



**WORLD TRADE
ORGANIZATION**

MEASURING TRADE IN SERVICES

**A training module produced by WTO / OMC in
collaboration with the Inter-agency Task Force on
Statistics of International Trade in Services**

December 2008

The training module "Measuring trade in services" was produced by the Economic Research and Statistics Division of the World Trade Organization following a request from the World Bank.

The WTO Secretariat is very grateful to the participating agencies of the Inter-agency Task Force on Statistics of International Trade in Services who provided material during the preparatory phase of the training module.

For further information on this training module or on statistics of international trade in services, please contact Statistics@wto.org.

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INTRODUCTORY NOTE

Statisticians often use complex concepts, methodologies and systems to produce reliable numbers. Translating them into simple and readily understandable information for non-specialists can be quite a challenge. The communication gap between producers and users of statistics is particularly wide in the area of trade in services. The entry into force of the WTO General Agreement on Trade in Services (GATS) in 1995 has not only inflated demand for enhanced statistics, it has also highlighted that the scope of international trade in services is far wider than what statistics conventionally measure.

Statistics are best interpreted with a sound understanding of the methodologies underpinning their production. This textbook provides an accurate while simple overview on the newly defined statistical framework for measuring trade in services.

Primarily intended as reference material, part of a broader course for government officials and trade negotiators, it should also be of benefit to other users such as business analysts, students, etc. Statisticians new to the domain may also find it useful to understand the more complex and accurate reference documents on the methodology for measuring trade in services.

The textbook starts with a general overview and contains six major Sections that can be read independently from each other. Each Section is introduced by a short paragraph describing in a few words what the reader will learn from it. References to further sources of information conclude each Section.

Readers will gain knowledge of:

- ☛ the economic importance of services and the concept of trade in services as illustrated in the GATS' four modes of supply (Section I);
- ☛ the relevant statistical framework recently developed on the basis of two major statistical domains (Section II focuses on key concepts related to trade between residents and non-residents as defined in international guidelines, while Section III deals with statistics on operations of services foreign affiliates), its usefulness and current limitations;
- ☛ the current state of play with regard to statistics on the presence of natural persons (Section IV);
- ☛ the different methods statisticians use to collect statistics on trade in services (Section V);
- ☛ statistics currently available and where they can be found at the international level (Section VI); and
- ☛ the recent developments and prospects in the domain of statistics on trade in services (Section VII).

Please note that the statistical rules, guidelines, concepts and definitions described are simplified and should not be used as reference standards. These are covered in the appropriate manuals on which this text is based, namely the *Manual on Statistics of International Trade in Services* and the *IMF Balance of Payments Manual*. Precise references to these documents and other sources used in preparing this textbook can be found in the bibliography.

ACRONYMS AND ABBREVIATIONS

INTERNATIONAL AND REGIONAL ORGANIZATIONS

Eurostat	Statistical Office of the European Communities
ILO	International Labour Organization
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNSD	United Nations Statistics Division
UNWTO	World Tourism Organization
WTO	World Trade Organization

OTHER ACRONYMS AND ABBREVIATIONS

BD3	3 rd edition of the OECD Benchmark Definition of Foreign Direct Investment
BOP	Balance of Payments
BPM5	5 th edition of the Balance of Payments Manual
CPC	Central Product Classification
EBOPS	Extended Balance of Payments Services Classification
EU	European Union
FATS	Foreign Affiliates Trade in Services
FDI	Foreign Direct Investment
GATS	General Agreement on Trade in Services
GDDS	General Data Dissemination System (IMF)
GDP	Gross Domestic Product
GNS/W/120	Services sectoral classification list
ICFA	ISIC Categories for Foreign Affiliates
ICSE	International Classification of Status in Employment
ISCO	International Standard Classification of Occupations
ISIC	International Standard Industrial Classification of all Economic Activities
ITRS	international transactions reporting system
LDCs	Least Developed Countries
MSITS	Manual on Statistics of International Trade in Services
n.a.	not available
n.i.e.	not included elsewhere
SDDS	Special Data Dissemination Standards (IMF)
1993 SNA	System of National Accounts, 1993
UBO	ultimate beneficial owner
USA	United States of America
USD	United States Dollar

I. OVERVIEW

This overview gives readers an insight into how important services are and the various ways in which services may be delivered internationally. It also provides a brief presentation of the recent achievement concerning a comprehensive measurement of trade in services: the Manual on Statistics of International Trade in Services.

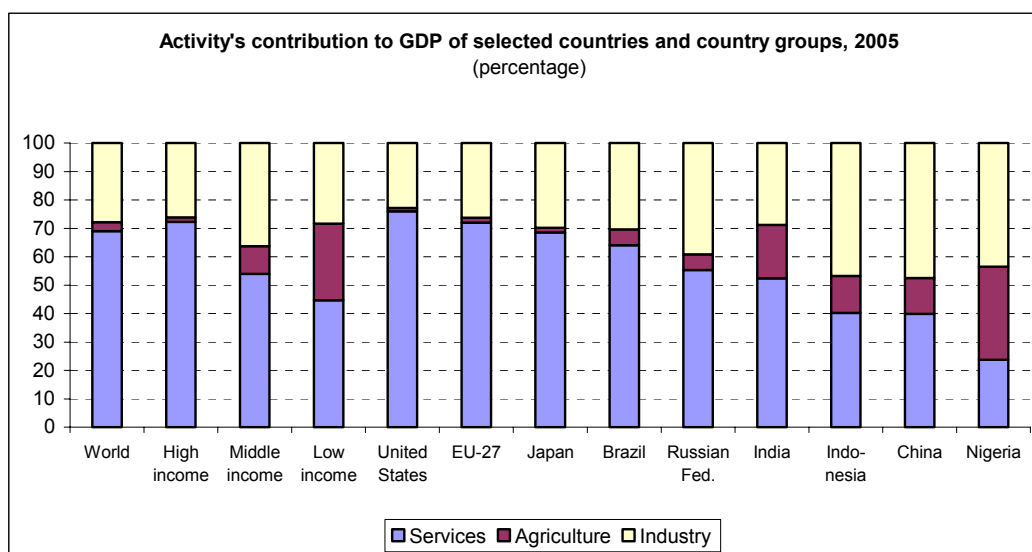
1. SERVICES AND TRADE IN SERVICES IN THE ECONOMY

a) Importance of services in the economy

The term *services* covers a wide range of intangible and heterogeneous products and activities such as transport, telecommunication and computer services, construction, financial services, wholesale and retail distribution, hotel and catering, insurance, real estate, health and education, professional, marketing and other business support, government, community, audiovisual, recreational, and domestic services.

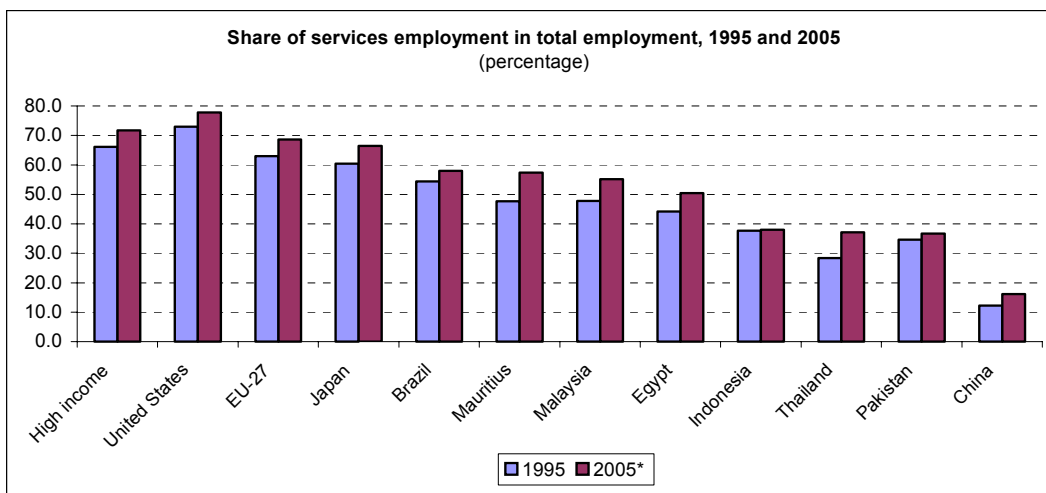
Services have a significant impact on growth and efficiency across a wide range of user industries and overall economic performance. For instance, sectors such as transport, telecommunications and financial services are key determinants of the conditions in which persons, merchandise, services and capital flow. Another illustration of the services' major role is environmental services, which contribute to sustainable development by alleviating negative impacts of economic activities.

Services currently represent **more than two thirds of World Gross Domestic Product (GDP)**. The share of services value added in GDP tends to rise significantly with the countries' level of income, standing at 72% on average in high income countries (76% in the United States), against 54% and 45% respectively in middle- and low- income countries. Even in the latter group, the production of services is generally a **core economic activity**, whose contribution to GDP is above that of both industry and agriculture. Significant differences however exist between countries within the same income group, as for example for India and Nigeria – two low-income countries whose respective shares of services in GDP are 52% and 24%.



Sources: World Bank, World Development Indicators (WDI) database online and Eurostat New Cronos database (EU data) Theme 2 (Dec. 2008) – note that “construction” is included in the industry sector.

The current importance of services' value added follows decades of sustained growth of contribution of the services sector to GDP, which is also mirrored in **employment statistics**. Looking at developments over the 1995-2005 period, a significant shift of employment from the agriculture and industry sectors to the services-producing sector can be observed. Services' contribution to total employment gained on average 5 percentage points in high income countries, and available information suggest that the increase was also sharp on average in upper middle income countries (over 6 percentage points growth, with, for example, Mauritius, recording 10 and Malaysia over 7 points, but only 0.5 points for Indonesia). The share also rose significantly in a number of lower middle income countries (e.g. China, Egypt, Thailand), but available data for low income countries seemed to show a smaller growth of services' contribution to total employment, (e.g. 2 percentage points in Pakistan). Employment data nevertheless confirm the importance of the services sector which is accounting for more than half of the employment in most countries under review (up to 78% in the United States).



* Except Brazil and Malaysia, 2004; Egypt, 2003; and China, 2002.

Sources: World Bank, World Development Indicators (WDI) database online and Eurostat New Cronos database (EU data) Theme 2 (Dec. 2008) – note that “construction” is included in the industry sector.

Box I.1 Measuring services production

(a) Statistics on domestic activity

National Accounts constitute the statistical framework out of which main macroeconomic aggregates are calculated (production, Gross Domestic Product, Gross National Income, consumption...). **Value added** broken down by industry permits the measurement of the contribution of the services sector and its sub-sectors to **GDP**. A majority of countries have adopted the international guidelines of the 1993 System of National Accounts (1993 SNA), which facilitates international data comparability.

Employment statistics provide the total number of people employed in various sectors of activity. They allow to identify the number of people employed in the services sector and their distribution among different sub-sectors (it should be noted that such statistics also form part of the central framework of National Accounts).

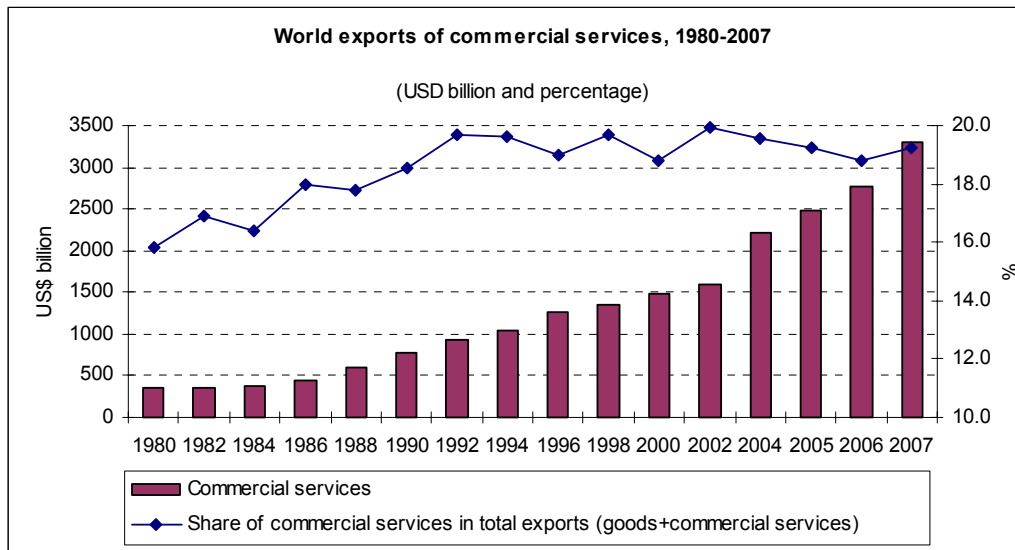
Other information such as **business statistics** (available from regional and international organizations) as well as data provided by business federations may also be useful for assessing the activity of specific services sectors.

(b) Quantitative indicators on specific sectors

Quantitative indicators on specific sectors (international number of students enrolled in basic education, arrivals of tourists, number of letters mailed, kilometres flown by planes, number of phone calls, etc.) also provide valuable information for assessing services production and performance, which enables more meaningful analysis of services sectors. However, quantitative indicators do not permit comparisons across sectors.

b) Trade in commercial services¹

World exports of *commercial services* amounted to **US\$ 3,300 billion in 2007**, after growing on average at around 8.5% per year in value terms since 1980. Trade in *commercial services* grew faster than trade in *goods* (7.5% on average) during this period, increasing its share in total world trade by 3 percentage points. In 2007, *services* accounted for approximately 19% of total world trade.

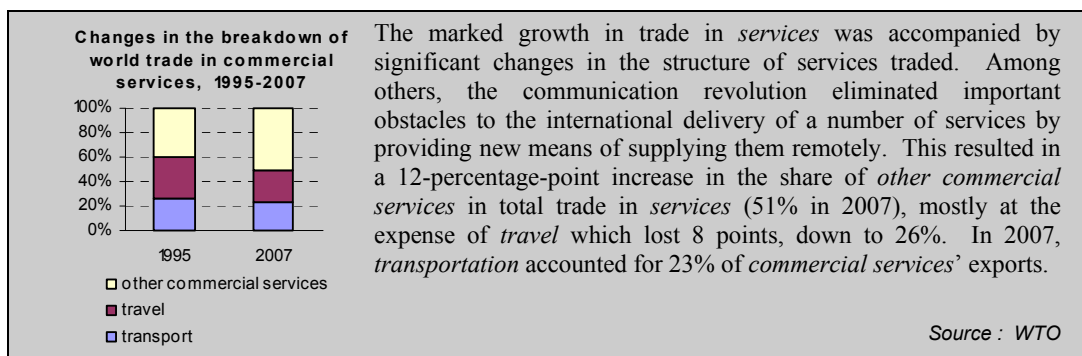


Source: WTO

The share of services in world trade contrasts with the central contribution of services production in domestic economies. Due to their **intangible nature**, trade in services is **inherently subject to more constraints** than trade in goods. While a (tangible) good may be produced, stored, moved and consumed at different places and times, the delivery of a (intangible) service is seldom dissociated from its production and its consumption, requiring the proximity of the supplier and the customer. For instance, hairdressers and their clients need to be physically close for a haircut.

The need for proximity for supplying many services has led providers to deliver their products through a **commercial presence abroad**, i.e. the establishment of foreign affiliates. This form of international trade in services is considered at least as important as “conventional” international trade in services between residents and non-residents.

Box I.2: Patterns of trade in services’ expansion



¹ A more detailed overview of international trade in commercial services and activities of foreign affiliates is provided in Annex I.

