

THE SERVICE SECTOR IN THE ECONOMY IN POLAND AND EUROPEAN UNION COUNTRIES

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Key words: service sector, market services, non-market services, employment, value added.

A b s t r a k t

The role of the service sector in the economy is increasing in the process of socio-economic development. This tendency has been confirmed and explained by the three-sector theory formulated by A.G.B. Fisher, C. Clark, and J. Fourastie.

The main goal of the paper is to show development tendencies in service sectors in Poland and the EU countries and assess them in view of the three-sector theory. The share of the service sector in the total employment and in the total gross value added in the years 2005–2013/2014 will be analysed together with two sub-sectors including market and non-market services.

The research shows that the share of the service sector in total employment and total gross value added has been recently increasing in Poland as well as in other EU countries, but there is a gap in this process between Poland and the most developed EU countries. Moreover, in Poland, the role of market services has been recently increasing much faster than the role of non-market services.

SEKTOR USŁUGOWY W POLSCE I KRAJACH UNII EUROPEJSKIEJ

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Słowa kluczowe: sektor usługowy, usługi rynkowe, usługi nierynkowe, zatrudnienie, wartość dodana.

A b s t r a k t

Celem opracowania jest ocena poziomu rozwoju sektora usługowego w Polsce oraz przedstawienie zmian w jego wewnętrznej strukturze na tle innych krajów Unii Europejskiej w latach 2005–2013/2014. Podstawą oceny znaczenia sektora usługowego w gospodarce jest zbadanie jego udziału w ogólnej liczbie pracujących i tworzeniu wartości dodanej brutto.

Przeprowadzone analizy pozwalają pozytywnie ocenić wzrost znaczenia sektora usługowego w polskiej gospodarce. Świadczy o tym rosnący jego udział w wytwarzaniu wartości dodanej brutto i wzrost odsetka pracujących w tym sektorze, a także w ogólnej liczbie podmiotów gospodarczych. Nadal jednak dość znaczny jest dystans rozwojowy w obszarze sektora usługowego między gospodarką polską a krajów wysoko rozwiniętych.

Introduction

The process of socio-economic development involves specific changes in the structure of all rapidly changing economies. The three-sector theory, developed by A. Fisher, C. Clark, and J. Fourastie, provides a theoretical basis for the analysis of these changes. The authors have divided economic activities into agricultural, industrial and service sectors. This concept and its subsequent modifications demonstrate the growing importance of the service sector in the process of structural changes in the economy.

This article aims to evaluate the level of development of the service sector in Poland and to identify the changes in its internal structure viewed against other EU countries in the years 2005–2013/2014. The study examines the sector's share in the overall employment and in the total gross value added.

The article has the following structure: Section 2 discusses the key determinants of the development of the service sector in the context of the three-sector theory. Section 3 examines and evaluates the changes in the three-sector structure of employment in Poland in the years 2005–2014 and in other EU countries in 2014. Section 4 provides an analysis of the service sector's contribution to gross value added and Section 5 presents the structure of employment within the service sector. The paper ends with conclusions.

The development of the service sector and its determinants in the context of the three-sector theory

The three-sector theory accentuates the importance of the service sector in the process of socio-economic development. Its authors, ALLAN FISHER (1945), COLIN CLARK (1957), and JEAN FOURASTIE (1954) analysed growth patterns and factors for the three identified sectors of the economy, i.e. agriculture, industry, and services. This concept has become a basis for investigation of the economic structure and its structural changes. The structural changes in the developing economy result from the different intensity of growth of particular sectors, which consequently changes their share in total labour resources and in the creation of GDP.

