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# 6 International Competition in Services

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## *1. Rachel McCulloch*

### 6.1 Introduction

Production of services now dominates economic activity in the United States. Whether hailed as the dawn of a new "information economy" or deplored as the key symptom of American industrial decline, the trend in employment is itself beyond dispute. By the 1980s, only one U.S. worker in four was employed in the sectors of the economy producing tangible outputs—manufacturing plus mining, construction, and agriculture. But the increasing role of service-sector employment is by no means unique to the United States. Similar trends have been reshaping the economies of the other industrialized nations and even many less-developed countries.

Given this dramatic economic transformation at home and abroad, it may seem natural to find increasing attention on the part of U.S. policymakers to international competition in service activities. However, unlike domestic production, trade among nations is still dominated by exchange of tangible goods. Moreover, while the role of international service transactions is already significant and while some sectors show potential for rapid growth, the service transactions prominent in international commerce are quite different from the activities typical of the domestic "service economy."

In recent decades, national markets for tangible goods have become increasingly integrated, and virtually all U.S. goods-producing industries have experienced significant growth in both exports and competing imports. However, the rapid domestic expansion of service industries reflects the rising importance of health, education, housing, public administration, and other largely untraded service categories in final

demand. The current U.S. interest in international service competition is focused on an entirely different group of industries, especially those supplying information-based business services. These industries are small relative to total domestic service-sector employment. And, although some part of their domestic output is "traded" internationally, that is, produced by residents of one nation for purchase by those of another, U.S. firms serve international markets primarily via local sales of foreign affiliates rather than exports.

### 6.1.1 Services on the Policy Agenda

Long ignored by trade officials as a generic issue, international competition in services has achieved high visibility on the global policy agenda just a few years after the subject was first raised by the United States. At the November 1982 ministerial meeting of the General Agreement on Tariffs and Trade (GATT), the United States trade representative called for inclusion of service transactions in forthcoming multilateral negotiations.[1] But the developing countries were strongly opposed, and the ministers merely recommended that members with an interest in service issues undertake their own national studies, exchange information, and report their results at the 1984 GATT session.[2]

Under continuing pressure from the United States, GATT members agreed in September 1986 to include services in the new Uruguay round of multilateral trade negotiations. Yet there remains widespread skepticism regarding progress on service issues. Abroad, the early and persistent enthusiasm of the United States for negotiations on services has caused U.S. trading partners to assume, perhaps incorrectly, that the United States will emerge as the major beneficiary of any liberalization achieved in this area.

The developing nations, led by Brazil and India, actively resisted inclusion of services on the GATT agenda. This resistance was overcome through a compromise that will keep services on a separate negotiating track from merchandise trade, but the developing nations are nonetheless suspicious of the outcome. While the other industrialized nations did eventually support the U.S. initiative on services, few trade officials abroad appear to view the prospects with any degree of enthusiasm. And even among the U.S. policymakers who pressed so vigorously for GATT negotiations on services, opinion remains divided on the best way to bring conflicting national policies toward services under the discipline of GATT rules.

Analysts in some U.S. government agencies worry that the GATT initiative on services may be premature. An extreme example is a recently issued report of the Office of Technology Assessment that openly suggests U.S. officials may have erred, perhaps because their decisions were based on inadequate data. The report's summary sec-

tion gives this evaluation of the U.S. decision to promote negotiations on services:

> Consider, specifically, the decision by the United States prior to the 1982 GATT Ministerial to place a high priority on services in the next round—a decision taken in the midst of a period of deterioration in the ability of the world trading system to manage the impacts on trade in goods of nontariff barriers, bilateralism, and the national industrial policies that have become standard in many parts of the world. Would a better grasp of the prospects for U.S. exports of services have led to a different approach to the new round? Certainly the poor quality and coverage of the data impair the ability of policymakers to gauge the importance of services trade—as a whole, on a sector-by-sector basis, or bilaterally. (U.S. Congress, Office of Technology Assessment 1986, 7)

### 6.1.2 Analysis of Competition in Services

Although there is broad agreement on the poor quality of services data, progress in clarifying the nation's policy goals has been hampered also by lack of analytical guidance. Given the huge theoretical and empirical literature on international competition in goods, surprisingly little attention has been devoted until recently to international competition in services. In most empirical research on international trade, services are simply ignored or are treated as nontradable goods. Theorists, in contrast, often imply or state without elaboration that trade in services is conceptually no different from trade in goods, so that standard analyses in areas such as comparative advantage and gains from trade apply equally to international commerce in services.

Each approach has some economic justification. For the classic textbook example of haircuts and for many other types of services important in domestic production, foreign competition is indeed a negligible influence. Yet some important services, including shipping, transportation, and a variety of financial services, have been actively traded for centuries; for these, the determinants of trade and the gains from trade are fundamentally similar to those for merchandise trade.

But given the evident heterogeneity of the activities included in the category, does "services" even constitute a useful analytic classification, or is it merely a convenient label for a statistical residual?[3] The political and economic issues raised by international competition among producers of tangible goods have in practice proved far from simple to resolve, despite ample theoretical and empirical guidance; consideration of services introduces additional layers of complexity. These reflect the intangible nature of the outputs of many service activities, the locational and temporal constraints linking service providers to consumers, and the extensive role of domestic regulation in service activ-

ities. Analysts have only begun to grapple with the implications of these special features. In terms of both measurement and interpretation, analysis of service issues is still in its infancy.

All this raises obvious questions about the new GATT negotiations. Do policymakers have a sufficient knowledge base to shape international rules that will promote global efficiency? And do U.S. trade officials have a sufficient knowledge base to identify and pursue the nation's own economic interests in the area of service competition? If not, what can be gained by putting U.S. influence and prestige on the line to bring services into the GATT framework? Is the services item on the GATT agenda truly a generic issue, or is it fundamentally an attempt to improve the international position of a small set of U.S.-based multinational firms in a few industries?[4]

This paper surveys the main issues and evidence relating to U.S. international competition in services. The next section reviews the forces that have catapulted the services issue to the top of the U.S. agenda for forthcoming GATT negotiations.

Section 6.3 addresses what is meant by services and by trade in services, focusing on key ambiguities of definition. The discussion emphasizes similarities and differences within the service sector as conventionally defined and between "services" and tangible "goods."

Sections 6.4 and 6.5 interpret evidence on the growing importance of services in U.S. production and in international transactions. This evidence indicates the extent to which internationally traded services are unrepresentative of the services in domestic production.

Section 6.6 evaluates the influence of various types of national policies on international competition in services and compares barriers to services competition with nontariff distortions of merchandise trade.

Section 6.7 analyzes some of the choices facing U.S. officials and evaluates the advantages of alternative negotiating approaches in dealing with services issues.

The final section sums up principal conclusions emerging from the survey and emphasizes the links between international competition in services and other international issues on the policy agenda.

## 6.2 Services in the Policy Spotlight

For more than a generation, the majority of U.S. workers have been employed in service-producing sectors; for well over a century, employment in the service-producing sectors has been growing steadily as a share of the U.S. labor force (see tables 6.3–6.5 below). Thus, while the United States can accurately be described as a "service economy," this is hardly a recent development. Why then has the issue of services, barely mentioned in earlier GATT negotiations, emerged

suddenly as a top U.S. priority for the Uruguay round? The burgeoning interest on the part of policymakers and the U.S. business community reflects several independent developments, each of which has generated some domestic support for market-opening measures in this area.

The first development is increasing concern in the United States about the nation's performance in international markets. Until the end of the 1960s, the technology gap between the United States and other industrialized nations appeared to provide a permanent advantage over foreign competitors, especially in the high-technology industries. Through massive research and development (R&D) expenditures, U.S. firms created a steady stream of new products and processes. These innovations allowed American manufacturing to remain internationally competitive, even given labor costs far higher than those abroad. But the technology gap narrowed with a speed that few anticipated. Through their global investments, American companies played a major role in the process.

In 1972, the United States recorded its first postwar deficit on merchandise trade. While the 1972 trade deficit of $2 billion seems insignificant relative to those of recent years, it stimulated questions about the course of the U.S. economy and its future position in world markets. The accompanying employment shift toward services, while not a new development, suggested the possibility that U.S. international comparative advantage was shifting from goods to services.

This impression was strengthened by U.S. balance of payments data that revealed a growing surplus in the "services" component of the current account. As U.S. merchandise trade performance deterioriated rapidly in the first half of the 1980s, services continued to make a significant positive contribution. As recently as 1982, the U.S. surplus on service transactions was large enough to reverse a sizable deficit on merchandise trade, so that the United States still showed a global surplus in the broader category of "goods and services" trade (see table 6.1). From this, some analysts inferred that increased market access abroad for U.S. service industries could further enhance their contribution to overall U.S. current account performance.[5]

Ironically, the healthy growth in the U.S. surplus on services was due mainly to increases in net earnings on foreign investments at a time of unusually high interest rates. Since then, interest rates worldwide have fallen dramatically. Moreover, the U.S. net investment position has reversed, with the United States emerging as the leading borrower in international capital markets. Accordingly, the contribution of investment income to U.S. current account performance is likely to become negative in the near future.

In contrast, as detailed in table 6.2, the types of service exports most likely to rise as a consequence of improved market access abroad

**Table 6.1 U.S. Current Account by Major Component, 1977–85 (billions of dollars)**

| | 1977 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|---|
| Merchandise trade | | | | | | | |
| Exports | 120.8 | 224.3 | 237.1 | 211.2 | 201.7 | 219.9 | 214.0 |
| Imports | 151.9 | 249.7 | 265.1 | 247.6 | 268.9 | 334.0 | 338.3 |
| Balance | 31.1 | −25.5 | −28.0 | −36.4 | −67.2 | −114.1 | −124.3 |
| Business services | | | | | | | |
| Exports | 23.4 | 37.0 | 41.7 | 41.7 | 41.8 | 43.8 | 45.1 |
| Imports | 20.9 | 29.4 | 32.1 | 32.6 | 35.3 | 41.5 | 44.9 |
| Balance | 2.5 | 7.6 | 9.6 | 9.1 | 6.4 | 2.3 | 0.2 |
| International investment income | | | | | | | |
| Exports (receipts) | 32.2 | 72.5 | 86.4 | 84.8 | 78.0 | 87.6 | 90.5 |
| Imports (payments) | 14.2 | 42.1 | 52.3 | 55.3 | 52.6 | 68.5 | 65.8 |
| Balance | 18.0 | 30.4 | 34.1 | 29.5 | 25.4 | 19.1 | 24.7 |
| Other goods and services | | | | | | | |
| Exports | 7.9 | 8.7 | 10.5 | 12.4 | 13.0 | 10.7 | 10.2 |
| Imports | 7.2 | 12.2 | 13.1 | 14.5 | 14.7 | 14.0 | 13.6 |
| Balance | 0.7 | −3.6 | −2.5 | −2.0 | −1.7 | −3.3 | −3.4 |
| Total goods and services | | | | | | | |
| Exports | 184.3 | 342.5 | 375.8 | 350.1 | 334.5 | 362.0 | 359.7 |
| Imports | 194.2 | 333.5 | 362.6 | 350.0 | 371.5 | 458.0 | 462.6 |
| Balance | −9.9 | 8.9 | 13.2 | 0.1 | −37.0 | −95.9 | −102.9 |
| Net unilateral transfers | −4.6 | −7.1 | −6.8 | −8.1 | −8.9 | −11.4 | −14.8 |
| Current account balance | −14.5 | 1.9 | 6.3 | −8.1 | −46.0 | −107.4 | −117.7 |

*Source:* U.S. Department of Commerce 1986, table 40.

**Table 6.2 U.S. Business Services Trade by Component, 1977–85 (billions of dollars)**

| | 1977 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 |
|---|---|---|---|---|---|---|---|
| Total business services | | | | | | | |
| Exports | 23.4 | 37.0 | 41.7 | 41.7 | 41.8 | 43.8 | 45.1 |
| Imports | 20.9 | 29.4 | 32.1 | 32.6 | 35.3 | 41.5 | 44.9 |
| Balance | 2.5 | 7.6 | 9.6 | 9.1 | 6.4 | 2.3 | 0.2 |
| Travel | | | | | | | |
| Exports | 6.2 | 10.6 | 12.9 | 12.4 | 11.0 | 11.4 | 11.7 |
| Imports | 7.5 | 10.4 | 11.5 | 12.4 | 14.0 | 16.0 | 17.0 |
| Balance | −1.3 | 0.2 | 1.4 | 0.0 | −2.6 | −4.6 | −5.4 |
| Passenger fares | | | | | | | |
| Exports | 1.4 | 2.6 | 3.1 | 3.2 | 3.0 | 3.0 | 3.0 |
| Imports | 2.7 | 3.6 | 4.5 | 4.8 | 5.5 | 6.5 | 7.4 |
| Balance | −1.4 | −1.0 | −1.4 | −1.5 | −2.4 | −3.5 | −4.4 |
| Shipping and other transportation | | | | | | | |
| Exports | 7.1 | 11.6 | 12.6 | 12.3 | 12.6 | 13.8 | 14.3 |
| Imports | 8.0 | 11.8 | 12.5 | 11.7 | 12.3 | 14.7 | 16.3 |
| Balance | −0.9 | −0.2 | 0.1 | 0.6 | 0.3 | −0.9 | −2.0 |
| Proprietary rights | | | | | | | |
| Exports | 4.9 | 7.1 | 7.3 | 7.1 | 7.9 | 8.1 | 8.5 |
| Imports | 0.5 | 0.7 | 0.7 | 0.2 | 0.2 | 0.5 | 0.2 |
| Balance | 4.4 | 6.4 | 6.6 | 6.9 | 7.6 | 7.6 | 8.3 |
| Other business services | | | | | | | |
| Exports | 3.8 | 5.2 | 5.9 | 6.6 | 6.9 | 7.5 | 7.6 |
| Imports | 2.2 | 2.9 | 3.0 | 3.5 | 3.4 | 3.8 | 4.0 |
| Balance | 1.7 | 2.2 | 2.9 | 3.1 | 3.5 | 3.7 | 3.6 |

*Source:* U.S. Department of Commerce 1986, table 41.
*Note:* Details may not sum to totals due to rounding.

constitute a very minor portion of the relevant totals. Thus, even highly favorable conditions can be expected to have only a modest effect on the aggregate international position of the United States, although such conditions would provide substantial benefits to a number of U.S. firms.

While some proponents of GATT negotiations on services have stressed the expansion of service trade as a potential replacement for lost market share in manufactured products, others have emphasized complementarity with merchandise trade. In a variety of service activities that include distribution, training, repair, telecommunications, computer software, construction, and leasing, market access in services enhances market opportunities in related merchandise transactions.[6] This linkage implies that barriers to international competition in services may in effect constitute an important category of nontariff barrier to international competition in *goods*, especially manufactured goods.