2. GATS AND MODES OF SUPPLY

One of the most important achievements of the Uruguay Round trade negotiations (1986-1993) is to have brought international trade in services under common multilateral rules. Entering into force on 1 January 1995, the WTO General Agreement on Trade in Services (GATS) is the first set of multilaterally negotiated and legally enforceable rules covering international trade in commercial services (i.e. excluding government services). As stressed in GATS, international trade in services can take place through **four modes of supply**:

- in Mode 1, *cross-border supply*, only the service crosses the border. The delivery of the service can take place, for example, through telecommunications (telephone, fax, television, Internet, etc.), or the sending of documents, disks, tapes, etc;
- Mode 2, *consumption abroad*, occurs when consumers consume services while outside their country. Visits to museums in a foreign country as well as medical treatment and language courses taken abroad are typical examples;
- in Mode 3, the service supplier establishes its *commercial presence* in another country through e.g. branches or subsidiaries. Examples are medical services provided by a foreign-owned hospital, and banking services supplied by a subsidiary of a foreign bank.
- Mode 4, *presence of natural persons*, occurs when an individual has moved temporarily into the territory of the consumer in the context of the service supply, whether self-employed or as an employee of a foreign supplier. For instance, architects moving abroad to supervise construction work are providing services under this mode of supply.

The pillars of GATS are a set of **general obligations**, applying to all WTO members and all services, such as the Most-Favoured-Nation treatment (MFN) ensuring non-discrimination between trading partners; countries' **schedules of specific commitments** resulting from negotiations; and several **annexes** on specific sectors and on the movement of natural persons.

3. THE MANUAL ON STATISTICS OF INTERNATIONAL TRADE IN SERVICES

Following the entry into force of GATS, there has been an increasing demand for detailed, relevant and internationally comparable statistical information on trade in services. Trade negotiators require statistics, possibly by mode of supply, as a guide to negotiate specific commitments and to monitor their economic impact for each type of service. Among others, statistics are necessary to evaluate market access opportunities, compare liberalisation commitments, assess the extent of liberalisation reached in specific sectors/markets and provide statistical background for the settlement of disputes.

As a first step to respond to needs, the recently published *Manual on Statistics of International Trade in Services* (MSITS) was produced. Building upon internationally agreed standards, it provides guidelines and recommendations on how to use and develop sources to measure trade in services. **Two building blocks** are identified:

- **balance of payments (BOP) statistics**, which conform to the 5th edition of the IMF *Balance of Payments Manual* (BPM5), summarise transactions of an economy with the rest of the world into the components of the **current account** and the **capital and financial account**. BOP statistics under BPM5 display data on **trade in services between residents and non-residents** (within the current account) into 11 items: *transportation; travel; communications services; construction; insurance services; financial services; computer and information services; royalties and license fees; other business services; personal, cultural and recreational services; and government services not included elsewhere*. MSITS proposes further breakdowns of these items to respond to needs for more detailed information. Furthermore, although

BOP statistics do not allow a comprehensive measurement of services delivered through Modes 3 and 4, they support the measurement of supplementary indicators, for example, *Foreign Direct Investment* (FDI) can be helpful concerning Mode 3.

- MSITS expands the statistical definition of international trade in services by recommending the measurement of services supplied by foreign affiliates, within the new framework of **Foreign Affiliates Trade in Services (FATS) statistics**. This framework provides for the compilation of a number of indicators aimed at describing the operations of foreign affiliates (turnover/output, exports and imports of goods and services, number of enterprises, etc.) with a particular – but not exclusive – focus on services.

The guidelines of MSITS – once implemented – will provide statisticians, economists and trade negotiators with eagerly awaited data on trade in services that would enable more pertinent statistical and economical analyses, and improved information for negotiations. MSITS' recommendations for developing these two sources should indeed provide a set of statistics covering most services delivered through all modes of supply. MSITS identifies needs for further methodological work in two main areas:

- As highlighted in Table I.1, a satisfactory linkage of statistics with GATS modes of supply is not feasible at present. As a first step, MSITS proposes a simplified approach, based on the overall good correspondence between (i) FATS statistics and Mode 3, and (ii) BOP services statistics and the three other modes of supply (as described further in Section II.5);
- The supply of services through mode 4 is not well identified in existing statistics. MSITS opens the way to the creation of a statistical framework in an annex on the movement of natural persons supplying services under GATS.

Table I.1: Correspondence between modes of supply and statistical domains

Mode of supply	Relevant statistical domains	Inadequacies
<i>Mode 1:</i> Cross border supply	BOP: commercial services (excluding <i>travel</i> and <i>construction services</i>)	BOP does not allow a separation between <i>Modes 1</i> and <i>4</i>
<i>Mode 2:</i> Consumption abroad	BOP: <i>Travel</i>	<ul style="list-style-type: none"> • <i>Travel</i> also contains goods and is not subdivided into the different categories of services consumed by travellers • Some transactions related to this mode of supply are also in other BOP categories
<i>Mode 3:</i> Commercial presence	FATS statistics BOP: FDI data (supplementary information) BOP: <i>construction services</i>	<ul style="list-style-type: none"> • Very few countries produce FATS data • FDI statistics cover a larger subset, not only (majority) controlled companies • Not distributed between <i>Modes 3</i> and <i>4</i>
<i>Mode 4:</i> Presence of natural persons	BOP: commercial service (excluding <i>travel</i>) BOP statistics: <i>compensation of employees</i> and <i>workers' remittances</i> (supplementary information)	<ul style="list-style-type: none"> • BOP does not allow a separation between <i>Modes 1</i> (3 for <i>construction services</i>) and <i>4</i> • no relationship with <i>Mode 4</i> but of interest for labour mobility

For further information...

☛ *statistics on services:*

- employment: the World Bank WDI (www.worldbank.org/data)
- value added: the World Bank WDI, UNCTAD *Handbook of Statistics* (www.unctad.org/statistics)
- trade: World Bank *World Trade Indicators*, WTO, *International Trade Statistics and Trade Profiles* (www.wto.org)
- trade indicators: WTO *Trade profiles*

☛ *quantitative indicators on services:*

- International Telecommunication Union (www.itu.int), Universal Postal Union (www.upu.int), World Tourism Organization (www.unwto.org) or other specialised organizations.

☛ *GATS: The General Agreement on Trade in Services, WTO* (www.wto.org)

II. STATISTICS OF TRADE IN SERVICES BETWEEN RESIDENTS AND NON-RESIDENTS OF AN ECONOMY

This section describes how trade in services is measured within the balance of payments framework. It also introduces recent extensions made to this framework in terms of the breakdown of services items so that statistics better fulfil users' needs with respect to information on trade in services. Finally, links of these statistics with GATS' modes of supply are highlighted.

1. INTRODUCTION

Balance of payments (BOP) statistics on services transactions between residents and non-residents provide a sound basis for the measurement of trade in services in the conventional sense. Recommendations made in the Manual on Statistics of International Trade in Services (MSITS) for the development of such statistics are made with the underlying concern to build upon existing principles and classifications, without altering these.

Sub-section 2 provides an overview of the fundamental concepts of the 5th edition of the IMF *Balance of Payments Manual* (BPM5) that underpin the measurement of trade in services. While keeping full consistency with the BPM5 concepts and classification, MSITS provides a more detailed classification of trade in services statistics (the Extended Balance of Payments Services Classification – EBOPS), which is presented in **Sub-section 3**. MSITS also makes recommendations for the production of a geographical breakdown of trade in services data (**Sub-section 4**) and proposes a simplified approach to allocate services transactions statistics to the four modes of supply (**Sub-section 5**).

2. PRINCIPLES OF RECORDING SUCH TRADE

The residence concept is a key concept for the measurement of services transactions between residents and non-residents. Other essential concepts relate to the valuation and the time of recording transactions. These main principles, which are in line with those of BPM5 and the System of National Accounts, 1993 (1993 SNA), are described below.

a) Transactions and residence of transactors

A country's BOP is a balanced statistical statement that summarises the economic **transactions** of its residents with the rest of the world. A transaction is an economic flow that involves change of ownership of goods and/or financial assets, the provision of services, or the provision of labour or capital. Services international transactions are in practice referred to as trade in services. These transactions are in general to be recorded **gross**, with each service item displaying a **credit** and a **debit** value, representing respectively exports and imports of that service.

The **residence** concept is not based on nationality or legal criteria but on a transactor's centre of economic interest. Further, because territorial boundaries recognised for political purposes may not always be appropriate for economic purposes, the economic territory of a country is used as the relevant geographical area to which the concept of residence is applied.

The **economic territory** of a country consists of the geographic territory administered by a government. It also includes territorial enclaves such as embassies, consulates, and military bases located in foreign countries.

It is not always straightforward to determine precisely whether an institutional unit has a **centre of economic interest** within a country, and thus is resident in this country. It is deemed that an enterprise has a centre of economic interest in an economy when it engages or intends to engage in economic activities on a significant scale, and over a long time period,

within the economic territory of that country. A household has a centre of economic interest where it maintains one or more dwellings within the country that members of the household use as their principal residence.²

A period of one year or more is suggested as a flexible guideline (the “one-year rule”) for determining residence (centre of economic interest).

b) Other principles of recording

Market price (i.e. the price at which buyers and sellers trade the item in an open marketplace) should be used as the basis for **valuation** of international transactions in services. In certain circumstances, such as exchanges between affiliated enterprises (related enterprises integrated under same management), the pricing adopted for bookkeeping purposes (“transfer pricing”) may not always be based closely on market considerations. Because it may be very difficult to evaluate a market price for the recording of such transactions, BPM5 acknowledges that in most cases such an evaluation or imputation would not be applied. In practice, if certain transfer prices are so divorced from those of similar transactions that they significantly distort measurement, they should either be replaced by market price equivalents or be separately identified for analytical purposes.

The appropriate time to record transactions in services is the **time at which they are rendered** (that is, when they are delivered or received). This may differ from the time at which payment is made or received, which may be either before or after the transaction takes place. Thus transactions should be recorded, whenever possible, on an accrual rather than a cash accounting basis.

Transactions may take place in a range of currencies, including the domestic currency of either the provider or the consumer of the service. To produce meaningful statistics, however, it is necessary for the compiler to convert all transaction values to a **common unit of account**. Most often, the common unit will be the national currency; this will facilitate the use of such statistics in conjunction with other economic statistics relating to the domestic economy. However, in some cases such as a significant depreciation of the national currency or hyperinflation, it may analytically be more useful to express transactions in another, more stable currency. The most appropriate exchange rate to be used in converting transaction values from the currency of transaction to the currency of compilation is the market rate prevailing at the time the transaction takes place.

3. THE EXTENDED BALANCE OF PAYMENTS SERVICES CLASSIFICATION

a) Main principles

EBOPS provides for the production of statistical information at a level of detail that, among others, meets needs for information in the framework of GATS negotiations. It builds upon the BPM5 classification of services. In BPM5 the 11 main items are also broken down into a list of standard and supplementary components. EBOPS consists of a **further breakdown of these components** into more detailed sub-items, and is therefore consistent with BPM5. EBOPS also contains several “memorandum items” for the recording of useful additional information regarding transactions in various services sectors such as freight transportation, travel, or insurance services.

Like the BPM5 services classification, EBOPS is primarily a **product-based classification**. Items of these classifications may be described in terms of the Central Product Classification

² Civil servants and military personnel employed abroad in government enclaves, and their dependants, continue to have centres of economic interest (i.e. they are residents) in their home countries.

Version 1.0 (CPC Ver. 1.0), which is the standard international product classification.³ In order to facilitate the use of statistics based on EBOPS for GATS purposes, MSITS provides, as an annex, tables of correspondence between EBOPS, CPC Ver. 1.0 and GNS/W/120 (the list of service sectors which is generally used as a basis for GATS negotiations).

MSITS recognises that it will not be possible for all compilers to immediately develop statistics at the detailed component level specified in EBOPS, and puts the highest priority on the development of statistics on international trade in services at the level described in BPM5. Where the breakdown of the main EBOPS components is developed, it should be carried out in stages. Compilers should commence with the disaggregation of services of major economic importance to their own economies and data on related memorandum items should also be produced if these are immediately available as a result of the data compilation process.

b) EBOPS components

EBOPS, like BPM5, includes eleven main services components which are listed below. The entire classification is provided in Annex II, and complete definitions of the components are given in MSITS.

- **Transportation** covers all transportation services 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. In addition, EBOPS distinguishes eight modes of transportation – sea, air, space, rail, road, internal waterway, pipeline, and other supporting and auxiliary transportation services.
- **Travel** differs from most other internationally traded services in that it is the consumer of these services that gives *travel* its distinctive characterisation. Thus *travel* does not refer to a particular product and covers expenses for goods and services (including accommodation, food, souvenirs, etc.) acquired by the traveller during his visit abroad. In line with the concept of residence, only persons staying in the visited country for less than one year are regarded as travellers. If they stay more than one year, they are considered to be residents of the visited country. This guideline does not apply to students and patients receiving health care abroad, who remain residents of their economies of origin even if they stay longer than one year. With respect to the purpose of the trip, travel is subdivided into *business travel*, and *personal travel*. The latter can be further divided into – *health-related expenditure*, *education-related expenditure*, and all *other personal travel expenditure*.⁴
- **Communications services** can be further disaggregated into two sub-components, *postal and courier services*, and *telecommunication services*.
- **Construction** covers work performed on construction projects and installation by employees of an enterprise in locations outside the territory of an enterprise. *Construction* is further disaggregated into *construction abroad* and *construction in the compiling economy*.
- **Insurance services** covers the provision of various types of insurance to non-residents by resident insurance enterprises, and vice versa. *Insurance services* are further subdivided into five components – *life insurance and pension funding*, *freight insurance*, *other direct insurance*, *reinsurance*, and *auxiliary services to*

³ However, correspondences cannot be established in the areas of *travel*, *construction services*, and *government services*, *n.i.e.*, which focus on the mode of consumption of goods and services, rather than on the type of product consumed.

⁴ An alternative disaggregation of travel services is included in the EBOPS' memorandum items distinguishing between *expenditure on goods*, *expenditure on accommodation and food and beverage serving services*, and *all other travel expenditure*. It allows the allocation of expenditure on services to Mode 2.

insurance. Information on *gross premiums* and *gross claims*, which may be the basis for estimating the service charge, is included in the memorandum items.

- **Financial services** covers financial intermediation and auxiliary services, provided by banks, stock exchanges, factoring enterprises, credit card enterprises, and other enterprises.
- **Computer and information services** are subdivided into *computer services* (hardware and software related services and data processing services), *news agency services* (provision of news, photographs, and feature articles to the media), and *other information provision services* (database services and web search portals).
- **Royalties and license fees** are divided into *franchises and similar rights* and *other royalties and license fees*. The former comprises international payments and receipts of franchising fees and the royalties paid for the use of registered trademarks. *Other royalties and license fees* include transactions for the authorised use of patents, copyrights, and industrial processes and designs and the use, through licenses of produced originals or prototypes (such as manuscripts and computer programs).
- The coverage of **other business services** is identical to that of BPM5 but it provides much more detail. This category includes *merchandising; other trade-related services; operational leasing services; and miscellaneous business, professional, and technical services*, including *legal services; accounting, auditing; business and management consulting and public relations services; etc.*
- **Personal, cultural, and recreational services** comprises *audiovisual and related services* and *other personal, cultural, and recreational services*. The first component includes services and fees related to the production of motion pictures, radio and television programs, and musical recordings. *Other personal, cultural, and recreational services* includes services such as those associated with museums, libraries, archives, and other cultural, sporting, and recreational activities. EBOPS provides for the production of additional information within the latter item among two separate sub-components: *education services* and *health services* that are important for trade negotiating purposes.
- **Government services, not included elsewhere (n.i.e.)**, covers all government and international organizations' transactions not contained in other EBOPS items. It can be subdivided into services transacted by *embassies and consulates*, by *military units and agencies*, and all *other* transactors. Note that GATS does not cover services supplied in the exercise of governmental authority.

For various analytical purposes, compilers may wish to aggregate service and non-service transactions to provide information on areas of particular interest or concern to users, such as all transactions relating to health care, educational, environmental or audiovisual activities. As an example, MSITS provides a suggested aggregation of transactions, the memorandum item *audiovisual transactions*, which includes services transactions that relate to audiovisual activities (audiovisual services, royalties and license fees), and also the acquisition and disposal of non-produced, non-financial assets such as patents, copyrights, trademarks and franchises. Compilation of this item is recommended for its analytical usefulness, and for its particular relevance to GATS' negotiations.

