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SERVICES IN THE DOMESTIC ECONOMY AND IN WORLD TRANSACTIONS

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Services in the Domestic Economy and In World Transactions ${\tt ABSTRACT}$

A new interest in the role of services in world transactions has been generated by the current efforts of the U.S. Government to reduce barriers to international trade in services.

The paper distinguishes four different classifications of economic activities between services and commodities. Service industries - those producing non-storable outputs - have been growing in most domestic economies relative to commodity-producing industries, though about half the growth in their share in GDP is attributable to relative price increases.

The U.S. policy effort focuses on a somewhat different set of services which are referred to as "private nonfactor services". Exports of such services have not expanded relative to commodity exports. However, their sales by U.S. affiliates abroad are much larger than exports from the U.S. and have been growing more rapidly than affiliates' commodity sales. It will not be easy to obtain the consent of foreign countries to a general easing of restrictions on direct foreign investment in service sectors. Also, it may be asked why, if growth is to be the criterion of special negotiating effort, the commodity-service dichotomy is relevant. Why not search for fast growing sectors among commodities as well?

However, a successful effort to reduce some foreign barriers and the compensatory reductions in U.S. barriers that this would entail might provide a modest counterweight on the side of liberalization in a world in which restrictions are growing.

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SERVICES IN THE DOMESTIC ECONOMY AND IN WORLD TRANSACTIONS Irving B. Kravis

A new interest in the role of services in world transactions has been generated by the current efforts of the U.S. Government to reduce barriers to international trade in services. The services that are the focus of this attention are not the same as those often spoken of in discussions of the "service economy". Yet generalizations based on definitions of services in the domestic context are sometimes drawn upon to support policy proposals in the international area.

This paper has two obejctives. One is to sort out these various congeries of services and to assess their importance in the domestic economies of various nations and in international transactions. The second is to examine the implications of the empirical findings for current U.S. policy with regard to international trade.

I Introduction

It seems like a natural extension of the concept of an evolving service economy to conceive of a relative expansion of international transactions in services. Yet when an effort is made to assess these prospects in the trade of nations, a large stumbling block is posed by the uncertainty that clouds the identity of the "services" involved. There are different congeries of services, each based on a different cross cut of economic activity. In the domestic economy there is a difference between services defined as final—demand products (e.g., public passenger transport)** and service industries in

The author is indebted to Robert P. Inman, Robert E. Lipsey and Helena Stalson for helpful comments. The statistical work for this paper was performed by Martin Shanin.

[&]quot;Final" demand refers to purchases for own use; that is, they are purchases not intended for re-sale, with or without further processing.

the sense of those that add value mainly by means of the use of capital and labor with relatively little intermediate inputs of physical things (e.g., finance). When it comes to international transactions, still other classifications are used. A major difference from the usual domestic concepts is that incomes from factors of production operating abroad, particularly capital in the case of the U.S., are often grouped with services in international classifications, regardless of the type of output produced by these factors. Another difference, recently emphasized in U.S. trade negotiating policy, is that the concept of trade in services is extented to include services rendered within foreign host countries by affiliates of U.S. parent companies.

II The U.S. Policy Initiative

Similar problems of classification do not arise with respect to commodities even though the obverse character of the definitions of commodities and services as two mutually exclusive but exhaustive sets of economic activities might be expected to lead to common difficult border areas.* Indeed, the analysis of international commodity trade flows has a long history, relatively untroubled by definitional questions. In recent years in particular the commodity composition, the country origins, and destinations of trade have been investigated by many analysts, often under the stimulus provided by claims and counterclaims about the role of trade in stimulating or curbing employment in the U.S. or other industrialized countries or in promoting or retarding economic growth in developing countries. This attention has been almost entirely focused on the merchandise component of international trade. Trade in services has been largely

In domestic production and consumption services and commodities are usually defined so that together thay exhaust the GDP. In the balance of payments, however, flows of capital assets form another important component.

neglected.

Now, however, this neglect is being replaced, especially in the U.S., by an increasing degree of attention to the role of services in the international business activities of American firms and in the world economy.* The reasons for this change are probably to be found among the following factors:

- 1. The widely perceived growth of the service sector in the domestic economy of the U.S. and other countries was likely sooner or later to turn attention to the role of services in world transactions.
- 2. The unprecedented growth of the world economy between World War II and the onset of the slow-down of the 1980's (as measured by real world GDP**) was accompanied by an even more rapid expansion of international commerce and investment which brought concurrent demands and opportunities for expansion in service transactions.
- 3. In the U.S., the Reagan Administration has launched a diplomatic campaign to remove obstacles to the exports of services by U.S. firms and, equally vigorously, to reduce barriers to the establishment and operation of U.S.-owned affiliates in service industries in foreign countries. The explanations for this decision include (a) the reaching of a stage of low returns to further efforts at liberalizing merchandise trade; (b) the barriers encountered by more and more U.S. service industry companies as they tried to expand their operations, sometimes with the motivation of servicing their U.S. customers in commodity producing industries who are engaged in export or in production abroad; and (c) the perception that service barriers abroad often affect U.S. interests more adversely than those of other countries,

See Helena Stalson's paper in this volume. Also Sapir and Lutz (1980 and 1981), DiLuilo (1981), Balassa (1982), U.S. ITC (1982), Sapir (1982) and Schott (1982).

^{**} See Kravis and Lipsey (1982).

particularly in such fields as insurance, telecommunications and data processing and construction and engineering services.* Another possibility is that a strong effort to clear away barriers to U.S. service business may be seen as a positive policy that will help counter protective pressures in import-vulnerable commodity industries.**

We do not attempt to delve further into these motivations, and we leave it to the Stalson paper in this volume to describe the institutional and other details of the Administration's program for liberalizing international business in the service industries. We are interested primarily in examining the role of services in the domestic economies of the U.S. and other countries, in U.S. international business activities, and in world transactions and then on the basis of the findings to assess the broad objectives of the program.

III. Services in the Domestic Economy

The role of services in the domestic economy has been written about extensively and summaries and further contributions appear elsewhere in this volume. However, it will be useful in considering international transactions in services briefly to highlight some salient features of services in the domestic setting, with attention not only to the U.S. but to other countries as well.

^{*} Among the service categories that are the focus of attention in the U.S. efforts are communications, computer and data processing, construction and engineering, consulting and management, educational services, equipment leasing, financial services, franchising, health services, hotel-motel services, insurance, motion picture, air transportation, and maritime transportation. (U.S. ITC (1982). See also the largely overlapping list in Table 10 infra.

For a study of complementarities between U.S. merchandise exports and services provided abroad by U.S. firms, see U.S. International Trade Commission, The Relationship of Exports in U.S. Service Industries to U.S. Merchandise Exports, USITC Publication 1290 (Washington, D.C.: September 1982).

