



STATISTICS IN FOCUS

Economy and finance

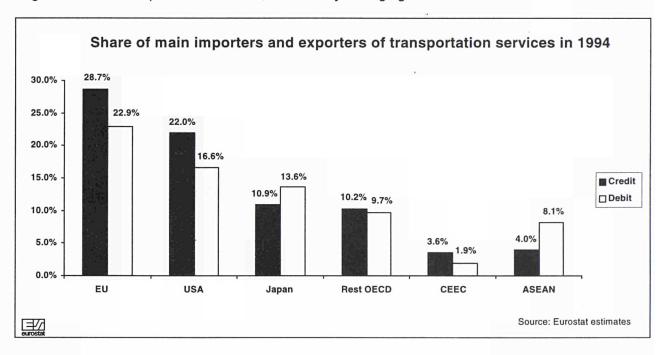
1997 7

ISSN 1024-4298

THE EU TRADE IN TRANSPORTATION SERVICES

The EU has the largest transactions in transportation in the world

Total transportation (credit + debit) between the European Union of fifteen Member States (EU) and the rest of the world, reached 100.3 bio ECU in 1994. This represented 25% of the world's transactions. The USA and Japan accounted for 19% and 12% respectively of the total world transactions in transportation services. The graphic below provides the economic zones which are the main importers and exporters of transportation services. Industrialised countries are by far the largest users of transportation services, followed by emerging market economies.



The EU balance of transportation records a deficit of 3.2 bio ECU in 1994.

Out of all the individual services, transportation represented the second most important service in value terms for the EU in 1994, at 26% of total services transactions¹, preceded by travel, at 29% of total services transactions. In terms of the current account transactions, transportation only contributed some 4%.

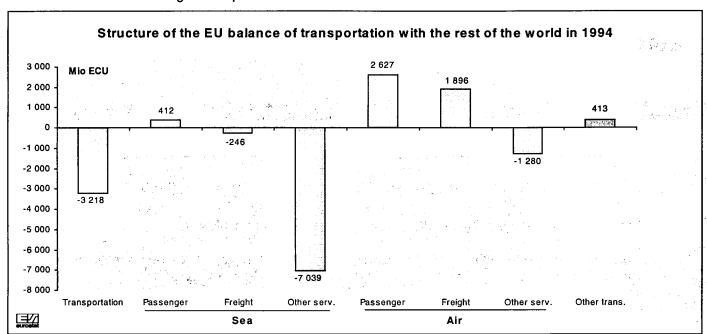
Manuscript completed on = 20.12.1996

For further information please contact: M.H.Figueira

Eurostat, L-2920 Luxembourg, tel. 4301-34730 Fax: 4301-33859 e-mail: Mariahelena.Figueira@eurostat.cec.be

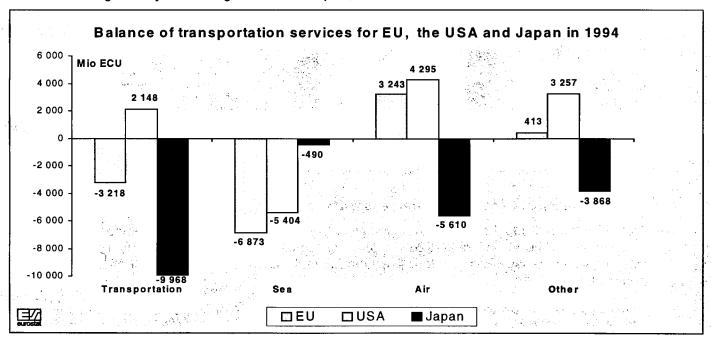
¹ Total transactions are defined throughout the text as the sum of credit and debit. In this case, total transactions include transactions within the EU, i.e. between Member States

The balance of transportation between the EU and the rest of the world, amounted to a deficit of 3.2 bio ECU in 1994, mostly stemming from the large deficit in supporting, auxiliary and other services on sea², which registered a deficit of 7.0 bio ECU. Supporting, auxiliary and other services by air also witnessed a deficit of 1.3 bio ECU. Passenger transport by both sea and air were in surplus at 0.4 bio and 2.6 bio ECU respectively. The large passenger by air surplus corroborates the surplus registered by travel, at 4.2 bio ECU. Freight transportation by air maintained a positive balance ranging from 1.4 to 2.0 bio ECU from 1992 to 1994 and the deficit on freight transportation on sea fell from -3.2 bio ECU in 1992 to -0.2 bio ECU in 1994.



