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**International Trade in Services Statistics—Monitoring Progress on Implementation of the
Manual and Assessing Data Quality**

International trade in services statistics - Monitoring progress on implementation of the Manual and assessing data quality.

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Introduction

This note aims to inform on the progress made in the implementation of the *Manual on Statistics of international trade in services (Manual)* and to provide a quality assessment of international trade-in-services statistics¹.

In the first section, we explore the progress made in implementing the core recommendations in the *Manual*. In the two following sections, we look at the quality of the trade statistics:

- using the OECD quality framework,
- considering bilateral and multilateral mirror statistics using balance of payments service data,

In the last section we refer to the joint Eurostat-OECD Methodological Soundness Questionnaire, we consider that it has the potential to be a useful tool to compare national practices.

1 - Are we making progress in implementing the recommendations of the Manual on Balance of payments international trade-in-services data?

If we look at the core recommendations of the *Manual* they are principally the following^{2,3}:

1. Implement the BPM5 recommendations in relation to trade in services.
2. Collect balance of payments trade-in-services data using Extended Balance of Payments Services (EBOPS) Classification.
3. Collect complete statistics on foreign direct investment (FDI) classified by ISIC Rev.3 activities.
4. Collect FATS statistics for basic variables such as sales, value added, employment, exports and imports by activity categories based on ISIC Rev3 - *i.e.* ISIC Categories for foreign affiliates (ICFA).
5. Collect FATS and balance of payments trade-in-services statistics by partner country.

¹ This paper develops some ideas set out by William Cave in *Implementing the Manual on Statistics on International Trade in Services: Are we progressing ?*, ISI 2003, Berlin. We wish to thank Maria-Helena Figuera, Jan Van Lanen, and Michael Mann for their comments.

² Manual on Statistics of International Trade in Services, pp. 5-6

³ Other recommended items are :

- The completion of the implementation of EBOPS including the memorandum items.
- The augmentation of basic FATS statistics.
- Collect statistics on natural persons working abroad under the GATS framework.
- Separate out the trade with related parties from that with unrelated parties.
- Allocate the transactions between residents and non-residents over the GATS modes of supply.

We address in this first section the question of progress in implementing the core recommendations of the *Manual*.

1-1 Implementation of BPM5 and compilation of balance of payments data according to EBOPS.

Balance of payments data are relatively well established following IMF's fifth Manual and there has been significant improvements in detail and comparability since mid-nineties. The data collection by the IMF, the OECD and Eurostat is being adapted to EBOPS classification.

The following 2 tables, borrowed from the WTO training module give an indication of the progress made in reporting of new BPM5 major Service's components between October 1997 and January 2003. We note for instance that, 39 % of IMF countries reported communication services in 1997, whereas they were 76 % in January 2003. We can consequently infer from this table a quite significant progression in the collection of data during this period.

Progress in reporting of new BPM5 Major Service's components.

| <u>Exports</u> | Reporting countries October 1997 % | Reporting countries January 2003 % |
|--|--|--|
| Communications services | 39 | 76 |
| Construction services | 21 | 48 |
| Insurance services | 61 | 83 |
| Financial services | 26 | 60 |
| Computer and information services | 11 | 47 |
| Royalties and licence fees | 32 | 53 |
| Other business services | 92 | 92 |
| Personal, cultural and recreational services | 14 | 44 |

Source WTO

The table below presents the progress in reporting of selected BPM5 supplementary services items. Regarding these items, there is also to see a constant progression as for instance 7% of IMF countries reported research and development services in 1997 and they were 16 % in 2003.

Progress in reporting of selected supplementary services items.

| Exports | Reporting countries October 1997 % | Reporting countries January 2003 % |
|---|---|---|
| Miscellaneous business, professional and technical services | 44 | 72 |
| Legal, accounting, management, consulting and public relations services | 8 | 31 |
| Advertising, market research and public opinion polling services | 10 | 25 |
| Research and development services | 7 | 16 |
| Architectural, engineering and other technical services | 8 | 22 |
| Agricultural, mining and on-site processing services | 4 | 15 |
| Other services | 28 | 49 |

Source WTO

1-2 Are we making progress in answering the recommendations of the *Manual on Foreign affiliates trade-in-services (FATS) data?*

FATS Statistics were published for the first time by the OECD in 2002 in *Measuring Globalisation The Role of Multinationals in OECD Economies, Volume II: Services*. They were based on 1998 and 1999 surveys. The publication covers 20 countries in varying detail.

The 2003 survey, to be published in the end of 2004 is expected to provide more information on a larger number of countries. The data are available on Source OECD (WDS), the OECD data dissemination system.

FATS, are relatively under-developed compared to BOP data. The data collection is currently expanding at Eurostat, OECD and UNCTAD.

FATS partner country data are collected at the OECD. The table on the next page gives an idea of the current state of the collection of FATS data.

Status of the collection of EBOPS and FATS data (end 2003)

| | Country | Number of EBOPS components reported | FATS inward | FATS outward |
|----|--------------------|-------------------------------------|-----------------------|---------------------------|
| 1 | Australia | 48 | No (but planned 2004) | No (but planned end 2003) |
| 2 | Austria | 22 | Yes | Yes |
| 3 | Belgium-Luxembourg | 62 | - | - |
| | Belgium | - | Yes | Yes |
| | Luxembourg | - | Yes | No |
| 4 | Canada | 45 | No | Yes |
| 5 | Czech Republic | 75 | Yes | No |
| 6 | Denmark | 4 | Yes | No |
| 7 | Finland | 52 | Yes | Yes |
| 8 | France | 47 | Yes | Yes |
| 9 | Germany | 58 | Yes | Yes |
| 10 | Greece | 55 | No | Yes |
| 11 | Hungary | 20 | Yes | No |
| 12 | Iceland | 26 | No | No |
| 13 | Ireland | 41 | Yes | No |
| 14 | Italy | 62 | Yes | No |
| 15 | Japan | 25 | Yes | Yes |
| 16 | Korea | 16 | No | No |
| 17 | Mexico | 30 | No | No |
| 18 | Netherlands | 44 | Yes | No |
| 19 | New Zealand | 29 | No | No |
| 20 | Norway | 56 | Yes | No |
| 21 | Poland | 62 | Yes | No |
| 22 | Portugal | 68 | Yes | Yes |
| 23 | Slovak Republic | 31 | No | No |
| 24 | Spain | 53 | No | No |
| 25 | Sweden | 58 | Yes | Yes |
| 26 | Switzerland | 10 | No | No |
| 27 | Turkey | 20 | Yes | No |
| 28 | United Kingdom | 46 | Yes | No |
| 29 | United States | 52 | Yes | Yes |

1-3 Compilation of statistics on trade-in-services by partner country.

Regarding statistics on trade-in-services, the *Manual* suggests to collect three levels of detail for international collection of trade data by partner country:

- For total services – Core recommendation
- For 11 main types of services as set out in BPM5 – Core recommendation
- For extended Balance of payments Statistics classification (EBOPS): full detail by type of service – desirable as far as possible.

Trade-in-services partner country data are published by Eurostat and since 2002 by the OECD. UNSD has done some feasibility studies on collection of trade in services by partner country and had sent a questionnaire to 160 non-OECD countries on their activity in the collection of data on trade in services. About 40 responses had been received of which 8 had some partner country data. In the ASEAN region there were some efforts to collect more trade-in-services data mainly on FATS. Most respondents planned to improve their trade-in-services statistics in some way.