According to the three-sector theory, in the course of economic development the share of the agricultural sector in overall employment tends to decrease, then the share of the industrial sector tends to increase, it becomes stable and then declines, and the share of the service sector in overall employment steadily increases (FISHER 1945, p. 8, CLARK 1957, p. 492, FOURASTIE 1954, p. 126–137). These tendencies change the three-sector structure of employment and the main focus of an economy's activity shifts with the development process from the agriculture sector through industry to services (KWIATKOWSKI 1980, p. 59 et seq.). According to the authors of the three-sector theory, the above trends are determined, *inter alia*, by the changes in the structure of consumer demand and the effects of technological progress. The changes in the structure of demand result from the hierarchy in which the needs are met, from differences in income elasticity of demand and market saturation. The income elasticity of demand for agricultural products is low, because demand for these basic products falls as needs are being satisfied in the course of economic development. The demand for industrial goods initially increases and the income elasticity of demand for these goods is high. However, along with economic development the relative importance of this demand for meeting needs decreases, and the market for these goods even shows signs of being saturated. In contrast, the demand for services is increasing along with the development process, without any signs of being satisfied (see FOURASTIE 1954, p. 86). The changes in the structure of demand affect the structure of employment. Due to a decreasing share of goods and an increasing share of services in the overall demand the countries at a higher level of socio-economic development are characterized by a higher share of employment in the service sector than the less developed countries.

Technological progress is the second factor determining the direction of structural changes in the economy (from agriculture through industry to services). This factor is particularly emphasised in the three-sector theory by J. FOURASTIE (1954, pp. 47–48), who argues that technological progress increases the productivity of labour and at the same time decreases demand for labour. Technological progress is diversified in particular sectors of the economy. Its rate is moderate in agriculture, high in industry, and low in the service sector and hence the process of labour displacement is much weaker there than in the other two sectors. According to Fourastie, this is another major reason, next to the increase in demand, for the increase in employment in the service sector.

The main arguments of the authors of the three-sector theory about the direction of structural changes and the essential role of demand as a determinant of the structure of production and employment contain rational elements. Many studies, particularly in the highly developed countries, confirm the occurrence of a servicisation processes, meaning the increased role of services

in the economy, manifested by the service sector's increasing share in employment and gross value added, as well as in the implementation of service functions in the agricultural and manufacturing sectors (SZUKALSKI 2004, p. 48). However, the opinion about the low rate of technological progress in the service sector raised numerous criticisms. The opinion is difficult to accept, especially as today many services use electronics and computer science, e.g., banking, communications, telecommunications, transport, insurance, education, science, and healthcare (KWIATKOWSKA 2007, p. 29–31). This is an argument for the need to improve and modify the concept of three-sector economy, which is characterized by excessive aggregation and to shift disaggregated research of the service sector, analysing its various sections and departments.

The service sector consists of many different service activities, both traditional (trade, transport) and those using the latest technologies, leisure services, and health and environmental protection services (*Serwicyzacja polskiej gospodarki...* 2013). By delivering modern knowledge-based services the sector provides the basis for the development of an information society. Thanks to the development of knowledge services, including services based on high technologies, the productivity of the entire service sector increases and the economy is more competitive in the global market (BAUMOL 1985, pp. 301–317). The growth of employment in the service sector is driven by the internationalisation of services. Global markets arise in the field of services, e.g., tourism services, IT services, transportation, financial, logistic and communications services (SKÓRSKA 2012, p. 55–58). Preferences for the development of the service sector arise from its ability to create jobs which require very different skills, the highest e.g., in finance, education, and healthcare, and the lowest for simple jobs, such as delivering newspapers or cleaning. The development of services increases employment opportunities for women and young people. Employment opportunities exist especially in services where interpersonal contacts are important, such as social welfare, healthcare, and education, hotels and restaurants, tourism, and public administration.

It can be concluded that the dynamic development of the service sector is a prerequisite for the development of the modern economy. It should be emphasized that services play an important role in the development of human capital and enhance the welfare of society (SASAKI 2007, pp. 438–459).

