

The Internationalization of U.S. Service Industries and Its Implications for Developing Countries

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One of the important trade policy issues of the 1980s is what is commonly called "trade in services."¹ Broadly speaking, this refers to foreign sales of services and purchases of foreign services, and it has become an important item in the U.S. balance of payments in recent years. In 1970 exports of private services (travel, passenger fares, transportation, royalties and fees, and other miscellaneous private services) amounted to \$9.6 billion (table 1). These services exports have increased steadily since then, reaching a sum in excess of \$41 billion in 1983. U.S. imports of private services also increased from \$9 billion in 1970 to \$36 billion in 1983.²

In the years from 1970 through 1983 the United States experienced an increasing deficit in its balance on merchandise trade. Although there were surpluses in 1970, 1973, and 1975, these years were exceptions to the general trend of an increasing deficit. In contrast, however, the United States experienced an increasing surplus in its balance in private services from 1970 through 1983 (with the exception of 1972). As can be seen in table 2, these surpluses constituted a significant offsetting item against the deficits on the merchandise account.

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1. See Benz (1985); Brock (1982); Diebold, Jr., and Stalson (1983); Ewing (1985); Krommenacker (1984); Malmgren (1985); Sapir (1985); Schott (1983); Shelp (1981); and Stern (1985); among others.

2. These figures are rough estimates of external transactions of service industries. Fees and royalties include remittances of income from U.S. manufacturing affiliates abroad, and other miscellaneous private services include expenditures in the United States by foreign diplomatic missions and international organizations.

TABLE 1. Major Types of U.S. Service Transactions (millions of dollars)

| Transactions | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| Exports: | | | | | | | | | | | | | | |
| U. S. Government | | | | | | | | | | | | | | |
| Transactions | 1,833 | 2,273 | 1,721 | 2,960 | 3,798 | 4,495 | 5,943 | 7,908 | 8,710 | 7,129 | 8,593 | 10,153 | 12,537 | 13,367 |
| Income on Investment | 11,747 | 12,707 | 14,764 | 21,808 | 27,587 | 25,351 | 29,286 | 32,179 | 43,265 | 66,699 | 75,936 | 86,243 | 84,146 | 77,003 |
| Private Services* | 9,625 | 10,539 | 11,629 | 14,062 | 16,975 | 18,796 | 21,655 | 23,392 | 26,994 | 30,625 | 36,174 | 41,207 | 40,424 | 41,575 |
| Totals | 23,205 | 25,519 | 28,114 | 38,830 | 48,360 | 48,642 | 56,884 | 63,479 | 78,969 | 104,453 | 120,703 | 137,603 | 137,107 | 131,945 |
| Imports: | | | | | | | | | | | | | | |
| U. S. Government | | | | | | | | | | | | | | |
| Transactions | 5,580 | 5,565 | 5,572 | 5,491 | 5,999 | 5,839 | 6,122 | 7,181 | 8,897 | 10,274 | 12,515 | 13,014 | 14,214 | 14,415 |
| Income on Investment | 5,516 | 5,436 | 6,572 | 9,655 | 12,084 | 12,564 | 13,311 | 14,217 | 21,865 | 33,236 | 43,174 | 52,760 | 56,842 | 53,495 |
| Private Services* | 9,090 | 9,990 | 16,495 | 13,575 | 15,625 | 16,392 | 18,764 | 20,702 | 23,455 | 26,589 | 28,891 | 32,239 | 32,841 | 35,892 |
| Totals | 20,186 | 20,991 | 23,639 | 28,721 | 33,708 | 34,795 | 38,197 | 42,100 | 54,217 | 70,099 | 84,580 | 98,013 | 103,897 | 103,802 |

Sources: Anthony J. DiLullo, "Service Transactions in the U. S. International Accounts, 1977-80," Survey of Current Business, November 1981, pp. 29-46, and various other issues.

* Private services are travel, passenger fares, transportation, royalties and fees, and miscellaneous private services.

TABLE 2. Balance of Trade in Merchandise and Services, 1970-1983 (millions of dollars)

| Balance | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 |
|--|-------|--------|---------|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| Merchandise Trade | 2,603 | -2,260 | -6,416 | 911 | -5,505 | 8,903 | -9,483 | -31,091 | -33,966 | -27,555 | -25,544 | -28,067 | -36,389 | -61,055 |
| Private Services* | 535 | 549 | -4,866 | 487 | 1,350 | 2,404 | 2,891 | 2,690 | 3,539 | 4,036 | 7,283 | 8,968 | 7,583 | 5,683 |
| Merchandise Trade and Private Services* | 3,138 | -1,711 | -11,282 | 1,398 | -4,155 | 11,307 | -6,592 | -28,401 | -30,427 | -23,519 | -18,261 | -19,099 | -28,806 | -55,372 |

Sources: Anthony J. DiLullo, "Service Transactions in the U. S. International Accounts, 1977-80," Survey of Current Business, November 1981, pp. 29-46, and other various issues.

