The financial services statistics illustrate why it is important to view both the values of services trade and the country rankings with a certain degree of caution. First, two major traders, Switzerland and the United Kingdom, report financial trade statistics only on a net basis, and not separately for exports and imports. Since each has a trade surplus, the two countries appear in Table A21 as exporters. But the practice of reporting net figures leads to an underestimation of world exports and world imports, and this leads to a distortion of the ranking of countries. Second, huge revisions in the national statistics reveal the fragility of current data. For instance, Japan's financial services imports (exports) in 1996 are nearly 10 times (6.5 times) larger than those reported in 1995; for the United States, recent revisions suggest that financial services imports (exports) may have been as much as 45 per cent (15 per cent) higher than the values reported in Table A21.

(vii) Insurance

In the GNS classification, *insurance services* include both life and non-life insurance, as well as reinsurance and retrocession, insurance intermediation, and services auxiliary to insurance. In BOP statistics, *insurance services* are valued by service charges included in total premiums earned rather than by total premiums. The BPM-5 classification does not include any sub-component for insurance services.¹⁵

Table A22 presents the 20 leading exporters and importers of *insurance services* among those countries that have reported to the IMF in 1995. The top ten exporters and importers of *insurance services* in 1995 accounted for approximately 84 percent and 72 percent of reported export and import of *insurance services*, respectively.¹⁶

(viii) Computer and information services

The GNS classification makes a distinction between *computer services*, which is a sub-sector of *business services*, and *news agency services*, which is a sub-sector of *recreational*, cultural and sporting services. However, in the BPM-5 Classification, computer and information services are treated as a single category.

Table A23 presents the 20 leading exporters and importers of computer and information services among those countries that have reported to the IMF in 1995. The top five exporters and importers of computer and information services in 1995 accounted for approximately 70 percent and 71 percent of reported export and import of computer and information services, respectively. Table A7 shows that this sector is probably the worst affected by reporting problems - the share of reporting countries in total trade is estimated to be only 49 percent.¹⁷

¹⁵In the OECD/Eurostat classification, "insurance services" are subdivided into: (i) life insurance and pension tunding, (ii) freight insurance; (iii) other direct insurance; (iv) reinsurance; and (v) auxiliary services.

Table A7 shows that the estimated shares of total reported exports and imports of *insurance services* are 94 percent and 93 percent of world exports and imports of *insurance services*, respectively.

The IMF BOP statistics do not show figures for the United States for computer and information services.

(ix) Other business services

Under other business services, the IMF classification includes merchanting and other trade related services, operational leasing and miscellaneous business, professional and technical services. Merchanting and other trade related services are related to elements of distribution services in the GNS classification, while operation leasing services relate to rental/leasing services, which is a sub-set of business services. Miscellaneous business, professional and technical services in the IMF classification cover elements of professional services, research and development services, advertising services and other business services in the GNS classification.

Most countries report figures only for the aggregate category other business services. Table A24 presents the 20 leading exporters and importers of other business services among those countries that have reported to the IMF in 1995. The top ten exporters and importers of other business services in 1995 accounted for approximately 65 percent and 60 percent of world export and import of other business services, respectively.

(x) Royalties and licence fees

A part of the IMF category royalties and license fees captures the GNS category franchising, which is a subset of distribution services.

Table A25 presents the 20 leading exporters and importers of *royalties and licence fees* for those countries that have reported to the IMF in 1995. The top five exporters and importers of *royalties and licence fees* in 1995 accounted for approximately 89 percent and 60 percent of reported export and import of *royalties and licence fees*, respectively.¹⁸

(xi) Personal, cultural and recreational services

The BPM-5 Classification, personal, cultural and recreational services captures transactions related to the GNS category personal, cultural and sporting services together with audiovisual and related services.