We take as our working definition of services, goods that are nonstorable, but this definition like others, such as intangibility, has its margins at which it fails to make clear cut distinctions. (E.g., Baumol's question whether messages taken by telephone answering service should be regarded as storable.) The difficulty of definition arises because by almost any characteristic that can be selected, services, whether viewed from the standpoint of final-product services, service industries, or internationally transacted services, are very heterogeneous.* Any statement made about the average characteristics of services - such as the labor intensity of service industries, their record of productivity change ** or their growth relative to the rest of the economy - is apt to be subject to the qualification that the average is accompanied by a great deal of dispersion for individual kinds of services.

Perhaps the characteristic of services which is least subject to wide dispersion is the relatively low value of commodities embodied in them as intermediate inputs. Starting with almost any plausible definition of services, it will be found that the proportion of value added to gross output is high in services and that the proportion of intermediate inputs in the form of services is high relative to commodity inputs.*** Commodities to a much greater degree involve the further processing of physical things, so that commodity inputs loom large in value added and even larger among intermediate

These various classifications of services are explained below. For a fuller discussion of the nature of services see Irving Leveson's paper in this volume, Hill (1977) and Kravis, Heston, and Summers (1982, p.129f).

^{**} See, for example, Baumol's paper in this volume for a discussion of the variability of service industries with respect to their susceptibility to productivity improvements.

Even on this point, an exception has to be entered for wholesale and retail trade if the goods distributed are counted as intermediate inputs.

inputs relative to service inputs.* These input characteristics are, of course, the other side of the output coin; services involve little physical tangibility at either end.

The expansion of spending on final demand services

A hypothesis that is frequently advanced is that the demand for services is income elastic - that is, that at any relative price of services the quantity absorbed rises more than the quantity of commodities as real income per capita increases. Sometimes this notion is at the root of the perception that services may be expected to expand rapidly in international transactions. The appropriate concept of services for considering the underlying economic propostion is in terms of service categories of final demand (e.g., haircuts, medical care).

The most important final-product or final-demand services are government, housing and education; they account for roughly 60 to 65 percent of service spending in both poor and rich countries. (See Table 1, columns 1 and 2.)

The addition of medical care and hotels and restaurants raises the proportion of service spending accounted for to 80 to 85%. Other services that come to mind, including communications and personal care, add relatively little, but the importance of some as contributors to international transactions may be greater than the domestic figures imply.

The similarities of the aggregate proportions in low and high income countries do not extend to the individual components. For example, public transport absorbs a higher share in poor countries and housing a lower share. There is a difference also in that the share of aggregate service

^{*} In the U.S. in 1972, 9 percent of the value of service industries' output was accounted for by commodity inputs and 19 percent by service inputs with the other 72 percent representing value added. The corresponding percentages for commodity industries were 44, 16, and 40 respectively. Kravis, Heston, Summers (1983), Table 1.

Shares of Various Services in Final Expenditures on GDP for Countries with Different Income Levels, at Own Prices and at International Prices, 1975

	In ow	In own-prices		In intern	In international prices	
	Iow income	High income	u.s.	Low income	High income	U.S.
	(1)	(2)	(3)	(4)	(5)	(9)
Share of spending on services		•		•		
Housing	19.8	22.8	24.1	16.0	27.1	27.4
Gross rent	14.9	18.1	20.3	8.6	24.5	22.6
Medical cared	9.9	10.6	14.2	ຜູ້ນ	15.3	9,3
Education	15,4	12.5	12.9	20.9	& & &	8.7
Hotels and Restaurants	8.6	10.4	7.2	4.1	12.6	φ . &
Other consumption	17.0	15.6	18.8	16.5	18.5	19.3
Public transport	6.7	2.9	ן.	6.3	2.3	0.9
Communication	0.7	1.6	2.6	0.4	1.7	3.0
Recreation	4.0	2.8	3.0	3.0	3.4	2.8
A Barber & beauty shops	0.4	1,3	0.7	1.0	1.3	0.5
Governmentd	31.2	28.1	22.8	37.0	17.7	26.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Service spending as share	α 	30	70 3	٦٥	١ ٧٢	788
105 TO	2	0) '	1	1	•
•	-				-	

Eight countries with 1975 real per capita GDP below 15% that of the U.S.

(Kravis, Heston and Summers, 1982, p. 18). Nine countries with 1975 real per capita GDP between 60 and 90% that of the U.S. Ibid.

Includes both public and private spending.

Includes both employee compensation Excludes spending on medical care, education and recreation. and government purchases of goods and services

Source: Kravis, Heston and Summers (1982).

spending in total spending on GDP is much lower in the poor countries. However, this is due to much lower service prices in the low income countries. When a common set of average international prices is used to value the quantities of all components of GDP (Table 1, columns 4 and 5), the resultant "real" share of spending on aggregate services is not very different between poor and rich countries. However, some compositional differences (government, housing, education, and medical care) become greater.

Two inferences may be drawn from these similarities and differences in the use of GDP for the provision of final demand services in poor and rich countries. (1) For the aggregate of services in GDP, the cross-country income elasticity of demand is near unity. (2) For individual kinds of final-demand services, income elasticities can be very different.

On the first point, earlier work (Kravis, Heston, and Summers, 1983, Table 7) produced an income elasticity for the aggregate of final-demand services of .99, virtually identical with the elasticity of 1.00 for aggregate commodity final demand. On the second point, Summers' paper in the present volume shows, income elasticities for six major subdivisions of services ranging from 0.79 (recreation and education) to 1.46 (medical care).

The reasons for this combination of overall unitary elasticity and component diversity, it has been suggested (Kravis, Heston, and Summers, 1983), is to be found in the evolution of technology. Changes in technology continually shift the modes through which the age-old basic wants of people are satisfied. Broad categories of wants tend to be satisfied by mixtures of services and commodities that vary at different times, places and income levels. This is true for a want like recreation which is often identified

For a comparison of elasticities for 26 detailed service and 77 detailed commodity categories, see Kravis, Heston and Summers, 1983, Table 8.

with services and for one like food which is usually identified with commodities. Within recreation, for example, the demand for musical entertainment in the U.S. today is met overwhelmingly by commodity spending on a mix of commodities and services that includes concert tickets, radios, records and record players, TV, and videotape recorders.*

Thus when services are viewed in terms of final-demand, they may become more expensive relative to commodities and absorb larger fractions of current spending as income grows, but there is no support in the cross country data for the view that the physical quantities of services as a whole will on average expand more than the physical quantities of commodities.

The contribution of service industries to GDP

Another and more common way to identify and classify service activities is in terms of the industries which produce them. A more or less standard classification of the main service industries in these terms is set out in Table 2. In this classification the key is the intangibility or nonstorability of the output without regard to the nature or motive of the purchaser; intermediate as well as final-demand services are included.

