# ECONOMIC ACTIVITY ACROSS EUROPE

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#### 1. Introduction

The European labour market has changed significantly in recent years. The female proportion of the labour force has increased and the gender gap is falling. Migration now also helps shape the labour market, with the accession of the new EU Member States and the right to free movement of workers bringing changes to the national and ethnic profile of the European labour market. Demographic changes associated with an ageing labour force have also been behind new labour market incentives to encourage older workers to remain in the labour force for longer.

## 2. Methodology

Labour market measurement units are overall comparable because most of the variables are defined in accordance with resolutions of the International Labour Organization (ILO) and other international organisations.

The activity rate is defined as the proportion of persons aged between 15 and 64 in the labour force in relation to the total population of the same age. Activity rates for men and for women are expressed as a percentage of the male population aged 15 to 64 and the female population aged 15 to 64 respectively, not as a share of the total (male and female) population aged 15 to 64. The labour force comprises employed and unemployed persons.

The employment rate is defined as the proportion of employed persons aged between 15 and 64 in the total population of the same age. Employment rates for men and women are expressed as a percentage of the male population aged 15 to 64 and the female population aged 15 to 64 respectively, not as a share of the total (male and female) population aged 15 to 64.

Employed persons are defined in the Labour Force Survey (LFS) as persons aged 15 and over who during the reference week did any work for pay, profit or family gain or were not at work but had a job or business from which they were temporarily absent because of, e.g., illness, holidays, industrial dispute and education or training. Employment by economic activity expresses the breakdown of employment according to the NACE classification.

The Gini coefficient is defined as the relationship of cumulative shares of the population arranged according to the level of equivalised disposable income, to the cumulative share of the equivalised total disposable income received by them. A society that scores 0 on the Gini scale has perfect equality in income distribution. The higher the number over 0, the higher the inequality, and the score of 100 indicates total inequality where only one person corners all the income.

## 3. Data Analysis

#### 3.1. Europe

The employment rate is calculated by dividing the number of persons aged 20 to 64 in employment by the total population of the same age group. The indicator is based on the EU Labour Force Survey. The survey covers the entire population living in private households and excludes those in collective households such as boarding houses, halls of residence and hospitals. Employed population consists of those persons who during the reference week did any work for pay or profit for at least one hour, or were not working but had jobs from which they were temporarily absent.

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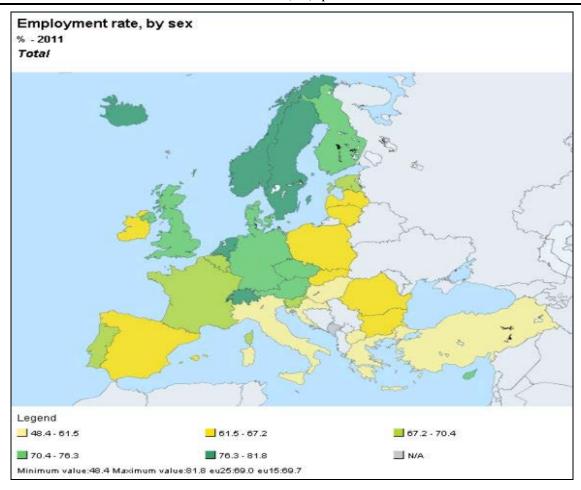


Fig. 1. Employment rate in Europe in 2011 [1]

Looking on this map (figure 1) we can observe five clusters. The higher employment rates have Netherlands, Iceland, Norway, Sweden and Switzerland. On the opposite the lower employment rates in Europe have Italy, Greece, Turkey and Hungary. On this map we have no Ukraine but looking on figure 4 we can state that it belongs to the third cluster.

#### 3.2. Poland and Ukraine

The number of the employed in Poland as of the state on 31 March 2012, amounted to 8526.4 thousand persons and was by 0.3% higher than last year (the last year a growth by 2.8% was observed). The share of the employed in the private sector amounted to 63.2% (the last year it was 62.5%).

Average employment in Poland in the first quarter of 2012 amounted to 8266.0 thousand persons, and was by 0.2% higher than at the same time last year; this growth was lower than the respective growth observed in the first quarter of 2011 (the last year respectively a growth by 2.8% was observed). The highest increase in average employment was observed in sections: professional, scientific and technical activities (by 4.9%), construction (by 4.8%), information and communication (by 4.3%), transportation and storage (by 2.4%), financial and insurance activities (by 1.9%), mining and quarrying (by 1.8%); while the lowest increase was observed in: water supply; sewerage, waste management and remediation activities and agriculture, forestry, hunting and fishing (respectively by 0.9% and 0.1%). A drop in employment was observed in other sections (see figure 2, table 1) [2].