The latest OECD issue presenting partner country data from 1999 to 2002 will be released in October 2004. The data cover 28 countries and 75% of world exports. This publication responds to the first level but only partly to the second level requested of the *Manual's* recommendations because currently only 4 types of services (transportation, travel services, government services, other commercial services) and the total services are presented in this publication. In order to reach compliance with the second level of detail requested by the *Manual*, OECD plans to ask the countries to provide, for the 2005 publication, trade-in-services data by partner country for the 11 main types of services set out in the BPM5.

2 – OECD framework for OECD statistics: provide a systematic and organised assessment of international trade-in-services statistics

The OECD Quality Framework⁴ identifies dimensions that are considered as important to describe the quality of statistics. These dimensions help provide a means to identify quality problems and to increase the transparency of the processes used by the OECD to ensure quality. An important feature regarding quality of the trade-in-services data published by the OECD is datasharing between OECD and Eurostat for the *OECD Statistics on International Trade in Services, detailed Tables by Service Category* publication. Eurostat provides data for European countries and the OECD provides the information for the other OECD Member countries⁵. This coedition agreement diminishes the reporting burden on countries.

In the context of trade-in-services statistics, the quality framework helps to identify following issues:

1. Trade analysts have expressed the opinion that the *relevance* of trade-in-services data could be improved by a presentation by modes of the trade-in-services statistics. A first attempt to meet their needs was made in the OECD (2003), “Preliminary Draft Indicators or Trade in Services by Modes of Supply”, *Room Document* of the meeting of experts in Trade-in-services, spring 2003.[...]. More work should be done in this area in order to improve the relevance to users of trade-in-services data.
2. *Accuracy* and comparability of trade-in-services data broken down by partner country can be monitored over time by using mirror statistics and by using tools like the asymmetry coefficient (*cf.* section 3).
3. *Timeliness* is an important issue because lack of timely updating weakens the *coherence* of OECD data on trade-in-services stored in two different data bases: i) trade-in-services broken down by services category and ii) trade-in-services broken down by partner country. This is due to a number of reasons including the delays in the transmission from countries and the delays in processing due to the OECD secretariat itself. Improving both the databases and the processes used to update the databases could help improving the overall consistency of trade-in-

⁴ In “Quality Framework for OECD statistics” (2002) on OLIS STD/HLG/(2002)3.

⁵ OECD and Eurostat currently plan in 2005 to publish the 25 EU members in the joint OECD Eurostat *Statistics on International Trade in Services, Detailed Tables by Service Category*, this implies that the OECD Statistics on international trade in services publication will hold 36 countries instead of 30.

services data. A project of technical cooperation and shared databases between the UNSD and OECD could help achieving that objective. This project could also permit better navigability between datasets.

4. The *interpretability* of the OECD and Eurostat trade-in-services statistics is assisted by the maintenance of metadata (*i.e.* country methodological information.) An effort has been conducted on OLIS, source OECD and in the CD-Roms to get metadata linked to data as recommended by the OECD Dissemination Policy for Statistics.

Another problematic issue regarding interpretability is the lack of historical data for the 2003 edition of the partner country publication which only presents data from 1999 to 2001. This lack of historical data is an obstacle to a proper analysis of the figures.

5. The *accessibility* of the service data has improved over the past years: the OECD statistics on international trade-in-services data are available via the Olis System and Source OECD. There is however large room for improvement in the area of accessibility as it can still be difficult for an external user to locate and access the relevant statistics.
6. It is not in the OECD list but one might want to consider *Reliability* from a practical point of view.

3 - Bilateral and multilateral mirror data

Given difficulty of measurement, it is a complex task to assess data quality. However, in the context of international trade, the most “natural” way of checking data quality seems to lie in the analysis of partner country mirror data. This could provide an indicator of international comparability of trade statistics. The IMF is also looking at global discrepancies between total exports and total imports that can help identify under reportings. We are aware of the few inherent conceptual asymmetries (for instance for merchanting services) but in general mirror data should give a measure of comparability following bilateral or multilateral approaches.

- Mirror data can help checking whether the flows reported by each reporting country is also declared by its partner country.
- To check whether the reported flows are the same.
- To detect systematic errors in the reporting process.
- To detect differences in definitions from one country to the other.

Mirror data are also useful in case of lack of reported data. For instance for Africa, in the next table, no reported data are available in 2001 but about three-quarters of Africa’s reported services can be estimated by reported imports of services from the 27 OECD countries. The table below also illustrates that OECD partner country data cover 75 % of world exports and more than 90 % if reported data are supplemented with mirror data.

| Exporting region | Total exports (billion USD) | Total available exports data by partner country, % of total exports | |
|-----------------------|--------------------------------|---|---|
| | | Reported data | Reported data supplemented with mirror data |
| World | 1493.8 | 75.0 | 91.7 |
| OECD | 1165.1 | 93.7 | 97.6 |
| NAFTA | 328.5 | 94.7 | 95.9 |
| OECD Asia and Oceania | 114.2 | 97.1 | 97.4 |
| EU total | 633.2 | 98.4 | 98.4 |
| OECD Europe other | 89.2 | 51.8 | 98.4 |
| Africa | 32.1 | 0.0 | 76.8 |
| America | 370.4 | 84.0 | 99.6 |
| Asia and Oceania | 332.8 | 42.3 | 73.5 |
| Europe | 756.8 | 88.4 | 96.6 |

Source: OECD, IMF.

Of course, as stated by the International Trade Center⁶ - in the context of trade in goods - mirror data are a second best solution, and present a number of shortcomings when compared to nationally reported data:

- They don't cover trade with other non-reporting countries as a result they don't cover south-south trade.
- There is a problem of transshipment which can hide the actual source of supply.
- They invert the reporting standards by valuing exports in CIF terms (i.e. including transport cost and insurance) and import in FOB terms (excluding these items).

For trade-in-services the last two do not apply but in the specific context of services there may be the problems of agents in large commercial centers which can hide the ultimate client, whether supplier or customer (Financial or Insurance Services, Shipments etc).

A very simple asymmetry coefficient can be calculated in order to check the comparability of exports and related imports flows.

If X = exports and mM = Mirror imports, the Asymmetry Coefficient = $(X - mM) / ((X + mM) / 2)$.

There is perfect symmetry (exports are equal to mirror imports) when the coefficient is equal to zero. The more the coefficient diverges from zero, the more the dissymmetry between exports and mirror imports becomes important.

The asymmetry coefficient is potentially useful because it can be monitored over time. This coefficient is also useful because as it can be either positive or negative, it can then be used to estimate if a country is globally declaring more or less important trade flows compared to those declared by its partner countries. It can also be used to identify other types of regularities. Mirror statistics and the asymmetry coefficient are of interest to look at bilateral and multilateral trade statistics.

⁶ International Trade Center, June 2003, "Reliability of Trade Statistics, Indicators of consistency between trade figures reported by countries and their corresponding mirror estimates", Market analysis section.