The table shows the contribution the main service industries make to total production in developing countries, developed countries, and the U.S.** In these terms the service industries are of even larger importance in

However, a systematic element may operate in these changes. It arises out of the probable tendency for technological changes to reduce costs more in commodity production than in service production. See Kravis, Heston, and Summers 1983. As Robert Lipsey has pointed out, national accounting conventions also have an effect. If consumer durables were treated as capital goods and their services imputed as those for housing are now, final expenditures on commodities would be reduced and those on services increased, particularly in the U.S.

The underlying figures doubtless suffer from serious incomparabilities for the two sets of countries and even for countries within each set, but the main outlines of the service sector are probably correctly reflected.

Shares of Various Service Industries in Producing GDP at Cwn Current Prices, Various Groups of Countries, 1979

TABLE 2

	20 developing countries	10 industrialized countries	U.S.
	(1)	(2)	(3)
Commodities	53.7	39.1	34.7
Services	46.3*	60 .9	65.3
Electricity, gas, water	1.7	2.6	2.6
Trade	18.7	14.6	16.9
Transport, storage,			
communication	6.1	6.5	6.3
Finance, insurance, real			
estate	3.8	16.3	19.4
Personal services	7:5	8.9	7.9
Covernment services	6.5	12.0	12.2
Total GDP	100.0	100.0	100.0

N.B. Countries include all those in each category for which sources cited below gave the necessary data.

Source: Col. 1 IBRD, World Tables, 1980 Cols 2 & 3: OECD, National Accounts, 1963-80, Vol. II. Detailed Tables

^{*} Subdivisions shown add to 44.3. "Ownership of dwellings" and "other branches", not separately given in the source for all countries, constitute the remaining 2 percent.

rich countries relative to poor ones than in terms of the final-demand figures of Table 1. The difference between the 46 percent share for developing countries and the 62 percent share for industrialized countries is more than fully accounted for by the larger shares of finance and government in the latter. We know from the cross-country data of Table 1 that the larger share of government in the rich countries is attributable mainly to higher compensation of government employees rather than to larger numbers of them,* and similar differences in the compensation of employees in other labor—intensive services probably increase shares of other service sectors in the industrialized countries relative to those in the developing countries. The large role of wholesale and retail trade in the developing countries accounting for nearly one-fifth of gross production and over one-third of service output, despite low wages, raises questions about the efficiency of this sector in these countries.

The relative roles of price and quantity changes in changing the share of service industries in domestic production over time are examined in Table 3. The table shows that for the "world" consisting of 49 market economies** the share of service expenditures in own-currency current prices rose by 6 percentage points between 1960 and 1975. Half of the increase was attributable to price increases and the other half to real quantity increases. Similar changes occurred in the industrial countries, but in the developing countries the expansion in real terms was larger than that in

However, government services in Table 2, unlike the corresponding Table 1 entry, includes public spending on health, education, and recreation.

All the countries are included for which data were available on a revised World Bank tape corresponding to World Tables 1980. The 49 countries accounted for 67 percent of the population of all market economies and 73 percent of their aggregate real GDP in 1975. The period 1960-75 is taken because the number of countries for which data are available shrinks for earlier and later years.

TABLE 3

Shares of GDP Originating in Service Industries, in Current and Constant Prices, 1960 and 1975, World and Selected Areas

	No. of countries	Curr		·19' prid	-
		1960	1975	1960	1975
World	49	51	57 '	54	57
Industrialized countries	1.3	55	62	58	62
U.S.	1	60	67	66	67
Developing countries	36	40	43	39	44

Source: World Tables 1980.

current prices.

Thus the time series data for service industries point to a small rise in their shares in the production of GDP. This expansion of service shares over time seems to be in conflict with the stability of final-demand service shares in the cross section data considered earlier. Each set of service classifications encounters great difficulties in factoring out price and quantity changes, and in the time-to-time data these problems are not met in the same way by all countries.

There is a high correlation $(r^2 = .71)$ between the share of finaldemand services in expenditures on GDP and the share of service industries in the production of GDP (1975 data for 27 ICP countries), but the a priori grounds for expecting such concordance are not strong. The reason is the factors affecting the changes in the relative importance of service industries in the production of GDP are different in some important respects from those that influence the share of final-demand services in the absorption of GDP. All or almost all final-demand services are produced by service industries* and the forces that lead changes in the consumption of final-demand services produce matching changes in the production of the relevant service industries. However, the important group of intermediate services produced by service industries rises or declines relative to commodity production in response to entirely different sets of influences. Some of these influences like those affecting the relative importance of trade, transportation and finance are linked to the general expansion of economic activity and wealth. But these services and others are often necessary concomitants of commodity production. In this context, they may either be carried on as ancillary

^{*} A few in which individuals proffer their labor directly to households may or may not be regarded as "industries".

operations of firms whose primary function is to produce some given commodity, or they may be contracted out to specialized service firms. In this sense, the relative size of service industries depends not only on the volume of service (accounting, delivery, etc.) that are necessary to bring a commodity (or a specific service) to the buyer, but also on how the performance of the necessary activities will be divided among firms.

In general, the influences that favor contracting out services to specialized service industries probably have been growing stronger. As tax laws become more complicated with important annual changes, specialized external law or accounting firms gain an advantage over in-house lawyers or accountants. The same effect comes from the growing complexity and uncertainty of other regulations (e.g., anti-trust, labor, pollution control). Contracting out services such as delivery, cleaning, and meals for employees not only involves specialized management for these subordinate operations but may also bring a degree of employment flexibility that is not available when in-house staff are employed to carry out these functions. The advantages of specialization increase as the technology with which the service can be provided becomes more complicated (e.g., computer accounting, food preparation techniques).

While it seem plausible to think that these changes are pressing towards the expansion of specialized service industries, it is possible that they are operating most strongly in service sectors that are very visible but that account for only relatively small shares of total service industry output and employment. (See Table 2.) Even so, the argument if accepted would support the view that there are growth sectors within the services that may be worthy of attention from policy makers.

More broadly, the overall time-to-time data for service industry shares

(Table 3) do show expansion, and this finding should not be set aside because it is not supported by the cross- section analysis based on final-demand services. To be sure the expansion is moderate in real terms and not nearly as dramatic as is sometimes protrayed in the literature on the shift to a "service economy". The widely noted shift in employment to service industries is attributable at least as much to different average productivity trends as to differences in the response of demand to rising incomes. However, the wide dispersion of individual services around these average tendencies must be borne in mind in considering their implications for the role of services in world transactions. There are as noted some service activities that are experiencing rapid growth in both current and constant prices.

