

## (ii) Sectoral statistics

This section describes the sectoral statistics that are potentially available. For reasons of space, only those which seemed most relevant have been included in this study.

Statistics on air transport services can be obtained from the International Civil Aviation Organization's (ICAO) Statistical Yearbook.<sup>6</sup> The Statistical Yearbook contains information on kilometres and hours flown, passengers carried, general type of activity of passengers, passenger-kilometres flown, tonne-kilometres of freight and mail, civil aircraft registered in ICAO states, fleet composition, as well as information on companies, such as the number of employees, operating revenue, expenses and surplus.

Statistics on maritime transport services can be obtained from the United Nations Conference on Trade and Development (UNCTAD) Review of Maritime Transport. The Review provides information on fleets, shipbuilding and port development, freight, containers and multi-modal transport, world fleet size by principal types of vessels, tonnage distribution of major open-registry fleets, cargo carried and ton-miles performed per deadweight tonnage of the total world fleet, container port traffic of developing countries and territories, and traffic for selected ports.<sup>7</sup>

Tourism statistics can be obtained from the Yearbook of Tourism Statistics published by the World Tourism Organization. The Yearbook contains information on passengers and passenger-kilometres flown, tourists arrivals, payments, nights in hotels, accommodation capacity, trends of tourist arrivals by country and by air for each region, and nights spent by tourists from abroad in all accommodation establishments

Financial statistics can be obtained from the Annual Report of the Bank for International Settlements, and from different publications of the IMF, the World Bank and the OECD. A recent study, "Opening markets in Financial Services and the Role of the GATS" (WTO, 1997), presents statistics relevant to financial services such as statistics on total banking assets, activity in international financial markets, global derivatives markets, and the share of foreign-owned assets in total banking assets.

Statistics on insurance services can be obtained from the Swiss Reinsurance Company SIGMA. This company publishes statistics on premiums in life and non-life insurance, for a selected number of countries (63). Detailed information on activities of insurance companies is given by UNCTAD for developing countries and OECD for its member countries.

Professional organizations such as the International Federation of Accountants (IFAC) keep statistics on membership of professional bodies on a country basis. The Federation of European Accountants (FEE) collects statistics on the accounting profession for the European Union countries. Nonetheless, data on accounting services are very limited.

Telecommunication services statistics are obtained from the International Telecommunication Union (ITU) (1996, 1997). These publications include information on telecommunication revenues, international telephone revenues, direction of outgoing and incoming traffic, telephone and cellular

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<sup>6</sup>Statistics on air transport are also available from the International Air Transport Association (IATA).

<sup>7</sup>Some of the statistics presented in the UNCTAD Review of Maritime Transport are drawn from Lloyd's Maritime Information Services Ltd. (London). The Economic Commission for Europe publishes information by modes of transport (railways, roads, inland waterway, international rivers, and pipelines) for European countries.

tariffs, settlement payments, new telephone lines added, telecommunication investment and telecommunication staff.<sup>8</sup>

### III. TRADE FLOWS IN SERVICES SECTORS BASED ON BOP STATISTICS

It must be emphasized that both the trade values and country rankings presented below, especially at the detailed sectoral level, should be viewed with a certain degree of caution, given the differences between countries in reporting, reliability, definitions and collection methods.

#### (i) Overview of trends in trade in services

World trade in commercial services, *measured on a balance of payments basis*, accounted for around one-fifth of world exports and imports of goods and services in 1995 (Table A1 in Annex A). There were some regional variations in this proportion. On the export side, North America and Western Europe recorded above-average shares of services in their total exports, while Latin America, Africa and Asia recorded shares of services below the global average. On the import side, the picture is somewhat different: Africa, Asia and Western Europe recorded shares above the average while the Americas recorded shares below the average.

The growth of world trade in commercial services slowed down in 1996 (Chart 1, Tables A2 and A3). Exports of commercial services were estimated to be \$1,260 billion in 1996, an increase of 5 per cent over the previous year - much lower than the increase of 14 per cent recorded in 1995. While Asia's exports and imports of commercial services grew fastest in 1995, Latin American growth was as impressive in 1996. Western Europe's trade revealed the most significant deceleration in 1996.

