MULTILATERAL TRADE NEGOTIATIONS THE URUGUAY ROUND

RESTRICTED
MTN.GNS/W/58
3 July 1989
Special Distribution

Group of Negotiations on Services

BALANCE OF PAYMENTS STATISTICS ON SERVICES

Note by the Secretariat

1. Balance of payments statistics are the only source of information on trade in services that is on a global basis. This note discusses a number of salient features of the existing data. It consists of two parts. The first part starts with a brief description of the components of the current account of the balance of payments. It then goes on to discuss a number of problems that characterize the available data. The second part presents a number of tables that provide information on the value of total world trade in services and its components for 1970 and 1987, focusing in particular on regional shares and leading exporters.

I. Balance of payments statistics

2. As noted above, the balance of payments is the primary source of information on trade in services because the intangibility of most services precludes their registration at the frontier. The balance of payments comprises a number of standard components, usually organized into two parts. The first registers flows of goods, services, income, and unrequited transfers and makes up the current account. The second is the capital account, which registers changes in stocks of assets, that is financial claims and liabilities. In this note the focus is only on the current account, the standard components of which are listed in the Annex. The IMF does not define services or trade in services, distinguishing merchandise from non-merchandise (or invisibles) instead. Trade is defined as transactions between residents of one country with non-residents. A change in residency is considered to occur if foreign factors of production stay abroad for one year or more.

II. Components of the current account

3. Merchandise refers to trade in goods on a free-on-board (f.o.b) basis. That is, it includes the value of distribution services required to bring the goods from the point of production onto the carrier (ship or plane). Shipment covers freight, insurance, and other distributive services in connection with merchandise. Other transport covers transport activities unrelated to merchandise. The main component is transport of people (passenger services) and port services, which comprise the procurement of goods and services by carriers. Examples include loading and unloading, harbour and airport fees, pilotage, towage, and maintenance and repair.

- 4. Travel covers all expenditures on goods and services in an economy by non-resident travellers, both for business and pleasure. In principle, travel receipts are equivalent to receipts derived from international tourism as defined by the World Tourism Organization. Investment income covers flows related to movement of financial assets. These can be divided into dividend and interest associated with portfolio investment, and income associated with foreign direct investment. Other goods, services, and income covers all transactions between residents and non-residents that are not included in previous items. The official component includes expenditures on embassies, (joint) military units, institutions such as the U.S. Peace Corps, and military services provided or obtained.
- 5. Labour income comprises payments to non-residents that are not included elsewhere, while property income refers to payments for non-financial assets. In large part this consists of royalties and license fees. As the name indicates, the component other private goods, services, and income includes goods, an example being subscriptions to periodicals. Mostly, however, these tend to be intermediate service inputs (producer services). Unrequited transfers comprise all financial flows that imply no <u>quid pro quo</u>. Remittances and official grants are examples.
- 6. The balance on goods, services, and income (that is, excluding transfers) measures the net exchange of real resources between an economy and the rest of the world. These real resources are of two types: those related to earlier changes in financial claims and liabilities with respect to the rest of the world (investment income), and those that are not (the other components). In the absence of a generally acceptable and comprehensive definition of trade in services, the focus of this note will be on total invisibles, defined as the sum of categories 2-7 listed in the Annex, and on the components themselves.
- 7. The non-merchandise components of the current account are sometimes broken down into factor- and non-factor services, following the distinction that is fundamental to the System of National Accounts. The former is defined to include income from assets held abroad (both tangible investment income and intangible royalties and fees) and income accruing to factors of production (capital and labour). Non-factor services are considered to include the categories Shipment, Other Transportation, Travel and Other Goods, Services and Income (but excluding income from labour and property).