Table A26 presents the 20 leading exporters and importers of personal, cultural and recreational services among those countries that have reported to the IMF in 1995. The top five exporters and importers of personal, cultural and recreational services in 1995 accounted for approximately 82 percent and 61 percent of reported export and import of personal, cultural and recreational services, respectively.¹⁹

¹⁸Table A7 shows that the estimated shares of total reported exports and imports of *royalties and licence* fees are 83 percent and 84 percent of world exports and imports of *royalties and licence fees*, respectively.

¹⁹Table A7 shows that the estimated shares of total reported exports and imports of *personal*, *cultural* and *recreational services* are 76 percent and 75 percent of world exports and imports of *personal*, *cultural* and *recreational services*, respectively.

IV. FOREIGN AFFILIATES TRADE (FAT) STATISTICS

As noted above, balance of payments statistics do not capture trade through commercial presence. Such trade is measured by statistics on the sales of foreign affiliates. The United States is the only country which has been regularly collecting Foreign Affiliates Trade statistics, though other OECD countries are now beginning to do so.

The United States compiles data on sales of services to foreign persons by Majority-Owned Foreign Affiliates (MOFAs) of U.S. companies, and on sales of services to U.S. persons by Majority-Owned U.S. Affiliates of Foreign companies (MOUSAs). MOFAs data are broken down by country of affiliate and MOUSAs by country of Ultimate Beneficial Owner (UBO). The U.S. data are particularly useful for comparing BOP-related and FAT-related sales, given that: (i) they are available for a number of service sectors and are broken down by partner country; (ii) U.S. FAT sales do not include sales to the country of origin, which prevents an overlap between BOP and FAT data; and (iii) U.S. sectoral BOP statistics are available for unaffiliated partners only, which prevent the double counting of particular transactions, such as when a service is exported to an affiliate which subsequently sells it on its domestic market. However, the fact that intra-firm transactions are not included is likely to induce a substantial undervaluation of BOP transactions in particular sectors such as in finance, accounting and advertising.

Comparisons of BOP and FAT statistics are affected by the fact that BOP transactions are mainly classified by type of service, whereas data on sales by foreign affiliates are broken down according to the primary industry of the affiliate. Furthermore, there is generally no direct concordance between these two classifications. Finally, as minority-owned foreign affiliates escape registration in FAT statistics, these statistics may underestimate the commercial presence mode of supply. A number of minority-owned foreign affiliates are presumably controlled by the foreign parent company.

In the following tables, it should be noted that the relative importance of trade by different modes in a particular sector reflects the choices of economic agents given the constraints of both technological feasibility and policy restrictions. Thus, for instance, we may observe a relatively high degree of affiliates trade in a particular legal service either because cross-border supply is not feasible or because such supply is restricted by the government.

Table 3 presents aggregate figures for BOP transactions and foreign affiliates transactions for the United States between 1992 and 1994, the most recent year for which statistics have been published. The relative importance of the two types of transactions does not differ significantly at the aggregate level. However, while BOP exports tend to exceed sales through affiliates, purchases through affiliates tend to be more important than BOP imports by roughly the same extent.

²⁰The activity of an affiliate is classified in the industry that accounts for the largest portion of its sales, and all data are shown in that industry whether or not the affiliate also has activities in secondary industries. This might be quite misleading, especially in service sectors such as professional services.

Table 3: Total commercial services trade of the United States

(Million dollars and percentage)

	1992	1993	1994	Annual change	Annual change
				1992-93	1993-94
BOP (exports)	164057	172139	182704	4.9	6.1
MOFAs	141585	142603	153541	0.7	7.7
BOP (imports)	103328	111016	121148	7.4	9 1
MOUSAs	126989	134700	144365	6.1	7.2

Source: Compiled by the secretariat from Survey of Current Business (1996, November).

Table 4 compares the receipts and payments of transportation services from BOP transactions and foreign affiliates transactions for the United States. In 1994, BOP transactions accounted for more than 80 percent of total receipts and total payments for transportation services. Freight and passenger transport (cross border supply by convention) accounted for a major part of BOP transactions. Europe dominates the United States' trade in transport services. In 1994, Europe's share of BOP exports was about 35 percent, and MOFAs sales was about 43 percent.