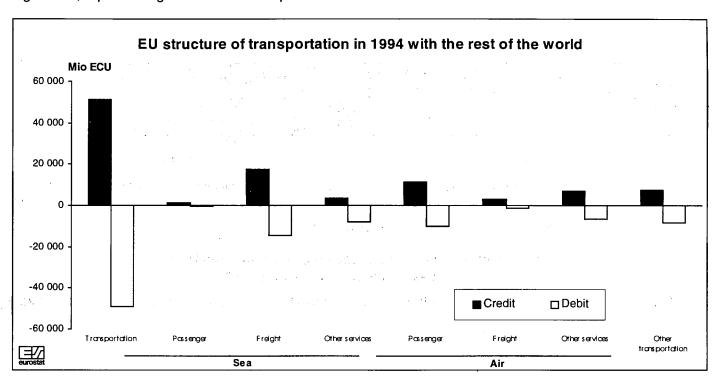
In contrast, the USA held a positive balance in transportation services with the rest of the world since 1989, which has remained between 2 and 4 bio ECU. The USA held a significant negative balance in sea transport of 5.4 bio ECU, whereas it registered a surplus in passenger air transport of 4.0 bio ECU in 1994. Other transportation surplus reached 3.3 bio ECU. In general, the USA performed better than EU in all modes of transportation with the rest of the world. Regarding bilateral trade between the USA and EU, the USA held a negative balance in transportation of -0.7 bio ECU in 1994 (-4.4 bio ECU declared by EU).

Japan, on the other hand, held significant deficits in all modes of transport: -5.6 bio ECU for air transport, -3.9 bio ECU for other transportation and -0.5 bio ecus for sea transport. The relatively large deficit in 1994 of -10.0 bio ECU was mostly due to passenger air transport, at -6.7 bio ECU. The trend for Japan has been to hold a gradually increasing deficit in transport, from -2.4 bio ECU in 1986.



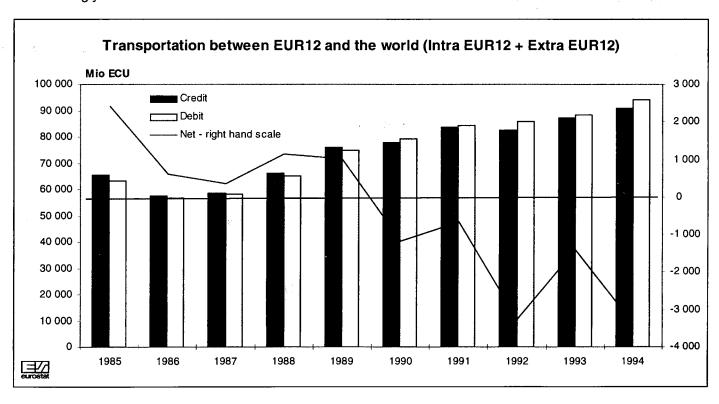
² These services refer mostly to cargo handling, storage and warehousing, packing and repacking, maintenance of transportation equipment, salvage or towing operations and brokerage fees and freight forwarding.

The structure of credits and debits for the EU with the rest of the world in 1994 reveals that sea freight represents the largest component of transportation followed by air passenger transport, for both credits and debits. Sea passenger transport between the EU and the rest of the world represents the smallest component of transportation. Sea transport is concentrated on freight services, whereas air transport deals mainly with passenger services. Other transportation, which includes rail, road and inland waterway transport is also significant, representing 16% of total transportation transactions.