III. Measurement problems and related issues

- 8. Given the limited number of components of the current account, it is clear that the level of aggregation at which international services transactions are reported is very high. Furthermore, very few countries report data on all of the components. Thus, the available detail on international transactions in services is minute compared to the multitude of categories reported for merchandise.
- 9. Because of their intangibility, data for trade in services are typically derived from central bank information on flows of foreign exchange and/or

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

- 10. Surveys of enterprises focus explicitly on transactions, not payments, so that in principle these problems do not arise. However, surveys lead to other potential problems. Imports by households and the government may not be captured, nor will transactions made by firms that are not registered. Thus, it is crucial that an up to date registry is maintained of the universe of service providers. Achieving a detailed coverage of service transactions using these sources is burdensome and costly. In practice, many countries rely primarily on central banks to provide information on trade in intangibles. Nevertheless, given the recent interest in services, one of the items on the agenda of many statistical offices is to generate more disaggregated data through the use of survey instruments. First steps in this direction have been taken by various international organisations (including the EC, the OECD, and the IMF) by developing more detailed classifications of international service transactions (as described in MTN.GNS/W/41 and MTN.GNS/W/54).
- Services transactions are likely to be substantially underreported in 11. the balance of payments. Services such as transport, insurance, and professional services such as legal advice and financial intermediation may in part be subsumed under the value of the goods to which they are related, or they may be misclassified, over- or underreported, or not reported at all. Overreporting may occur for categories such as merchanting (transactions of goods between resident and non-residents where the goods stay in one country, that is, do not cross a border). Some countries measure trade in this category so as to include the value of the goods traded; others measure only the service component, that is, the trade margin. Misclassification may occur as a result of reporting payments for trade in services as payments for goods or factors, or vice versa. Data for services that require the movement of consumers, such as medical and educational services, are often not reported in the balance of payments, even though they may at times be substantial.
- 12. Trade may consist of transactions between affiliated firms or between non-affiliated entities. There exist well-known difficulties with respect to the registration of transactions between affiliates. The existence of differential tax rates, exchange restrictions or investment performance requirements, and variations in the degree to which firms are required to reinvest earnings may lead to transfer pricing strategies that bias reported trade figures. Trade in many services (such as management, data processing, advertising, and so forth) may not be registered at all, as there may not be a flow of foreign exchange. While separate statistics on transactions between affiliated firms exist for a small number of countries, most

countries do not collect such data. Sales by foreign affiliates are not recorded at all in the balance of payments, because the factors that move in these cases do so for a substantial period of time (longer than one year), and thus are considered to change their residency status. The consequence is that the associated sales are not regarded as trade.

- 13. Service trade statistics are inferior to merchandise trade statistics not only because of lesser comprehensiveness and disaggregation, but also because data are not available on the volume and the direction of trade. Price deflators allowing the calculation of the volume of trade in services and its evolution do not exist on a comparable cross-country basis. Thus, analyses are limited to whatever nominal data are reported. The lack of global information on trade by origin and destination means that one can only calculate shares in world trade.
- 14. In addition to the weaknesses mentioned above, balance of payments data are also subject to the same kinds of problems that affect domestic statistics on services. Thus, by definition, services that are traded informally or in the underground economy are not recorded, nor are many services produced by firms whose primary activity is in the goods sector. In the latter case, which is likely to be more important, part of the value of trade in goods will actually be trade in services. Even at the very high level of aggregation with which trade data presently are reported, comparability across nations is fraught with difficulties. This is because nations vary substantially in terms of the composition of the aggregates reported to the IMF. These variations also pertain to sources of data. As noted previously, some countries may rely on central bank information, others on surveys or censuses, and sometimes estimates may be made using unknown methodologies.
- 15. Comparability across countries and time is also limited because coverage and methods of data collection may change. Furthermore, some countries may not report any data for specific years, especially the most recent ones or those prior to 1970. Many countries do not report anything on certain components of their trade in invisibles to the IMF, while others, such as the USSR, Hong Kong and Taiwan are not members. The implication is that calculations regarding the distribution of world trade across regions will be biased, as will be the total.
- 16. The last problem with balance of payments data that will be mentioned is that of comparability/consistency with domestic statistics and classifications. Often it is difficult if not impossible to relate trade data to the classifications used to report domestic data (such as the ISIC), so that one cannot relate trade to domestic production. This problem pertains to all the balance of payments invisibles categories. Transport trade data (that is, the categories Shipment and Other Transportation) cannot be readily compared to domestic transportation data because part of traded transportation services are embodied in the value of traded goods. Currently, the IMF recommends that imports and exports be valued on an f.o.b basis. The implication of this is that there will be imputed imports (exports) of transportation (and other distribution) services if the invoice value of an import (export) transaction is greater (less than) the f.o.b