Evaluation of the three-sector employment structure in Poland and other countries of the European Union

To assess and verify the changes in the three-sector structure of the Polish economy Table 1 presents the share of agriculture, industry, and services in overall employment in the years 2005–2014. As mentioned before, the changes in the structure of employment, i.e., the growing share of the service sector in overall employment, should be seen as an important indicator of the level of economic development and maturity of the market system.

Table 1
The structure of employment by economic sector in Poland between 2005 and 2014 (Q4), in %

Year	Agricultural sector*	Industrial sector**	Service sector***
2005	17.3	29.0	53.7
2006	15.3	30.1	54.5
2007	14.0	31.2	54.8
2008	13.4	32.0	54.6
2009	12.9	30.8	56.3
2010	12.9	30.5	56.6
2011	12.5	30.9	56.6
2012	12.2	30.6	57.2
2013	11.9	30.7	57.4
2014	11.5	30.8	57.7

* The agricultural sector includes agriculture, hunting, forestry, and fishing;

** The industrial sector includes manufacturing and construction;

*** The service sector includes other economic activities.

Source: *Kwartalna informacja o rynku pracy* (2007, p. 4), *Kwartalna informacja o aktywności ekonomicznej ludności* (2011, p. 4, 2012, p. 6, 2013, pp. 4, 5), *Aktywność ekonomiczna ludności Polski* (2014, p. 28).

Comparing the sectoral structure of employment in the years 2005–2014, it is clear that in the period under study the share of employment in agriculture declined (by 5.8 percentage points – pp), the share of employment in the industrial sector slightly increased (by 1.8 pp), while the service sector steadily increased its share in the stock of employment (by 4.0 pp). The changes in the structure of employment are particularly evident if we compare them to the early transition years in the Polish economy. In 1993, the share of employment in agricultural was still 25.9%, 31.1% in the industrial sector, and 43% in the service sector (*Aktywność ekonomiczna ludności Polski* 2002, p. 98). The data confirm, therefore, that in accordance with the three-sector theory, today, the

service sector has become the most important source of jobs and demand for labour.

The data in Table 2 illustrate the changes in the number of employed in the service sector in Poland.

Table 2
Changes in the number of employed in the service sector in Poland, in the years 2005–2014 (Q4)

Year	Employment (thousands)	Growth rates	
		previous year =100	2005=100
2005	7.727	–	100.0
2006	8.126	105.2	105.2
2007	8.502	104.6	110.0
2008	8.739	102.8	113.1
2009	8.943	102.3	115.7
2010	8.798	98.4	113.9
2011	8.835	100.4	114.3
2012	8.940	101.2	115.7
2013	9.023	100.9	116.8
2014	9.205	102.0	119.1

Source: As for Table 1, author's own calculations.

Compared to 2005, the number of people working in services increased in 2014 by 1,478 thousand people, i.e., by 19.1%. Given the year-on-year growth rates it can be seen that with the exception of 2010, despite the economic slowdown in the years 2009–2011, the number of people working in services slowly started to increase after 2011. In 2012, employment in the service sector came close to the 2009 level. The service sector is therefore quite resistant to cyclical fluctuations (SZCZUKOCKA 2013, pp. 35–37). In order to evaluate the three-sector employment structure in Poland, it seems necessary to compare it with the structures in other countries of the European Union 28. The data on this subject are presented in Table 3.

By analysing the data in Table 3, it can be observed that in 2014 the structure of the three-sector employment in Poland differed quite significantly from the structure characteristic of the EU28, EA19, and highly developed countries. The proportion of workers in the agricultural sector in Poland was 2.5 times higher than the EU28 average and 3.6 times higher than in the EA19. Only in Romania, the share of employed in this sector exceeded by 14.2 pp the proportion of people employed in the agricultural sector in the Polish economy. Despite the downward trend in the share of the agricultural sector in Poland in the total number of employed, the gap between Poland and particular Member

