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Comparative assessment of women unemployment and poverty in European Union

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Abstract

High unemployment and poverty rate is one of the sorest social and economical problems those interfere relevant application of advantages provided for women by economics. After having analyzed the change trends of women unemployment and poverty rate, under the article it is sought to define their inter-correlation. Scientists' approach towards the links of unemployment and poverty differs even though it is most frequently highlighted that unemployment is one of the main reasons of poverty. However, the link assessment of the women unemployment rate and women at risk of poverty rate disclosed that there exists strong direct interrelationship not in all 28 countries of the European Union. It is also defined that currently, women unemployment rate in 28 countries of the EU, is lower than men; however, their risk of poverty rate outweighs the indicator of men.

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1. Introduction

Although the system of free market theoretically provides with a possibility to seek for economical independence for all citizens, the unstable economical situation, changes in the structure of labor market and work, altering national political, legal, cultural and institutional environment, etc., frequently decrease persons' possibilities for integration into labor market. The mechanism of labor market functioning is complex, thus there always appear persons, who face with a problem of involuntary job loss or failure to find a job, and the unemployed person has a greater possibility to join the destitute.

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Poverty is a factual problem that brings some trouble into the life of many people and restrains human's possibilities to lead life under relevant conditions. Thus, states, seeking to implement their political, economical, demographical, cultural and other aims, cannot exclude from society not taking into consideration human, residing in them, needs and look for ways how to decrease the spread of poverty. Reducing unemployment and alleviating poverty are key policy goals in many countries. However, despite legal act in force, regulating the following field, there are still a lot of persons, particularly women, who risk appearing at the poverty level.

The hidden gender poverty gap, women's economic dependence within families, the organization and distribution of resources in the household became the subject of a number of recent research studies and analyses (Tarkowska, 2002). Scientists (Ajakaiye & Adeyeye, 2002; Agénor, 2004; Bastos, Casacab, Nunesc, & Pereirinhad, 2009; Bradshaw & Finch, 2003; Bukšnytė-Marmienė & Vaitkūnienė, 2012 Callan, Nolan, & Whelan, 1993; Kangas & Ritakallio, 1998; Keršienė, 2011; Layte, Maitre, Nolan, & Whelan, 2001; Nolan & Whelan, 1996a; Perry, 2002; Šileika & Bekerytė, 2013; Townson, 2009; Whelan et al., 2002; and others) analyze unemployment and poverty, their reasons, inter-links and look for reasons that cause a worse women status in comparison with men, etc. However, there is a lack of statistic data in the analysis that discloses the extent which women unemployment is related to their higher risk to join the destitute.

The research aim – having analyzed change trends of women unemployment and risk of poverty rate to compare the obtained outcomes in the countries – members of the European Union.

The research objectives:

- 1. To analyze reasons of unemployment and poverty under a theoretical aspect.
- 2. To analyze changes in women unemployment rate and the women at risk of poverty rate in the countries members of the European Union.
- 3. To assess links between women unemployment rate and women at risk of poverty rate.

The research methods: the analysis of scientific literature, synthesis, comparison, summary, descriptive statistics, time series, correlative – regressive analyses, Min–Max indexes, and mean indexes.

2. Theoretical issues of unemployment and poverty

The job plays an important role for the formation of personal identity, conditions its self-esteem, self-consciousness, sometimes the main ambition in life and protects against poverty and social exclusion. However, individuals more frequently face integration problems related to labor market in the contemporary and fast changing world.

Labor market is formed when there 'take place production processes and there is carried out the satisfaction of work, as a factor of production, need' (Raškinis, 2008). According to Šileika and Andriušaitienė (2007) labour market can be described as market subsystem, its compound part where purchase-sales object is a specific good – potential employee.

Following the scientists' approach (Nikiforova, 1991; Borjas, 2010; Bosworth, Dawkins, & Stromback, 1996; Martinkus, Beržinskienė, 2005; Šileika & Andriušaitienė, 2007), labor market not only is the finding of a relevant workplace for an employee and selection of relevant employees; labor market is defined as a place where an employer, employee and jobseeker interact together in order to solve the issues related to payroll, working conditions, time, level of qualification, work intensity and volume, social benefits and guarantees, etc.

In accordance with the scientists (Beržinskienė & Juozaitienė, 2011; Beržinskienė & Rudytė, 2008; Martinkus & Beržinskienė, 2005) who analyze the issues of labor market it would be ideal if in the labor market there were as many workplaces as willing ones to work, and the labor agreement was completed in case a vacancy and person's appearance comply with each other. However, due to the dynamics, indeterminacy and different expression of labor market, it is not perfect or ideal as there are present quite many obstacles that encumber potential employees' possibilities to integrate into the labor market. Disproportions those emerge between labor supply and demand, cause unemployment problems.

Following the approach by Beržinskienė and Rudytė (2008), the indicator of unemployment rate reflects negative outcome of employment. Unemployment rate is an economical indicator that shows which part of labor resources

is not employed. The unemployment rate is the number of unemployed people as a percentage of the labour force, which refers to the total number of employed and unemployed people (European social statistics, 2013).

Having lost a job, a person does not only lose income, but he/she faces both social and psychological problems. In case the term of unemployment is getting longer, there are lost not only skills and qualification, but also job search activeness. According to Bukšnytės-Marmienė & Vaitkūnienė (2012), involuntary job loss is one of the strongest stressful situations in an adult's life and might cause changes in the condition of human negative lifestyle, psycho-social health and general health. Absence of work increases the risk of premature death due to the use of alcohol, different diseases and suicide. It is noticed that in case the term of unemployment is getting longer and family circumstances are getting force, the social family exclusion is getting greater and has negative impact on intercommunication in a family and the satisfaction of child development and perfection needs. Long-term unemployment has negative impact on human and society that can cause the change in the essential life provisions.

