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### Evolving Patterns of Trade and Investment in Services\*

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## **I. Introduction**

The purpose of our paper is to discuss and document the usefulness and limitations of existing data on international trade and investment in services. We concentrate especially on the conceptual and measurement issues involved in interpreting and trying to use the available data on international services transactions, and, in the process, identify gaps in the data that need attention.

We begin in Section II with a discussion of the distinguishing characteristics of services, what is meant by trade and investment in services, and what economic theory has to say about how international services transactions may evolve through time. In Section III, we set forth a number of hypotheses concerning the evolution of international trade in goods and services and then examine and interpret the available data in the light of these hypotheses. Section IV proceeds along the same lines in analyzing patterns of international investment in goods and services. We then discuss the reliability and accuracy of our main empirical findings regarding trade and investment in goods and services in Section V, calling attention to the limitations of existing data on international transactions in services. Section VI turns to the type of improvements that are required for further analysis to be feasible. Some concluding remarks are made in Section VII.

## II. Conceptual and Measurement Issues

### What is Meant by International Trade and Investment in Services?

We can say that international trade in goods and/or services occurs when there are cross-border transactions carried out between economic units (i.e., consumers, firms, governments) that reside in different countries. This is in contrast to production and sale of goods and/or services abroad, which will involve a change in residency from one country to another of certain assets or factors of production. While this distinction seems reasonably straightforward, in practice problems nonetheless arise when it comes to distinguishing cross-border trade from production by foreign-owned firms and separating international transactions in goods from international transactions in services.

As far as the distinction between trade and foreign production is concerned, conventions play a large role. Usually a one-year criterion is employed, in that factors are only considered to change their residency if they move abroad for longer than one year. However, this is not a uniform practice. Once firms are considered to have changed their residency, their sales will no longer be registered in the home country's balance of payments.

Turning to the difference between goods and services, it is important to realize that there is no generally accepted comprehensive definition of what constitutes a service. Despite efforts by national accounting experts in recent years to arrive at a definition, no acceptable definition has emerged. The general problem is that no one criterion suffices to distinguish goods from services. For example, Hill (1977) defines a service "as a change in the condition of a person, or a good belonging to some economic unit, which is brought about as a result of the activity of some other economic unit." However, this does not encompass activities which are intended to prevent a change, even though one would consider these to be services as well (think of defense, police, preventive medicine, etc.).<sup>1</sup>

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<sup>1</sup>See, for example, Drechsler and Hoffman (1988).

One could take the view that from an economic perspective what really matters is that products are being produced and sold, and that efforts to break down products into goods and services thus may not be very meaningful. It is of course true that different types of products have different characteristics, but these characteristics may not lend themselves readily to unambiguous identification of their goods and services components. It is interesting to note in this connection that such a “product-based” approach is the one that has been taken by the economic statisticians in designing the new Central Product Classification (CPC) system that focuses on the universe of products and makes no distinction between goods and services.<sup>2</sup> This reflects their considered judgment of the impracticality of measuring goods and services transactions separately.

Abstracting from definitional difficulties, the feasibility of separating goods from services hinges in an important way on the nature of technological change and, as Bhagwati (1984a) has emphasized, the ways in which the specialized activities of firms are “splintered” off into services from goods and goods from services. Thus, depending on the level of aggregation for recording transactions and particularly the time span involved, it may be quite difficult to distinguish goods from services and vice versa at the firm or industry level. This difficulty will become more pronounced especially if services that previously were purchased at arm’s length from other firms come to be subsumed within the firm.

The implication of the foregoing discussion is that there is unfortunately no airtight way of identifying and accounting for international transactions in services per se, and it may not be very useful to do so. Whatever system or classifications may be devised are bound to be somewhat arbitrary. It remains the case nonetheless that products with “service” characteristics are often considered to be of interest in their own

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<sup>2</sup>United Nations (1989). The CPC is a classification of products, as opposed to activities. Its strength is that it allows for much more detailed data to be collected as compared to an activity based classification such as the International Standard Industrial Classification (ISIC). Thus, the CPC distinguishes over 600 service products, compared to only 130 in the most recently revised ISIC.

right, and that certain conventions may be adopted in an effort to distinguish services from goods. In what follows we shall take a “residual” approach, in that services shall be considered to comprise categories 6–9 of the International Standard Industrial Classification (ISIC): wholesale and retail trade, hotels and restaurants; transport, storage, and communications; finance, real estate, and business services; and community, social, and personal services.

### **Characterizing International Transactions in Services**

In Stern and Hoekman (1988a), we called attention to two distinguishing characteristics of services: (1) production and consumption of services have to take place simultaneously, implying that services usually cannot be stored; and (2) services tend to be intangible. We also noted that services can: (1) be complementary to trade in goods; (2) substitute for trade in goods; or (3) be unrelated to goods. All of these characteristics have implications for how trade can occur.

Because of their intangibility and nonstorability, in order to become tradable, services have to be applied to (embodied in) objects, an information flow, or persons. Available means of “transportation” must then be employed to move the objects, information, or persons from one country to another.<sup>3</sup> Thus, for trade to occur, the means of transporting the services often have to be able/permitted to cross national frontiers. As a consequence, international transactions in services appear to be more complex conceptually than international transactions in goods.<sup>4</sup> Elsewhere, typologies have been developed characterizing the manner in which trade in services may occur. Usually these break down international transactions in services into three types: cross-border or separated trade analogous to trade in goods, transactions that require the

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<sup>3</sup>Feketekuty (1988, p. 28).

<sup>4</sup>In particular, the issue of market access is much more important for services than for goods. In the sphere of merchandise trade, transportation up to the frontier may be enough to be able to sell a good. In services this is often not sufficient, and either the means of transportation or the provider (factor) may need to be able to cross the border.

movement of the producer to the location of the demander (demander-located services), and transactions that imply the movement of the consumer to the location of the provider (provider-located services).<sup>5</sup>

Such typologies are helpful in that they focus attention on the crucial role that technology plays in the tradability of services. Depending on the type of service, trade may or may not be technically feasible. To the extent that it is, there may be one or more avenues available to firms. These include trade in what Hirsch (1989) has called “service-intensive” goods, embodiment in cross-border information flows (separated services), and movement of provider or demander. We shall have more to say on this topic below.

### **Possible Determinants of the Evolution of Trade and Investment In Services**

In trying to understand the evolution of international transactions in services, it is helpful to begin by reviewing the factors that shape the role of services in a country’s domestic economic structure.

Broadly speaking, the demand for both goods and services will depend upon the level and rate of increase in per capita real incomes and relative prices. The latter will be a function of changes in factor productivity (technological change), differential income elasticities, and changes in economic structure (urbanization, labor-force participation), and business practices. As services are often said to lag behind goods-producing sectors in terms of productivity improvements and to have income elasticities of demand greater than unity, one might expect that the share of spending on services (reflecting both final and intermediate demand) would rise with increases in per capita income.<sup>6</sup> It is noteworthy in this connection that the share of services in total output and employment especially tends to be higher in the industrialized countries as compared to the developing countries.

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<sup>5</sup>See Sampson and Snape (1985) and Stern and Hoekman (1987).

<sup>6</sup>As suggested originally by Baumol (1967) and Fuchs (1968). While the service sector as a whole tends to lag behind goods-producing sectors in terms of productivity growth, certain service activities have experienced very large increases in productivity. As Baumol (1985) has emphasized, there are both “stagnant” and “progressive” service activities.

This may be due in part to differences in the ways that services are measured in the industrialized and developing countries, in particular the difficulties of taking institutional and structural differences into account. But even if allowance is made for these intercountry variations, the importance of services appears to be reflected in differences in levels of development and per capita incomes.

Table 1 records the percentage breakdown of gross domestic product (GDP) measured on a value added basis in current prices for three major sectors — agriculture (including forestry and fishery), industry (i.e., mining, manufacturing, construction, and utilities), and services (wholesale and retail trade; hotels and restaurants; transport, storage and communication; finance, real estate and business services; and personal, social, and community services) — for the major industrialized and developing countries and other regions for 1965 and 1986. For convenience, when available manufacturing is also reported separately. It can be seen that most countries experienced an increase in the relative importance of services in total output.<sup>7</sup> In most industrialized countries the counterpart of this rise was a decline in the shares of agriculture and industry. In contrast, many developing countries experienced a simultaneous increase in the share of both industry and services. However, the trend in these countries is not uniform, and a number of economies saw the share of services decline.<sup>8</sup>

The relative importance of services in terms of employment can be seen in Table 2 to have increased dramatically in the major industrialized and developing countries in the post-1950 period. In several of the industrialized countries, the share of services in total employment is currently greater than 60%. The relative importance of employment

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<sup>7</sup>Data on regional/country groupings in this and subsequent tables are weighted averages of all the countries in a given group, not just those reported separately in the tables. In cases where country data were not reported or not available, the countries were given a zero weight in the groupings. This will of course tend to bias the weighted average downward, thus making it difficult to make comparisons among groupings and between years.

<sup>8</sup>Examples include Singapore, Taiwan, Mexico, Cameroun, Tanzania, and Zaire.

in services tends to be less in developing economies as compared to the industrialized countries. The reasons for the increases in the employment share of services presumably stem from lagging productivity in services and structural changes such as increased participation rates of female labor, increased urbanization, technological changes, and increased specialization that have led to new service activities, expansion of part-time employment opportunities, and the growth of government services.<sup>9</sup>

Tables 1 and 2 appear to indicate that services become more important as economic development proceeds (as per capita incomes rise). To this can be added the evidence in Kravis, Heston, and Summers (1983), who found that per capita spending on final-demand services is smaller in poor countries than in rich countries, based on data measured in current prices and converted at current nominal exchange rates. However, in part what is observed may be a nominal phenomenon. For example, Kravis, Heston, and Summers found that the rising share of final demand expenditure on services does not hold when purchasing-power-parities (PPPs) are used for conversion purposes. Use of PPPs reduced the dispersion of per capita incomes across countries as well as the differences in the relative price structures of poor and rich countries.<sup>10</sup>

It is helpful at this point to provide an indication of the relative importance of various service activities in GDP (Total Value Added). Table 3 provides information on the average contribution of the major services sectors to GDP in the industrialized and the developing countries. It can be seen that wholesale and retail trade, hotels, and restaurants tend to contribute most to total value added, followed by finance and business services, transport and communications, and social services. Note that the major difference between developed and developing countries in terms of economic structure is with respect to the relative importance of agriculture and government.

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<sup>9</sup>These issues have been analyzed at length in the literature. For a summary discussion, see Stern and Hoekman (1988b).

<sup>10</sup>See also Kravis, Heston, and Summers (1982) and Bhagwati (1984b).

A comparison of low and high income countries shows, according to Park and Chan (1989), that the relative importance of producer services (finance, insurance, real estate, professional services such as engineering, consulting, and accounting, as well as cleaning and maintenance) tends to be about three times greater in the high income countries. This is a phenomenon that holds for both services and goods producing sectors: the relative importance of producer service inputs is twice as large for distribution (transport and wholesale/retail trade), and three times as large for personal, social and community services in high income countries as compared to low income countries. Limited time series evidence for specific countries supports the conclusion that producer services tend to become relatively more important over time. Green (1985) has demonstrated that arms-length expenditures on producer services as a proportion of the value of manufacturing output increased about 20% on average in West Germany, Italy, and the United Kingdom between 1975 and 1981. In the recent past, most service subsectors have been growing faster than manufacturing output in the United States, but this is the case especially for producer services such as telecommunications, brokerage, and business and miscellaneous professional services (Adams and Siwaraksa, 1987; Duchin, 1988).

Possible reasons for the growth of producer services noted above include the increasing scope for arms-length sourcing due to innovations in information technology, as well as increasing specialization and product differentiation, driven in part by emerging economies of scale and scope, and in part by demand for a larger variety of and higher quality services. These developments may be a function of economic growth, changes in the composition of demand, and/or changes in business practices. In this connection, it is often hypothesized that an important change in business practices that has occurred involves firms shifting from in-house to arms-length sourcing of service inputs (also called unbundling or externalization). However, Kutscher (1988) demonstrates that unbundling has not taken place to any great extent in the United States, as the relative in-house employment of people engaged in producer service activities has remained constant or even

increased. Thus, the increase in output and employment of business services apparently reflects increasing demand for these services, and not a shift in sourcing.

In general, the supply of services will be governed by available production technologies and the market structure of the supplying firms. Some (e.g., personal) services will be supplied by relatively small producers under conditions of competition while other services (e.g., transport) will require sizable fixed investments that may lead to economies of scale. Some (e.g., professional and personal) services may be supplied in many varieties or qualities while other services may be more homogeneous. Over time, changes in technology will be of crucial importance in affecting the supply of services. We have already mentioned the phenomenon of the splintering of goods and services and the specialization of producing firms that may come about due to invention and innovation involving new products and processes. Further, the degree of capital/labor substitution will have an important influence on employment and wages especially insofar as goods- and services-producing firms and industries differ in their ability to effect increases in labor productivity.

It can be expected that the various factors mentioned relating to a country's domestic economic structure will also be operative internationally. As real per capita incomes rise, reflecting the process of economic growth and development, one would expect therefore that the share of services in international transactions will increase over time. Thus, the presumption exists that both the level and the pattern of trade and investment in services will be in part a function of the level of economic development. In addition, familiar factors such as endowments, technologies, tastes, culture, location, etc. will be important. Most trade theorists agree that the standard "toolbox" is applicable to trade in services (i.e., the principle of comparative advantage, predictions as to the factor content of

trade).<sup>11</sup> The limited empirical evidence available supports the view that standard approaches can be fruitfully used to analyze trade in services.<sup>12</sup>

Government policies, of course, may play an important role as well in determining the pattern of trade and investment in goods and services. That is, the regulatory, trade, and investment policy regime of a country may encourage, deter, or change the mix between international transactions in goods and services.<sup>13</sup> In this regard it should be recalled that many services require the physical proximity of the provider and recipient. This means that services provided by means of foreign direct investment and the international movement of workers and consumers may often be of considerable importance in comparison to services traded directly across international borders in a manner similar to trade in goods. This implies that government intervention may be as, if not more, important than technology in determining the tradability of services and the form of trade. For example, establishment may be required in the insurance sector, even though separated trade is often feasible. The opposite frequently applies to retail banking: only cross-border trade is allowed, in practice prohibiting sales by foreign-owned firms established abroad. Intervention will not only affect the pattern of trade and investment, but may in turn affect both the rate of growth and the economic structure of the country.

The conclusion to be drawn is that the evolution of trade and investment in services will depend on differences in per capita incomes, variations in factor endowments, distances from markets, technology and technological gaps, the degree to which capital, labor, and demanders are mobile, government policies, and firm strategies (market structure). These are, of course, the same factors that shape trade in goods. But, trade in

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<sup>11</sup>There is not complete agreement, of course. Furthermore, while in principle standard theories remain valid, their application is made more difficult due to the fact that there are multiple modes through which international transactions in services may occur.

<sup>12</sup>See, for example, Sapir and Lutz (1980, 1981), Sagari (1988), and Langhammer (1989).

<sup>13</sup>See, for example, Kaspar (1988), Noyelle and Dutka (1988), White (1988), and Yeats (1989).

services is more complex because of the need to determine their tradability. Thus, analysis should also focus on the technological and regulatory considerations that determine the relative costs associated with alternative ways of providing services. Two questions then need to be answered: (1) is trade possible; and (2) if so, what means will be preferred? As noted above, options include temporary physical movement (of either provider or recipient), embodiment in an information flow (phone calls, faxes, electronic data and mail), and embodiment in a good. Over time the answers will change, and this may influence both the trade versus investment decision as well as the choice of mode of trade.

### **Availability of Statistics**

There are three main sources of available data relating to international transactions in services: (1) the balance of payments; (2) input-output tables; and (3) industry or sector specific information collected by government agencies and/or the private sector. Current balance-of-payments (BOP) data are highly aggregated, often inaccurate and difficult to compare across countries or time, only available on a value basis, and very rarely reported by origin and destination.<sup>14</sup> The classification of services found in BOP accounts is by type of activity and includes both nonfactor services (e.g., travel, transport, other private services) and what would be regarded as factor services in the national accounts (e.g., royalties and fees for intangible property, investment income, and labor income). The factor payments/receipts typically do not distinguish income from goods-related as opposed to services-related investment (production). Also workers' remittances are generally included under transfers in the BOP accounts although they can be considered to be a component of factor services. BOP data are the only global source of trade data currently available.