3-1- Bilateral mirror statistics

Mirror statistics can help to detect global imbalances where total exports are very different from total imports. In the table below, we present some selected examples of bilateral BOP services asymmetries with the calculation for year 2001⁷ of an asymmetry coefficient for trade between Japan, USA and EU for the following categories: Total services, transportation, travel, government services and other commercial services.

| \$ Mn | 2001 | Export | Mirror imports | Asymmetry Coefficient | | Export | Mirror imports | Asymmetry Coefficient | | Export | Mirror imports | Asymmetry Coefficient | |
|---------------------------|------|--------------|----------------|-----------------------|--------------------|--------------|----------------|-----------------------|--|-----------------|----------------|-----------------------|--|
| Japan to USA | | | | | Japan to EU | | | | | EU to US | | | |
| Total Services | | 20587 | 18618 | 0.10 | | 13064 | 9977 | 0.27 | | 108056 | 73720 | 0.38 | |
| Transportation | | 5713 | 6261 | -0.09 | | 5270 | 3066 | 0.53 | | 28153 | 21245 | 0.28 | |
| Travel | | 550 | 2700 | -1.32 | | 441 | 789 | -0.57 | | 23350 | 20323 | 0.14 | |
| Government services | | 410 | 1455 | -1.12 | | 115 | 110 | 0.04 | | 3538 | 7922 | -0.77 | |
| Other commercial services | | 13914 | 8201 | 0.52 | | 7236 | 6013 | 0.18 | | 53016 | 24230 | 0.75 | |
| USA to Japan | | | | | EU to Japan | | | | | US to EU | | | |
| Total Services | | 31294 | 35414 | -0.12 | | 15761 | 20854 | -0.28 | | 88684 | 109776 | -0.21 | |
| Transportation | | 6104 | 5060 | 0.19 | | 4708 | 5576 | -0.17 | | 13694 | 21809 | -0.46 | |
| Travel | | 9785 | 6828 | 0.36 | | 3840 | 4369 | -0.13 | | 21453 | 22236 | -0.04 | |
| Government services | | 482 | 444 | 0.08 | | 55 | 168 | -1.01 | | 2554 | 1664 | 0.42 | |
| Other commercial services | | 14924 | 23083 | -0.43 | | 7161 | 10742 | -0.40 | | 50983 | 64067 | -0.23 | |

This table is illustrative of the kind of discrepancies that can exist when measuring trade-in-services. For instance, in 2001, the United States services exports to EU were 89 billion USD while the EU imports of services from the US were 110 billion USD (see the highlighted grey areas). The table illustrates also that in general; the more detailed the breakdowns, the more variable are the discrepancies in the mirror data. A straightforward way to illustrate this is to calculate the average of the absolute values of the above calculated asymmetry coefficients by category of services. The “grand total” category corresponding to “the total services” in the table below obtains the lowest average of asymmetry coefficients, the government services category obtains the largest.

| | Average of absolute values of calculated bilateral asymmetry coefficients. |
|---------------------------|--|
| Total services | 0.22 |
| Transportation | 0.28 |
| Travel | 0.42 |
| Other commercial services | 0.42 |
| Government services | 0.57 |

⁷ Data for year 2002 are expected to be published at the end of 2004.

3-2 - Multilateral mirror statistics

Another way of looking at mirror data is the multilateral approach. In the tables presented in the annex, we present exports from the U.S., Japan and the European Union to individual OECD countries for total services, transportation, travel, other commercial services and government services. Mirror imports reported by their partner countries are also shown and asymmetry coefficients are calculated. These coefficients help identify if a country is declaring more or less services imports and exports than what is declared by a given individual partner or by the rest of OECD, if we look at the total line of the annex tables.

For instance, in the table 11 of the annex (see the highlighted grey area in table 11), the EU15 reports 5.7 billion USD Total services exports to Canada, Canada declares 6.9 billion USD Total services imports from the EU, this provides a negative asymmetry coefficient which means that EU15's declared exports to Canada are lower than Canada's declared imports from the EU. The table below summarizes the multilateral trade tables presented in the annex by presenting the total line of each table.

| Multilateral summary asymmetry table | | | | | | | | |
|---|-------------|---------------|-----------------------|------------------------------|--|----------------|-----------------------|------------------------------|
| \$bn | 2001 | Export | Mirror imports | Asymmetry coefficient | | Imports | Mirror exports | Asymmetry coefficient |
| EU15 to rest of OECD | | | | | | | | |
| Total services | | 152.134 | 126.969 | 0.18 | | 144.634 | 130.834 | 0.1 |
| Transportation | | 40.787 | 36.379 | 0.11 | | 31.451 | 29.232 | 0.07 |
| Travel | | 35.071 | 34.226 | 0.02 | | 31.078 | 30.051 | 0.03 |
| Other commercial services | | 72.518 | 47.853 | 0.41 | | 80.098 | 68.555 | 0.16 |
| Government services n.i.e. | | 3.762 | 8.495 | -0.77 | | 2.008 | 2.975 | -0.39 |
| Japan to rest of OECD | | | | | | | | |
| Total services | | 39.563 | 36.945 | 0.07 | | 65.899 | 54.136 | 0.2 |
| Transportation | | 13.677 | 11.6 | 0.16 | | 13.765 | 13.517 | 0.02 |
| Travel | | 1.691 | 5.051 | -1 | | 15.732 | 18.023 | -0.14 |
| Other commercial services | | 23.514 | 16.706 | 0.34 | | 35.73 | 23.95 | 0.39 |
| Government services n.i.e. | | 0.681 | 1.655 | -0.83 | | 0.673 | 0.584 | 0.14 |
| US to rest of OECD | | | | | | | | |
| Total services | | 149.335 | 174.212 | -0.15 | | 114.409 | 152.713 | -0.29 |
| Transportation | | 26.29 | 35.041 | -0.29 | | 35.495 | 45.669 | -0.25 |
| Travel | | 42.918 | 38.787 | 0.10 | | 32.1 | 32.059 | 0 |
| Other commercial services | | 85.079 | 111.535 | -0.27 | | 41.673 | 84.733 | -0.68 |
| Government services n.i.e. | | 3.41 | 2.347 | 0.37 | | 9.819 | 4.198 | 0.8 |

We observe that the EU15, reports higher imports and exports to OECD countries (with positive asymmetry coefficients), compared to the figures declared by its partners, in the case of total

services, transportation, travel, and other commercial services. On the other hand, the EU15 reports lower exports and imports of government services to the rest of the OECD (with a negative asymmetry coefficient) compared to the declared mirror flows.

It is almost the same picture for Japan, which seems to be reporting higher imports and exports figures than those declared from partners in the mirror flows in the case of total services, transportation, other commercial services to the rest of OECD. On the other hand, Japan seems to be reporting less exports of travel and government services, the imports of government services being slightly higher than the mirror exports.

On the contrary, the mirror flows show that the United States are globally declaring less imports and exports than their partners for total services, transportation services, and other commercial services. In particular the US report imports of other commercial services which are less than half then reported mirror exports of other commercial services to US. The United States are, on the other hand, declaring more imports and exports of government services, as well as travel services, to the rest of the OECD.

These observations, where government services - and also travel in two cases - appear to have an asymmetry coefficient in the opposite sign compared to the other services categories⁸ tends to confirm the special status of government services in international trade.