* Private services are travel, passenger fares, transportation, royalties and fees, and miscellaneous private services.

The figures in table 2 do not, however, reveal the full extent of the contribution made by U.S. service industries to the balance of payments. In recent years service industries have rapidly increased direct foreign investment, raising their share of the total U.S. foreign investment position from 20 percent in 1975 to 25 percent in 1983. This means that (although there are no figures to substantiate the claim) service industries may now account for a large share of the growing income on foreign investment (Table 1).

The growing internationalization of U.S. service industries has brought to the surface a multitude of obstacles to international transactions in services. These have now become binding constraints on services transactions and a source of conflict among major trading nations of the world. Resolution of the conflict appears remote—as observed by Baldwin (1984), far too little is known about the causes and effects of international services transactions as well as the true magnitude of these transactions. What is clearly needed is a better understanding of these issues, which will pave the way toward resolving the conflict.

The purpose of this paper is twofold: First, it is an attempt to determine the extent to which U.S. service industries have been internationalized. Internationalization is defined as the process of producing and distributing a good or a service, whether carried out at home or abroad, for a foreign market.³ This term was chosen instead of the more widely used "trade in services." The latter often refers to direct foreign investment in services as well as trade in services in its strict sense of the word. Trade and investment are certainly not the same in terms of their economic causes and effects and in terms of the barriers they may encounter. Thus, it is best to treat them separately, rather than combining them under the rubric "trade in services."⁴ That term also sometimes refers to invisible items in the balance of payments. In this usage services include income on the factor of production employed abroad; this income is sometimes referred to as factor services. It therefore includes profits repatriated by multinational corporations in manufacturing industries, repatriated interest earnings on portfolio investment, and remittances by workers employed abroad. In other words trade in services as defined in the literature is not necessarily a trans-border transaction involving nonfactor services, which are the output of service industries. Since the objective of this study is to investigate the international dimension of U.S. service industries, it would be best not to use the term "trade in services" except in a specific case in which its usage is parallel

3. This definition is broader than that of Aronson and Cowhey (1984), who define internationalization as "... the process of producing and distributing a good or a service through local subsidiaries, affiliates or franchises ..."

4. Sapir (1985) makes a clear distinction between trade in services and foreign sales of services but deals mostly with the former.

to that of "trade in goods."

The significance of separating factor services from trade in services can be seen in table 1. American services transactions or invisible trade are grouped into three broad categories: (1) U.S. government transactions, (2) income on investment, and (3) private services. Among these only the last—which includes travel, passenger fares, transportation, royalties and fees, and miscellaneous private services—corresponds roughly to what could be correctly called trade in services. Table 1 shows that invisible trade is much larger than trade in services thus defined, and equating trade in services with invisible trade overstates the importance of nonfactor services in the U.S. balance of payments.

This discussion is not intended to downgrade the importance of U.S. service industries for the balance of payments, however. As will be shown, U.S. service industries have invested heavily abroad; consequently, income on investment in table 1 includes overseas earnings. The point is that analytically and for policy implications it is best to distinguish trade in services from investment in services and the return on investment.

The second purpose of the paper is to address some of the theoretical issues relating to international transactions in services. More specifically, some questions are raised relating to the causes and effects of the internationalization of service industries. Because of the importance of international service transactions, work at the analytical level is urgently needed to better comprehend various issues relating to these transactions and to help lay the foundation for an appropriate international economic order.

Section I examines the extent of the internationalization of U.S. service industries in recent years, making clear the distinction between trade in services on the one hand and investment in services and the sales of foreign affiliates on the other. Section II discusses the causes for trade and investment in services and argues that no special theories are needed to treat trade and investment in services separately from trade and investment in goods. Section III evaluates various arguments for restricting international service transactions and discusses some of the possible effects of liberalizing these transactions.

I. The Internationalization of U.S. Service Industries

There are two ways in which a foreign market may be served—by exporting a good or a service to the foreign market and by establishing a foreign affiliate.⁵

5. Here "affiliate" denotes any establishment created abroad with direct foreign investment.

Since these are alternative ways of serving a foreign market, trade statistics as conventionally reported tend to underestimate the extent of the internationalization of an industry. A better measure of internationalization (if it is to indicate the extent of the industry's international transactions) should therefore be based on the exports of the industry and the sales of its foreign affiliates.⁶ However, due to the paucity of data and the incompatibility of classification systems used for the balance of payments and for direct investment position the necessary pooling of data is not possible. Thus, trade, in services and investment in services are reported separately, and no attempt is made at a precise measurement of the extent of the internationalization of U.S. service industries.