IV Services in World Transactions

The classification of services usually presented in statistics of international transactions includes both factor and nonfactor services. The former represent direct services rendered by the factors of production such as interest payments for the use of foreign capital or wages to a foreign laborer, regardless of the nature of the output. Nonfactor services, on the other hand, are those which require the addition of intermediate inputs to labor and/or capital for their production.*

In the domestic economy classifications considered in the previous section, virtually all services are nonfactor services. Purchases of these services involve payments for some distinct form of production or output rather than a payment made solely for the services of a factor of production. (This is true even when the service output is measured by the input of the factor, as is often done in national accounting.) Nonfactor services in balance of payments classifications include a mixture of categories found in the final-demand and industry-of-origin classifications. For example, transportation is a standard category in the industry-of-origin classification, where it includes both final and intermediate purchases. Components such as passenger fees would be found on a sufficiently detailed list of final-demand expenditures. On the other hand, some categories found in standard classifications of domestic service industries are not found in the classifications used for international transactions. Trade, for example, is an important domestic service industry but the value of distributive services in international transactions is

Services in the U.S. balance of payments

In balance of payments terms, services inclusive of direct factor services and nonfactor services accounted for over one-third of the U.S exports of "goods and services" in 1980 and nearly 25% of U.S. imports (see Table 4). However, policy-oriented discussions often concentrate on nonfactor services which constitute only 19 percent of the export total and 11 percent of the import total. In some contexts only investment income is excluded in order to obtain the total for nonfactor services. The treatment of royalties and fees in services does not change the picture very much; if as in the table they are regarded as (direct factor) services, the share of total exports counted as services is only a couple of percentage points nigher than would otherwise be the case.

These classifications, it should be borne in mind, are not without their arbitrary elements. The same kind of activity may wind up with its transactions value in one category or another according to the accounting convenience of different reporters or the practices of the statistical authorities. For example, the income derived by a U.S. parent from a foreign service affiliate may appear in balance of payments statistics as investment income, as a royalty or fee,* or as a payment for a professional or a managerial service.

Among the nonfactor services, transport (including freight, passenger fees and travel) accounts for around 70 percent of the total. Government

included in the value of the commodity or service traded. The difference is related to the fact that the contribution of service industries to the production of GDP is measured from a value added approach, while the value of nonfactor services in international transactions is measured in terms of gross sales revenue or purchase values.

In the U.S. statistics royalty and fees include compensation of U.S. employees temporarily assigned to foreign affiliates of U.S. parents.

TABLE 4

Factor and Nonfactor Services in the U.S. Current Account Transactions

Includes U.S. defense equipment and supplies

Excludes U.S. defense equipment and supplies

Includes contractors fees

Services which require addition of intermediate inputs to labor and capital မှ ကို စု ရှင် တွင်

Mainly defense expenditures excluding equipment and supplies Includes transportation, travel and passenger fees

Includes reinsurance, communications, film rentals and "other"

Source: Reclassification of data in Anthony J. Dilullo, "Service Transactions in the U.S. International Accounts, 1970-80", Survey of Current Business, November 1981, pp. 30-39. transactions make up a good part of the balance. The private services other than transportation, such as communications and data processing, that appear to be the main concern of current U.S. policy are found mainly in the "other" category which constitutes less than 10% of nonfactor services and 1 percent of trade in goods and services.

Service activities of U.S. foreign affiliates

However, account must be taken of the important role of U.S.-owned foreign affiliates in rendering private nonfactor services in order to round out the picture of the role of services in U.S. international business activity. Foreign service revenues earned through majority-owned affiliate sales are larger than those earned from a U.S. base. Thus, for 1977, the most recent date for which official data on affiliate sales are available, sales of U.S. affiliates abroad amounted to close to \$280 billion (see Table 5), far in excess of private nonfactor service exports of \$19 billion.* The service affiliates accounted for over 40 percent of the income of all affiliates and over 25 percent of their employment. Petroleum related services and trade accounted for three quarters of service income and nearly 60 percent of service industry employment. The remaining service sectors, where the service activities on which U.S. policy efforts seem to be concentrated are found, thus account for about one sixth of total affiliate income and employment.

Reliable and comprehensive estimates of income, sales, and employment are not available for subsequent years. However, the U.S. direct investment position abroad (book value of direct investors' equity and net loans to affiliates) increased by about 50% in service industries between 1977 and 1981, and, if past experience is any guide, sales probably increased by a

^{*} The \$19 billion dollar figure includes \$1.2 billion in contractors fees. DiLullo, 1981, p.31.

TAPLE 5

Income and Employment of All Foreign Affiliates of All U.S. Parents, by Commodity Producing and Service Industries, 1977

h.	Total income ^a (bil \$)	Employment (1000)
All industries ^b	630.1	7342
Commodity producing	399.9	5404
Services	280.2	1938
Petroleum related ^C	97.2	140
Trade	104.4	991
Banking	23.2	135
Finance, insurance, real estate	17.4	97
Finance (exc. banking)	4.2	27
Insurance	10.4	62
Real estate	.2	2
Construction	10.1	179
Transportation	3.5	48
Vater	2.0	17
Air	.3	5
Related services ^e	1.3	26
Communications, public utilities	9.9	40
Communications	n.a.	28
Public utilities	n.a.	12
Other services	12.6	308
Hotels and other lodging		500
places	1.6	66
Advertising	1.4	32
Motion pictures inc. TV tape	1.1	12
Engineering, architectural	3.2	40
Accounting	.4	9
Other personal and business	• 4	9
sources	4.9	149

- a. Sales data were not available in the same degree of industry detail as the figures for income and employment given above. However, sales make up the preponderance of income. For nonbank affiliates of nonbank parents, 1977 sales were \$648 billion and income \$656 billion (U.S. Department of Commerce, 1981, pp. 137 and 139).
- b. The data are classified according to the industry of the affiliate. They include commodity income and employment of affiliates in service industries and exclude service income and employment of affiliates classified as commodity producing.
- c. Oil and gas field services, petroleum wholesale trade, tanker operations, pipeline transmissions, gasoline service stations, etc.
- d. Excludes banking.
- e. Includes warehousing, terminal facilities, travel agents, etc.

larger percentage.*

Growth of U.S. foreign service transactions

The behavior of service industry shares in domestic transactions, considered earlier, would lend some support to expectations for above-average growth rates for trade by service industries, if it could be assumed that growth in domestic and international transactions are likely to go hand-in-hand. This does not, however, appear to be the case. The 1980/70 expansion ratios (i.e., the ratios of the 1980 values to those f 1970), shown in Table 4, are lower for services than for commodities and lower still for nonfactor services. However, international transactions of the U.S. expanded more rapidly over the decade than the domestic economy, and trade in both services and in its nonfactor component increased at a faster rate than U.S. GDP.**

Comprehensive data for the other and larger component of international business services, foreign sales by U.S. owned foreign affiliates, are available for the period 1957-77. The most reliable data are from major surveys for 1957, 1966, and 1977. (See Table 6). There are serious imcomparabilities in the three data sets in the definitions of the foreign affiliates covered and in the industrial classifications, the latter bearing especially on "service" industries. The summary of the expansion ratios (terminal year sales as ratios of beginning year sales) relating to the

As Helena Stalson points out in her paper in this volume, widely varying estimates of revenues from foreign service sales have been offered. An estimate by the U.S. International Trade Commission (ITC, 1982) covering 14 service categories (listed in a footnote on page 4) that accounted for a large part but not for all of the service sector placed 1981 service revenues from foreign sources at \$105.5 billion.