If we calculate the average of the absolute values of the above calculated asymmetry coefficients by category of services, we find that the “grand total” category corresponding to “the total services” in the table below obtains the second lowest average of asymmetry coefficients, transportation getting the lowest. Government services get the largest average value which means that this category of service presents the largest discrepancies between reported exports and mirror flows.

| | Average of absolute values of calculated Multilateral asymmetry coefficients. |
|------------------------------|--|
| Total services | 0.165 |
| Transportation | 0.15 |
| Travel | 0.215 |
| Other commercial services | 0.375 |
| Government services | 0.55 |

⁸ This observation is however led on a very small population (3 countries, five categories of services, one year), so we will be cautious and won't draw yet any conclusions from it.

4 - The Methodological Soundness Questionnaire

Another tool that is useful in order to look at the quality of data is the Methodological Soundness Questionnaire. This is a joint initiative from the OECD and Eurostat. The questionnaires were sent out in June 2003. Up to now, 30 countries have filled the joint questionnaire.

The OECD was responsible for the collection of information from 10 countries, until now, the OECD has received replies from 8 countries: Iceland, Japan, Korea, Norway, New Zealand, Switzerland, Australia and USA. OECD has not yet received information for Canada and Mexico.

Eurostat has received the questionnaire filled in by 22 countries: Belgium, Czech Republic, Denmark, Estonia, Spain, Finland, France, Germany, United Kingdom, Hungary, Ireland, Italy, Luxembourg, Latvia, Malta, Netherlands, Poland, Portugal, Romania, Slovenia, Sweden and Turkey.⁹ Eurostat have not yet received responses for the following 5 countries: Austria, Cyprus, Greece, Lithuania, and Slovakia.

The results will be discussed with experts first before being made more widely available. We see this Methodological Soundness Questionnaire as a useful means to identify and compare national practices and eventually to foster good practice.

Concluding remarks.

Five main conclusions and suggestions for future work can be drawn from this note:

1. Progress can be observed in the implementation of the core recommendation of the *Manual*.
2. The OECD quality framework helps us to identify that the relevance of international trade-in-services statistics could be improved by a presentation by modes – this is also a recommendation of the *Manual*. The cooperation with the UNSD for a future shared database could improve the OECD secretariat's data updating processes by providing a more elaborated and reliable data processing tool than what is currently available at the OECD for trade in services. This new database, by storing together the trade in services datasets broken down by partner country and by category of services could also help improving the coherence between the two datasets.
3. Mirror Statistics are useful i) to identify if countries are reporting higher or lower trade with partners and ii) to identify irregularities.
4. The Methodological Soundness Questionnaires will be a useful tool to compare national practices and to foster good practices.
5. The asymmetry coefficients suggest that there is some work to be done by countries towards providing internationally comparable and reliable data.
6. Suggestions for future work would be to identify the most striking discrepancies in mirror data and request countries to find out why they take place. Another area would

⁹ Methodology of International Trade in Services Questionnaire, Follow-up and Action Plan, Draft, presented at the Balance of payments working group in Luxembourg 18-19 March 2004.

be to try and provide more information about reasons for poor asymmetry coefficients using existing material as the OECD outsourcing paper¹⁰.

¹⁰ Section on International Sourcing, in the section 2, Globalisation of the ICT sector in the *Information Technology Outlook 2004*.

Annex - Multilateral trade in services mirror statistics

1 – US multilateral trade

Table 1 - US Total services

| Million U.S. dollars | | | | | | |
|--|---------------------|---------------------|-----------------------|---------------|---------------------|-----------------------|
| REPORTING COUNTRY: United States | Total services 2001 | | | | | |
| | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| Canada | 24448 | 25919 | -0.06 | 18431 | 21631 | -0.16 |
| Mexico | 14604 | | | 11159 | | |
| United States | - | - | - | - | - | - |
| Australia | 4909 | 3103 | 0.45 | 3640 | 2439 | 0.40 |
| Japan | 31294 | 35414 | -0.12 | 18618 | 20587 | -0.10 |
| Korea | | | | | | |
| New Zealand | | | | | | |
| Czech Republic | | | | | | |
| Hungary | | | | | | |
| Iceland | | | | | | |
| Norway | | | | | | |
| Poland | | | | | | |
| Slovak Republic | | | | | | |
| Switzerland | | | | | | |
| Turkey | | | | | | |
| EU-15 | 88684 | 109776 | -0.21 | 73720 | 108056 | -0.38 |
| Denmark | | | | | | |
| Sweden | | | | | | |
| United Kingdom | 29674 | 17960 | 0.49 | 23673 | 24828 | -0.05 |
| Euro area | | | | | | |
| Austria | | | | | | |
| Belgium-Luxembourg | 3507 | 6303 | -0.57 | 2522 | 7702 | -1.01 |
| Finland | | | | | | |
| France | 9772 | 11805 | -0.19 | 9256 | 16458 | -0.56 |
| Germany | 14882 | 21546 | -0.37 | 15082 | 16303 | -0.08 |
| Greece | | | | | | |
| Ireland | | | | | | |
| Italy | 5120 | 7870 | -0.42 | 6184 | 7038 | -0.13 |
| Netherlands | 6866 | 8118 | -0.17 | 5721 | 7904 | -0.32 |
| Portugal | | | | | | |
| Spain | | | | | | |
| Total : EU 15 + other OECD countries. | 149335 | 174212 | -0.15 | 114409 | 152713 | -0.29 |

Table 2 - US Transportation

| Million U.S. dollars | | | | | | |
|--|---------------------|---------------------|-----------------------|--------------|---------------------|-----------------------|
| REPORTING COUNTRY: United States | Transportation 2001 | | | | | |
| | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| Canada | 3880 | 3639 | 0.06 | 3982 | 3602 | 0.10 |
| Mexico | 1621 | | | 2354 | | |
| United States | - | - | - | - | - | - |
| Australia | 638 | 427 | 0.40 | 970 | 385 | 0.66 |
| Japan | 6104 | 5060 | 0.19 | 6261 | 5713 | 0.09 |
| Korea | 1794 | 3620 | -0.67 | 2628 | 3698 | -0.34 |
| New Zealand | 260 | | | 463 | | |
| Czech Republic | - | | | | | |
| Hungary | - | | | | | |
| Iceland | - | | | | | |
| Norway | 180 | 486 | -0.92 | 409 | 4118 | -1.64 |
| Poland | - | | | - | | |
| Slovak Republic | - | | | - | | |
| Switzerland | 451 | | | 1069 | | |
| Turkey | - | | | - | | |
| EU-15 | 13694 | 21809 | -0.46 | 21245 | 28153 | -0.28 |
| Denmark | - | | | - | | |
| Sweden | 405 | 194 | 0.70 | 270 | 784 | -0.98 |
| United Kingdom | 4589 | 3481 | 0.27 | 6217 | 3772 | 0.49 |
| Euro area | - | | | - | | |
| Austria | - | | | - | | |
| Belgium-Luxembourg | 685 | 1151 | -0.51 | 876 | 1614 | -0.59 |
| Finland | - | | | - | | |
| France | 1515 | 2947 | -0.64 | 2099 | 3259 | -0.43 |
| Germany | 2666 | 2653 | 0.00 | 3837 | 3104 | 0.21 |
| Greece | - | | | - | | |
| Ireland | - | | | - | | |
| Italy | 754 | 1103 | -0.38 | 1456 | 668 | 0.74 |
| Netherlands | 1018 | 1963 | -0.63 | 1639 | 3230 | -0.65 |
| Portugal | - | | | - | | |
| Spain | 506 | 404 | 0.22 | 391 | 500 | -0.24 |
| Total : EU 15 + other OECD countries. | 26290 | 35041 | -0.29 | 35495 | 45669 | -0.25 |