4. STATISTICS BY TRADING PARTNER

There is a need for detailed geographical allocations of the statistics on the various types of services supplied and consumed by each economy according to the country of residence of trading partners. Such statistics give a firm basis for the multilateral and bilateral trade in services negotiations, and are important for a variety of analytical purposes. For instance,

bilateral comparisons of a country's data with those of a trading partner, through the use of "mirror statistics", are an important tool for investigating and improving data quality.

One of the core recommendations of MSITS is that countries should compile statistics on international trade in services on an **individual trading partner** basis, at least at the level of services trade as a whole and the **11 main components** of the BPM5 classification of services, and where possible at the more detailed EBOPS level. However, it may be very resource-intensive and difficult for compilers to develop statistics on trade in services by trading partner. Thus, it is suggested that countries start compiling these statistics at least for **their main partners and in their most important services sectors**. It is also recommended that, to the extent possible, compilers use an identical geographical basis for all related sets of international trade in services statistics (including FATS statistics).

5. ALLOCATION OF BOP/EBOPS ITEMS TO MODES OF SUPPLY⁵

A country's exports of *computer services* may be well measured overall. However how much of these sales relate to cross-border supply (Mode 1, e.g. electronic transmission of a specific software developed in the country of the provider), and how much relate to the presence of natural persons (Mode 4, e.g. a programmer developing a specific application in the premises of the foreign customer)? MSITS acknowledges that compilers will not be able to allocate each EBOPS type of service by GATS modes of supply in the near future. As a first step, it proposes a **simplified approach**, operational in the current statistical context, for producing **approximations**. Based on the determination of the location of the supplier at the time of the service transaction, it is assumed that a given service category in the BOP accounts corresponds to only one or two **dominant** mode(s) of supply.

According to this methodology, the following EBOPS services, when exchanged between residents and non-residents, are deemed to be predominantly delivered through Mode 1 (cross-border supply): *transportation* (except *supporting and auxiliary services* to carriers in foreign ports, which should be allocated to Mode 2), *communications*, *insurance*, and *financial services*, and *royalties and license fees*. All services recorded under item *travel* (i.e. excluding goods) should be allocated to Mode 2 (consumption abroad).

The picture is more complex for the remaining commercial services, which may involve significant elements of two modes of supply: *computer and information services*; *other business services*; and *personal, cultural, and recreational services* may be delivered through Mode 1 and Mode 4; *construction services* may be provided through Mode 3 and Mode 4. **Further work is necessary** to determine an allocation of these statistics to modes of supply.

For further information...

- ☛ *general*: MSITS Chapter III
- ☛ *on BOP concepts and definitions*: BPM5, Chapters IV through VII and www.imf.org/bop
- ☛ *on the allocation of services items to modes of supply*: MSITS, Section II.D.4

⁵ Please note that Mode 3 (commercial presence) is primarily concerned with FATS. These statistics are presented in Section III. Mode 4 (presence of natural persons) is further described in Section IV.

III. FOREIGN AFFILIATES TRADE IN SERVICES STATISTICS

This section sheds light on methodological aspects of foreign affiliates trade in services statistics: firms covered, economic variables pertinent to study foreign affiliates activities and classification of data (by country and by activity and/or services product).

1. INTRODUCTION

The international delivery of a number of services requires close and continuous contact between producers and consumers, which can often only be achieved through locally established affiliates (i.e. GATS Mode 3, commercial presence). To allow the measurement of this particularly important channel of delivery⁶, MSITS recommends the implementation of the **Foreign Affiliates Trade in Services (FATS)** statistical framework. It provides guidelines for the production of indicators on the operations of both resident affiliates of foreign firms (**inward FATS**), and affiliates abroad of resident firms (**outward FATS**). Apart from providing indicators on Mode 3 trade in services, FATS statistics provide general indicators that help understand the phenomenon of globalisation⁷.

Sub-section 2 presents criteria for determining the population of foreign producers for consideration in FATS statistics as well as indications for choosing the statistical unit within that population. It also discusses the time of recording statistics. **Sub-section 3** presents the variables of most interest for economic and policy analysis, while **Sub-section 4** describes how to break down the variables in order to draw a complete picture of foreign affiliates' activities.

2. PRINCIPLES FOR RECORDING FATS STATISTICS

Principles for recording FATS statistics are in line with international statistical standards, especially those governing the measurement of foreign direct investment (FDI) within BPM5 and the *OECD Benchmark Definition of FDI*, 3rd Edition (BD3). The FDI universe is introduced in the first subsection as it enables the understanding of the universe of FATS statistics. Furthermore, FDI statistics may provide interim indicators of commercial presence for those countries that have not yet begun to compile FATS statistics.⁸

a) *The FDI universe*

FDI is the category of international investment that reflects the objective of a resident entity in one economy (the direct investor) to obtain a **lasting interest** in an enterprise resident in another economy (the direct investment enterprise). The lasting interest implies the existence of a long-term relationship between the direct investor and the enterprise, and a significant degree of influence of the investor on the management of the enterprise.

⁶ Although only fragmentary data are available, it is estimated that the value of services delivered through foreign affiliates is higher than the value of services traded on a BOP basis (See Section I.1.b).

⁷ Guidance in the OECD Handbook on Economic Globalisation Indicators (2005, Chapter III The economic activity of multinational enterprises) is fully consistent with guidelines of MSITS.

⁸ FDI statistics comprise initial investments and subsequent transactions between related enterprises. They cover direct investment financial transactions (recorded primarily on a directional basis), direct investment income (accruing to the direct investor) and direct investment positions (value of the stock of direct investment at the end of the reference period).

The **direct investment enterprise** is an incorporated or unincorporated enterprise in which a direct investor owns 10% or more of the ordinary shares or voting power (for an incorporated enterprise) or the equivalent (for an unincorporated enterprise).

Direct investors may be individuals, incorporated or unincorporated public or private enterprises, associated groups of individuals or enterprises, Governments or government agencies, or other organizations that own direct investment enterprises in economies other than those in which the direct investor resides.

b) Firms covered in FATS statistics

FATS statistics generally cover only those affiliates controlled by a foreign direct investor. For statistical purposes, the relevant population for FATS statistics comprises affiliates that are majority-owned by a single direct investor⁹ holding more than **50 % of ordinary shares or voting power**.¹⁰ Thus, the statistical population of FATS statistics is a **subset of the FDI universe**. It should be noted that FATS statistics reflect all operations of the affiliates concerned rather than being prorated according to the ownership share of the foreign parent firms.

Because FATS as used here stands for foreign affiliates trade in *services*, it might be expected that FATS statistics should cover producers of services only. However, **they cover producers of goods and services** alike. Some firms produce both goods and services, and it is only by the coverage of all producers that the activities of firms producing services as a secondary activity will be reflected in the statistics. In addition, coverage of all producers allows for the activities of services producers to be seen in the context of statistics covering all firms.

c) Statistical units

FATS statistics may be collected either at the **enterprise** (company) **level**, or at the individual business location or **establishment level**. The units employed can strongly influence the interpretation of the statistics (see example below) and either basis has its strengths and weaknesses (difficult allocation of some variables among establishments of an enterprise, different costs for data collection, etc.). As these statistics are often derived from existing statistical systems in which the units are already defined, MSITS makes no recommendation on which statistical units should be used, but recommends that FATS statistics disclose the units used in explanatory notes.

For example, suppose an enterprise has two establishments – one that provides financial services and one that provides information services. Suppose further that the financial services establishment accounts for 60 percent of the enterprise's sales, and that the information services establishment accounts for the remaining 40 percent. In establishment-level statistics, the sales would be recorded in the two industries in the proportions indicated. In enterprise-level statistics, by contrast, the entire enterprise would be classified under a single industry (financial services, if the distribution of sales were used as the basis for classification), in which case all the sales would be recorded in that industry and none in the other one. However it is more costly to collect the information from establishments than at the enterprise level.

⁹ In this respect, an associated group of investors acting in concert is considered as a single investor.

¹⁰ Some firms other than those majority-owned by a foreign investor are recognised to be of interest, either in the context of the GATS or in studies of globalisation (e.g. firms that are exactly 50-percent-owned by a foreign investor, firms in which there is collective majority ownership by multiple foreign investors). MSITS encourages compilers to provide separately identified supplemental statistics, along with appropriate explanatory notes, covering such cases of interest.

d) Time of recording

As for other economic statistics, guidelines for FATS statistics recommend that variables be measured and recorded on an **accrual basis** (i.e. in the period in which the transaction occurs rather than, for example, under the period in which the related payments are made). Flow variables, such as output and value added, should refer to a reference year, while stock variables, such as assets and net worth, should refer to the end of a reference year.

The basis should be the calendar year. However, for some countries, only fiscal or accounting year data are likely to be available. These countries are encouraged to provide explanatory notes indicating this and providing any information on the extent to which fiscal and calendar years deviate in their FATS universe.

3. ECONOMIC VARIABLES FOR FATS

A wide range of economic data or variables – operational or financial – regarding FATS may be pertinent for analytical and policy purposes. MSITS recommends that the FATS variables to be collected include at least the following basic measures of foreign affiliate activity: **sales** (turnover) and/or **output, employment, value added, exports and imports of goods and services, and number of enterprises**. A description of these measures is given in Annex III.

Although these variables constitute a basic set that can provide answers to a variety of questions, additional measures of foreign affiliate activities may prove useful in addressing specific issues. MSITS suggests that the following **additional variables** be considered for collection in a second stage by countries able to compile them: **assets, compensation of employees, net worth, net operating surplus, gross fixed capital formation, taxes on income, and research and development expenditures**.

Most of both the “basic” and the “additional” variables are drawn from 1993 SNA.

4. ATTRIBUTION (CLASSIFICATION) OF FATS VARIABLES

FATS variables may be distributed following two main breakdowns. The **geographical breakdown** indicates where the production took place, and where the owner of the producing affiliate is located. The **primary industrial activity breakdown** of the producer indicates which sector of activity is concerned. Moreover, some variables may be classified by product. The recommendations of MSITS on each of these breakdowns are given below.

a) By country

In breaking down variables by country, the issues to be addressed depend on whether the statistics are on inward FATS or outward FATS.

For **inward FATS**, the question is either to attribute the transaction to the immediate investing country or to the ultimate investing country. MSITS recommends that the country of the **ultimate beneficial owner** (UBO) of the affiliate be the primary basis of the geographical breakdown. The country of the UBO is the country that ultimately owns or controls – and that derives the primary benefits from owning or controlling – the affiliate. For example, if a French company indirectly owns an affiliate in Russia, through its wholly owned subsidiary in the Netherlands, then in inward FATS statistics compiled by Russia, France should be the owner country. However, considering that information on immediate owners (or “first foreign parents”) may be available as a by-product of FDI data, and to facilitate comparisons with those data, MSITS encourages countries to also compile data broken down according to the country of the immediate owners.

For **outward FATS**, there are two options. The variables could be attributed to the country of location of the affiliate (**immediate host country**) or – if the ownership is through a directly

held affiliate located in another country – to the country of that affiliate (**ultimate host country**). MSITS recommends attributing them to the country of the affiliate whose operations are described by the variables.¹¹ This treatment is indeed the most relevant for revealing the country of location of the affiliate in which the direct investor’s commercial presence exists. For example, if a British company owned an affiliate in the United States through a holding company located in Bermuda, then in British outward FATS statistics the affiliate should be classified in the United States rather than in Bermuda.

b) By activity (industry) and by services product

All FATS variables should be allocated to the **industrial activities of the producers**. MSITS provides an activity classification for FATS variables drawn from the International Standard Industrial Classification of All Economic Activities, Revision 3 (ISIC Rev.3). This classification, termed **ISIC Categories for Foreign Affiliates (ICFA)** is shown in Annex IV. The categories provided in ICFA cover all economic activities with more detail for services.

The data recorded against any given ICFA category must be interpreted as an **indication of the principal activity** of firms rather than as a precise measure of the activity itself. The industry where a given firm is classified only reflects the most important activity carried out. For example, computer services may be provided not only by firms classified in the computer services industry but also by firms classified in computer manufacturing and computer wholesale trading. Similarly (though in reality less commonly), computer services firms may engage in manufacturing or wholesale trade as secondary activities. Statistics shown for the activity “computer services” would thus misstate the value of the activity, both by excluding the computer services provided by manufacturers and wholesale traders and by including the manufacturing and wholesale trade activities of computer services firms.

For this reason, as well as because of differences in the classifications themselves, the extent to which data on resident/non-resident trade classified according to **EBOPS can be aligned with data on FATS variables classified according to ICFA** is inherently limited. Nonetheless, a correspondence between the two bases of classification (provided in MSITS) may be useful for some purposes, especially in sectors where firms are specialised and do not tend to have significant secondary activities. For example, if legal services were performed only by law firms and law firms tended to perform legal services alone, then sales recorded under the activity “legal services” would correspond closely to sales of legal services, as they would be recorded under a product classification.

Although MSITS recommends as a first priority to breakdown FATS statistics by activity, it encourages countries, as a **longer term goal**, to work towards breaking down a number of variables such as sales, exports and imports, by types of services produced and sold.¹² Data on a product basis would allow the identification of specific types of services delivered through commercial presence. Any product detail for FATS that is available or can be developed should be broken down on a **basis compatible with EBOPS**. If this level of specificity cannot be achieved, countries may wish to disaggregate sales in each industry as between sales of goods and sales of services, as a first step toward a product breakdown.

For further information

☛ *General:*

- MSITS, Chapter IV;
- OECD Handbook on Economic Globalisation Indicators, Chapter III;

☛ *FDI definitions:* OECD Benchmark Definition of Foreign Direct Investment, 3rd Edition and BPM5 (www.imf.org)

¹¹ It should be noted that FDI transactions recorded in the BOP framework are attributed to the immediate host country, which is appropriate for tracking financial flows and positions.

¹² Other variables such as value added and employment cannot be classified by product.

IV. THE PRESENCE OF NATURAL PERSONS

From this section, readers will gain knowledge of the major issues relating to the definition of Mode 4 supply of services (presence of natural persons) and how these relate to statistics. This section also sheds light on the extent to which existing data may be used as indicators on Mode 4.

1. INTRODUCTION

MSITS recognises that a comprehensive statistical framework for the measurement of Mode 4 still needs to be developed. As a first step an annex on the movement of natural persons (MSITS' Annex) was included in the manual. Progress has been made since MSITS was prepared, but in some instances it may be difficult to define the coverage of Mode 4 delivery of services (**Sub-section 2**). **Sub-section 3** examines statistical sources which could be used to help assess this mode of supply and also presents possible ways for improving its measurement.

2. THE PRESENCE OF NATURAL PERSONS IN GATS

GATS does not provide a precise definition of Mode 4 which could be immediately used for statistical purposes. Mode 4 is generally described in terms of purpose of stay and duration: the supplier gains temporary entry in the context of the supply of a service under GATS, whether he is directly involved in the production/delivery of the service or indirectly (e.g. working for a foreign affiliate, marketing, selling).

a) Mode 4 service suppliers

GATS qualifies Mode 4 trade in services as being “the supply of a service ... by a service supplier of one Member, through **presence** of natural persons of a Member in the territory of any other Member”. Mode 4 can in general be described as covering foreign natural persons entering the host economy to:

- (i) fulfil directly service contracts (contractual service suppliers); this covers **self-employed persons** (independent professionals) or **employees of a foreign service supplier**;¹³
- (ii) work in a foreign affiliate that delivers services (**intra-corporate transfer** or **directly recruited by the affiliate**); or
- (iii) negotiate a service contract (**services sellers**), negotiate the constitution/acquisition of an establishment supplying services (**persons responsible for setting up commercial presence**), market a service etc.

Mode 4 is therefore not limited to foreign persons directly involved in the rendering of services (which in general would be measured as trade in services in the balance of payments) but also concerns those whose presence abroad is instrumental to the provision of a service.