Table 3

Employment by economic activity, 2014, in %

Country	Agriculture	Industry incl. construction	Services		Total market and non-market services
			market	mainly non-market	
EU28	4.4	24.5	40.2	30.9	71.1
EA19 (Euro area)	3.1	24.0	41.0	31.9	72.9
Belgium	1.1	21.5	40.3	37.1	77.4
Bulgaria	6.9	30.3	40.3	22.5	62.8
Croatia	8.7	27.3	38.9	25.1	64.0
Czech Republic	2.7	38.3	35.1	23.8	58.9
Denmark	2.3	19.4	39.4	38.9	78.3
Germany	1.3	28.3	39.4	30.9	70.3
Estonia	3.9	30.5	39.5	26.0	65.5
Ireland	4.7	18.5	45.3	31.4	76.7
Greece	13.0	15.1	43.0	28.2	71.8
Spain	4.2	19.5	45.8	30.5	76.3
France	2.8	20.7	39.2	37.3	76.5
Italy	3.5	27.1	40.9	28.6	69.5
Cyprus	3.9	16.5	47.8	31.8	79.6
Latvia	7.3	24.1	42.4	26.2	68.6
Lithuania	9.0	24.8	39.8	26.0	65.8
Luxembourg	1.3	11.1	44.8	42.8	87.6
Hungary	4.6	30.6	36.7	28.0	64.7
Malta	1.2	21.6	45.5	31.6	77.1
Netherlands	2.1	16.4	45.9	35.6	81.5
Austria	4.3	26.1	41.5	28.2	69.7
Poland	11.2	30.8	34.5	23.4	58.0
Portugal	5.5	24.9	38.7	30.8	69.5
Romania	25.4	30.1	28.8	15.7	44.5
Slovenia	7.7	31.7	35.6	25.0	60.6
Slovakia	3.5	35.5	34.5	26.4	60.9
Finland	3.9	22.1	39.4	34.6	74.0
Sweden	1.7	18.9	41.2	38.3	79.5
United Kingdom	1.1	19.1	44.1	35.7	79.8

Source: Eurostat, Labour Force Survey, <http://ec.europa.eu/Eurostat>, 25/08/2015.

States is still large, e.g., in relation to the UK and Belgium it is 10.1 pp, Germany, Malta, the Netherlands, Denmark, and Luxembourg it is 8.9–10 pp. The differences regarding the share of the industrial sector in employment are

much smaller. In Poland, the share was higher by more than 6 pp than on the average in the EU-28 and EA-19. Higher shares, ranging from 30 to 38%, occurred in countries which have recently become members of the EU, e.g., the Czech Republic, Hungary, Slovakia, Slovenia, Estonia, and Bulgaria. In other Member States the share of the industrial sector in employment did not exceed 29% of total employment.

In Poland, the share of services in total employment is small. In relation to the average rates for EU-28 and EA-19, in 2014, the difference was respectively 13.1 pp and 14.9 pp. In Romania, the share of service employment was smaller than in Poland (44.5%). In 12 EU Member States (the UK, Sweden, Denmark, Belgium, Ireland, France, Spain, Cyprus, Malta, Finland, Greece and Germany), the share of service employment was above 70% (70.3–79.6%). In two countries, Luxembourg and the Netherlands, the share of this sector even reached a level of above 80%. It can therefore be concluded that despite the increase in employment in services, the gap between the development of the service sector in Poland and in the highly developed Member States is still significant. The share of services in employment in Poland is also lower than in the countries which have recently become members of the EU, with the exception of Romania.

The data in Table 3 show the share of market services and non-market services in employment. Market services include: wholesale and retail trade, transportation, accommodation and food service activities, communication, financial and insurance activities, real estate activities, professional, scientific, and technical activities, administrative and support service activities. Non-market services include: public administration, education, health, arts, entertainment and recreation, other services activities, activities of households as employers, activities of extraterritorial organisations.