Deterioration of EUR12 trade in transportation with the rest of the world (1985-1994)

When looking at a ten year period, for which the only data available is for the European Union of twelve Member States (EUR12), it becomes apparent that the balance in transportation has steadily decreased from a surplus of 2.4 bio ECU to a deficit of 3.4 bio ECU. The total transactions between EU Member States has risen by 54.6%, whereas total transactions between EUR12 and the rest of the world has risen by 36.1% from 1985 to 1994. The larger intra EUR12 growth rate indicates that the direction of growth has been centred most strongly on the internal market rather than on trade with third countries.



The annual growth rate of transportation has been positive since 1987, after a considerable fall in 1985-1986. The greatest growth has been registered by air transport, which recorded an average annual growth rate of 6% over the period 1985-1994 (see note below table). The average annual rate of growth for transportation with Intra EUR12 was 6% and with Extra EUR12 was 4%. Comparing to other modes of transportation, air transport registered a significantly larger average annual rate of growth for Intra EUR12 (9%) than for Extra EUR12 (5%).

Breakdown of the annual growth rate of transportation for EUR12 with Intra and Extra partner zones

	1986	1987	1988	1989	1990	1991	1992	1993	1994	Average
Transportation	-11%	2%	12%	15%	4 %	7%		4 %	5 %	5 %
Sea transport	-14%	-1%	11%	12%	0%	8 %		4 %	8 %	4 %
Air transport	-6%	7%	15%	14%	7%	3%		4 %	4 %	6%
Other transportation	-11%	2%	12%	17%	5%	8%		4 %	3%	5 %

SERIES BREAK (1)

Note (1): The growth rate refers to the growth of total (credit + debit) trade. The change in methodology from IMF 4th manual up to 1991 to IMF 5th manual from 1992, has meant that a proportion of other transportation has been reclassified under supporting, auxiliary and other services on sea and by air. This reclassification means that the 1992 growth rate becomes meaningless. The average rate of growth is calculated excluding 1992.

The transportation of freight by sea represented more than 70% of total sea transport for the EU in 1994

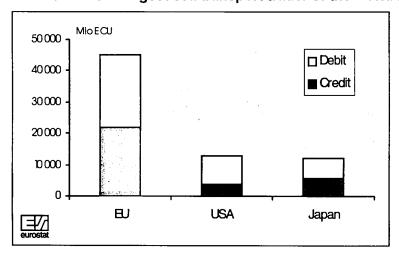
In 1994, 43% (46%) of exported (imported) EU transport services to (from) the rest of the world were made by sea. Within sea transport, freight accounts for more than 79% of sea transport credits and more than 63% of debits. The relatively large proportion of sea transport devoted to freight has been observed over the last decade. Furthermore, with a share of 32%, freight transport by sea constitutes the main individual component of the EU international transportation services.

The weight of sea transport in total transportation services is substantially different for the EU, the USA and Japan. For the USA, sea transport represents 10% of exported and 26% of imported transportation services. In the case of Japan the weight of sea transport in total transportation is of 32% and 22% for exports and imports respectively.

1994	EU with the rest of the world				USA with the world				Japan with the world				
In mio ECU	Credit	Debit	Net*	Cover	Credit	Debit	Net	Cover	Credit	Debit		Cover	
Transportation	51 195	49 123	-3 218	94	36 739	34 591	2 148	106	18 189	28 157	-9 968	65	
Air transport	21 436	18 066	3 243	118	17 418	13 123	4 295	133	4 086	9 695	-5 610	42	
Passengers 2000	11 480	9 983	2 627	128	14 693	10 673	4 019	138	1 239	7 939	-6 700	16	
Freight	2 986	1 517	1 896	245	2 725	2 450	276	111	2 846	1 756	1 090	162	
Support.aux. and others	6 970	6 566	-1 280	83	na	na	na	na	па	па	na	na	

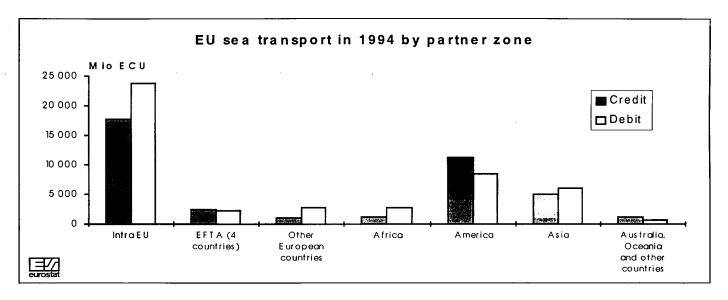
^(*) The balance of credit and debit does not equal the net since the net figure is the balance corrected for intra EU15 asymmetries. Due to Intra EU15 asymmetries it is preferable to use the net of EU15 with the world that is considered to be closer to the correct Extra EU15.