Table 3 - US Travel

| Million U.S. dollars | Travel 2001 | | | | | |
|--|--------------|---------------------|-----------------------|--------------|---------------------|-----------------------|
| | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| REPORTING COUNTRY: United States | | | | | | |
| Canada | 7054 | 7102 | -0.01 | 6501 | 6453 | 0.01 |
| Mexico | 5541 | | | 6904 | | |
| United States | - | | | - | | |
| Australia | 1488 | 693 | 0.73 | 1645 | 708 | 0.80 |
| Japan | 9785 | 6828 | 0.36 | 2700 | 550 | 1.32 |
| Korea | 2739 | 1650 | 0.50 | 701 | 803 | -0.14 |
| New Zealand | 536 | | | 814 | | |
| Czech Republic | - | | | - | | |
| Hungary | - | | | - | | |
| Iceland | - | | | - | | |
| Norway | 399 | 278 | 0.36 | 230 | 195 | 0.16 |
| Poland | - | | | - | | |
| Slovak Republic | - | | | - | | |
| Switzerland | 1022 | | | 715 | | |
| Turkey | - | | | - | | |
| EU-15 | 21453 | 22236 | -0.04 | 20323 | 23350 | -0.14 |
| Denmark | - | | | - | | |
| Sweden | 639 | 970 | -0.41 | 238 | 500 | -0.71 |
| United Kingdom | 9373 | 5449 | 0.53 | 6438 | 3563 | 0.57 |
| Euro area | - | | | - | | |
| Austria | - | | | - | | |
| Belgium-Luxembourg | 450 | 1011 | -0.77 | 319 | 1117 | -1.11 |
| Finland | - | | | - | | |
| France | 2440 | 3405 | -0.33 | 3590 | 5177 | -0.36 |
| Germany | 3183 | 2670 | 0.18 | 2440 | 2368 | 0.03 |
| Greece | - | | | - | | |
| Ireland | - | | | - | | |
| Italy | 1256 | 1669 | -0.28 | 3056 | 3153 | -0.03 |
| Netherlands | 1121 | 1492 | -0.28 | 687 | 1047 | -0.42 |
| Portugal | - | | | - | | |
| Spain | 998 | 1406 | -0.34 | 1428 | 2181 | -0.42 |
| Total : EU 15 + other OECD countries. | 42918 | 38787 | 0.10 | 32100 | 32059 | 0.00 |

Table 4 – Other commercial services

| Million U.S. dollars | Other commercial services 2001 | | | | | |
|--|--------------------------------|---------------------|-----------------------|--------------|---------------------|-----------------------|
| | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| REPORTING COUNTRY: United States | | | | | | |
| Canada | 13343 | 15049 | -0.12 | 7650 | 11368 | -0.39 |
| Mexico | 7418 | | | 1696 | | |
| United States | - | | | - | | |
| Australia | 2577 | 1873 | 0.32 | 883 | 1305 | -0.39 |
| Japan | 14924 | 23083 | -0.43 | 8201 | 13914 | -0.52 |
| Korea | 2588 | 6099 | -0.81 | 436 | 3757 | -1.58 |
| New Zealand | 406 | | | 71 | | |
| Czech Republic | - | | | - | | |
| Hungary | - | | | - | | |
| Iceland | - | | | - | | |
| Norway | 664 | 1364 | -0.69 | 273 | 1373 | -1.34 |
| Poland | - | | | - | | |
| Slovak Republic | - | | | - | | |
| Switzerland | 4349 | | | 2583 | | |
| Turkey | - | | | - | | |
| EU-15 | 50983 | 64067 | -0.23 | 24230 | 53016 | -0.75 |
| Denmark | - | | | - | | |
| Sweden | 2137 | 2822 | | 739 | 1492 | -0.68 |
| United Kingdom | 15154 | 8706 | 0.54 | 10275 | 17090 | -0.50 |
| Euro area | - | | | - | | |
| Austria | - | | | - | | |
| Belgium-Luxembourg | 2235 | 4060 | -0.58 | 1041 | 4918 | -1.30 |
| Finland | - | | | - | | |
| France | 5567 | 5385 | 0.03 | 3244 | 8000 | -0.85 |
| Germany | 8758 | 15909 | -0.58 | 3908 | 8123 | -0.70 |
| Greece | - | | | - | | |
| Ireland | - | | | - | | |
| Italy | 3026 | 4827 | -0.46 | 848 | 3188 | -1.16 |
| Netherlands | 4218 | 4405 | -0.04 | 3191 | 3582 | -0.12 |
| Portugal | - | | | - | | |
| Spain | 1857 | | | 401 | | |
| Total : EU 15 + other OECD countries. | 85079 | 111535 | -0.27 | 41673 | 84733 | -0.68 |

Table 5 - US Government services

| Million U.S. dollars | Government services n.i.e 2001 | | | | | |
|--|--------------------------------|---------------------|-----------------------|-------------|---------------------|-----------------------|
| REPORTING COUNTRY: United States | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| Canada | 171 | 129 | 0.28 | 298 | 208 | 0.36 |
| Mexico | 25 | | | 204 | | |
| United States | | | | | | |
| Australia | 203 | 110 | 0.59 | 144 | 42 | 1.10 |
| Japan | 482 | 444 | 0.08 | 1455 | 410 | 1.12 |
| Korea | | | | | | |
| New Zealand | | | | | | |
| Czech Republic | | | | | | |
| Hungary | | | | | | |
| Iceland | | | | | | |
| Norway | | | | | | |
| Poland | | | | | | |
| Slovak Republic | | | | | | |
| Switzerland | | | | | | |
| Turkey | | | | | | |
| EU-15 | 2554 | 1664 | 0.42 | 7922 | 3538 | 0.77 |
| Denmark | | | | | | |
| Sweden | | | | | | |
| United Kingdom | 559 | 324 | 0.53 | 743 | 403 | 0.59 |
| Euro area | | | | | | |
| Austria | | | | | | |
| Belgium-Luxembourg | 138 | 81 | 0.52 | 286 | 53 | 1.37 |
| Finland | | | | | | |
| France | 250 | 69 | 1.13 | 323 | 21 | 1.76 |
| Germany | 276 | 314 | -0.13 | 4898 | 2708 | 0.58 |
| Greece | | | | | | |
| Ireland | | | | | | |
| Italy | 83 | 271 | -1.06 | 824 | 28 | 1.87 |
| Netherlands | 510 | 258 | 0.66 | 202 | 47 | 1.24 |
| Portugal | | | | | | |
| Spain | | | | | | |
| Total : EU 15 + other OECD countries. | 3410 | 2347 | 0.37 | 9819 | 4198 | 0.80 |