value. The use of the f.o.b valuation convention for merchandise requires that gross flows of freight (shipment) services between countries be estimated. The convention recommended by the IMF is: (1) to treat as credits all services performed by residents on its exports once these have passed the border; and (2) to treat as debits all services performed by non-residents on its imports once these have been loaded on the carrier at the frontier of the country of export.

17. The implication of all the problems that have been touched upon above is that it is very likely that the relative importance of services in total trade of a nation will be underestimated. One can only make educated guesses as to the extent of this bias. Research has indicated that aggregate balance-of-payments data for the United States, for example, may be anywhere from 40% to 100% too low, depending on the definitions and assumptions employed.

IV. World trade in services by region and leading exporters

- 18. Tables 1-9 focus on the value and regional distribution of trade in services (invisibles) in 1970 and 1987. Tables 1 and 2 report data for the value of world exports and imports in 1970 and 1987, as well as the relative importance of the various components of invisibles in world trade. The discrepancy between world imports and exports for certain components is illustrative of some of the problems affecting the database. The large discrepancy for shipment is due to non-reporting of revenues by major exporting countries such as Greece, as well as revenues accruing to flags of convenience.
- 19. Tables 3-9 focus on the shares in world exports of various components of the current account by region and by leading exporters (ranked by 1987 exports). It is important to keep in mind that due to non-reporting and incomplete country coverage (i.e., only IMF members are included), the list of leading exporters is indicative only, as the ranking implied may not be completely accurate. Definitions of country groupings are those employed in the GATT publication International Trade.

Table 1
WORLD EXPORTS 1970 AND 1987
(billion US \$)

Cohoran	1 9	7 0	1 9	8 7
Category	Value	% Total	Value	% Total
Goods and invisibles Invisibles	373 109	100 29	3,174	100 34
of which: Shipment	109	4	1,066 66	2
Passenger services Other transport	3 8	1 2	29 55	1
Travel Other private services	18 15	5 4	146 169	2 5 5
Labour & property income Investment income	5 26	1 7	32 407	1 13
Other official services Unrequited transfers	8 12	2 3	45 113	1 4

Table 2
WORLD IMPORTS 1970 AND 1987
(billion US \$)

0.1	1 9	7 0	1 9	8 7
Category	Value	% Total	Value	% Total
Goods and invisibles Invisibles of which:	375 120	100 32	3,204 1,124	100 35
Shipment Passenger services	16 3	4	97 29	3 1
Other transport Travel	10 18 14	3 5	56 148 150	2 5 5
Other private services Labour & property income Investment income	6 28	4 2 7	36 443	1 14
Other official services Unrequited transfers	10 15	3 4	43 123	1 4

Source: IMF Balance of Payments Statistics

Table 3

SHARES IN WORLD EXPORTS OF INVISIBLES*
BY REGION AND LEADING EXPORTERS, 1970 AND 1987

Region/Country	1970	1987
Developed	86.2	85.1
Developing	13.4	13.6
Eastern trading area	0.3	1.3
Western Europe	55.7	57.6
North America	25.3	18.5
Middle East	2.4	3.7
Asia	8.5	14.2
Africa	3.3	2.1
Latin America	4.5	3.2
Selected East European	0.3	0.7
Leading exporters:		
United States	21.6	16.8
United Kingdom	11.2	12.5
Germany, Fed. Rep.	8.6	8.7
France	7.4	8.5
Japan	3.7	7.6
Belgium	3.3	4.8
Italy	5.9	4.5
Netherlands	4.2	4.0
Canada	3.8	1.9
Saudi Arabia	0.3	1.3
Korea, Rep.	0.6	1.1
Singapore	0.5	1.0
Mexico	1.5	0.9
Yugoslavia	1.2	0.8

^{*&}quot;Invisibles" comprises categories 2-7 of the Annex.