Data on employment at the end of a year cover: employees hired on the basis of an employment contract, owners and co-owners of establishments engaged in economic activity and contributing family workers, outworkers, agents and persons employed by agents, members of the agricultural production co-operatives.

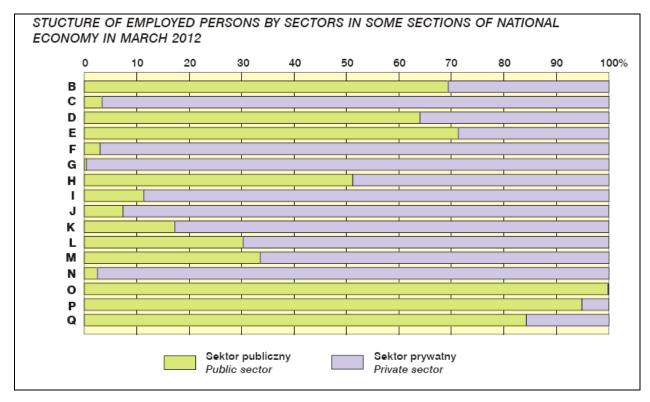


Fig. 2. Structure of employed persons in Poland

Economically active population (or labour force) includes all persons aged 15 and more who are considered as employed or unemployed in accordance with the definitions presented below.

Among the employed (figure 3) are included all persons aged 15 and more who during the reference week:

- performed for at least one hour any work generating pay or income, i.e. were employed as paid employees, worked on their own (or leased) agricultural farm, or conducted their own economic activity outside agriculture, assisted (without pay) in work on family agricultural farm or in conducting family economic activity outside agriculture,
- had work but did not perform it:
- due to sickness, maternity leave or vacation;
- due to other reasons, but the break in employment:
- did not exceed 3 months;
- exceeded 3 months, but these persons were paid employees and during that period received at least 50% of the hitherto remuneration (since the 1st quarter of 2006).

Compared to the third quarter of 2011, a drop in the number of the employed, a drop in the number of employed persons by 0.5% was observed. The number of the unemployed, as well as the economically active population increased (respectively by 4.2% and 0.2%).

In accordance with the international standards, among the employed were also included apprentices who entered into occupational training or occupational preparation contract with a private or public employer, if they received remuneration [3].

The changes in the definition of the unemployed (and economically inactive persons) follow the EUROSTAT recommendation (Commission Regulation (EC) No. 1897/2000 of September 2000).

Tab. 1. Employed persons in Poland, 2012

EMPLOYED PERSONS ABY SECTIONS OF NATIONAL ECONOMY As of 31 March 2012 Ogółem WYSZCZEGÓLNIENIE w tys. 31 III 2011=100 31 XII 2011=10 SPECIFICATION Total in thous. OGÓLEM ..... 8526,4 100.3 100,6 TOTAL w tym: of which: SEKTOR PRZEDSIĘBIORSTW ..... 5731.0 100.6 101.0 ENTERPRISE SECTOR Rolnictwo, leśnictwo, łowiectwo i rybactwo ..... 83.8 100,4 99.6 Agriculture, forestry and fishing 2544,2 99.4 100,4 Przemysł ..... Industry górnictwo i wydobywanie ..... 171,3 101,7 100.8 mining and quarrying przetwórstwo przemysłowe ..... 2094,4 99,4 100.5 manufacturing wytwarzanie i zaopatrywanie w energię elektryczną, gaz, parę wodną i gorącą wodę<sup>△</sup>...... 95,8 98,7 148,5 electricity, gas, steam and air conditioning supply dostawa wody; gospodarowanie ściekami i odpadami; rekultywacja<sup>5</sup>..... 129,9 100.7 100.4 water supply; sewerage, waste management and remediation activities Budownictwo ..... 103.2 515.6 104.2 Construction 100,3 Handel; naprawa pojazdów samochodowych <sup>a</sup> ....... 1162,4 100.8 Trade; repair of motor vehicles<sup>△</sup> Transport i gospodarka magazynowa ..... 499.0 102,6 103.5 Transportation and storage Zakwaterowanie i gastronomia <sup>Δ</sup>..... 131.4 95.4 94.2 Accommodation and catering <sup>a</sup> Informacja i komunikacja ..... 175,2 104,3 103,5 Information and communication Działalność finansowa i ubezpieczeniowa ..... 286.7 102.4 100.2 Financial and insurance activities Obsługa rynku nieruchomości <sup>Δ</sup> ...... 120,3 101.0 98,2 Real estate activities Działalność profesjonalna, naukowa i techniczna ...... 242,8 104,5 103,1 Professional, scientific and technical activities Administrowanie i działalność wspierająca <sup>△</sup> ...... 335,5 99.3 102,3 Administrative and support service activities Administracja publiczna i obrona narodowa; obowiązkowe zabezpieczenia społeczne ..... 628,4 99.3 99,7 Public administration and defence; compulsory social security Edukacja ..... 1035,4 99.6 100.2 Opieka zdrowotna i pomoc społeczna ..... 99,1 630,8 99,0 Human health and social work activities