2. Japan multilateral trade

Table 6 - Japan Total services

| Million U.S. dollars | Total services 2001 | | | | | |
|--|---------------------|---------------------|-----------------------|--------------|---------------------|-----------------------|
| | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| REPORTING COUNTRY: Japan | | | | | | |
| Canada | 1669 | 1298 | 0.250 | 1750 | 1130 | 0.431 |
| Mexico | 639 | - | - | - | - | - |
| United States | 20587 | 18618 | 0.100 | 35414 | 31294 | 0.124 |
| Australia | 1031 | 916 | 0.118 | 2507 | 1749 | 0.356 |
| Japan | - | - | - | - | - | - |
| Korea | 3212 | 6136 | -0.626 | 5374 | 4202 | 0.245 |
| New Zealand | 160 | - | - | 456 | - | - |
| Czech Republic | - | - | - | - | - | - |
| Hungary | - | - | - | - | - | - |
| Iceland | - | - | - | - | - | - |
| Norway | - | - | - | - | - | - |
| Poland | - | - | - | - | - | - |
| Slovak Republic | - | - | - | - | - | - |
| Switzerland | 927 | - | - | 1354 | - | - |
| Turkey | - | - | - | - | - | - |
| EU-15 | 13064 | 9977 | 0.268 | 20854 | 15761 | 0.278 |
| Denmark | - | - | - | - | - | - |
| Sweden | 137 | 336 | -0.841 | 453 | 607 | -0.291 |
| United Kingdom | 4949 | 2384 | 0.700 | 7663 | 4297 | 0.563 |
| Euro area | - | - | - | - | - | - |
| Austria | - | - | - | - | - | - |
| Belgium-Luxembourg | 491 | 598 | -0.197 | 908 | 1119 | -0.208 |
| Finland | - | - | - | - | - | - |
| France | 801 | 884 | -0.099 | 2756 | 2157 | 0.244 |
| Germany | 2208 | 2630 | -0.174 | 3410 | 2822 | 0.189 |
| Greece | - | - | - | - | - | - |
| Ireland | - | - | - | - | - | - |
| Italy | 496 | 632 | -0.241 | 1648 | 1824 | -0.101 |
| Netherlands | 2347 | 710 | 1.071 | 2126 | 1469 | 0.366 |
| Portugal | - | - | - | - | - | - |
| Spain | 221 | 322 | -0.372 | 389 | 306 | 0.239 |
| Total : EU 15 + other OECD countries. | 39563 | 36945 | 0.07 | 65899 | 54136 | 0.20 |

Table 7 - Japan Transportation

| Million U.S. dollars | Transportation 2001 | | | | | |
|--|---------------------|---------------------|-----------------------|--------------|---------------------|-----------------------|
| | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| REPORTING COUNTRY: Japan | | | | | | |
| Canada | 386 | 304 | 0.24 | 592 | 357 | 0.50 |
| Mexico | 98 | - | - | 54 | - | - |
| United States | 5713 | 6261 | -0.09 | 5060 | 6104 | -0.19 |
| Australia | 640 | 466 | 0.31 | 810 | 591 | 0.31 |
| Japan | - | - | - | - | - | - |
| Korea | 1668 | 1503 | 0.10 | 1727 | 1757 | -0.02 |
| New Zealand | 92 | - | - | 172 | - | - |
| Czech Republic | - | - | - | - | - | - |
| Hungary | - | - | - | - | - | - |
| Iceland | - | - | - | - | - | - |
| Norway | - | - | - | - | - | - |
| Poland | - | - | - | - | - | - |
| Slovak Republic | - | - | - | - | - | - |
| Switzerland | 197 | - | - | 252 | - | - |
| Turkey | - | - | - | - | - | - |
| EU-15 | 5270 | 3066 | 0.53 | 5576 | 4708 | 0.17 |
| Denmark | - | - | - | - | - | - |
| Sweden | 67 | 96 | -0.36 | 146 | 273 | -0.61 |
| United Kingdom | 1543 | 570 | 0.92 | 1612 | 574 | 0.95 |
| Euro area | - | - | - | - | - | - |
| Austria | - | - | - | - | - | - |
| Belgium-Luxembourg | 222 | 96 | 0.79 | 190 | 108 | 0.55 |
| Finland | - | - | - | - | - | - |
| France | 259 | 396 | -0.42 | 721 | 736 | -0.02 |
| Germany | 1080 | 689 | 0.44 | 1126 | 1143 | -0.01 |
| Greece | - | - | - | - | - | - |
| Ireland | - | - | - | - | - | - |
| Italy | 301 | 287 | 0.05 | 487 | 294 | 0.49 |
| Netherlands | 1099 | 426 | 0.88 | 762 | 1382 | -0.58 |
| Portugal | - | - | - | - | - | - |
| Spain | 73 | 125 | -0.53 | 43 | 38 | 0.12 |
| Total : EU 15 + other OECD countries. | 13677 | 11600 | 0.16 | 13765 | 13517 | 0.02 |

Table 8 - Japan Travel

| Million U.S. dollars | Travel 2001 | | | | | |
|--|-------------|---------------------|-----------------------|--------------|---------------------|-----------------------|
| | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| REPORTING COUNTRY: Japan | | | | | | |
| Canada | 185 | 124 | 0.39 | 742 | 486 | 0.42 |
| Mexico | 15 | - | - | 57 | - | - |
| United States | 550 | 2700 | -1.32 | 6828 | 9785 | -0.36 |
| Australia | 97 | 164 | -0.51 | 1039 | 972 | 0.07 |
| Japan | - | - | - | - | - | - |
| Korea | 418 | 1274 | -1.01 | 2754 | 2940 | -0.07 |
| New Zealand | 21 | - | - | 242 | - | - |
| Czech Republic | - | - | - | - | - | - |
| Hungary | - | - | - | - | - | - |
| Iceland | - | - | - | - | - | - |
| Norway | - | - | - | - | - | - |
| Poland | - | - | - | - | - | - |
| Slovak Republic | - | - | - | - | - | - |
| Switzerland | 11 | - | - | 437 | - | - |
| Turkey | - | - | - | - | - | - |
| EU-15 | 441 | 789 | -0.57 | 4369 | 3840 | 0.13 |
| Denmark | - | - | - | - | - | - |
| Sweden | 12 | 99 | -1.57 | 114 | 69 | 0.49 |
| United Kingdom | 194 | 160 | 0.19 | 973 | 488 | 0.66 |
| Euro area | - | - | - | - | - | - |
| Austria | - | - | - | - | - | - |
| Belgium-Luxembourg | 7 | 71 | -1.64 | 199 | 255 | -0.25 |
| Finland | - | - | - | - | - | - |
| France | 63 | 115 | -0.58 | 741 | 805 | -0.08 |
| Germany | 92 | - | - | 550 | - | - |
| Greece | - | - | - | - | - | - |
| Ireland | - | - | - | - | - | - |
| Italy | 21 | 142 | -1.48 | 817 | 1291 | -0.45 |
| Netherlands | 14 | 12 | 0.15 | 193 | 107 | 0.57 |
| Portugal | - | - | - | - | - | - |
| Spain | 8 | - | - | 284 | - | - |
| Total : EU 15 + other OECD countries. | 1691 | 5051 | -1.00 | 15732 | 18023 | -0.14 |