Table 4

SHARES IN WORLD EXPORTS OF SHIPMENT
BY REGION AND LEADING EXPORTERS, 1970 AND 1987

Region/Country	1970	1987
Developed	93.7	84.4
Developing	6.2	12.2
Eastern trading area	n.a.	3.4
Western Europe	75.2	63.1
North America	10.1	8.1
Middle East	1.6	1.6
Asia	9.8	21.2
Africa	1.2	1.3
Latin America	2.1	3.2
Selected East European	n.a.	1.5
Leading exporters:		
Japan	7.3	12.4
France	8.9	10.6
Italy	5.5	8.3
Germany, Fed. Rep.	9.9	8.0
United States	8.1	7.4
Norway	12.5	6.5
Unites Kingdom	18.9	6.1
Netherlands	5.8	5.8
Belgium and Luxembourg	2.2	4.5
Sweden	3.8	3.0
Denmark	2.4	3.0
Korea, Rep.	0.3.	2.8
China	n.a.	1.8
Spain	0.7	1.8
Poland	n.a.	1.4

Table 5

SHARES IN WORLD EXPORTS OF OTHER PRIVATE SERVICES*
BY REGION AND LEADING EXPORTERS, 1970 AND 1987

Region/Country	1970	1987
Developed	86.9	86.1
Developing	11.3	12.1
Eastern trading area	1.6	1.7
Western Europe	68.2	70.0
North America	13.1	8.9
Middle East	2.3	3.0
Asia	7.8	13.0
Africa	2.4	1.2
Latin America	4.5	3.1
Selected East European	1.6	1.1
Leading exporters:		
France	11.1	14.1
United Kingdom	15.7	12.2
Germany, Fed. Rep.	6.7	10.4
Japan	4.3	6.7
Belgium and Luxembourg	7.7	6.2
United States	8.7	5.9
Italy	6.5	5.5
Netherlands	4.6	5.2
Switzerland	5.1	3.9
Canada	4.4	2.9
Austria	1.6	2.9
Korea, Rep.	0.4	1.8
Sweden	2.2	1.7
Saudi Arabia	n.a.	1.6
Denmark	1.6	1.6

^{*&}quot;Private services" comprises category 6.2 of the Annex, with the exclusion of labour and property income.

Table 6

SHARES IN WORLD EXPORTS OF TRAVEL
BY REGION AND LEADING EXPORTERS, 1970 AND 1987

Region/Country	1970	1987
Developed	82.7	79.1
Developing	17.0	19.0
Eastern trading area	0.3	1.9
Western Europe	61.4	63.0
North America	19.2	13.0
Middle East	1.9	2.0
Asia ·	4.5	11.0
Africa	2.3	3.0
Latin America	10.5	7.0
Selected East European	0.3	1.0
Leading exporters:		
Spain	9.2	10.3
United States	12.8	10.3
Italy .	9.0	8.5
France	7.3	8.3
United Kingdom	5.7	7.2 .
Austria	5.5	6.2
Germany, Fed. Rep.	7.3	5.4
Switzerland	5.0	3.8
Canada	6.4	3.3
Mexico	6.4	2.4
Belgium and Luxembourg	1.9	2.1
Netherlands	2.4	1.9
Greece	1.1	1.6
Singapore	0.5	1.5
Korea, Rep.	0.1	1.5

Table 7

SHARES IN WORLD EXPORTS OF PASSENGER SERVICES*
BY REGION AND LEADING EXPORTERS, 1970 AND 1987

Region/Country	1970	1987
Developed	91.3	81.2
Developing	8.7	17.9
Eastern trading area	-	0.8
Western Europe	65.0	54.9
North America	17.3	19.0
Middle East	2.1	3.1
Asia	9.5	13.3
Africa	1.1	3.9
Latin America	4.9	5.5
Selected East European	-	0.3
Leading exporters:		
United States	17.3	19.0
United Kingdom	18.5	14.0
Germany, Fed. Rep.	13.5	10.4
Spain	4.0	5.5
Switzerland	n.a.	4.7
Italy	11.1	4.6
Netherlands	6.7	4.5
Australia	4.5	3.2
Japan	4.5	3.1
Sweden	3.8	2.5
Korea, Rep.	0.2	2.3
Belgium-Luxembourg	1.5	2.1
Norway	n.a.	2.0
Mexico	1.3	1.5
Finland	0.3	1.2

^{*&}quot;Passenger services" includes predominantly receipts for air transport of people.

