

Introduction

Problems of international trade in services are gaining increasing attention in the literature on international economic relations. However, analyses usually concern a narrow scope of services, namely non-factorial ones, and so do not fully reveal trends in total services, which include much more components. Therefore, the purpose of this article was to present a broad classification of services, and then show trends in the trade in different types of factorial and non-factorial services in the European Union in the years 2004–2013.

1. Broad classification of services

The broad definition of services in the international trade includes two main types: factorial and non-factorial services, which together constitute total services (summarized in Figure 1).

Non-factorial services refer to the narrow definition of services commonly used in the literature (and also known as pure services). Their classification is based on the methodology of the International Monetary Fund, which derives data on non-factorial services from the balance of services recorded in the current account of balance of payments of its member countries. In the reports prepared by the World Trade Organization these services are referred to as commercial services. They are also known as services in the strict sense or traditional services.

International trade in non-factorial services includes three main groups of services recorded in the current account of balance of payments of a country. These are transportation, travel and other services.

Transportation (sea, air, space, railway, road, inland waterways and pipeline) performed by residents to non-residents consists in the carriage

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of passengers, movement of goods (freight), hiring (chartering) of vehicles with crew, as well as the provision of auxiliary and delivery services which are associated with transportation (e.g. storage, supplies).

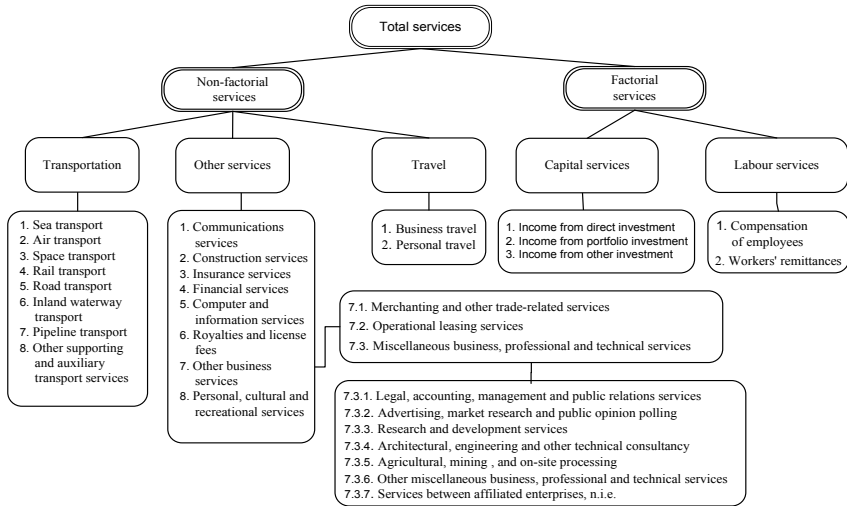


Figure 1. The classification of total services in international trade

Source: own elaboration based on *Balance of Payments Manual*, International Monetary Fund International Monetary Fund, Washington D.C. 1993; *Manual on Statistics of International Trade in Services*, European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, United Nations Conference on Trade and Development, World Trade Organization, Geneva–Luxemburg–New York–Paris–Washington D.C. 2002.

Travel covers goods and services acquired by persons traveling for tourist, health-related and educational purposes, as well as in connection with business trips. Popular travel goods and services include accommodation (hotel services), food (catering services), entertainment, insurance, transportation, as well as souvenirs and gifts.

Other services consist of eight components: communications services, construction, insurance, financial, computer and information,

royalties and license fees, other business services and personal, cultural and recreational services.¹ Other business services can be further divided into ten or so types, such as merchandising and other trade-related services, operational leasing services and miscellaneous business, professional and technical services. The last category can be further divided into legal, accounting, management and public relations services; advertising, market research and public opinion polling; research and development services; architectural, engineering and other technical consultancy; agricultural, mining and on-site processing; other miscellaneous business, professional and technical services; services between affiliated enterprises, not included elsewhere.

Another major group of services consists of factorial services. They are based on the perception of the factors of production, namely capital and labour, as services provided by the exporting country to the importing country. In this group, one may distinguish capital and labour services (see Figure 2).