^{**} The 1980/70 expansion ratio for GDP (in current prices) was 2.63. IMF, 1983. Here and elsewhere, relative quantitative evaluations about services must be hedged with reservations about the comprehensiveness of statistical coverage for service transactions relative to that for merchandise. It is possible that both the relative level and growth of services may be understated.

TABLE 6

Sales of U.S. Majority Owned Foreign Affiliates, by Industry, 1957, 1966, and 1977 (\$ billion)

	1957 ^a	1966 ^b	1977 ^C
All industries Mining Petroleum Manufacturing Trade	40.3 ^d 2.0 14.5 18.3 1.3 ^e	97.8 3.3 27.5 47.4	507.0 5.1 198.6 194.2
Finance, insurance (exc. banking) Other Agriculture Construction Transportation, communication,	0.8e 3.3 ^f 0.9	14.1 _g 5.6 ^h	77.4 10.0 21.7 1.2 7.9
public utilities Services	1.2	1.4	3.6 9.1
Addendum: GDP (\$ bil) Exports Imports	440.5 20.87 14.62	750.3 30.43 27.79	1894.9 121.23 160.41

- a. Includes affiliates for which at least 25% of voting stock was owned by affiliated U.S. residents or 50% by non-affiliated U.S. residents.
- b. Includes affiliates for which a single U.S. reporter's ownership interest was at least 50%
- c. Includes nonbank affiliates of nonbank parents with at least 50% ownership by single U.S. reporter
- d. Includes total costs rather than sales for trade and finance
- e. Total costs
- f. Includes "miscellaneous"
- g. Less than \$0.1 billion
- h. Includes "other industries"

Source: U.S. Department of Commerce, 1960, 1975, and 1981; IMF, 1983.

relative growth of service sales set out below (derived from Table 6) therefore has to be regarded as very approximate:

	Expansion ratiosa f	or affiliate sales
	1966/57	1977/66
All industries	2.43	5.18
Commodity producing ^b	2.22	5.04
Mining & petroleum	1.86	6.61
Manufacturing	2.59	4.10
Services	4.04	5.80
Trade and finance	6.71	6.20
Transportation, communicat	tion,	
public utilities	1.17	2.57
Other	2.38	5.45

- a. Ratio of terminal-to-initial-year sales.
- b. Includes agriculture with an interpolated figure of \$1 million for 1966.

Here a relationship opposite to that found for exports emerges: the sales of service affiliates expanded more rapidly than those of commodity producing affiliates, and this was true in both periods. Trade and finance were the fastest growing sectors in both periods, while transportation, communications and public utilities sector had the lowest expansion. Other private nonfactor services such as lodging places, advertising, engineering, and accounting are in the "other" service category, which has intermediate expansion ratios. The "other" service ratios were higher than the commodity ratios, and both sets were substantially above the expansion ratio for the domestic economy.*

Although as noted above, direct investment in service industries did not expand more rapidly than in commodity producing industries between 1977 and 1981, it seems clear that at least some sectors in the "other" set expanded very rapidly. A U.S. International Trade Commission (ITC) survey that elicited responses from 143 international service firms in 14 selected service

^{*} The GDP expansion ratios were 1.70 and 2.53 for the two periods, while those for merchandise exports were 1.46 and 3.98.

industries* concluded that between 1980 and 1982 foreign revenues increased by more than 50 percent, rising from 12.9 to 14.9 percent of the total foreign and domestic revenues.

By way of summary, the dominant components of U.S. international business in services are transport in the private nonfactor export category and trade and petroleum related services in the foreign sales of service affiliates. There is evidence that a selected set of private nonfactor services that are the focus of U.S. trade policy have been growing rapidly in foreign affiliate sales, but there is not much reason to believe that service exports have increased relative to commodity exports in any general way. The services to which most policy attention is being given still constitute modest shares both of exports and of affiliate sales.

Role of services in world trade

A picture of the role of services in world transactions that is broader in country coverage is provided in Table 7, though the source does not permit a decomposition into factor and nonfactor services.* When "services" are taken to include investment income as payment for a direct factor service, services constituted about one-quarter of world transactions in merchandise and services in 1980. The U.S. service share in exports of goods and services was larger than the world average while that for developing countries was smaller. On the import side, the main deviation from the world average was the large share of the developing countries.

^{*} The 143 responses came from a questionnaire mailed to 479 "known international service companies in 14 categories of services". For the list of categories see footnote on p.4.

The difficulty is with the category "other private goods, services and income" given in the source. The category includes payments to labor and for royalties as well as for nonfactor services such as communications and non-merchandise insurance. "Other official goods, services, and income" seems to be constituted mainly of nonfactor services; it is dominated by payments for diplomatic representation and joint military arrangements abroad. IMF, 1977a.

Share of Services in World Transactions of Goods and Services, World and Subdivisions: 1970, 1980 TABLE 9

A. Exports (In Billion SDR's)

<u>ظ</u>	1970 1980 1970 1980	2 95	172.1	e C	58.3	7 25 7 9 8 1				35.3 35.0 19.2 19.1	17.2 13.0 16.9 13.9		Developing		1980		191,6 43.8	64.6 22.4	33,1	· 60	1.5	1.0 3.1 3.4 21.3			33.4 25.2 33.8 32.6	
rial Too	1980	1299.7	925.3	374.4	145.5	133,8	19.1	76.0	÷	28.8	17.6	on SDR's)	ial	ies 1080	0061	1328.8	976.5	352,3	126.8	142.6	16.9	0.99			26.5	
Industrial	1970	309.1	222.2	86.9	25.1	37.9	6.1	17.8		28.1	20.0	Imports (In billion SDR's)	Inlustrial	countries		298.0	215.0	83.0	19.7	39.3	8.4	15.6			27.9	
70	1980	1747.0	1288.4	458.6	168.2	173.8	22.1	94.5		26.3	16.6			1980		1780.4	1283.6	496.8	175.3	200.1	33.6	87.8			27.9	
Worl	1970	365.2	267.6	97.6	26.4	43.5	7.8	19.9		26.7	19.5	B,	;	World 1970		364.2	258.8	105.4	28.4	48.1	9.6	19.0			28.9	
		Total Merchandise & Services	Merchandise	Services a	Investment income	Transportation	Other official	Other private d	Share in Total Merchandise and Services	Services less investment	income					Total Merchandise & Services	Merchandise	Services	Investment income	Transportationa	Other official	Other private	Share in Total Merchandise	and Services	Services Services less investment	

a. "Other goods, services and income" in source. Includes investment income.

b. Includes freight, merchandise insurance, port services, passenger fees and expenditures of travelers.

c. Mainly diplomatic and military personnel and installations.

d. Includes labor and property incomes of nonresidents, insurance (other than freight insurance), communications, advertising, brokerage, management, operational leasing (other than charters), subscriptions to periodicals, and professional and technical services (including surveys, research, and provision of instruction and know-bow).