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<sup>14</sup>For more detailed analyses of the deficiencies of data on international trade in services, see Ascher and Whichard (1987), OTA (1986), Drechsler and Hoffman (1988), and Stern and Hoekman (1987). We shall return to data issues in Sections V and VI below.

An alternative source of data on international transactions in services is national input-output (I-O) tables. These are especially useful in assessing the interindustry relations involving goods and services. However, depending on the country, I-O tables will employ different nomenclatures and have varying levels of aggregation and disaggregation, making cross-country comparisons difficult. More importantly, international transactions in services are often not clearly identified, making it difficult to determine how such transactions relate to domestic transactions. Furthermore, I-O data are rarely up to date and are often only available at five or ten year intervals. Under the circumstances, as noted in Hoekman (1988), large discrepancies exist between measures of trade in services based on I-O tables and the balance-of-payments. For this reason we shall not make use here of I-O data.

A third important source of data on international transactions in services derives from periodic surveys of foreign direct investment by government agencies or from financial flows monitored by central banks. However, these data are not often broken down geographically, may focus only on financial flows instead of sales by affiliates, and rarely identify services as separate activities. Finally, there are studies by official bodies, private organizations, and individuals that contain a great deal of information for a variety of services sectors. For example, data exist on construction contracts awarded, trade in insurance, as well as the largest firms in service sectors such as hotels and restaurants, accounting, and advertising. These data are very useful for sectoral studies, but less so for global analyses.

In line with the theme of this conference, the two sections that follow focus on what the available BOP and stock data on FDI in services can tell us. We are very aware of the fact that the reliability and accuracy of the data we use are limited, but we shall abstract from any detailed discussion of these issues until Section V. In large part the rationale for such an approach is to highlight the data gaps. Nevertheless, it needs to be kept in mind that statistics are not very reliable, so that caution must be exercised in

drawing conclusions from the data we report. So as to focus the discussion, some broad hypotheses or questions concerning the evolution of international trade and investment in goods and services are suggested. We then investigate the extent to which available data allow the analyst to answer the questions.

### III. Patterns of International Trade in Goods and Services

#### Hypotheses

1. The previous section indicated that there is reason to believe that the *share* of services in domestic transactions can be expected to rise in response to increases in per capita incomes. Has a similar phenomenon occurred for international transactions in services? Have rates of change in output and trade in services been similar? Finally, have growth rates for trade in services been greater or smaller than for trade in goods?<sup>15</sup>

2. The *variety* of both intermediate and final services can be expected to increase due especially to changes in demand and technology that allow increasing specialization to occur at the level of the firm in particular industries. Can such a development be observed in trade flows?

3. The relative importance of trade in *separated* services (i.e., taking place via telecommunications media as opposed to mobility or embodiment in goods) can then be expected to increase, and changes in the composition of services trade may reflect the increasing importance of technological developments. That is, given government policies, has trade in separated services grown faster than trade via the temporary mobility of providers and demanders?

4. Economic theory leads one to expect, and empirical analysis generally confirms, that, depending on patterns of comparative advantage, countries will specialize

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<sup>15</sup>The answers to the last two questions will depend in part on the respective income and price elasticities of demand and whether goods and services are complements or substitutes. While such information is not currently available, the answers may provide some indication of the relationship between goods and services.

in the production of specific types of products. Are there any discernible trends to this effect for services?

5. We have seen that as per capita incomes rise there is a shift in the composition of service sector activities. In particular, as a result of both demand and supply factors, the relative importance of producer services rises, while that of personal and distribution services declines. This leads to a number of possible hypotheses or questions. For example, can a similar phenomenon be observed in trade flows? Also, does this imply that trade in producer services will tend to be mostly between developed nations? Finally, as developing economies grow, one expects to observe a rise in the relative importance of developing regions in global trade in producer services.

### **Evidence and Analysis**

We may begin with Table 4 which records average annual growth rates of sector contributions to GDP at constant prices for 1965–80 and 1980–86 for the major industrialized and developing countries. For most countries, growth rates of GDP dropped dramatically in the 1980–86 period, major exceptions being countries such as China and India. It is noteworthy that growth rates in agricultural output have recently risen substantially in both the industrialized and the developing regions. Indeed, in the European Community, Australia, and the Middle East/North Africa, agriculture was the most rapidly growing sector in the 1980–86 period.<sup>16</sup> This is in marked contrast to the 1965–80 period, when agriculture was the slowest growing sector in all regions. In general, growth rates of service sector output have not been significantly greater than growth in GDP.

Turning to international trade, Table 5 reports data on the nominal value of world exports of merchandise and “invisibles” for the period between 1970 and 1987. Invisibles comprise all the nonmerchandise components of the current account, while “private

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<sup>16</sup>As was the case for the earlier tables, the weighted averages for country/regional groupings give a zero weight to countries for which data are not reported or not available.

services" include travel, transport, and the private components of the IMF category "other goods, services, and income."<sup>17</sup> It can be seen that merchandise exports grew slightly faster than private services during the 1970s, whereas the opposite was the case in 1980-87. The relative importance of private services was more or less unchanged between 1970 and 1987. The largest changes were apparently recorded for investment income, and account for the increase in the relative importance of invisibles in world trade. However, this cannot be interpreted to mean that provision via factor mobility has grown faster than trade, since to a large extent these income flows are related to portfolio investment, not FDI. Furthermore, labor income flows and worker remittances are excluded. We shall return to this topic in the next section.

Tables 6 and 7 focus respectively on the percentage shares of world exports and imports of merchandise and services for the major industrialized and developing countries and other regions for 1970 and 1987. They show that the share in world trade of merchandise held by the industrialized countries remained virtually unchanged between 1970 and 1987, while the share in total exports of private services has declined. The share in world exports of maritime and air transport (shipment and passenger services) of these countries declined significantly by about ten percentage points. The concomitant rise of developing countries in these categories is reflected in part in a declining share in the world credits associated with "other transport" (primarily port services). It can be hypothesized that, as the size of developing country fleets and their merchandise trade expanded, payments for port services increased.

Changes in the shares of travel and other private services (OPS) were minor, reflecting the fact that trade in these categories largely is a developed country affair. For

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<sup>17</sup>The major categories employed by the IMF are shipment (transport of freight including insurance); passenger services (air fares); other transport (charters and port services); travel (expenditures and receipts associated with temporary stays of nonresidents); other goods, services and income (labor and property income, as well as all other types of services). The latter category includes both official and private transactions. For our purposes, the term other private services (OPS) will be used to denote the private component of this category, excluding labor and property income.

example, as measured by travel statistics, Europe remains the largest tourist market in the world.<sup>18</sup> The share of industrialized nations in world imports of OPS increased between 1970–87, which supports the point already mentioned that demand and supply of producer services are likely to be concentrated in high income countries. There is some evidence also that the share in global imports of OPS by the dynamic Asian economies has increased, which is in contrast to the declining share of developing countries as a whole. Again, this is in line with the broad hypothesis noted above.

The growth in the developing country share of world trade in both goods and services is largely due to the Asian economies, which doubled or tripled their share in all categories of services, with the exception of other transport. Certain countries experienced substantial declines in services shares. Examples include: Italy, West Germany, and the United Kingdom for passenger services; the United Kingdom for other transport; Mexico, Canada and the United States for travel; Norway and the United Kingdom for shipment; and Switzerland, the United States, and the United Kingdom for OPS. As noted earlier, the industrialized countries' share in world exports of OPS remained virtually constant, indicating that these changes were compensated by the increased share of other such industrialized nations as Japan, France, West Germany, and Austria.

It is interesting to note that many developing countries apparently experienced an increase in the relative importance of exports of private services compared to merchandise after 1970 while the opposite was the case for most industrialized countries. This can be seen from Table 8. Only four out of the 20 industrialized countries listed in Table 8 saw an increase in the relative importance of private services, as compared to 18 out of 29 developing economies. This suggests that service exports grew faster than merchandise exports for many developing countries. This is, of course, the counterpart to the finding

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<sup>18</sup>IMF travel receipts are identical in principle to tourism receipts as defined by the World Tourism Organization. The latter defines an international tourist as any traveller who stays abroad (for whatever purpose) for longer than 24 hours.

discussed above that the developing country share in world exports of private services has increased.

Table 9 reports average annual growth rates of total exports and imports of merchandise and services in current prices for five-year intervals starting in 1967 for the major industrialized and developing countries. There are a number of interesting details that are worth noting. Focusing on the industrialized countries first, exports of merchandise grew faster than exports of private services for all periods except 1977-82. However, after 1977 imports of services tended to increase faster than imports of merchandise. In general, growth rates of exports and imports for the various categories tend to be quite similar. Developing countries demonstrate an opposite pattern. Thus, exports of services tended to grow faster than exports of merchandise, except during the 1972-77 period which included the first oil shock. For the period as a whole, services exports outperformed merchandise exports, while the opposite holds for developed countries. Interestingly, the opposite also holds for the Asian "tigers."

Developing economies show an unstable pattern of growth rates on the import side. During 1967-72 and 1977-82 imports of services grew faster than imports of merchandise, and vice versa during 1972-77 and 1982-87. The decline in the growth of imports during 1982-87 is noteworthy: average annual changes of -5% for both merchandise and services. In general, growth rates are less balanced for developing as compared to industrialized countries.

As is to be expected, country experiences vary widely over time. Middle income countries that export manufactures, such as Brazil, Ireland, Spain, and Yugoslavia, generally report that imports of services grow faster than exports. Countries such as South Korea and Singapore start by having higher growth rates for exports of services than for imports, but report the opposite for the 1982-87 period. The same is true for Asia as a whole. Latin American countries, in contrast, saw their imports of services grow faster than their exports from the late sixties to the early eighties. However, during

the 1982-87 period growth rates of imports plummeted for most nations. Finally, it is noteworthy that the decreases in the growth rates of exports experienced by many countries in the post-1982 period were concentrated in merchandise rather than private services. This suggests that the merchandise terms of trade may be considerably more volatile than the services terms of trade. Alternatively (or additionally) it may reflect increased competition in industrialized countries.

Tables 10 and 11 indicate respectively the average annual growth rates of exports and imports for various categories of nonfactor services and factor services for the major industrialized and developing countries for 1967-1987. Note that growth rates in general tended to be much lower during the 1977-87 period than during 1967-77. Industrialized countries' exports and imports of OPS were the fastest growing component of private services trade during 1967-77. While OPS continued to be the most dynamic component of exports during 1977-87, passenger services and travel became the fastest growing services on the import side. As far as the developing countries are concerned, no component dominated. During 1967-77, exports of OPS and passenger services grew fastest, as opposed to imports of other transport followed by OPS. During 1977-87, passenger services was the most rapidly growing category on both the export and import sides.

Again, country experiences varied widely. Focusing on exports first, of the industrialized countries, Austria, Ireland, Italy, Portugal, and Sweden all had growth rates of exports that were double the average for shipment. Portugal and Sweden saw the same occur for travel exports, to which one can add Australia and Japan. Major gainers for other transport included Austria, Greece, Ireland, and Spain, while Austria, Greece, Japan, and New Zealand all experienced large growth rates for exports of OPS. Note that many countries are mentioned more than once, and that most of them are small, and often (upper) middle income countries. The only exception to this is Japan. As far as developing economies are concerned, South Korea and Singapore reported growth rates double the

average in all categories except OPS. In addition to the Asian "tigers," one can observe that Turkey had growth rates of shipment and travel exports much larger than the average. The same was true for Chile, Egypt, and Yugoslavia for other transport, and for Brazil and Chile for passenger services.

It is very interesting to observe that the growth rate of exports of OPS by South Korea and Singapore fell below the developing country average during 1977-87. This is the only category for which this is the case. It may reflect in part specialization in these countries. Thus, for example, exports of construction services by South Korea fell dramatically during the eighties. Note further that Chile, Mexico, Egypt and Yugoslavia substantially outperformed the developing country average for exports of OPS.

Turning to imports, of the developed countries, Ireland, Spain, the United Kingdom, Finland and Japan were the most dynamic countries in at least two categories (three for Japan). The largest import growth rates for OPS were registered by Ireland, Finland, Japan, and the United States. Developing economies report a varied pattern of import growth rates. Often, certain countries saw their imports decline over the 1977-87 period. Growth rates of imports were substantial for Asian economies, with the exception of other transport. In contrast, Latin American countries such as Argentina and Mexico reported substantial growth rates of imports of other transport. In part this reflects above average growth in exports of shipment.

Imports of OPS for most Asian countries (but not South Korea), as well as Argentina, Chile, Mexico, Egypt, Turkey, and Yugoslavia grew especially rapidly. However, rates of growth for these countries were not noticeably different from those of the more dynamic industrialized countries.

Great care must be taken when drawing conclusions based on the foregoing tables with regard to the evolution of the pattern of trade in goods and services in recent decades. As noted earlier, and as will be discussed in greater detail in Section V, this is because data on trade in services are neither comprehensive nor very reliable. Thus, the following

conclusions should be considered to be tentative. How much confidence can be placed in them will be discussed in at the end on Section V.

What then are the conclusions that are suggested by the data insofar as the questions noted at the beginning of this Section are concerned?

1. There is a tendency among developing countries for the share of private services in total trade to increase. Thus, domestic trends appear to be reflected in international trade statistics. However, this is not the case for industrialized countries. If one compares growth rates of service sector output reported in Table 4 with the growth rates of exports and imports, it can be concluded that industrialized countries with higher than average service sector output growth are not necessarily the most dynamic traders of services.

2. While developing countries on average experienced higher growth rates of services output than industrialized ones, this does not imply that developing country export growth rates tend to be higher than those of the industrialized nations. However, it is the case that developing countries with relatively high services output growth rates (including South Korea, Singapore, Brazil, Egypt, Saudi Arabia, and Turkey) tend to be high growth exporters of services. No such pattern emerges on the import side.

3. No quantitative information is available with respect to the question of whether the variety of traded services has increased over time. In large part this is because the existing data are too highly aggregated. The question whether separated trade has become more important relative to trade via temporary mobility of provider or consumer also cannot be answered readily. BOP data are not broken down by mode of delivery. It is clear that travel data on receipts and expenditures related to international flows of people, both for purposes of holiday and business, reflect a mix of provider- and consumer-mobility. In contrast, transport tends to comprise separated trade. The main problem is that OPS are a mix of the three major modes of delivery, and that the value of reported OPS for most industrialized countries is understated. The reason for this

understatement is that virtually no information exists on the volume and value of transborder data flows. This issue will be discussed in the following Section.

4. As for specialization, it is clear that this is reflected in the increasing developing country shares in world exports of shipment, travel, and passenger services. These service categories have become relatively more important in their total trade. Within the group of industrialized countries, it was noted above that most of them experienced an increase in the relative importance of merchandise (exceptions include France, West Germany, and Greece). However, apparently several developed nations did become more specialized in certain types of services. This is the case for Austria, France, West Germany, and the Netherlands for OPS; travel for the United Kingdom; and shipment for Japan. In large part developing country increases in shipment, travel, and passenger services are due to increasing specialization of countries such as South Korea. However, it must be emphasized that data on developing countries especially are very patchy, and little can be said with confidence.

There is some support for the hypothesis that trade in OPS will tend to be an affair between industrialized nations. The highest share of these countries in world exports of services is in OPS, and it has remained remained virtually constant since 1970. However, as data by origin and destination are not readily available, and data are also highly aggregated, no firm conclusions can be drawn.<sup>19</sup>

#### **IV. Patterns of International Investment in Goods and Services**

##### **Hypotheses**

We have already noted that the provision/sale of a service frequently requires a physical proximity between provider and receiver. This implies that either establishment by the foreign provider in the consuming country, or movement of the demander is

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<sup>19</sup>In any event, as discussed in Section V, even if disaggregated data were available, problems of bias would arise due to incomplete and changing coverage of the statistics.

required for provision to occur. Thus, either temporary or permanent factor movement may be necessary. Building again on the discussion in Section II, the following hypotheses suggest themselves:

1. Given that the role of services tends to rise as per capita incomes increase, this suggests that foreign direct investment in services will tend to be concentrated in markets with relatively high per capita incomes and relatively liberal foreign investment policies. Furthermore, the share of FDI in services will tend to increase as per capita incomes rise (given no change in government policies) and as FDI regulations are relaxed.