Table 4: U.S. trade in transport services, 1994

(Million dollars)

	Total	Canada	Europe	Latin America	Japan	Australia	Other
BOP exports (receipts)	42944	3565	15026	6804	8176	629	8744
MOFAs sales	8740	1550	3789	383	(a)	135	1991
BOP imports (payments)	40868	3622	16038	4320	5865	665	10358
MOUSAs sales	9551	1418	5728	54	1792	44	322

Source: Survey of Current Business (1996, November).

(a) Confidential.

The U.S. BOP classification provides a category for telecommunication services, but no category for other communications services. On the other hand, U.S. FAT statistics provide only for communications services as a whole. Despite the wider coverage of the FAT category, it can be seen from Table 5 that cross-border imports of telecommunication services in the United States are far more important than MOUSAs sales in the United States. Sales of MOFAs are close to cross-border exports for Europe and Latin America, but the sales of MOFAs dominate with respect to the non-reporting "other" countries. The relative importance of cross-border supplies and sales via commercial presence varies widely according to the partner country.

Table 5: U.S. trade in telecommunications (BOP) and communications (MOFAs and MOUSAs), 1994

(Million dollars)

	Total	Canada	Europe	Latin America	Јарап	Australia	Other
BOP exports (receipts)	2871	244	924	672	212	59	761
MOFAs sales	(a)	(a)	785	866	(a)	(a)	1900
BOP imports (payments)	6924	390	1603	2358	268	66	2240
MOUSAs sales	1057	(a)	795	(a)	4	0	(a)

Source: Survey of Current Business (1996, November).

(a) Confidential.

Table 6 shows that in the United States, commercial presence is by far the dominant mode of supply in insurance services.

Table 6: U.S. trade in insurance services, 1994

(Million dollars)

	Total	Canada	Europe	Latin America	Japan	Australia	Other
BOP exports (receipts)	4944	1021	2088	843	470	85	437
MOFAs sales	30941	5242	9106	3152	8271	324	4846
BOP imports (payments)	13861	1128	6563	5521	429	97	123
MOUSAs sales	48666	11586	36191	(a)	495	112	130

Source: Survey of Current Business (1996, November).

(a) Confidential.

Computer and data processing services are a subset of business services.²¹ Despite the expansion of trade through BOP-related modes of supply, commercial presence remains the dominant mode of supply, as illustrated in Table 7.

²¹In BOP classifications, "packaged" software are excluded from computer and related services and recorded in goods trade.

Table 7: U.S. trade in computer and data processing services, 1994 (Million dollars)

	Total	Canada	Europe	Latin America	Japan	Australia	Other
BOP exports (receipts)							
Computer and data processing services	2724	192	959	244	388	123	818
Data base and other information services	1113	108	558	81	119	85	161
Total of above	3837	300	1517	325	507	208	979
MOFAs sales	16714	759	11723	1363	1217	654	998
BOP imports (payments)							
Computer and data processing services	244	31	162	4	11	11	25
Data base and other information services	141	9	96	1	19	2	14
Total of above	385	40	258	5	30	12	39
MOUSAs sales	2944	438	2197	14	138	61	94

Source: Survey of Current Business (1996, November)

In professional services, the comparison between commercial presence and other modes of supply is limited by the availability of data and the lack of concordance between BOP and FAT classifications. Table 8 presents a comparison between U.S. BOP receipts and payments in management, consulting and pubic relations services; accounting, auditing and bookkeeping services; and research, development and testing on the one hand, and MOFAs and MOUSAs sales in the accounting, research, management and related services sectors on the other hand.

Although the three BOP categories together are broader in scope than the FAT category, sales by foreign affiliates are far more important than the corresponding BOP transactions. Commercial presence is thus the dominant mode of supply in professional services for the United States, as shown in Table 8.