Source: IMF, Balance of Payments Statistics, Vol. 32, Yearlook, Part 2, 1981; and Balance of Payments Yearbook, Supplement to Vol. 28, 1970-76.

When the more usual procedure of excluding investment income is followed, the service share in world trade in goods and services drops to 17 or 18 percent of which 10 or 11 percent represents transport and travel. The U.S. share is below the world average due mainly to a lower proportion for transportation.

In Table 8 we return to the recent U.S. balance of payments position and place it in an international setting. The U.S. is far from a dominant exporter of private nonfactor services although it has had modest surpluses in this category.* Furthermore, the U.S. share in both world exports and industrial country exports of these services declined during the preceding decade:

		Share of U.S	Exports ^a	
	Trans	sport	Other nonfa	ctor services
	19 70 - 71	1979-80	1970-71	1979- 80
World	13.2	10.8	17.6	8.6
Industrial countries	15.2	14.0	19.7	10.6

a. For source and definitions see Table 8.

It seems probable, however, that the U.S. role taking both exports and affiliate sales abroad into account would loom larger relative to other countries than is the case when exports alone are considered.

The growth of world service transactions

The decade of the 1970's was not only marked by rapid economic growth but by rapid growth that was widely dispersed throughout the world economy.**

Growth was accompanied by a rise in the proportion of world production that

The IMF classification other private goods services and income shows gradually rising U.S. surpluses for the years 1970-80. The U.S. classification private nonfactor services excluding transportation (Table 4) gives the same results though with smaller absolute magnitudes.

^{**} Kravis and Lipsey, 1982.

B EINNE

Dalance of Inyments in Services, Selected Areas and Countries, 1980 (Billions SDRs)

Developing Countries	81.9 141.5 -59.6	54.5 93.8 -39.3	51.5 77.1 -25.6	38.9 55.9 -16.8	12.6 21.4 -8.8
Japan	24.2 32.9 -8.7	20.1 25.0 -4.9	19.0 24.8 -5.8	10.5 16.9 -6.4	8.5 7.9 0.6
U.K.	41.9 35.3 6.6	27.4 20.8 6.6	25.5 18.7 6.8	16.2 14.8 1.4	യ ധ സ ധ ഗ ഷ
France	40.8 34.4 6.4	25.6 21.9 3.7	25.2 21.1 4.1	14.5 13.2 1.3	10.7 7.9 2.8
Germany	39.7 48.3 , 8.6	29.6 39.5 -9.9	24.8 38.1 -13.3	12.9 24.5 -11.6	11.9
U.S.	92.8 64.6 28.2	34.4 31.6 2.8	26.6 22.4 4.2	18.5 19.1 -0.6	8 . 4 L. 8
Industrial Countries	374.4 352.3 22.1	229.0 225.4 3.6	209.9 208.5 1.4	133.7 142.7 -9.0	76.2 65.8 10.4
World	458.6 496.8 -38.2	290.5 321.5 -31.0	268.4 287.9 -19.5	173.7 200.1 -26.4	94.7 87.8 6.9
Services	Credit Debit Net Credit Nonfactor services	Credit Debit Net Credit Private nonfactor service	Credit Debit Net Credit Transportation ^d	Credit Debit Net Credit Other private nonfactor ^e services	Credit Debit Net Credit

[&]quot;Other goods, services, and income" in source. Includes investment income, က် ကို

Source: IMF, Balance of Payment Statistics, Vol. 32, Yearbook, (Pt. 2, 1981).

[&]quot;Other goods, services and income" less investment income.

[&]quot;Other goods, services, and income" less investment income and less "other official goods, services, and income". The last category refers mainly to services rendered to diplomatic and military personnel and installations,

Freight, insurance, passenger services, port services, tourism. r Ö

Private nonfactor services less transportation. For inclusions see note d of Table 7.

was traded. Thus in current prices world GDP expanded 3.9-fold between 1970 and 1980, while the current dollar value of world exports of goods and services was 4.8 times as great in 1980 as in 1970 (see Table 9). The expansion of service exports was only marginally smaller than that of merchandise exports, but if investment income is excluded the expansion ratio for services drops to 4.6. Growth during the decade for both GDP and all the trade categories including private services was higher for the developing countries than for the industrialized countries.

Thus both for the U.S. and the world economy international transactions have grown faster than domestic transactions. The service component of international transactions has expanded more rapidly than world GDP although it has not matched the rate of growth in merchandise trade, especially in the case of the U.S.

Assessment

How then shall we assess the relative importance of private nonfactor services in the international business activities of the U.S.? Growth in service exports and in sales of foreign service affiliates have been greater than domestic growth, but service exports have not expanded as rapidly as merchandise trade. Revenues from the sales of foreign affiliates are much larger than export proceeds. Service industry affiliates accounted for about 40% of total affiliate sales, but much of this was in trade and petroleum related services which do not seem to be the focus of policy attention. Sales of foreign service affiliates have been more dynamic than sales of foreign commodity affiliates, at least until the last few years. Even within this period, however, an ITC survey has identified some specific areas of rapid expansion.

However, if the actual or potential growth rate is to be the criterion

TABLE 9

Expansion Ratios (1980/1970) for GDP and Trade (Based on current prices)

	World	Industrialized countries	U.S.	Developing countries
GDP	3.9	3.6	2.6	ν 4
Trade, total	4.8	4.2	4.0	7.6
Merchandise	4.8	4.2	4.0	r. r
Services	4.7	4.3	4.0	7.,
Exc. investment income	4.1	3.7	3,1	
Private	4.7	4.3	2.2	8.6

ODP based on aggregate GDP of 94 developing market economies and 21 industrialized countries, converted to dollars by exchange rates. "Expansion ratios" are obtained by dividing 1980 current values by 1970 current values. NB:

Trade based on IMF export data. See Table 7 for source.

for policy attention, the classification of an industry as a service or commodity activity becomes irrelevant. The data we have examined and the heterogeneity of services stressed earlier suggest that there are some (many?) private nonfactor services not characterized by rapid growth. On the other hand, a search into the commodity sectors would doubtless produce some industries characterized by rapid growth in affiliate sales.

Some types of services may of course warrant special attention for reasons other than their direct quantitative importance or growth potential. For example, telecommunications and data transfers are areas to which importance is sometimes attached not only owing to their growth potential, but to their high technological character and their strategic importance to other international business activities. But here again the commodity-service dichotomy is not the key element.