2. As many services cannot be traded in a manner analogous to trade in goods, one might expect that FDI in services should, on average, be greater than FDI in manufacturing.

3. Related to the foregoing is that because trade in goods is much less constrained than trade in services, it can be hypothesized that, all other things equal, FDI in service activities will be more important relative to trade in services than is the case for merchandise (i.e., primary and manufactured products).

4. The relative importance of intrafirm trade in services will increase over time as technological advances allow disembodied (long distance) provision to occur (more cheaply). This can be expected to hold for any given level of FDI, and will be strengthened to the extent that FDI increases over time.

There are many other potentially interesting questions and hypotheses. For example, depending on relative cost conditions and the foreign investment policies of host countries, activities initially involving the production and sale of goods and services by multinational enterprises may become separated, or vice versa. However, to analyze issues of this type, detailed country and industry studies are required and are thus beyond the scope of this paper.

## Evidence and Analysis

Global data on foreign direct investment (FDI) are unfortunately rather scanty, and, to the extent that countries report data at all, it is usually at a high level of aggregation. The basis for FDI stock and flow figures varies widely and statistics are usually not readily comparable across countries. It is important to recognize, moreover, that breakdowns of FDI between goods and services sectors are made by only a limited number of countries, and that stock data are often biased due to the widespread use of historical cost valuation methods, the distorting effects of exchange-rate fluctuations, exclusion of retained earnings, the treatment of divestment, and measures on commitments or approvals rather than actual investment flows.

Table 12 contains data on the book value of the stock of inward FDI in total and the portion in services for selected host countries for various years. FDI in services can be seen to vary between 25% and 50% of the total stock of FDI in most host countries. According to Sauvart and Zimny (1987, p. ?), as of the mid-1980s, about 40% of the world stock of FDI and 50% of the annual new flow of FDI was in services. In countries that report data, FDI in services has almost invariably become more important over time. The rise in the relative importance of FDI in services occurs in both industrialized and developing countries, although the increase is more marked for the former countries. Much of services FDI in developing countries appears to be related either to investment in offshore financial centers and tax havens, or to investment in flags of convenience. However, as noted in UNCTC (1988, p. ?), even when the foregoing investments are excluded, the share of services in total FDI in developing countries has increased over time. All of this suggests that the increasing relative importance of services in terms of domestic production and employment that we noted in our earlier discussion appears to have gone hand-in-hand with an increase in the relative importance of services in global flows of FDI.

Despite its obvious interest, data on the sectoral composition of FDI in service activities are quite limited, as is evident from Table 13. Where comparable sectoral data are available, it appears that FDI in wholesale and retail trade and financial services is especially important. However, most FDI in financial services apparently relates to offshore banking. There is reason to believe that maybe half of the stock of existing FDI in services reflects the establishment of service affiliates by firms whose primary activity is industrial (i.e., goods related) in nature. In large part these investments appear to be directed towards financial and distribution-related activities and are intended to support parent-firm production and sales. Thus, much of the investment in finance and distribution is not independent. To illustrate this point further, according to the CTC Reporter (1987, p. 19), for West Germany, service multinational enterprises (MNEs) controlled 29% of the total outward stock of FDI in 1984, while service affiliates represented 60% of the total number of affiliates and 45% of the total assets of all affiliates of German-based MNEs. The same phenomenon holds for the United States, where the figures were 55% and 68% respectively, given a share of services in the total stock of FDI of only 37%. It is of course possible that host country regulatory policies and technological constraints may be responsible to an important extent for the foreign presence of service providing firms. But granting this point, there are many types of service activities that in themselves will require a foreign presence.

It is also interesting to consider the distribution of FDI in host countries by country or region of origin. Some data pertaining to the distribution of total FDI for various years are contained in Table 14. It is clear that Western Europe and the United States are the major sources of FDI, followed by Japan. Japan is important especially in the Asian region, as is reflected in its share of total FDI in Indonesia, Korea, and Thailand. However, Japanese FDI has been of declining relative importance in those countries that are reported, reflecting in part increases in its share of FDI in industrialized nations. A weak tendency can be observed for Western Europe to become more important

as a source of FDI. As one would expect, intra-regional FDI is of some importance. Thus, Asian countries tend to invest in Australia, Indonesia, Japan, South Korea, and Thailand, while Latin American countries invest in Brazil, Colombia, Chile, Peru, and Venezuela.

While the data in Table 14 do not permit a comprehensive breakdown by sector of FDI according to the country or region of origin, such information is available for outward stocks of FDI for a limited number of major industrialized countries and is presented in Table 15. Two interesting facts emerge from this table. First, the share of FDI in services tends to increase in most countries, but especially in industrialized ones. Second, most FDI is in developed nations. The implication is that the majority of FDI originates in — and is destined for — industrialized country markets, so that FDI tends to be an intra-industrialized nation affair. Also, the share of FDI in services, especially in the developed countries, has been increasing. Both of these observations are in accordance with the first hypothesis noted at the beginning of this Section.

Table 12 indicates that inward FDI in services is often less than half of total FDI in many countries. Data pertaining to the question of whether FDI in services tends to be higher than FDI in goods (i.e., manufacturing) are unfortunately not readily available as far as stocks of inward investment are concerned. Statistics on the sectoral breakdown of inward FDI reported in Stern and Hoekman (1988b, pp. 50-51) indicate that FDI in services is larger than FDI in manufacturing for only a number of the industrialized countries in their sample (Australia, New Zealand, and the United States). In all of the developing countries discussed in their paper, FDI in manufacturing was larger than FDI in services.

Data reported in Table 15 contradict this picture somewhat, as they show that as far as *outward* flows of FDI of major home countries are concerned, FDI in services in developing countries tends to be more important than FDI in manufacturing. However, in part this reflects a recent shift towards FDI in services, as Table 15 also indicates that most of the major home countries reported the opposite in 1975. Of course, a general

implication of the rising share of services in total FDI that one observes in the statistics is that FDI in primary and/or secondary activities will decline. It is interesting to observe, however, that while some source countries increased their FDI in primary activities, virtually all of them experienced a decline in the relative importance of FDI in manufacturing.

It is difficult to provide a comprehensive explanation of all aspects of FDI. One element that is likely to play a role are trade policies and policies affecting FDI. Recent policies of deregulation and privatization in certain industrialized countries, as well as the increasing use that is made of local content restrictions on FDI and restrictions on merchandise trade, may well change the incentive structure towards FDI in "nontradable" services and away from manufacturing. Recent liberalization of FDI regulatory regimes in developing countries will also play a role.

What can be said regarding the relative importance of trade versus FDI for services and merchandise, respectively? The information provided in Table 12 allows one to calculate the ratios of FDI to trade for each of these two categories. Such an exercise leads to the following conclusion. First, as might be expected, because merchandise trade flows tend to be much larger for most countries than trade in services, ratios of FDI in nonservice activities to merchandise trade are usually lower than the comparable ratio for services. This is the case for six of the forty countries included in Table 12, the latter ratio being on average at least twice as large as the former. A corollary of this is that to the extent that ratios of stocks of FDI to trade are greater than one, this occurs for services, and not for merchandise.<sup>20</sup>

To be able to discuss the hypothesis that intrafirm trade in separated services will increase over time, data are required on the value and volume of transborder data flows (TDF). As noted in Section III, such data do not exist, because of both conceptual and

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<sup>20</sup>The ratio of FDI stock in services to trade in services was greater than one for ten of the countries included in Table 12 (calculated for the most recent year).

technical measurement problems. It would appear that intrafirm trade will have been increasing, as it may be a precondition for FDI to occur. Survey data indicate that TDF have become increasingly important for many firms in the last decade and are expanding rapidly. Over 85% of multinationals in a sample survey conducted by Business International (1983) reported that they depend on TDF for at least one key aspect of their international operation. Important tasks for which TDF were used include financial management, marketing and distribution, and inventory control.

General factors explaining the rise of electronic data interchange include the following: (1) the increasing cost of holding inventory (often a major component of short-term borrowing requirements of firms) and the associated management innovations such as just-in-time inventory techniques; (2) improvements in technology, both computer/communications hardware and the associated software; and (3) the rise of specialized providers such as General Electric's Information Services Intelligence Network, the Society for Worldwide Interbank Financial Telecommunication (SWIFT), computer reservation systems such as United Airlines' Sabre, and numerous commercial databases. Subscribers and users of these systems have been increasing rapidly.<sup>21</sup>

It is noteworthy that service industries have become increasingly capital intensive. In many of the developed economies, for example, national accounts data indicate that services account for approximately two-thirds of total capital spending. Capital investment is especially high in knowledge intensive industries such as information, finance, insurance, and business services. Much of the capital spending by service industries is for information technology (IT), especially computers. Spending on IT has grown dramatically. The United States is illustrative: total IT spending rose from \$24 billion in 1970 to \$360 billion in 1985. Currently, about 85% of the U.S. IT stock is owned by service sectors. Concomitant with the growth of the value of the IT stock, the

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<sup>21</sup>For example, in 1978, 21 million messages were sent through SWIFT, as opposed to approximately 160 million in 1985. Currently the system has 2900 users in 60 countries (Sauvant, 1987; Transnational Data Communications Report, April 1989).

relative importance of IT increased also, with the share of IT in capital spending in service sectors increasing between two- and ten-fold since 1970. The communications sector currently accounts for almost half of the total IT stock in services in the United States (Roach, 1988). This development underlies the increasing importance of (tele-) communications in both domestic and international services transactions.

In conclusion, the data indicate that the relative importance of services-related FDI has been increasing recently, mostly reflecting intra-industrialized country flows. Whether FDI in services will be greater than FDI in manufacturing will depend in part on endowments and the policies of host and home country governments. On average, it appears that FDI in services has been increasing relative to FDI in manufacturing. The available statistics also show that, because of the comparatively much larger size of merchandise trade flows, the ratio between merchandise exports and FDI in manufacturing is much higher than the ratio between exports of services and FDI in services.

#### **V. Data Problems and Analytical Implications**

While we have not dwelled on the reliability of the data discussed in the previous Sections, it has already been noted that BOP statistics and stock data on FDI have a number of weaknesses. Analytical work on the evolving pattern and determinants of international transactions in services will thus be limited so long as this situation continues, and extreme care must be taken before drawing definite conclusions from the available data. While we are of the opinion that many of the trends reported in the foregoing sections reflect "reality" as far as the direction of change is concerned for broad categories of services, comparisons across specific components of services must be made with the utmost caution. It thus seems fitting accordingly at this point to call attention to some of the most glaring data deficiencies that confront the analyst.

Because of their intangibility, data for trade in services are typically derived from central bank information on flows of foreign exchange and/or from periodic surveys or

censuses of service industries. Banking data pertain to payments, not transactions, and thus this source can only give an incomplete picture of trade in services. Registered flows of foreign exchange often will only cover part of a transaction, or, alternatively, they may apply to a number of transactions. Only payments that are made via resident banks may be registered. Furthermore, some payments will not go through a financial intermediary. Finally, central bank cash-flow information sometimes is reported on a net basis, making it impossible to determine exports and imports.

Surveys of enterprises focus explicitly on transactions, not payments, so that in principle the foregoing problems do not arise. However, surveys lead to other potential problems. Imports by households and the government will not be captured, nor will transactions made by firms that are not registered. Thus, it is crucial that an up-to-date registry of the universe of service providers be maintained. While it is technically feasible to achieve a detailed coverage of service transactions using these sources, doing this will be burdensome and costly. In practice, many countries rely primarily on central banks to provide information on trade in intangibles. This limits the possible disaggregation at which data may be reported.

In practice, services such as transport, insurance, and legal, financial, or professional services may in part be subsumed under the value of the goods to which they are related, or they may be misclassified, over- or underreported, or not reported at all. Most problems occur with respect to the reporting of OPS. Overreporting may occur for categories such as merchanting (transactions of goods between residents and nonresidents where the goods stay in one country) and advertising. Some countries measure merchanting so as to include the value of the goods traded; others measure only the service component, that is, the trade margin. Advertising is sometimes overreported as a result of including establishment and operating costs. Misclassification may occur as a result of reporting payments for services as payments for goods or factors, or vice versa. In part, these problems may be due to data collection and reporting procedures.

This is certainly the case with respect to the registration of transactions between affiliates. The existence of differential tax rates, exchange restrictions, or investment performance requirements, and variations in the degree to which firms are (forced) to reinvest earnings lead to transfer pricing strategies that bias reported trade figures. Separate statistics on transactions between affiliates do not exist on a global basis. This is regrettable, because it is likely that much of the trade that occurs between affiliates consists of intangibles. This is one reason to believe that total reported OPS is biased downward. Telecommunication and postal services are often the carrier (transportation technology) used to move services from the point of production to the point of consumption. Data on both the volume and value of services transported by these media are virtually nonexistent, which constitutes another source of downward bias for OPS. Also, to the extent that trade data are reported, such data often are a function of accounting conventions and do not reflect actual payment flows.

Provider- and demander-located services appear only partially in the BOP, primarily under the heading of travel. Data for some services of this type, such as medical and educational services, are often not reported, even though they may at times be substantial. For example, expenditures by nonresidents on U.S.-based health and education services in 1987 were an estimated \$518 and \$3,800 million, respectively.<sup>22</sup>

In the BOP, financial flows resulting from factor movements of some kind can be found under the following headings: (1) investment income; (2) labor income not included elsewhere (n.i.e.); (3) property income n.i.e.; (4) workers remittances; and (5) migrants transfers. The difference between remittances and labor income is that in the case of the former, the factor is considered to have changed residency. However, the one-year criterion for residency that is used in BOP statistics is rather arbitrary, and in practice it is often very difficult for statisticians to allocate financial flows to the two categories accurately. Indeed, the IMF tends to correct much of the data it receives. For example,

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<sup>22</sup>Department of Commerce, Bureau of Economic Analysis (1977, p. ).

about \$5 billion of what countries reported as labor income in 1983 was reclassified as remittances by the IMF (IMF, 1987). In general, the five accounts noted above are unlikely to measure accurately payments accruing to domestic factors. There may be some strategic reporting of income for reasons mentioned above involving transactions between affiliates. Also, what is reported as factor income may at times be a flow associated with trade in a service. This is possible in those cases where demander-located services are provided via the physical movement of factors of production, as in practice it may often be difficult to distinguish factor inputs from service outputs.

By definition, services that are traded informally or in the underground economy are not recorded, nor are many services produced by firms whose primary activity is in the goods sector. In the latter case, which is likely to be more important, part of the value of trade in goods will actually be trade in services. Furthermore, even at the very high level of aggregation with which trade data currently are reported, comparability across nations is fraught with difficulties. This is because nations differ substantially in terms of the composition of the aggregates reported to the IMF, as well as the methodologies employed to collect and estimate data. Comparability across countries and time is also limited because coverage and methods of data collection may change.

A general issue that needs to be kept in mind when comparing developments in trade in services over time at both the country and the global level is that methodologies and definitions employed by countries may vary between different years. For example, at some point the methodology for estimating travel statistics may be changed. Often, countries may have improved the sectoral coverage of their data collection efforts. An example pertains to current U.S. collection of trade statistics for many service activities that had never been reported before (such as exports of health services). The implication is that it will be very difficult to determine to what extent an increase in recorded trade in

services for a specific time period is "real," as to some extent it may simply be an artifact of improvements in data collection techniques.<sup>23</sup>

Another problem is that at virtually any level of aggregation, some nations may not report information on a certain item. For example, shipment exports are not reported by certain major shipowning countries (e.g., Greece) while passenger services are not reported by many countries. As already mentioned, this results in biased figures when data are added across countries to arrive at regional totals, or the total for developing countries, and so forth. Discrepancies also arise when comparing world imports for a category with world exports, which is another indicator of the problem. A further coverage problem is that for certain countries, publicly available statistics on trade in services do not appear to exist. A major example is the USSR. While Eastern European countries and the USSR report merchandise trade statistics, with the exception of Poland, Hungary, and Romania for certain nonmerchandise items, there is no readily available source for their nonmerchandise trade with each other and with the rest of the world. This biases downward world trade in services and further distorts cross-regional comparisons.