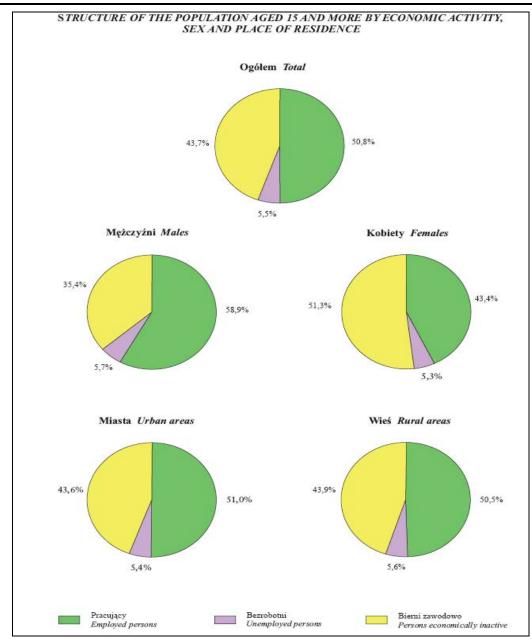


Fig. 3. Structure of the population in Poland by economic activity, 2011

Additionally, we present tables concerning economic activity of particular subpopulations, such as: school-leavers, students, rural population, and disabled persons.

Among school-leavers are included persons at the age 15–30 years who completed school during the last 12 months and who do not continue education. As students are referred the persons attending schools on all levels of education – beginning with primary and ending with tertiary (including doctorate studies) regardless of the system of this education (full-time, evening or weekend). The rural population was divided into two subpopulations:

- agricultural population with connections to agricultural holdings, i.e. persons living in rural areas, members of the households with a holder of agricultural farm or plot,
- non-agricultural population, i.e. persons living in rural areas, members of the households without any holders of agricultural farm or plot.

Population of disabled persons was separated from the population aged 15 years and more on the basis of legal criterion. Among the disabled were included persons aged 16 years and more who were granted a certificate of disability or inability to work.

Tab. 2. Economic activity rate in Ukraine 2011, by sex, age group and place of residence (percent of the total population in respective age group in average for period)

	Total		Of					
		15–24	25–29	30–39	40–49	50–59	60–70	working age <sup>1</sup>
Total population	64,3	41,7	79,7	84,2	85,3	65,4	24,2	72,7
females	58,5	36,6	69,0	78,4	84,2	58,5	22,1	68,9
males	70,7	46,5	90,1	90,2	86,4	73,9	27,4	76,3
urban population	62,6	38,1	80,2	85,0	85,3	63,1	15,9	72,2
rural population	68,1	49,3	78,5	82,3	85,2	71,1	42,1	73,8

<sup>&</sup>lt;sup>1</sup> Females aged 15-54, males aged 15-59.

Source: SSC of Ukraine

Similar to Poland we present economic activity based on Ukrainian data (see figure 4, table 2). We preset also data from Ukrainian labour market including by cause of inactivity (figure 5). The number of economically active population of Ukraine for the first quarter of 2012, dropped by 0,67% to 21,8 million people.