Table 9 - Japan Other commercial services

| Million U.S. dollars | Other commercial services 2001 | | | | | |
|--|--------------------------------|---------------------|-----------------------|--------------|---------------------|-----------------------|
| | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| REPORTING COUNTRY: Japan | | | | | | |
| Canada | 1096 | 836 | 0.27 | 398 | 269 | 0.39 |
| Mexico | - | - | - | 499 | - | - |
| United States | 13914 | 8201 | 0.52 | 23083 | 14924 | 0.43 |
| Australia | 272 | 274 | -0.01 | 639 | 181 | 1.12 |
| Japan | - | - | - | - | - | - |
| Korea | 996 | 1382 | -0.32 | 868 | 1415 | -0.48 |
| New Zealand | 41 | - | - | 38 | - | - |
| Czech Republic | - | - | - | - | - | - |
| Hungary | - | - | - | - | - | - |
| Iceland | - | - | - | - | - | - |
| Norway | - | - | - | - | - | - |
| Poland | - | - | - | - | - | - |
| Slovak Republic | - | - | - | - | - | - |
| Switzerland | 712 | - | - | 655 | - | - |
| Turkey | - | - | - | - | - | - |
| EU-15 | 7236 | 6013 | 0.18 | 10742 | 7161 | 0.40 |
| Denmark | - | - | - | - | - | - |
| Sweden | 56 | 140 | -0.86 | 192 | - | 2.00 |
| United Kingdom | 3200 | 1641 | 0.64 | 5023 | 3229 | 0.43 |
| Euro area | - | - | - | - | - | - |
| Austria | - | - | - | - | - | - |
| Belgium-Luxembourg | 257 | 428 | -0.50 | 506 | 756 | -0.40 |
| Finland | - | - | - | - | - | - |
| France | 462 | 359 | 0.25 | 1260 | 617 | 0.69 |
| Germany | 1016 | 1733 | -0.52 | 1719 | 1349 | 0.24 |
| Greece | - | - | - | - | - | - |
| Ireland | - | - | - | - | - | - |
| Italy | 163 | 183 | -0.12 | 334 | 183 | 0.58 |
| Netherlands | 1222 | 261 | 1.30 | 1166 | 261 | 1.27 |
| Portugal | - | - | - | - | - | - |
| Spain | - | - | - | 58 | - | 2.00 |
| Total : EU 15 + other OECD countries. | 23514 | 16706 | 0.34 | 35730 | 23950 | 0.39 |

Table 10 - Japan Government services

| Million U.S. dollars | Government services n.i.e. 2001 | | | | | |
|--|---------------------------------|--------------------|-----------------------|-------------|---------------------|-----------------------|
| REPORTING COUNTRY: Japan | Exports (x) | Mirror imports (m) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| Canada | 2 | 34 | -1.78 | 18 | 18 | 0.00 |
| Mexico | - | - | - | 7 | - | - |
| United States | 410 | 1455 | -1.12 | 444 | 482 | -0.08 |
| Australia | 22 | 12 | 0.59 | 18 | 5 | 1.13 |
| Japan | - | - | - | - | - | - |
| Korea | 132 | 44 | 1.00 | 25 | 24 | 0.04 |
| New Zealand | 5 | - | - | 4 | - | - |
| Czech Republic | - | - | - | - | - | - |
| Hungary | - | - | - | - | - | - |
| Iceland | - | - | - | - | - | - |
| Norway | - | - | - | - | - | - |
| Poland | - | - | - | - | - | - |
| Slovak Republic | - | - | - | - | - | - |
| Switzerland | 8 | - | - | 11 | - | - |
| Turkey | - | - | - | - | - | - |
| EU-15 | 115 | 110 | 0.04 | 168 | 55 | 1.01 |
| Denmark | - | - | - | - | - | - |
| Sweden | 3 | 2 | 0.40 | 2 | 3 | -0.40 |
| United Kingdom | 12 | 13 | -0.08 | 55 | 6 | 1.61 |
| Euro area | - | - | - | - | - | - |
| Austria | - | - | - | - | - | - |
| Belgium-Luxembourg | 6 | 4 | 0.40 | 13 | 0 | 2.00 |
| Finland | - | - | - | - | - | - |
| France | 17 | 14 | 0.19 | 34 | 2 | 1.78 |
| Germany | 20 | 22 | -0.10 | 16 | 1 | 1.76 |
| Greece | - | - | - | - | - | - |
| Ireland | - | - | - | - | - | - |
| Italy | 11 | 19 | -0.53 | 9 | 4 | 0.77 |
| Netherlands | 12 | 10 | 0.18 | 6 | 3 | 0.67 |
| Portugal | - | - | - | - | - | - |
| Spain | - | - | - | 4 | - | 2.00 |
| Total : EU 15 + other OECD countries. | 681 | 1655 | -0.83 | 673 | 584 | 0.14 |

3 – EU 15 multilateral trade

Table 11 – EU15 Total services

| Total services 2001 | | | | | | |
|--|---------------|---------------------|-----------------------|---------------|---------------------|-----------------------|
| REPORTING COUNTRY: EU15 | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| Canada | 5748 | 6909 | -0.183 | 5894 | 6226 | -0.055 |
| Mexico | 2548 | | | 1769 | | |
| United States | 108056 | 73720 | 0.378 | 109776 | 88684 | 0.213 |
| Australia | 4816 | 3828 | 0.229 | 3943 | 3093 | 0.242 |
| Japan | 15761 | 20854 | -0.278 | 9977 | 13064 | -0.268 |
| Korea | 2751 | 5786 | -0.711 | 2014 | 3234 | -0.465 |
| New Zealand | 722 | | | 669 | | |
| Czech Republic | 2507 | 2387 | 0.049 | 2909 | 3736 | -0.249 |
| Hungary | 2417 | 1774 | 0.307 | 2800 | 1769 | 0.451 |
| Iceland | 390 | | | 345 | | |
| Norway | 9179 | 10470 | -0.131 | 6541 | 9787 | -0.398 |
| Poland | 3664 | | | 4250 | | |
| Slovak Republic | 899 | 1241 | -0.320 | 780 | 1241 | -0.456 |
| Switzerland | 34421 | | | 29237 | | |
| Turkey | 2421 | | | 5033 | | |
| EU-15 | - | | | - | | |
| Denmark | - | | | - | | |
| Sweden | - | | | - | | |
| United Kingdom | - | | | - | | |
| Euro area | - | | | - | | |
| Austria | - | | | - | | |
| Belgium-Luxembourg | - | | | - | | |
| Finland | - | | | - | | |
| France | - | | | - | | |
| Germany | - | | | - | | |
| Greece | - | | | - | | |
| Ireland | - | | | - | | |
| Italy | - | | | - | | |
| Netherlands | - | | | - | | |
| Portugal | - | | | - | | |
| Spain | - | | | - | | |
| Total : EU 15 + other OECD countries. | 152134 | 126969 | 0.18 | 144634 | 130834 | 0.10 |

Table 12 – EU15 Transportation

| Transportation 2001 | | | | | | |
|--|--------------|---------------------|-----------------------|--------------|---------------------|-----------------------|
| REPORTING COUNTRY: EU15 | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| Canada | 1629 | 2420 | -0.39 | 1442 | 1395 | 0.03 |
| Mexico | 450 | | | 209 | | |
| United States | 28153 | 21245 | 0.28 | 21809 | 13694 | 0.46 |
| Australia | 1347 | 1090 | 0.21 | 819 | 666 | 0.21 |
| Japan | 4708 | 5576 | | 3066 | 5270 | |
| Korea | 1102 | 2194 | -0.66 | 954 | 1844 | -0.64 |
| New Zealand | 251 | | | 115 | | |
| Czech Republic | 498 | 273 | 0.58 | 487 | 772 | -0.45 |
| Hungary | 620 | 340 | 0.58 | 416 | 467 | -0.12 |
| Iceland | 77 | | | 89 | | |
| Norway | 2563 | 2991 | -0.15 | 2228 | 4888 | -0.75 |
| Poland | 705 | | | 1476 | | |
| Slovak Republic | 167 | 250 | -0.40 | 230 | 236 | -0.03 |
| Switzerland | 5376 | | | 4996 | | |
| Turkey | 609 | | | 1063 | | |
| EU-15 | - | | | - | | |
| Denmark | - | | | - | | |
| Sweden | - | | | - | | |
| United Kingdom | - | | | - | | |
| Euro area | - | | | - | | |
| Austria | - | | | - | | |
| Belgium-Luxembourg | - | | | - | | |
| Finland | - | | | - | | |
| France | - | | | - | | |
| Germany | - | | | - | | |
| Greece | - | | | - | | |
| Ireland | - | | | - | | |
| Italy | - | | | - | | |
| Netherlands | - | | | - | | |
| Portugal | - | | | - | | |
| Spain | - | | | - | | |
| Total : EU 15 + other OECD countries. | 40787 | 36379 | 0.11 | 31451 | 29232 | 0.07 |