The foregoing considerations suggest that it is very likely that the relative importance of services in the total trade of a nation will be underestimated. One can only make educated guesses as to the extent of this bias. Research has indicated that in the early 1980s aggregate balance-of-payments data for the United States, for example, should have been anywhere from 40% to 100% higher than reported, depending on the definition of trade in services that is used (OTA, 1986). Another implication that was noted above is that over time growth rates will be biased due to improvements in data collection and reporting procedures. Similar considerations pertain to conclusions regarding changes in the specialization of particular countries, as care must be taken that

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<sup>23</sup>This may be the case, for example, in many of our tables where country data were reported for some but not all years.

such changes do not simply reflect the fact that as of a specific year a country starts or stops to report an item.

One implication of all this is that calculations regarding the distribution of world trade across regions will be biased, as will be the total. However, we do not believe that the numerous data problems invalidate the trends that emerge from an inspection of the existing trade statistics. One of these trends is that the relative importance of services in the trade of developing countries has been increasing. The fact that there is a downward bias in the services statistics strengthens this conclusion. The same can be said as concerns the problem of possibly upward biased growth rates of OPS, as the latter are primarily exported by industrialized countries. However, this could be a problem insofar as growth rates of OPS were compared to other categories of services or to merchandise. But, broadly speaking, while the paucity of data limits the number of interesting questions that can be addressed, one can have some faith that many of the conclusions that are suggested by the existing data reflect actual developments.

As far as the statistics on FDI are concerned, to our knowledge there is no reason to believe that there are major differences between the accuracy of data pertaining to FDI in services as compared to FDI in primary activities and industry. Some of the problems with the data were mentioned briefly in Section IV. They include valuation based on historical cost, the distorting effects of exchange-rate fluctuations, the fact that often reinvested earnings and divestment may not be taken into account, and that data may reflect committed, contracted, or approved projects, and not actual investment flows. These types of problems should not bias our findings in Section IV, as our main interest there was to compare services-related FDI with FDI in other sectors.

## **VI. Data Needs and Priorities**

Given the previous discussion, there is obviously great scope for improvement of data on international trade and investment in services. Many of the questions (or hypotheses) suggested in our earlier discussion cannot be answered (investigated)

satisfactorily because the coverage of international transactions in services is inadequate. Thus, the lack of any data on the value and volume of transborder data flows and interaffiliate transactions in services makes it very difficult to determine what has been happening insofar as modes of delivery are concerned. It also makes it difficult to have confidence in any statement regarding the absolute and relative importance of services in world trade. We can say fairly confidently that even though the value of trade in services is currently underreported, in broad terms the trends suggested by existing data reflect actual developments. It is clear nonetheless that the current situation is less than satisfactory.

There are three groups of potential users or demanders of better data: policymakers, business, and analysts.<sup>24</sup> However, to a large extent all three groups are likely to be interested in the same kind of improvements in the statistics. Arguably, what is needed is for data to be generated on a comparable country basis covering: (1) the domestic production of services; (2) trade in services on both a volume and a value basis by origin and destination; (3) outward and inward FDI by sector and country; and (4) the share of services production that is provided by firms and labor that have ties to other countries. The latter should include only production by entities that have decided on longer-term establishment, because services provided via a short-term presence constitute trade. It would also be desirable if: (1) production and trade data were reported on the basis of compatible nomenclatures; and (2) the data on services could be linked with comparable data on goods.

A general problem with current BOP data is that often the data are not comparable or consistent with domestic statistics and classifications. Often it is difficult if not impossible to relate trade data to the classifications used to report domestic data (such as the ISIC), so that one cannot relate trade to domestic production. This problem pertains

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<sup>24</sup>Policymakers include negotiators. For a review of data requirements from the point of view of negotiators in the ongoing Uruguay Round of multilateral trade negotiations, see Hoekman (1989a).

to all the BOP service categories. For example, transport services in the BOP (that is, shipment, passenger services and other transportation) cannot be compared to domestic transportation data because part of traded transportation services is embodied in the value of traded goods.<sup>25</sup> Currently most services not related to travel or transport are included in OPS. Usually, given the level of aggregation employed by the IMF, each item reported under the OPS heading will consist of multiple items in the ISIC (or CPC), so that it often is not clear what the domestic counterpart of an item in the IMF category "other goods, services, and income" is. A related problem is that travel expenditures/receipts in the BOP are not broken down by product or activity. Very few countries currently do this.<sup>26</sup> Without this type of information it will always be very difficult to determine how trade in services via provider/consumer mobility has been evolving relative to separated trade.

In addition, information is needed on the existing government-imposed barriers and regulations that may impede trade in services and/or the right of establishment of foreign firms and the employment of foreign (nonimmigrant) labor. Also, much more information is required on what types of services are tradable in principle, and what the relative costs are of alternative forms of trade for specific services. This type of information will allow the universe of services to be broken down into tradable and nontradable services (the latter requiring both long-term establishment abroad by the provider and the impossibility of movement of the consumer). Furthermore, it will help

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<sup>25</sup>Currently, the IMF recommends that imports and exports be valued on a free-on-board (f.o.b.) basis. The implication of this is that there will be imputed imports (exports) of transportation (and other distribution) services if the invoice value of an import (export) transaction is greater (less than) the f.o.b. value. The use of the f.o.b. valuation convention for merchandise requires that gross flows of freight (shipment) services between countries be estimated. The convention recommended by the IMF is: (1) to treat as credits all services performed by residents on its exports once these have passed the border; and (2) to treat as debits all services performed by nonresidents on its imports once these have been loaded on the carrier at the frontier of the country of export.

<sup>26</sup>An exception is the United States, for which it was estimated that in 1984 visitors spent 26% of their total expenditures on lodging, 22% on gifts and other purchases, 21% on food and beverages, 16% on local transport, 9% on entertainment, and 6% on "other" items (OTA, 1986). Note, incidentally, that these categories cannot be related unambiguously to ISIC categories.

the analyst focus on substitution possibilities between alternative forms of trade. Thus, for some services the choice will be between embodiment in a good and separated trade, for others the choice will be between short-term or long-term mobility, etc.

All the foregoing data would provide information on the magnitudes and composition of services in the international economy and permit a descriptive analysis of the stakes that particular countries and sectors have in the existing structure of trade and the foreign provision of services. It would become possible to analyze the effects of existing impediments on trade and (foreign) production of both goods and services, using either a partial or a general equilibrium computational framework. The object in either case would be to obtain estimates of the trade, employment, price, and welfare effects of existing restrictions and to determine how these effects would be altered if the restrictions were reduced or eliminated altogether. Since a foreign presence is essential in providing a wide variety of services and in view of the substantial foreign production of goods as well, such analysis would need to take international factor mobility into account. This raises many new complexities which to date have not been addressed systematically to any great extent in empirical work.<sup>27</sup>

Work is ongoing in both national and international fora to improve data collection and reporting efforts. However, budgets are limited, so that the question arises where the priorities should lie. In the remainder of this section we will focus on this issue. A first priority is to improve the consistency and the comparability of the statistics. As was remarked upon previously, one problem that emerges when drawing upon IMF BOP data is that some countries do not report items, and that one cannot be certain that what is reported, for example, for an item by country A is comparable to the figure reported for that item by country B. Of course, often an impression can be obtained from the technical

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<sup>27</sup>It should be emphasized that improved information is not just of interest to the analyst. Policymakers, such as negotiators involved in multilateral discussions, desire as much information as possible so as to be able to determine what the status quo consists of, and to be able to pursue tradeoffs and linkages. See Hoekman (1989a, 1989b).

notes, but this does not help much if the goal is to do cross-country and cross-regional comparisons. It would already be a major improvement if data reported to and by the IMF using its *existing* classification system were comparable across countries. In principle this could be achieved in a relatively short period of time, and should not require a major outlay of financial resources.

Another short-run improvement that should be feasible is to inform the user of service statistics how "good" trade and investment data are on both a sector or a country basis. Obviously, some service figures will be reasonably accurate insofar as statisticians will have a fair amount of confidence that the reported figure is within x% of the "real" number. However, for other items the confidence in the number reported in the BOP will be much lower. Currently, there is no way for a user to determine which statistics can be used with some confidence and which are more in the nature of guesstimates. In general, it is often not clear how numbers reported in the BOP were derived, what they are based on, what methodologies were used, etc. Furthermore, wide discrepancies often exist between different sources. For example, travel exports for some countries as reported by the World Tourism Organization differ significantly from those reported by the IMF. In such cases, which figure should be considered to be more reliable?

Taking a somewhat longer perspective, the goal should be to improve on what is currently available. This requires the construction of a generally acceptable nomenclature for services that allows for a more detailed reporting of specific service activities or products. Furthermore, it should either be consistent with classification systems used in the national accounts, or be easily concurred. Fortunately, in part thanks to the efforts of the Voorburg Group on Service Statistics, the basis for such a nomenclature is currently available in the form of the provisional CPC. The CPC has been used by the GATT Secretariat as the basis for a list of the "universe" of service products requested by negotiators. Work is ongoing in the EEC, the OECD, the UNSO, and the IMF to develop

such a classification of international services transactions that is consistent with the CPC and the revised ISIC.

Given a nomenclature, data will have to be collected, preferably on an origin and destination basis. This will require more extensive use of sample survey techniques by many countries to augment central bank sources. Such procedures are probably the only way to obtain a good impression of the magnitude of intrafirm transactions, many professional services, as well as computer and communication services. Ideally, methodologies should be developed that allow trade data to be collected on a volume basis as well as a value basis. Currently, the lack of such data makes it very difficult to determine what proportion of growth in a given year is due to inflation, what the role of changes in quality was, etc.

Developing countries will obviously face greater constraints of both a technical and a financial nature in attempting to improve their statistics. Three avenues can be taken to deal with this problem, none of which is mutually exclusive. First, they could be aided in their efforts by industrialized nations and multilateral institutions. Second, as more disaggregated data become available from industrialized nations on an origin and destination basis, this will already provide an indication of developing country trade. Third, data collection efforts could be focused primarily on aggregates. Often there may be more interest in having an accurate picture of total trade rather than having a detailed breakdown.

## VII. Conclusion

We have made an effort in this paper to identify and discuss important conceptual and measurement issues involving international transactions in services and to present and analyze available global data on services to the extent feasible. Several hypotheses or questions were posed with regard to the evolution of trade and foreign direct investment in goods and services. While we are fairly confident in interpreting some of the changes that

can be observed in the broad aggregates, more detailed analysis of services components rests unfortunately on a much shakier foundation.

There is obviously great scope for improving the accuracy and comparability of the existing data on services and for disaggregating the components especially of Other Private Services which have been growing rapidly in many instances. However, because of resource constraints and especially because of the inherent difficulties of measuring many intangible services transactions, data improvements are bound to be slow in coming. In view of the fact that services have been given a prominent place on the Uruguay Round negotiating agenda, the need for better data has been underscored. Since interest in services issues in both domestic and international transactions is bound to grow, it will be important to maintain the momentum for national governments and international organizations to gather and report better and more detailed data on services.

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Table 1

Distribution of GDP (Valued Added) by Sector and Country/Region, 1965 and 1986  
(U.S. \$ million and percentage share)

Country or Region	GDP		Agriculture		Industry		Manufacturing		Services	
	1965	1986	1965	1986	1965	1986	1965	1986	1965	1986
<b>Industrialized Countries</b>	1,373,360	10,451,880	5	3	40	35	29	NA	54	61
Australia	24,050	184,940	9	5	39	34	26	17	51	62
Austria	9,480	93,830	9	3	46	38	33	28	45	59
Canada	45,940	323,790	6	3	40	36	27	NA	53	61
<b>European Community</b>	455,220	3,354,430	7	4	44	38	NA	NA	49	59
Belgium	16,600	112,180	5	2	41	33	31	23	53	64
Denmark	8,940	68,820	8	6	36	28	23	20	55	66
France	99,660	724,200	8	4	39	34	28	NA	53	63
West-Germany	114,790	891,990	4	2	53	40	40	32	43	58
Greece	5,270	35,210	24	17	26	29	16	18	49	54
Ireland	2,340	21,910	20	14	30	45	NA	NA	50	41
Italy	72,150	599,920	11	5	41	39	23	22	48	56
Netherlands	19,890	175,330	7	4	44	34	32	18	49	62
Portugal	3,740	27,480	24	10	37	40	NA	NA	39	51
Spain	23,320	229,100	15	6	36	37	NA	27	49	56
United Kingdom	88,520	468,290	3	2	46	43	34	26	51	55
Finland	7,540	62,370	16	8	37	37	23	25	47	55
Japan	91,110	1,955,650	9	3	43	41	32	30	48	56
New Zealand	5,640	26,630	14	11	31	33	NA	NA	55	56
Norway	NA	69,780	8	4	33	41	21	14	59	56
Sweden	19,610	114,470	6	3	40	35	28	24	53	62
Switzerland	13,920	135,050	NA	NA	NA	NA	NA	NA	NA	NA
United States	701,670	4,185,490	3	2	38	31	28	20	59	67
<b>Developing Countries</b>	348,960	2,361,370	30	19	31	36	20	NA	38	46
<b>East/South Asia</b>	151,723	966,050	40	24	29	38	NA	NA	31	38
China	65,590	271,880	39	31	38	46	30	34	23	23
Hong Kong	2,150	32,250	2	0	40	29	24	21	58	71
India	46,260	203,790	47	32	22	29	15	19	31	39
South Korea	3,000	98,150	38	12	25	42	18	30	37	45
Singapore	970	17,350	3	1	24	38	15	27	73	62
Taiwan	2,803	105,700	22	8	35	51	NA	NA	43	41
<b>Latin America</b>	87,240	569,360	17	11	34	38	NA	NA	49	51
Argentina	16,500	69,820	17	13	42	44	33	31	42	44
Brazil	19,450	206,750	19	11	33	39	26	28	48	50
Chile	5,940	16,820	9	6	40	39	24	21	52	56
Mexico	20,160	127,140	14	9	31	39	21	26	54	52
Venezuela	8,290	49,980	7	9	41	37	NA	23	52	54
<b>Middle East</b>										
<b>North Africa</b>	18,980	275,130	18	10	40	44	NA	NA	43	46
Egypt	4,550	40,850	29	20	27	29	NA	NA	45	51

Table 1 (continued)

Country or Region	GDP		Agriculture		Industry		Manufacturing		Services	
	1965	1986	1965	1986	1965	1986	1965	1986	1965	1986
Saudi Arabia	2,300	78,480	8	4	60	50	9	9	31	46
<b>Other Europe</b>	18,820	114,260	27	15	35	39	NA	NA	37	46
Turkey	7,660	52,620	34	18	25	36	16	25	41	46
Yugoslavia	11,160	61,640	23	12	42	42	NA	NA	35	46
<b>Subsaharan Africa</b>	26,440	165,990	45	36	19	25	9	10	37	36
Senegal	810	3,740	25	22	18	27	14	17	56	51
Tanzania	790	4,020	46	59	14	10	8	6	40	31
Zaire	3,140	6,020	21	29	26	36	16	NA	53	35
Nigeria	4,190	49,110	53	41	19	29	7	8	29	30
South Africa	10,540	56,373	10	6	42	46	23	22	48	49

Source: World Bank, *World Development Report*, 1988.