V. International Services in Current U.S. Commercial Policy

The kinds of services that are the focus of U.S. commercial policy are represented by the 16 industries found in Table 10*. The industries all fall under the heading of private nonfactor services found in balance of transactions statistics. However, there are two important differences between the U.S. list and those found in the more standard balance of payments classification. For one thing, no effort has been made in the U.S. list to provide a comprehensive classification of all private nonfactor services. While the list is extensive, the criteria of inclusion seems to have been services about which the concerned U.S. Government agencies (mainly the Office of the U.S. Trade Representative and the Department of Commerce) learned

^{*} This list, which is not intended to be exhaustive, is based on industries that appear in the documents produced by and for the Office of the U.S. Trade Representative. The list overlaps substantially with the 14 industries included in the ITC study cited above.

Service Industries Involved in U.S. Trade Liberalization Efforts, Crudely Classified by Motivations of Foreign Restrictions

CI: cultural identity

FS: financial stability

NS: national sovereignty or security

protection of public from monopoly power, fraud or other undesired practices not easily discerned by consumers PP

through receipt of complaints or through surveys of U.S. business firms of the existence of barriers to foreign service sales. A second major difference is that the focus is not on exports but on service transactions carried out in a host country by a U.S. affiliate. The fact that the ITC reported that most of the foreign service revenue of the responding firms were produced by foreign affiliates, joint ventures, and franchising and licsensing suggests that the main targets are investment rather than trade restrictions. (Incidentally, the liberalization of the imports from the U.S. of the commodities and services necessary to support service sales are also included in U.S. policy objectives.)

The economic characteristics of the industries included in the U.S. list can only be treated impressionistically. A number including information services, accounting, adverstising and the engineering and design features of construction services are probably intensive in human capital. Some of these and others such as leasing and franchising are industries in which firms have developed special managerial techniques which can be exploited abroad with relatively limited additional development effort on the part of the firm (Caves' public goods analogy applies here (1971).) Human capital intensity and advanced managerial methods in these industries probably confer a comparative advantage on the U.S. companies. However, the list also includes industries such as tourism and transportation, where comparative advantage rests with other countries having lower wages and sunnier climes. Even in the latter cases, of course, a U.S. firm may have a company-specific comparative advantage, leading, for example, to the establishment of U.S. hotel affiliates in tropical climates.

With respect to growth prospects also, the industries seemed to vary widely. Some like information and data processing services seem to be strong

growth points of great strategic importance while others such as transportation appear to be tied to a slower pattern.

The emphasis on the investment-related sales relative to exports from the U.S. is suggested also by a classification of the barriers offered in an official briefing paper, at least if the degree of detail provided under various headings is any guide.* The classification with some modifications is as follows:

I. Restrictions on right of residents to import services from foreign country. Examples:

Quotas or license requirements

Sales below cost by government-owned service company

Restrictions on availability of foreign exchange

II. Limitations on right of establishment

Examples:

Outright prohibition on establishment of local operations

Local ownership requirements

Procedural impediments to establishment process

- III. Discrimination against operations of foreign-owned firm once it is established
 - a. Restrictions on management control

Examples:

Discriminatory taxes on income, profits, or royalties of foreign-controlled establishments

Controls on reinvestment or repatriation of earnings

^{*} U.S. Office of the U.S. Trade Representative, 1982. An inventory of over 800 cases of barriers was compiled.

b. Interferences with marketing

Examples;

Discriminatory government procurement policies
Inadequate protection of intellectual property
Regulatory procedures that discriminate against
foreign firms

c. Interferences with support facilities

Examples:

Restrictions on visas for specialized personnel

High tariffs or undue delays on imports of necessary

inputs such as advertising layouts or specialized

machinery.

This classification invites several comments relating to the similarity and dissimilarity of these restrictions compared to those that might be found on a list focussed on commodities. The similarities are obvious; there are few if any items in the service classification that would not be found also in a similar survey of restrictions on commodities, although the commodity list might well include more numerous references to restrictions on exports (I).

The dissimilarities are not inherent in the restrictions per se but rather in the political context in which they are found. With respect at least to restrictions on commodity trade, GATT provides a set of rules and a surveillance mechanism (although that may be too strong a term) which is entirely absent for services.* When it comes to investment (II and III), there is no worldwide code like GATT either for commodities or services. The disagreements among countries about the investment provisions of the Charter for an International Trade Organization (ITO) were among the main causes that

^{*} Except for motion pictures which are included in the GATT.

led to the failure of that document to receive ratification. It is hardly likely that it will be easier today than it was then for capital exporting and capital importing countries to reach a meaningful agreement on an investment code.

The other important difference between commodity and service restrictions is the extensive degree to which restrictions on foreign service activities are bound up with social, political and economic objectives that transcend the merely protective motivations of the restrictions. In a number of service industries domestic firms are subject to various restraints and regulations designed to protect the public from monopoly power, fraud, deception or the invasion of privacy. The regulation of banking and of foreign exchange markets to promote financial stability are almost universal. Similar motivations, particularly those related to the protection of public health and safety, lead to regulation of some commodity producing industries (e.g., drugs, electric applicances), but they are probably less pervasive.

Not only is it to be expected that foreign controlled firms will also be subject to such regulations and restrictions, but foreign ownership often raises special fears and problems. The concentration of financial power in foreign hands and the foreign control of advertising stereotypes are illustrations. A crude and rather arbitrary classification of the 16 service industries according to the extent to which discrimination against foreign firms may be based on or reinforced by such social motivations is presented in Table 10. The classification is meant to be suggestive; it is not based on any effort to assess the nature and strength of foreign attitudes. Nor is it intended to deny that a protective motivation may often enter into barriers that are justified on social grounds. What seems very likely, however, is that strongly held positions in support of barriers to foreign control in

certain services are deeply embedded in the domestic values and institutions of many countries (not excluding the U.S.). It is important to add that these objections to foreign control do not necessarily apply to the same industry in each actual or potential host country. The inference for negotiations is that an industry by industry, country by country approach is called for. (The efforts to resist protective pressures in the commodity field have pretty much returned us to such an approach in that sector.)

VI. Conclusion

In considering the policy implications of the findings of the previous sections, due regard has to be taken of our concentration on the empirical aspects of a very complicated subject. Only limited attention has been devoted to the political and diplomatic context in which the U.S. service initiative must be placed. With this caveat, the following points emerge from our considerations:

- 1. Services probably represent a relative growth sector in the domestic economies. Measurement problems abound, but as a rough approximation it may be taken that something like half of the growth in service industry shares in the production of GDP tends to reflect a relative increase in prices and only the other half an increase in real quantities.
- 2. There is little evidence of rapid growth in private nonfactor services relative to world trade in commodities or as a share of trade in commodities and services. This may represent inadequate measurement. Also, trade in both commodities and services has expanded more rapidly than the world GDP of market economies. However, a policy based on a sweeping view of the entire category of private nonfactor services as an area of great future trade growth

relative to commodity trade does not seem warranted. If growth prospects are to be the criteria for special negotiations of trade barriers, the commodity-service dichotomy is not very relevant.