An additional stimulus for attention to services arises from the national debate on "deindustrialization" of the American economy. At a time when U.S. manufacturing employment shows little promise of growth, expansion of the service industries represents an alternative means to improve the nation's economic prospects. Yet the forecast that newly created service jobs will replace jobs lost in manufacturing is itself controversial.

Optimists focus on a relatively narrow set of knowledge-based service activities, including ones closely linked to high-technology manufacturing. While some of these sectors have indeed enjoyed rapid growth in recent years, their size relative to the broad aggregate of services is quite small, both in the domestic market and in international transactions. Moreover, further decline in the size of the U.S. manufacturing sector is likely to slow or even reverse the growth of associated service activities as well. And U.S. labor unions, which are concentrated in manufacturing industries, point ominously to the low average earnings in many types of service employment and to the lower average rate of productivity increase in services relative to that in the goods-producing sectors.[7]

Support for including services in future GATT negotiations has also come from the U.S. public officials charged with forming and implementing the nation's policies toward trade. To many policymakers, services represent a promising area for continuing U.S. efforts to maintain open world markets. Negotiations on services could extend the discipline of GATT rules to a new and important category of transactions and might also help maintain the forward momentum of the liberalization process at a time when the prospect of further progress on merchandise trade issues appears dim. Anticipated trade and employment gains from increased service exports could help revitalize flagging political support at home for maintaining open markets (Feketekuty and Krause 1986, 89).

Finally, a major part of the impetus for the recent U.S. emphasis on service issues has come directly from the industries and specific firms with an important economic stake in serving international markets. Large international firms in insurance and other financial services activities and in business support services such as accounting, law, telecommunications, and data processing have actively promoted U.S. initiatives in the area of services. In many cases, U.S. firms expect their best customers abroad to be the foreign affiliates of major domestic clients. Thus, the global expansion of competition in services is in part a reflection of the earlier globalization of U.S. manufacturing industries.

In pressing their case for increased access to foreign markets, the interested firms and industry associations usually make no distinction between services exported from the United States and those provided

locally to customers abroad by foreign affiliates of U.S. companies. Yet the two modes of serving foreign markets need to be separated for purposes of policy formation. Both types of transactions can provide substantial benefits to the U.S. economy. They will, however, generate quite different effects on domestic employment and income distribution.

Moreover, improved access for international sales via foreign subsidiaries is fundamentally not a trade issue at all, but rather a matter of national policy abroad toward direct foreign investments by U.S. firms. While consideration of trade in services already represents a significant extension of the GATT mandate beyond its current domain, the inclusion of service activities of foreign affiliates of U.S. firms would entail still a further expansion of GATT jurisdiction.[8] This initiative comes at a time when the GATT has been less than notably successful in its traditional work of maintaining open world markets for merchandise trade.

In sum, while a number of firms evidently anticipate substantial benefits from U.S. action on services, the national stake in the issue, whether in absolute terms or relative to other issues confronting members of the GATT, is less clear. Also, at least part of the broader enthusiasm for expanding U.S. market access in services reflects a superficial understanding of the role and importance of services in U.S. domestic production and in the nation's international transactions. Has liberalizing international competition in services been ranked too high on the nation's policy agenda? We return to this question at the end of the paper.

## 6.3 Analytical Issues

Despite continuing discussion of the nation's metamorphosis into a "service economy" and, more recently, of the growing importance of U.S. international competition in services, only meager attention has been paid to precisely what activities are entailed or exactly how these activities enter into international commerce. This section focuses on the fundamental issue of what is meant by services, emphasizing similarities and differences within the industries conventionally grouped together as "services" and between the categories of "services" and tangible "goods."

### 6.3.1 How Services Differ

Which are the industries included within the broad category of services? In terms of domestic employment, government (federal, state, and local) is by far the largest among U.S. service industries, obviously one for which international competition is not a pressing concern. Other major domestic service-producing sectors include transportation and

public utilities, wholesale and retail trade, health, and financial and business services.[9] It is in the last category that the United States apparently hopes to make major gains via access to foreign markets. But in terms of international trade, travel and transportation currently account for the lion's share of total U.S. receipts from all "service" transactions (excluding income from direct foreign investment; see tables 6.1 and 6.2).

Although a number of scholars have attempted to identify the essential features that separate services from other economic activities, the inherent heterogeneity of the category implies that there will be important exceptions to any allegedly common feature. Heterogeneity may be on the rise, with the increasing importance of services that are "knowledge based" or "information based." These closely related categories include services that provide access to proprietary information (from mailing lists to industrial patents and trade secrets) and the services of individuals with specialized knowledge (from nursing to law). In practice, the two categories overlap; for example, an increasing range of services can be provided directly to the customer by skilled individuals or offered indirectly in the form of proprietary computer software packages.

Fundamentally, service activities may be distinguished either by the nature of their products or by the way in which those products are supplied.[10] Most service industries produce outputs that are intangible and nonstorable, although the rapidly growing category of information-based services offers important exceptions. For sectors such as telecommunications and computers, services and tangible goods are often provided together as part of a single transaction. Another characterizing feature of service products is high value-added relative to gross output. Again, however, there is a major exception, wholesale and retail trade, if the value of goods sold is included as an input.

Looking at the production process, services often require physical proximity of the producer and the consumer, a distinction that is particularly relevant for international competition in these sectors, although new communication technologies are changing the importance of this production constraint. For some knowledge-based services, a salient characteristic is strong economies of scale in production. Scale economies may reflect large fixed costs of physical equipment, as in telecommunications; large fixed costs of research and development, as for patented industrial knowledge; or large fixed costs of acquiring managerial or technical expertise which can then be extended inexpensively to additional customers, as in management consulting. Especially in financial service activities, scale offers the further cost advantage of internal risk diversification.

### 6.3.2 International Competition in Services

In general, international trade may be regarded as the *indirect* exchange of productive inputs embodied in the goods traded, that is, as a substitute for the direct movement of inputs across national boundaries.[11] Opportunities for and gains from international trade in services thus depend on the extent to which this indirect exchange is feasible. Since services are distinguished from tangible goods in part by greater constraints on the physical location of producer and consumer, it is helpful to classify services with respect to such constraints. There are four possible cases.[12]

1. No *required*[13] movement of providers or demanders. These have been called "separated" services (Sampson and Snape 1985) and "disembodied" or "long-distance" services (Bhagwati 1984). Such services are fundamentally similar to tangible goods with respect to opportunities for trade and gains from trade.

2. Required movement of providers (demander-located services). Where physical proximity to the market is essential, international competition necessarily entails movement of capital or labor to the production site, as in construction. However, the production process may also involve some inputs in another location (e.g., research and development or management). Deardorff (1985) calls these additional inputs "absent factors."

3. Required movement of demanders (provider-located services). The obvious example is tourism, but in practice, health and education are also important categories. Free "trade" in such services requires unrestricted international movement of potential demanders.

4. Required movement of either providers or demanders. In this case, production requires proximity, but the activity is "footloose" and can occur in the importing nation, the exporting nation, or even in a third location.

Another relevant classification of services is with respect to their relationship to merchandise trade. Some internationally provided services are complementary to trade in tangible goods (e.g., transportation, insurance, computer software), some offer alternatives to goods trade (e.g., licensing, computing services), while a third group is unrelated to goods trade (e.g., health and education).

Both classification schemes can be useful in sorting out issues of international competition (and barriers to international competition) in the broad range of activities usually lumped together in the category of services. However, any such taxonomy is necessarily arbitrary, and rapid changes in technology may in any case shift a particular activity from one niche into another.

U.S. firms may offer their services (and also tangible products) for sale abroad through direct exports or through local domestic transactions of a foreign affiliate.[14] In standard usage, a U.S. service "export" entails production by U.S. residents of a service purchased by a resident of another nation. It is thus the country of residence of the producer and buyer, rather than the site of production, that distinguishes trade in services. While the same definition applies for tangible goods, most trade in goods is accomplished by the movement of the goods themselves across national boundaries. But except for separated services (case 1 above), trade in services involves the movement of the producer and/or the buyer of the service.

As an alternative to exporting, a U.S. firm may establish a foreign subsidiary or enter into a joint venture with a foreign firm. In this case, the affiliate abroad can provide the service. Most of the affiliate's labor requirements will be met locally, although some skilled workers or managers may also move for a time period from the United States to the site of the foreign affiliate. In both trade and affiliate sales, there is a link to the U.S. firm, but sales abroad of U.S. affiliates do not necessarily entail a specific transaction between a U.S. resident and a resident of another nation and thus may not enter directly into the U.S. balance of payments accounts.

However, exporting and affiliate sales are not mutually exclusive modes of participation in foreign markets. In fact, they are often complementary activities of multinational corporations (see Bergsten, Horst, and Moran 1978, chap. 3). Likewise, trade and factor movements, or exports of goods and exports of services, have significant complementarity in actual transactions. The potential links among alternative modes of competition in foreign markets are highlighted in the following comparison, adapted from Feketekuty and Krause (1986), of the foreign sale of an automobile (tangible good) and of insurance (service). In both instances, movement abroad of U.S. factors, establishment of a foreign affiliate, and exporting are all potentially present.

To sell automobiles abroad, the U.S. producer usually establishes a dealer network in the foreign market. The U.S. firm need not own the dealerships, but in practice often does so. The firm also sends sales representatives to the foreign market to negotiate the terms under which the cars will be sold, government relations representatives to persuade foreign governments that safety and environmental standards have been met, and engineers to train and advise local mechanics. The automobiles themselves may be exported from the United States or produced by a local subsidiary. Often, market penetration begins with exporting and may be followed by establishment of a local subsidiary. Even then, the local operation may simply assemble automobiles from parts imported from the United States.

The U.S. insurance company wishing to sell policies abroad will likewise require a dealer network of local insurance brokers or agents to sell and service the policies. Again, the U.S. company need not own the brokerages but may do so. The U.S. insurance company will likewise need to send government relations managers to satisfy the foreign government that local regulatory requirements have been met, sales representatives to deal with local brokers, and perhaps management consultants to help train the local brokers.

For both automobiles and insurance, what is "exported" conceptually to the foreign market represents just a fraction of the value of the purchase made by the final consumer. Value added by local inputs, including sales and service personnel and transportation, makes up the difference. In the case of insurance, what is exported by the U.S. company is mainly risk bearing and related industry know-how, as well as other "headquarter services" of the parent corporation.

Attempting to classify any given transaction as either an export or an affiliate sale may thus produce a distorted overall picture of international competition. A more appropriate question concerns the relative importance of the two modes of foreign competition. The extent to which a given foreign transaction is carried out through affiliate sales rather than exporting obviously depends on technology but is also influenced by a variety of government policies toward transborder flows of products and data, movements of people, and direct foreign investment. Such policies at home and abroad may have a minor influence on the global market share of a given firm but a major influence on the firm's primary mode of participation in foreign markets.

### 6.3.3 Comparative Advantage in Services

Comparative advantage is the basic determinant of the direction of trade and of the gains from trade among nations: nations export the goods they can produce relatively cheaply and import goods that are relatively more costly to produce at home. Trade can thus be viewed as a superior indirect technology for producing certain goods. A given supply of primary inputs yields a greater total value of outputs when resources are concentrated in activities that are relatively more efficient.

Conceptually, comparative advantage may rest on differences in relative factor abundance, differences in technology, or the existence of scale economies. Most of the literature on merchandise trade has focused on the role of relative factor abundance. When countries have similar tastes and technologies, each will tend to export goods making relatively intensive use of its abundant factors and import goods requiring large amounts of its scarce factors.[15]

Accordingly, U.S. comparative advantage should lie in the high-technology areas, as these employ large amounts of skilled labor, the

nation's abundant resource. Extending the same approach to services, there is a similar presumption that U.S. comparative advantage will lie in the high-technology end of the spectrum, and particularly in the production and export of knowledge itself.

However, recent theoretical research has emphasized the potential role of economies of scale in determining trade flows and the gains from trade. With restricted trade, large countries will tend to have lower prices for goods and services subject to important economies of scale.[16] But these lower prices do not necessarily predict the direction of trade when barriers are removed; with integrated markets, a firm located in a small nation no longer operates at a cost disadvantage.

Moreover, while scale economies increase the potential benefits from liberalization, they also complicate the issue of how these benefits are shared. In particular, the possibility that a given nation may lose by expanding trade even though global efficiency is improved is more difficult to rule out when scale economies are important. Mutual gains are assured only if each country is able, on average, to expand production in industries with scale economies.[17]

Information-based and knowledge-based services are the areas in which U.S. firms and U.S. policymakers seem most confident of expanding global sales. These services are likely to exhibit strong economies of scale. The theoretical analysis of comparative advantage and gains from trade suggests both that the apparent U.S. advantage in these industries (as measured by domestic prices) may be overstated under current conditions and that the cautious approach of other nations toward the liberalization of trade in services may have a firm economic basis.

## 6.4 Services in the Domestic Economy

This section reviews evidence on the growing importance of services in U.S. employment and production, and compares U.S. trends with experience of other nations. Tables 6.3–6.8 indicate the division of U.S. economic activity into service and nonservice components according to two alternative criteria. As discussed below, the most important categories of internationally traded services (see tables 6.1 and 6.2) are not the same ones that are most important in terms of recent growth of domestic employment.