Table 8

SHARES IN WORLD EXPORTS OF OTHER TRANSPORT*
BY REGION AND LEADING EXPORTERS, 1970 AND 1987

Region/Country	1970	1987
Developed	83.3	84.0
Developing	16.7	14.8
Eastern trading area	-	0.9
Western Europe	44.7	51.0
North America	27.6	22.9
Middle East	2.5	1.3
Asia	16.7	16.1
Africa	3.0	3.8
Latin America	5.5	4.5
Selected East European	-	0.4
Leading exporters:		
United States	25.8	22.3
France	n.a.	14.8
Netherlands	10.0	9.1
Japan	6.9	7.7
Germany, Fed. Rep.	5.7	5.9
United Kingdom	11.0	5.9
Singapore	3.2	3.5
Spain -	1.9	3.0
Egypt	0.1	3.0
Belgium-Luxembourg	1.8	2.2
Australia	4.3	2.0
Sweden	2.7	1.7
Denmark	2.8	1.6
Italy	3.9	1.4
Yugoslavia	0.3	1.2

^{*}Other transport" includes port services, charter and miscellaneous transportation.

Table 9

SHARES IN WORLD CREDITS ASSOCIATED
WITH LABOUR MOVEMENT*, 1970 AND 1987

Region/Country	Value 1987	Value 1987 Share in	
Region/Country	(billion \$)	1970	1987
Developed	52	79.7	60.5
Developing	20	20.3	38.8
Eastern trading area	0.3	n.a.	0.6
Eastern trading area	0.3	n.a.	0.0
Western Europe	26	69.7	50.3
North America	3	6.1	5.9
Middle East	3	3.2	5.3
Asia	8	8.7	22.7
Africa	7	7.2	13.7
Latin America	2	5.0	3.7
Leading exporters:			
Yugoslavia	4.1	9.2	8.3
Germany, Fed. Rep.	3.9	6.5	7.9
Egypt	3.6	0.5	7.4
Portugal '	3.4	7.3	6.9
Canada	2.5	6.1	5.1
India	2.5	2.1	5.0
France	2.5	4.7	5.0
Pakistan	2.2	1.6	4.4
Turkey	2.0	5.1	4.1
Morocco	1.6	1.2	3.2
Spain	1.6	8.7	3.2
Australia	1.5	3.4	3.1
Greece	1.4	6.3	2.9
Belgium-Luxembourg	1.3	5.4	2.6
Philippines	1.0	n.a.	2.1

Source: IMF Balance of Payments Statistics

^{*}Figures reported pertain to the sum of labour income, worker remittances and migrants transfers.

Annex

Components of the Current Account

Merchandise 1.

2. Shipment

- Freight
- Insurance on freight
- Other distribution services

3. Other transportation

- Passenger services
- Port services
- Charters of carriers
- Miscellaneous transportation

4. Travel

5. Investment income

- 5.1 Direct investment income

 - Reinvested earningsDistributed earnings
- 5.2 Other investment income
 - Resident official, including interofficial
 - Foreign official, excluding interofficial
 - Private

Other goods, services and income 6.

- 6.1 Official
 - Interofficial
 - Other, resident official
 - Other, foreign official
- 6.2 Private
 - Labour income, not included elsewhere
 - Property income, not included elsewhere
 - Other goods and services, including:

Non-merchandise insurance

Communications

Advertizing

Brokerage

Management

Operational leasing, other than charters

Subscriptions to periodicals

Processing and repair

Merchanting

Professional and technical services

7. Unrequited transfers

7.1 Private

- Migrants' transfers
- Workers' remittances
- Other
- 7.2 Official