The EU was the largest sea transport trader of the world in 1994



With EU sea transport transactions reaching 45 bio ECU, the EU is the world's largest trader within this sector, followed by the USA and Japan with 13 bio ECU and 12 bio ECU respectively. Although the balance of sea transport services for the three economies remained in deficit, the largest of these belonged to the USA with a cover ratio that reached only 41% in 1994, following the same behaviour as in previous years.

^(**) Cover ratio EU15 with Extra EU15 = 100 x [Credit EU15 with Extra EU15 + (0.5 x asymmetry)] / [Debit EU15 with Extra EUR15 - (0.5 x asymmetry)] / [Included a symmetry of the extra EUR15 - (0.5 x asymmetry)] / [Inclu

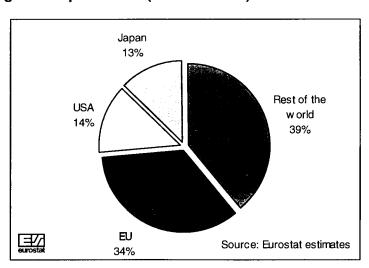


America, Asia and Other European countries were the EU's most privileged partner zones for sea transport services in 1994

The majority of sea transport transactions of the EU are carried out within the EU, representing 48% of the total sea transport traded with the world. Apart from the intra EU zone, America is the main EU geographical partner zone, reaching 23% of total trade in sea transport, of which the USA represents more than 80%. Asia is the third geographical partner zone, representing 13% of the total EU transactions, of which Japan covers more than 25% of the EU-Asian trade. Finally, EFTA (4 countries) represents 5% of the total EU sea tranport transactions followed by other European countries (4%), Africa (4%) and Australia, Oceania and other countries (2%).

EU is the largest trader in freight transport in the world

EU accounted for 34% of the total world transactions (credit + debit in value terms) in 1994, followed by the USA with 14% and Japan with 13%. These three economies together make up 61% of the world's sea freight. The relatively large amount unaccounted for by these three economies (39%) is explained by the fact that developing countries hold the largest amount of ships in the world. Lloyd's Maritime Information Services Ltd reported that in 1994, only 27% of all the world's fleets were owned by industrialised (OECD) countries. In terms of tons transported, the developed countries accounted for 29.4% of the total weight transported in the world. Transportation in value terms is higher for the three economies than the share warranted by actual weight transported by size of fleets, which could be due to such variables as the distance of freight transported, the type of cargo transported and/or price differences.



Freight transport share (credit + debit) in the world in 1994

Passenger transport represented 54% of total air transport for the EU in 1994

EU air transport with the rest of the world represented 42% and 37% of total transportation credits and debits respectively in 1994. Within air transport, passenger transport is the main item, representing more than half of the weight of total air transport for credits and debits in 1994, a trend observed in previous years.

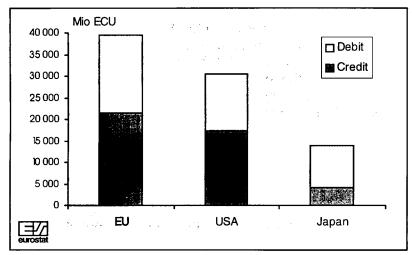
Furthermore, passenger transport by air represents the second most important component, after freight transport on sea, in all transportation transactions.

Comparing the structures of the EU with the USA, we can observe that the weight of air transport in total transportation is quite similar. The weight of air transport in total transportation stands at 47% and 38% for the USA for exports and imports respectively. Japan exhibits a different structure, with a weight of 22% for exports and 34% for imports.