Table 2

## Distribution of Employment by Sector and Country/Region, 1950-1980

Country or Region	Agriculture			Industry			Services		
	1950	1965	1980	1950	1965	1980	1950	1965	1980
<b>Industrialized Countries</b>	NA	14	7	NA	38	35	NA	48	58
Australia	16	10	7	39	38	32	45	52	61
Austria	34	19	9	36	45	41	30	36	50
Canada	20	10	5	36	33	29	44	57	65
<b>European Community</b>	29	17	9	38	42	38	34	41	53
Belgium	12	6	3	51	46	36	37	48	61
Denmark	26	14	7	34	37	32	41	49	61
France	31	18	9	35	39	35	34	43	56
West-Germany	23	11	6	43	48	44	34	41	50
Greece	55	47	31	19	24	29	26	29	40
Ireland	40	31	19	25	28	34	35	48	48
Italy	44	25	12	31	42	41	25	34	48
Netherlands	18	9	6	36	41	32	46	51	63
Portugal	50	38	26	24	30	37	26	32	38
Spain	50	34	17	25	35	37	25	32	46
United Kingdom	6	3	3	50	47	38	45	50	59
Finland	35	24	12	35	35	35	30	41	53
Japan	49	26	11	24	32	34	28	42	55
New Zealand	19	13	11	35	36	33	47	51	56
Norway	26	16	8	37	37	29	37	48	62
Sweden	21	11	6	41	43	33	38	46	62
Switzerland	17	9	6	46	49	39	37	41	55
United States	12	5	4	37	35	31	51	60	66
<b>Developing Countries</b>	NA	70	62	NA	12	16	NA	18	22
<b>East/South Asia</b>	83	75	69	6	13	16	11	13	15
China	88	81	74	5	8	14	7	11	12
Hong Kong	12	6	2	56	27	38	32	41	47
India	78	73	70	8	12	13	14	15	17
South Korea	77	55	36	6	15	27	17	30	37
Singapore	8	6	2	20	27	38	71	68	61
Taiwan	56	46	20	17	22	42	27	31	38
<b>Latin America</b>	53	44	32	20	22	26	27	34	42
Argentina	25	18	13	32	34	34	43	48	53
Brazil	60	49	31	17	20	27	23	31	42
Chile	34	27	17	30	29	25	36	44	58
Mexico	60	50	37	17	22	29	23	29	35
Venezuela	43	30	16	21	24	28	36	47	56
<b>Middle East</b>									
<b>North Africa</b>	55	63	47	16	14	20	29	23	33
Egypt	60	55	46	13	15	20	27	30	34
Saudi Arabia	76	68	48	9	11	14	15	21	37

Table 2 (continued)

Country or Region	Agriculture			Industry			Services		
	1950	1965	1980	1950	1965	1980	1950	1965	1980
<b>Other Europe</b>	82	68	49	9	16	22	9	15	28
Turkey	87	75	58	6	11	17	7	14	25
Yugoslavia	73	57	32	14	26	33	13	17	34
<b>Subsaharan Africa</b>	84	79	75	6	8	9	10	13	16
Senegal	85	83	81	5	6	6	10	11	13
Tanzania	87	92	86	4	3	5	9	6	10
Zaire	27	82	72	7	9	13	6	9	16
Nigeria	77	72	68	8	10	12	15	18	20
South Africa	34	32	17	29	30	35	37	39	49

Source: World Bank, *World Development Report*, 1988.

**Table 3****Average Share in GDP (Total Value Added) by Activity, 1980-84  
(percentage)**

<b>Activity</b>	<b>Developed Countries</b>	<b>Developing Countries</b>
<b>Goods-related</b>		
Agriculture, forestry, and fishing	6	16
Mining	3	8
Manufacturing	24	21
Electricity, gas, water	3	2
Construction	7	6
<b>Total Goods</b>	<b>43</b>	<b>53</b>
<b>Services</b>		
Wholesale and retail trade hotels and restaurants	15	17
Transport and communications	7	6
Finance, insurance, real estate, business services	14	10
Community, social, and personal services	7	7
<b>Subtotal market services</b>	<b>43</b>	<b>40</b>
Government	14	7
<b>Total services</b>	<b>57</b>	<b>47</b>

**Source:** Calculated from data reported in UN National Accounts Yearbook, 1988.

Table 4

Average Annual Growth Rates of Real GDP by Sector and Country/Region,  
1965-80 and 1980-86

Country or Region	GDP		Agriculture		Industry		Manufacturing		Services	
	65-80	80-86	65-80	80-86	65-80	80-86	65-80	80-86	65-80	80-86
<b>Industrialized Countries</b>	3.6	2.5	0.9	2.5	3.2	2.5	3.7	NA	3.6	2.6
Australia	4.0	3.1	2.6	6.1	2.9	2.0	1.2	NA	5.4	3.5
Austria	4.3	1.8	2.2	1.2	4.5	1.6	4.7	2.1	4.4	1.9
Canada	4.4	2.9	0.7	2.8	3.4	2.9	3.8	3.6	5.5	2.9
<b>European Community</b>	3.6	1.5	1.4	2.7	3.4	0.8	NA	NA	3.9	2.0
Belgium	3.9	0.9	0.5	3.1	4.4	0.5	4.8	1.6	3.8	1.1
Denmark	2.7	2.8	0.9	4.6	1.9	2.6	3.2	2.9	3.1	2.4
France	4.4	1.3	0.8	2.8	4.6	0.6	5.3	NA	4.6	1.6
West-Germany	3.3	1.5	1.4	3.1	2.9	0.7	3.3	0.8	3.7	2.1
Greece	5.6	1.5	2.3	0.3	7.1	0.4	8.4	0.2	6.2	2.5
Ireland	5.1	0.7	NA	-6.2	NA	-1.1	NA	NA	NA	3.8
Italy	3.9	1.3	0.8	0.5	4.2	0.2	5.1	-0.2	4.1	2.1
Netherlands	3.7	1.0	4.3	4.5	3.6	0.5	4.3	NA	4.0	1.9
Portugal	5.5	1.4	NA	0.1	NA	1.4	NA	NA	NA	1.7
Spain	5.2	1.8	3.0	2.8	5.8	0.8	6.7	0.3	4.6	2.3
United Kingdom	2.2	2.3	1.7	4.1	1.2	2.0	1.1	1.2	2.9	2.6
Finland	4.1	2.7	0.1	0.2	4.4	2.8	5.0	3.0	4.8	2.4
Japan	6.3	3.7	0.8	1.0	8.5	5.0	9.4	7.8	5.2	2.9
New Zealand	3.1	2.6	NA	2.1	NA	3.8	NA	NA	NA	2.0
Norway	4.4	3.5	-0.4	3.0	5.6	3.8	2.6	0.3	4.2	3.4
Sweden	2.8	2.0	-0.2	2.5	2.2	2.5	2.3	2.3	3.3	0.5
Switzerland	2.0	1.5	NA	NA	NA	NA	NA	NA	NA	NA
United States	2.8	3.1	1.1	3.1	1.9	3.2	2.7	4.0	3.4	3.0
<b>Developing Countries</b>	6.1	3.8	3.1	3.6	7.2	4.6	8.0	5.9	7.1	3.4
<b>East/South Asia</b>	5.6	6.8	3.1	4.5	7.7	8.2	NA	NA	6.0	6.9
China	6.4	10.5	3.0	7.9	10.0	12.5	9.5	12.6	7.0	9.4
Hong Kong	8.5	6.0	NA	NA	NA	NA	NA	NA	NA	NA
India	3.7	4.9	2.8	1.9	4.0	7.1	4.3	8.2	4.6	6.0
South Korea	9.5	8.2	3.0	5.6	16.5	10.2	18.7	9.8	9.3	7.2
Singapore	10.4	5.3	3.1	-3.5	12.2	4.4	13.3	2.2	9.7	6.1
Taiwan	13.1	6.8	NA	NA	NA	NA	NA	NA	NA	NA
<b>Latin America</b>	5.7	1.0	2.9	2.0	6.1	0.4	NA	NA	6.3	1.4
Argentina	3.4	-0.8	1.4	2.3	3.3	-1.7	2.7	-0.4	3.9	-0.8
Brazil	9.0	2.7	3.8	2.0	9.9	1.6	9.6	1.2	10.0	3.8
Chile	1.9	0.0	1.6	3.1	0.8	0.7	0.6	-0.2	2.7	-0.9
Mexico	6.5	0.4	3.2	2.1	7.6	-0.1	7.4	0.0	6.6	0.4
Venezuela	5.2	-0.9	3.9	2.3	3.4	-0.8	5.8	2.0	6.5	-1.2
<b>Middle East</b>										
<b>North Africa</b>	6.7	1.3	4.5	5.2	7.6	-0.9	NA	NA	9.0	4.0
Egypt	6.7	4.7	2.8	1.9	7.0	6.3	NA	NA	9.5	4.4

Table 4 (continued)

Country or Region	GDP		Agriculture		Industry		Manufacturing		Services	
	65-80	80-86	65-80	80-86	65-80	80-86	65-80	80-86	65-80	80-86
Saudi Arabia	10.9	-3.4	4.1	10.3	11.6	-10.4	8.1	6.1	10.5	4.4
<b>Other Europe</b>	6.1	2.9	3.1	2.2	7.6	3.5	NA	NA	6.4	2.9
Turkey	6.3	4.9	3.2	3.1	7.2	6.4	7.5	8.0	7.6	4.7
Yugoslavia	6.0	1.2	3.1	1.4	7.8	1.1	NA	NA	5.5	1.4
<b>Subsaharan Africa</b>	5.6	0.0	1.6	1.2	9.4	-1.6	8.5	0.3	7.5	0.1
Senegal	2.1	3.2	1.4	2.3	4.8	4.0	3.4	4.1	1.3	3.2
Tanzania	3.7	0.9	1.6	0.8	4.2	-4.5	5.6	-4.6	6.9	2.9
Zaire	1.4	1.0	NA	1.7	NA	2.7	NA	-0.7	NA	-0.7
Nigeria	8.0	-3.2	1.7	1.4	13.4	-5.1	14.6	1.0	8.8	-4.0
South Africa	4.0	0.8	NA	-1.3	NA	-0.5	NA	-1.7	NA	2.4

Source: ILO (1986).

**Table 5**  
**World Exports of Merchandise and Invisibles, 1970-87**

Category	Value US \$ bn		Share in Total		Average Annual Change		
	1970	1987	1970	1987	1970-79	1980-87	1970-87
Merchandise exports	264	2080	71	66	20	2	13
Invisibles exports	110	1078	29	34	21	5	14
of which:							
Private services	64	504	17	16	19	5	13
Investment income	26	415	7	13	25	6	18
Other official goods, services, and income	8	45	2	1	17	2	10
Unrequited transfers	12	114	3	4	22	4	14
Total	374	3135	100	100	20	3	13

**Notes:** Figures have been rounded. See text for definitions.

**Source:** IMF, *Balance of Payments Yearbook* and national sources.

Table 6

Shares in World Exports of Merchandise and Services  
by Selected Country and Region, 1970 and 1987

Country or Region	Merch.		Ship.		Travel		Pass.		OT		OPS		Total PS		Prop. Inc.		Lab. Inc.	
	70	87	70	87	70	87	70	87	70	87	70	87	70	87	70	87	70	87
<b>Industrialized Countries</b>	82.8	82.2	92.8	83.7	82.7	80.8	91.3	81.2	83.3	84.0	86.9	86.1	87.7	84.0	99.6	99.4	83.5	76.5
Australia	1.8	1.3	0.4	0.6	0.6	1.2	4.5	3.2	4.3	2.0	1.1	0.4	1.3	1.1	0.3	0.7	1.1	1.5
Austria	1.1	1.3	0.6	1.6	0.7	0.6	na	na	0.1	0.2	1.6	2.9	2.1	3.0	0.2	0.3	na	na
Canada	6.4	4.7	2.0	0.8	6.4	3.3	na	na	1.9	0.6	4.4	2.9	3.5	2.1	na	na	na	na
EEC	42.6	44.0	54.6	48.6	46.6	48.7	57.2	42.7	39.3	45.6	56.3	58.1	50.9	51.3	26.5	36.8	78.7	66.3
Belgium	3.4	3.7	2.2	4.5	1.9	2.1	1.5	2.1	1.8	2.2	7.7	6.2	3.5	3.9	3.6	2.1	8.2	4.7
Denmark	1.3	1.2	2.4	3.0	1.7	1.5	0.2	0.3	2.8	1.6	1.6	1.6	1.7	1.6	na	na	na	na
France	6.8	6.7	8.9	10.6	7.3	8.3	na	na	na	14.8	11.1	14.1	8.6	10.9	2.1	5.1	7.2	13.7
Germany	13.0	13.4	9.9	8.0	7.3	5.4	13.5	10.4	5.7	5.9	6.7	10.4	7.9	8.5	3.9	6.3	20.6	25.6
Greece	0.2	0.3	0.2	0.2	1.1	1.6	na	0.1	1.6	0.2	0.6	1.1	0.7	0.9	na	na	0.4	0.5
Ireland	0.4	0.7	na	na	1.0	0.6	0.7	0.8	0.5	0.9	0.1	0.2	0.5	0.4	na	na	na	na
Italy	5.0	5.6	5.5	8.3	9.0	8.5	11.1	4.6	3.9	1.4	6.5	5.5	7.4	6.7	3.6	10.5	35.6	15.7
Netherlands	4.1	4.2	5.8	5.8	2.4	1.9	6.7	4.5	10.0	9.1	4.6	5.2	4.9	4.6	3.0	4.1	6.8	3.9
Portugal	0.0	0.4	na	0.2	na	1.5	na	0.4	na	0.7	na	0.3	na	0.7	na	na	na	0.8
Spain	0.9	1.6	0.7	1.8	9.2	10.3	4.0	5.5	1.9	3.0	1.7	1.3	3.6	4.4	na	0.2	na	1.5
U.K.	7.4	6.3	18.9	6.1	5.7	7.2	18.5	14.0	11.0	5.9	15.7	12.2	12.1	8.8	10.3	8.5	na	na
Finland	0.9	0.9	1.1	0.8	0.7	0.6	0.3	1.2	0.6	0.8	0.4	0.8	0.7	0.7	na	0.2	2.0	0.5
Japan	7.2	10.8	7.3	12.4	1.3	1.5	4.5	3.1	6.9	7.7	4.3	6.7	4.1	5.7	1.5	7.4	na	1.6
New Zealand	0.5	0.3	0.8	0.3	0.2	0.7	na	1.1	na	0.6	0.2	0.2	0.3	0.4	na	na	na	na
Norway	0.9	1.0	12.5	6.5	0.9	0.9	na	2.0	1.1	1.0	1.2	1.0	3.4	1.7	na	0.4	na	0.1
Sweden	2.6	2.1	3.8	3.0	0.8	1.4	3.8	2.5	2.7	1.7	2.2	1.7	2.1	1.8	0.5	1.7	na	0.3
Switzerland	2.0	2.7	0.7	0.7	5.0	3.8	na	4.7	na	na	5.1	3.9	2.8	2.9	na	na	na	4.3
USA	16.1	12.0	8.1	7.4	12.8	10.3	17.3	19	25.8	22.3	8.7	5.9	15.1	10.9	70.6	51.9	na	1.8
<b>Developing Countries</b>	16.3	15.1	6.2	12.2	16.9	17.2	8.7	17.9	16.7	14.8	11.3	12.1	11.8	14.1	0.4	0.6	16.5	23.2
<b>Asia</b>	3.9	6.5	1.5	6.2	2.3	6.2	0.5	5.2	5.4	5.2	2.6	5.4	2.6	5.7	na	na	2.0	14.2
China	na	1.7	na	1.8	na	1.2	na	0.5	na	0.5	na	0.5	na	0.9	na	na	na	0.3
Hong Kong	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
India	0.7	na	0.6	na	0.2	na	na	na	0.9	na	0.6	na	0.4	na	na	na	na	na
South Korea	0.3	2.2	0.3	2.8	0.1	1.5	0.2	2.3	0.2	0.4	0.4	1.8	0.3	1.7	na	na	1.9	2.9
Taiwan	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
<b>Latin America</b>	5.7	4.4	2.1	3.2	10.5	6.5	4.9	5.5	5.5	4.5	4.5	3.1	5.7	4.3	0.4	0.3	11.1	3.7
Argentina	0.7	0.3	0.3	0.5	0.4	0.4	0.7	0.8	1.0	0.6	0.2	0.1	0.4	0.4	0.3	na	0.4	0.2
Brazil	1.0	1.3	0.7	1.2	0.2	na	0.5	0.5	0.7	0.8	0.6	0.3	0.5	0.4	na	na	0.5	na
Chile	0.4	0.3	0.3	0.3	0.3	0.1	na	0.3	0.2	0.2	na	0.3	0.2	0.2	na	na	na	na
Mexico	0.5	1.0	na	na	6.4	2.4	na	na	0.1	0.4	1.1	1.3	2.3	1.4	na	na	7.2	2.4
Venezuela	1.0	0.5	0.2	0.2	0.3	0.2	na	0.3	0.9	0.2	0.2	na	0.3	0.1	na	na	na	na
<b>Middle East N. Africa</b>	3.9	1.6	0.7	1.2	2.6	1.6	2.5	3.5	2.1	3.7	1.9	2.4	1.5	2.4	na	na	na	na
Egypt	0.3	0.1	na	na	na	0.4	na	1.1	0.1	3.0	0.8	0.5	0.2	0.7	na	na	na	na

Table 6 (continued)

Country or Region	Merch.		Ship.		Travel		Pass.		OT		OPS		Total PS		Prop. Inc.		Lab. Inc.	
	70	87	70	87	70	87	70	87	70	87	70	87	70	87	70	87	70	87
Saudi Arabia	0.8	1.1	na	na	0.6	na	na	na	1.5	0.1	na	1.6	0.3	0.6	na	na	na	na
<b>Other Europe</b>	0.8	1.0	na	1.7	1.8	2.2	2.5	na	0.5	1.4	1.2	1.5	na	na	na	na	na	na
Turkey	0.2	0.5	na	1.0	0.3	1.0	0.4	na	0.2	0.2	0.4	0.8	na	na	na	na	na	na
Yugoslavia	0.6	0.5	1.7	0.7	1.5	1.2	2.1	1.2	0.3	1.2	0.8	0.7	na	na	na	na	na	na
<b>Subsaharan Africa</b>	2.5	1.2	0.8	0.7	1.0	0.8	0.9	1.7	na	na	1.3	1.1	1.2	0.7	na	na	na	na

**Notes:** na - not available. Merch.: merchandise; Ship.: shipment (i.e., freight and insurance on freight); Pass.: passenger services (primarily air fares); OT: other transport (mainly charters and port services); OPS: other private services; total PS: total private services (equals sum of foregoing categories); Prop. Inc.: property income; Lab. Inc.: labor income.

