
Chapter 2

Measuring International Service Activity

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This report addresses two fundamental questions. First, what is the impact of international service activity on the U.S. balance of payments? Second, to what extent are service products exported and imported directly, as opposed to being sold in foreign markets through local affiliates? To answer these and related questions, it is first necessary to adopt a rigorous set of definitions for trade in services, the subject of this chapter, and for service transactions themselves—a subset of invisible transactions, and one of the subjects of chapter 3.

In general, an American company wishing to sell services overseas—or a foreign company wishing to sell services here—can choose from alternatives that include direct exports, investments in foreign affiliates, licensing agreements, and joint ventures. While these can be combined in various ways, the underlying alternatives reduce to two—exporting services directly, or operating in some way through foreign affiliates; licensing agreements can be viewed as exports of intangible assets or rights, while joint ventures involve the establishment of an affiliate.

Services can be exported directly if the service is transportable (motion pictures, computer software), if the buyer comes to the source of supply (travel services), or if a cross-border linkage between buyer and seller can be established (either directly, as in the case of transportation and telecommunications, or by sending skilled employees to the site, as in construction and management consulting). Alternatively, firms may choose to do business in foreign markets by investing in foreign affiliates (and may export to them). This maybe the preferred mode of operation because of inherent difficulties in producing or marketing a particular service away from the site of consumption (many kinds of health services), because of barriers preventing exports to the buyer nation (many governments limit or prohibit cross-border insurance underwriting), or because of competitive advantages stemming from local operations (ad-

vertising, many other types of business services). The equity share held by an American firm in a foreign affiliate may range from 10 to 100 percent; the U.S. Government treats holdings of less than 10 percent as portfolio investments rather than foreign direct investment (FDI). Other governments may use different definitions.

Exports and imports enter the balance of payments directly because buyer and seller reside in different countries. Local sales by foreign affiliates are not U.S. balance of payments transactions, but direct investment may nonetheless affect the balance of payments in several ways—e. g., transfer of investment funds, repatriation of profits from the foreign affiliate, licensing agreements and other charges for services transferred between parent and affiliate. Of the sales of the foreign affiliate, only exports from its own country of operation constitute balance of payments transactions; only if those exports were sold to the United States would they affect the U.S. balance of payments.

This fundamental distinction leads to the two alternative measures of international service activity that OTA has adopted for this report. One is the standard balance of payments measure of exports (receipts) and imports (payments), reflecting the flow of service products across national borders. This is the indicator most significant for direct impacts on the Nation's economy —e.g., employment generated by export sales.

The second and broader measure includes exports while also reflecting the operations of foreign affiliates. Particularly for services, where both the nature of production and the frequency of regulatory and trade barriers may make FDI the only way to penetrate a market, affiliate sales should be included in a comprehensive measure of international activity. The more useful indicators for analytical purposes treat service output on an ownership rather than a geographic basis. Thus OTA defines the "foreign revenues" of U.S. firms as including