Trade in Services

Services transactions that are reported in the balance of payments and regarded as traded in the conventional sense of the word are travel, passenger fares, transportation, royalties and fees, and miscellaneous private services.⁷ These are transactions that generally do not require the establishment of a foreign affiliate. However, as previously noted, some of the royalties and fees belong to other sectors in the economy, and miscellaneous private services include expenditures on goods by foreign diplomatic entities and international organizations. As a result, figures on these overestimate trade in services.

Trade in services may take place in one of the following ways: (1) Resident firms or individuals provide services to nonresident firms or individuals across national boundaries without establishing foreign affiliates; (2) resident firms or individuals provide services to nonresident firms or individuals within national boundaries; and (3) some services—the use of intangible properties—are transmitted across national boundaries through contractual arrangements. An example of the latter is an intangible property telematically transmitted across national boundaries. The transmission of such a property, which is stored on magnetic tape upon receipt, is a case of what Bhagwati (1984) calls "disembodiment" of services from their providers or what Sampson and Snape (1985) call "separated" services. Both conceptually and analytically, such transmission of an intangible property is not different from the export of a book containing valuable information. The fact is, however, that the latter is regarded as trade in goods and the former as trade in services.

6. This method may lead to double counting, as sales by an affiliate may be nothing more than commodities distributed by the affiliate, which imported them from its parent company.

7. "Services" refer to the output of service industries and not to the services provided within a firm, for instance in a manufacturing industry. The latter cannot be included in trade in services for the same reason the value of an intermediate product contained in other exported goods is not added to the export of the intermediate product.

What this example demonstrates is the difficulty involved in defining trade in service and in finding data that correspond to the correct definition of the term. With this caveat, figures on services traded are shown as reported in the balance-of-payments for the years 1970 through 1983 (tables 1 and 2).

In 1970 the total value of private services exports was \$ 9,625 million. It then increased every year, reaching a sum in excess of \$ 41 billion in 1981. There was a slight decrease in 1982 but an increase again in 1983. Imports of private services also increased during this period, from about \$9 billion in 1970 to nearly \$36 billion in 1983.

Table 2 reports the balance on private services for 1970 through 1983. It registered a surplus for every year except 1972, and the surplus showed an increasing trend throughout the period. In fact, between 1970 and 1981 there was a 16-fold increase in surplus. However, in contrast, there was an increasing deficit on the merchandise account during the same period. Although the surplus on the services account was large enough to offset the deficit on the merchandise account, it certainly reduced the deficit on the overall trade balance during this period.

We have noted that some of the fees, royalties, and other private services properly belong to other sectors. Since their inclusion in the category of private services may account for the surplus on the services account, it may not be due to comparative advantage shifting toward service industries. To shed some light on this issue we have separated travel, passenger fares, and other transportation (TPOT) from fees, royalties, and other services (FROS). If the former can be shown to account for surpluses on the services account, there are grounds for the argument that U.S. comparative advantage has been shifting toward service industries. If it is the latter, the argument becomes much weaker.

Table 3 shows that the United States experienced a deficit every year during the 1970-1982 period on the TPOT account but a surplus on the FROS account. There is no clear trend in the deficit, but there is a definite upward trend in the surplus. The increasing surplus in the balance of private services must thus be attributed to the increasing surplus on the FROS account. Since the FROS account contains items that may belong to non-service sectors, caution is needed in inferring changes in the U.S. comparative advantage from aggregate statistics on private services.

Direct Foreign Investment by Service Industries and Sales of Foreign Affiliates

Trade is not the only channel through which firms make sales abroad-this is also accomplished through foreign affiliates. In fact, since services are nonstorable and thus nontransportable, much of their international sales is carried out through foreign affiliates. Therefore, the full extent of the internationalization of U.S. service industries cannot be comprehended without an examination of U.S. service industries cannot

TABLE J. Balance on Private Services, 1970-1982 (millions of dollars)

| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|
| Balance | | | | | | | | | | | | | |
| Travel, passenger fares, and other transportation | -2,038 | -2,345 | -3,063 | -3,158 | -3,184 | -2,792 | -2,558 | -3,565 | -3,573 | -2,935 | -1,434 | -598 | -2,095 |
| Fees, royalties, and other services | 2,573 | 2,894 | 3,197 | 3,645 | 4,534 | 5,196 | 5,449 | 6,073 | 6,938 | 6,933 | 8,579 | 9,566 | 9,678 |

Sources: Anthony J. DiLullo, "Service Transactions in the U. S. International Accounts, 1977-80," Survey of Current Business, November 1981, pp. 29-46; and various issues.

be comprehended without an examination of U.S. multinational enterprises (MNEs) in service industries and their overseas activities.