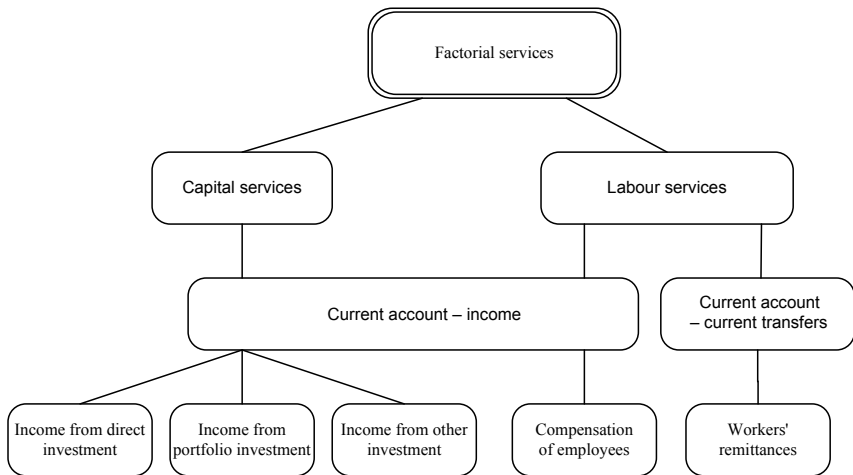


Figure 2. Factorial services in the balance of payments

Source: the same as under Figure 1.

¹ Other services include also government services, which are not, however, included in the commercial services.

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Services of foreign investment (or national capital abroad) are treated as income in the current account. They are further divided into particular types of capital services, which may assume the form of income from direct investment, portfolio and other investment.

Factorial services associated with working abroad (labour services) are also included in the current account, but in two separate balance sheets. These are compensations of employees staying abroad for less than one year (i.e. short-term labor-intensive services), classified as income in the current account, and remittances from workers staying abroad for more than one year, classified as current transfers.

2. Structure of total services exports in the European Union in 2004–2013

In the broad approach the value of international trade in services is twice the value of the services in their narrow definition. The generic structure of the EU's exports of services, presented in Table 1 shows the similar value of factorial and non-factorial services. In the period 2004–2013 these categories accounted for 50.7% and 49.3% of exports of services in a broad sense.

At the beginning of the second half of 2000s, the prevalence of factorial services, however, was greater. In 2007, they accounted for a record high 58.1% of income from total services. The following year the global financial crisis began, which had a major and lasting impact on trade in factorial services. A decline in the exports of factorial services in the EU countries in 2008 was not followed by a full recovery.

Table 1

Structure of exports of factorial and non-factorial services in the EU 27 in 2004–2013 (per cent)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	2	3	4	5	6	7	8	9	10	11
Total services	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Factorial services	49.7	53.0	56.3	58.1	54.6	48.5	47.4	48.3	46.7	44.7
Capital services ^a	46.9	50.3	53.8	55.7	52.0	45.4	44.3	45.3	43.7	41.7