However it may be difficult to define the coverage with respect to the supply of services under Mode 4 as for instance:

- the difference between a service contract and an employment contract may be difficult to establish, in particular for independent service suppliers;

¹³ Some self-employed persons may also establish themselves in the host market and supply services from within this territory: although a mode 4 commitment guarantees the right for this person to be present in this territory, it is considered that the supply of the service is carried out through a commercial presence.

- it is not always easy to determine what constitutes a service: for example, fruit-pickers could be viewed as temporary agricultural labourers (outside the scope of Mode 4) or as suppliers of fruit-picking services; or
- although Mode 4 applies to service suppliers whatever their skills, at the time of writing many WTO members' commitments are generally focusing on highly-skilled workers.

b) “Temporary”: a key issue in the measurement of Mode 4

The GATS *Annex on Movement of Natural Persons Supplying Services Under the Agreement* (GATS Annex) specifies the **temporary** nature of the presence: measures regarding citizenship, migration, residence and employment on a permanent basis are excluded from the Agreement. In addition GATS does "not apply to measures affecting natural persons seeking access to the employment market of a Member". Under Mode 4, the natural person gains entry to perform a task with respect to the supply of a service; when the task has been performed, the natural person should leave the economy.

Although GATS does not define temporary presence in terms of a specific duration of stay, in practice this is done in Member's schedules of commitments. The maximum length of stay related to Mode 4 indicated in schedules varies between about three months for services sellers/persons responsible for setting up commercial presence, up to between two to five years for intra-corporate transferees.

Within international statistical standards (BPM5, 1993 SNA and UN *Recommendations on Statistics of International Migration, Revision 1*), the distinction between temporary and permanent presence is generally determined by the **one-year rule**, which distinguishes residents of an economy from non-residents. MSITS' Annex notes the divergence between the definition given to “temporary” by statistical standards and GATS and concludes that available statistical information on economic activities of residents (i.e. more than one year) also contains elements related to the temporary presence in the GATS sense.

c) Mode 4 and relations to statistical classifications

MSITS' Annex stresses the relevance of a number of existing international classifications for GATS negotiations and for measuring mode 4: **CPC** (which is also relevant for other modes of supply); the ILO International Standard Classification of Occupations (**ISCO**) distinguishing between the different categories of employment; **ISIC** which could be relevant in the context of lack of statistical information on the distribution of foreign employment according to occupation; the International Classification of Status in Employment (**ICSE**) relevant for instance to identify self-employed service suppliers which are often subject to GATS-specific commitments.

3. STATISTICS FOR MEASURING MODE 4

Various indicators are of interest for assessing Mode 4. Most of them relate to the different types of presence of natural persons identified in previous sections. These indicators concern the value of services traded or the number and types of persons moving across borders. Box IV.1 provides a picture of how different types of service supply through the movement of natural persons can be linked to existing statistical areas. As will be shown below, useful indicators to measure Mode 4 are often readily available, but for a much wider population. The **major difficulty** in the measurement of Mode 4 lies in the **identification of the subset** of services and workers that should be measured.

Box IV.1: Different types of Mode 4 presence, viewpoint of the recipient country

Categories	Statistical coverage: services value	Statistical coverage: number of natural persons
I. Service contracts, delivered in the host country by foreign supplier, or its employee(s) entering the host economy to supply a service	BOP service transactions between resident and non-residents, major BPM5 services components	Tourism and migration statistics (non-migrants) on <i>business travellers</i> ; adjustments for category of persons, duration (more than one year), type of service.
II. Employment contracts (non-permanent), for foreigners in all domestic firms (not of interest for assessing Mode 4).	BOP: compensation of employees and workers' remittances; adjustments for sectoral breakdown and duration	Migration statistics for short- and long-term migrants; adjustments for category of persons, duration, sectoral breakdown
(a) of which in foreign-owned or controlled resident services companies (intra-corporate transferees and direct recruitments of foreigners by foreign affiliate)	irrelevant: services are supplied through mode 3: commercial presence	A subset of the above; for instance could be derived using the FATS register; adjustments for duration, sectoral breakdown
III. Service selling (attempting to establish contractual relationships for a service contract) and setting up commercial presence	irrelevant: no service is traded at this stage	Tourism and migration statistics (non-migrants) on <i>business travellers</i> ; adjustments for category of persons, duration (more than one year), type of service.

a) Value of mode 4 trade: included in BOP statistics on trade in services

Estimating the value of Mode 4 trade in services is only relevant for the category I identified in Box IV.1, i.e. self-employed service suppliers or employees of a foreign service supplier entering the host economy of the client to produce/provide directly a service. For intra-corporate transferees and foreign persons directly employed by the foreign affiliate (category II (a)), the supply of the service takes place through mode 3 (the mode 4 movement is instrumental to the supply of the service through commercial presence). There is no trade in economic terms (at least initially) for services sellers/persons responsible for the establishment of commercial presence (category III).

The value of Mode 4 trade in services is almost entirely captured (together with Mode 1 and Mode 2) within the *services* components in BPM5/EBOPS which covers transactions relating to international service contracts.¹⁴ The BPM5/EBOPS services items that are thought to include **significant elements** of Mode 4 are **computer and information services; other business services; personal, cultural and recreational services; and construction**. The allocation of BPM5/EBOPS items to modes of supply (see Section II.5) will provide a satisfactory measurement of the value of Mode 4 trade in services, but is currently not a priority when compared to other possible improvements in the measurement of trade in services.

BOP labour-related flows (i.e. *compensation of employees* and *workers' remittances*) provide interesting **information on the income flows originating from general (temporary or indefinite) movements** of persons or migration, of which labour mobility. However, unlike BPM5/EBOPS services indicators, (i) labour-related flows do not measure trade flows

¹⁴ For more information on the allocation of BOP/EBOPS items to modes of supply see Section II.5. These statistics will not cover self-employed service suppliers staying (or intending to stay) more than 12 months in the host economy, as they will become residents of this economy and the transactions corresponding to the services contracts will no longer be international transactions. However, compiling countries for which the category of self-employed persons established in an economy other than their own is believed an important share of the mode 4 population, may wish to develop estimates of the value of services sales/output of these self-employed service suppliers.

(transactions) as specified in international service contracts between service suppliers and consumers (see above); and (ii) the universe of persons covered with respect to labour-related flows generally largely differs from the universe of persons involved in Mode 4 service trade.

b) Number of persons moving in the context of mode 4: Tourism and migration statistics

Tourism and migration/labour statistics partly respond to the needs identified for **measuring the number of persons moving under mode 4**. Adjustments in related statistical concepts (e.g. duration of stay, categories of migrants and non-migrants) could be very helpful to respond to trade policy needs.¹⁵ Elements related to the presence of natural persons are identified in the *International Recommendations for Tourism Statistics*, *Tourism Satellite Accounts: Recommended Methodological Framework* and *Recommendations on Statistics of International Migration, Revision 1*, which include, for example, persons travelling for business purposes.¹⁶ More specifically, these frameworks could be used as follows:

- within tourism and migration (non-migrants) statistics, separately identify business travellers/visitors travelling for business purposes, and further breakdown this information by category of persons, except for intra-corporate transferees and foreigners directly recruited by foreign affiliates which are generally not covered by these statistics; and
- within migration statistics, short- and long-term migrant categories, separately identify intra-corporate transferees and foreigners directly recruited by foreign affiliates. Indicators on mode 4 movements related to mode 3 trade could also be obtained from the FATS statistical framework. A significant number of current commitments taken on Mode 4 concern directly intra-corporate transferees (their right to move facilitates the provision of services through mode 3) and it could prove useful to identify separately foreign non-permanent employment in appropriate statistics.

For a more accurate measurement, extensions in terms of duration of stay should be envisaged. If possible information collected through these statistical frameworks should be broken down according to: the type of service supplied; the activity of the enterprise employing the person or the activity performed by the self-employed; the occupation/skills of the persons moving; the length of stay in the host economy; and the economy of origin/destination of trade and persons.

For further information...

- ☛ *general*: MSITS Section II.4.(d) and Annex I
- ☛ *on recent developments*: Measuring Mode 4 Trade Flows, WTO staff working paper (WTO), http://www.wto.org/english/res_e/reser_e/ersd200805_e.htm
- ☛ *on existing labour and migration statistics and classifications*: ILO International Labour Migration Database, www.ilo.org

¹⁵ It is currently unlikely that trade policy needs be duly taken into account in migration statistics in the short-term.

¹⁶ In practice, the coverage of countries' migration statistics might differ to some extent from international recommendations, such as the use of longer periods (i.e. than the one year guideline) as the borderline between short-term and long-term migration.

V. DATA SOURCES

Throughout this section, readers will learn about main systems and sources statisticians use to produce trade in services statistics. They will gain knowledge of comparability issues between country's balance of payments statistics, and how these may be addressed through effective co-operation. This section also introduces international initiatives for assessing the quality of statistics.

1. INTRODUCTION

BOP and FATS statistics may be collected using a wide range of sources. The ways the data are collected and compiled differ among BOP items or between inward and outward FATS, within and between countries. **Sub-section 2** below reviews the sources most commonly used for the collection of BOP services statistics and **Sub-section 3** describes the two major collection systems for FATS statistics. Finally **Section 4** tackles the issue of asymmetries of statistics and presents a number of major initiatives aimed at improving the quality of statistics.

2. MAIN DATA SOURCES FOR BOP STATISTICS

A number of sources exist for the collection of statistics on services transactions between residents and non-residents, of which two are generally used as a backbone of the BOP collection system: International Transactions Reporting System (ITRS) and enterprise surveys. Other existing sources are used to complement one (or a combination) of these two systems.

a) *International Transactions Reporting System*

An ITRS is a collection system in which **international payments channelled through domestic banks** are reported to the BOP compiler together with indications on the specific services for which the payments are made. Generally, domestic banks act as intermediaries in such a collection system, by reporting their customers' international settlements. This indirect reporting is often supplemented by a direct reporting of transactions settled outside the domestic banking system (e.g. via accounts held abroad by residents) or transactions for which only net payments are made, such as those taking place in clearing/netting schemes.¹⁷

An ITRS provides comprehensive and timely BOP statistics, involving a relatively small number of reporters. However, it somewhat deviates from the BPM5 recommendation that transactions should be measured when services are rendered rather than when payments are made (although both periods generally correspond in the case of services). It may also be difficult for the reporter to determine the exact type of service traded, which sometimes causes misclassification.

b) *Enterprise surveys*

Enterprise surveys may form the basis of the collection of service transactions between residents and non-residents. In such cases, statistics on international trade in services are often collected on the basis of a range of surveys addressed to representative samples of

¹⁷ In such systems, a clearing house enables participants to settle reciprocal claims/liabilities that arose during a specific period of time by making net payments in the end of the period (e.g. payments between air transport companies made through the International Air Transport Association (IATA)).

international transactors. Some surveys inquire on all the international transactions of the enterprises, and others address specific services items.

There is no theoretical limitation to the use of enterprise surveys in collecting statistics on international trade in services. The quality of statistics obtained from surveys depends on the appropriateness of the techniques used to design samples, to prepare questionnaires and to process the results, and also depends on the quality of the business register. The latter should be kept up to date and be sufficiently documented to enable an appropriate identification of each survey's target population.

c) Combining ITRS and enterprise surveys

Some countries, such as the United States or the United Kingdom, operate only a system based on enterprise surveys without making use of an ITRS at all. But in many cases, countries operate **a combination** of ITRS and enterprise surveys to collect BOP statistics. Such systems can take multiple forms, which **may range from a limited use of surveys complementing a system based primarily on ITRS, to the opposite**. For instance, the French BOP collection system currently makes an extensive use of an ITRS, but complements this information with a “direct reporting” of BOP by “big players”, that is, main enterprises involved in international transactions. A different example is that of the Netherlands, where the BOP collection system changed recently from an ITRS to a survey-based system. In the new system however, a remnant of ITRS based on a simplified bank reporting was maintained to permit the identification of enterprises carrying out international transactions.

While systems mainly based on ITRS are generally under the responsibility of the national central bank, those using surveys as a main source are often operated by national statistical institutes. Whichever organization is responsible, close co-operation between these two institutions is of particular relevance especially when both sources are to be combined.

d) Other sources of information

Other sources may complement the information collected from ITRS and/or enterprise surveys for a more accurate measurement of residents' international transactions. A typical area of services within BOP that uses supplementary sources is the *travel* item. Many countries retrieve additional information on (incoming and outgoing) visitors' expenditures from surveys conducted in the framework of migration and tourism statistics. Other sources, such as household expenditure surveys (e.g., to arrive at weights for consumer price indices) can also provide useful information on residents' expenditures abroad.

Other data on international trade in services may also be available from **official sources** (government and monetary authorities). In some countries, efficient co-operation with government units enables the BOP compiler to retrieve some statistics on a range of services transactions. Not only information on **governments' transactions** can be used as an input for the compilation of the item *government services n.i.e.*, it may also be useful for other services-related activities, such as airport departure tax collected from non-residents (*travel*), landing and stevedoring charges collected by government authorities (*transportation*). Furthermore official sector institutions are often able to provide data as a **by-product of their various functions**. A typical area of interest for international trade in services is data that may be maintained by governments on education and health services provided to or by non-residents (*travel; personal, cultural and recreational services*).

Information obtained from **partner countries** is useful when data is not available within a country and also to validate and improve statistics of the compiling country. As discrepancies are identified and explained, compilers can improve the quality of their BOP statistics (see Section V.4). Data from international organizations are useful for aid recipient countries to compile data on technical assistance services.

3. DATA COLLECTION SYSTEMS FOR FATS STATISTICS

a) *Key features for the collection of FATS statistics*

The FATS universe refers to two populations that compilers must approach in different ways. Domestic affiliates of foreign enterprises are to be surveyed directly on their activity (**inward FATS**), whereas activities of foreign enterprises that are majority-owned by domestic firms are (indirectly) measured by addressing the resident parent enterprise (**outward FATS**).

Inward and outward FATS statistics may be collected on the basis of, at various extents, several existing sources and statistics. In particular, there are likely to be links to existing data on FDI, especially for determining the FATS target population. The register used for collecting FDI data should enable the compiler to identify or approximate the portion of majority owned affiliates of the FDI universe. It should also provide information useful for the geographical allocation of FATS data (residence of foreign owners and foreign affiliates).

There are two basic approaches – not mutually exclusive – for developing FATS statistics:

- The first is to design **surveys with the aim of collecting FATS data** on operations of resident affiliates of foreign firms and of foreign affiliates of domestic firms. It may be considered to design **new surveys on FATS** or **add key FATS variables** to existing surveys on FDI. Making such a choice requires balancing costs and benefits of each approach. It is however commonly thought that separate FATS surveys would be preferable to avoid increasing the response burden on enterprises not concerned by foreign majority ownership and also because FDI surveys are in general conducted quarterly and require a quick turnaround. Whatever the approach chosen, surveys on FATS should strive to collect key FATS variables at the greatest possible detail of the ICFA classification, which may also raise concerns about resource availability and response burden.
- The second, which can be used only for inward FATS, **identifies the subset of existing statistics on resident enterprises referring to majority-owned foreign affiliates**. Most countries indeed conduct surveys of resident enterprises that comprise variables such as employment, turnover (may also be available broken down by product) or value added, on the basis of a detailed classification of activities. Among the data collected, FATS statistics could be obtained as an aggregation of variables across the foreign-owned population of resident enterprises.

One of the main challenges for this statistical domain stems from the fact that the collection and definition of these statistics may draw on expertise and responsibilities that are scattered among multiple institutions, such as central banks, national statistical offices and various ministries. As it is the case for BOP statistics, close co-operation among the different institutions involved is necessary for compiling FATS statistics.

b) *Examples of country practices*

Various options can be combined for the compilation of inward and outward FATS statistics. As an example, the United States and most EU countries that compile outward FATS data collect both inward and outward FATS statistics on the basis of **FDI surveys**. Belgium uses FDI surveys for outward FATS but compiles inward FATS data on the basis of statistics collected on domestic enterprises. **Many countries compile only inward FATS**: when this is the case (e.g. Czech Republic) they tend to use **existing business statistics**. Sweden produces both inward and outward FATS statistics on the basis of a specific separate survey.