In 1977 there were 3,425 MNEs based in the United States, and of these 1,213 were in service industries (excluding banking). In that year the worldwide sales of U.S. MNEs amounted to more than \$2 trillion, and the service industries (excluding banking) accounted for 20 percent of the total sales, or \$403 billion (table 4).⁸

These figures seem to indicate that service industries (excluding banking), which are the predominant sector in the U.S. economy, are not yet as global in their reach for market as other industries. The number of MNEs in service industries and their share of all MNEs' sales do not correspond to the importance of the service sector in GNP and employment.⁹ Furthermore, the 1977 data show that foreign affiliates of the service industries accounted for 19 percent of their 1977 worldwide sales, whereas those of the manufacturing industries and of mining and petroleum accounted for 29 percent and 53 percent respectively. These figures indicate that as of 1977 the service industries were not as internationalized as other industries and that service MNEs were not as extensive in their international transactions as those in other industries.

Has there been any change in the internationalization of the service industries since 1977? There are no comparable sales data to answer this question; however, a rough indication of change may be found in the investment position of the service industries for the years following 1977.

Table 5 shows the U.S. direct investment position (the net value of investors' equity and outstanding loans to foreign affiliates) at years end of 1977 through 1983 for all industries and for three major industry groups. Investment position of all industries increased from 1977 through 1981 and has remained at the 1981 level since then. Investment position of the service industries likewise increased through 1981 but has since decreased. Only the mining and petroleum industries have increased their investment position consistently year after year.

During the 1977-1983 period the service sector's share of the total investment position increased slightly from 23 percent to 25 percent, peaking at 29 percent in 1979. If it is assumed there is one-to-one correspondence between investment position and the sales of foreign affiliates, the service sector has apparently become slightly more internationalized both absolutely and in relation to the other sectors.

8. The 1982 benchmark survey of U.S. direct investment abroad treats the sales of foreign affiliates of the wholesale and retail trade industries as sales of goods and not services. In this paper MNEs in these industries (trade) are treated as service firms as our objective is to find the extent of the internationalization of service industries.

9. This can be explained in part by the fact that the service sector includes the government and the public utilities, which do not invest abroad.

TABLE 4. Number of U.S. Multinational Corporations (MNCs) and their Sales in 1977, by U.S. Parents (millions of dollars)

| Industry | Number of U.S. MNCs | Number of Affiliates | MNCs' Worldwide Sales* | Sales of U.S. Parents | Sales of Affiliates |
|---|------------------------|-------------------------|---------------------------|--------------------------|------------------------|
| All Industries | 3,425 | 23,641 | \$ 2,060,263 | \$ 1,412,293 | \$ 647,969 |
| Mining and Petroleum | 187 | 2,349 | 481,500 | 226,743 | 254,758 |
| Manufacturing | 1,841 | 15,316 | 1,037,157 | 739,460 | 297,697 |
| Services : | 1,213 | 4,537 | 403,152 | 327,079 | 76,072 |
| Trade | 375 | 1,419 | 228,750 | 183,706 | 45,044 |
| Finance (excluding banking), Insurance and Real Estate | 600 | 1,841 | 144,650 | 119,596 | 25,054 |
| Other Services | 238 | 1,277 | 29,752 | 23,777 | 5,974 |
| Other Industries | 184 | 1,439 | 138,454 | 119,012 | 19,442 |

Source : Betty L. Barker, "A Profile of U.S. Multinational Corporations in 1977," Survey of Current Business, October 1981, pp. 38-57.

* The sum of sales of U.S. parents and of their foreign affiliates. It contains duplication because of intra-firm sales.