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1	2	3	4	5	6	7	8	9	10	11
Income from direct investment ^b	15.9	17.2	16.4	15.6	12.5	15.0	17.7	19.1	19.5	18.5
Income from portfolio investment ^b	15.8	15.3	15.3	15.6	17.5	17.8	15.9	15.5	14.8	14.6
Income from other investment ^b	9.9	11.6	14.5	17.0	17.2	9.8	7.5	7.5	6.4	5.5
Labour services	2.8	2.7	2.5	2.4	2.6	3.1	3.1	3.0	3.0	3.0
Compensation of employees	2.1	2.0	1.7	1.6	1.8	2.1	2.2	2.2	2.2	2.3
Workers' remittances	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.8	0.8	0.7
Non-factorial services	50.3	47.0	43.7	41.9	45.4	51.5	52.6	51.7	53.3	55.3
Transportation	11.0	10.4	9.7	9.2	10.4	10.2	11.1	10.5	10.7	10.9
Sea transport	4.8	4.6	4.2	4.1	4.8	4.3	4.7	4.4	4.5	n.d.
Air transport	3.7	3.5	3.1	2.9	3.1	3.3	3.5	3.4	3.4	n.d.
Space transport	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	n.d.
Rail transport	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	n.d.
Road transport	1.8	1.6	1.7	1.6	1.8	1.9	2.0	2.0	2.0	n.d.
Inland waterway transport	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	n.d.
Pipeline transport	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	n.d.
Other supporting and auxiliary transport services	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	n.d.
Travel	13.3	11.7	10.5	9.5	9.9	10.8	10.5	10.3	10.5	10.9
Business travel	2.2	2.0	2.0	1.8	2.0	2.1	1.9	1.9	1.9	n.d.
Personal travel	11.1	9.7	8.5	7.7	7.9	8.7	8.5	8.3	8.6	n.d.
Other services	26.0	24.8	23.5	23.1	25.0	30.4	31.0	30.9	32.1	33.5
Communications services	1.3	1.3	1.2	1.1	1.3	1.5	1.6	1.5	1.7	1.6
Construction services	1.1	1.2	1.1	1.0	1.2	1.5	1.3	1.1	1.1	1.1
Insurance services	1.5	0.9	1.0	1.0	1.1	1.8	1.7	1.6	1.7	1.5
Financial services	3.7	3.7	3.9	4.2	4.2	4.3	4.2	4.3	4.3	4.4
Computer and information services	2.7	2.5	2.4	2.4	2.9	3.5	3.7	3.7	4.0	4.4
Royalties and license fees	2.0	1.9	1.7	1.6	1.9	2.8	2.8	2.8	2.8	3.2
Other business services	13.0	12.7	11.7	11.3	12.1	14.6	15.1	15.2	15.8	16.4
Merchanting and other trade-related services	2.6	2.7	2.7	2.8	2.9	3.3	3.5	3.7	3.7	n.d.
Operational leasing services	0.4	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	n.d.
Miscellaneous business, professional and technical services	10.0	9.4	8.5	8.0	8.7	10.6	10.9	10.9	11.5	n.d.
Legal, accounting, management and public relations services	1.8	1.6	1.7	1.6	1.8	2.2	2.3	2.3	2.4	n.d.
Advertising, market research and public opinion polling	0.8	0.9	0.7	0.7	0.7	0.9	1.0	1.0	1.0	n.d.
Research and development services	1.4	1.4	1.2	1.1	1.2	1.5	1.4	1.5	1.6	n.d.
Architectural, engineering and other technical consultancy	1.5	1.4	1.3	1.2	1.3	1.5	1.5	1.5	1.6	n.d.
Agricultural, mining, and on-site processing	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	n.d.

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1	2	3	4	5	6	7	8	9	10	11
Other miscellaneous business, professional and technical services	2.3	2.0	1.8	1.7	1.5	1.7	1.8	1.7	1.8	n.d.
Services between affiliated enterprises, n.i.e.	1.9	1.9	1.6	1.5	1.9	2.6	2.7	2.6	2.7	n.d.
Personal, cultural and recreational services	0.7	0.6	0.5	0.4	0.4	0.6	0.7	0.7	0.7	0.8

^a The value of exports of capital services is obtained by summing the income generated in this category by 27 member states.

^b The sum of shares of the various types of capital services is not equal to the total percentage of capital services. This is due to the smaller accuracy of statistical data at a lower level of aggregation.

n.d. – no data.

Source: own elaboration based on data from Eurostat, *International Trade in Services (since 2004), Balance of Payments by Country, Workers' Remittances and Compensation of Employees*, <http://epp.eurostat.ec.europa.eu> (30.06.2014).

Consequently, the share of factorial services in the income from total services fell to just 44.7%, i.e. by more than 13 percentage points by the end of 2013. This was due to the fact that about 90% of the factorial services were capital services. They have been directly affected by the crisis that broke out in the United States and caused a severe disturbance in the functioning of the banking systems of Europe as well as perturbations in the financial markets and in the real economy of the EU countries.²

Accordingly, this resulted in changes in the structure of capital services. Income from other services lost most in significance, as banks were reluctant to grant loans for fear of insolvency. The amount of interest in this respect decreased by almost 70% in the period 2007–2013 which caused a drop from 17% to as little as 5.5% of total services.

Capital services in the form of direct investment gained most in significance. Their share increased from 15.9% of total services in 2004 to

² More on this subject in J. Narękwicz, *Global Economic Crisis and the Situation in the Polish Foreign Trade in 2009*, Studies and Works of the Department of Economic Sciences and Management No. 23, Szczecin 2011, p. 83 (in Polish); A. Sławiński, *The Causes of the Global Banking Crisis*, in: *Social Sciences of the Crisis in Financial Markets*, Economic-Social College, Warsaw School of Economics, Warsaw 2009, pp. 33–58 (in Polish).

nearly one fifth at the end of the analysed period. The growing influence of this area was associated with the development of technologies – an increasingly fast and cheap flow of information necessary for remote business management, as well as easier access to the information essential for expanding one's business abroad. The increase in the role of income from direct investment in the international trade of the EU was also due to the development of integration and globalization processes which supported the growth of the corporations in the member states.