In recent years, *transportation* accounted for at least a quarter and *travel* for around a third of all trade in commercial services (Chart 2, Table A4). Over the last couple of years, the exports of *transportation* services increased less, while *other commercial services* (insurance, banking, telecommunication and so forth) expanded somewhat faster than total services (Chart 1). Chart 3 and Table A5 have been constructed to provide a more disaggregated picture of the relative importance of particular services within the category of *other commercial services*. One significant problem encountered was that not all countries report statistics for each sub-sector. Trade in individual sub-sectors for non-reporting countries was estimated on the basis of their share in total trade in commercial services. A second problem was that aggregate imports were not always equal to aggregate exports in particular sectors due to differences in reporting. Table A5, therefore, presents the average of imports and exports for each sub-sector. Subject to these qualifications, Tables A4 and A5 together reveal that trade in most sub-sectors is dwarfed by *transport* and *travel*.<sup>9</sup> *Financial* and *insurance* services together constituted around a fifth of *other commercial services* in recent years. *Other business services* is a large category within other commercial services because it is a catch-all category for all unreported sectors. The relatively large category of *royalties and licence fees* is treated as part of services in IMF BOP statistics, but it is only the *franchising* component of this category which is relevant in the GATS context (as a sub-sector of *distribution services*).

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<sup>8</sup>Statistics on telecommunications are also available from SIEMENS on telecommunication lines, countries' capacities, local, long distance and international calls, subscribers by type, and investments in the sector. Moreover, the OECD publishes a range of information for member countries.

<sup>9</sup>It is important to note that travel is a blanket category which covers all expenditure by travellers abroad, including therefore consumption abroad of other services like transportation and telecommunications.

Chart 1: Annual growth of trade in commercial services

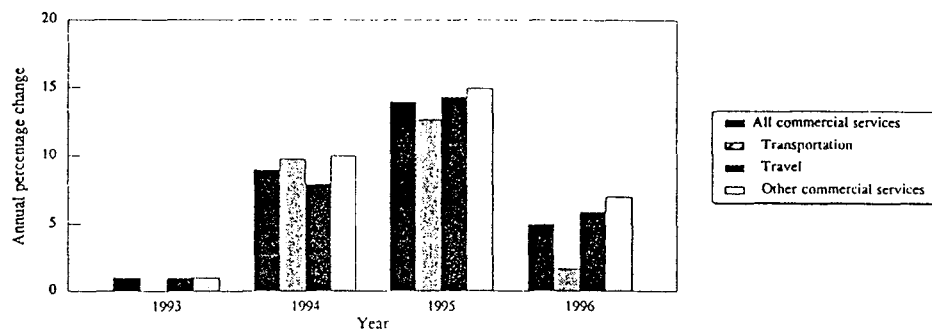


Chart 2: Share of world trade in all commercial services by category in 1996

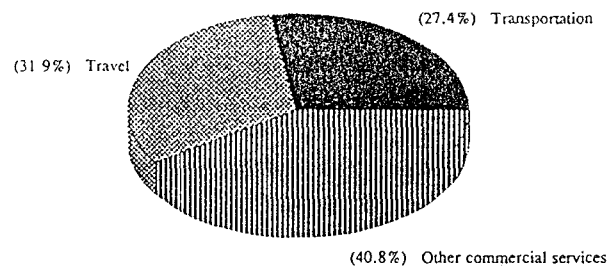
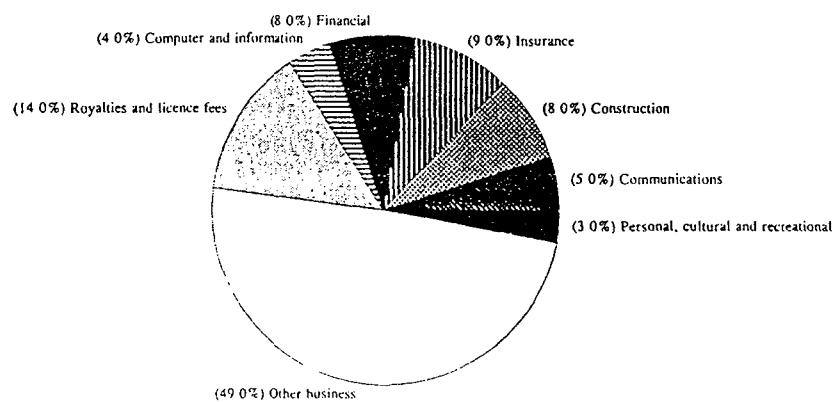


Chart 3: Estimated share of world trade in "other commercial services" by category in 1996



Source: IMF Balance of Payments Statistics and WTO Secretariat Estimates

The top 15 exporters and importers of commercial services accounted for around 72 per cent and 69 per cent of world exports and imports, respectively, in 1995 - the most recent year for which a sufficiently large number of countries have reported statistics (Table A6). The leading exporting countries and the leading importing countries tend to be the same, though their relative importance in exports and imports differs somewhat. Although annual changes need to be treated with caution, Table A6 suggests that there are significant variations in the performance of the leading exporters and importers of commercial services in 1995.