### 6.4.1 Services in U.S. Employment

Sectoral employment is the yardstick that demonstrates most clearly the extent to which the United States has become a "postindustrial" or service economy. Tables 6.3 and 6.4 show recent nonagricultural employment of U.S. workers by type of industry. The service-producing

**Table 6.3 U.S. Employment on Nonagricultural Payrolls by Industry, 1984–86 (thousands)**

| Industry | 1984 | 1985 | 1986 |
|---|---|---|---|
| Total | 94,496 | 97,614 | 99,918 |
| Private sector | 78,472 | 81.199 | 83,198 |
| Goods producing | 24,727 | 24,930 | 24,965 |
| Mining | 966 | 930 | 790 |
| Construction | 4,383 | 4,687 | 4,974 |
| Manufacturing | 19,378 | 19,314 | 19,201 |
| Service producing | 69,769 | 72,684 | 74,953 |
| Transportation and public utilities | 5,159 | 5,242 | 5,265 |
| Transportation | 2,917 | 3,006 | 3,037 |
| Communications and public utilities | 2,242 | 2,236 | 2,228 |
| Wholesale trade | 5,555 | 5,740 | 5,872 |
| Retail trade | 16,545 | 17,360 | 17,464 |
| General merchandise stores | 2,267 | 2,320 | 2,344 |
| Food stores | 2,637 | 2,779 | 2,917 |
| Auto dealers and service stations | 1,799 | 1,892 | 1,944 |
| Eating and drinking places | 5,388 | 5,715 | 5,889 |
| Financial, insurance, and real estate | 5,689 | 5,953 | 6,261 |
| Finance | 2,854 | 2,979 | 3,137 |
| Insurance | 1,757 | 1,830 | 1,918 |
| Real estate | 1,078 | 1,144 | 1,206 |
| Services | 20,797 | 21,974 | 22,924 |
| Business services | 4,057 | 4,452 | 4,755 |
| Health services | 6,122 | 6,310 | 6,543 |
| Government | 16,024 | 16,415 | 16,720 |
| Federal | 2,807 | 2,875 | 2,889 |
| State | 3,734 | 3,848 | 3,936 |
| Local | 9,482 | 9,692 | 9,885 |

*Source: Monthly Labor Review,* October 1986, table 13.
*Note:* Data for 1984 and 1985 are annual averages; 1986 data are for May.

sectors are distinguished here by the intangible nature of their output and include both final-demand and intermediate-input categories.

As table 6.3 shows, U.S. employment is now heavily concentrated in the industries broadly described as service producing: transportation, public utilities, wholesale and retail trade, finance, insurance, real estate, miscellaneous business services, health, and government. This broad range of activities comprises all industries that are *not* included in the goods-producing sector, that is, manufacturing, construction, mining, and agriculture. The employment classification in table 6.3 is made on the basis of the industry's main output, which may be sold to final consumers (health, education), used as an intermediate input (business services), or both (restaurants).

**Table 6.4** **U.S. Employment on Nonagricultural Payrolls by Industry, 1919–83 (millions of workers)**

| Industry | 1919 | 1930 | 1940 | 1950 | 1960 | 1970 | 1980 | 1983 |
|---|---|---|---|---|---|---|---|---|
| Total | 27.1 | 29.4 | 32.4 | 45.2 | 54.1 | 70.9 | 90.4 | 90.1 |
| Private sector | 24.4 | 26.3 | 28.2 | 39.2 | 45.8 | 58.3 | 74.2 | 74.3 |
| Goods producing | 12.8 | 12.0 | 13.2 | 18.5 | 20.4 | 23.6 | 25.7 | 23.4 |
| Mining | 1.1 | 1.0 | 0.9 | 0.9 | 0.7 | 0.6 | 1.0 | 1.0 |
| Construction | 1.0 | 1.4 | 1.4 | 2.4 | 3.0 | 3.6 | 4.3 | 3.9 |
| Manufacturing | 10.7 | 9.6 | 11.0 | 15.2 | 16.8 | 19.4 | 20.3 | 18.5 |
| Service producing | 14.3 | 17.5 | 19.1 | 26.7 | 33.8 | 47.3 | 64.7 | 66.7 |
| Transportation and public utilities | 3.7 | 3.7 | 3.0 | 4.0 | 4.0 | 4.5 | 5.1 | 4.9 |
| Wholesale trade | n.a. | n.a. | 1.8 | 2.6 | 3.1 | 4.0 | 5.3 | 5.3 |
| Retail trade | n.a. | n.a. | 4.9 | 6.8 | 8.2 | 11.0 | 15.0 | 15.5 |
| Financial, insurance, and real estate | 1.1 | 1.5 | 1.5 | 1.9 | 2.6 | 3.6 | 5.2 | 5.5 |
| Services | 2.3 | 3.4 | 3.7 | 5.4 | 7.4 | 11.5 | 17.9 | 19.7 |
| Government | 2.7 | 3.1 | 4.2 | 6.0 | 8.4 | 12.6 | 16.2 | 15.9 |
| Federal | n.a. | 0.5 | 1.0 | 1.9 | 2.3 | 2.7 | 2.9 | 2.8 |
| State | n.a. | n.a. | n.a. | n.a. | 1.5 | 2.7 | 3.6 | 3.7 |
| Local | n.a. | n.a. | n.a. | n.a. | 4.5 | 7.2 | 9.8 | 9.4 |

*Source:* U.S. Department of Labor 1985, table 63.

*Note:* Data include Alaska and Hawaii beginning in 1960. Details may not sum to totals due to rounding.

Tables 6.4 and 6.5 indicate the nation's labor force allocation in longer-term perspective. Table 6.5 shows the division of U.S. employment among three major sectors: agriculture, goods, and services. Here agriculture includes forestry and fisheries; goods-producing employment includes mining and construction. Government employment is allocated according to industry, with only public administration listed as a separate service category.

Table 6.5 reveals that the growth of service-sector employment as a share of the U.S. labor force is a trend going back to 1850, the earliest year for which data are available. However, until recent years that growth was accommodated mainly through the secular contraction of agriculture's share. Agriculture accounted for about two-thirds of U.S. employment in 1850 but less than 4 percent by the 1980s.

In contrast, the share of goods-producing employment increased steadily until the turn of the century and moved cyclically around the one-third mark for many years thereafter. Only in the past twenty years has growth of employment in service-producing industries come mainly at the expense of manufacturing and the other nonagricultural goods-producing sectors.

Even so, it is primarily the *share* of the goods-producing sectors in total employment, rather than the *level* of such employment, that has

**Table 6.5 U.S. Employment by Major Sector, 1850–1982 (percentage of total)**

| Year | Agriculture | Goods Producing | Service Producing |
|---|---|---|---|
| 1850 | 64.5 | 17.7 | 17.8 |
| 1860 | 59.9 | 20.1 | 20.0 |
| 1870 | 50.8 | 25.0 | 24.2 |
| 1890 | 43.1 | 28.3 | 28.6 |
| 1900 | 38.0 | 30.5 | 31.4 |
| 1910 | 32.1 | 32.1 | 35.9 |
| 1920 | 27.6 | 34.6 | 37.7 |
| 1930 | 21.8 | 31.7 | 46.6 |
| 1940 | 18.3 | 33.1 | 48.6 |
| 1952 | 11.3 | 35.5 | 53.3 |
| 1957 | 9.8 | 34.3 | 56.0 |
| 1962 | 7.8 | 33.1 | 59.1 |
| 1967 | 5.3 | 34.7 | 60.1 |
| 1972 | 4.4 | 31.4 | 64.2 |
| 1977 | 3.7 | 29.7 | 66.6 |
| 1979 | 3.6 | 30.2 | 66.3 |
| 1982 | 3.6 | 27.2 | 69.2 |

*Source:* Urquhart 1984, table 1.

fallen in recent years. As table 6.6 indicates, the number of workers in goods-producing employment actually rose between 1967 and 1979, even though the share of these sectors fell from 34.7 percent to 30.2 percent of the U.S. labor force. But a sharp recession in 1980–82 produced a substantial fall in goods-producing employment. Although employment growth resumed in 1983, by 1986 the total number of workers in the goods-producing industries was still well below previous peaks. Of course, employment in manufacturing and other goods-producing sectors fell even more relative to the levels that would have been attained had the distribution of the larger labor force among the major sectors remained unchanged from the 1967 pattern.

### 6.4.2 Services in Gross National Product

A similar pattern emerges from an examination of U.S. gross national product (GNP) by industry, as shown in table 6.7. In current dollars, the service-producing sectors now account for over two-thirds of U.S. GNP, up from about 55 percent immediately after World War II. The industrial classifications used in tables 6.3–6.7 include both intermediate and final products, and both government and private activities.

An alternative measure of the economic importance of services is their share in final demand as measured by consumer spending. As shown in table 6.8, expenditure for services now accounts for about

**Table 6.6 Estimated Employment Shifts by Sector and Industry, 1967–79 (millions)**

| Sector and Industry | 1967 Actual | 1979 Actual | 1979 with 1967 Distribution | Relative Gain or Loss |
|---|---|---|---|---|
| Total | 74.4 | 98.8 | — | — |
| Agriculture | 3.9 | 3.5 | 5.2 | −1.7 |
| Goods producing | 25.8 | 29.8 | 34.3 | −4.5 |
| Manufacturing | 20.7 | 22.5 | 27.5 | −5.0 |
| Service producing | 44.7 | 65.5 | 59.4 | +6.2 |
| Transp., communication, and public util. | 4.9 | 6.5 | 6.5 | +0.0 |
| Trade | 13.9 | 20.1 | 18.5 | +1.6 |
| Wholesale | 2.6 | 3.9 | 3.4 | +0.5 |
| Retail | 11.3 | 16.2 | 15.1 | +1.2 |
| Eating and drinking establishments | 2.3 | 4.2 | 3.0 | +1.2 |
| Finance, insurance, and real estate | 3.5 | 5.9 | 4.7 | +1.2 |
| Services | 18.2 | 27.8 | 24.1 | +3.7 |
| Business and repair | 2.1 | 3.7 | 2.7 | +1.0 |
| Personal | 4.4 | 3.9 | 5.9 | +2.0 |
| Entertainment and recreation | 0.7 | 1.1 | 0.9 | +0.2 |
| Professional | 11.0 | 19.2 | 14.6 | +4.6 |
| Health | 3.8 | 7.0 | 5.1 | +1.9 |
| Education | 5.2 | 8.0 | 6.9 | +1.1 |
| Legal | 0.3 | 0.7 | 0.5 | +0.2 |
| Welfare and religious | 0.7 | 1.6 | 1.0 | +0.6 |
| Public administration | 4.2 | 5.2 | 5.6 | −0.4 |
| Postal | 0.7 | 0.7 | 1.0 | −0.3 |
| Other federal | 1.5 | 1.6 | 2.0 | −0.4 |
| State | 0.6 | 0.9 | 0.8 | +0.1 |
| Local | 1.1 | 1.9 | 1.8 | +0.1 |

*Source:* Urquhart 1984, table 2.
*Note:* Details may not add to totals due to rounding.

one-half of total personal consumption expenditures, up from about 40 percent in 1929 and as little as one-third in 1950. The main categories of service expenditures in final demand are housing, utilities and other services used in household operation, transportation, and medical care.[18] However, these data tend to understate the relative importance of services in final consumption, since they do not include important government-financed consumption services such as education and recreation.

**Table 6.7 U.S. Gross National Product by Industry, 1947–85 (billions of dollars)**

| | 1947 | 1950 | 1960 | 1965 | 1970 | 1975 | 1980 | 1985 |
|---|---|---|---|---|---|---|---|---|
| Total GNP | 235.2 | 288.3 | 515.3 | 705.1 | 1015.5 | 1598.4 | 2732.0 | 3998.1 |
| Goods producing | 102.9 | 127.3 | 203.2 | 271.3 | 352.3 | 531.4 | 903.2 | 1192.3 |
| Agriculture, forestry, and fisheries | 20.8 | 20.8 | 21.7 | 24.2 | 29.9 | 56.3 | 77.2 | 91.5 |
| Mining | 6.8 | 9.3 | 12.8 | 14.0 | 18.7 | 41.3 | 107.3 | 122.8 |
| Construction | 9.1 | 13.2 | 24.3 | 34.7 | 51.4 | 76.5 | 137.7 | 182.2 |
| Manufacturing | 66.2 | 84.0 | 144.4 | 198.4 | 252.3 | 357.3 | 581.0 | 795.8 |
| Service producing | 129.4 | 158.7 | 311.4 | 429.3 | 657.1 | 1047.0 | 1776.3 | 2770.3 |
| Transp. and public utilities | 21.0 | 26.6 | 47.3 | 62.6 | 88.4 | 141.7 | 240.8 | 374.4 |
| Wholesale and retail trade | 44.2 | 51.5 | 85.7 | 115.0 | 168.7 | 273.7 | 438.8 | 652.5 |
| Financial, insurance, and real estate | 23.8 | 32.2 | 72.8 | 98.9 | 145.8 | 221.7 | 400.6 | 626.6 |
| Services | 20.2 | 24.2 | 51.4 | 74.6 | 120.2 | 199.8 | 374.0 | 639.4 |
| Government and government enterprises | 20.2 | 24.2 | 54.2 | 78.2 | 134.0 | 210.1 | 322.1 | 477.4 |
| Statistical discrepancy | 1.8 | 0.8 | −2.8 | −1.2 | −1.1 | 2.5 | 4.9 | −5.5 |
| Rest of the world | 1.2 | 1.5 | 3.5 | 5.8 | 7.3 | 17.5 | 47.6 | 41.2 |

*Source: Economic Report of the President,* 1987, table B-10.

*Notes:* Industry classification is on an establishment basis and is based on the 1972 Standard Industry Classification. Details may not add to totals due to rounding.

**Table 6.8** **U.S. Personal Consumption Expenditures, 1929–86 (billions of dollars)**

| | 1929 | 1940 | 1950 | 1960 | 1970 | 1975 | 1980 | 1986 |
|---|---|---|---|---|---|---|---|---|
| Total | 77.3 | 71.0 | 192.1 | 330.7 | 640.0 | 1012.8 | 1732.6 | 2762.4 |
| Durable goods | 9.2 | 7.8 | 30.8 | 43.5 | 85.7 | 135.4 | 219.3 | 388.3 |
| Nondurable goods | 37.7 | 37.0 | 98.2 | 153.2 | 270.3 | 416.2 | 681.4 | 932.7 |
| Services | 30.4 | 26.2 | 63.2 | 134.0 | 284.0 | 461.2 | 831.9 | 1441.3 |
| Housing | 11.7 | 9.7 | 21.7 | 48.2 | 94.0 | 148.4 | 261.5 | 438.5 |
| Household operation | 4.0 | 4.0 | 9.5 | 20.3 | 37.7 | 63.5 | 113.9 | 178.4 |
| Transportation | 2.6 | 2.1 | 6.2 | 11.2 | 23.7 | 35.7 | 64.5 | 95.9 |
| Medical care | 2.2 | 2.2 | 6.9 | 16.4 | 46.1 | 84.2 | 164.2 | 315.9 |
| Other | 9.9 | 8.2 | 18.8 | 38.0 | 82.5 | 129.3 | 227.9 | 412.6 |

*Source: Economic Report of the President,* 1987, table B-14.
*Notes:* Housing includes imputed value of owner-occupied housing. Data for 1986 are preliminary.

### 6.4.3 Why and How Services Grew

The summary tables presented in the previous sections document the evolution of today's "service economy" but give little insight into the causes of these dramatic changes. In brief, the employment and output shifts reflect the combined impact of three basic forces: changes in the sectoral allocation of final demand (in turn reflecting rising per capita income and systematic changes in relative prices as well as demographic shifts), relative rates of productivity improvement, and changes in the organization of economic activity.