4. DATA COMPARABILITY AND RELIABILITY

While **means** of compiling trade in services statistics (BOP or FATS) are various, these generally strive to produce data complying with agreed concepts and definitions described in international guidelines (e.g. MSITS and BPM5). In this respect, each national system – made up of a unique combination of collection and compilation processes – bears its strengths and weaknesses. The quality of results obtained differs widely among countries, none providing a perfect picture of the reality. For instance wide discrepancies may be observed when comparing countries' statistics with data from partner countries.

a) *BOP asymmetries*

In theory when looking at bilateral statistics, imports reported by a country from a partner country should equal the corresponding reported exports of this partner ("mirror imports"). In practice, this is only exceptionally the case: the discrepancy observed between two countries' respective imports and exports are referred to as bilateral **asymmetries**. Asymmetries concern also trade flows between more than two countries, and are often monitored at the level of specific economic zones or at the global level (aggregate exports of all countries of the world should equal corresponding aggregate imports).

In its 2007 report, the IMF Committee on BOP presented the situation of global imbalances (world asymmetries) covering the period of 1996 to 2002. As regards *total services* (i.e. including government services), the 2007 report shows that credits (exports) have been higher than debits (imports) since 2003, the positive imbalance (asymmetry) being USD 106 billion in 2006 (1.9% of gross services flows, i.e. exports + imports). Between 1996 and 2002 the imbalance was negative. However, in the case of more disaggregated figures by services components and/or partners (the ones trade negotiators may be more interested in) much larger discrepancies can emerge (e.g in 2006 for other commercial services the discrepancy is USD 209 billion).

Many **factors** contribute to the occurrence of such asymmetries: misallocation, implementation of different thresholds for recording transactions, different times of recording, difficult geographical identification of the counterpart, etc.¹⁸

To **address problems of asymmetries**, a number of regional and bilateral initiatives have risen that seek to reconcile statistics. In the standard procedure (termed "bottom-up"), groups of two or more countries scrutinise the main asymmetries to find their origin and take appropriate actions. As an illustration, such an exercise is regularly being performed between Canada and the United States: for a number of BOP items, these countries substitute each other's bilateral flows (deemed to be more reliable) for the data originally compiled. Another approach is also currently being tested at the level of the European Union (EU): the "top-down" method consists in building a mathematical model that distributes and eliminates intra-EU asymmetries on the basis of methodological information provided by each member state.

b) *IMF initiatives related to data quality*

In order to assess data quality, the IMF has launched two initiatives which are followed by an increasing number of countries and should foster a general improvement of statistics: the Special Data Dissemination Standard (SDDS) and the General Data Dissemination System (GDDS).

SDDS identifies **best practices** in the dissemination of economic and financial data in four areas: data coverage, periodicity and timeliness; public access to the data; integrity of the data; and data quality. In this context, quality refers to characteristics such as accuracy,

¹⁸ It is also to be mentioned that, although rare, some transactions are inherently asymmetric, such as *merchandising* services.

adherence to international statistical guidelines, and consistency. SDDS concerns countries having or seeking access to international capital markets, and prescribes specific standards that **must** be observed by countries at the time they subscribe.

On the other hand, participation to **GDSS** is open to all IMF members. The approach adopted with respect to data quality is similar to the one adopted for SDDS, but is **less prescriptive** and places more emphasis on improving data quality over the **long run**.

For further information...

- ☛ *on the compilation of BOP statistics:* IMF BOP Compilation Guide (www.imf.org/bop).
- ☛ *on the compilation of FATS statistics:*
 - MSITS section G of Chapter IV
 - OECD Handbook on Economic Globalisation Indicators, Chapter III;
 - Eurostat Recommendations Manual on the Production of Foreign Affiliates Statistics.
- ☛ *on asymmetries:*
 - Asymmetries in EU Current Account data, Eurostat Working Papers and Studies;
 - Bilateral flows and asymmetries, OECD
- ☛ *on SDDS and GDSS:* IMF Dissemination Standards Bulletin Board. (www.imf.org)

VI. DATA AVAILABILITY AND DISSEMINATION BY INTERNATIONAL ORGANIZATIONS

International and regional organizations collect and disseminate trade in services and foreign affiliates trade in services statistics. In this section readers are given information on data availability and dissemination: the type of indicators and breakdown published, the number of countries reporting, and the mode of dissemination of data.

1. INTRODUCTION

An essential element of the quality of BOP and FATS statistics is the **public access to the data**. International and regional organizations collect and disseminate trade in services statistics compiled by individual countries, which enables users to have an immediate access to a wide range of data and also allows the dissemination of statistics that are internationally comparable. Moreover, international and regional organizations encourage national compilers to produce statistics at the highest useful level of detail. The following Sections review the type of trade in services indicators and breakdowns disseminated. **Sub-section 2** focuses on the availability and international dissemination of BOP trade in services statistics **Sub-section 3** examines FATS and FDI data.

2. BOP TRADE IN SERVICES DATA AVAILABILITY AND DISSEMINATION

a) BOP/EBOPS trade in services data

BOP trade in services data collection is relatively well established and widespread according to the principles and framework of BPM5. Annex V gives an overview of the number of countries that report components and supplementary items of BPM5, as of December 2008. Between 145 and 160 countries reported export data for *transport, travel, communications services, insurance services, and other business services*; and between 95 and 130 countries reported export data for *construction, financial services, computer and information services, and royalties and licence fees*.

Table VI.1: Countries reporting exports of selected BPM5 services components
(as a percentage of countries reporting total services)

	Reporting countries in October 97 %	Reporting countries in December 08 %
Communications services	39	90
Construction services	21	58
Insurance services	61	87
Financial services	26	68
Computer and information services	11	66
Royalties and licence fees	32	59
Other business services	92	91
Miscellaneous business, professional and technical services	44	76
Legal, accounting, management, consulting, public relations serv.	8	43
Advertising, market research and public opinion polling services	10	38
Research and development services	7	25
Architectural, engineering and other technical services	8	30
Agricultural, mining and on-site processing services	4	24
Other services	28	61
Personal, cultural and recreational services	14	59

Sources: WTO (October 1997) and IMF monthly CD-ROM on BOP statistics (December 2008).

Table VI.1 shows the recent developments with respect to export statistics of a number of BPM5 major services components. For most of the components, the number of reporting countries has more than doubled between October 1997 and December 2008. For example, in December 2008, 68% of countries reporting total *services* exports also reported exports of *financial services*, compared to only 26% in October 1997. When looking at more detailed services items, for instance the breakdown of *miscellaneous business, professional and technical services*, the number of countries reporting this breakdown, although lower than those reporting BPM5 standard items, has also significantly increased.¹⁹ Concerning services items according to EBOPS, according to the information available, the number of countries able to provide trade in services data according to part or all of this classification is increasing (up to 60-70 reporters for a number of items, 100 for telecommunications).

An increasing number of countries are also breaking down their BOP/EBOPS trade in services statistics by partner country (approximately 50 economies, mainly EU and/or OECD but also non-OECD economies such as Singapore, Hong Kong, China or the Russian Federation). The degree of partner detail varies widely across reporters, services sectors and years. For instance some countries only report partner detail for a particular year by detailed type of business services (Israel) or by type of service for numerous years for their most important partners (Belarus, Bangladesh, Bhutan, Swaziland, Ukraine). Some other countries report partner detail only for travel (Mexico, Morocco, Tunisia, Turkey), while other countries report very detailed partner information, such as EU member/candidate countries. However the status is difficult to establish as not all countries report their available partner detail to international organizations. This is particularly true for the item travel, where many countries have the information but do not disseminate it.

b) International dissemination of BOP statistics

As may be seen in Table VI.2 below, which summarises the dissemination of statistics by international organizations, **Eurostat, the OECD, the IMF and the UN currently collect and disseminate BOP data by type of service** for their respective member countries (Eurostat is also responsible for information concerning EU candidate countries). Additional general BOP items are also collected and disseminated by these organizations. They use the IMF's internationally agreed BOP coding system that facilitates common reporting of data.

Table VI.2 Summary of BOP trade in services data dissemination by international organizations

Publication	Country coverage	By type of service	By partner country
<i>IMF Balance of Payments Statistics Database</i> (book and CD-ROM) – also available from ITC's <i>Trade Map</i>	IMF members	BPM5 and EBOPS (provided to IMF on voluntary basis)	No
<i>Eurostat New Cronos Database</i> (on-line and CD-ROM)	EU members, total EU, euro area, EU candidate countries	EBOPS	Up to 115 partner economies and regions (270 for total services)
<i>OECD Statistics on International Trade in Services Volume 1 Detailed Tables by Service Category and Volume 2 Detailed Tables by Partner Country</i> (book, on-line and CD-ROM)	OECD members; Hong Kong and Russian Federation for partner detail	EBOPS (and additional detail)	Up to 115 partner economies and regions (270 for total services)
<i>UN ServiceTrade database</i> (on-line)	190 economies (around 40 with partner detail)	EBOPS	Up to 115 partner economies and regions (270 for total services)
<i>WTO's International Trade Statistics</i> (book, on-line and CD-ROM)	All economies	Summary data and analysis	Summary data and analysis

¹⁹ BPM5 supplementary items are reported on a voluntary basis by countries. These items are present in the IMF BOP questionnaire mainly due to the fact that they are part of EBOPS.

With respect to **geographical breakdown**, Eurostat and the OECD collect and disseminate data broken down by partner country for their members (the OECD publication also contains data for Hong Kong and the Russian Federation as reporters). The UN also recently began publishing trade in services data, as part of its worldwide collection of data broken down geographically. These data sets make it possible to partially estimate non-reporting countries' exports and imports of services by partner on the basis of bilateral ("mirror") data.

3. COMMERCIAL PRESENCE: INFORMATION AVAILABLE

Compared with trade in services in BOP, FATS statistics are at an earlier stage of development. Nevertheless, their collection and dissemination are taking an increasing importance **at Eurostat, the OECD and the UNCTAD**, fuelled by the growth in national activity in this area. When countries do not yet collect FATS data, FDI statistics can provide a useful indicator of commercial presence.²⁰ The international and regional organizations are working together to co-ordinate data collection, to improve consistency of data, to avoid duplication of effort and to reduce reporting burdens on countries.

a) *Availability and dissemination of FATS statistics*

Eurostat and the OECD use FATS questionnaires inquiring their member countries both inward and outward FATS information, by activity (40-50 services categories of the ISIC Rev.3 classification) and by country of origin/destination of investment. Table VI.3, derived from OECD and Eurostat (2008) with additional information available to WTO, shows the relatively good coverage of inward FATS statistics compared to the outward situation which is due to the difficulty for national agencies to collect statistics on operations performed outside the country territory or jurisdiction.²¹

Many countries cannot provide all requested data. The results of these surveys are published in *Measuring Globalisation: The Role of Multinationals in OECD Economies, Volume II: Services*. Eurostat has also several publications in the Statistics in Focus series, and publishes available FATS statistics in the reference database New Cronos. These data are provided to UNCTAD that also collects data on FDI (see below) and conducts a direct survey of multinationals. The UNCTAD publishes combined results including estimates in the *World Investment Report*.

b) *FDI statistics as an alternative*

The state of implementation regarding the collection of FDI statistics by activity of the ISIC Rev.3 and by origin and destination is well described in periodic reports on the joint OECD/IMF Survey of Implementation of Methodological Standards for Direct Investment (SIMSDI). The report of the 2001 SIMSDI update showed a significant improvement of data availability for the 61 countries²² which participated in the update exercise. 53 collect data on inward flows with geographic breakdowns (43 countries for outward flows) and 49 collect inward flows with an activity breakdown (36 for outward flows). Corresponding figures for FDI income flows and FDI positions are lower. More than 90 percent of OECD countries were able to provide geographic disaggregations of FDI financial flows and disaggregations by economic activity were almost as commonly available. Around 80 per cent of non-OECD countries participating in the update exercise were also able to provide geographic and activity disaggregations.

²⁰ See Section III.

²¹ It should be noted that FATS figures, at the detailed activity/geographical breakdown level, are not disseminated due to the requirement in most countries to protect the confidentiality of individual firms' data (e.g. when it only concerns a small number of firms or when a small number of firms account for a significant part (e.g. 75%) of the figure).

²² 30 OECD members + 31 of the 84 non-OECD countries participating in the 1997 SIMSDI.

Table VI.3: Availability of inward and outward FATS statistics in OECD countries

	Inward			Outward		
	Number of employees	Turnover/output	Value added	Number of employees	Turnover/output	Value added
Australia	X		X	X	X	
Austria	X	X	X	X	X	
Belgium	X	X		X	X	
Bulgaria	X	X	X			
Canada				X	X	
Cyprus	X	X	X			
Czech Republic	X	X	X		X	
Denmark	X	X	X			
Estonia	X	X	X			
Finland	X	X	X	X	X	
France	X	X	X		X	
Germany	X	X		X	X	
Greece	X	X		X	X	
Hong Kong, China	X	X	X			
Hungary	X	X	X	X	X	
Ireland	X	X	X			
Israel	X	X	X		X	
Italy	X	X	X		X	
Japan	X	X	X	X	X	X
Latvia	X	X	X			
Lithuania	X	X	X			
Luxembourg	X	X				
Netherlands	X	X	X			
New Zealand	X	X				
Norway	X	X	X			
Poland	X	X				
Portugal	X	X	X	X	X	X
Romania	X	X	X			
Slovak Republic	X	X	X		X	
Slovenia	X	X	X			
Spain	X	X	X			
Sweden	X	X	X	X		
Switzerland	X			X		
Trinidad and Tobago		X				
United Kingdom	X	X	X			
United States	X	X	X	X	X	X

Source: OECD and Eurostat (2008) and national sources.

The **main collectors and disseminators of FDI data are Eurostat, the IMF, the OECD, and the UNCTAD**. Eurostat and the OECD use a common questionnaire to collect FDI inward and outward stocks, flows and income data, broken down by industry and by country of origin or destination. The IMF collects FDI positions, flows and income according to the components set out in BPM5, but without any industry and partner country breakdowns. Data can be found in Eurostat's New Cronos reference database, the OECD's *International Direct Investment Statistics*, the IMF's *Balance of Payments Statistics* and UNCTAD's *Foreign Direct Investment Database*.

For further information...

☛ *on publication of BOP based trade in services statistics:*

- IMF Balance of Payments Statistics Database
- Eurostat New Cronos Database
- OECD Statistics on International Trade in Services, 2 volumes
- UN ServiceTrade database (unstats.un.org/unsd/ServiceTrade/default.aspx)
- WTO's International Trade Statistics (www.wto.org/English/res_e/statis_e/statis_e.htm)

☛ *on publication of FATS based statistics:*

- Measuring Globalisation: The Role of Multinationals in OECD Economies, Volume II: Services
- Eurostat Statistics in Focus series and New Cronos Database
- UNCTAD World Investment Report

☛ *on publication of FDI statistics:*

- IMF Balance of Payments Statistics Database
- Eurostat New Cronos Database
- OECD International Direct Investment Statistics
- UNCTAD Foreign Direct Investment Database

VII. CURRENT STATE AND PROSPECTS

This section shows how the promotion and assistance in the implementation of the Manual on Statistics of International Trade in Services recommendations takes place. It reviews the progress made in terms of quantity and quality of statistics on trade in services and on activities of foreign affiliates in the services sector. It also informs on improvements needed and future work.

1. INTRODUCTION

International and regional organizations have been very active in the area of trade in services statistics over the past years. The Interagency Task Force on Statistics of International Trade in Services²³ (Task Force) developed the MSITS, which was completed in 2002. The tasks of the group are multiple and concentrate in the short term on the **promotion - and assistance in the implementation - of MSITS**, which is a first step towards the MSITS' phased implementation (**Sub-section 2**). Some results achieved to date in the measurement of trade in services, as well as ongoing work are reviewed in **Sub-section 3**. To conclude, **Sub-section 4** examines areas where improvements are necessary and medium-term plans of the Task Force.