TABLE 5. U.S. Direct Investment Position* Abroad, Yearend (millions of dollars)

| Industry/Sector | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| All Industries | \$ 148,782 (100%) | \$ 167,804 (100%) | \$ 196,760 (100%) | \$ 215,578 (100%) | \$ 226,359 (100%) | \$ 221,512 (100%) | \$ 226,117 (100%) |
| Mining and Petroleum | 37,953 (29%) | 40,780 (24%) | 44,685 (24%) | 54,350 (25%) | 58,440 (26%) | 62,934 (28%) | 66,527 (29%) |
| Manufacturing | 65,604 (44%) | 74,080 (44%) | 78,640 (42%) | 89,160 (41%) | 92,386 (41%) | 90,582 (41%) | 90,124 (40%) |
| Services: | 34,729 (23%) | 41,381 (25%) | 54,200 (29%) | 61,103 (28%) | 63,415 (28%) | 56,352 (25%) | 57,261 (25%) |
| Trade (wholesale and retail) | 14,757 (10%) | 17,340 (10%) | 22,677 (12%) | 25,843 (12%) | 28,332 (13%) | 27,449 (12%) | 28,534 (13%) |
| Finance (including banking), Insurance and Real Estate | 19,972 (13%) | 24,041 (14%) | 31,523 (17%) | 35,260 (16%) | 35,083 (15%) | 28,903 (13%) | 28,727 (13%) |

Source: U.S. Department of Commerce, Survey of Current Business, various issues.

* Investment position is the net value of direct investors' equity and outstanding loans to foreign affiliates. A change in Investment position is due to net capital outflows, reinvested earnings and revaluation adjustments.

Within the service sector the wholesale and retail industries increased their investment position during the 1977–1983 period both in terms of value and in terms of share of total investment position. Finance (including banking), insurance, and real estate also increased their investment position during this period, but their share for 1983 was the same as that for 1977. The largest increases in this sector occurred in 1978, 1979, and 1980 with a peak share of 17 percent in 1979.

One of the major service industries is banking, and it is also one of the industries that have been global in their activities. Since the statistics on the sales of foreign affiliates are for service industries excluding banking, they provide only a partial picture of the internationalization of all of the service industries. Completing the picture is not an easy task, however, as comparable data are not available.

Table 6 presents total assets and foreign network for the top 21 U.S. transnational banks. Their total assets grew from \$411.5 billion in 1975 to \$592.5 billion in 1978, and their foreign network also expanded from 1,280 to 1,342 entities during this three-year period.

What emerges from this discussion is that, although the service industries seem to have become increasingly internationalized in recent years, they are not yet as internationalized as the manufacturing industries. The reason for this may be that only recently the U.S. comparative advantage has shifted toward the service industries, and they have yet to take full advantage of their competitive strength in the world market. Alternatively, it may be that many foreign countries have restricted trade and investment in services, and that consequently U.S. service industries have not been able to expand their international activities. Clearly, to find the answer we need a better understanding of the causes of trade and investment in services, the economic effects, and the existing barriers on international service transactions. In the sections that follow these issues are addressed with the aim of exploring questions relevant to the issues rather than providing ready answers.

TABLE 6. Total Assets and Foreign Network of Top 21 U.S. Transnational Banks^a

| Item | 1975 | 1978 |
|--|---------|---------|
| Total Assets ^b (billions of dollars) | \$411.5 | \$592.5 |
| Foreign Network ^c (number of entities) | 1,280 | 1,342 |

Source : UN Centre on Transnational Corporations, Transnational Banks : Operations, Strategies and Their Effects in Developing Countries, New York, 1981.

NOTES :

- a. A transnational bank is a deposit-taking bank that in 1975 had branches or Majority-owned subsidiaries in five or more different countries or territories.
- b. Total assets include contra accounts.
- c. Foreign network includes branches, subsidiaries, affiliates, and representative offices.

II. Causes for Internationalization

Recently attempts have been made at finding a unified theoretical framework for both trade and investment in services (Deardorff, 1985). However, at present more can be learned by treating them separately and postponing the task of finding integrated theories for both trade and investment in services. There is already a large body of literature on direct foreign investment and on trade ; the issue here is therefore whether services are sufficiently different from goods to require theories separate from the existing theories on trade and investment.

Trade in Services

Hindley and Smith (1984) argue that the analysis of trade in services does not require a new, separate theoretical framework different from the established theories. They argue that in their theoretical models economists never considered services to be different from goods.

Had Ricardo in his classic example specified wine and insurance policies instead of wine and cloth, his demonstration of the gains from trade would have still succeeded.....Nothing in the logical structure of his proof ipso facto exclude international transactions involving services from its scope (p. 374).

Although Hindley and Smith are correct in saying that trade models do not specify goods as being separate from services, it is appropriate to point out that they normally

assume immobility of the factors of production and therefore the movement of goods unaccompanied by their providers or receivers. Insurance policies are documents that can be transported easily without providers or receivers of the insurance service moving physically to another country. International trade in insurance services is clearly a case of trade in separated services and thus is not different in any essential way from trade in goods. In contrast, the services of a barber cannot move without the barber himself moving from place to place. Despite some exceptions, such as separated services, a general characteristic of services is that they are intangible, nonstorable, and thus nontransportable without the providers or receivers of them moving physically at the same time. That is, trade in services generally requires providers or receivers to move between countries, whereas trade in goods and separated services does not require their movement.¹⁰

This inseparability of the movement of services from that of providers or receivers accounts for the greater importance of transportation services—cost as well as speed—in trade in services than in trade in goods and the relative importance of direct foreign investment as a means of providing services in a foreign market.