In all Member States the share of market services in employment is higher than the share of non-market services. Poland is also among these countries, with the 34.5% share of market services in employment, higher by 11.1 pp than the share of non-market services. The average EU-28 share of market services (40.2%), is higher by 9.3 pp than the share of non-market services. In many countries the proportion of people employed in the services market exceeds 40%. In some countries the share of market and non-market services is very similar, e.g., in Belgium, Denmark, France, and Luxembourg, the difference is 1–2 pp. The major share of people working in market services confirms the market nature of economies of EU Member States.

In many countries, there are economic structures which confirm a relatively high stage of economic development, namely the post-industrial development stage (BELL 1973, pp. 343–345), which is characterized by the dominance of the service sector, whereby the production of goods gives way to the

production of services. To reduce Poland's development gap in relation to the medium and highly developed member countries, it is necessary to maintain the growing pace of economic growth, support the creation and development of new jobs in services, and efficiently use EU funds and continuously improve the quality of human capital.

This will direct migration workers from the agricultural sector into the service sector, the development of which is also needed in rural areas due to the need to minimize the hidden unemployment. Also, the industrial sector is increasingly connected with service activities, which is a prerequisite for the development of the service sector, e.g., the growing significance of services in the field of education, training, law, finance, management consulting, research, marketing, and information technology.

Importance of the three sectors of the economy in the creation of gross value added in Poland and other EU-28 countries

To assess the significance of the service sector in the economy it is necessary to determine its role in the creation of gross value added viewed against the background of agricultural and industrial sectors. The data for the Polish economy are presented in Table 4.

Table 4
Gross value added by economic sector in Poland, in the years 2005–2013, in %

Year	Sector		
	agriculture	industry	services
2005	4.5	30.7	64.8
2006	4.3	31.1	64.6
2007	4.3	31.8	63.8
2008	3.7	31.5	64.7
2009	3.6	31.8	64.6
2010	3.8	32.0	64.2
2011	3.6	33.4	63.0
2012	3.2	32.8	64.0
2013	3.1	33.2	63.7

Source: Author's own calculation based on the Statistical Yearbook of the Republic of Poland, years: 2011 (pp. 682–683) and 2014 (pp. 706–707).

Analysis of data on the gross value added in the three-sector system in the years 2005–2013 confirms the decreasing importance of the agricultural sector in favour of other sectors of the economy. This is reflected by the declining

share of the agricultural sector in the production of gross value added from 4.5% in 2005 to 3.1% in 2013, and by the declining (but still relatively high) percentage of those working in the sector.

The industrial sector accounted for ca. 31–33% of gross value added. It may be recalled that in the first year of the transformation of the Polish economy (1990), this sector accounted for half (53.1%) of the gross domestic product. Thus, in comparison to the initial years of transition, the share of the industrial sector decreased quite significantly. To assess the significance of the industrial sector in the economy, it is necessary to determine the nature of changes in its internal structure from the point of view of the degree of development of modern manufacturing sectors which have a positive impact on the modernization of the economic structure, competitiveness and development of the knowledge economy in Poland (ECHEVARRIA 1997, pp. 431–452).

In the period under study, the service sector dominated. In the years 2005–2013 it accounted for ca. 64–65% of gross value added. In 2011 and 2013, compared to 2005 the share slightly declined by 1.8–1.1 pp. The share of the service sector in value added was twice higher than the share of the industrial sector. It can therefore be concluded that the increase in the proportion of employment in services and its relatively high share in value added confirm the dominant role of the service sector in Poland's economic structure.

The dominance of the service sector is also reflected by a relatively high share of economic entities in this sector. In the years 2005–2011 these entities accounted for 76–77% of all entities registered in the REGON register (see SZCZUKOCKA 2013, p. 79). The share of entities in the industrial sector in the period under study ranged between 21 and 22% and entities in the agricultural sector accounted for only ca. 2.5%. The distribution of entities among the three sectors confirms the important role of the service sector in the creation of jobs in the Polish economy.