- 3. Trade in many services does not have characteristics that provide any justification for their exclusion from the GATT regime. Trade in nonfactor services, amounting to something like 10 or 15% of world trade in commodities and services appears to have been omitted from the GATT rules more by oversight and lack of knowledge than for any compelling reason. An effort to extend the GATT rules to trade in nonfactor services seems warranted.
- 4. In the case of U.S.firms, nonfactor service sales by affiliates, branches, etc. in host countries are much more important than service sales made from the U.S. (i.e., exports). Thus, though much of the language of U.S. policy statements is cast in terms of trade, what is really at stake is the treatment of U.S. direct investment in foreign host countries. Service activities do not seem to warrant special treatment related to direct foreign investment. The general case for the removal of restrictions on the right of establishment and on the business operations of a foreign affiliate is not different for commodity— and service—producing industries (unless it is argued that restrictions on direct investment should be more lenient for services because they cannot be exported).
- 5. With the exception of a general extension of the GATT suggested in paragraph 3, there appear to emerge strong reasons for industry by industry, country-by-country negotiations. One set of reasons rests in the often deeply embedded objections to equal treatment for foreign suppliers of services in certain industries particularly ones that are domestically regulated in pursuit of nationally accepted objectives. The strength of these attitudes and the industries upon which they focus vary from one country to another. An

effort to include all countries in a broad coverage negotiation might produce a very low common denominator. Also, a more selective approach will enable the U.S. negotiators to concentrate on situations (industries and countries) where the pay-off from the relaxation of restrictions would be high.

6. The evaluation of the prospects of a program that is based on so many unknowns and so many uncertainties is hazardous. However, the size of the industries included, the subset for which a large expansion in U.S. exports could be expected even with the relaxation of barriers, and a realistic appraisal of the extent to which barriers are likely to be negotiated down, all suggest that the potential gains to the U.S. balance of payments from the present program are not likely to be large. A similar evaluation seems appropriate for U.S. sales of services from foreign based affiliates and branches. The prospects for gains are enhanced by the greater importance of such sales and by the rapid growth of some sectors, but the difficulty of reducing obstacles to direct investment is an offsetting factor. However, particular industries and firms may benefit substantially. (This would appear to be the case whether a selective strategy suggested in the previous paragraph was purposefully adopted or not.)

All this is not to denigrate the U.S. initiative. While it is obviously mercantilist in its search for further sales opportunities for U.S. firms, it does identify and attack restrictions on international business. If the restrictions it seeks out are foreign ones, our trade partners can be relied upon to identify ours. In any case, considering the growing speed with which imitation overtakes innovation in world markets, any improvement in the U.S. balance of payments or other U.S. gains may turn out to be mainly of a transient character. Nonetheless, the program provides a modest counterweight on the side of liberalization in a world in which restrictions are growing.

REFERENCES

- Balassa, B. (1982), "New Issues in Trade Policy in the 1980s", presented at the Conference on Trade Policy in the Eighties, sponsored by the Institute for International Economics, Washington, June 23-25.
- Caves, R.E. (1971), "International Corporations: The Industrial Economics of Foreign Investment", Economica, February.
- DiLullo, Anthony J. (1981), "Service Transactions in the U.S. International Accounts, 1970-80", Survey of Current Business, November.
- Hill, T.P. (1977), "On Goods and Services", Review of Income and Wealth, December.
- IBRD, (1980), World Tables, 1980, Second Edition, Washington, D.C.
- IMF, (1977a), Balance of Payments Manual, 4th Ed. Washington, D.C..
- , (1977b) Balance of Payments Yearbook, Supplement to Vol. 28, 1970-76, Washington, D.C.
- , (1981), Balance of Payments Statistics, Vol. 32, Yearbook, Part 2, Washington, D.C.
- , (1983), International Financial Statistics Yearbook, 1982, Washington, D.C.
- Kravis, I.B., A. Heston, R. Summers (1982) World Product and Income:

 International Comparisons of Real Gross Product, The Johns Hopkins University
 Press.
- Growth" in F.G. Adams and B. Hickman (eds.), Global Econometrics: Essays in Honor of Lawrence R. Klein, M.I.T. Press.
- Kravis, I.B. and R. E. Lipsey, (1982), "The Diffusion of Economic Growth in the World Economy, 1950-80", prepared for the Conference on International Comparisons of Productivity, American Enterprise Institute, Washington, D.C. September 30-October 1. To be published in proceedings volume.
- Leveson, Irving (1982), "Services in the U.S. Economy", presented at the ARA/Wharton Conference on the Future of the Service Economy, Fishman/Davidson Center for the Study of the Service Sector, Wharton School, University of Pennsylvania, November 19-20.
- OECD, National Accounts, 1963-80, Volume II, Detailed Tables.
- Sapir, Andre (1982), "Trade in Services: Policy Issues for the Eighties", Columbia Journal of World Business, forthcoming.
- Sapir, A. and E. Lutz (1980), "Trade in Non-Factor Services: Past Trends and Current Issues", World Bank Staff Working Paper No. 410, August.

- (1981), "Trade in Services: Economic Determinants and Development-Related Issues", World Bank Staff Working Paper No. 480, August.
- Schott, Jeffrey J. (1982), "International Trade in Services", Carnegie Endowment for International Peace.
- Stalson, Helena (1982), "Internation! Service Transactions", prepared for the ARA/Wharton Conference on the Future of the Service Economy, Wharton School, University of Pennsylvania, November.
- Summers, Robert (1982), "Services in the International Economy", prepared for the ARA/Wharton Conference on the Future of the Service Economy, Wharton School, University of Pennsylvania, November.
- U.S. Department of Commerce, (1960), U.S. Business Investments in Foreign Countries, by Samuel Pizer and Frederick Cutler, Office of Business Economics.
- U.S. Department of Commerce (1975), U.S. Direct Investment Abroad, 1966, Bureau of Economic Analysis.
- U.S. Department of Commerce (1981), U.S. Direct Investment Abroad, 1977, Bureau of Economic Analysis.
- U.S. International Trade Commission (1982) Publication 1290, The Relationship of Exports in U.S. Service Industries to U.S. Merchandise Exports, Washington, D.C., September.
- U.S. Office of the U.S. Trade Representative, (1982), <u>Briefing Packet:</u>

 <u>International Trade in Services</u>, #4, What are the Different Kinds of Barriers

 <u>Service Industries Encounter in Their Foreign Operations?</u>
- Whichard, Obie G. (1982), "U.S. Direct Investment Abroad in 1981", Survey of Current Business, August.