It follows from this that besides the factors determining comparative cost, technological innovations that reduce transportation costs or make services separable or splintered will affect trade in services. Such innovations can be regarded as those reducing transaction costs incurred in trade and thus transform nontraded services to traded services. It is possible that the United States has had a comparative advantage in certain services for some time, but it is only recently that technological innovations have made it possible for services to be extensively exported.

A recent study relevant to the question of whether the United States has a comparative advantage in services is that by Kravis, Heston, and Summers (1983). It shows that goods (storable physical objects) and services are cheaper in a typically poor country than in a typically rich country but that services are more so than goods. Given this difference in the relative prices of services it is puzzling at first glance to find the United States, the wealthiest nation in the world, exporting services. The answer to the puzzle lies in the fact that services are highly heterogeneous, and services in the study by Kravis, Heston, and Summers are different from services exported from the United States.

In their study Kravis, Heston, and Summers deal with final-product services such as health, education, and government. These services are different from producer

10. In the case of transportation it is instructive to separate transportation services from transportation equipment and attendant personnel. For the former to be traded the latter must move between countries.

services such as accounting, advertising, and franchising, which are intermediate inputs used in the production of goods and other services ; they also facilitate the distribution of goods from the point of production to the point of consumption.

It appears that, except for a few final-product services such as travel and passenger transport, the services traded are producer services, and they are exported from the rich country to the poor country. Why, then, are final-product services both absolutely and relatively (compared with goods) cheaper in the poor country than in the rich country, whereas the converse is true for producer services?

In the case of final-product services it is likely, as argued by Bhagwati(1984), that the production function of a given service is the same for the poor and rich countries. Since most final-product services are relatively labor intensive, and since the wage-rental ratio is higher in the rich than in the poor countries, they are relatively cheaper in the latter.

In recent years there has been a high rate of technological innovation in producer services, and they are relatively intensive in human capital. This accounts for lower prices of producer services in the United States and for its export of producer services.

So far the only empirical study on factors determining comparative advantage in traded services (freight transport, passenger transport, and insurance) is that by Sapir and Lutz (1981). Although this study suffers from a paucity of data on a limited number of industries, its findings that physical and human capital are the key determinants support the position that trade in services need not be treated differently from trade in goods.

Direct Foreign Investment (DFI) in Services

As noted earlier, a large portion of international services transactions is carried out by foreign affiliates. Given this fact, studies such as that by Sapir and Lutz, which investigates the determinants of comparative cost for services trade, leave unexplained a significant part of services transactions. Studies are needed addressing DFI in services and reasons why DFI is relatively more important for international transactions in services than for those in manufacturing or agriculture.

There is a great deal of literature on DFI, but it rarely addresses DFI in services specifically. This neglect may be because DFI has been largely in goods ; thus, studies on it have followed this empirical pattern. An alternative explanation, one that could be offered by Hindley and Smith, is that economists do not see the necessity to distinguish services from goods in their study on DFI. Whatever the reason for this, it is important to find out whether DFI in services is sufficiently different from DFI in t

goods to warrant separate theorizing.

The modern theory of the MNE explains DFI as a process of internalizing market transactions. A firm may profitably internalize market transactions when there are market imperfections. A market may be imperfect because of its structural characteristics, such as economies of scale and differential advantages in knowledge, or a market may be naturally imperfect because of transaction costs inherent in market transactions.¹¹ Thus, internalization through DFI is socially efficient when market imperfections are natural, whereas it may not be when they are structural (Dunning and Rugman, 1985).

Since these market imperfections, whether natural or structural, are not unique to the markets for goods, the modern theory of the MNE should also apply to DFI in services. A question of greater interest, therefore, is whether market imperfections in services are likely to be more natural and less structural.

As noted previously, trade in services involves transactions between resident firms or individuals and nonresident firms or individuals, either across national boundaries or within national boundaries. In other words, for trade in services to take place either providers of services move to where receivers are located or receivers move to where providers are located or receivers move to where providers are located, except in the case of separated services. This characteristic—that services cannot move between countries without either providers or receivers moving—is what sets apart trade in services from trade in goods.

