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A REVIEW OF STATISTICS ON TRADE FLOWS IN SERVICES

Note by the Secretariat

This paper was prepared at the request of the Council for Trade in Services. It aims to provide an overview of the statistics on international trade in services that are currently available. This paper is organised in 6 sections. A brief introduction is followed by Section II which describes the data that are currently available. Section III describes trade flows in services, at an aggregate and sectoral level, on the basis of balance of payments statistics. Section IV discusses the statistics on Foreign Affiliates Trade for the United States, the only country which has so far collected such statistics on a regular basis. Section V presents available indicators of the importance of the presence of natural persons as a mode of supply, and Section VI concludes the paper.

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I. INTRODUCTION

At the meeting of the Council for Trade in Services held on 25 July 1997, the Secretariat was asked to identify trends in services trade flows. This paper draws together a variety of data to construct a general, but necessarily incomplete, picture of services trade. The paper should be read in conjunction with the previous Secretariat paper on services statistics, circulated as document S/C/W/5, especially Section II, which describes the significant problems with existing services statistics. The poor quality and inconsistency of available data continue to be major problems in analysing trade flows in services.

In the GATS context, in addition to general inadequacies of services statistics, we encounter a crucial problem: *the framework of negotiated commitments does not match the existing structure of trade statistics* (see S/C/W/5). This is for three related reasons. First, the GATS definition of trade in services goes beyond the traditional notion of international trade, which refers to products crossing geographical boundaries, or to transactions between residents and non-residents. Thus, trade in services is defined as including local sales by foreign entities who would be considered "residents" by conventional statistical criteria and for whose activities adequate statistics do not exist. Second, the scheduled commitments are, in most part, according to the GNS classification¹ which is based largely, but not entirely, on the UN Central Product Classification (CPC).² However, the only services trade statistics available on a global basis follow the IMF Balance of Payments Manual classification which was not originally based on the CPC.³ The third reason, related to the first, is the distinction made in GATS between four modes of supply: cross border supply, consumption abroad, commercial presence and presence of natural persons. In the country schedules, commitments in each service sector are specifically defined according to each mode of supply. This is a form of disaggregation for which only crude statistical approximations exist.

II. AVAILABLE DATA

Three types of data on trade in services are used in this paper: balance of payments (BOP), sectoral, and Foreign Affiliates Trade (FAT) data. The first column in Table 1 lists the 10 main components of the IMF classification, discussed below. The second column in Table 1 lists the sector-specific statistics which are presented in this paper. The third column indicates the sectors for which statistics on FAT are available for the United States, the only country which currently reports such statistics on a regular basis.⁴ This Section describes the first two sources, while the third source is discussed in a subsequent section.

¹MTN.GNS/W/120.

²The GNS Classification deviates from the CPC classification primarily in *telecommunication* and *financial services* and to a lesser extent in *transport services*. The CPC constitutes a complete product classification covering goods, services and assets. It was developed primarily to enhance harmonization among various fields of economic-related statistics.

³Work is currently in progress on establishing a concordance between the IMF classification and the CPC.

⁴Several other OECD countries have begun work on the collection of statistics on Foreign Affiliates Trade. The first results of this work should become available towards the end of 1997.

Table 1: Types of data on trade in services presented in this paper

BOP	Sectoral	FAT (U.S. only)
Transport	Air - Passengers carried - Passenger-kilometres performed - Freight carried Maritime - World seaborne trade by types of cargo and country groups - Structure of the merchant fleets of the main country groups - 35 most important maritime countries	Yes
Travel	- World's top tourism destinations	None
Communications services	- Top 20 revenue-earners of telecommunications services (total and international) - Volume of outgoing and incoming international calls, and settlement payments	Yes
Construction services	None	None
Insurance services	None, but see WTO (1997)	Yes
Financial services	None, but see WTO (1997)	None
Computer and information services	None	Yes
Royalties and licence Fees	None	None
Other business services	None	- Accounting, management and related services - Advertising
Personal, cultural and recreational services	None	None

(i) Balance of Payments (BOP) Statistics

The only comprehensive source of information on trade in services available on a global basis are the IMF balance of payments statistics. These statistics are reported by central banks and national statistics offices and reproduced in the IMF Balance of Payments Yearbooks. Most data available until 1994 were reported according to the conceptual framework and the classification system of the 4th edition of the IMF Balance of Payments Manual (1977) (hereafter referred to as BPM-4) but a transition is now being made to the 5th edition of 1993 (referred to as BPM-5 and described below).

In BPM-4, there was no explicit identification of what constituted trade in services. Rather, the current account was divided between *merchandise* and *non-merchandise* items, the latter often being referred to as *invisibles*. The term *invisibles* generally referred to the sum of the following categories: *shipment, other transportation, travel, investment income, other official goods, services and income, other private goods, services and income*, and (optionally) *private and official unrequited transfers*. The definition of *commercial services* used in previous GATT publications included all the components of invisibles except *investment income, other official goods, services and income*, and *private and official unrequited transfers*. Starting with the 1995 issue of the Annual Report, the WTO decided to exclude *labour income*, which consists mainly of wages and salaries paid to seasonal and border workers, from the definition of commercial services. The reason for this exclusion is discussed in Section V.