2. THE PHASED APPROACH OF MSITS TO IMPLEMENTATION

MSITS proposes a phased approach to the implementation of its recommendations so that countries, including those that are starting to develop statistics on international trade in services, can gradually structure the available information in line with this new international standard framework. This **phased approach is reflected in a set of ten recommended elements**, of which the first five are designated as core elements. Their sequence takes into account the relative ease that many compilers may find in their implementation. However, the order is quite flexible, so that countries can meet the priority needs of their own institutions.

The implementation of the **core elements** would provide a basis for internationally comparable basic data sets. These core elements are:

- the implementation of BPM5 recommendations on service transactions between residents and non-residents;
- the compilation of BOP data according to items in the EBOPS classification (beginning with items of major economic importance to the country and available related memorandum items should also be provided);
- the collection of FDI statistics by activities of ISIC Rev.3;
- the compilation of basic FATS variables, broken down by activity according to ICFA; and
- the compilation of statistics on trade in services by partner country for each of the main types of services in BPM5. (Also for FATS and FDI).

²³ The six International Organizations that have jointly developed and published the *MSITS* are the Organisation for Economic Co-operation and Development (OECD), the Statistical Office of the European Communities (Eurostat), the International Monetary Fund (IMF), the United Nations Statistical Division (UNSD), the United Nations Conference on Trade and Development (UNCTAD), and the World Trade Organization (WTO). The Task Force also benefits from expertise in other international organizations (such as the United Nations World Tourism Organization which is now a participant in the Task Force) and in national organizations, particularly the US Bureau of Economic Analysis, Statistics Canada, the Deutsche Bundesbank, Bank of Japan and Central Bank of the Philippines.

The implementation of **other elements – generally seen as a long-term goal** – would represent a considerable increase in the detail of information available on trade in services.

These elements relate to:

- the full implementation of EBOPS, to the extent relevant to the compiling economy;
- the additional details in FATS statistics;
- the collection of statistics on the presence of natural persons;
- the subdivision of trade in services between residents and non-residents: separate trade with related parties from that with unrelated parties; and
- the allocation of transactions between residents and non-residents over GATS modes of supply.

3. RECENT PROGRESS AND SHORT-TERM PLANS

The **quality and quantity of statistics on international trade in services dramatically improved** over the past years. Before 1995, with the exception of *travel* and *transport*, services in BOP statistics were all lumped together in one category named "other goods, services, and income". The detail provided has progressively improved. Thanks to the detail asked for in BPM5, there is now a multi-country data set on statistics for major services categories.

As described in Section VI.2., for most of the major BPM5 service components, **the number of reporting countries has more than doubled since 1997** and almost tripled in some instances. The number of countries reporting **BPM5 supplementary items has also significantly increased** between 1997 and 2005. Even though MSITS is still relatively recent, an increasing number of countries are now able to provide trade in services data according to part or all of the **EBOPS classification** (up to 70 countries for a number of items), and provide statistics broken down by **partner countries**.

Up to recently, **the United States was the only country compiling FATS statistics**. It was therefore not possible to determine the magnitude of the third GATS' mode of supply: commercial presence. On a wider context, using new FATS data from the OECD together with BOP statistics, it has been estimated that trade through commercial presence surpasses the three other modes of supply together.²⁴ Despite its limitations, such an estimate shows the importance of FATS, which had been neglected for so long in the economic/statistics literature. The importance of FATS statistics is now well recognised, and data collection has started in many OECD and non-OECD countries (see Section VI.3).

According to information reported by countries participating in the 2001 update of the joint OECD/IMF Survey of Implementation of Methodological Standards for Direct Investment, between 1997 and 2001 there has been a significant increase in the number of countries compiling FDI data with geographic and activity breakdowns.²⁵

Eurostat has issued two regulations, which require from EU member states a more detailed reporting of trade in services, using MSITS as the benchmark. One of these regulations which was adopted in June 2004 by the European Parliament and the Council of Community Statistics covers **BOP statistics** - trade in services and FDI, which embodies the EBOPS classification. EBOPS has thus become binding for EU member states. The other regulation covers the compilation of **FATS** was issued in June 2007, also making this compilation mandatory. A "Recommendations manual on the production of foreign affiliates statistics

²⁴ see Section I.1.b.

²⁵ Available individual country information with respect to the 2003 SIMSDI is provided at www.imf.org.

(FATS)" was recently issued by the Eurostat "Joint Working Group on Foreign Affiliates Statistics".

The **IMF**, OECD and UNSD collect data according to EBOPS including memorandum items (on a voluntary basis for the IMF), EBOPS reporting is substantially increasing. The **OECD** is progressively expanding its collection of BOP trade in services by partner country as well as of FATS as recommended in MSITS. The latter is part of a wider OECD work on developing indicators of economic globalisation. The **United Nations Statistics Division** is disseminating BOP trade in services data by partner country from non-OECD/EU countries. This is believed to be an incentive for countries to make this information available. Such statistics are also believed to help compilers assess the quality of their statistics. The **UNCTAD** will expand data collection on activities of foreign affiliates.

Eurostat and OECD are also working together to **monitor the implementation of MSITS and data quality**. The joint Methodological Soundness Questionnaire on Measurement of Trade in Services in the Balance of Payments, issued in 2003, provides useful information for around 30 countries. The results of the questionnaire were published in 2006.

Finally international agencies have organised/participated in a number of **regional/country workshops** in order to present and discuss the concepts and methodologies of MSITS (e.g. South-Eastern European countries, UN ESCWA, UN ECLAC, CIS, APEC). Moreover **joint projects** (e.g. Caribbean Community/USAID or Andean Community/EU) have been established, which cover the improvement and introduction of common guidelines for the compilation of trade in services statistics.

4. PROSPECTS FOR TRADE IN SERVICES STATISTICS

a) Areas where improvements are needed

Statistics on international trade in services still need important improvements. Although a majority of countries report the main BPM5 services breakdown, only 25-40% of countries report the full BPM5 requested detail (see Table VI.I) and the reported data often lack reliability. In addition, documentation on data coverage and deviations from standards is rarely available. Although the dissemination of BOP services data by partner is increasing this is still mainly limited to developed economies.

Due to the infancy stage of FATS statistics, the lack of data reliability and inter-country comparability is almost a general rule. According to available information outside the EU/OECD area, only a handful of countries have started collecting FATS statistics. In the FATS context, confidentiality issues severely limit the amount of detail countries are able to provide. At present, non-OECD countries are not encouraged to collect FATS statistics, since no international organization collects and disseminates such data. This adds to the inherent difficulties and cost to engage in such an exercise.

Even if the recommendations of MSITS related to BOP and FATS statistics were fully implemented, it would only be a first step in providing information by modes of supply, for two major reasons. First, the simplified rules provided in MSITS only lead to a rough approximation of trade in services by modes of supply. Second, a true assessment of trade in services (e.g. quantitative indicators), would require more information that lies outside the BPM5 and FATS domains.

There has recently been a coordinated revision of the SNA (to be finalized in 2009), the balance of payments manual (2009), ISIC and CPC (2008), which set out the fundamental frameworks that serve as a base for reliable and comparable services statistics (including trade). As a consequence the recommendations with respect to services (definitions, classifications) have been clarified and an updated version of MSITS is also planned for 2010. It will in particular take into account the revisions of the international statistical guidelines

listed above and new recommendations with respect to FATS; it will also include a new chapter which deals with the measurement of the supply of services by modes of supply.

b) Future work

In the framework of the phased approach adopted for the implementation of MSITS, the Interagency Task Force on Statistics of International Trade in Services identified the need to further develop technical assistance to build statistical capacities on measuring trade in services. In addition, the preparation of a **compilation guide** is under way, but this task might take some time, as MSITS covers new areas such as FATS statistics.

The Task Force also concentrates on **further methodological work**. The collection and compilation of information on the presence of natural persons is an area that obviously needs further improvement. Other areas of interest concern e-commerce, trade in software, in cultural products etc..

The on-going work of the Task Force will provide helpful tools for improving statistics on trade in services. This is however a long term process and the success of this challenge depends on a number of factors:

- efforts by national agencies to employ the appropriate methodologies;
- governments' willingness to allocate the necessary resources;
- co-operation and co-ordination between national institutions, such as Central Banks, National Statistical Offices and Ministries of Trade;
- co-operation between international and regional institutions, and their support to national initiatives;
- effective technical assistance, i.e. transfer of knowledge and resources from countries having advanced statistical systems to the other countries, especially developing and least developed ones; and
- ability of international and regional institutions to provide effective compilation guidance.

For further information...

☛ *on trade in services development work, etc .:*

unstats.un.org/unsd/tradeserv

www.oecd.org/std/trade-services

☛ *on the MSITS revision process:* unstats.un.org/unsd/tradeserv/TFSITS/msits.htm

ANNEX I – OVERVIEW OF WORLD TRADE IN COMMERCIAL SERVICES AND ACTIVITIES OF FOREIGN AFFILIATES IN THE SERVICE SECTOR

This overview of trade in services and activities of foreign affiliates in the service sector is based on available BOP and FATS statistics. It presents:

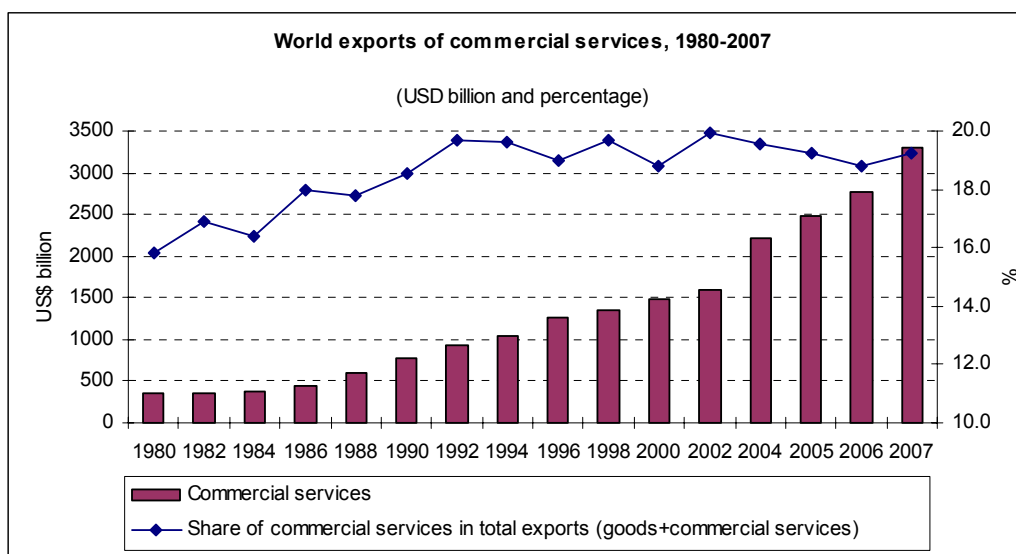
- ✓ medium/long-term trends in **trade in commercial services** between residents and non-residents, based on international **exports** measured in balance of payments statistics;
- ✓ **operations of foreign affiliates in services** measured in recent years in four countries; and
- ✓ **a comparison of US exports of services and sales of services by US-owned foreign affiliates.**

Data sources: Section 1: WTO, *Statistics database* (October 2008)
 Section 2: OECD, *Measuring Globalisation, The Role of Multinationals in OECD Economies – Volume II: Services*, 2008
 Section 3: US BEA, *Survey of Current Business*, October 2008.

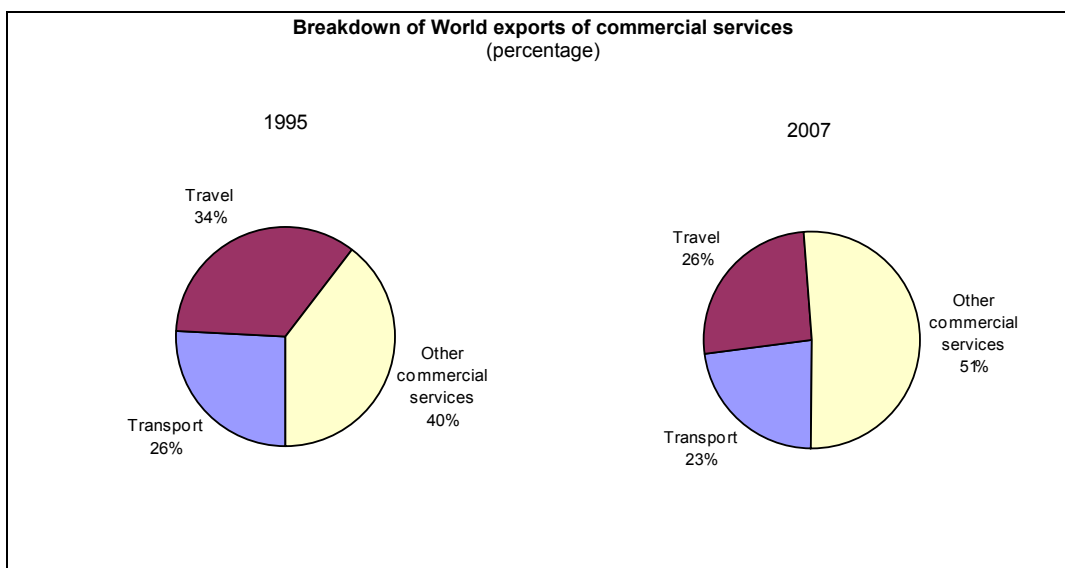
1. Structure and trends in international trade in commercial services

(a) World trade in commercial services

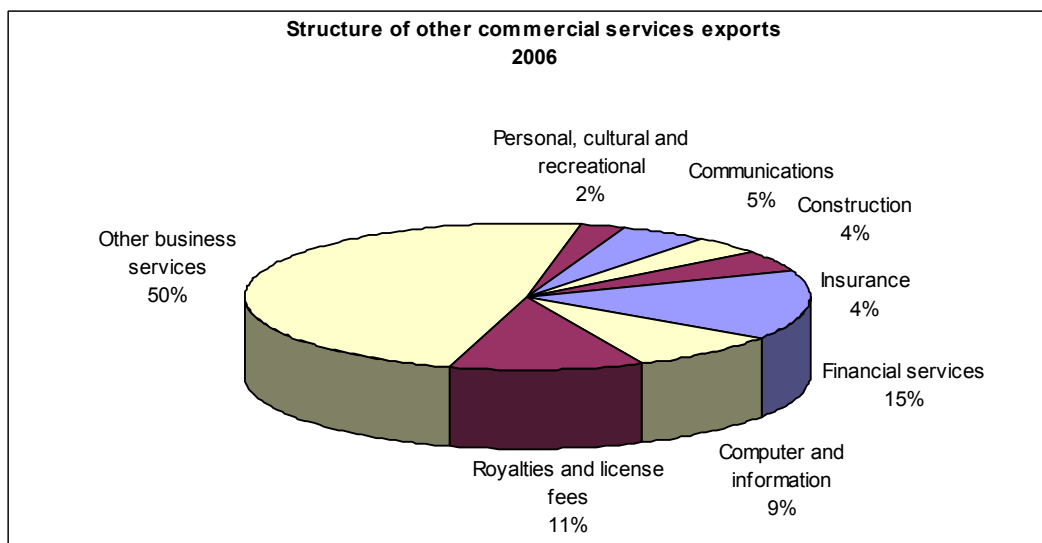
Following five years of stagnation in the 80s at less than USD 400 billion, global exports of *services* grew regularly up to 2007, reaching USD 3,300 billion, an eightfold value increase compared to 27 years earlier. The contribution of exports of commercial services to total world exports (*goods and commercial services*) rose from 16% in 1980 to 19% in recent years.



Between 1995 and 2007, the share of *travel* in total *commercial services* decreased by eight percentage points to 26% in 2007, while that of *other commercial services* gained 11 percentage points (51%). The share of *transportation services* was steady at around one quarter of total commercial services.