Table A7 provides estimates of the share of the top 5 and top 10 exporters and importers in reported trade in each sector. As noted above, not all countries report trade figures for each services category. The relative importance of the reporting countries in total trade in the relevant service is estimated on the basis of their share in total trade in commercial services. In so far as the reporting countries may be relatively more important traders in the relevant services category, their estimated share in world exports may be understated. It must be noted that there is virtually full reporting for the categories transport, travel and other business services. But the ingredients of other business services are likely to differ between countries in so far as they include data for all unreported sectors. The elements of Table A7 are discussed in the sections on individual sectors.

## (ii) Transportation

In the GNS classification, *transportation services* include maritime, internal waterways, air, space, rail, road, pipeline, as well as auxiliary services, such as cargo-handling, storage and warehousing, and freight agency services. In the BPM-5 Classification, *transportation* is divided into sea, air and other transport, with each category subdivided further into passenger, freight and other.<sup>10</sup>

Table A8 presents the 15 leading exporters and importers of *transportation services* in 1995.<sup>11</sup> The top five exporters of transportation services accounted for around 42 percent of world exports of *transportation services* in 1995, reflecting a small decline from their share of over 44 per cent in 1990. The corresponding figures for the top five importers of *transportation services* are 41 per cent and 42 per cent, respectively.

Among the top 15 exporters of *transportation services*, Hong Kong (China), the Republic of Korea, Chinese Taipei, and Sweden did not report disaggregated data for individual transportation services. Among those countries which reported disaggregated data, Japan and Italy were the top two exporters and importers of sea transport services in 1995.

The data reported by the IMF are at an aggregated level. More disaggregated or industry-level data for *maritime transport services* are reported by UNCTAD in its Reviews of Maritime Transport. Table A9 presents statistics for world seaborne trade for the year 1970, 1993, 1994 and 1995. Table A10 presents the structure of the merchant fleets of the main country groups for the year 1995, and Table A11 shows the 35 most important maritime countries in 1995.

The information contained in Table A9 pertains not to trade in maritime transport services *per se*, but demonstrates the reliance on maritime transport for trade in goods. The table distinguishes

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<sup>10</sup>The OECD/Eurostat classification includes the other major transport categories (space, rail, road, and internal waterway transport) as separate sectors. According to BPM-5 guidelines, "ship repairs" are included not in the services account, but in the goods account as part of the general category "repairs on goods". However, "maintenance" of ship is included in "other transportation".

<sup>11</sup>1995 is the latest year in which most countries reported to the IMF.

between goods loaded (exports) and goods unloaded (imports), types of goods (crude oil, oil products, and dry cargo), and country groups. A comparison of Tables A8 and A11 reveals interesting differences. Greece, the Russian Federation, Japan, China and Norway were the five most important maritime countries in 1995 - ranked by ownership of number of vessels under either national or foreign flag. However, Greece and China did not figure in the list of most important exporters of maritime transport services because these figures are not fully reported to the IMF. The Russian Federation's low position in terms of exports, despite its ownership of a large number of vessels, may be explained by the large national consumption of maritime transport services.

In 1995, oil tankers and bulk carriers each accounted for over a third of the world's merchant fleets. Oil tankers had the largest share (over 40 per cent) in the fleets of both developed market-economy and major open-registry countries, whereas bulk carriers had the largest share (42 percent) in the fleets of developing countries and socialist countries of Asia. General cargo vessels (share of 39 per cent) dominated the fleets of Central and Eastern European countries (including the former USSR).