An upward trend – but mostly at the end of the in the mid-2000s – could be observed for income from portfolio investment. It increased from 15.8% in 2004 to 17.8% of total services in 2009, making them the most important position in the structure of capital services. It was a reflection of the rapidly growing demand for portfolio investment. This was associated with a rather short-term nature of this type of investment, and its high mobility allowing a quick profit on speculative operations. It was one of the manifestations of the financialisation of the world economy, considered the basis for the outbreak of the global financial and then economic crisis.³ It resulted in a systematic – after 2009 – decrease in income from dividends and interest on debt securities. At the end of 2014 capital services in the form of portfolio investment, however, accounted for 14.6% of total services, so only about 1.2 percentage points less than in 2004.

Another type of factor services were services associated with the movement of workers. They played a much smaller role in EU exports, as they generated an average of 5.6% factorial services, i.e. 2.8% of total services. This resulted from legal, cultural and social differences between countries, which also maintained numerous barriers, particularly in relation to non-EU countries. Within the common market, restrictions were smaller due to the implementation of the free movement of persons, and so the exports of labour-intensive services from the EU were therefore determined by flows within the Union, which generated 64% of income in 2004–2013, while

³ More on this subject in J. Dudziński, *The Current Economic Paradigm in the Light of Financialisation*, "Folia Oeconomica Stetinensia" 2013, Vol. 10, Issue 1, p. 24.

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transfers from third countries constituted on average slightly more than one third of the EU income in this field. Due to the the intra-Community nature of trade in labour services, it was dominated by short-term cross-border transfers. Income obtained by seasonal cross-border workers accounted for almost 3/4. Remittances obtained in the member states by persons working abroad for more than one year accounted for about 1/4.

The structure of the global demand for non-factorial services was less diverse than for the above-mentioned factorial services. The development of trade in non-factorial services was determined by the trend of almost steadily increasing income from other services. In the years 2004–2014 they increased more than 2-fold, while travel and transportation increased 1.3- and 1.5-fold, respectively. As a result, the proportion of other services increased from 26% in 2004 to about 33.5% in 2013, while travel fell from 13.3% to 10.9%; the share of transportation remained at the same level (about 11%).

The increase in the role of other services in the international trade of the EU was due to the increase in selected types of services, among which the main role was played by other business services. In the period 2004–2013 they generated half of the EU's exports of other services, i.e. on average about 14% of total services.

Other business services are a group of ten or so types of services. Among them, miscellaneous business, professional and technical services had the largest share of exports (3/4 at the end of 2012), followed by merchanting and other trade-related services (23% of exports) and operational leasing services (4%).

While in the years 2004–2012 exports of other business services came mainly from sales of miscellaneous business, professional and technical services, in the analysed period they contained mostly services between affiliated enterprises; legal, accounting, management and public relations services; other miscellaneous business, professional and technical services; architectural, engineering and other technical consultancy; and research and development services. In total, these types of services accounted for over 60% of exports of other business services in 2012 (10% of total services).

Other business services were usually followed by financial services. In the period 2004–2013 they generated an average of 14.9% of exports of other services, i.e. 4.1% of total services. In the last year of the period, they were equalled by computer and information services, which – similar to financial services – amounted to about 13% share of other services, i.e. 4.4% of total services. Among other things, this was caused by the development of offshoring services, e-commerce, cloud computing, etc. The exports of computer and information services increased approximately 2.5-fold in the period 2004–2013. Such a high increase of value occurred also in the case of royalties and license fees; accordingly, their share in the export of services also improved. At the end of 2013, income from royalties and license fees accounted for 9.7% of other services, i.e. 3.2% of total services.

In 2004–2013, further positions in the structure of other services were taken by communications, insurance and construction services. These three types of services generated an average of about 4–5% of other services, i.e. 1.2–1.4% of total services. The smallest role was played by cultural personal, cultural and recreational services, which accounted only for 2.1% of other services, i.e. as little as 0.6% of total services.

Other services were followed by travel, with 3 times lower share in the total services (10.9% in 2013), which meant a drop compared to 2004 (13.3%). This downward trend, although mild, might have had considerable effect on the member states' economies. This results from the fact that tourism, a crucial component of travel, not only contributes to income in foreign currencies but also enhances employment, production of goods and other services, and so the economic growth.⁴

In the structure of travel services, important role was played by personal travel. In the analysed period it generated on average 80% of income from travel in the EU countries. In 2013 this meant 8.6% of total services, and in 2004 as much as 11%. The share of business travel was

⁴ More on this subject in H. Nakonieczna-Kisiel, *Services in the International Exchange*, in: *International Economic Relations*, eds. J. Dudziński, H. Nakonieczna-Kisiel, Publications of the West Pomeranian Business School, Szczecin 2007, p. 107 (in Polish); A. Kuźnar, *Services in the International Trade*, Wydawnictwo Adam Marszałek, Toruń 2007, p. 89 (in Polish).