**Source:** IMF, *Balance of Payments Yearbook*.

Table 7

**Shares in World Imports of Merchandise  
and Services by Selected Country and Region  
1970 and 1987**

Country/ Region	Merch.		Ship.		Travel		Pass.		OT		OPS		Total PS		Prop. Inc.		Lab. Inc.	
	70	87	70	87	70	87	70	87	70	87	70	87	70	87	70	87	70	87
<b>Industrialized Countries</b>	82.7	83.8	74.6	73.3	84.1	87.9	83.2	87.6	89.8	83.2	78.6	81.2	82.4	83.0	96.3	95.2	95.1	88.1
Australia	1.6	1.3	2.8	2.1	1.2	1.7	na	3.4	3.8	1.1	1.1	0.8	2.1	1.6	5.3	2.9	1.3	1.3
Austria	1.4	1.5	0.6	1.1	1.7	3.9	na	na	0.1	0.2	1.8	1.7	1.1	1.9	1.5	1.2	na	na
Canada	5.4	4.3	2.6	1.2	7.7	4.7	na	na	2.0	0.6	8.0	5.3	4.7	3.2	na	na	na	na
EEC	43.6	42.5	43.4	42.4	49.6	58.7	34.3	34.4	46.0	49.4	46.8	47.0	47.7	45.5	61.9	57.9	75.0	58.6
Belgium	3.4	3.7	1.5	2.1	2.8	2.7	1.5	1.8	1.2	2.3	5.2	5.4	2.8	3.4	7.0	4.5	4.2	3.5
Denmark	1.6	1.2	1.5	1.2	1.5	2.0	na	na	1.8	2.9	0.7	1.1	1.2	1.4	na	na	na	na
France	6.9	7.1	9.5	9.4	6.3	5.9	na	na	na	12.9	7.1	9.2	7.9	8.5	8.0	8.7	18.5	18.6
Germany	11.2	10.0	10.1	7.6	15.8	16.5	13.5	12.0	7.1	5.9	13.9	13.4	12.7	12.9	13.6	13.5	39.4	28.9
Greece	0.6	0.5	0.4	0.6	0.3	0.4	0.4	0.4	0.3	0.2	0.4	0.2	0.4	0.3	na	na	1.0	0.4
Ireland	0.6	0.6	0.4	0.6	0.5	0.6	na	na	0.4	0.7	0.1	0.5	0.3	0.5	na	na	na	na
Italy	5.3	5.6	7.3	7.3	4.1	3.2	2.7	2.8	3.4	2.8	6.7	6.1	5.6	5.2	14.1	15.7	4.7	4.0
Netherlands	4.6	3.9	5.3	5.9	3.4	4.5	5.3	3.3	3.2	2.7	4.7	4.8	4.3	4.6	4.6	6.1	7.3	3.0
Portugal	na	0.6	na	1.0	na	0.3	na	na	na	0.3	na	0.3	na	0.4	na	0.5	na	0.1
Spain	1.7	2.2	1.7	1.8	0.8	1.4	1.1	1.4	0.9	2.1	1.4	1.8	1.2	1.6	3.3	2.1	na	na
U.K.	7.6	7.1	5.5	5.0	5.2	8.3	9.8	12.7	27.8	10.5	6.6	4.2	9.3	6.7	11.3	6.8	na	na
Finland	1.0	0.9	0.7	0.9	0.5	1.1	0.3	1.0	0.8	0.6	0.4	1.0	0.6	0.9	0.6	1.1	1.6	na
Japan	5.9	6.1	9.1	8.5	1.8	7.5	5.7	12.4	11.6	13.9	8.2	12.4	7.1	10.5	16.4	21.1	na	3.1
New Zealand	0.5	0.3	1.2	0.5	0.4	0.5	na	1.0	na	0.5	0.6	0.4	0.5	0.5	na	na	na	na
Norway	1.4	1.1	0.4	0.5	1.4	2.2	na	na	6.7	6.0	0.8	1.6	1.7	1.9	na	1.1	na	0.3
Sweden	2.5	1.9	1.8	0.7	2.7	2.6	1.8	2.0	5.1	2.4	2.5	2.4	2.6	2.1	1.8	2.5	1.0	0.9
Switzerland	2.5	2.9	0.8	1.4	2.4	3.1	na	2.9	na	na	1.6	1.1	1.5	2.3	na	16.2	19.7	
USA	15.6	19.7	9.7	12.4	22.5	14.4	40.8	30.4	11.8	12.3	5.8	4.6	13.5	11.2	8.8	7.4	na	4.1
<b>Developing Countries</b>	16.3	13.4	24.3	24.3	15.7	11.5	16.8	12.1	10.2	14.5	20.1	17.5	17.1	15.7	3.7	4.8	4.9	11.9
<b>Asia</b>	5.8	6.9	7.9	10.3	1.7	3.4	1.2	2.6	2.4	5.2	5.0	5.9	4.6	5.4	na	na	na	na
China	na	1.7	na	1.5	na	0.3	na	na	na	0.8	na	0.1	na	0.5	na	na	na	na
Hong Kong																		
India	0.8	na	1.5	na	0.1	na	na	na	0.8	na	0.9	na	0.7	na	na	na	na	na
South Korea	0.7	1.9	0.8	0.9	na	0.4	0.2	0.5	0.1	3.2	0.7	1.3	0.4	1.1	na	0.3	na	0.1
Singapore	0.9	1.4	0.9	2.2	na	0.6	na	na	0.3	na	0.3	1.4	0.3	1.0	na	na	na	na
Taiwan																		
<b>Latin America</b>	5.7	3.4	8.0	4.9	9.4	4.6	10.5	5.0	5.0	6.8	7.5	3.6	7.4	4.5	3.4	3.5	2.2	1.5
Argentina	0.6	0.4	0.7	0.2	0.7	0.6	2.5	1.0	0.6	0.8	0.4	0.2	0.8	0.5	2.8	1.5	na	0.1
Brazil	1.0	0.7	0.9	0.7	0.9	0.2	1.0	0.4	1.7	2.5	1.2	0.8	1.0	0.7	na	0.2	0.1	na
Chile	0.3	0.2	0.4	0.2	0.5	0.2	0.7	0.5	0.5	0.5	0.3	0.3	0.4	0.3	na	0.2	na	na
Mexico	0.9	0.6	0.7	0.6	4.3	1.6	1.8	0.8	na	1.0	1.7	0.7	1.7	1.0	na	1.0	na	na
Venezuela	0.7	0.4	1.1	0.9	0.8	0.3	0.6	0.2	0.5	0.4	0.9	0.3	0.8	0.4	na	na	na	na

(Table 7) (continued)

Country/ Region	Merch.		Ship.		Travel		Pass.		OT		OPS		Total PS		Prop. Inc.		Lab. Inc.	
	70	87	70	87	70	87	70	87	70	87	70	87	70	87	70	87	70	87
<b>Mid. East</b>																		
<b>N. Africa</b>	2.5	2.2	4.8	6.2	2.5	3.5	1.1	2.0	na	na	na	6.3	2.0	3.8	na	na	na	na
Egypt	0.4	0.4	0.7	0.9	na	0.1	na	0.2	0.1	0.3	na	0.9	0.3	0.5	na	na	na	na
Saudi Arabia	0.3	.9	0.5	2.6	0.6	na	na	na	0.2	na	na	4.9	0.3	1.9	na	na	na	na
<b>Other Europe</b>																		
Turkey	1.3	1.1	1.7	1.6	0.9	na	na	na	1.5	2.0	0.8	2.8	1.1	1.4	na	na	na	na
Yugoslavia	0.3	0.6	0.5	0.4	0.2	0.3	0.2	na	0.1	0.4	0.2	0.3	0.3	0.3	na	na	na	na
	1.0	0.5	1.2	1.2	0.7	na	na	na	1.4	1.6	0.6	2.5	0.8	1.1	0.2	na	na	na
<b>Subsaharan Africa</b>																		
	2.2	0.9	4.4	4.5	2.0	1.4	3.4	1.7	1.3	0.7	3.3	1.3	2.8	1.3	na	na	0.1	0.4

Notes: na - not available. For definitions, see Table 6.

Source: IMF, *Balance of Payments Yearbook*.

**Table 8**

**Ratio of Exports of Private Services  
to the Sum of Merchandise and Private Services Exports,  
Selected Countries, 1970 and 1987**

Country	1970	1987
<b>Developed economies with a constant or declining share of private services</b>		
Australia	16	16
Austria	32	36
Belgium-Luxembourg	20	20
France	23	28
Canada	12	10
Greece	42	44
Germany, Fed. Rep.	13	13
New Zealand	12	23
Denmark	25	23
Finland	16	16
Ireland	12	11
Italy	23	22
Japan	12	11
Netherlands	22	21
South Africa	24	11
Spain	48	39
Sweden	17	17
Switzerland	25	21
United Kingdom	28	25
United States	18	18
<b>Developed economies with an increasing share of private services</b>		
Austria	32	36
France	23	28
Greece	42	44
New Zealand	12	23
<b>Developing economies with a constant or declining share of private services</b>		
Algeria	8	6
Brazil <sup>a</sup>	10	7
Cameroon	18	17
Colombia	21	17

Table 8 (continued)

Country	1970	1987
Mexico <sup>c</sup>	53	24
Nigeria	5	4
Taiwan	12	7
Venezuela	6	6
<b>Developing economies with an increasing share of private services</b>		
Chile	10	17
Cote d'Ivoire	8	10
Egypt <sup>d</sup>	13	53
India <sup>a</sup>	13	23
Indonesia	1	5
Kenya	33	40
Malaysia	4	12
Morocco	26	32
Peru	15	16
Philippines	14	32
Saudi Arabia	9	11
Senegal	25	27
Singapore	20	21
Sudan	9	35
Thailand	20	24
Tanzania <sup>a</sup>	20	23
Zaire	2	9
Zambia	1	5
<b>World</b>	<b>20</b>	<b>20</b>

**Notes:**

<sup>a</sup> 1986 rather than 1987.

<sup>b</sup> 1984 rather than 1987.

<sup>c</sup> When exports of maquiladoras are included the share of private services in merchandise exports declined from 111 to 24 per cent between 1970 and 1987.

<sup>d</sup> Exports of travel were not included in Egypt's reported exports of commercial services in 1970 resulting in a significant understatement of their value. In 1977, the first year for which travel was reported, exports of private services amounted to 77 per cent of merchandise exports.

**Source:** GATT (1989).

Table 9

Average Annual Growth Rates of Total Exports and Imports  
of Merchandise and Services by Region and Country  
1967-87 (current prices)

Country/ Region	1967-72				1972-77				1977-82				1982-87				1967-87			
	Merch.		Services		Merch.		Services		Merch.		Services		Merch.		Services		Merch.		Services	
	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.
<b>Industrialized Countries</b>	14.7	14.7	13.9	14.6	19.6	21.1	17.8	17.5	10.1	9.9	10.6	10.4	8.3	8.2	7.7	8.7	13.1	13.4	11.6	12.5
Australia	13.1	5.1	12.8	11.6	16.0	23.2	14.1	20.0	9.5	13.9	13.6	10.5	5.1	2.7	5.2	2.0	10.7	11.0	11.4	10.9
Austria	16.4	16.9	21.0	17.8	20.4	22.2	21.3	27.6	9.6	6.8	11.5	8.0	11.5	10.9	9.1	12.8	14.4	14.1	15.6	16.3
Canada	13.9	12.9	5.5	13.7	15.5	16.1	12.3	15.5	10.3	6.7	10.2	6.9	6.8	9.9	7.1	8.4	11.5	11.4	8.7	11.0
EEC	15.6	14.9	14.6	16.1	19.7	20.6	18.9	17.5	9.3	9.6	9.4	10.2	9.6	8.0	8.2	8.3	13.4	13.2	12.3	12.6
Belgium	18.4	16.4	14.5	16.3	19.5	23.3	27.7	24.8	8.1	7.7	6.2	8.1	10.5	9.0	8.8	8.9	14.0	13.9	14.0	14.3
Denmark	11.7	10.1	12.5	9.4	18.1	21.6	18.5	20.0	9.4	5.3	5.5	9.1	10.4	8.6	7.9	10.0	12.3	11.2	10.8	12.3
France	18.3	17.8	19.5	22.5	18.8	21.0	24.5	20.0	8.4	10.7	9.6	10.2	8.8	6.8	7.1	7.0	13.5	13.9	13.5	13.3
Germany	15.5	17.0	14.3	18.0	20.4	20.8	20.9	18.7	7.9	8.5	10.9	9.0	10.9	8.1	6.1	7.9	11.4	13.5	12.9	13.3
Greece	13.0	16.0	20.7	16.8	24.8	21.3	22.4	17.0	10.4	9.4	10.2	14.1	6.2	4.5	4.9	1.5	13.4	12.6	14.3	12.2
Ireland	13.3	12.9	3.1	8.5	21.8	20.9	16.2	22.4	13.4	12.5	10.6	13.2	14.4	7.3	10.9	12.9	15.7	13.3	10.1	14.1
Italy	16.4	16.3	9.8	10.6	19.4	19.5	15.2	13.0	10.2	12.7	10.2	10.7	9.8	7.3	10.6	12.7	13.9	13.9	10.8	11.2
Netherlands	18.2	15.6	21.9	23.9	20.7	21.5	19.6	20.5	8.7	6.9	8.0	9.7	7.5	7.8	6.8	8.4	13.6	12.8	12.6	15.0
Portugal	na	na	na	na	14.1	17.3	4.0	10.2	10.3	14.7	14.3	14.5	17.3	6.9	14.9	6.8	na	na	na	na
Spain	22.5	14.3	18.6	20.8	21.9	21.8	11.8	16.9	15.1	12.8	13.4	16.6	9.4	8.7	13.3	7.3	17.1	14.3	14.2	15.3
U.K.	10.2	9.6	12.2	10.8	18.7	18.5	14.1	11.1	11.8	9.4	8.7	11.7	6.1	9.6	8.3	7.7	11.6	11.7	10.8	10.3
Finland	14.0	13.4	18.0	13.4	21.7	19.1	20.5	21.3	6.0	12.0	13.6	12.9	14.9	6.9	4.9	12.6	14.1	12.8	14.1	15.0
Japan	22.3	16.0	23.1	17.2	23.1	26.6	22.6	21.5	11.7	14.0	13.1	14.1	10.3	1.4	5.9	8.5	16.7	14.1	15.9	15.2
New Zealand	14.6	10.7	28.5	15.6	10.6	16.4	20.9	16.6	10.4	12.0	9.9	12.3	6.4	3.9	12.4	5.1	10.4	10.7	17.7	10.7
Norway	13.5	9.8	10.1	9.0	22.6	25.0	12.9	26.4	14.1	3.0	9.3	8.0	3.7	7.5	1.2	5.8	13.3	11.0	8.3	12.0
Sweden	14.0	11.5	14.7	15.1	16.8	20.1	14.9	17.1	7.0	7.5	11.1	6.5	10.6	8.0	5.7	8.3	12.1	11.7	11.6	11.6
Switzerland	14.3	15.7	13.1	16.0	20.2	16.2	11.3	16.8	8.2	9.9	10.4	13.5	16.1	16.5	14.1	12.5	14.6	14.5	11.9	15.3
U.S.	10.0	15.7	9.8	10.3	19.6	22.2	14.5	12.3	11.8	10.3	14.8	9.8	3.4	10.6	6.2	11.3	11.0	14.6	11.2	10.7
<b>Developing Countries</b>	11.5	10.8	15.3	12.9	32.4	29.7	23.1	27.7	9.7	11.9	15.0	14.4	-3.8	-5.0	0.5	-5.4	12.4	11.3	13.3	11.8
<b>Asia</b>	17.3	10.9	20.8	14.4	24.2	26.2	24.3	22.8	12.4	16.1	17.5	15.6	8.4	2.2	3.4	4.7	15.4	13.2	16.3	14.2
China	na	na	na	na	na	na	na	na	na	na	na	na	10.5	16.6	9.8	4.6	na	na	na	na
Hong Kong	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
India	7.5	-1.8	4.8	0.9	21.5	18.3	33.0	19.2	8.1	21.5	18.1	22.6	na	na	na	na	na	na	na	na
South Korea	38.0	19.9	36.7	21.0	43.0	36.1	57.9	44.2	15.8	17.5	19.7	15.4	17.2	10.4	4.8	5.6	27.9	20.6	28.3	20.8
Singapore	14.0	18.2	40.7	31.3	30.6	25.5	24.4	21.4	20.2	21.9	25.8	23.1	7.0	2.6	-4.9	6.4	17.6	16.7	20.3	20.2
Taiwan	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
<b>Latin America</b>	9.1	11.0	13.4	13.5	23.6	23.5	17.3	18.9	13.0	11.1	11.0	15.2	-1.2	-4.8	2.5	-5.7	11.1	9.7	10.8	na
Argentina	5.8	11.7	7.4	3.7	23.8	17.6	24.2	12.3	6.1	5.0	14.5	18.5	-3.5	2.1	2.6	4.5	7.6	8.9	11.9	na
Brazil	19.0	23.8	23.0	24.1	24.8	23.5	21.9	21.9	11.1	10.0	10.9	12.8	5.3	-5.0	1.7	-5.6	14.8	12.4	14.0	na
Chile	-0.7	9.2	3.8	9.7	20.8	16.3	27.6	17.0	11.1	11.1	18.5	17.1	7.1	1.9	3.3	0.9	9.3	9.5	12.8	na
Mexico	8.3	8.2	13.9	17.9	21.8	16.6	11.0	7.5	35.8	20.6	7.1	21.2	-0.6	-3.2	7.3	-3.2	15.5	10.2	9.8	na
Venezuela	10.2	7.1	11.5	24.8	35.6	24.4	35.2	11.3	5.9	15.0	15.2	na	-8.3	-8.3	-10.4	-19.6	12.2	9.8	8.2	na