Looking first at the long-term shift of employment out of agriculture offers some perspective on the more recent movements from goods-producing to service-producing employment. In the case of agriculture, low income and price elasticities of demand, changing dietary preferences, and sustained high rates of productivity improvement have all contributed to agriculture's declining share of total employment, even over the periods when the United States was increasing its penetration of foreign markets.

Changes in the organization of economic activity reinforced the effects of demand and productivity changes, with specialized processing, transportation, distribution, and business-services units gradually taking over many functions once handled by workers classified as agricultural employees. But the nation is by no means losing its "agricultural base" in terms of production. On the contrary, agricultural outputs have continued to grow with dismaying rapidity despite the steady decline in the number of workers employed in the sector.

While the shift from goods-producing to service-producing employment is more complex, some of the same forces were important. Changes in the age composition of the population and in the labor force partic-

ipation of women have fueled increases in the demand for some services that have experienced high rates of growth. These include health and education among professional services, and eating and drinking establishments, a major component of retail trade. Moreover, the goods-producing sectors have maintained relatively high rates of productivity increase, so that outputs of most sectors have continued to rise even when employment has stabilized or dipped. Finally, changes in the degree of vertical integration of goods-producing firms have led to a reclassification of many workers from other industrial categories as service employees, although the work performed by these employees is basically unchanged.

In recent years, "business services" has been the most rapidly growing sector of the U.S. economy in terms of employment. The business services sector comprises seven major industries:[19] advertising; consumer credit reporting and collection; mailing, reproduction, and stenographic services; services to buildings, including cleaning, maintenance, and exterminating services; personnel supply services, including both temporary-help suppliers and employment agencies; computer and data processing services; and miscellaneous business services, which include research and development, management and consulting, and protective services.

Firms in this industry provide a variety of business services on an ongoing contractual basis (e.g., janitorial services, data processing, advertising) or to accommodate temporary or cyclical requirements (e.g., office personnel, unskilled labor). While some of the included activities are new (computer services), the growth of others reflects changes in the way U.S. firms are doing business and particularly in employer-employee relationships in the goods-producing sectors of the economy.[20]

### 6.4.4 Services, Labor Supply, and Productivity

Changes in the composition of the labor force may affect growth of service employment through changes in productivity as well as through changes in the pattern of final demand. The recent bulge of new entrants into the labor force was absorbed in large part through expansion of employment in the services sector, with slow or negative increases in compensation. One recent study found that women hired in the service sector were much more likely not to have worked at all in the previous year than to have worked previously in the goods sector.[21] The rapidly growing retail trade sector (which includes the infamous fast-food outlets) experienced the largest relative decline in average hourly earnings between 1977 and 1983 of any major employment sector (U.S. Department of Labor 1985, table 78).

With fewer new entrants to the labor force, or with greater downward rigidity of wages and employee benefits (as in the European community), a smaller number of new jobs would have been created in services, while the higher cost of employing additional workers would have induced employers to adopt more capital-intensive (i.e., more "productive") technologies.[22]

The relatively strong productivity performance and accordingly low employment growth of the goods-producing sectors may have a similar explanation. With more extensive unionization and less flexibility in compensation and work rules, faster adaptation of new labor-saving technologies would typically mean slower employment growth but higher measured increases in labor productivity for any given growth rate of output. Thus, for both tangible goods and for services, sectoral patterns of labor productivity growth are appropriately viewed as endogenous, reflecting the interaction of such forces as technological advance, labor market developments, and tax policy.

### 6.4.5 International Comparisons

The relative importance of the U.S. service sector in total employment has increased over time with the nation's rising per capita income. Cross-country evidence also points to a strong positive correlation between service employment and per capita GNP. As table 6.9 shows, in 1980 service employment absorbed just 15 percent of the labor force of the world's poorest countries, while agriculture occupied nearly three workers of every four—a pattern not too different from the United States in the mid-1800s.[23]

Among the industrialized nations, the average share of service employment was 58 percent, with the United States eight percentage points higher. Moreover, between 1965 and 1980, every industrialized country showed an increase in the share of services in total employment. The same was true also for the nonmarket economies of Eastern Europe and for almost all other nations, whether rich or poor. In most cases, the increase in the share of services has come at the expense of agricultural employment, presumably reflecting the dissemination worldwide of modern agricultural technologies as well as the industrialization goals of many nations.[24]

A similar pattern emerges for the percentage share of services in gross domestic product (GDP). As table 6.10 indicates, the percentage share of services in GDP averaged 62 percent in 1984 for the industrialized nations but only 29 percent for the world's poorest nations. The table also shows that the share of services has been increasing over time for every industrialized nation, while that of industry broadly and of manufacturing specifically has been declining.

These shares are calculated on the basis of local domestic prices. However, prices of services tend to be higher relative to those of tangible goods in countries with higher per capita GNP. When a common set of international prices is used to value outputs, the percentage shares of services in GDP differ less markedly over time for a given country or between rich and poor nations in a given year. Using real-quantity indexes in place of value shares, Kravis, Heston, and Summers (1983) show that in real terms, low-income countries may actually consume services in higher proportions than wealthier nations. This finding presumably reflects the very low relative prices of services in poor countries.

## 6.5 International Service Transactions

The high priority placed by the United States on negotiations on trade in services is frequently justified by assertions that this trade is currently or potentially very important to the nation's overall international position. Yet the data on U.S. trade in services provide only weak support for such a claim. Globally and also for the United States, the aggregate size of services trade as reflected in balance of payments data is roughly one-fourth that of merchandise trade. Moreover, that

**Table 6.9 Distribution of Labor Force by Industry, 1965 and 1980 (percentage of total labor force)**

| | Agriculture | | Industry | | Services | |
|---|---|---|---|---|---|---|
| Country Group | 1965 | 1980 | 1965 | 1980 | 1965 | 1980 |
| Low-income economies | 77 | 73 | 9 | 13 | 14 | 15 |
| Middle-income economies | 57 | 44 | 17 | 22 | 26 | 34 |
| Oil exporters | 61 | 49 | 14 | 19 | 24 | 32 |
| Oil importers | 53 | 40 | 19 | 23 | 28 | 36 |
| High-income oil exporters | 56 | 36 | 15 | 21 | 28 | 44 |
| Industrialized market economies | 14 | 7 | 38 | 35 | 48 | 58 |
| Canada | 10 | 5 | 33 | 29 | 57 | 65 |
| France | 17 | 9 | 39 | 35 | 43 | 56 |
| Germany | 10 | 6 | 48 | 44 | 42 | 50 |
| Italy | 24 | 12 | 42 | 41 | 34 | 48 |
| Japan | 26 | 11 | 32 | 34 | 42 | 55 |
| United Kingdom | 3 | 3 | 47 | 38 | 50 | 59 |
| United States | 5 | 4 | 35 | 31 | 60 | 66 |
| Eastern European nonmarket economies | 35 | 21 | 34 | 40 | 31 | 39 |

*Source: World Development Report*, 1986, table 30.

*Notes:* Country groups are as defined by the World Bank. Group averages are weighted by population.

**Table 6.10** **Structure of Production by Major Sector, 1965 and 1984 (percentage of total gross domestic product)**

| Country Group | Agriculture | | Industry | | Manufacturing | | Services | |
|---|---|---|---|---|---|---|---|---|
| | 1965 | 1984 | 1965 | 1984 | 1965 | 1984 | 1965 | 1984 |
| Low-income economies | 43 | 37 | 29 | 34 | 14 | 14 | 28 | 29 |
| Middle-income economies | 21 | 15 | 31 | 36 | 20 | 21 | 47 | 49 |
| Oil exporters | 22 | 16 | 28 | 39 | 16 | 18 | 50 | 46 |
| Oil importers | 21 | 13 | 33 | 35 | 22 | 25 | 46 | 52 |
| High-income oil exporters | 5 | 2 | 65 | 61 | 5 | 7 | 30 | 37 |
| Industrialized market economies | 5 | 3 | 39 | 35 | 29 | 25 | 56 | 62 |
| Canada | 5 | 3 | 34 | 24 | 23 | — | 71 | 72 |
| France | — | 4 | — | 34 | — | 25 | — | 62 |
| Germany | — | 2 | — | 46 | — | 36 | — | 52 |
| Italy | 11 | 5 | 41 | 40 | — | — | 48 | 55 |
| Japan | 9 | 3 | 43 | 41 | 32 | 30 | 48 | 56 |
| United Kingdom | 3 | 2 | 41 | 36 | 30 | 22 | 56 | 62 |
| United States | 3 | 2 | 38 | 32 | 29 | 21 | 59 | 66 |

*Source: World Development Report,* 1986, table 3.

*Notes:* Country groups are as defined by the World Bank. Group averages are weighted by population. Japanese data are for 1965 and 1983.

proportion has been relatively stable in recent years. Thus, neither the absolute size nor the rate of growth of trade transactions in services by themselves makes a compelling case for its recent promotion to a top position on the trade policy agenda of the United States.

Although there is ample reason to believe that official trade data seriously underestimate the true value of both U.S. service exports and imports, even improved and expanded services data do not provide credible support for a major push on services trade. If there is a strong argument for broad-based negotiations on services, it appears to apply less to trade than to the alternative mode of international competition, sales abroad of U.S. affiliates.

Tables 6.11 and 6.12 show the value and composition of international service exports in 1980 for the twenty-five leading service-exporting nations. The United States is indeed largest in terms of services exports, as well as merchandise exports and income from foreign investment. However, the relative importance of services, as measured by the ratio of service exports to GDP, is *less* for the United States than for most of the other nations. This should perhaps not be surprising, given the very large absolute size of the U.S. market. But the ratio of service exports to merchandise exports is also far below that of other major service exporters.

Still, these data provide only a partial indication of the importance of international competition in services to the U.S. economy. As described in section 6.3, a U.S. firm may compete in markets abroad through direct exports or through a foreign affiliate. A service export entails production by U.S. residents of a service purchased by the resident of another nation. At least in principle, the total value of service export sales appears in the services section of the U.S. balance of payments accounts.[25] As shown in table 6.12, the most important service export categories by value for the United States and most other nations are travel and transportation.

Unlike export sales, sales abroad of U.S. affiliates do not enter directly into the U.S. international accounts, as such sales do not necessarily entail a specific transaction between a U.S. resident and a resident of another nation. Affiliate sales probably have important indirect effects on two items in the services section of balance of payments accounts—earnings of U.S. investments abroad and intrafirm payments of royalties and licensing fees. But neither item provides a reliable measure of the U.S. stake in the foreign market, because payments between the parent and foreign affiliates are shaped by tax considerations and other dimensions of national regulation.

For the firms and industries that have shown the greatest interest in a U.S. initiative on services trade, sales abroad by foreign affiliates are substantially larger than exports from U.S. operations, although the

**Table 6.11 Twenty-five Largest Services Exporters in 1980 (billions of U.S. dollars)**

| Country | Value of Services Exports | Value of Foreign Investment Income | Value of Merchandise Exports | Services Exports to GDP Ratio (%) | Services Exports to Merchandise Exports Ratio (%) |
|---|---|---|---|---|---|
| U.S. | 34.9 | 70.2 | 224.3 | 1.4 | 15.6 |
| U.K. | 34.2 | 17.1 | 110.9 | 6.5 | 30.9 |
| France | 33.0 | 18.4 | 107.6 | 5.1 | 30.7 |
| Germany | 22.4 | 8.5 | 185.5 | 3.9 | 17.2 |
| Italy | 22.4 | 5.3 | 76.8 | 5.7 | 30.2 |
| Japan | 18.9 | 7.2 | 126.8 | 1.8 | 14.9 |
| Netherlands | 17.7 | 10.0 | 67.5 | 10.5 | 26.2 |
| Belgium | 14.5 | 17.6 | 55.2 | 12.1 | 26.3 |
| Spain | 11.7 | 0.2 | 20.5 | 5.6 | 56.9 |
| Austria | 10.8 | 2.5 | 17.2 | 14.0 | 62.6 |
| Switzerland | 8.4 | n.a. | 29.3 | 8.3 | 28.9 |
| Sweden | 7.5 | 0.8 | 30.7 | 6.0 | 24.3 |
| Mexico | 7.4 | 1.0 | 16.2 | 4.0 | 45.8 |
| Norway | 7.3 | 0.5 | 18.7 | 12.7 | 39.2 |
| Canada | 7.0 | 2.9 | 67.6 | 2.7 | 10.3 |
| Singapore | 5.9 | n.a. | 18.2 | 54.1 | 32.7 |
| Korea | 4.5 | 0.3 | 17.2 | 7.7 | 26.1 |
| Yugoslavia | 4.5 | 0.2 | 9.0 | 7.1 | 49.9 |
| Greece | 4.0 | 0.0 | 4.1 | 9.9 | 97.6 |
| Saudi Arabia | 3.7 | n.a. | 100.7 | 3.2 | 3.7 |
| Australia | 3.5 | 0.7 | 21.7 | 2.5 | 16.2 |
| Israel | 3.2 | 0.7 | 5.8 | 15.9 | 55.8 |
| South Africa | 3.0 | 0.4 | 25.5 | 3.8 | 11.8 |
| Finland | 2.8 | 0.2 | 14.1 | 5.6 | 19.6 |
| Egypt | 2.3 | 0.3 | 3.9 | 9.8 | 60.2 |

*Source:* U.S. Trade Representative 1983, table 2.

*Notes:* Values converted to U.S. dollars at current exchange rates. Services exports exclude official transactions and investment earnings. Foreign investment earnings include private direct investment income and portfolio income but exclude foreign official income.

industries' own discussions typically do not distinguish these two types of foreign operations or divide revenues from foreign markets into exports and affiliate transactions.

The importance of subsidiary sales in total foreign sales of U.S. service firms is qualitatively similar to the situation of international competition in tangible goods. In the manufacturing industries, U.S. firms have maintained a roughly constant share of world exports in recent decades. But exports from the United States have constituted a declining share of total U.S. sales in international markets, with exports from U.S. affiliates abroad increasing to maintain overall constancy of the total market share (Lipsey and Kravis 1985).

