and training services, distribution, environment, energy, insurance, banking and telecommunications, tourism, transport, postal, recreational, cultural and sporting services. In response to these requests, India is to make an initial offer in services, which could be discussed bilaterally before the commitments taken finally are multilateralised.

5.60 The mode of supply of particular interest to India and other developing countries is Mode 4, *i.e.*, the movement of natural persons. India already has a significant presence of natural persons abroad and this is reflected in sustained buoyancy in private remittances flowing into the country. This, in turn, is due to a large pool of well qualified professionals in service sectors like computer and related services, education services, audio-visual services, accountancy services, architectural services, construction services, engineering services and health and consultancy services. At present, immigration policies in developed countries are so complex that making a direct investment in a developing country is often less cumbersome than movement of labour to developed countries (Mattoo, 2003; Faini, 2002). Greater openness in trade in services under Mode 4 can significantly enhance global remittance flows. Little progress on this issue in GATS framework and the unfavourable approach of the developed countries on natural movement of persons does not presage any significant gains from trade in the near term.

5.61 As such, coalition building amongst developing countries is essential. Furthermore, India has a fairly large comparative advantage over other Member countries with regard to cross border supply of services (Mode 1), given her strengths in Information Technology (IT). This is another area of focus in India's negotiation.

5.62 India has sought freer trade in services through movement of natural persons on the basis of the following broad principles: (i) rules should be transparent; (ii) each contracting party should publish and make freely available procedures applicable for movement of personnel and the entry procedures; (iii) there should not be any discriminatory tariff/tax or other regulatory restrictions on the nationals of foreign countries *vis-à-vis* its own nationals; (iv) there should not be any quantitative limitations (*i.e.,* number of visas) on temporary movement of professionals, just as there are to be no quantitative limitations on trade in goods; and (v) fees and charges applicable to residents and/or citizens with a view to providing social security nets or retirement benefits should not apply as there is only temporary movement of professionals rather than permanent residence or citizenship.

5.63 In a policy paper submitted by the Government of India to the World Trade Organisation (WTO) in 1999, it was indicated that the movement of personnel is linked to commercial presence but only a few developing countries are in a position to benefit because of high capital requirements for establishment in developed countries. Concern was also raised that the categories of professionals do not prominently figure in the commitments and liberalisation in Mode 4. The commitments in this regard have been left out in the scheduling exercise by many countries whereas in actual practice, there is considerable global trade in these labour services. There is a need for greater freedom of movement of personnel, particularly professionals. Developing countries like India which have distinct comparative advantage in delivery of such services owing to their large stock of intellectual capital should be free to exploit their comparative advantage. India, together with like-minded developing countries, is working on a formula approach to achieve broader commitments by a larger number of WTO members in Mode 4. A joint negotiating proposal was submitted to the WTO in July 2003.

5.64 During the recently held WTO Ministerial Conference at Cancun in September 2003, India renewed its commitment to intensify efforts to conclude negotiations on specific commitments. India also emphasised due attention to quality of offers, particularly in sectors and modes of supply in which developing countries have export interests. The need for a review of progress was proposed for the Special Session of the Council of Trade in Services by March 2004. Negotiations should aim at progressively higher levels of liberalisation with no *a priori* exclusion of any service sector or mode of supply.

## IV. CONCLUDING OBSERVATIONS

5.65 The assessment of the current account in the preceding sections, based on the stylised evidence drawing from country experiences and empirical verification of the key analytical issues, suggests that the size, composition as well as financing of the current account is critical in determining the future sustainability of external sector. The country evidence on current account deficits reveals that their persistence at high levels can pose serious problems to the external stability. Furthermore, as the EMEs relax barriers to capital mobility, excessive current account deficits can enhance vulnerability of these economies to external shocks thereby entailing risks for financial stability. As such, these challenges pose dilemmas before the policy makers on deciding a sustainable level of the current account deficits while striving to overcome the domestic resource constraint. Current account deficits above 5 per cent of GDP pose a threat to external sector stability, even if they are on account of private sector imbalances. In the ultimate analysis, the sustainable level of the current account deficit is a country-specific question and has to be estimated for each country separately. At the same time, financing of current account deficits also matters. The Indian experience of the 1990s bears out the hypothesis that high correlation between domestic savings and investments is reflected in relatively moderate levels of current account deficits. Unidirectional causality running from fiscal deficits to current account deficits for most developing economies underlines the importance of fiscal consolidation for external sector stability.

5.66 The current account dynamics have been significantly influenced by the increasing tradability and competitiveness of services in India in contrast to many emerging economies. Estimates of a fixed effect model indicate that the service content of exports is significantly determined by the output structure. Estimates of income elasticity of demand for India's services exports point to a strong potential for expanding services exports in the coming years. An analysis of relative comparative advantage in services exports brings out a significant improvement in trade competitiveness in software and other related business services and an erosion of competitiveness in services such as transportation and travel. This remains an area of policy concern. In this regard, recent liberalisation of air travel services in India can be considered as an important policy initiative for augmenting tourism and transportation earnings.

5.67 Another important development in the current account has been the emergence of workers' remittances as an important source of external finance, offsetting high trade account deficits and volatility in the capital account. India has emerged as the highest remittance receiving country in the world reflecting its comparative advantage in skilled and semi-skilled labour exports. Empirical analysis suggests that economic activity in the host country and exchange rate movements significantly impact inflows of workers' remittances. Furthermore, these inflows are found to be insensitive to interest rate differentials, indicative of the relative stability of remittances *vis-à-vis* capital flows. These findings need to be reflected in India's negotiating position under the GATS under various modes of supply. Greater openness in exports of services under Mode 4 of delivery can contribute significantly to an enduring current account sustainability.