A more comprehensive evaluation of changes in the three sectors of the Polish economy can be made by analysing how much the sectors contribute to gross value added in other EU-28 countries. The data for 2013 are shown in Table 5.

In all EU Member States the service sector accounts for the largest part of gross value added. In the year under study, in four countries; Luxembourg, Malta, Greece and Cyprus, the service sector accounted for more than 80% of gross value added. The lowest part of gross value added is generated by services in Romania (51.2%) and Czech Republic (60.8%) and therefore the industrial sectors account for a relatively large share of gross value added (over 40%). The share of the service sector in value added in Poland (over 63%) was similar to that of Slovakia (62%) and slightly higher than in the Czech Republic (2.6 pp). In other Member States, these indicators ranged from 65%

Table 5
The share of the three sectors of the economy in gross value added in the EU28 in 2013, in %

Country	Sector		
	agriculture	industry	services
Belgium	0.8	26.0	76.6
Bulgaria	5.5	34.3	66.5
Croatia	4.3	33.4	69.2
Czech Republic	2.6	40.3	60.8
Denmark	1.4	27.6	76.0
Germany	0.9	30.2	68.4
Estonia	3.6	33.4	67.5
Ireland	1.6	34.6	74.4
Greece	3.8	23.1	82.2
Spain	2.8	33.3	73.8
France	1.7	23.2	78.5
Italy	2.3	28.2	74.4
Cyprus	2.5	22.6	85.9
Latvia	3.6	26.4	73.0
Lithuania	3.8	36.5	65.6
Luxembourg	0.3	16.8	87.6
Hungary	4.4	35.8	65.4
Malta	1.6	25.1	81.1
Netherlands	2.0	25.6	75.9
Austria	1.4	31.7	70.3
Poland	3.3	33.3	63.4
Portugal	2.3	26.9	76.6
Romania	6.3	42.3	51.2
Slovenia	2.1	36.2	65.9
Slovakia	4.0	40.1	62.7
Finland	2.7	36.2	70.5
Sweden	1.4	31.1	72.6
United Kingdom *	0.7	23.2	76.1

* In 2011

Source: Statistical Yearbook of the Republic of Poland (2014, p. 891).

(Lithuania, Hungary) to 78.5% (France). Greece, with a relatively high share of the service sector in value added (82.2%), surviving the financial and economic crisis, should take special care to develop this sector in the economy, through diversification and new types of services in the structure of the service sector.

The structure of employment in the service sector in Poland and other EU Member States

The service sector includes various activities, in the form of separate sections, based on the Polish Classification of Activities (PKD) 2007, in line with international statistical classifications, including the EU classification. The overall classification of market and non-market services and their subsections are presented in Table 6. These sections show the different tasks performed by the service sector in the economy. These are the services related to the functioning of the state, business and financial services, services which contribute to development of human capital, production services, and consumer services.

Table 6
The structure of employment in the service sector in Poland in 2010 and 2014 (IV Quarter) (in % of total employment)

Specification	2010		2014	
	thousands	%	thousands	%
Total employment	15,557	100.0	16,018	100.0
Market services, including	5,158	33.2	5,460	34.1
Wholesale and retail trade; repair of motor vehicles and motorcycles	2,284	14.7	2,320	14.5
Transportation and storage	862	5.5	913	5.7
Accommodation and food service activities	311	2.0	314	2.0
Information and communication	319	2.1	355	2.2
Financial and insurance activities	349	2.2	366	2.3
Real estate activities	164	1.1	166	1.0
Professional, scientific, and technical activities	470	3.0	555	3.5
Administrative and support service activities	399	2.6	471	2.9
Non-market services, including	3,619	23.3	3,726	23.3
Public administration and defence; compulsory social security	1,030	6.6	1,068	6.7
Education	1,211	7.8	1,253	7.8
Human health and social work activities	921	5.9	952	5.9
Arts, entertainment and recreation	194	1.2	219	1.4
Other service activities	263	1.7	234	1.5

Source: Labour force survey in Poland (2014, pp. 74–75, 2015, p. 86).