**Table 6.12** **Major Categories of Service Exports, 1980 (billions of U.S. dollars)**

| | Total | Shipment | Other Transp. and Passenger Fares | Travel and Tourism | Other Private Services |
|---|---|---|---|---|---|
| U.S. | 37.5 | 4.0 | 12.9 | 10.0 | 10.8 |
| U.K. | 37.1 | 5.8 | 11.2 | 6.9 | 13.3 |
| France | 33.0 | 1.3 | 10.7 | 8.2 | 12.8 |
| Germany | 33.8 | 5.3 | 6.5 | 6.6 | 15.5 |
| Italy | 23.5 | 3.3 | 3.4 | 8.9 | 7.8 |
| Japan | 19.4 | 7.4 | 6.1 | 0.6 | 5.3 |
| Netherlands | 18.6 | 3.7 | 7.2 | 1.7 | 6.1 |
| Belgium | 14.9 | 2.4 | 2.3 | 1.8 | 8.4 |
| Spain | 12.2 | 1.2 | 2.4 | 6.9 | 1.7 |
| Austria | 10.8 | 0.7 | 0.1 | 6.5 | 3.6 |
| Switzerland | 8.4 | 0.4 | n.a. | 4.1 | 3.9 |
| Sweden | 8.0 | 1.8 | 1.9 | 1.0 | 3.4 |
| Mexico | 7.7 | n.a. | 0.7 | 5.2 | 1.8 |
| Norway | 9.2 | 5.0 | 2.1 | 0.8 | 1.4 |
| Canada | 7.0 | 0.8 | 0.7 | 2.9 | 2.6 |
| Singapore | 5.9 | 0.6 | 2.0 | 1.4 | 1.9 |
| Korea | 4.8 | 1.0 | 1.0 | 0.4 | 2.5 |
| Yugoslavia | 4.6 | 0.4 | 1.0 | 1.6 | 1.5 |
| Greece | 4.0 | 0.1 | 0.9 | 1.7 | 1.2 |
| Saudi Arabia | 4.3 | n.a. | 2.2 | 1.3 | 0.7 |
| Australia | 3.5 | 0.5 | 1.8 | 1.0 | 0.3 |
| Israel | 3.1 | 0.6 | 0.7 | 0.9 | 0.9 |
| South Africa | 3.2 | 0.3 | 1.2 | 0.6 | 1.1 |
| Finland | 3.0 | 0.5 | 0.8 | 0.7 | 1.0 |
| Egypt | 2.5 | n.a. | 1.4 | 0.6 | 0.5 |

*Source:* U.S. Trade Representative 1983, table 3.

*Notes:* Values converted to U.S. dollars at current exchange rates. Other private services include IMF balance of payments categories "other goods, services and income," "labor income, n.i.e.," and "property income, n.i.e." Totals on this table may not match data in table 6.11 because of intervening revisions in the IMF data tapes used.

In the case of services, available data are sketchy for both exports and foreign sales. One estimate suggests that revenues from sales abroad of U.S. affiliates exceed those from U.S. exports on average by about 50 percent (U.S. Congress, Office of Technology Assessment, 1986). Since profit rates of foreign subsidiaries are usually higher than those of domestic operations, this would mean that, in terms of profits to U.S. firms competing internationally, affiliate sales probably account for well over half of all profits generated by operations abroad. However, affiliate sales translate into a smaller demand for domestic labor input than the same dollar volume of export sales.

The importance of affiliate sales relative to direct exporting varies substantially across those industries with important international trans-

actions. For some major service industries, including travel, educational and legal services, and technology licensing, direct exports account for nearly all revenues from international transactions. In a second group, including insurance, advertising, and accounting, affiliate sales provide the bulk of foreign revenues. For a third group, including transportation, construction, consulting, and computer software, both direct exports and affiliate sales are significant. Table 6.13 shows Office of Technology Assessment estimates of 1983 revenues in both categories for U.S. service firms. Banking, an important service industry both domestically and in international transactions, was treated separately because of the special problem of distinguishing investment income from the service component of foreign revenues.

Given that affiliate sales greatly exceed exports for many service providers, a broader measure of the importance of international transactions to U.S. service industries is the size of total foreign revenues

**Table 6.13 OTA Estimates of Foreign Revenues of U.S. Service Firms, 1983 (billions of dollars)**

| Activity | Direct Exports | Affiliate Sales | Total Foreign Revenues |
|---|---|---|---|
| Accounting | 0.2–0.5 | 3.7–4.0 | 3.9–4.5 |
| Advertising | 0.1–0.5 | 1.7 | 1.8–2.2 |
| Construction | 4.8 | 2.9–3.3 | 7.7–8.1 |
| Data processing | 0.1–1.2 | 2.5–3.7 | 2.6–4.9 |
| Education | 1.6–2.3 | 0.0–0.1 | 1.6–2.4 |
| Engineering | 1.1–1.6 | 4.0 | 5.1–5.6 |
| Franchising | 0.2–1.1 | 0.0 | 0.2–1.1 |
| Health | 1.0–2.5 | 1.1 | 2.1–3.6 |
| Information | 0.0–2.9 | 0.0–2.9 | 2.9 |
| Insurance | 2.7–3.6 | 10.1–12.1 | 12.8–15.7 |
| Investment banking/brokerage | 1.0–2.0 | 7.7 | 8.9–9.7 |
| Leasing | 0.2–1.2 | 3.7–5.4 | 4.5–5.6 |
| Legal | 0.0–2.0 | 0.1 | 0.1–2.1 |
| Licensing | 5.2 | 0.0 | 5.2 |
| Management/consulting | 0.6–1.4 | 1.2 | 1.8–2.6 |
| Motion pictures | 1.9 | 2.0 | 3.9 |
| Retailing | 0.0 | 25.4 | 25.4 |
| Software | 2.5–2.6 | 3.2–4.4 | 5.7–7.0 |
| Telecommunications | 1.3 | 1.3 | 2.6 |
| Transportation | 17.1 | 10.9 | 28.0 |
| Travel | 14.1 | 0.0 | 14.1 |
| Miscellaneous | 5.3 | 6.0 | 11.3 |
| Subtotal (excluding banking) | 61.0–75.1 | 87.5–97.3 | 152–169 |
| Banking | n.a. | n.a. | 9.4 |
| Total | n.a. | n.a. | 161–178 |

*Source:* U.S. Congress, Office of Technology Assessment 1986, table 5.

from both sources relative to overall sales. For the major U.S. service industries as ranked on the basis of domestic employment, including health services and education, foreign revenues from exporting plus affiliate sales are small relative to the value of total output. Moreover, as with merchandise trade, a few large firms account for the lion's share of all U.S. international service transactions in a given industry.

While there is no "typical" service sector, the insurance industry can provide an illustration of the relative magnitudes. According to Stalson (1985, 94), there are about ten thousand insurance companies worldwide, with half of those in the United States alone. But only a few hundred have significant foreign sales. Of this group, about fifty are U.S. firms; among the U.S. firms, five are very large and operate in many countries. Revenues from foreign sales constitute about one-tenth of total revenues for the U.S. industry, with most of that going to five firms.

Although the data for many service industries are seriously deficient, a more significant problem is in interpretation. None of the available measures can give an accurate indication of the contribution of foreign sales to profits. For information-based service industries, including telecommunications and most business services, fixed costs may account for a very large portion of total costs. Expansion into foreign markets (whether through exports or sales of affiliates abroad) may thus make a contribution to profits far in excess of the proportion of foreign sales to total revenues.[26] Of course, the actual or potential contribution to profits of U.S. firms is still far from a measure of the *national* stake in pursuing multilateral liberalization of barriers to international competition in the service sector. This is particularly relevant at a time when attaining U.S. goals will surely require trade concessions affecting the prospects of other domestic industries.

## 6.6 Barriers to International Competition

The U.S. move to promote inclusion of services in the new round of GATT negotiations reflects the belief not only that international service transactions are important to the American economy but also that significant barriers hamper the access of U.S. firms to foreign markets. This section considers the types of barriers that might be included in efforts to maintain open markets for services transactions, and prospects for success based on experience in negotiating limits on barriers to merchandise trade.

### 6.6.1 Barriers to Merchandise Transactions

Even for the relatively straightforward case of tangible goods, barriers to trade are anything but straightforward. Tariffs, the classic trade

barrier, have not entirely disappeared, and high tariffs are still present for some products. However, in recent decades focus has shifted to nontariff barriers (NTBs) to trade, meaning all other national policies that potentially affect the volume of and gains from international trade. The Kennedy round of GATT negotiations succeeded in slicing most tariff rates to postwar lows. The subsequent Tokyo round was the first to tackle the much broader issue of nontariff barriers, but with only modest results.

At least four major reasons account for the slow progress. First, NTBs are not one problem but fifty or three hundred separate problems, ranging from relatively straightforward quantitative trade restrictions to such complex mechanisms as product standards, government procurement procedures, and labor market policies. In most cases, the impact on foreign competition is not the primary motivation of the policy, although in practice such policies are nonetheless administered in a way that puts foreign firms at a disadvantage in serving the local market.

A second reason for slow progress in limiting the proliferation of nontariff barriers is that their use arises partly from basic deficiencies of the GATT structure in handling problems of adjustment to changing international conditions. For example, the widespread use of "voluntary" export restraints (VERs) reflects general dissatisfaction with the provisions of article 19, which in principle governs members' response to unanticipated changes in international competition.

Third, the GATT was designed under the assumption that national policies can be viewed as having both "domestic" and "international" components. The GATT rules focus primarily on the latter—that is, policies applied at the national border. But the increased integration of national markets has made this dichotomy almost obsolete.

Finally and perhaps most important, both the GATT negotiation process and the GATT rules are predicated on a mercantilistic view of the gains from international trade, that is, that the "gains" from open markets are expanded exports and that any increased imports represent the price paid for the opportunity to expand exports. By failing to emphasize the real mutual gains from integrated global markets, GATT member nations have shifted negotiating efforts in inappropriate directions, even to the point of forcing GATT to become a party to global cartelization of the markets for textiles and apparel.[27]

Unfortunately, the factors that apply to merchandise trade are at least equally relevant for international competition in services, where movement of "traded" products across national borders is the exception rather than the rule. This does not necessarily imply that inclusion of services in forthcoming negotiations is unprofitable. It does, however, mean that the very basic problems now confronting the GATT

are likely to be exacerbated rather than eased by broadening its mandate to include services.

### 6.6.2 Barriers to Competition in Services

Diverse in many respects, the service industries do not share common objectives with respect to expansion abroad. Indeed, some industries with well-established foreign operations are hesitant to participate in a generic sectoral push to expand market access abroad lest their own firm-specific and industry-specific needs receive less favorable attention from foreign governments. Even information on the relative importance of particular types of barriers is not easily collected. Some U.S. firms are reluctant to divulge information that might indicate their competitive position to foreign or domestic rivals, and the service firms as a group are less accustomed than those in the goods-producing sectors to providing detailed information about their business operations to government agencies on a regular basis (U.S. International Trade Commission 1982, 1).

To provide better support for U.S. efforts, the International Trade Commission conducted a voluntary survey of 479 international service firms in fourteen service industries. Only about one-fourth of the firms responded to the survey, and the response rate was much lower in some industries. In communication services, only one firm out of eight responded to the questionnaire.

Respondents identified the degree to which specific nontariff barriers were encountered in foreign markets. Most important were restrictions affecting the basic "right of establishment" in the foreign market (63 percent of all respondents), specific barriers to provision of a service by foreign firms (62 percent), and foreign exchange controls (54 percent). Other barriers in order of frequency included government procurement (30 percent), technical issues (27 percent), restrictions on related trade in goods (21 percent), subsidies and countervailing duties (21 percent), licensing requirements (18 percent), standards and certification (17 percent), inadequate protection of intellectual property (12 percent), and professional qualification restrictions (10 percent).

Despite the ubiquitous nature of these barriers, one-fourth of the firms did not anticipate any increase in foreign revenues from their removal. Presumably profits would rise, however. Half of the firms surveyed did expect revenues to increase, but the anticipated increase was surprisingly small—$1 billion in total, plus another $2 billion in associated merchandise trade exports.[28]

### 6.6.3 Why Liberalization Is Opposed

Looking at specific barriers and speculating on the prospects for limiting their future use ignore the more basic question of why most

countries have responded coolly to U.S. proposals for liberalization of trade in services. If the experience with merchandise trade is indicative, agreeing to eliminate specific barriers without regard to their domestic objectives usually means that other policies, possibly less desirable from an efficiency perspective, will be substituted in short order.

Obviously, all the same kinds of economic and political considerations—employment, adjustment, regional effects, and so forth—that arise with liberalization of merchandise trade are equally relevant for trade in services. But some additional domestic considerations appear to be more important for services as a group than for goods.

First, many types of services, from banking and telecommunications to haircuts and restaurants, are subject to extensive local regulation, either because they are considered essential to national welfare and security or because they have important potential effects on consumer health and safety. Whatever their motive, regulatory barriers typically ensure above-normal profits for successful entrants, making current domestic providers particularly reluctant to share the market and potential foreign providers particularly keen to enter.

Moreover, local regulation is likely to act as a barrier to international competition even when the regulation is applied evenhandedly to both domestic and foreign firms; the same requirement is often more difficult and costly for a foreign firm to meet because of language barriers or general unfamiliarity with local legal and administrative procedures. But regulation often discriminates explicitly between domestic firms and foreign-controlled suppliers.

For some particular sectors deemed "essential," a foreign presence is considered undesirable or even unacceptable. For example, the United States prohibits foreign ownership of radio and television stations, while Brazil and Japan exclude foreign firms in some telecommunications sectors. Many countries provide essential services via a public monopoly. Even the United States maintains a government monopoly in postal service.

For such sectors there are really two different cases for excluding foreign firms. In some instances a nation may desire to maintain permanent local control over a particular sector, even if this control comes at a cost in terms of efficiency. Presumably a national security motive is present in most such cases. For a second group, the need of "temporary" protection is justified by a variant of the usual infant industry argument.

The perceived need to protect infant service industries is an important factor underlying the strong resistance of some developing nations to GATT negotiations on services. Financial services as well as telecommunications and associated information-based services are frequently protected, with the goal of nurturing a domestic provider not yet able to confront international competition. However, because these

services are important intermediate inputs, protection raises costs and lowers efficiency for all the using industries, thus lowering the odds of survival for other, perhaps more promising, infants.

As noted in section 6.3, however, it is theoretically possible for liberalization to reduce national welfare unless a country is able on average to expand its outputs in activities with scale economies. This condition is unlikely to be met for most developing nations, so the theoretical case for developing-country liberalization of service sectors is not airtight.

Finally, some countries generally concerned about foreign influence within their borders see liberalization of "trade" in services as the start of a general assault on national policies restricting direct foreign investment. Their alarm has some justification, since U.S. firms pressing for expanded markets abroad rarely distinguish between opportunities for trade and opportunities for affiliate sales.

Overall, as in the case of merchandise trade, a variety of arguments may be used to justify barriers against foreign competition in service sectors. But, as in the case of merchandise trade, the "national interest" arguments for continued protection are put forward mainly by those whose own commercial interests would be threatened by liberalization.