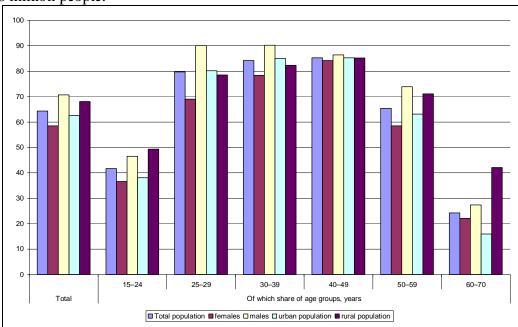


Fig. 4. Economic activity rate in Ukraine 2011, by sex, age group and place of residence

The number of economically active population in Ukraine aged 15-70 years in the first quarter of 2012, amounted to 21 million. 885,3 million. man. This was reported by the State Statistics Service (State Statistics Service). Relative to similar period of 2011, that number decreased to 0,67% (1st quarter 2011, the number of economically active population stood at 33,1 million 22 thousand people). Among the population of working age in the first quarter of 2012, amounted to 20 million 340.7 million people (increase of 115.6 million), over 1 million working-age-544 thsd. (decreased by 263.4 thousand). The level of economic activity, as a percentage of the population of the relevant age group, was as follows: aged 15-70 years-64.2% (unchanged);-working age-72.8% (increased by 0.2 p.p.). Older than working age-25.2% (decreased by 2.7 p.p.). It should be noted that the number of economically active population aged 15-70 years old in 2011, amounted to 22 million. 56.9 k. a man – 2010, it increased by 0.024%.

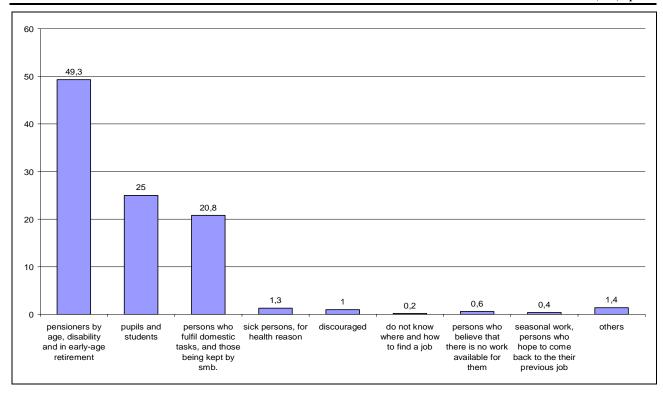
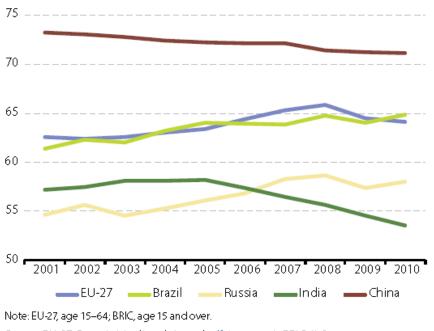


Fig. 5. Ukrainian labor market including by cause of inactivity, 2011

### 3.3. The European Union and the BRIC countries

At the end we want to compare Eurostat, and Brazil, Russia, India and China — the BRIC countries (figure 6). We presents the results of a desk study done in order to find best comparable information which allows an overview of EU-27 and the countries of Brazil, Russia, India and China [4].

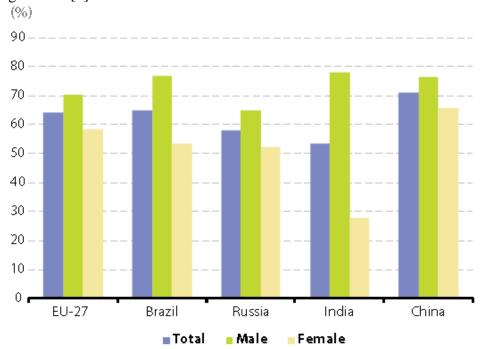


Source: EU-27, Eurostat (online data code: lfsi\_emp\_a); BRIC, ILO.

Fig. 6. Employment rates, total

In Eurostat, relations with other developed countries outside of the EU take place mainly via bilateral agreements or in international fora such as the UN and OECD. Eurostat has a Memorandum of Understanding (MoU) with the Brazilian Institute of Geography and Statistics (IBGE) signed in 2010, and the National Bureau of Statistics of the People's Republic of China

signed in 2011. The MoU with the Indian Central Statistics Office was signed in February 2012 while a follow-up to the 2002 MoU with the Federal States Statistics Service of Russia (Rosstat) is currently being drafted [5].