The cost of transporting services from one country to another is the cost of transporting either the providers or the receivers. It follows that the cost of transporting a unit of a service (in a conventionally traded unit) is in general higher than the cost of transporting a unit of a good. One reason for this is that the cost of transporting services of services in moving between countries. There is no such cost in trade in goods. For many services the transportation cost is too high for them to be traded between countries.

Establishing a foreign affiliate in services is thus a way of reducing the transportation cost necessary for trade. Services are provided by foreign resident firms or individuals to other resident firms or individuals, and international movement of providers for every sale of services is unnecessary. The initial cost of transplanting the firm or individual can be amortized over the life of the affiliate. It follows that DFI in services, which results in a decrease in transportation costs per unit of services tran-

11. These are sometimes called "Williamson-type" transaction costs and are attributed to bounded rationality, opportunism, and asset specificity. See Dunning and Rugman (1985) and Williamson (1975).or

saction, is socially efficient. This cost reduction is brought about through internalization of market transactions in which the market imperfection is due to a high cost of transportation.

A firm in a service industry may also establish a foreign affiliate instead of exporting its output (i. e., trade in services) because compared with a typical manufacturing establishment a service establishment encounters diseconomies of scale at a relatively small scale of operation (Stanbeck, 1979). The firm therefore does not reap any cost advantage by centralizing production at one establishment and exporting the output. The service firm is not, however, subject to the same diseconomies of scale, and consequently what is often found in service industries is a firm with multiple establishments. A foreign affiliate is simply an establishment in a foreign country.

III. The Liberalization of International Service Transactions and Its Economic Effects

In recent years much has been written about barriers to trade and investment in services and on how to reduce or eliminate these barriers.¹² Arguments for the liberalization of trade and investment in services cannot be persuasive, however, unless they are supported with firm theoretical and empirical analysis of the effects on the liberalizing country.

Perhaps the strongest argument made in favor of liberalization in terms of its effect on the importing country is that of Hindley and Smith, that is, that the theory of comparative cost applies to both commodities and services, as the goods in the theory are not specified as commodities to the exclusion of services. However, trade in services is small relative to transactions carried out by foreign affiliates, and consequently the theory of comparative cost explains only a small segment of the phenomenon. Furthermore, trade in services runs into fewer barriers than investment in services. Thus, what must be demonstrated is a case in favor of liberalizing direct foreign investment in services.

As argued earlier, DFI in services is socially efficient because it saves on transportation costs. What matters to the host country, however, is its share of the gains resulting from this economization. The modern theory of the MNE does little to explain how the gains will be distributed between the host and the investing countries. There is a broad range of views on this—from the extreme position that minor exceptions the developing host country has received no gains from international services trans-

12. See references in footnote

actions to the neoclassical position of shared gains.

One approach that might be used to settle this controversy would be to delineate conditions under which the host country can gain from DFI in services and then demonstrate that such conditions do exist. One of these conditions is that DFI increases competition in the industry affected, the presumption being that the more competitive the industry becomes the greater the improvements in allocative efficiency and x-efficiency. Furthermore, increased competition would tend to force foreign affiliates to pass on to consumers more of the quasi-rents on their technological superiority in the form of lower prices. The difficulty with this approach of demonstrating gains from DFI in services to the host country is that few countries have had DFI in services long enough to accumulate adequate data for such a project. An alternative approach, adopted in this paper, is to examine critically various arguments made in favor of maintaining barriers to DFI in services.

Perhaps the harshest criticism of DFI in services has been voiced by Clairmonte and Cavanagh (1984). In their view, the entry of the MNE into the host country's industry has insidious effects on the values of the society, and they are not merely limited to economic effects such as those on income and employment. The MNE may in fact have undesirable effects on social values and the cultural identity of the host country. Although such arguments against the MNE should not be lightly dismissed, they lie outside the realm of economic analysis and are thus beyond the scope of this paper. This analysis is confined to various arguments for restricting the entry of the MNE on economic grounds.

An UNCTAD study (1985b), states that many services such as railways and electricity generation (i.e., public utilities) are major employers, and governments sometimes regard employment as a more important issue than economic efficiency.

For some governments employment may undeniably be more important than economic efficiency, especially in the short run. But the question then is why the same argument does not also apply to manufacturing industries. The answer may be found in the fact that the output of a service affiliate is entirely for the local market, whereas that of a manufacturing affiliate is usually exported. The government of a developing host country may thus regard a manufacturing affiliate as contributing to the employment of its citizens but a service affiliate as displacing its local competitors and not adding any net employment.

A fallacy of this view is that it does not take into account indirect effects of DFI in services. These are the favorable effects on employment in other industries, which are brought about by increased efficiency in service industries. These effects may more than offset the possible negative effect on employment. Thus, protecting service industries for the purpose of creating employment may have a negative employment

effect on other industries and on the economy as a whole.