In 1995, the United States, Germany, the United Kingdom, France and Japan were the top 5 exporters as well as the top 5 importers of *air transport services*. More disaggregated or industry-level data for air transport services are presented in Tables A12, A13 and A14, which are drawn from the ICAO Annual Reports. In 1995, United States' airlines carried the highest number of passengers on scheduled flights. The United States' share of world's passengers carried was more than 41 percent in terms of total operations, and more than 14 percent for international operations. Airlines from the United States also carried the most tonnage of freight in 1995. Its share of world's freight tonnes-kilometres performed was approximately 24 percent from total operations, and approximately 15 percentage from international operations.

### (iii) Travel

The BOP category *travel* covers all expenditures by travellers abroad, including those on goods, and is not subdivided into the different categories of services acquired by travellers. Some elements of consumption abroad which arise when the property of the consumer moves or is situated abroad, as in the repair and maintenance services of ships and aircrafts, are not recorded in *travel* but in other BOP categories.

Table A15 presents the 15 leading exporters and importers of *travel services* in 1995. The top ten exporters and importers of *travel services* in 1995 accounted for approximately 59 percent and 63 percent of world exports and imports of *travel services*, respectively. In 1995, the United States was the leading exporter of *travel services*, and Germany was the leading importer of *travel services*.

France, United States, Spain, Italy and Hungary were the top five tourism destinations in 1994 as shown in Table A16. The top ten tourism destinations in 1994, which also included China, Poland and Mexico, accounted for more than half of the arrivals worldwide.

### (iv) Communications

In the GNS classification *communications services* include postal, courier, telecommunication, and audiovisual services. In the BPM-5 Classification, *communications services* group together postal, courier and telecommunication services, while audiovisual services are reported separately as an element of personal, cultural and recreational services.

Table A17 presents the 20 leading exporters and importers of *communications services* among those countries that have reported to the IMF in 1995. The top five exporters and importers of *communications services* in 1995 accounted for more than 49 percent and 67 percent of reported exports and imports of *communications services*, respectively.<sup>12</sup> The United States, Germany and the United Kingdom were the top three exporters and importers of *communications services*.

Table A18 presents the top 20 revenue-earners of international telecommunication services in 1995, and Table A19 presents the international telephone traffic for the top 20 countries - ranked by the number of outgoing minutes for the same period.

#### (v) Construction

In the GNS classification, *construction services* are subdivided into several sub-sectors, while the BPM-5 classification includes all construction services in a single category. Two points should be noted about the BOP statistics on construction services: first, the one-year rule for determining whether an entity is resident is interpreted flexibly, so that many situations of temporary commercial presence are captured by the data. Second, goods imported by an enterprise for use in projects are included in the value of construction services rather than being recorded under goods trade; the data presented thus tends to overrate the "true" services component.

Table A20 presents the 20 leading exporters and importers of *construction services* for those countries that have reported to the IMF in 1995. The top five exporters and importers of *construction services* in 1995 accounted for approximately 61 percent and 69 percent of reported exports and imports of *construction services*, respectively.<sup>13</sup>

#### (vi) Financial services

In the GNS classification, *financial services* include insurance, banking and other financial services. In the BPM-5 Classification, *financial services* covers financial intermediary and auxiliary services (except those of insurance enterprises and pension funds) conducted between residents and non-residents. Included are intermediary service fees, such as those associated with letters of credit, bankers' acceptances, lines of credit, financial leasing, and foreign exchange transactions. Also included are commissions and fees related to transactions in securities - brokerage, placements of issues, underwritings, redemptions, and arrangements of swaps, options, and other hedging instruments; commissions of commodity futures traders; and services related to asset management, financial market operational and regulatory services, security custody services, etc.

Table A21 presents the 20 leading exporters and importers of *financial services* (other than insurance) for those countries that have reported to the IMF in 1995. The top five exporters and importers of *financial services* in 1995 accounted for approximately 61 percent and 71 percent of reported exports and imports of *financial services*, respectively.<sup>14</sup>

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<sup>12</sup>Table A7 shows that the estimated shares of total reported exports and imports of *communications services* are 83 percent and 81 percent of world exports and imports of *communications services*, respectively.

<sup>13</sup>Table A7 shows that the estimated shares of total reported exports and imports of *construction services* are 73 percent and 71 percent of world exports and imports of *construction services*, respectively.

<sup>14</sup>Table A7 shows that the estimated shares of total reported exports and imports of *financial services* are 81 percent and 72 percent of world exports and imports of *financial services*, respectively.