Table 9 (continued)

Country/ Region	1967-72				1972-77				1977-82				1982-87				1967-87			
	Merch.		Services		Merch.		Services		Merch.		Services		Merch.		Services		Merch.		Services	
	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.	Ex.	Im.
Mid. East	14.5	14.8	14.0	14.8	43.8	39.3	28.0	40.7	6.7	8.9	10.1	13.5	-16.1	-10.6	0.6	-7.8	11.0	11.4	13.1	13.7
N. Africa	6.4	6.1	-4.9	na	19.4	28.1	38.5	na	15.3	13.9	12.2	na	-5.0	-0.8	5.2	na	8.6	11.3	13.5	na
Egypt	20.8	14.2	23.1	16.8	59.5	65.1	42.1	69.5	12.9	18.6	19.0	27.6	-20.7	-12.4	-10.8	-11.4	14.6	18.3	16.7	22.3
Saudi Arabia	11.9	14.9	21.4	19.6	17.3	27.3	14.4	21.4	18.7	7.7	19.5	17.8	5.8	3.4	3.7	1.9	13.3	13.0	14.5	14.9
Other Europe	10.8	17.9	27.6	17.2	14.6	32.1	9.2	15.7	27.4	9.1	33.1	8.9	11.8	9.6	13.0	10.3	16.0	16.8	20.3	13.0
Turkey	12.3	13.6	19.9	20.7	18.3	24.8	15.7	23.4	15.0	6.8	15.8	19.7	1.8	-1.9	-1.4	0.1	11.7	10.4	12.2	15.6
Yugoslavia	12.0	11.2	11.5	11.0	27.3	27.3	19.5	26.9	1.9	7.5	8.4	5.3	-5.9	-12.6	-7.1	-11.5	8.0	7.5	7.9	6.6
Subsaharan Africa																				

Notes: na - not available

Source: IMF, *Balance of Payments Yearbook*.

Table 10

Average Annual Growth Rates of Exports  
of Services and Other Invisibles for the Major  
Industrialized and Developing Countries, 1967-77 and 1977-87

Country/ Region	Ship.		Travel		OT		Pass.		OPS		Total PS		Prop. Inc.		Lab. Inc.		Inv. Inc.	
	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87
<b>Industrialized Countries</b>	14.1	5.7	14.2	10.5	16.5	6.4	13.9	11.0	19.6	10.5	15.6	9.2	12.7	8.7	13.4	8.7	18.1	16.6
Australia	28.2	3.6	16.4	16.0	12.6	2.6	na	14.5	9.8	11.4	13.5	9.3	9.7	23.9	26.4	9.5	14.6	18.0
Austria	22.2	10.5	19.8	9.0	21.5	10.6	na	na	25.6	13.3	21.2	10.3	20.4	8.3	na	na	29.4	20.0
Canada	7.5	0.4	4.5	9.6	11.9	-1.4	na	na	16.8	10.3	8.9	8.6	na	na	na	na	14.7	12.0
EEC	15.1	5.6	14.7	10.7	15.4	5.9	12.9	10.3	19.2	9.6	16.0	8.8	11.8	11.2	12.9	9.3	20.6	17.1
Belgium	21.1	7.7	17.0	9.8	18.4	5.5	na	14.0	22.0	6.8	20.6	7.5	5.6	10.6	13.9	5.2	30.9	18.7
Denmark	16.6	5.2	15.4	9.0	na	4.9	na	8.6	na	6.8	15.2	6.7	na	na	na	na	21.0	21.9
France	24.7	6.4	14.3	10.5	na	8.5	na	na	na	8.0	18.5	8.4	na	12.2	na	7.7	20.0	16.9
Germany	12.9	4.2	15.3	9.2	14.5	9.5	15.5	9.6	24.1	9.4	17.5	8.5	13.4	12.1	20.0	12.6	22.5	16.8
Greece	12.0	5.8	22.7	8.8	18.8	-14.0	1.6	23.3	27.0	14.4	21.6	7.5	na	na	34.8	6.2	29.3	3.7
Ireland	1.6	14.7	5.4	10.0	17.4	13.4	9.1	9.6	25.0	9.9	9.5	10.7	na	na	na	na	10.5	11.3
Italy	10.5	13.1	12.8	9.8	11.1	-0.1	9.2	7.2	na	12.1	11.8	10.4	na	14.8	7.9	8.3	15.0	16.8
Netherlands	51.4	5.5	13.4	9.3	na	4.6	na	8.5	na	9.8	19.6	7.4	na	12.0	na	5.5	20.6	12.6
Portugal	na	13.1	na	18.0	na	6.9	na	12.3	na	11.8	na	14.6	na	10.7	na	16.6	na	20.7
Spain	24.6	9.1	12.7	14.0	24.9	11.4	23.4	15.8	19.6	11.7	15.2	13.3	na	3.5	na	16.2	37.1	15.0
U.K.	8.3	-0.6	20.2	9.6	14.7	2.2	11.9	10.4	13.6	12.7	13.2	8.5	12.7	7.2	na	na	19.0	17.9
Finland	9.4	8.1	22.1	8.2	22.8	6.3	32.5	13.1	23.1	10.5	19.2	9.1	na	22.7	15.6	4.9	25.9	27.7
Japan	23.7	6.7	16.7	17.4	21.7	3.0	na	9.8	22.6	15.5	22.8	9.4	na	19.9	na	10.2	29.1	29.4
New Zealand	29.1	-8.7	22.8	19.6	na	na	na	na	14.7	14.7	24.7	11.1	na	na	na	na	12.5	12.9
Norway	8.0	3.4	16.8	10.0	16.2	8.4	na	5.3	21.1	6.3	11.5	5.2	na	3.5	na	6.3	15.9	26.3
Sweden	4.6	10.8	15.1	16.4	14.3	6.9	15.4	8.1	24.8	4.5	14.8	8.4	25.0	14.4	31.3	-3.2	16.7	20.2
Switzerland	12.8	6.7	10.9	10.7	na	na	na	8.8	na	15.3	13.2	12.2	na	na	na	4.9	22.2	19.1
USA	10.5	6.9	14.1	9.1	na	9.7	na	14.6	na	14.4	12.8	10.4	na	6.3	na	3.2	14.9	12.4
<b>Developing Countries</b>	18.0	8.8	16.2	8.0	19.0	2.7	23.6	11.6	23.8	7.7	18.7	7.3	54.5	-4.2	18.1	11.3	30.9	10.0
<b>Asia</b>	23.9	7.6	21.5	15.3	18.8	4.4	13.1	16.3	26.4	11.4	22.5	10.0	10.3	20.3	16.2	16.6	24.5	25.7
China	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Hong Kong	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
India	14.1	na	31.2	na	4.4	na	na	na	18.1	na	18.1	na	na	na	na	na	26.6	na
South Korea	39.3	19.4	36.9	19.5	47.5	5.3	43.0	19.9	54.2	6.4	46.9	12.1	na	na	11.4	15.6	55.9	10.2
Singapore	44.4	16.1	31.3	13.5	20.7	8.1	na	na	78.8	6.1	32.3	9.3	na	na	na	na	27.7	20.0
Taiwan																		
<b>Latin America</b>	22.5	6.5	11.2	6.9	12.9	3.3	23.6	11.6	22.6	7.3	15.3	6.7	53.1	-27.3	24.1	2.6	31.8	12.0
Argentina	17.0	7.5	16.3	11.2	10.9	6.3	22.6	8.2	17.4	7.0	15.5	6.7	21.5	0.2	na	na	25.5	5.0
Brazil	28.8	8.0	13.8	6.4	16.5	9.7	8.9	17.5	25.2	0.7	22.4	6.2	na	-27.3	na	-5.7	35.0	4.4
Chile	na	5.5	6.1	8.7	-3.3	13.2	5.8	37.2	40.2	11.7	15.1	10.7	na	na	na	na	na	25.6
Mexico	na	na	8.2	5.1	na	9.6	na	15.0	55.5	10.0	4.8	14.4	na	na	34.5	3.9	21.5	27.1
Venezuela	32.4	6.3	17.7	6.3	12.5	-5.7	na	11.0	10.9	-13.3	15.4	1.5	na	na	na	na	38.1	6.1

(Table 10) (continued)

Country/ Region	Ship.		Travel		OT		Pass.		OPS		Total PS		Prop. Inc.		Lab. Inc.		Inv. Inc.	
	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87
<b>Mid. East</b>	12.7	6.8	22.1	2.8	27.0	-0.2	23.2	6.3	8.3	11.2	19.6	5.2	na	13.4	15.1	7.8	38.9	9.3
<b>N. Africa</b>	na	na	na	0.1	na	10.5	na	12.7	7.2	16.5	14.8	8.6	na	na	na	na	5.8	29.3
Egypt	na	na	29.3	na	34.8	-25.9	na	na	na	na	32.3	3.3	na	na	na	na	55.9	10.2
Saudi Arabia	14.2	5.7	21.2	10.9	30.2	6.3	9.8	11.7	13.1	19.8	17.8	11.3	na	na	na	na	33.3	18.1
<b>Other Europe</b>	27.4	21.2	31.8	21.8	27.7	-4.8	na	na	na	na	18.0	22.6	na	na	na	na	na	58.6
Turkey	13.0	-1.4	19.7	6.2	32.2	10.1	12.0	11.7	18.4	11.1	17.8	6.9	na	na	na	na	32.7	1.4
Yugoslavia	16.9	-2.3	15.8	5.6	16.6	-5.7	11.8	12.7	17.3	-3.4	15.8	-0.3	na	-4.5	na	7.5	17.6	-4.0
<b>Subsaharan Africa</b>																		

Notes: na - not available. For definitions see Table 6.

Source: IMF, *Balance of Payments Yearbook*.

Table 11

Average Annual Growth Rates of Imports  
of Services and Other Invisibles for the Major  
Industrialized and Developing Countries, 1967-87

Country/ Region	Ship.		Travel		OT		Pass.		OPS		Total PS		Prop. Inc.		Lab. Inc.		Inv. Inc.	
	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87
<b>Industrialized Countries</b>	15.1	7.6	15.4	11.0	14.3	5.3	18.6	12.5	18.6	10.8	15.9	9.5	13.3	11.6	17.5	11.7	20.8	17.8
Australia	12.3	4.6	21.8	7.6	5.0	3.3	na	5.7	18.6	8.8	15.7	6.2	11.5	7.7	26.4	9.5	14.1	15.5
Austria	22.0	9.0	25.4	10.2	22.8	9.1	na	na	18.1	11.3	22.6	10.4	17.9	7.7	na	na	28.3	17.6
Canada	15.5	1.5	15.4	11.1	5.5	0.7	na	na	14.8	10.5	14.6	7.6	na	na	na	na	14.1	11.5
EEC	16.4	7.6	16.7	10.8	11.4	5.2	15.8	12.6	18.7	9.8	16.4	9.3	12.9	11.1	17.6	11.3	23.9	17.1
Belgium	22.0	4.6	17.8	7.4	19.7	7.4	na	11.3	21.4	10.4	20.5	8.5	8.8	12.7	23.8	8.8	30.3	19.9
Denmark	11.6	7.8	15.2	11.8	na	8.1	na	na	na	8.9	20.5	8.5	na	na	na	na	28.0	22.3
France	29.1	6.5	13.0	8.0	na	10.0	na	na	na	9.9	18.9	8.6	na	11.3	na	12.5	28.4	18.6
Germany	13.7	6.8	20.7	8.9	14.3	5.0	17.4	10.3	19.6	9.0	18.3	8.5	16.3	9.4	18.9	11.4	18.7	13.9
Greece	18.5	6.9	14.8	12.0	17.8	-0.8	16.7	11.7	16.1	6.6	16.9	7.6	na	-1.8	17.4	3.4	17.5	21.4
Ireland	16.5	9.4	10.9	13.1	13.4	14.3	na	na	28.5	16.0	15.2	13.0	na	na	na	na	23.1	20.8
Italy	9.7	10.5	11.6	17.6	12.6	4.8	12.8	15.6	na	11.8	10.8	11.7	na	13.4	5.9	16.3	21.4	18.3
Netherlands	21.3	6.9	20.0	10.1	na	5.3	na	7.5	na	11.3	22.3	9.0	na	12.0	na	6.6	23.4	13.9
Portugal	na	10.6	na	11.2	na	8.7	na	0.3	na	11.6	na	10.6	na	15.9	na	-2.6	na	18.7
Spain	13.0	10.2	18.3	13.9	31.0	10.6	28.9	16.3	20.3	11.7	18.8	11.8	7.8	11.3	9.5	14.4	26.1	14.8
U.K.	12.1	8.5	10.6	19.2	8.8	2.0	13.4	16.9	14.5	7.1	11.0	9.7	11.3	7.9	na	na	24.6	16.9
Finland	14.1	11.8	17.2	14.9	16.4	2.3	27.5	13.7	19.5	15.4	17.3	6.9	17.2	14.5	-8.4	2.9	25.9	15.1
Japan	8.8	11.2	30.5	17.5	26.1	1.9	na	15.4	17.2	15.2	19.3	11.2	na	14.5	na	15.8	22.9	24.5
New Zealand	16.4	-2.3	20.3	10.3	na	na	na	na	12.3	9.6	16.1	8.6	na	na	na	na	17.9	16.0
Norway	17.3	7.9	18.6	11.7	12.0	5.7	na	na	31.6	3.9	17.3	6.9	na	12.9	na	16.4	21.9	13.6
Sweden	16.3	-2.7	15.8	11.7	13.0	0.8	21.5	11.1	19.4	10.3	16.1	7.4	14.9	13.0	15.4	14.1	30.3	19.5
Switzerland	16.1	13.1	14.1	14.6	na	4.0	na	12.2	na	10.1	16.6	13.0	na	na	na	14.5	21.5	32.3
USA	14.9	8.2	8.8	10.6	na	9.2	na	12.3	na	14.5	11.4	10.5	na	10.1	na	5.2	17.9	19.4
<b>Developing Countries</b>	20.0	0.8	17.6	4.5	24.8	4.6	18.6	12.5	20.6	6.9	20.0	3.9	16.7	3.9	29.1	13.1	16.1	9.5
<b>Asia</b>	12.7	7.6	23.7	14.6	22.3	3.6	61.0	13.5	18.9	13.0	18.5	10.0	12.7	13.2	28.1	13.3	20.3	18.4
China																		
Hong Kong																		
India	8.0	na	9.9	na	13.1	na	na	na	11.7	na	9.7	na	na	na	na	na	3.2	na
South Korea	19.2	8.2	29.1	19.7	57.8	14.2	23.4	15.7	37.5	6.7	32.1	10.4	na	32.2	na	27.2	50.9	17.1
Singapore	20.5	13.5	41.8	14.9	na	na	na	na	43.4	15.1	23.3	14.4	na	na	na	na	42.3	14.1
Taiwan																		
<b>Latin America</b>	13.4	1.7	13.0	5.2	32.9	5.7	12.7	6.1	16.4	6.7	15.4	4.8	15.5	3.1	20.1	5.8	15.4	13.3
Argentina	9.0	-2.7	4.2	16.9	15.1	11.7	10.8	9.3	11.2	8.9	9.0	10.5	-0.8	18.0	na	na	15.5	18.3
Brazil	14.0	4.4	16.7	2.3	66.7	3.5	22.4	-0.4	16.9	4.7	22.2	3.8	na	-13.1	na	-5.7	28.3	11.1
Chile	4.6	3.0	17.8	5.5	39.9	5.4	6.1	16.0	8.7	20.1	13.0	8.6	na	7.8	na	na	6.8	17.3
Mexico	16.0	6.1	8.5	7.1	na	24.3	8.1	-4.4	36.7	11.4	12.6	8.8	na	na	na	na	16.9	14.5
Venezuela	21.5	-1.9	26.1	-9.6	na	2.4	3.3	-0.1	22.4	-2.2	22.7	-3.7	na	na	na	na	na	14.9