In most countries many service industries are highly regulated in terms of rates charged and entry conditions. Arguments in favor of regulations are that competition leads to the disruption of services, that buyers have only imperfect information on services provided, and that foreign entry increases dependency on foreign countries.

In the context of this paper there are two issues relating to regulation of service industries. The first is whether there should be such regulation; the second is whether there should be discrimination against the entry of the MNE. These are separate issues, since service industries may be regulated either without discrimination against the entry of the MNE or with restriction on its entry. This distinction becomes important when negotiations are carried out to reduce or eliminate barriers to foreign entry.

If regulations are bona fide and are not set up to restrict foreign entry, then demanding deregulation, however it may be justified in terms of economic reasoning and evidence, could be construed as an attack on national sovereignty over policy matters. If regulations are discriminatory, however, demands for "national treatment" of foreign affiliates are less likely to be viewed as an incursion into national sovereignty. The problem with this distinction between nondiscriminatory and discriminatory regulations is that it is difficult in practice to make the distinction. As pointed out by Alexander and Tan in their study of barriers to U.S. service trade in Japan (1984a), even if protectionist goals are the basis of regulation, they do not have to be overt to be effective. To make the necessary distinction in such a situation and to make the true objective for regulation transparent are formidable tasks.

An argument may be made against liberalizing service industries on the ground that it has a negative effect on the balance of payments. However, the liberalization may have a positive effect. Since it leads to improved efficiency in service industries, there will be a decrease in the relative prices of service intensive commodities. If service-intensive commodities are exportables, the liberalization will bring about an increase in the country's exports, whereas if they are importables, it will lead to a decrease in imports. The liberalization will thus improve the country's trade balance, although it may have an adverse direct effect on the service account. This link between the liberalization of service industries and trade in goods needs to be further elaborated and empirically estimated. Empirical demonstration of the link may help allay the fear on the part of the developing countries that liberalizing service industries will lead to balance-of-payment difficulties.

This points to an important but neglected fact—that price distortions can also be caused by restrictions on investment. The World Bank's World Development Report 1983 discusses distortions in the prices of foreign exchange, capital, labor, and infras-

structure services but fails to discuss price distortions resulting from investment restrictions in services. In this world of increasing factor mobility it no longer seems valid to regard the immobility of factors as a binding natural constraint. As Sampson and Snape (1985) point out, with factor mobility, a new point of reference—which might be free trade cum free investment—needs to be specified. Only with that point of reference can the question of price distortions be discussed.

Perhaps the most important effect of liberalizing service industries is that on "distributional coalitions." As Olson (1982) states, regulations whether discriminatory against foreign entry or not, are creations of distributional coalitions, and they render the economy less capable of coping with technological changes and external shocks. If external political pressure leads to liberalization and deregulation of service industries, distributional coalitions would be incapacitated. This effect of liberalization cannot be anything but beneficial to the economic development of the country.

IV. Conclusions

This paper has addressed the extent of the internationalization of U.S. service industries, theoretical issues relating to trade and investment in services, and some of the possible effects of liberalizing international service transactions. Knowledge of these is still meager, as research on trade and investment in services has just research have yet to be collected and become widely available for scrutiny.

In spite of this lack of knowledge one thing seems to be beyond doubt—with the continuing industrialization of many developing countries and with continuing technological innovations in U.S. service industries, the United States is finding its comparative advantage shifting increasingly toward service industries. This shift requires structural adjustment in the U.S. economy, with resources moving from manufacturing industries to service industries. For this structural adjustment to be carried out smoothly it is necessary that other countries undertake policies that will accommodate the adjustment. These countries cannot expect to continue to expand exports of manufactured goods to the United States without at the same time making it possible for U. S. service industries to expand their trade and investment abroad. Without such accommodating policies structural adjustment in the U.S. economy will be much more difficult, and this difficulty will only increase political pressure for protectionist measures against imports of many manufactured goods. In other words, the Politico-economic effect of other countries' restrictions of international service transactions may be limited expansion of their manufactured exports to the United States.

Liberalization of international service transactions may thus lead to expansion of

international trade in manufactured goods in two ways: First, it is likely to improve comparative advantage in the manufacturing industries of services-importing countries as their service industries become more efficient and as services become less costly as inputs for manufactured output. Second, liberalization would lessen political pressure for protectionist measures in the United States against manufactured imports. This linkage between international service transactions and trade in manufactured goods certainly requires further study. However, knowledge of this linkage is sufficient to warn against regarding international service transactions as a matter affecting only the service sector.

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