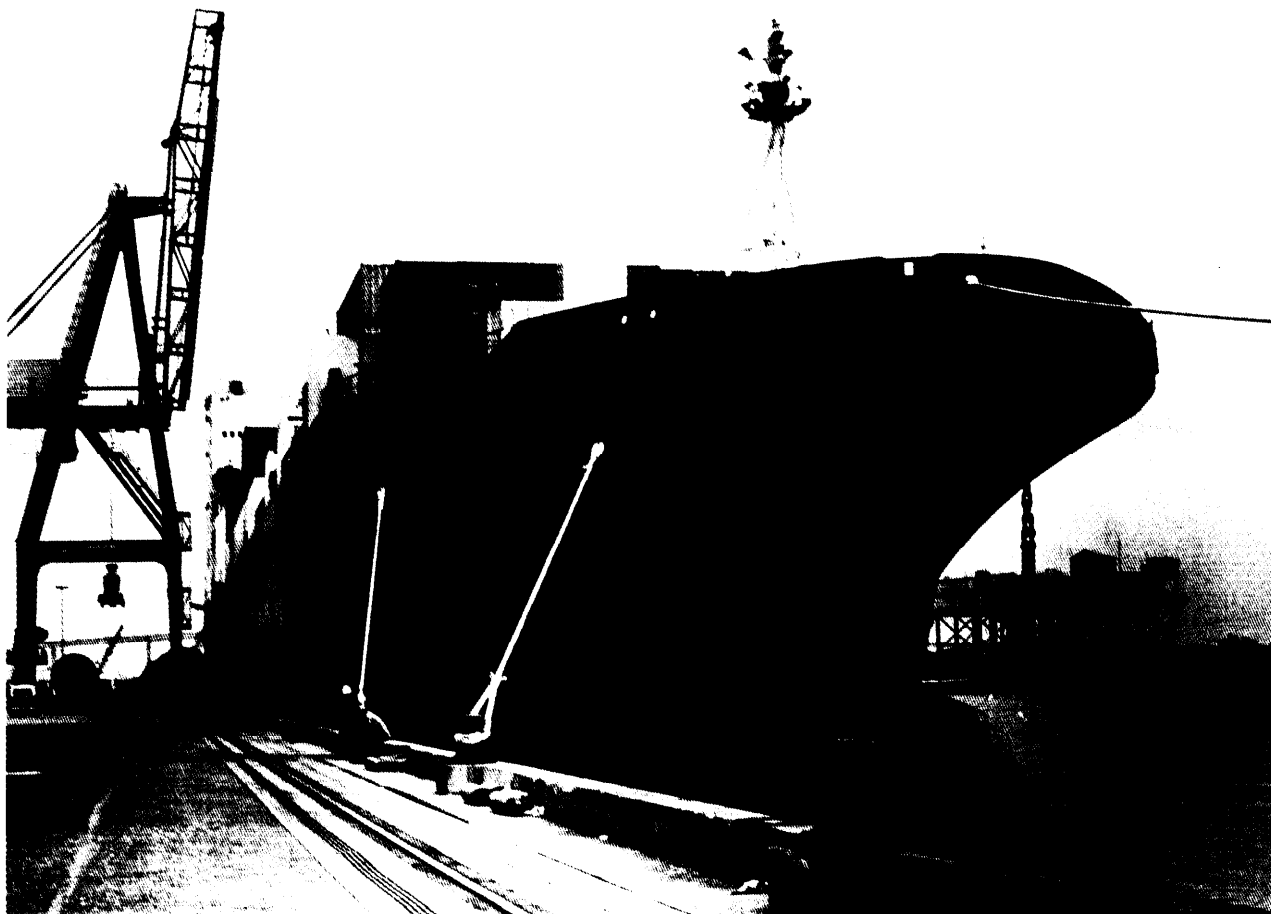


Photo credit Port of New Orleans

Foreign ship docked in New Orleans. U.S. imports of freight transportation services came to \$10.8 billion in 1984.

sales by U.S. affiliates regardless of where the service is produced.¹

¹As such, the foreign revenues measure resembles the "ownership" measure suggested in "International Services Transactions of the United States: Proposals for Improvement in Data Collection," prepared by E.P. Lederer, W. Lederer, and R.L. Sammons for the Departments of State and Commerce and the Office of the United States Trade Representative, January 1982. However, Lederer, et al., define exports on an ownership basis to be sales by a U.S.-owned entity to a non-U.S.-owned entity. As discussed more fully below, the definition of foreign revenues used by OTA is based on sales by a U.S.-owned entity to a nonresident of the United States, thus combining the purely geographic and purely ownership concepts of international trade and yielding a definition more nearly consistent with the normal definition of foreign revenues that a multinational corporation would tend to employ (e. g., in its annual report).

Ideally, only the U.S. ownership share of sales by affiliates should be included in the foreign revenues measure. For exam-

Direct exports of services by U.S.-owned firms fit the definitions for both the ownership (i.e., foreign revenues) and balance of payments

pie, if an overseas affiliate with non-U. S. sales of \$100 million were 25 percent owned or controlled on an equity basis by a U.S. firm, the contribution to U.S. foreign revenues of that firm should be taken as \$25 million. In practice, data on sales by foreign affiliates are not available on a U.S.-equity-share basis, only total sales by affiliates. The extent of the distortion will vary from industry to industry. For example, in 1983 almost all of the sales by overseas affiliates in management, consulting, and public relations were accounted for by majority-owned affiliates (i.e., over 50 percent U.S. equity control). In this case, using total sales as a proxy for the U.S. equity share of sales is a reasonable approximation. However, for transportation and communication affiliates, only about 18 percent of total sales were by majority-owned affiliates, with the rest accounted for by firms where U.S. equity holdings ranged from 10 to 50 percent.

measures and are included in both measures. Transactions between parent firms and their foreign affiliates should be included in the balance of payments measure, but netted out when measuring foreign revenues on an ownership basis (both buyer and seller fit under the same national umbrella of ownership). Exports of services from the United States by a foreign owned or controlled U.S. firm are excluded from measures of foreign revenues on an ownership basis, but do constitute U.S. exports on a balance of payments basis. Similarly, sales of services to the United States by U.S. affiliates abroad are not included in the foreign revenues measure; such transactions are U.S. imports in a balance of payments sense, but not in an ownership sense (both buyer and seller are U. S.-owned). Thus:

U.S. exports (balance of payments basis) = export sales of all firms located in the United States, including sales to the overseas affiliates of U.S. firms and the exports of foreign-owned firms in the United States.

Foreign revenues of U.S. firms (ownership basis) = foreign sales of all U.S.-owned firms regardless of location, and therefore including both exports from the United States of U.S.-owned firms and sales to foreign entities by overseas affiliates of U.S. firms. Transactions between U.S. parent and foreign affiliate are excluded, as both buyer and seller are U. S.-owned; transactions between U. S.-owned firms located overseas and unaffiliated U.S. firms are excluded for the same reason.

A parallel set of definitions holds on the import side:

U.S. imports (balance of payments basis) = sales to U.S. residents by all firms located

in other countries, including the foreign affiliates of U.S. firms,

U.S. revenues of foreign firms (ownership basis) = sales to U.S. residents of all foreign-owned firms regardless of location (i. e., including both foreign-based firms and the U.S. affiliates of foreign firms). Transactions between U.S. affiliates and their foreign parents are excluded, as both buyer and seller are foreign-owned. Transactions between foreign-owned U.S. firms and unaffiliated foreign firms are likewise excluded.

Strictly speaking, a complete picture of trade in services on an ownership basis should also include purchases of services in the United States by foreign-owned firms located here, and local purchases by U. S.-owned firms abroad. Because of a nearly complete vacuum in the data on such purchases, OTA has had to omit them; however, indirect evidence indicates that they may be substantial. For example, in 1982 nonbank foreign affiliates of nonbank U.S. firms reported that their total expenses net of taxes, employee compensation, and nonoperating expenses came to \$742 billion; for foreign affiliates in the United States, the corresponding total was \$440 billion. These expenses reflect the cost (excluding labor) of goods sold, as well as marketing, administrative, and other indirect expenses. Some portion of these totals represents local purchases of services used in the course of operations. OTA's estimates of U.S. service exports, imports, and foreign revenues do not in any instance exceed \$100 billion, even at the upper bounds of the estimated ranges. Even if local purchases of services were a small fraction of affiliate expenses, they would probably be significant relative to this amount of services trade. Unfortunately, there is no way to estimate these local purchases, even roughly,