1994	EU	with the rest	of the world		USA with th	e world		Japan with the world				
In mio ECU	Credit	Debit		Cover	Credit	Debit	Net	Cover	Credit	Debit	Net	Cover
Transportation	51 195				36 739							
Air transport	21 436		3 243	118	17 418	13 123	4 295	133	4 086	9 695	-5 610	42
Passengers	11 480	9 983	2 627	128	14 693	10 673	4 019	138	1 239	7 939	-6 700	16
Freight	2 986	1 517	1 896	245	2 725	2 450	276	111	2 846	1 756	1 090	162
Support.aux. and others	6 970	6 566	-1 280	83	na	na	na	na	na	na	na	na

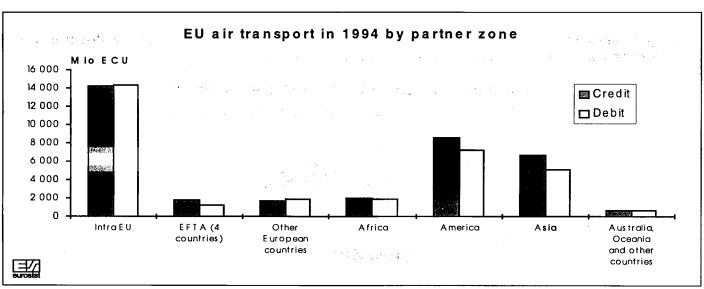
^(*) The balance of credit and debit does not equal the net since the net figure is the balance corrected for intra EU15 asymmetries. Due to Intra EU15 asymmetries it is preferable to use the net of EU15 with the world that is considered to be closer to the correct Extra EU15.

EU was the largest air transport trader of the world in 1994



With air transport transactions reaching 39.5 bio ECU, the EU exceeded by far the USA (30.5 bio ECU) and Japan (14 bio ECU) in terms of total transactions. The more remarkable fact when comparing these three economies for air transport services in 1994 is the low cover ratio (42%) held by Japan, which registered a deficit of -5.6 bio ECU.

100



America, Asia and Other European countries were the EU's most privileged partner zones for air transport services in 1994

The majority of transactions of the EU were carried out within the EU, representing 42% of the total (credit + debit in value terms) air transport transactions with the world. Apart from the intra EU zone, America is the main geographical partner zone, accounting for 23% of the total trade in transport, of which the USA represents more than 79%. Asia is the third most important geographical zone, representing 17% of the total EU transactions, of which Japan represents more than 29% of the total EU-Asian air transport trade. Finally,

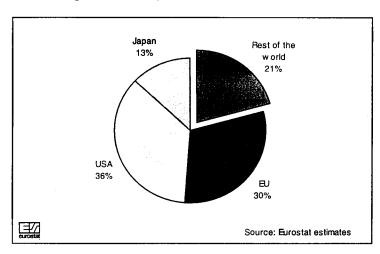
^(**) Cover ratio EU15 with Extra EU15 = 100 x [Credit EU15 with Extra EU15 + (0.5 x asymmetry)] / [Debit EU15 with Extra EUR15 - (0.5 x asymmetry)] / [na) not available

Africa represented 6% of the total EU air transport transactions followed by other European countries (5%), EFTA - 4 countries - (4%) and Australia, Oceania and other countries (2%).

In 1994, the USA and the EU accounted for 66% of the total air passenger transactions in the world

The USA represented 36% and the EU 30% of the total (credit + debit) transactions in passenger air transport in the world. Japan shares 13% of the world total, the remaining 21% of passenger air transactions being carried out by the rest of the world.