(Table 11) (continued)

Country/ Region	Ship.		Travel		OT		Pass.		OPS		Total PS		Prop. Inc.		Lab. Inc.		Inv. Inc.		
	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	67-77	77-87	
<b>Mid. East</b>																			
<b>N. Africa</b>	30.5	-2.8	26.8	na	25.9	na	21.4	-2.8	19.9	9.5	26.8	2.0	14.6	3.9	41.1	12.1	14.3	-0.4	
Egypt	18.0	6.3	21.9	-5.6	18.5	5.1	na	5.8	26.8	9.3	21.9	6.8	na	na	na	na	21.0	12.0	
Saudi Arabia	47.8	-2.4	32.9	na	40.6	na	na	na	34.7	24.7	40.7	6.3	na	na	na	na	21.0	-16.6	
<b>Other Europe</b>	16.3	6.7	16.2	4.3	18.8	6.9	16.7	na	29.3	13.1	20.6	9.5	na	na	na	na	17.6	19.4	
Turkey	10.7	8.7	27.7	5.8	21.2	14.5	16.7	na	11.7	16.2	16.4	9.6	na	na	na	na	17.9	16.0	
Yugoslavia	18.7	6.1	5.8	-0.8	18.6	5.7	na	na	34.6	12.8	22.1	9.5	na	na	na	na	17.5	16.4	
<b>Subsaharan Africa</b>	20.0	-3.1	14.6	-3.8	15.0	-6.1	8.1	-0.6	22.5	-5.3	19.3	-4.2	na	-5.2	na	21.5	17.0	4.8	

Notes: na - not available: For definitions see Table 6.

Source: IMF, *Balance of Payments Yearbook*.

Table 12

**Inward Stock of Foreign Direct Investment in Services  
Selected Host Countries, Various Years**

Country	Year	Value (bn)		Share of Services in total FDI
		Total FDI	FDI in Services	
<b>Industrialized Nations (national currency)</b>				
Australia	1975	7.0	3.1	43
	1983	18.1	8.5	47
Austria	1975	33.5	17.1	52
	1981	46.0	20.5	44
Canada	1975	37.4	9.2	25
	1984	81.8	23.6	29
EEC				
Belgium	1970	113.8	11.1	10
	1981	238.8	41.3	17
Denmark <sup>a</sup>	1983	7.7	2.8	37
France <sup>b</sup>	1980	89.7	33.1	37
	1985	129.0	81.7	63
Germany, Fed. Rep.	1976	78.9	26.3	33
	1985	119.1	54.9	46
Italy	1974	5,449.0	1,723.0	32
	1985	31,769.0	11,752.0	40
Netherlands	1973	20.7	5.8	28
	1984	58.3	24.9	43
Portugal	1974	7.7	3.1	40
	1983	38.4	16.4	43
Spain	1975	142.8	31.2	22
	1984	1,097.8	339.2	31
United Kingdom	1971	5.6 <sup>c</sup>	0.6 <sup>c</sup>	11
	1984	38.5	13.3	35
Finland <sup>d</sup>	1975	0.9	0.7	76
	1986	4.6	1.9	46
Japan (U.S. dollars)	1975	1.5	0.3	18
	1986	7.0	2.0	29
United States	1974	26.5	11.5 <sup>c</sup>	43
	1986	209.3	111.2	53

Table 12 (continued)

Country	Year	Value (bn)		Share of Services in total FDI
		Total FDI	FDI in Services	
<b>Latin America</b> (U.S. dollars)				
Argentina <sup>e</sup>	1981	2.4	0.6	25
	1985	3.1	0.9	26
Bolivia <sup>f</sup>	1981	0.46	0.05	11
	1986	0.53	0.06	11
Brazil	1971	2.9	0.5	16
	1985	25.7	5.6	22
Chile	1973	0.4	0.1	27
	1983	2.0	0.7	33
Colombia <sup>g</sup>	1975	0.6	0.2	29
	1986	2.7	0.4	13
Ecuador <sup>g</sup>	1981	1.0	0.5	48
	1986	1.3	0.6	44
Mexico	1971	3.0	0.6	19
	1981	13.5	3.2	23
Panama	1975	0.3	0.1	32
	1983	0.4	0.2	48
Peru	1978	0.8	0.2	25
	1986	1.4	0.4	30
Venezuela	1981	1.8	0.6	34
	1986	2.4	0.65	27
<b>Asia</b> (US dollars)				
Hong Kong	1981	3.8	2.4	55
Indonesia <sup>h</sup>	1977	2.9	0.3	11
	1985	6.4	0.7	10
Korea, Rep.	1980	1.1	0.3	23
	1986	2.2	0.7	27
Malaysia <sup>i</sup>	1972	0.7	0.2	37
	1984	2.9	1.2	40
Philippines	1976	0.5	0.2	34
	1983	2.0	0.5	26
Singapore	1970	0.6	0.3	55
	1981	8.2	4.2	51
Sri Lanka <sup>j</sup>	1985	0.7	0.4	57
Taiwan	1986	5.9	1.4	23
Thailand <sup>k</sup>	1975	0.5	0.3	56

Table 12 (continued)

Country	Year	Value (bn)		Share of Services in total FDI
		Total FDI	FDI in Services	
<b>Africa</b> (U.S. dollars)	1985	2.0	0.9	47
Egypt <sup>1</sup>	1979	7.0	4.0	57
	1984	14.9	6.7	45
Morocco	1975	0.2	0.1	48
	1982	0.7	0.4	54
Nigeria	1975	3.0	0.6	20
	1982	4.3	1.6	37
Zimbabwe	1982	1.9	0.7	34

**Notes:** Shares were calculated before rounding of the stock data.

<sup>a</sup> Cumulative flows for 1974-83.

<sup>b</sup> Cumulative flows during 1975-80 and 1975-85.

<sup>c</sup> Excluding banking and insurance. Services include agriculture and mining.

<sup>d</sup> Cumulative flows since 1967.

<sup>e</sup> Cumulated approved FDI since March 1977.

<sup>f</sup> Based on approvals.

<sup>g</sup> Excluding oil.

<sup>h</sup> Cumulative flows since 1977.

<sup>i</sup> Paid-up value of equity shares held by foreign residents in limited liability companies incorporated in Malaysia as of the end of 1972 and 1984, respectively.

<sup>j</sup> Cumulative flows since 1977 based on approvals.

<sup>k</sup> Cumulative flows since 1971.

<sup>l</sup> Cumulative flows 1974-79 and 1974-84 associated with projects established under the Investment and Free Zones Law.

**Source:** UNCTC (1988), pp. 378, 380-81.

Table 13

**Composition of FDI in Services and Construction for Selected Host Countries  
(latest available year)**

Country	Activity				
	Wholesale and Retail Trade	Finance and Insurance	Transport and Communications	Construction	Other Services
<b>Industrialized Countries</b>					
Canada	27.1	55.9	nsa	nsa	16.8
Belgium	35.1	nsa	nsa	nsa	64.9
France	30.3	55.5	1.2	nsa	8.7
Germany, Fed. Rep.	36.2	53.3	2.5	0.7	5.1
Italy	12.3	64.5	4.1	nsa	19.1
Netherlands	42.2	24.5	2.8	2.8	27.7
United Kingdom	24.1	43.3	1.5	1.5	1.5
Japan	43.7	35.2	2.9	2.9	15.4
United States	41.3	46.9	2.1	6.4	3.3
<b>Latin America</b>					
Brazil	17.7	65.9	nsa	nsa	16.2
Mexico	33.3	58.4	nsa	6.1	2.3
Peru	40.1	36.6	4.2	0.9	18.0
<b>Asia</b>					
Indonesia	44.9	na	8.2	9.3	37.5
Korea, Rep.	nsa	12.7	4.0	18.9	64.4
Malaysia	17.2	64.3	nsa	2.0	16.5
Philippines	19.9	55.0	6.1	4.0	14.9
Singapore	32.1	57.8	6.6	2.6	0.7
Thailand	39.1	16.1	8.9	28.2	7.8
Taiwan	2.1	20.3	nsa	9.2	68.5

(Table 13) (continued)

Country	Activity				
	Wholesale and Retail Trade	Finance and Insurance	Transport and Communications	Construction	Other Services
<b>Africa</b>					
Egypt	nsa	39.0	nsa	21.3	39.7
Nigeria	43.3	7.5	na	46.4	na

**Notes:**

nsa: not separably available; na: not available

**Source:** UNCTC (1988), p. 593.

Table 14

Book Value and Percentage Distribution of  
Inward Stock of FDI by Host Country and  
Country/Region of Origin

Host Country	Year	Total All Countries (mill.) <sup>a</sup>	Percentage Distribution by Country or Region of Origin						
			Western Europe	Japan	USA	Other Developed	Latin America	Asia	Other LDC
<b>Industrialized Countries</b>									
Australia	1975	7,036	43.9	4.2	33.9	3.7	na	na	na
	1984	20,274	35.3	10.0	36.7	2.8	na	6.4	na
Canada	1975	37,389	18.3	0.7	79.3	0.8	0.6	0.1	0.2
	1985	83,941	19.4	2.1	75.5	1.5	0.6	0.6	0.3
<b>EEC</b>									
W. Germany	1976	63,531	52.7	2.2	40.9	0.9	1.1	0.2	0.9
	1985	88,256	48.8	6.0	38.6	1.6	1.6	0.4	1.4
Netherlands	1975	26,382	50.9	1.1	34.5	4.0	7.5	0.3	1.6
	1984	58,255	43.7	2.8	33.3	4.5	14.3	1.3	0.1
United Kingdom	1974	6,566	28.6	*	55.8	11.1	1.6	3.1	*
	1984	38,477	37.4	1.7	51.2	4.6	2.3	2.1	na
Japan (US \$)	1975	1,500	21.1	—	60.0	2.5	0.7	0.9	1.9
	1986	7,007	23.4	—	48.6	1.8	na	4.1	6.1
United States	1975	27,661	67.2	*	—	19.5	na	1.2	na
	1986	209,328	67.6	11.2	—	11.8	0.6	2.7	na

(Table 14) (continued)

Host Country	Year	Total All Countries (mill.) <sup>a</sup>	Percentage Distribution by Country or Region of Origin						
			Western Europe	Japan	USA	Other Developed	Latin America	Asia	Other LDC
<b>Developing Countries</b>									
Brazil (US \$)	1975	7,305	42.0	11.5	32.8	6.3	6.6	0.2	5.8
	1985	25,664	42.9	9.3	31.4	5.9	6.9	0.6	3.0
Chile (US \$)	1985	7,613	11.0	0.8	66.8	10.4	5.3	na	na
Colombia (US \$)	1979	957	25.1	na	53.0	3.4	17.2	1.2	na
	1985	2,231	21.6	na	64.1	2.8	9.7	1.8	na
Indonesia (US \$)	1975	5,518	12.8	40.7	12.4	5.1	0.9	20.0	0.0
	1986	16,154	20.1	33.0	6.8	6.5	1.3	18.5	0.0
S. Korea (US \$)	1976	675	4.5	64.8	20.2	1.5	5.4	0.6	0.6
	1985	1,829	11.2	47.5	32.1	1.1	2.2	2.4	1.3
Peru (US \$)	1977	791	33.7	2.2	44.7	4.2	14.3	0.1	0.4
	1985	10,359	14.0	26.7	16.6	3.0	0.5	24.0	0.2
Thailand	1975	3,714	9.9	41.6	14.5	0.5	0.9	23.0	2.2
	1985	10,359	14.0	26.7	16.6	3.0	0.5	24.0	0.2
Venezuela	1979	6,552	15.4	0.6	57.7	8.8	11.5	na	3.5
	1985	11,075	23.1	3.1	54.1	5.9	10.0	na	2.2

Notes: Total values in millions of national currency unless otherwise indicated.

Source: UNCTC (1988)

**Table 15**

**Percentage Distribution and Book Value of  
Outward Stock of FDI by Home Country and Sector  
for the Industrialized and Developing Countries,  
1975 and latest available year**

Home Country	Year	Industrialized Countries			Developing Countries			Total (mill.)
		Pri.	Manuf.	Serv.	Pri.	Manuf.	Serv.	
Canada	1975	16.1	46.2	14.3	4.9	4.2	14.1	10,526
	1983	15.8	43.1	25.8	7.1	3.1	5.1	37,793
W. Germany	1975	1.5	35.3	37.1	2.6	13.0	4.7	49,081
	1985	2.4	34.6	43.6	1.4	8.4	4.7	147,794
Japan	1975	10.9	8.8	26.5	17.2	23.6	13.0	15,942
	1986	4.0	12.8	37.1	8.9	13.8	23.4	10,970
Netherlands	1973	40.5	33.7	9.5	7.1	5.5	3.7	44,173
	1984	49.3	18.7	16.7	6.4	3.6	5.3	143,736
United Kingdom	1974	7.0	49.3	22.4	4.3	11.5	8.0	10,117
	1984	27.5	27.3	26.9	5.9	4.5	8.0	75,715
United States	1975	19.9	36.6	14.4	3.8	8.4	7.0	124,212
	1986	14.3	31.6	26.6	6.4	7.2	7.8	276,075

**Notes:** Total values in millions of national currency with the exception of Japan, for which data are in U.S. dollars.

Pri.: Primary, i.e., agriculture and mining.

**Source:** UNCTC (1988).