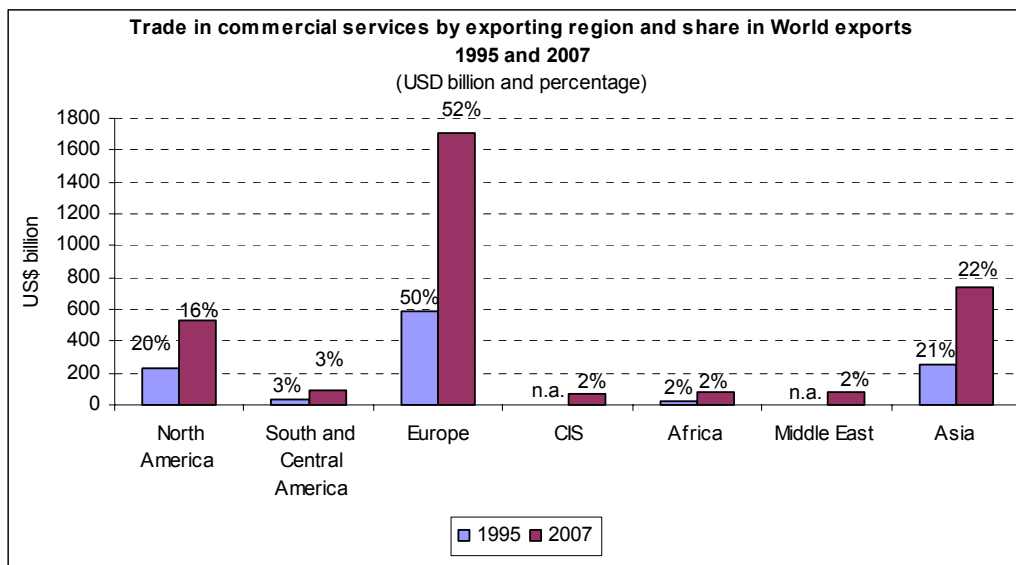
A further breakdown by type of service of total exports of *other commercial services* was estimated on the basis of available 2006 statistics. This breakdown reveals the major importance of *other business services* (50% of *other commercial services*), which comprises activities such as merchandising and other trade-related services; operational leasing services; and miscellaneous business, professional and technical services (i.e. legal, architectural services, etc.). The following biggest shares of *other commercial services* also show the importance of *financial services* (15% of *other commercial services* exports), *royalties and license fees* (11%), and *computer and information services* (9%).



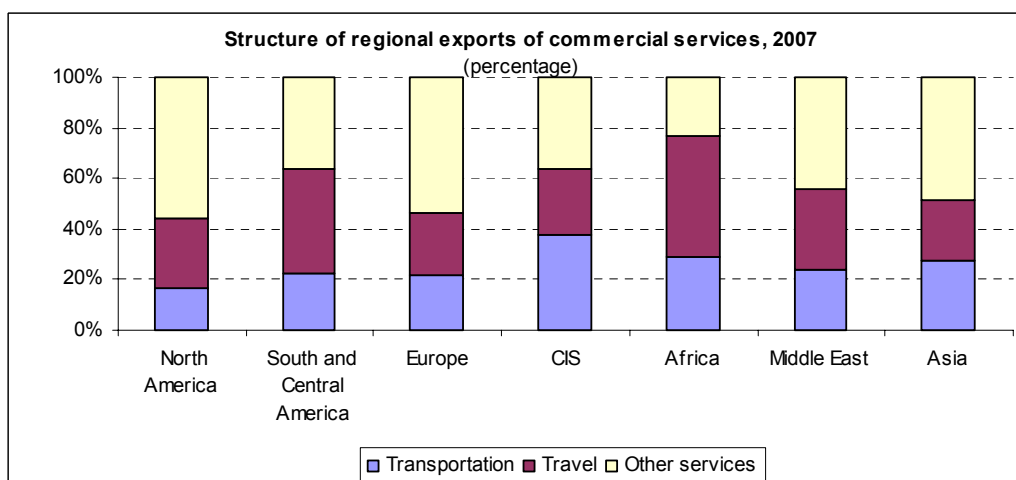
(b) Regional trade in commercial services

Europe, North America and Asia are the three main exporting regions with a cumulated share in total exports of *commercial services* of 92% in 2007. The value of North American and

Asian exports grew significantly from 1995 to 2007. However, the shares of services exported by North America decreased somewhat, and the share of Asia remained relatively stable. Such a reduction was mainly due to the faster increase in European exports (including trade between member states of the EU), which accounted respectively for 52% in 2007, compared to 50% in 1995. Exports of *commercial services* by other regions also grew significantly in the period, although their share in world trade remained rather constant, at around 3% for South and Central America, and 2% for Africa.



In 2007, the pattern of the types of *commercial services* exported was similar in the three main exporting regions (North America, Europe and Asia) and the Middle East: *other services* accounted between 45 and 65% of total services exports. In South and Central America and Africa, receipts from *travel* represented about 45% of these regions' exports of *commercial services*. It is important to note that the share of *transportation* exports in the CIS countries is very high compared to other regions: in 2007 it represented approximately 40%, which is 15 percentage points above the World average.

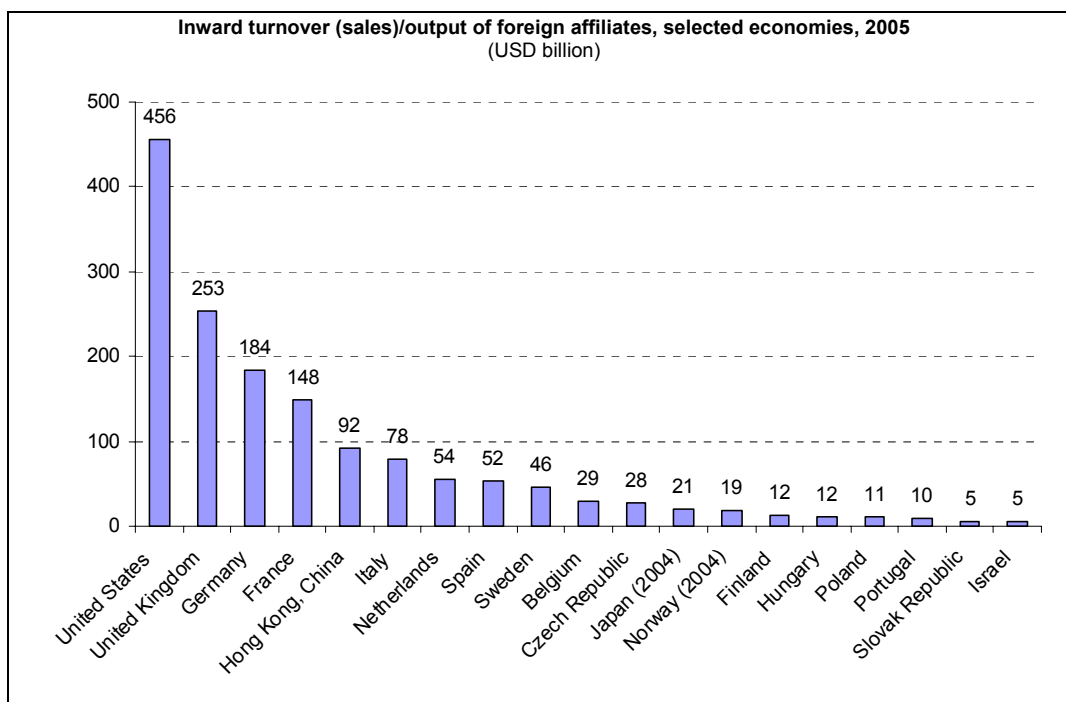


2. Sales of foreign affiliates in the services sector: selected economies

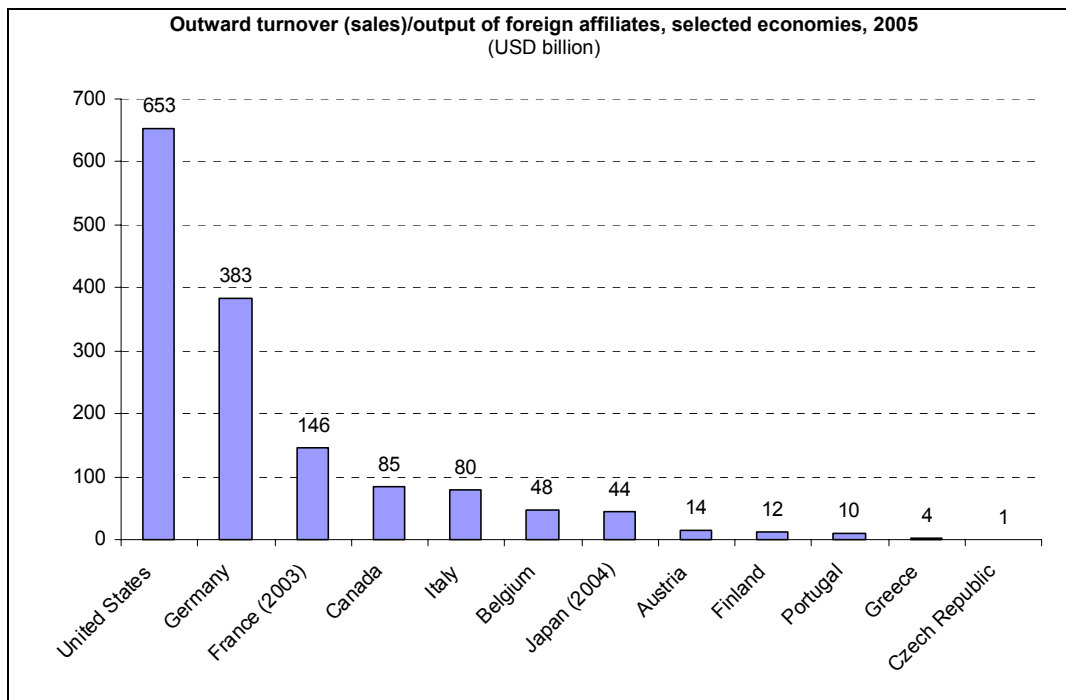
It is often necessary for services providers to establish a commercial presence through a foreign affiliate in countries they wish to trade in to be close to customers (foreign affiliates trade in services - FATS). At the global level, the WTO estimated services delivered by foreign affiliates (commercial presence) to be more important than trade in services between residents and non-residents (cross-border supply). FATS statistics are still at an early stage of development and at present data are available mainly for a number of (OECD) countries and a couple of non-OECD countries. It is therefore not possible to review services traded through commercial presence abroad as comprehensively as trade between residents and non-residents. In addition, given the recent development of these statistics, comparability and coverage of individual economy data may not always be complete. Availability of detailed data and long-time series varies considerably between economies.

This section examines available statistics compiled for 2003-2005 for the **turnover/sales** variable. Both inward and outward FATS are analysed. Sales of firms mainly active in wholesale and retail trade and repair activities are not included as most of the value of their sales is of goods. In addition for many economies the values exclude most or a large part of financial intermediation activities.

Among the countries considered, the United States was the country in which foreign-owned affiliates performed the highest level of sales of services in 2005 (turnover of **inward FATS**); USD 456 billion. United Kingdom, Germany and France followed with total services sales of foreign-owned affiliates in their territory of respectively USD 253, 184 and 148 billion. Sales of services of foreign-owned affiliates in Hong Kong, China amounted to a total of USD 92 billion.



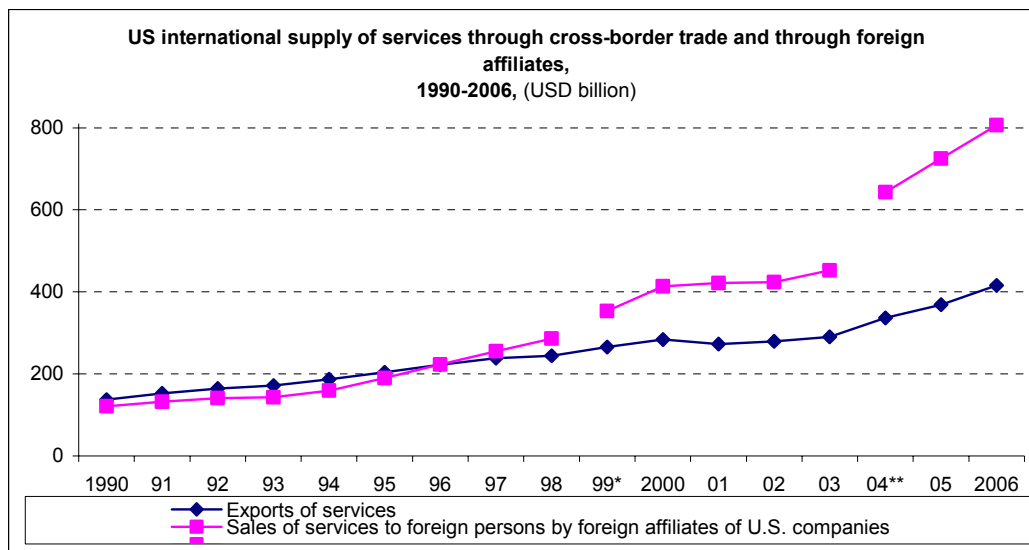
Looking at statistics on **outward FATS**, 2005 sales of United States foreign affiliates in the services sector (USD 653 billion) reached 1.5 times that accounted for by foreign affiliates of Germany (USD 383 billion). French affiliates abroad realised a total turnover of USD 146 billion in 2003. Canada and Italy-owned firms sales accounted for approximately USD 80-85 billion.



3. Comparison of US exports of services and supply of services of US-owned foreign affiliates

Data produced by the U.S. Department of Commerce – Bureau of Economic Analysis (BEA) show the growing importance of sales/supply of services of majority U.S. owned affiliates outside the U.S.²⁶ compared to conventional "cross-border" services exports. While exports of services have long been higher than sales/supply of affiliates of US firms abroad, these two forms of delivering services internationally reached comparable levels in 1996 (about USD 220 billion). The supply of services of US majority-owned foreign affiliates now largely exceed exports of services, reaching USD 810 billion in 2006 compared to USD 420 billion.

²⁶ Please note that this information refers to sales/supply of services products of US foreign affiliates whereas FATS data presented in the previous section refer to sales of foreign affiliates operating in the services sector, which means that for instance the latter also include sales of goods of foreign affiliates whose primary activity is classified as a service industry but not the sales of services of those whose primary activity is classified as a manufacturing industry. For example, in 2005, the total value of sales (goods plus services) by US foreign affiliates whose primary activity is services (presented in the previous section, i.e. excluding wholesale and retail trade activities) accounts for approximately USD 650 billion, whereas the value shown in this section (USD 725 billion) corresponds to the total supply of services by US foreign affiliates.



* Beginning in 1999, sales of services by affiliates were redefined following a change in reference activity classification. This resulted in a net shift of sales from goods to services.

** The estimates from 2004 are presented as "services supplied" rather than "sales of services" as was done for previous years. Services supplied adds a measure of wholesalers' and retailers' distributive services and insurers' premium supplements and subtracts a proxy measure of insurers' expectations of losses to sales of services, resulting in a net increase in services provided.

ANNEX II – EXTENDED BALANCE OF PAYMENTS SERVICES CLASSIFICATION

This table sets out the components of the EBOPS Classification and relates these to the components of the BPM5 and the Joint Classification of the OECD and Eurostat. For each component:

an X in the first column indicates that the component is a BPM5 standard component

an X in the second column indicates that the component is a BPM5 supplementary item

an X in the third column indicates that the component is a BPM5 memorandum item

the three digit number in the fifth column identifies the internationally accepted code for reporting balance of payments components.