Table 8: U.S. trade in accounting, management and related services, 1994 (Million dollars)

	Total	Canada	Europe	Latin America	Japan	Australia	Other
BOP exports (receipts)							
Management, consulting & public related services	1138	77	391	148	69	47	405
Accounting, auditing and bookkeeping services	132						
Research, development and testing	522	38	182	15	150	12	125
Total of above	1792			•••			
MOFAs sales							
Accounting, research, management & related services	5678	693	3969	222	238	202	354
BOP imports (payments)							
Management, consulting & public related services	318	29	149	25	16	9	90
Accounting, auditing and bookkeeping services	130						**
Research, development and testing	294	35	153	12	46	5	43
Total of above	742		•••				
MOUSAs sales							
Accounting, research, management &related services	1606	17	1215	13	334	4	20

Source: Survey of Current Business (1996, November).

From Table 9 it is evident that in advertising services, commercial presence is again the dominant mode of supply.

Table 9: U.S. trade in advertising services, 1994 (Million dollars)

	Total	Carada	Europe	Latin America	Japan	Australia	Other
BOP exports (receipts)	489	208	119	72	39	5	46
MOFAs sales	(a)	324	3148	195	189	184	(a)
BOP imports (payments)	725	47	285	51	231	23	88
MOUSAs sales	3135	13	2897	(a)	76	Ú	(a)

Source: Survey of Current Business (1996, November).

(a) Confidential.

Table 10 shows the growth rates of BOPs trade and Foreign Affiliates Trade for 1992-1993 and 1993-1994. No clear pattern emerges of the changing relative importance of different modes of supply.

Table 10: Growth of U.S. BOP and Foreign Affiliates Trade, 1992-93 and 1993-94 (Percentage)

Sectors		Growth rates 1992-93							
	BOP exports	MOFAs sales	BOP imports	MOUSAs sales					
Telecommunications & communications	-3.5	-33.3	5.2	-0.2					
Transport	0.5	3.4	4.5	2.3					
Insurance	3.3	6.2	3.0	(a)					
Accounting, management and related services	-3.3	-3.9	10.0	25:6					
Advertising	7.3	-16.0	43.6	7.6					
Computer and data processing services	18.0	8.7	94.4	1 3					

Sectors		Growth rates 1993-94						
	BOP exports	MOFAs sales	BOP imports	MOUSAs sales				
Telecommunications & communications	3.1	(a)	8.8	9.0				
Transport	6.0	30.3	8.6	9.9				
Insurance	24.2	12.2	14.6	9.8				
Accounting, management and related services	23.2	9.6	18.0	13.6				
Advertising	44.7	(a)	12.2	22.9				
Computer and data processing services	27.8	31.9	-7.0	17.5				

Source: Compiled by the Secretariat from Survey of Current Business (1996, November).

V. ESTIMATING TRANSACTIONS ASSOCIATED WITH PRESENCE OF NATURAL PERSONS

To begin with, it must be recognized that no comprehensive statistics exist today on the extent of trade taking place through Mode 4, i.e through the presence of natural persons. This section examines certain indirect indicators of such trade. Presence of natural persons includes, first, service suppliers who are present for less than a year in foreign markets and are therefore considered non-resident in the BOP context. If such natural persons are themselves service suppliers, then their sales are captured in the relevant services categories of BOP statistics - but are not recorded separately from cross-border sales. Employees are covered by the GATS if they are employed by a service supplier of a Member. The earnings of such natural persons are an unidentifiable ingredient of the BOP category compensation of employees, which records the earnings of all natural persons established abroad for less than one year - regardless of the sector of employment. Starting with the 1995 issue of the Annual Report, the WTO decided to exclude compensation of employees, which consists mainly of wages and salaries paid to seasonal and border workers, from the definition of commercial services. The main reasons were that the former category measured income earned by temporary employees in both the goods and services sectors, rather than sales of services per se. Nevertheless, Table 11 presents evidence on compensation of employees since this is the closest indicator that can currently be found of the importance of Mode 4, subject to all the qualifications noted above. The largest compensation of employees abroad was received by the Philippines which also recorded the fastest increase in such

⁽a) Confidential.