The data in Table 6 confirm the growing importance of market services in the Polish economy. This is evidenced by the increase in the number of people working in these services by about 409 thousand people between 2010 and

2014. In the period under study the highest percentage of people worked in the „Wholesale and retail trade; repair of motor vehicles and motorcycles”, although their share in this section a little declined by 0.2 pp. The share of people working in the infrastructure services, such as „Transportation and storage” is quite large. The number of employed in this section increased by about 51 thousand people in the period under study, and their share in the stock of employment increased to 5.7% in 2014.

„Professional, scientific, and technical activities” play an increasingly important role in market services. These services are closely associated with science, modern technologies, and innovations. Despite the increase in the number of employees (by 85 thousand people) and their share (up to 3.5%) in the total number of employees, one should expect that this section will grow in importance in the process of socio-economic development.

Modern services, of increasing importance among market services, include also the following sections: „Information and communication”, and „Financial and insurance activities”. These services underlie the development of the information society, related to computer and telecommunications services and to the use of modern technologies in the financial and insurance activities. In both of these sections, in the years 2010–2014, the number of employed increased by about 53 thousand people, and their share increased to 4.5% of the total working population.

The increasing number and share of employment (up to about 3% in 2014) also took place in „Administrative and support service activities”, including advisory services in the field of running business and management, e.g., security services, office administrative services, cleaning services, recruitment of employees and job search. On the other hand the share of „Real estate activities” (1.0%), and „Accommodation and food service activities” (2.0%), in employment was stable between 2010 and 2014, despite a slight increase in the number of employed in these sections, respectively, by 2 thousand and 3 thousand people. It can be assumed that with increasing wealth of the society the importance of these services will show an upward trend. The increased leisure time resulting from labour productivity growth and the development of tourism will contribute to the development of „Accommodation and food service activities”.

Analysis of non-market services demonstrates its lower importance in the structure of employment in the Polish economy. The share of employment in this sector in the period under study was approximately 23%, while the number of employed increased by 107 thousand people, as a result of increased employment in all sections of the sector (the highest in „Education” by 42 thousand people and smaller in „Human health and social work activities by” 31 thousand people). The employment structure is dominated by „Education”

Table 7

The structure of employment in selected sections of the services sector in the EU in 2013, in% (based on ISIC)

Country	Trade, repair of motor vehicles and motorcycles	Transportation and storage	Financial and insurance activities, real estate activities
Belgium	13.9	5.3	4.2
Bulgaria	17.9	6.2	2.1
Croatia	13.7	6.4	2.9
Czech Republic	12.3	6.1	3.8
Denmark	14.1	4.7	3.8
Germany	14.4	4.9	3.8
Estonia	13.0	7.6	3.5
Ireland	14.5	4.7	5.3
Greece	17.9	5.0	3.1
Spain	16.6	4.9	3.2
France	12.4	5.3	4.6
Italy	14.8	4.7	3.5
Cyprus	18.6	4.1	6.7
Latvia	14.9	8.6	4.9
Lithuania	17.6	7.3	2.6
Luxembourg	8.4	4.2	13.4
Hungary	13.7	6.7	2.9
Malta	14.3	5.7	5.1
Netherlands	14.7	4.4	4.0
Austria	14.6	5.1	6.6
Poland	14.3	5.9	3.3
Portugal	14.6	4.1	2.6
Romania	13.1	4.9	1.6
Slovenia	12.7	5.4	3.2
Slovakia	12.8	6.4	3.0
Finland	12.0	5.8	2.9
Sweden	11.7	5.2	3.5
United Kingdom	13.4	5.0	5.0

Source: Statistical Yearbook of the Republic of Poland (2014, p. 794). Author's own calculations.