## 6.7 Where and How to Negotiate on Services

Although the United States has succeeded in putting the services issue on the agenda for the new GATT round, many questions concerning future U.S. negotiations in this area remain to be answered. This section considers two. First, what are the merits of pursuing the services issue in other bilateral or multilateral forums, in addition to or instead of the GATT? Second, what are the alternative strategies that might be used to make progress on this admittedly difficult issue?

### 6.7.1 Where to Negotiate on Services

As a practical matter, it is too late to wonder whether the United States is prepared to lead international negotiations on service issues in the GATT.[29] For better or worse, the decision has been made and cannot be reversed without substantial loss of credibility for the United States. Gaps in knowledge, both analytical and empirical, remain significant but are beginning to be filled. However, the Uruguay round of GATT negotiations is expected to extend over a number of years. In the meantime, what might be accomplished by pursuing some of the same issues with selected trading partners in other forums?

Since progress on service issues will require countries to grapple with a whole new set of nontariff distortions of international commerce, bilateral negotiations offer an opportunity to explore these issues with

just one partner. In the case of Canada, where broader bilateral negotiations on a free trade area are already in progress, there is a natural opportunity to test out possible negotiating strategies. One special complication in this case is Canada's provincial regulatory structure. However, given the generally cordial relationship between the United States and Canada and the high degree of integration of the two economies, any approach that fails in this test case can probably be scrapped without trying it out in the GATT.

A second possibility is to work initially within a group of countries with a particular interest in pursuing liberalization in the services area. This has been termed a "minilateral" approach or a "GATT of the like-minded." Since the developing nations have expressed the greatest reservations about services, such a group would presumably be drawn from the OECD, or the OECD might become the formal sponsor of a parallel negotiation.[30] Agreements reached within the group would have a conditional most-favored-nation (MFN) status, applying only to the nations agreeing to abide by the terms.[31] However, others could join the group later by agreeing to the same terms.

While the benefits of learning by doing in a smaller negotiation are real, there are some risks as well. Bilateral or minilateral negotiations create preferential trading arrangements that become vested interests. This may reduce the motivation of some GATT members to press for broader and more inclusive agreements later on (Aho and Aronson 1985). Another danger is that the terms of a bilateral agreement with, say, Canada, may be difficult to extend to other trading partners with stronger comparative advantage in certain sectors (e.g., transport, construction).

### 6.7.2 How to Negotiate on Services

Here the basic choice is whether to organize the discussions along sectoral lines (e.g., insurance, telecommunications) or to attempt as in the Tokyo round to develop codes that cover particular types of policies (e.g., subsidies, government procurement policies) for all or most types of traded services.[32] Given the vast universe of policies that impinge on international services competition, it is not possible to handle all relevant issues through the second approach, so the question is really about the degree of emphasis accorded to each.

One strategy to prevent the task from becoming unmanageable is to begin by extending as far as possible the current GATT framework on merchandise trade to services transactions. This approach would identify any "easy" liberalization gains from moving negotiating efforts into virgin territory. At the same time, information would be gained about the important specific issues that do not fall easily into a framework paralleling that for goods.

Another important issue is the extent to which liberalization in service trade is linked to issues on goods. The two-track compromise agreed on at Punta del Este suggests that linkage will be minimal, at least at the start. Unfortunately, complete separation places limits on the efficiency gains attainable through multilateral negotiations, and especially potential north-south agreements to make liberalization in labor-intensive manufactured goods in the north the quid pro quo for high-technology and services liberalization in the south.

One final strategic issue concerns timing. The conventional wisdom is that the pressure of deadlines and media attention can help negotiators to reach mutually beneficial compromises that might otherwise prove elusive. With perhaps a decade of slogging through difficult issues ahead, there is need for some short-term goals where progress can be made, and announced, sooner.

## 6.8 Summing Up

The United States has indeed become a "service economy"—and so have most U.S. trading partners, both industrialized and developing. But although domestic employment at home and abroad is now heavily concentrated in the service industries, tangible goods still dominate international trade. Moreover, the services that absorb most of the labor force at home are not the same services that account for most international service transactions or even the ones ripe for global expansion in the near future.

Thus, the need to press forward on liberalization of services must be justified along other lines—for example, to maintain the forward momentum in multilateral negotiations or to restore domestic support in the United States for open international markets. Yet these arguments seem shaky if services are allowed to displace important unfinished business in the traditional areas of GATT efforts, especially safeguards. Also, if U.S. service firms are interested mainly in expanding sales abroad of their foreign affiliates rather than exports, as the greater importance of the former in total revenues suggests, then the resulting base for domestic support may be rather narrow.

There are important positive aspects to bringing services into the GATT, however. Despite its sometimes disappointing record, the GATT remains the only international organization where rules are taken seriously.[33] Because services would be a new issue in the GATT, there could be some easy gains to be made initially; in merchandise trade, only the hard things are left to tackle. Consideration of services would necessitate greater attention to the links between trade and direct investment and between trade and international movements of labor—further complicating the task of GATT, but in a way likely to serve its

ultimate objective of pushing the world economy toward greater efficiency. And, finally, because goods and services are inextricably (and increasingly) intertwined in real transactions, progress on merchandise trade will surely be slowed unless trade negotiators begin to think seriously about services too.

## Notes

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1. With a few minor exceptions, the rules of the GATT currently apply only to merchandise trade. Outside the GATT framework, long-established regimes govern international competition in some specific service activities, such as ocean shipping and air transport. However, cartelization rather than liberalization has been the dominant theme. In a few other cases, such as telecommunications, there are sector-specific bodies dealing primarily with regulatory and technical issues and only incidentally with barriers to trade. Also see Stalson 1985, 30–36.

2. See U.S. Trade Representative 1983. This is the national study submitted to the GATT by the United States in December 1983.

3. In U.S. statistics for the domestic economy, "services" are usually defined to include all sectors except manufacturing, construction, mining, and agriculture. Balance of payments accounting conventionally divides current account transactions into merchandise trade and "invisibles." The "services" added to merchandise trade to form the broader "goods and services" balance in the U.S. international accounts are income from foreign investments, military transactions, travel and transportation, and "other services." (The remaining category of "invisible" transaction is unilateral transfers.) The U.S. Department of Commerce uses the term *business services* to refer to travel, transportation, and "other services" as recorded in the U.S. international accounts.

4. In a footnote to a statement by the Committee on Changing International Realities of the National Planning Association endorsing Stalson's generally favorable assessment of the prospects for U.S. negotiations on service issues, John C. Carroll of the Communications Workers of America writes, "I sometimes feel that it is a disservice to the public interest to use the code words of 'barriers to trade in services' to fight for the foreign interests of a handful of large construction, banking, and insurance firms" (Stalson 1985, 7).

5. Optimism about the outcome of trade negotiations almost always reflects a belief that the nation's exports will increase more than its imports. Progress toward liberalization thus typically rests on the shaky foundation of mercantilistic goals and inconsistent expectations, rather than an accurate perception of mutual gains to be achieved through expansion of both exports and imports along lines of comparative advantage.

6. See, for example, U.S. International Trade Commission 1982. The Office of Technology Assessment regards prospective direct benefits from expanded service exports as modest but acknowledges the possibility that exports of

goods may follow from sales of services such as engineering and construction contracts (U.S. Congress, Office of Technology Assessment 1986, 5).

7. Based on an analysis of recent job creation in the United States, the Industrial Union Department of the AFL-CIO concluded that service occupations "experiencing the largest net growth in the number of jobs demand little skill, are only weakly organized into unions, and usually offer little pay—ranging from building custodians to fast food workers. . . . prospects for upward mobility out of these lower rung jobs . . . are slight" (AFL-CIO 1984, 11–12). However, other researchers view growing service-sector employment in a more favorable light. For example, see Lawrence 1984 and Urquhart 1984.

8. However, trade-related investment policies have also been ranked high on the agenda for the new GATT round by U.S. trade negotiators, along with a third "new" issue, protection of intellectual property.

9. See table 6.3. Construction, considered a service activity in the international accounts of the United States, is included in the goods-producing sectors in the tabulation of domestic employment by industry.

10. For more extensive discussion of the distinguishing properties of services as economic activities, see Bhagwati 1984; Deardorff 1985; Gray 1983; Kravis 1983; Sampson and Snape 1985; and Stern and Hoekman 1986.

11. A large part of the theoretical literature on international trade deals with the extent to which indirect exchange of factors via trade can achieve the same efficiency benefits in production and consumption as free international movements of the factors themselves.

12. The following discussion is based on Stern and Hoekman 1986.

13. What is technologically required needs to be distinguished from what is cost efficient or profitable. This distinction is elaborated in the examples below.

14. Most analyses of international competition in services exclude factor services, that is, the employment abroad of a country's labor or capital by a foreign firm.

15. The theory of comparative advantage explains the source of mutual gains to nations from international trade and, in particular, shows that a nation can gain from trade even if it is at an absolute disadvantage in all productive activities. The theory of comparative advantage does not suggest that every resident of a given nation will be made better off by trade. Actual trade flows are determined by international competitiveness, of which comparative advantage is just one element, along with exchange rates and national policies. Comparative advantage is a reliable predictor of a nation's trade flows only when exchange rates are consistent with globally balanced trade and the influence of trade-distorting policies is minor.

16. "Large" refers here to the size of the market for a given product. This tendency has been termed "false comparative advantage" by Lancaster 1979. Also see Helpman and Krugman 1985, 152.

17. This problem was discussed by Frank Graham more than half a century ago. For a modern treatment, see Helpman and Krugman 1985.

18. Housing services in table 6.8 include the imputed rental value of owner-occupied housing, but transportation services does not include a similar imputed value for motor vehicles.

19. This definition is the one used in the employment data published by the Bureau of Labor Statistics. Business services is sometimes defined more broadly to include all services purchased mainly by businesses rather than households, adding in particular business-oriented financial and communication services. Also, the U.S. Department of Commerce uses the term *business services* in its balance of payments reporting to refer to all nonfactor services traded internationally.

20. Like the broader services category, employment in business services includes workers at every level of skill. See Howe 1986 for a detailed assessment of employment growth in the business services industry.

21. Urquhart 1984. Men hired in the service sector were more likely to have worked in the goods-producing sector rather than not to have worked at all during the previous year.

22. A related issue is the extent to which firms in service industries earn rents, which are shared with workers through higher wages. Using microdata, Krueger and Summers (1986) show that most service industries are low paying even when the usual adjustments are made for worker characteristics. The exceptions include banking and insurance, industries that are characterized by substantial barriers to entry.

23. Final demands are typically met by a combination of goods and services selected on the basis of both income and relative prices. Intermediate-input service needs are met by direct employment or by purchases from specialized service-providers. Again, the choice depends on relative prices. The observed long-term correlation between per capita income growth and the importance of service employment necessarily reflects changes in relative prices as well as systematic effects of rising income (Kravis 1983; Kravis, Heston, and Summers 1983). The same is of course true for cross-country comparisons in a given year.

24. Some developing nations are belatedly recognizing their strong comparative advantage in agricultural production as well as the concentration of poverty in rural areas. A few are attempting to alter domestic policies that have favored industrial production at the expense of agriculture.

25. In practice, many service exports are misreported or unreported. Some service exports are bundled together with merchandise exports (e.g., computer equipment and software). For these, the total value of the bundle is reported as a merchandise export. In others including tourism, reported amounts are based on voluntary surveys with low response rates. Some categories of service exports are estimated from conceptually flawed or incomplete data, while still others are simply omitted. For further details on measurement issues, see U.S. Congress, Office of Technology Assessment 1986 and references cited there.

26. The existence of scale economies is, of course, not unique to for-profit activities. Both health and education, largely organized on a not-for-profit basis, offer similar examples of potential benefits from "exporting" services in excess of the share in total revenues.

27. The small GATT secretariat has remained an important voice for liberal policies, but these efforts have had scant influence on the actions of major nations.

28. U.S. International Trade Commission 1982, 4–7. This document also provides information by industry for each of the fourteen service industries.

29. Krommenacker 1984 provides an insider's evaluation of the potential role of the GATT in liberalizing trade in services.

30. The OECD has already sponsored considerable consultative work on services. See Schott 1983 for an evaluation of OECD initiatives and the relative merits of proceeding within the OECD rather than the GATT.

31. Such conditionality represents a departure from the central GATT principle of MFN treatment (nondiscrimination), under which tariff concessions made by any member apply to all other members. However, a similar approach was used in the Tokyo round for the codes of conduct on specific types of nontariff barriers.

32. Strategies for negotiating on services are discussed in greater detail by Aronson and Cowhey 1984; Brock 1982; Gray 1983; Malmgren 1985; Stalson 1985; and Sapir 1985.

33. Not necessarily followed, but at least taken seriously. A good example is the prolonged effort by the United States to find a "GATT-able" variant on its domestic international sales corporation (DISC) device for subsidizing exports.

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## 2. *Maurice R. Greenberg*
### The United States and World Services Trade

My company, AIG, is the largest international insurance organization in the world—with thirty thousand employees and $20 billion in assets. We do business in 140 countries and jurisdictions. In every one of them, insurance is a highly regulated activity; when governments even *think* about policies that affect trade in services, we feel the heat.

Direct economic interest is one reason I care about services, but there is also another, bigger reason for my concern over trade in services. It is such an important area of U.S. economic activity, yet has gotten so little attention. We, as a nation, have a tremendous economic stake in the health of our service sector—a stake that is only now starting to be understood and appreciated.

Unfortunately, we are well past the point at which understanding and appreciation are enough. As in other trade areas, the growth of intense worldwide competition and the spread of nontariff barriers have hurt U.S. economic interests in services trade—and will continue to hurt us in the absence of firm, direct, and immediate action on our part and on the part of our principal trading partners.

My feelings of alarm are not eased when a labor leader describes the service economy as fast food and video games; when the head of one of the world's biggest banks describes the service economy as one where we take in each other's laundry; when a former presidential candidate describes the service economy as one where Americans serve hamburgers and sweep floors.

One of the reasons services have gotten such short shrift is that they are hard to understand. What is a "service" anyway? You cannot see it, touch it, store it, or measure it in any meaningful way that is also easily understood. We are dealing here with a "product"—in quotes—that is really a process; something that was once integral to the production and distribution of goods—organizing inputs, throughputs, and outputs—that has been broken away into any number of separate, distinct, profit-producing activities.

A lot of service industries have been around for a long time. In my own business, even Lloyd's was a latecomer: insurers were writing covers on caravan goods when Hammurabi ruled Babylonia four thousand years ago. What makes today different is the rapid growth of the telecommunications infrastructure, the integration of the world's capital markets, and the shifting basis of comparative advantage from natural endowments to human resources.