The BPM-5 classification, introduced in 1993, is significantly more disaggregated than BPM-4, and indicates what has already become available for many countries. Box A3 in S/C/W/5 presents a juxtaposition, rather than a formal concordance, of the GNS and the BPM-5 classifications. This reveals that the information available on a global basis in the near future will still suffer from certain shortcomings. First, these statistics still do not cover "foreign affiliates trade". Balance of payments statistics register transactions between residents and non-residents. According to balance of payments conventions, if factors of production move to another country for a period longer than one year (sometimes flexibly interpreted), a change in residency has occurred. The output generated by such factors that is sold in the host market is not recorded as trade in the BOP. Thus, transactions involving commercial presence or stay of natural persons for durations of more than one year are not covered by the BOP statistics. The implications for statistical coverage of individual sectors depend on the relative importance of these modes of supply in a particular sector. Sectors like *distribution services* and *financial services* are likely to be among the worst affected.

Second, even BPM-5 contains a relatively limited disaggregation in comparison with the GNS classification. The greatest number of sub-divisions in the GNS classification are in *business* (46), *communication* (21), *financial* (16) and *transport* (33) services. The number of subdivisions in the IMF classification for these sectors are 2, 2, 2 and 9, respectively. The inclusion of supplementary information, which was included in response to GATS needs, raises the number of *business* subdivisions to 8.

Finally, there is the problem of lack of concordance in that some of the IMF categories do not match the GNS ones. For statistical coverage, *educational services* and *health-related and social services* must rely on a disaggregation of personal travel expenditures provided only in the supplementary information section, and on non-separated ingredients of *other personal, cultural and recreational services*. The lack of a precise concordance is also a major problem for *computer and related services*, *environmental services*, *tourism and travel-related services*, and *recreational, cultural and sporting services*. For example, in the IMF BOP classification, *computer and information services* include *news agencies services* which are part of *recreational and cultural services* in the GNS classification.

Table 2 illustrates the level of detail at which different countries report to the IMF. The low number for 1996 reflects delays in reporting. Almost all of the IMF member countries report aggregate trade statistics for *transportation*, *travel*, *insurance*, and *other business services*. However, only a small number of the countries report disaggregated data for individual components of *transportation* and *travel*. Furthermore, fewer than half the IMF member countries report statistics separately for sectors like *construction*, *financial*, *computer and information*, and *personal, cultural and recreational services*.⁵ Even the statistics that are reported do not necessarily have the same coverage. For instance, the United States BOP figures for services sub-sectors other than transport and travel, only include transactions between unaffiliated partners, while those of other countries include transactions between affiliated partners also.

The Tables in Annex B provide IMF BOP data for 1995. Tables B1 and B2 present export and import statistics, respectively, of all IMF member countries for the ten main components of the BPM-5 classification. Tables B3 and B4 present export and import statistics, respectively, of the subset of member countries (27 and 29, respectively) which reported statistics for more than half of the items in the detailed BPM-5 classification. Significant gaps remain in both sets of tables.

⁵This paper relies on the statistics that have been published by the IMF. There are indications that certain countries have more detailed data at the national level. The Secretariat is exploring the possibility of obtaining access to such data.

Table 2: Coverage: Number of countries reporting trade data for specific services sectors, 1994-96

Code	Service description	Imports			Exports		
		94	95	96	94	95	96
	Total services	147	117	46	146	116	46
1	Transport	147	117	46	141	113	46
1.1	Sea transport	48	48	27	42	44	27
1.1.1	Passenger transport on sea	18	19	14	13	15	13
1.1.2	Freight transport on sea	42	40	22	31	33	22
1.1.3	Supporting, auxiliary and other services	31	30	19	31	31	18
1.2	Air transport	48	46	26	49	48	26
1.2.1	Passenger transport by air	43	39	23	39	37	23
1.2.2	Freight transport by air	26	32	22	22	29	20
1.2.3	Supporting, auxiliary and other services	26	27	16	33	32	18
1.3	Other transportation	35	34	22	39	40	22
1.3.1	Passenger	19	19	10	22	21	11
1.3.2	Freight	27	26	17	28	29	17
1.3.3	Other transportation services	24	27	15	27	30	15
2	Travel	145	115	46	141	114	46
2.1	Business travel	34	33	15	24	22	12
2.2	Personal travel	47	48	21	39	40	19
2.2.1	Health-related expenditure	13	15	6	4	7	4
2.2.2	Education-related expenditure	25	23	8	10	14	7
2.2.3	Other personal travel	37	37	14	29	28	11
3	Communications services	57	60	33	57	62	32
4	Construction services	36	40	26	30	37	23
5	Insurance services	131	104	39	89	72	31
6	Financial services	40	44	23	38	43	24
7	Computer and information services	19	25	18	16	23	16
8	Royalties and licence fees	63	57	29	46	42	24
9	Other business services	143	116	44	134	110	42
9.1	Merchanting and other trade-related services	31	33	18	36	37	19
9.2	Operational leasing	29	30	21	20	25	19
9.3	Miscellaneous business, professional and technical services	66	62	33	64	61	31
9.3.1	Legal, accounting, management, consulting and public relations services	19	19	11	12	14	9
9.3.2	Advertising, market research and public opinion polling services	16	19	12	14	16	11
9.3.3	Research and development services	11	14	9	10	13	9
9.3.4	Architectural, engineering and other technical services	12	15	8	11	14	8
9.3.5	Agricultural, mining and on-site processing services	5	6	4	6	7	4
9.3.6	Other services	42	37	20	41	37	20
10	Personal, cultural and recreational services	27	30	17	20	24	16
10.1	Audio-visual and related services	16	19	12	11	14	11
10.2	Other personal, cultural and recreational	15	16	9	13	15	11

Source: Compiled by the WTO Secretariat from IMF Balance-of-Payments Statistics.