(7.8% share in both years under study), „Public administration and defence; compulsory social security” (the share increased to 6.7%), and „Human health and social work activities” (the share was stable – 5.9%). The share of employment in „Arts, entertainment and recreation” increased to 1.4%, while in „Other service activities” declined to 1.5%.

„Education” and „Human health and social work activities” should be seen, in the broad sense, as investment in human capital. Their growing importance is a result of their increasing role in the process of socio-economic development, and will continue to grow, but also due to demographic changes associated with the aging of society. It appears that the progress of civilization will create the demand for cultural, entertainment, and recreational services.

To evaluate the structure of employment in selected sections of the service sector in Poland it was compared with the corresponding structures in other countries of the EU28 Member States in 2013. The results are presented in Table 7.

The following conclusions can be drawn from the data:

Firstly, in all countries the section „Wholesale and retail trade; repair of motor vehicles and motorcycles” accounted for the largest share of employment. The largest share of employment in this section was found in Cyprus (18.6%), Bulgaria (17.9%), Greece (17.9%), and Lithuania (17.6%). In most countries, including Poland, the share stood at 12–15%. The smallest proportion of people employed in trade and repairs was in Luxembourg (8.4%). Secondly, the share of people working in „Transportation and storage” in most countries was in the range of 4 to 6%. The smallest percentage of people employed in this section was found in Cyprus (4.1%), Portugal (4.1%), and Luxembourg (4.2%) and the highest in Latvia (8.6%), Estonia (7.6%), and Lithuania (7.3%). The share of employment in this section in Poland (5.9%) corresponds to the share in Finland (5.8%) and Malta (5.7%). Thirdly, the proportion of people employed in the sections: „Financial and insurance activities” and „Real estate services” was highest in Luxembourg (13.4%) and Cyprus (6.7%) and the lowest in Romania (1.6%). In Poland, employment in these sections (3.3%) was less favourable compared with other member states, where it stood in the range of 4 to 5%. It can be concluded that the differences in the structure of employment in Poland compared to other EU countries are not significant in the first two sections under study, while larger differences concern financial and real estate services.

Final conclusions

These observations allow for the following conclusions:

1) The division of the economy into three sectors is the basis for research of the economic structure and structural changes that occur therein.

2) Based on the theory of the three sectors, the transformation of the economic structure is a prerequisite for socio-economic development. These transformations take place at a different pace, but in line with certain

regularities. The economic structure of developed countries is dominated by the service sector, the share of the industrial sector is smaller and the share of the agricultural sector is relatively small.

3) The growing importance of the service sector in the Polish economy is a positive element; since it shows that economic structure in Poland becomes similar to the structure of the highly developed countries, although there is still quite a significant development gap in this area. In the highly developed EU countries, the share of the service sector in employment and the gross value added fluctuated around 70-80%.

4) The predominant importance of the service sector in the Polish economy is reflected by its high share in gross value added (63.7% in 2013) and an increase in the proportion of workers in this sector (up to 57.7% in 2014), as well as the increase in the total number of economic entities (77% of all entities). The assessment of the level of development of the service sector should take into account changes occurring within the sector. Poland's economy, as other countries' of the EU28, is dominated by market services, but unfortunately in Poland there is a high share of services which do not contribute to the strengthening of the competitive position of the country. In market services, the structure of employment is dominated by trade and repairs (14.5% in 2014), and transportation and storage (5.7%). Knowledge-based services associated with R&D, and with financial and insurance activities, and with new technologies and innovations, of such importance to modern information and communication services, are still, however, relatively absent.

5) Education, health care and social assistance, which are the basis for the development of human capital; public administration and defence, and compulsory social security, important for the smooth functioning of the state and security of society, are important sections among non-market services.

Translated by TADEUSZ WEJCHERT
Proofreading by MICHAEL THOENE

Accepted for print 30.11.2015

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