Today, we talk routinely of world cars, outscourcing, and focused manufacturing as if they had been around forever. In fact, they are recent developments, made possible by the vast, technology-driven expansion of the service sector. Microchips and microwaves have given us the ability to allocate and manage resources globally, on a scale and to an extent that none of us could have imagined when John Kennedy was president.

That ability to deliver services globally has, in turn, fueled economic transformation and division of labor on a global scale—a degree of economic integration that boggles the mind, occurring at a pace that leaves us breathless. In turn, this quantum leap in economic development has both multiplied demand for services and dramatically increased supply of the necessary ingredients for a modern service economy—technology, expertise, and capital.

World trade figures reflect this fundamental change. In 1976, service transactions represented just over one-quarter of total world trade; in 1985, they accounted for 30 percent.

At the same time, the U.S. position in worldwide services trade has slipped significantly in a number of ways. For one thing, the dramatic growth in service exports—over 400 percent between 1970 and 1980—has come to a grinding halt. Since 1980, our exports, measured in current dollars, have grown only 26 percent—that is actually a net loss of almost 8 percent when corrected for inflation.

We have also seen significant erosion of our market share. Up through the early 1970s, U.S. service exports accounted for a dependable 25 percent of the worldwide total. In recent years, they have averaged 20 percent or less.

To our credit, services—including investment income—have been our best trade performer. In every year since 1972, services have shown a surplus. In five of those years, the surplus was even big enough to offset deficits in the merchandise account. That, of course, was when our merchandise deficits were a small fraction of their present size.

A lot of the glimmer fades, however, when we take a closer look. For one thing, our overall trade performance is deteriorating significantly. Since 1981, when we hit a high of $41 billion, our overall surplus has steadily fallen to its current level of around $24 billion.

Most of the decline comes not from eroding exports, but from explosive growth in service imports—growth that is likely to continue. Our transformation to net debtor status is going to increase that pressure, since every penny of the interest we pay to our foreign creditors—and every penny of profit on U.S. operations they repatriate—counts as a service import.

But most disturbing of all is the deterioration of our trade in business services—finance, brokerage, insurance, professional services and so

on—the growth industries of the service sector. In 1981, our peak year, business services generated a surplus of $10 billion. In 1985, that figure was down to less than half a billion. Last year's numbers could well show deficit. Stated in other terms, our share of that market has fallen from almost 15 percent in 1973 to just under 8 percent in 1984. However you look at it, we are not in good shape.

Before we all get terminally depressed, however, let me hasten to point out that these numbers are, at best, imprecise. Despite the best efforts of that huge statistical machine in Washington, we know very little about our true performance.

Nobody ever paid very much attention to giving services their due. We were a manufacturing economy at the end of World War II—or at least we thought we were—and statistically speaking we were going to stay a manufacturing economy. Last September, the congressional Office of Technology Assessment suggested that our service exports between 1982 and 1984 may have been underestimated by as much as $128 billion, but nobody really knows, because nobody keeps close track of the numbers.

How can we make policy if we do not know what we are dealing with?

One thing I do know, and which we all know without a doubt, is that the United States is very much a service economy—with all due respect to the labor leader, banker, and presidential candidate I quoted earlier. Well over two-thirds of our GNP comes out of services. Three-quarters of our work force is directly employed in service industries: the actual proportion probably exceeds 90 percent when we include service employees in the goods-producing sector—managers, planners, accountants, R&D personnel, and so on. Forty percent of our exports are services; a quarter of our imports are services.

America's overwhelming national interest in the strength of the service sector is self-evident. Service industries have a critical role to play not only in contributing to the vitality of our international economic performance but also—and perhaps especially—in enhancing the efficiency and global competitiveness of our goods-producing industries as well.

One way we can work toward strengthening our service sector is by improving our ability to compete in the global marketplace for services.

There is nothing fundamentally wrong with the U.S. service sector. Our technological base, our human resource base, and our access to capital are second to none. Indeed, if anything, the vastness and complexity of our domestic marketplace have given us a substantial lead in the learning curve of resource allocation and infrastructure management that lie at the core of service activities.

So why haven't we been able to translate that head start into sustained leadership in the world marketplace? In a word, the reason is

protectionism. By their very nature, services are among the world's most closely regulated economic activities. Traditionally, governments have granted themselves tight control over access to their financial, communications, and internal transport markets.

That is all well and good, so long as a national government is willing and able to live in isolation from the rest of the world community. Maybe Albania can do that, but I cannot think of many others. The fact is that the integration of world markets, deregulation, and the wholesale privatization of former public and quasi-public monopolies have effectively demolished whatever rationale may have existed for constraints on market access in most, if not all, nonmilitary economic activities.

Yet such constraints not only exist, but have grown perniciously over the last several years. As in merchandise trade, trade in services has become a viper's nest of governmentally inspired economic distortion and obstruction at every turn. Not that this is surprising: increased competition is a natural and predictable consequence of the substantial and continued growth in both the demand for services and capacity I noted earlier.

The problem is that this license to obstruct with impunity is a direct result of the exclusion of services from the multilateral trading regime. And it is hurting the United States and others committed to open markets.

Without negotiated rules, we are left with an ad hoc system of expedient means based on the narrowest of national interests. Now, I am certainly not arguing against self-interest: if anything, self-interest is the only thing that lets agreements work. What I am arguing against is short-term, unilateral action that inevitably leads to long-term, multilateral conflict.

Obviously, we have made some progress. The Reagan administration's successful effort to get services onto the GATT agenda has built a strong multilateral consensus on the need for negotiated rules and set a major precedent as well. At the same time, however, we cannot forget that last September's success at Punta del Este came only after six years of incessant jawboning and arm-twisting on the part of William Brock, Clayton Yeutter, and dozens of others in every forum imaginable.

One voice that made a great deal of difference is the Coalition of Service Industries, a group formed in 1982, which I served as chairman until last year. The purpose of the coalition is to build public awareness of the role of service industries in the U.S. economy and to speak out on public policy issues affecting the U.S. service sector.

So far, we have done well. Among other things, the coalition supported passage of the Omnibus Trade Act of 1984, made a strong commitment to reducing barriers to trade in services at the 1984 London

Economic Summit and to completing the U.S. National Study on Services, and experienced success at Punta del Este.

However, let me also emphasize that our initiative, precedent-setting though it was, is still only an agenda victory. If the Kennedy and Tokyo rounds are any indication, we are not going to see Draft Codes, let alone signed agreements, for a long time—perhaps, if things go well, by the turn of the century.

This is not to dismiss GATT. It is an organization that has contributed a great deal to our trading system and still has an important contribution to make. But its potential for contribution may not be strongest in the services area. I would much rather see a series of linked bilateral or multilateral agreements that could eventually be integrated into a broader multilateral code subject to further negotiation in the GATT forum.

Certainly the constituencies exist. As a key player in services, Japan was the first to support our initiative. The United Kingdom has also understood its stake in services—what they call "invisible trade"—for a long time. As a result of the national studies on services mandated by the GATT ministerial conference in 1982, we have discovered that France is an even bigger exporter of services than the United Kingdom: as a whole, EEC service exports are more than three times the size of ours. And speaking of blocs, the ASEAN countries are also starting to recognize their stake in services. I think most of those governments would be willing to negotiate under the right conditions.

The executive power exists: The Omnibus Trade Act of 1984 not only opened the way for bilateral sectoral trade agreements in services and investment; it also strengthened the president's power to impose sanctions for unfair trade practices in services.

And there are precedents as well: a few years ago, for example, Canada offered to open negotiations around a sectoral free trade agreement on traded computer services, and services are included in the U.S.-Israel free trade agreement of 1985.

If we can build a framework of bilateral agreements on a services regime, we will be more than halfway—much more than halfway—toward full GATT sanction. But before we can enter into any kind of international negotiations, we have to get our own act together and that is not going to be easy.

The first thing we must do is decide that we are going to speak with one voice and then execute the decision. Right now, there are at least five executive branch departments that have some say over trade policy—Commerce, Agriculture, State, Defense, and the trade representative's office. A few years ago, Donald Regan and Malcolm Baldridge floated the idea of a Department of Trade, but it died. Recently, Dan Rostenkowski raised the idea again as part of his trade bill. I think we need to do it, regardless of the turf battles these things invariably create.

Another necessary step is beefing up our collection and analysis of service-sector economic data. The Omnibus Trade Act of 1984 mandated such changes, but the various departments have been slow to respond. Three years after the act's passage, for example, it is still impossible to get more than the sketchiest annual figures on trade in business services. We will not be able to make realistic, workable policy.

The last thing we have to do before we sit down at the negotiating table is to make some fundamental decisions about the kind of agreements we want and then adopt appropriate strategy and tactics. If we want a single broad agreement, we have to decide that. If we want a "constitution" for services trade that sets out some general rules, plus a series of sectoral codes that can be signed, we have to decide that too. The one thing we cannot do is go in unprepared and negotiate ad hoc.

There are a number of pressing issues on the services agenda. From my perspective, the most pressing of these is national treatment—the right of foreign service businesses to receive fair and equal treatment under the laws of the host country. At present, governments can, and do, discriminate against service businesses in ways that are clearly prohibited in the agreements that govern trade in goods. Those practices seriously impair our ability to compete on a level playing field.

Discrimination can take place in many forms: the most common are in fiscal policy, taxation, and government procurement practices. Discriminatory fiscal policy generally works by setting up unequal and onerous requirements for foreign businesses. In some countries, for example, foreign insurers are obliged to make deposits of assets that are not required of domestic insurers—in situations that the government specifies.

Taxation is also an easy way to discriminate. In several European countries, foreign insurers are required to pay taxes on premium income, while domestic companies pay taxes on profits. In another European country, premium taxes can be 400 percent greater for foreign insurers than for their domestic competitors.

One of the great successes of the Tokyo round was the agreement on rules for opening up government procurement of merchandise. We need the same thing in services. Today, foreign insurers are still methodically shut out of the bidding on government-sponsored projects, both at home and in third countries. They are systematically excluded from subsidized or guaranteed government export credits—even when those credits can benefit domestic industries.

Nor is the insurance industry alone. Any number of industry and government surveys show that other service industries face the same kinds of discriminatory and unequal treatment in foreign markets. To

counteract this, we have to insist that any agreement guarantees, to the largest extent possible, the right of market access and the principles of transparency and national treatment.

In conclusion, I want to reemphasize the need for negotiated rules on trade in services. Such an agreement would benefit not just the service sector but every sector of the U.S. economy—manufacturing, mining, and agriculture—by improving efficiency and enhancing competitiveness. It would strengthen our trade position immeasurably by establishing a level playing field on which we can compete. And it would make a positive contribution to the further integration of the world economy.

Our success or failure at the negotiation table will depend on how we trade access to our markets for access to other markets. Most of our trading partners appreciate the size and wealth of our economy and understand the implicit power of the leverage we possess. It is time we understand and appreciate them as well.

# 3. *Lionel H. Olmer*

## The Role of Services

A couple of hundred years ago Adam Smith, the eighteenth-century father of classical economics (or so I am told by ideologues among Reagan administration policy officials past and present) is said to have criticized the role of services in the economy. He wrote that services are "unproductive of any value because they do not fix or realize themselves in any permanent subject or vendible commodity which endures after labor is passed." A service, he remarked, "perishes in the very instant of its production."

I believe, to the contrary, that services are important and increasingly so. The U.S. economy seems to be driven more and more by the services sector rather than by manufacturing or agriculture, both in terms of economic output and employment. Indeed, the crown jewel in the Reagan administration's display of accomplishments, the "great American job machine," which has produced 13 million new jobs over the last six years, is a record of truly glittering proportions compared with other industrial nations, particularly those in Western Europe where no new jobs have been added over a ten-year period. None of this additional employment has been in the manufacturing sector; virtually all of it has been created in the services: since 1980, retailing, which now represents 16 percent of the U.S. work force, has experi-

enced a 20 percent increase, and finance and real estate have each experienced roughly a 25 percent rise in employment during the six-year period. These three categories alone, retailing, finance, and real estate, now account for more than one out of every five jobs in America, while all services comprise three of every four jobs in our economy. Because there has been no increase in jobs in manufacturing, as the economy grows, manufacturing employment will make up a smaller and smaller percentage of the total.

The role and significance of services in our economy are neither well understood nor accurately measured and evaluated. Part of this problem stems from an archaic statistical system which has not kept pace with changes in our economy and does not provide adequate data. For example, an emerging pattern in recent years has been for manufacturing companies to remove from their direct-hire payrolls workers needed for custodial, security, and cafeteria services and instead to contract out to specialty firms for the performance of those functions. There might not be any net change in the number of employees, but U.S. labor statistics would reflect a reduction in manufacturing employment and an increase in services jobs. The extent of this trend has not been determined. On another level, and notwithstanding Adam Smith's peroration, some services may exert a strong "pull" on manufacturing sales; that is, the performance of a service, such as engineering consulting, may result in sales contracts for equipment specified as a consequence of the engineering service. This phenomenon has been experienced often in connection with large construction contracts, in the developing world especially.

In the field of informatics, that is, the integration of telecommunications, computers, and related services, the relative value of software continues to escalate in comparison with hardware. Among some leading manufacturers of digital telephone switching equipment—machines that receive, store, relay, and forward hundreds of thousands of telephone calls, computer linkups, and video signals simultaneously—fully 80 percent of the cost is in the software that permits the equipment to operate, and only 20 percent of the total cost of production lies in the machinery. One switch manufacturer has told me his company's objective is to "drive down the cost of the hardware to close to zero, and we have a good chance of reaching this goal within five years." The production of the switching software for computers and telecommunications equipment and the design of microchips and related tasks are classified as services.

Finally, it can be said with some justification that the world of finance has overshadowed the manufacturing sector in terms of overall importance to national economies. Financial flows exceed the value of trade in goods by more than twenty to one. Finance is clearly the lubricant that

makes possible the smooth flow of international commerce. In the absence of credit, trade grinds to a virtual halt: over a three-year period in the early 1980s, U.S. exports to six countries in Latin America suffered a $17 billion decline mostly because financing was simply not available as lending institutions panicked in the face of the enormous buildup of foreign debt by these countries. The impact on the U.S. trading community generally, and in particular among export-related industry in south Florida, was staggering. And so it is fair to state that financial services to a great degree underpin manufacturing jobs and the performance of U.S. companies in international trade.