Table 13 - EU15 Travel

| Million U.S. dollars | Travel 2001 | | | | | |
|--|--------------|---------------------|-----------------------|--------------|---------------------|-----------------------|
| | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| REPORTING COUNTRY: EU15 | | | | | | |
| Canada | 1827 | 1852 | -0.01 | 2149 | 1852 | 0.15 |
| Mexico | 575 | | | 870 | | |
| United States | 23350 | 20323 | 0.14 | 22236 | 21453 | 0.04 |
| Australia | 1502 | 1672 | -0.11 | 1778 | 1744 | 0.02 |
| Japan | 3840 | 4369 | | 789 | 441 | |
| Korea | 435 | 931 | -0.73 | 124 | 340 | -0.93 |
| New Zealand | 229 | | | 395 | | |
| Czech Republic | 561 | 851 | -0.41 | 1190 | 2042 | -0.53 |
| Hungary | 335 | | | 1136 | | |
| Iceland | 169 | | | 185 | | |
| Norway | 3106 | 3882 | -0.22 | 1482 | 1605 | -0.08 |
| Poland | 1030 | | | 1176 | | |
| Slovak Republic | 115 | 346 | -1.00 | 194 | 574 | -0.99 |
| Switzerland | 10197 | | | 7148 | | |
| Turkey | 447 | | | 2741 | | |
| EU-15 | - | | | - | | |
| Denmark | - | | | - | | |
| Sweden | - | | | - | | |
| United Kingdom | - | | | - | | |
| Euro area | - | | | - | | |
| Austria | - | | | - | | |
| Belgium-Luxembourg | - | | | - | | |
| Finland | - | | | - | | |
| France | - | | | - | | |
| Germany | - | | | - | | |
| Greece | - | | | - | | |
| Ireland | - | | | - | | |
| Italy | - | | | - | | |
| Netherlands | - | | | - | | |
| Portugal | - | | | - | | |
| Spain | - | | | - | | |
| Total : EU 15 + other OECD countries. | 35071 | 34226 | 0.02 | 31078 | 30051 | 0.03 |

Table 14 - EU15 Other commercial services

| Million U.S. dollars | Other commercial services 2001 | | | | | |
|--|--------------------------------|---------------------|-----------------------|--------------|---------------------|-----------------------|
| | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| REPORTING COUNTRY: EU15 | | | | | | |
| Canada | 2216 | 2500 | -0.12 | 2244 | 2800 | -0.22 |
| Mexico | 1511 | | | 663 | | |
| United States | 53016 | 24230 | 0.75 | 64067 | 50983 | 0.23 |
| Australia | 1951 | 1009 | 0.64 | 1293 | 667 | 0.64 |
| Japan | 7161 | 10742 | | 6013 | 7236 | |
| Korea | 1193 | 2572 | -0.73 | 910 | 1022 | -0.12 |
| New Zealand | 236 | | | 152 | | |
| Czech Republic | 1437 | 1239 | 0.15 | 1211 | 919 | 0.27 |
| Hungary | 1448 | 1404 | 0.03 | 1220 | 1286 | -0.05 |
| Iceland | 139 | | | 72 | | |
| Norway | 3481 | 3538 | -0.02 | 2790 | 3238 | -0.15 |
| Poland | 1910 | | | 1557 | | |
| Slovak Republic | 615 | 619 | -0.01 | 350 | 404 | -0.14 |
| Switzerland | 18809 | | | 16978 | | |
| Turkey | 1336 | | | 1165 | | |
| EU-15 | - | | | - | | |
| Denmark | - | | | - | | |
| Sweden | - | | | - | | |
| United Kingdom | - | | | - | | |
| Euro area | - | | | - | | |
| Austria | - | | | - | | |
| Belgium-Luxembourg | - | | | - | | |
| Finland | - | | | - | | |
| France | - | | | - | | |
| Germany | - | | | - | | |
| Greece | - | | | - | | |
| Ireland | - | | | - | | |
| Italy | - | | | - | | |
| Netherlands | - | | | - | | |
| Portugal | - | | | - | | |
| Spain | - | | | - | | |
| Total : EU 15 + other OECD countries. | 72518 | 47853 | 0.41 | 80098 | 68555 | 0.16 |

Table 15 - EU15 Government services

| Million U.S. dollars | Government services n.i.e. 2001 | | | | | |
|--|---------------------------------|---------------------|-----------------------|-------------|---------------------|-----------------------|
| REPORTING COUNTRY: EU15 | Exports (x) | Mirror imports (mm) | Asymmetry coefficient | Imports (m) | Mirror exports (xm) | Asymmetry coefficient |
| Canada | 74 | 136 | -0.59 | 58 | 181 | -1.03 |
| Mexico | 13 | | | 28 | | |
| United States | 3538 | 7922 | -0.77 | 1664 | 2554 | -0.42 |
| Australia | 19 | 58 | -1.01 | 55 | 15 | 1.14 |
| Japan | 55 | 168 | | 110 | 115 | |
| Korea | 20 | 89 | -1.27 | 24 | 28 | -0.15 |
| New Zealand | 5 | | | 4 | | |
| Czech Republic | 12 | 23 | -0.63 | 22 | 3 | 1.52 |
| Hungary | 14 | 30 | -0.73 | 26 | 16 | 0.48 |
| Iceland | 1 | | | 0 | | |
| Norway | 28 | 59 | -0.71 | 45 | 56 | -0.22 |
| Poland | 19 | | | 40 | | |
| Slovak Republic | 2 | 10 | -1.33 | 4 | 7 | -0.55 |
| Switzerland | 41 | | | 118 | | |
| Turkey | 30 | | | 65 | | |
| EU-15 | - | | | - | | |
| Denmark | - | | | - | | |
| Sweden | - | | | - | | |
| United Kingdom | - | | | - | | |
| Euro area | - | | | - | | |
| Austria | - | | | - | | |
| Belgium-Luxembourg | - | | | - | | |
| Finland | - | | | - | | |
| France | - | | | - | | |
| Germany | - | | | - | | |
| Greece | - | | | - | | |
| Ireland | - | | | - | | |
| Italy | - | | | - | | |
| Netherlands | - | | | - | | |
| Portugal | - | | | - | | |
| Spain | - | | | - | | |
| Total : EU 15 + other OECD countries. | 3762 | 8495 | -0.77 | 2008 | 2975 | -0.39 |