Passenger air transport share in the world in 1994



Geographical breakdown by mode of transportation services for the EU in 1994

In mio ECU	TRANSPORTATION			SEA TRANSPORT			All	R TRANSPOR	ìт	OTHER TRANSPORTATION		
	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net	Credit	Debit	Net
WORLD	98 347	101 565	-3 218	39 834	46 707	-6 873	35 668	32 425	3 243	22 845	22 433	413
INTRA EU	47 152	52 442	-5 291	17 681	23 819	-6 138	14 232	14 359	-127	15 239	14 264	975
EXTRA EU	51 195	49 123	:	22 153	22 888	:	21 436	18 066	:	7 606	8 168	:
EFTA (4 countries)	6 329	4 900	1 429	2 464	2 171	293	1 790	1 255	536	2 075	1 475	600
Other European countries	3 840	6 824	-2 984	1 116	2 779	-1 663	1 642	1 936	-294	1 082	2 110	-1 027
Czech Republic	319	342	-23	38	34	4	99	88	11	182	219	-37
Hungary	283	240	43	28	42	-14	114	106	8	141	92	49
Poland	384	928	-543	124	245	-121	70	68	2	190	614	-424
Russia	552	1 724	-1 172	258	1 350	-1 092	165	211	-47	129	163	-33
Turkey	344	528	-184	82	260	-178	190	213	-23	71	55	16
Africa	3 746	5 232	-1 487	1 255	2 694	-1 439	2 022	1 899	124	468	640	-171
North African countries	1 279	2 714	-1 435	471	1 535	-1 064	622	970	-348	186	209	-23
Morocco	386	441	-54	164	146	18	151	218	-67	71	7 7	-6
Other African countries	2 467	2 5 1 8	-51	784	1 159	-375	1 400	928	472	283	431	-148
America	22 328	17 658	4 669	11 216	8 454	2 762	8 549	7 226	1 324	2 563	1 979	584
Canada	1 164	943	221	395	372	22	663	517	146	106	54	53
USA	18 406	13 983	4 423	9 558	6 425	3 132	6 588	5 888	700	2 260	1 670	591
Central American countries	1 014	1 105	-92	535	709	-174	340	191	150	138	206	-67
South American countries	1 744	1 627	117	728	947	-219	958	630	328	58	50	8
Argentina	350	320	30	176	220	-43	106	78	27	68	22	46
Brazil	579	779	-200	285	469	-184	235	247	-12	59	63	-4
Asia	12 837	13 015	-177	4 923	6 107	-1 184	6 635	5 118	1 517	1 280	1 790	-510
Near and Middle East countries	2 183	1 761	422	1 066	833	233	864	820	44	253	108	144
Other Near and Middle East countries	299	230	68	135	60	75	136	154	-18	28	16	11
Other Asian countries	10 654	11 253	-599	3 856	5 274	-1 418	5 770	4 298	1 472	1 027	1 681	-654
China	263	790	-527	114	569	-455	89	135	-46	61	. 87	-26
India	462	357	106	157	185	-28	158	136	22	147	35	112
Japan	3 7 1 1	3 092	619	1 139	1 677	-538	2 355	1 132	1 223	216	283	-67
Australia, Oceania and others	1 970	1 360	610	1 196	700	496	68 6	619	67	88	41	47
Australia	1 411	1 001	410	879	516	363	460	455	5	73	30	43
New Zealand	449	244	205	318	167	151	120	71	49	11	6	5
International organisations	1	0	0	0	0	0	0	0	0	0	0	0
OECD countries	80 880	80 861	19	34 207	35 990	-1 782	26 293	23 754	2 538	20 380	21 117	-737
Central and Eastern Europe countries	1 663	2 575	-912	341	606	-265	608	550	58	714	1 419	-705
NAFTA	19 248	14 420	4 828	10 037	6 742	3 294	7 046	6 400	647	2 165	1 278	887
ACP countries	1 692	2 069	-378	687	1 035	-349	803	706	97	203	328	-126
OPEC	2 209	2 819	-610	788	1 807	-1 019	1 050	809	241	370	202	168
Mediterranean Basin	3 500	5 733	-2 234	1 269	2 837	-1 569	1 696	2 251	-555	535	645	-110
Maghreb countries	934	1 659	-725	326	719	-393	448	784	-336	159	156	4
Mashrek countries	501	863	-362	184	503	-319	270	311	-41	47	49	-2
NICS1	3 045	3 463	-418	1 564	1 851	-286	1 203	1 274	-71	278	339	-61
NICS2A	862	1 262	-400	150	409	-259	636	798	-162	76	5 5	21
NICS2LA	1 692	1 597	95	664	887	-223	807	580	227	221	130	91
ASEAN	2 128	2 495	-367	699	1 106	-407	1 156	1 237	-81	273	152	121
CIS countries	735	2 490	-1 755	242	1 177	-935	335	434	-100	158	878	-720