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almost 4.5 times lower (about 2% of total services) but was more stable in the examined period.

The third category of non-factorial services is transportation, which accounted for an average of 10.4% of total EU exports of services. Among the types of transportation services, a major role in the entire period was played by sea, air and road transport. In 2012, they accounted for 4.5%, 3.4% and 2.0% of sale of total services, respectively. Importantly, sea and air transports showed a slight downward trend, while the road transport was growing. In total, the three modes of transport in the EU accounted for more than 90% of the income from transport (sea transport more than 43%, air transport more than 32%, and road transport about 18%). The significance of other types of transport, such as rail, inland waterway and pipeline in the analysed period was relatively small in the structure of EU exports (and together accounted for about 5% of income from transport services, and 0.6% of total services in 2012).

Conclusions

Analysis of the generic structure of EU exports of services in a broad sense allows for the following conclusions:

1. In the structure of income from total services exports, the share of factorial and non-factorial services was similar.
2. In recent years, however, the share of non-factorial services has grown, which showed their greater resistance to economic and financial crisis. Factorial services lost in importance due to the withdrawal of funds from financial markets, as well as due to the global economic downturn.
3. Trade in factorial services mainly reflected a growing need for capital-intensive services, which was supported by the growing financialisation of the modern economy. A much smaller role was played by labour-intensive services.
4. In the structure of factorial services rendered by foreign capital, there was an increase in income from direct investment, and to a lesser extent on portfolio investment. While capital services in the form of other investment were gradually losing in significance.

5. Services accompanying the movement of labour were dominated by flows within the EU, generated mainly by seasonal and cross-border workers. Remittances of workers staying abroad for a long period had a relatively little share in factorial services.
6. The development of exports of non-factorial services was mainly due to the rapid pace of development of other services – so-called modern services associated with the new technologies.
7. Travel was of relatively minor importance in the trade in non-factorial services. Travel services were mainly associated with tourist, health, educational and other purposes, while business travel played a smaller role.
8. Transportation generated income at the level similar to tourism. The most important modes of transport services were sea, air and road transport. However, the first two types showed a slight downward trend, while the third one was growing.
9. Exports of non-factorial services were dominated by other services, primarily business services, such as miscellaneous business, professional and technical services – mainly services between affiliated companies, not included elsewhere.
10. The international trade in non-factorial services in the EU countries increasingly depended on other types of other services (particularly financial, computer and information as well as royalties and license fees).

References

Balance of Payments by Country, <http://epp.eurostat.ec.europa.eu>.

Balance of Payments Manual, International Monetary Fund International Monetary Fund, Washington D.C. 1993.

Dudziński J., *The Current Economic Paradigm in the Light of Financialisation*, “Folia Oeconomica Stetinensia” 2013, Vol. 10, Issue 1.

International Trade in services (since 2004), <http://epp.eurostat.ec.europa.eu>.

Kuźnar A., *Services in the International Trade*, Wydawnictwo Adam Marszałek, Toruń 2007.

Manual on Statistics of International Trade in Services, European Commission, International Monetary Fund, Organisation for Economic Co-operation and

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New Phenomena in International Markets and their Implications

Development, United Nations, United Nations Conference on Trade and Development, World Trade Organization, Geneva–Luxemburg–New York–Paris–Washington D.C. 2002.

Nakonieczna-Kisiel H., *Services in the International Exchange*, in: *International Economic Relations*, eds. J. Dudziński, H. Nakonieczna-Kisiel, Publications of the West Pomeranian Business School, Szczecin 2007.

Narękwicz J., *Global Economic Crisis and the Situation in the Polish Foreign Trade in 2009*, Studies and Works of the Department of Economic Sciences and Management No. 23, Szczecin 2011.

Sławiński A., *The Causes of the Global Banking Crisis*, in: *Social Sciences of the Crisis in Financial Markets*, Economic-Social College, Warsaw School of Economics, Warsaw 2009.

Workers' Remittances and Compensation of Employees, <http://epp.eurostat.ec.europa.eu>.

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