Note: EU-27, age 15-64; BRIC, age 15 and over.

Source: EU-27, Eurostat (online data code: lfsi\_emp\_a); BRIC, ILO.

Fig. 7. Employment rates, 2010

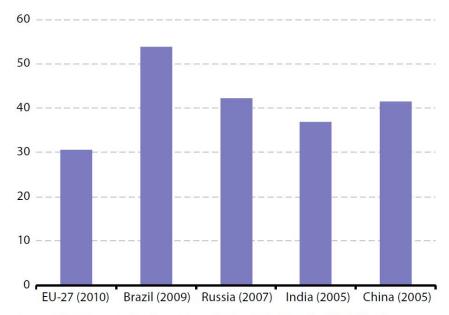
In order to provide a comparative view of the situation amongst the BRIC countries and the EU, use has often been made of data collected by international organizations such as the UN and its agencies, the OECD and others. Data has also been taken from national yearbooks (figure 7 and 8, table 3). The statistical data for the EU-27 stem largely from Eurostat's statistical reference database (Eurobase) and were essentially extracted between December 2011 and February 2012. External trade data for the EU-27 have mainly been taken from Eurostat's Foreign Trade database (Comext) and reflect data availability as of the beginning of February 2012. Trade data for the BRIC countries have been extracted from the UN's Comtrade database.

Tab. 3. Employment rates by gender and age groups

(%)

	Age	2001		2005		2009		2010	
		M	F	M	F	M	F	M	F
EU-27	15 +	60.5	43.3	59.9	44.3	59.3	45.9	58.7	45.6
	15-24	40.4	34.1	38.9	33.0	37.1	32.9	36.2	31.8
	25+	64.4	44.9	63.8	46.2	63.3	47.9	62.6	47.8
Brazil	15+	75.3	48.1	76.5	52.0	76.3	52.4	76.8	53.4
	15-24	62.2	39.7	64.5	43.1	62.4	42.2	62.6	43.2
	25+	80.6	51.2	81.0	55.1	80.8	55.4	81.2	56.3
Russia	15 +	61.3	49.2	62.5	50.8	64.1	51.9	65.1	52.2
	15-24	37.7	30.0	35.8	29.3	40.0	33.1	40.4	32.4
	25+	67.8	53.3	70.2	55.5	70.0	55.5	70.9	55.7
India	15+	79.4	33.4	79.9	35.1	78.4	29.4	78.1	27.7
	15-24	58.4	24.4	58.4	25.1	51.7	19.1	49.1	17.2
	25+	88.4	37.2	88.7	39.1	89.0	33.2	89.4	31.6
China	15+	78.2	68.0	77.4	66.8	76.5	65.6	76.4	65.6
	15-24	55.7	64.6	55.3	61.0	54.6	58.7	54.4	58.8
	25+	84.2	68.9	83.7	68.3	82.6	67.4	82.4	67.3

Source: EU-27, Eurostat (online data code: Ifsa\_ergan); BRIC, ILO.



Source: EU-27, Eurostat (on line data code: ilc\_di12); BRIC, The World Bank.

Fig. 8. Gini coefficient

#### 4. Conclusions

After the analysis, we can make conclusions that economic activity across Europe is rapidly increasing. This increase can be shown the best on the example of international labour market. These tendencies are differ according to the countries and its level of economic activity, which eventually influence the migration processes.

#### References

- 1. European Commission [Electronic source]. Access: http://ec.europa.eu/eurostat.
- 2. Employment, Wages and salaries in national economy. Warszawa: Statistical Information and Elaborations, 2012 [Electronic source]. Access: http://www.stat.gov.pl.
- 3. Labour Force Survey in Poland IV Quarter 2011. Warszawa: Statistical Information and Elaborations, 2012 [Electronic source]. Access: http://www.stat.gov.pl.
- 4. The European Union and the BRIC countries. 2012, Eurostat [Electronic source]. Access: http://ec.europa.eu/eurostat.
- 5. European news in English [Electronic source]. Access: http://www.news-en.com/2012/06/25/the-number-of-economically-active-population-of-ukraine-for-the.

### **Summary**

The author highlights the state and perspectives of economic activity development across Europe through the migration processes. The methodological approach and a lot of migration processes measurements are given in the article, which shows the last tendencies concerning this area.

**Key words:** economic activity; labour; migration.

**UD classification:** 330.3(4)

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