⁽¹⁾ Net EU with Intra EU = Asymmetry

⁽²⁾ Due to Intra EU asymmetries, it is preferable to use the net of the EU with the world, which is considered to be closer to the correct Extra EU balance

BALANCE OF PAYMENTS FRAMEWORK

- Eurostat is the only institution that treats and publishes data for the fifteen Member States of the European Union (EU) with a large detail of item classification and extensive geographical breakdown.
- This rapid report is mainly based on the Eurostat International Trade in Services, EU, 1985-94 publication, which is the only publication issued by an international organisation which provides harmonised (comparable) statistics for EU. The period covered is from 1985 to 1994, although data for EU is only available from 1992. Eurostat believes that the data has significantly improved since 1992 due to the adoption of the IMF 5th manual (BPM5), the new questionnaires and the compilation procedures. Data for 1985 to 1991 covers EUR12 and each Member State and have been retropolated from the previous publication from the IMF 4th manual to the 5th format.
- Problems linked to the analysis of values:

The statistics in this rapid report are expressed in value terms. Trends observed depend on the volume of transactions, market prices and exchange rates.

Since the US dollar is used extensively as a transaction and price-formation currency, the fluctuations of the US dollar against the ecu have a particularly important impact on the values of this rapid report. For example the table below illustrates the large depreciation of the US dollar in the second half of the 1980s (base year 1990 = 100):

USD	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
100 ecu =	59.9	77.3	90.7	92.9	86.5	100	97.3	101.9	92	93.4

- Explanation of the main items:
- Transportation: covers all transportation (sea, air, and other-including land, internal waterway, space, and pipeline) services that are performed by residents of one economy for those of another and that involve the carriage of passengers, the movement of goods (freight), rentals (charters) of carriers with crew, and related supporting and auxiliary services.

The breakdown of transportation is made by mode of transportation.

- Sea and air transport:

Passengers services: cover all services provided between the compiling economy and abroad or between two foreign economies in the international transportation of non-residents by resident carriers (credit) and that of residents by non-resident carriers (debit).

Freight services: refer mainly to the transport or carriage of goods and rentals (or operational leases) which are made by residents to non-residents.

Supporting, auxiliary and other services: this category covers a range of services provided in ports, airports, and other terminal facilities. Among such services are: cargo handling (loading and unloading of containers, etc.); storage and warehousing; packing and repacking; other towing, pilotage, and navigational aid for carriers; maintenance and cleaning of transportation equipment; and salvage operations.

- Other transportation: covers space transport, rail transport, road transport internal waterways transport (on rivers, canals and lakes) and pipeline transport.

Bibliography:

- International Trade in Services EU, 1985-94. Eurostat 1996
- Geographical Breakdown of the Current Account EU, 1992-1994. Eurostat 1996
- Balance of Payments Statistics Yearbook PART 2, 1995, International Monetary Fund
- New Cronos database: EUROSTAT
- Lloyd's Maritime Information Services Ltd (London)
- Review of Maritime Transport 1994, United Nations (UNCTAD) 1995

Note:

1bio = 1000 million1mio = 1 million

Reference publications: International Trade in Services - EU, 1985-94 and Geographical Breakdown of the Current Account - EU, 1992-1994 can be obtained from the Official Publications Office of the European Communities, L-2985

For any technical information other than dissemination, contact: Eurostat, L-2920 Luxembourg - Unit B5 - Balance of Payments

Mr P. Baker, Mr J. Erdozia or Ms M.H. Figueira*, tel. (352) 4301-33470 Fax: (352) 4301-33859 e-mail: Mariahelena.Figueira@eurostat.cec.be

^{*}We would like to express our appreciation to Ms F. FAES-CANNITO for her assistance in the production of this document.