Having declared that I believe services are increasingly significant yet not well understood and that their contribution to the manufacturing sector may be underestimated, let me now put a different perspective on the role of services in the U.S. economy. I shall make four points:

1. The export potential of services in relation to international trade in goods has been exaggerated, and thus the importance of services in the context of America's staggering trade and current account deficits is being vastly overstated.

2. The prospects are dim for achieving a more open and liberal regime of rules to guide world trade in services, as for example through the new round of multinational negotiations initiated in September 1986 under the auspices of the General Agreement on Tariffs and Trade (GATT).

3. Yet even if a GATT agreement on services is not possible to achieve, say, over the next five years, and even though the value of services exports is relatively small, the effort to liberalize markets and regulations is still worthwhile.

4. The United States, however, would be better advised to place greater emphasis on bilateral and sector-specific negotiations rather than on those that are multilateral and generic in character.

The size and pervasiveness of the U.S. trade deficit (we are now experiencing a deficit even in high-technology trade, a field in which we had long thought ourselves preeminent) has finally aroused the body politic and convinced virtually everyone in and out of government that the United States has a severe problem. The problem will not be corrected by market forces but through negotiation on an "even playing field" on which U.S. businessmen are allowed to compete on terms equivalent to those permitted to foreigners in the U.S. marketplace. Nor will it be solved merely by encouraging faster economic growth in major industrialized countries or by some magic stroke that would eliminate the debt and interest payment obligations of less developed countries so that they could, presumably, buy more U.S. goods and services. No, the realization has taken hold that the United States cannot export its way back to a balance of accounts.

Some argue that, in the end, accounts will balance "because they must," that when foreigners cease loaning money to the United States, the U.S. foreign debt will increase even faster (it is already larger than any other single country's external debt and arguably within a few years will be larger than the combined debt of all other nations in the world) and the value of our currency will plummet, making U.S. goods price competitive in both world markets and our own market. I am not so sanguine about this unhappy forecast! Price competitiveness is only one factor in the sale of manufactures: market presence, technological superiority, quality, and service weigh heavily in the decision-making calculus of most purchasers. In some sectors, once a presence has been established, it is extremely difficult to dislodge even with an offer of significant cost savings.

Although statistics on trade in services are inadequate, and even to a degree misleading, an examination of our economic accounts is nonetheless revealing of the relative unimportance and lack of potential contribution by services to the resolution of the overwhelming deficits we confront. The most comprehensive yardstick of international economic activity is the *current account,* which includes the total of U.S. trade and other transactions in goods and services. The current account is comprised of five component parts: the *merchandise trade* account which measures the exchange of goods but not services; the *business services* account which is the aggregation of all services; the *international investment income* account; the *other goods and services* account which measures mostly government transactions; and the *unilateral transfers* account which is comprised almost entirely of payments to U.S. citizens living abroad. Table 6.14 shows how the Department of Commerce reports the performance of these various accounts for 1986.

A closer focus on the 1986 *business services* account accomplishes two purposes (see table 6.15): it demonstrates that little comfort should be drawn from believing that success in trade in services will do more than contribute at the margin to a turnaround of our deficits; more important, it underscores the critical primacy of trade in goods and the burden on the manufacturing sector[1] for any serious reduction in the current account imbalance.

The point is that the largest categories in the business services account have nothing whatever to do with the substance or rhetoric associated with the popular discourse on services trade as the wave of the future.[2] And the part of the account that does deal with insurance, engineering consulting, financial management, and the like amounts to a very small fraction of the U.S. trade picture, hardly enough to make a difference in the context of present and foreseeable economic realities. Indeed, it is reasonable to expect that U.S. service companies will not have an easy time holding on to existing surpluses as, for

**Table 6.14 Current Account (billions of dollars)**

| | Imports | Exports | Balance (−$140) |
|---|---|---|---|
| Merchandise trade | 398 (CIF) | 228 | −170<br>(−148 FOB) |
| International investment income | 68 | 91 | +23 |
| Unilateral transfers | −15.1 | — | −15.1 |
| Business services | 45.1 | 48 | +2.9 |
| Other goods and services | 13.7 | 10.2 | −3.5 |

**Table 6.15 Business Services (billions of dollars)**

| | Imports (45.3) | Exports (48.2) | Balance (+2.9) |
|---|---|---|---|
| Travel | 17.8 | 12.9 | −4.9 |
| Passenger fares | 6.8 | 3.3 | −3.5 |
| Shipping | 16.4 | 14.7 | −1.7 |
| Proprietary rights | — | 9.6 | +9.6 |
| Other: (communications services, contractor/ consulting fees, financial management, insurance, film rentals, etc.) | 4.3 | 7.7 | +3.4 |

example, Japan becomes a more experienced international center of finance, as Korea increases its participation in international construction projects, and as the U.S. share of world patents continues to decline as it has for a decade.

The government and industry should make substantial efforts to improve the performance and opportunity for U.S. companies to compete in these areas, but we must bear in mind the fact that services cannot come close to bailing us out of our international economic morass.

GATT negotiation on services will produce results that are disappointing at best and possibly harmful if the United States grants concessions and assumes obligation in anticipation of equivalent commitments from its trading partners. This is not farfetched if one looks at the historical record of GATT agreements outside the realm of mutual and balanced tariff reductions. The Tokyo round of GATT negotiations concluded in 1979, and one would be hard pressed to find many (if any!) in the private sector who would testify to the utility or value of the variety of nontariff agreements that those negotiations produced amid much-heralded and highly publicized fanfare (e.g., agreements on government procurement and civil aviation have neither produced sig-

nificant sales opportunities for U.S. exporters nor dissuaded foreign governments from subsidizing national aerospace companies).

Services trade is by its nature less amenable to multinational negotiations and agreement. Not only are the problems harder to define, but they are often unique to particular regions and countries. The "problems" as we might see them may, from the foreigners point of view, not represent a problem or a barrier to the entry of nondomestic suppliers; rather they exist as a reflection of the history, culture, and custom of the local society.[3] Moreover, the two fundamental principles of GATT are *national treatment,* that is, the proposition that outside competitors will be treated the same as domestic citizens, and *most favored nation* (MFN) *treatment,* which makes available to all GATT members concessions granted to any. Often, national treatment is not enough to provide U.S. suppliers with an opportunity to compete. For example, in countries where government policy that supports monopoly services and paternalistic regulations represents the primary barriers to U.S. services trade, reciprocal market access would require those countries either to adopt the regulatory philosophy for the United States or to otherwise accommodate U.S. concerns in ways that far exceed national treatment. "Reciprocity" is simply unacceptable to most countries as a comprehensive international standard.

Telecommunications are much in the news. The United States has concluded formal negotiations with Japan on terms pronounced "90 percent satisfactory" by segments of the U.S. industry. Talks with Germany, Italy, and France, however, continue with little progress being reported and with high potential for major confrontation looming. Thus, the U.S. Congress, feeling increasingly pressured to do "something" about the U.S. trade deficit lest members be characterized as ineffective, threatens to pass telecommunications reciprocity legislation. Supporters of such legislation, which would force the president to retaliate if bilateral negotiations fail, assert that the breakup of AT&T and the consequent opening up of the U.S. telecommunications markets constitute a unilateral trade concession by the United States. Because most of the rest of the world chooses not to follow the U.S. lead in deregulation, the only way to obtain foreign concessions is to negotiate accommodations of U.S. grievances on a bilateral, sectoral basis. This is not compatible within the framework of MFN, and it is highly unlikely that any nation would open its borders to all members without assurances that each subscribed to and would seriously implement a world agreement. From the point of view of U.S. national interests, we should become more comfortable with the policy of negotiating market access on a bilateral basis even in the face of criticism that it appears to lessen U.S. commitments to a multilateral trade regime.

Private sector companies with major interests that would be advanced through open markets and liberal regulations governing trade

in services have done a superb job of maintaining pressure on the U.S. government. The administration has secured an agreement from GATT members to put services on the agenda when serious negotiations begin in Geneva, Switzerland, later this year. Had it not been for U.S. insistence starting at the ministerial level in 1981 and continuing through the start of the Uruguay round in September 1986, more delay would certainly have been the result of intransigence on the part of the leading advanced developed nations, most especially Brazil and India. (It was not long ago, 1982 to be exact, that the EC resisted U.S. blandishments on services and agreed only to "study" the various issues. After four years of desultory "study," the EC seems willing to accept services on the agenda, although this should not be seen as tantamount to embracing the subject enthusiastically.) That in the final hours at Punta del Este a concession was forged and the United States achieved "victory" in the sense of incorporating services as part of the Uruguay declaration on the new GATT round should not obscure the long, torturous road ahead or raise unrealistic expectations for what might be achieved in the course of the next several years of negotiations. Plow ahead we should, but with eyes wide open as to what the costs and benefits might be for *all* American interests and without encouraging the belief that mere grudging acceptance to discuss services in the GATT is close to a great leap forward in U.S. export trade.

The United States needs to press hard for greater market access throughout the many difference service areas and to insist on improved protections for intellectual property rights lest we slowly lose the present advantages and permit by abdication or ineffective negotiations the steady erosion of the existing trade surpluses in these fields. In the case of patents, copyrights, and semiconductor chip design (which was created as a sui generis right by the U.S. Congress in 1984 and which, by dint of strict reciprocal standards embodied in the statute, is slowly being emulated by certain of our leading trade partners to the great advantage of the U.S. high-technology community), tough negotiations, strict enforcement, effective oversight, and dispute settlement are more likely to be productive if pursued bilaterally among like-minded nations perceiving a shared interest in reaching a conclusion.

In summary, there is every reason to push ahead vigorously for expanding services trade through the mechanism of the GATT, but to achieve faster results more meaningful to most U.S. companies, we would probably be better off pressing hardest on a sector-by-sector basis with those countries most likely to perceive a benefit from reaching agreement with the United States. But we must recognize that success in liberalizing services trade will be difficult to achieve and long in coming; above all else we should know that such success would not approach the magnitude of manufactures trade which must remain dominant in the U.S. economy.

## Notes

1. This burden on the manufacturing sector will become even heavier as the current account deficit continues to rise in the face of increasing interest payments on U.S. foreign debt and as remittances increase on foreign investment in the United States. Historically in surplus, or at least less in arrears than the merchandise trade balance, the current account deficit will grow to exceed the trade deficit this year or next. It represents roughly 3.3 percent of U.S. GNP in 1986, and if U.S. foreign debt reaches $600–800 billion in the early 1990s, the current account deficit will approach 15 percent of our entire growth national product. Merchandise trade is the only area of our trading economy large enough to make a difference in reducing the deficit.

2. Articles in newspapers, congressional testimony by "experts," and administration witnesses speaking on behalf of services, perhaps in part to reduce pressures on other areas, frequently cite the entire business services account, which lumps together all manner of transactions into what appears to be a respectably large accumulation of trade—$93 billion in 1986. For example, in an op-ed piece in the September 14, 1986, *New York Times*, Leslie Wayne writes of services exports as "the new symbol of America's grandeur abroad. They are the bright spot in an otherwise bleak trade picture [and] represent about one-third of the nation's $800 billion-plus flow of exports and imports." In fact, this "new wave" totaled $12 billion in 1986 with a $3.4 billion surplus, statistics that remain roughly unchanged.

3. This is not to suggest that the United States should accept the status quo, but to make clearer that what we often see as a barrier is something of deep fundamental significance to the foreign country and that its elimination is likely to be several orders of magnitude more difficult (impossible?) than reducing tariffs.

## Summary of Discussion

Several issues in the negotiations for freer trade in services were discussed. On the question of whether the forthcoming U.S. trade bill would demand reciprocity or national treatment for services, Lionel Olmer explained that the administration report "Quest for Excellence" is a grab bag of ideas that does not make a clear statement on this point. According to section 301, the absence of reciprocity can be grounds for the initiation of a trade complaint, but there is no definition of reciprocal treatment in the legislation, and in any case, Olmer contended, the presence of such a basis in law would be unreliable.

The aluminum industry deals bilaterally with trade problems whenever possible, reported Charles Parry. GATT promises to be a tidy solution, but in practice it fails. Services in particular will be a farce in GATT. Olmer defended the emphasis on services in the current GATT

round as a justifiable strategy for bleeding off congressional protectionist pressures. He noted, however, that Congress has become extremely cynical about GATT. Furthermore, the current GATT negotiations will not be over for several years, and any agreement on services will be very nonspecific in any case. Services should not be neglected, but should be placed in perspective with a realization that manufacturing is by far the dominant traded sector in terms of jobs and the future health of the economy. Thomas Enders supported a pessimistic outlook for service trade negotiations, citing as an example the bilateral negotiations between the United States and Canada, where despite great commitment and similar policies, skilled negotiators, minimal cultural problems, and a systematic attack on the issues, a major step forward cannot be expected.

Maurice Greenberg rejected any analysis of service trade based on available statistics, which he claimed are faulty. His personal experience suggests that the value of service trade is much greater than evoked by the data. No one suggests, according to Greenberg, that service-sector income will balance merchandise trade; both issues are important. He pointed out that there is international support for expanded service trade, particularly from the United Kingdom, France, and Japan and that India and Brazil form the principal resistance. He downplayed the doubts expressed about GATT, suggesting that it is a worthwhile forum for this type of negotiation.

The discussion shifted to questions of the merits of bilateral versus multilateral and codified versus case-by-case approaches. Robert Baldwin suggested that even in the case of trade in manufactured goods, the codes of the Tokyo round were ineffective and the panel dispute resolution not satisfactorily uniform in outcome. In his view, bilateral approaches are a waste of time; a more promising approach would be to attack nontariff barriers in a multilateral forum on an item-by-item basis, with countervailing duties available as the proverbial stick. Greenberg agreed that nontariff barriers cannot be codified and expressed some hope in the application of the section 301 stick as a threat in bilateral negotiations.

Thomas Johnson brought up the case of the regulation of financial transactions, where the problem is not with London or New York but Tokyo. There is a complex set of institutional questions, due to the existence in Japan of a Glass-Steagall-type law. Licensing of U.S. banking institutions to operate directly in securities markets is not prohibited by Japanese law, but the resistance has so far been insurmountable. U.S. regulators are helping, although the admittance by the Fed of three Japanese participants as primary dealers of U.S. government securities might not help because it removes the stick. The U.S. banks need reciprocal, not national, treatment in Japan.

On the question of the importance of the exchange rate in service trade, Maurice Greenberg said that it matters only a little, since in the books the earnings or losses in foreign exchange are balanced out.

Sebastian Edwards raised the issue of what is to be considered fair game in service trade, wondering why LDCs should not claim that housekeeping, for example, is a service. Rudiger Dornbusch suggested that Mexican dentists might want to fly to Texas for the day to export their particular service.