Annex II (cont'd): Extended Balance of Payments Services Classification

Extended Balance of Payments Services Classification				
	BPM5 standard components	BPM5 supplementary items	BPM5 memorandum items	Internationally accepted codes
Component				
1 Transportation	X			205
1.1 Sea transport	X			206
1.1.1 Passenger	X			207
1.1.2 Freight	X			208
1.1.3 Other	X			209
1.2 Air transport	X			210
1.2.1 Passenger	X			211
1.2.2 Freight	X			212
1.2.3 Other	X			213
1.3 Other transport	X			214
1.3.1 Passenger	X			215
1.3.2 Freight	X			216
1.3.3 Other	X			217
Extended classification of other transport				
1.4 Space transport				218
1.5 Rail transport				219
1.5.1 Passenger				220
1.5.2 Freight				221
1.5.3 Other				222
1.6 Road transport				223
1.6.1 Passenger				224
1.6.2 Freight				225
1.6.3 Other				226
1.7 Inland waterway transport				227
1.7.1 Passenger				228
1.7.2 Freight				229
1.7.3 Other				230
1.8 Pipeline transport and electricity transmission				231
1.9 Other supporting and auxiliary transport services				232
2 Travel	X			236
2.1 Business travel	X			237
2.1.1 Expenditure by seasonal and border workers				238
2.1.2 Other				239
2.2 Personal travel	X			240
2.2.1 Health-related expenditure		X		241
2.2.2 Education-related expenditure		X		242
2.2.3 Other		X		243
3 Communications services	X			245
3.1 Postal and courier services				246
3.2 Telecommunications services				247
4 Construction services	X			249
4.1 Construction abroad				250
4.2 Construction in the compiling economy				251

	BPM5 standard components	BPM5 supplementary items	BPM5 memorandum items	Internationally accepted codes
5 Insurance services	X			253
5.1 Life insurance and pension funding				254
5.2 Freight insurance				255
5.3 Other direct insurance				256
5.4 Reinsurance				257
5.5 Auxiliary services				258
6 Financial services	X			260
7 Computer and information services	X			262
7.1 Computer services				263
7.2 Information services				264
7.2.1 News agency services				889
7.2.2 Other information provision services				890
8 Royalties and license fees	X			266
8.1 Franchises and similar rights				891
8.2 Other royalties and license fees				892
9 Other business services	X			268
9.1 Merchanting and other trade-related services	X			269
9.1.1 Merchanting				270
9.1.2 Other trade-related services				271
9.2 Operational leasing services	X			272
9.3 Miscellaneous business, professional, and technical services	X			273
9.3.1 Legal, accounting, management consulting, and public relations		X		274
9.3.1.1 Legal services				275
9.3.1.2 Accounting, auditing, bookkeeping, and tax consulting services				276
9.3.1.3 Business and management consulting and public relations services				277
9.3.2 Advertising, market research, and public opinion polling		X		278
9.3.3 Research and development		X		279
9.3.4 Architectural, engineering, and other technical services		X		280
9.3.5 Agricultural, mining, and on-site processing services		X		281
9.3.5.1 Waste treatment and depollution				282
9.3.5.2 Agricultural, mining, and other on-site processing services				283
9.3.6 Other business services		X		284
9.3.7 Services between related enterprises, n.i.e.				285
10 Personal, cultural, and recreational services	X			287
10.1 Audiovisual and related services	X			288
10.2 Other personal, cultural, and recreational services	X			289
10.2.1 Education services				895
10.2.2 Health services				896
10.2.3 Other				897
11 Government services, n.i.e.	X			291
11.1 Embassies and consulates				292
11.2 Military units and agencies				293
11.3 Other government services				294

Memorandum items				
	BPM5 standard components	BPM5 supplementary items	BPM5 memorandum items	Internationally accepted codes
1 Freight transportation on merchandise, valued on a transaction basis				853
1.1 Sea freight				856
1.2 Air freight				857
1.3 Other freight				858
1.4 Space freight				862
1.5 Rail freight				863
1.6 Road freight				864
1.7 Inland waterway freight				865
1.8 Pipeline freight				868
2 Travel				
2.1 Expenditure on goods				869
2.2 Expenditure on accommodation and food and beverage serving services				870
2.3 All other travel expenditure				871
3 Gross insurance premiums			X	874
3.1 Gross premiums—life insurance				875
3.2 Gross premiums—freight insurance				876
3.3 Gross premiums—other direct insurance				877
4 Gross insurance claims			X	879
4.1 Gross claims—life insurance				880
4.2 Gross claims—freight insurance				881
4.3 Gross claims—other direct insurance				882
5 Financial intermediation services indirectly measured (FISIM)				887
6 Financial services including FISIM				888
7 Merchanting gross flows				893
8 ²⁷ Audiovisual transactions				894

²⁷ This item consists of a range of services and other transactions relating to audiovisual activities. Included are services that may be included in either *audiovisual services* or *royalties and license fees*, and also the acquisition and disposal of non-produced, non-financial assets relating to audiovisual activities, such as patents, copyrights, trademarks, and franchises.

ANNEX III – DESCRIPTION OF BASIC VARIABLES FOR FATS

Any number of variables pertaining to the operations and financing of foreign affiliates may have analytical and policy relevance, but MSITS has identified five core indicators that should be included in any FATS data system: (a) sales (turnover) and/or output, (b) employment, (c) value added, (d) exports and imports of goods and services, and (e) number of enterprises. These are defined and discussed briefly below.

a) Sales (turnover) and/or output:

Sales and turnover are used interchangeably in MSITS to mean the same thing. Following the 1993 SNA, output differs from sales because it includes changes in stocks of finished goods and work in progress and because of differences in measurement applicable to activities involving trade or financial intermediation. For most purposes, output is a superior and more refined measure of economic activity. However, services activities do not involve stocks of finished goods, and changes in work-in-progress will usually be impossible to measure. In addition, sales data are easier to collect and may present more options for disaggregation. Taking these factors into account, there may be a continuing role in FATS statistics for both measures.

Sales measures gross operating revenues, less rebates, discounts and returns. Although lacking the duplication-free quality of value added, the sales variable generally presents fewer collection difficulties and thus is likely to be more widely available than value added. Also unlike value added, the sales variable indicates the extent to which foreign affiliates are used to deliver outputs to customers, irrespective of the extent to which the output originated in the affiliates themselves or in other firms. Further, sales are more comparable than value added with regard to such variables as exports and imports, which are themselves measures of sales.

In addition to disaggregation by industry and by country, other breakdowns of sales may be useful for particular purposes. One such breakdown is to distinguish among sales within the host country (local sales), sales to the country of the parent enterprise, and sales to third countries. All three types of sales result from a commercial presence by the home country in the host country. However, only the local sales represent the delivery of output within host economies and thus relate directly to the commitments made under the GATS Mode 3 by those economies. In addition, elimination of the sales to the parent country (which would already be included as imports in that country's BOP accounts) may be desired in an analysis of FATS variables in conjunction with data on the parent country's trade with non-residents, to avoid duplication.

b) Employment:

In a FATS context, employment would normally be measured as the number of persons on the payrolls of foreign affiliates. Data on employment can be used in several ways in a FATS system. For example, they can be used to determine the share of foreign affiliates in host country employment or to help determine the extent to which employment by foreign affiliates complements or substitutes for domestic (home country) employment by parent companies or other domestic firms. An industry breakdown of affiliates' employment can yield further insights into the impact of foreign-owned enterprises on specific parts of the economy. Used in conjunction with data on compensation of employees (one of the suggested "additional" variables), the employment variable may be used in examining compensation practices of affiliates relative to those of domestically owned firms.

Although data would not, in general, appear to be available to identify separately the portion of employment by affiliates that is accounted for by employees from abroad, such information, if available, could be used for elaborating on the GATS presence of natural persons Mode of supply (Mode 4).

c) Value added:

The 1993 SNA defines both gross and net measures of value added. Gross value added of an establishment, enterprise, or industry is the amount by which the value of the outputs produced exceeds the value of the intermediate inputs consumed in production. A related concept, “net value added”, is defined as gross value added less the consumption of fixed capital (e.g., depreciation). Gross value added can provide information about the contribution of foreign affiliates to host country gross domestic product. For this reason and because it may be easier to compute (because it does not require estimation of capital consumption) and thus is more widely available, the higher priority is accorded to the gross measure of value added.

Because it includes only the portion of the firm’s output that originates within the firm itself, value added is a particularly useful measure from the perspectives of both the GATS and globalization analysis. It was for this reason that the MSITS included it among the five “basic” FATS variables, even though, as a measure that may have to be estimated or derived from other variables, it may be among the more difficult variables to compile.

d) Exports and imports of goods and services:

International goods and services transactions of foreign affiliates is another basic indicator relevant to FATS. These are to be measured as outlined in BPM5 and, for services, in MSITS (and in section II of these materials). Both balance of payments data and data provided by parent enterprises and affiliates in separate questionnaires may be appropriate sources for such information. Where the data are obtained through linkages with primary data sources for BOP transactions, breakdowns by product and by origin or destination often will be possible. However, it often may prove difficult or impossible to identify the transactions of foreign-owned firms in such data. Thus, it may be possible to develop the necessary data only through the use of separate questionnaires.

If this is done, selected additional breakdowns may prove useful. For example, trade with related parties might be distinguished from trade with unrelated parties, or trade with the country of the parent enterprise might be distinguished from trade with other countries. If possible, these breakdowns should be obtained separately for goods and for services. For inward FATS, for example, that would mean disaggregating the affiliate’s exports of goods and exports of services into (a) exports to the parent enterprise, (b) other exports to the country of the parent, and (c) exports to third countries.

e) Number of enterprises:

The number of enterprises (or establishments, where that is the statistical unit) meeting the criteria for coverage by FATS statistics is a basic indicator of the prevalence of majority ownership by foreigners in the host economy. That number may be compared with the total number of firms in the economy. It may also be assessed in relation to the other FATS variables because it allows the computation of ratios – such as value added or number of employees per enterprise – that may be compared with the same ratios for domestically owned firms, thus giving an indication of the behaviour of foreign affiliates.

It should be recognised that the number of firms alone may not give an accurate picture of the overall importance of foreign-owned firms, because of differences in size between these firms and those that are domestically owned.

MSITS may be consulted for additional details and examples.

ANNEX IV - ISIC CATEGORIES FOR FOREIGN AFFILIATES (ICFA)

	<u>ISIC code</u>
1. Agriculture, hunting, forestry, and fishing	01, 02, 05
1.1. Agriculture, hunting, and related service activities	01
1.2. Forestry, logging, and related service activities	02
1.3. Fishing, operation of fish hatcheries and fish farms; services activities incidental to fishing	05
2. Mining and quarrying	10, 11, 12, 13, 14
<i>of which:</i> Services activities incidental to oil and gas extraction excluding surveying	112
3. Manufacturing	15 to 37
4. Electricity, gas, and water supply	40, 41
5. Construction	45
6. Trade and repair	50, 51, 52
6.1. Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of automotive fuel	50
6.2. Wholesale trade and commission trade, except of motor vehicles and motorcycles	51
6.3. Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	52
7. Hotels and restaurants	55
8. Transport, storage, and communications	60, 61, 62, 63, 64
8.1. Transport and storage	60, 61, 62, 63
8.1.1. Land transport; transport via pipelines	60
8.1.1.1. Transport via railways	601
8.1.1.2. Other land transport	602
8.1.1.3. Transport via pipelines	603
8.1.2. Water transport	61
8.1.2.1. Sea and coastal water transport	611
8.1.2.2. Inland water transport	612
8.1.3. Air transport	62
8.1.3.1. Scheduled air transport	621
8.1.3.2. Non-scheduled air transport	622
8.1.4. Supporting and auxiliary transport activities; activities of travel agencies	63
8.1.4.1. Supporting and auxiliary transport activities	6301, 6302, 6303, 6309
8.1.4.2. Activities of travel agencies and tour operators; tourist assistance activities, not elsewhere classified (n.e.c).	6304
8.2. Post and telecommunications	64
8.2.1. Post and courier activities	641
8.2.2. Telecommunications	642

ANNEX IV - ISIC CATEGORIES FOR FOREIGN AFFILIATES (ICFA) (CONT'D)

9. Financial intermediation	65, 66, 67
9.1. Financial intermediation, except insurance and pension funding	65
9.2. Insurance and pension funding, except compulsory social security	66
9.2.1. Life insurance	6601
9.2.2. Pension funding	6602
9.2.3. Non-life insurance	6603
9.3. Activities auxiliary to financial intermediation	67
9.3.1. Activities auxiliary to financial intermediation, except insurance and pension funding	671
9.3.2. Activities auxiliary to insurance and pension funding	672
10. Real estate activities	70
11. Renting of machinery and equipment without operator and of personal and household goods	71
12. Computer and related activities	72
13. Research and development	73
14. Other business activities	74
14.1. Legal, accounting, market research, and consultancy	741
14.1.1. Legal activities	7411
14.1.2. Accounting, bookkeeping, and auditing activities; tax consultancy	7412
14.1.3. Market research and public opinion polling	7413
14.1.4. Business and management consultancy activities	7414
14.2. Architectural, engineering, and other technical activities	742
14.3. Advertising	743
14.4. Business activities, n.e.c.	749
15. Education	80
16. Health and social work	85
17. Sewage and refuse disposal, sanitation, and similar activities	90
18. Activities of membership organizations, n.e.c.	91
19. Recreational, cultural, and sporting activities	92
19.1. Motion picture, radio, television, and other entertainment activities	921
19.1.1. Motion picture and video production and distribution; motion picture projection	9211, 9212
19.1.2. Radio and television activities	9213
19.1.3. Other arts and entertainment activities	9214, 9219
19.2. News agency activities	922
19.3. Library, archives, museums, and other cultural activities	923
19.4. Sporting and other recreational activities	924
20. Other service activities	93

Note. The following categories of the ISIC Rev.3 have been excluded from ICFA because they are not relevant for foreign direct investment or for FATS: (i) public administration and defence; compulsory social security (ISIC division 75), (ii) private households with employed persons (division 95), and (iii) extraterritorial organizations and bodies (division 99). Otherwise, all ISIC categories are included.

**ANNEX V - REPORTING STATUS OF BPM5 COMPONENTS AND SUPPLEMENTARY ITEMS, AS OF
DECEMBER 2008**

Service description	Exports			Imports		
	1995	2000	2005	1995	2000	2005
	Number of reporters	Number of reporters	Number of reporters	Number of reporters	Number of reporters	Number of reporters
Total services	156	160	165	156	160	165
Transport	152	155	159	154	158	161
<u>Sea transport</u>	78	99	111	86	114	123
Passenger transport on sea	23	36	42	25	32	42
Freight transport on sea	50	66	76	67	98	112
Supporting, auxiliary and other services	53	72	80	50	63	72
<u>Air transport</u>	88	119	125	86	119	126
Passenger transport by air	68	92	98	72	101	110
Freight transport by air	50	72	78	50	84	95
Supporting, auxiliary and other services	55	86	94	50	77	83
<u>Other transportation</u>	57	78	83	50	77	88
Passenger	31	51	58	29	45	52
Freight	39	63	70	36	68	80
Other transportation services	38	54	59	35	50	60
Travel	150	156	160	153	156	160
<u>Business travel</u>	45	84	95	63	91	104
<u>Personal travel</u>	74	108	119	83	111	127
Health-related expenditure	12	33	46	26	45	60
Education-related expenditure	25	51	58	39	62	76
Other personal travel	56	86	101	63	89	106
Communications services	102	135	148	100	135	147
Construction	54	80	95	64	94	111
Insurance services	117	129	144	142	149	155
Financial services	61	97	113	68	108	123
Computer and information services	43	90	109	47	93	121
Royalties and licence fees	66	90	97	85	115	130
Other business services	144	142	150	153	152	154
<u>Merchandising and other trade-related services</u>	51	72	81	47	73	84
<u>Operational leasing</u>	40	62	76	45	73	82
<u>Miscellaneous business, professional and technical services</u>	98	115	126	102	123	132
Legal, accounting, management, consulting and public relations services	25	55	71	38	63	83
Advertising, market research and public opinion polling services	24	44	63	26	53	71
Research and development services	17	27	41	18	29	46
Architectural, engineering and other technical services	20	39	50	21	39	51
Agricultural, mining and on-site processing services	10	25	40	13	28	42
Other services	63	85	100	62	95	108
Personal, cultural and recreational services	43	80	97	53	87	106
<u>Audio-visual and related services</u>	22	43	58	32	49	62
<u>Other personal, cultural and recreational services</u>	29	54	73	34	60	76

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