High unemployment is the key problem of poverty. In the second part of XVIII century there was started the discussion related to poverty and the change in the concept of the following term has been lasting for more than a century. Primarily, poverty was comprehended as insufficient income in order to obtain the necessaries of life and retain personal physical power. Nowadays, most authors define poverty as exclusion from minimal socially acceptable standards of living due to the insufficiency of resources (Callan et al., 1993; Kangas & Ritakallio, 1998; Layte et al., 2001; Nolan & Whelan, 1996a; Perry, 2002; Whelan, Layte, & Maitre, 2002). Poverty is also defined as a gap of necessary social needs (Bradshaw & Finch, 2003; Nolan & Whelan, 1996b). Poverty is seen not only in terms of economic/material deprivation, but also as a state of deprivation of well-being (Bastos et al., 2009).

The World Bank defined poverty as helplessness and insufficient freedom for functioning. Poverty is comprehended as an inability to come up to minimum standards of living (Overwiew: Understanding, measuring and overcoming poverty, 2009). The United Nations has defined poverty much more broadly than simply a lack of income. It argues that its "human rights" definition of poverty leads to "more adequate responses to the many facets of poverty." It gives due attention to the critical vulnerability and subjective assaults on human dignity that accompany poverty. And, importantly, it looks not just at resources, but also at the capabilities, choices, security, and power needed for the enjoyment of an adequate standard of living and other fundamental civil, cultural, economic, political, and social rights (Townson, 2009). In the modern society, such persons are called the destitute, whose gained income and other resources (tangible, cultural and social) are so poor that they do not secure normal standards of living. According to the following definition, it can be stated that the concept of poverty is more meaningful, relative and defined taking into consideration living standards in the country (Misiūnas, Binkauskienė, 2007).

The reasons causing poverty might be different. According to Ajakaiye & Adeyeye (2002), they include low or negative economic growth, inappropriate macroeconomic policies, deficiencies in the labour market resulting in limited job growth, low productivity and low wages, and a lag in human resource development, etc. Khandker (2005) argues, that poverty may be due to national, sector-specific, community, household or individual characteristics.

In the scientific literature, following the approach by Keršienė (2011), there are present different theories for reasons of poverty: (1) poverty is caused by individual drawbacks; (2) poverty is caused by cultural beliefs that bear subcultures of poverty; (3) poverty is caused by economical, political and social deformation or discrimination; (4) poverty is caused by geographical differences; (5) poverty is caused by accumulative and cyclical interdependence. Each of the listed theories for reasons of poverty proposes peculiar strategies for the interference into social development (Keršienė, 2011).

Nevertheless, it is most frequently highlighted that one of the main reasons of poverty is unemployment; although, scientists' approach towards the links between unemployment and poverty differs. According to the statement by Šileika and Bekerytė (2013) some scientists state that unemployment has direct impact on poverty, others assume that not always poorer countries have higher unemployment rate. However, there is no dispute that unemployment and poverty are closely related problems.

Thus job loss and inability to find a job cause severe subsequences for human, family and society. Consequently, one of the most significant aims of every state is to increase population employment in a country and seek for as low unemployment rate as possible that it did not cause the increase of inflation.

Employment policy officially became one of the main priorities of the European in the meeting of the Council of Europe in Luxembourg Union in November, 1997, where there was approved the European Employment Strategy; although, the procedure of the employment aims integration into the economical policy of the EU, already started at the beginning of the year 1990. During the following period, European countries began the solution of the problems related to a high and unstable unemployment rate and long-term increasing unemployment taking into consideration structural problems of labor market (Kluve, Card, & Fertig, 2007). Similarly, the EUS turned to be a significant starting point in the solution of problems related to the women integration into labor market (Rubery, Smith, Anxo, & Flood, 2001). Following the approach by scientists (Rubery et al., 2001; Rubery, Smith, & Fagan, 1999), increasing of women employment is one of the most significant aspects of employment strategy.

One of essential strategic aims in order to achieve some welfare, competitiveness and the growth of the Knowledge Economy is increasing of all social group employment in the European Union. The European Commission highlights that the application of equal conditions for men and women is an economical necessity, thus, 'strengthening of women's role in labour market is one of the basic EU aims – economical growth and gender equality – presumptions of implementation' (Gečienė, 2008). Thus the gender equality is a vitally important aim for the growth of the European Union, employment and social linkage. Countries and companies can be competitive only if they develop, attract and retain the best talent, both male and female (The Global Gender Gap Report 2013, 2014).

Summarizing it can be stated that unemployment and poverty is a sore social problem, toughly related to an individual's life. Participation in labor market and material resources conditions every human's perspective in the society of possibilities; thus, if there are present insufficient possibilities for using educational and development possibilities, inadequate status in labor market and low income, and there emerges threat for a social individual's participation and integration.

3. Change trades in women unemployment in the European Union

The unemployment trends are not similar across the European Union. Unemployment is showing a wide and growing divergence between Member States. Assessing changes in the unemployment rate in EU it is not difficult to notice that during economic recession, unemployment rate started growing as this process is usually related to decelerating output rates, lower company profitability, decrease of goods and service, etc. Since the start of the crisis unemployment has increased strongly in the south and periphery of the euro area, but much less so in other Member States (Draft Joint Employment Report, 2014). The data of Eurostat (2014) proves that crises struck men – their unemployment rate grew faster than women's because "male dominated sectors" were most affected. In the year 2009 in comparison with 2007, men unemployment rate grew most in Latvia (13.9p.p.), Lithuania (12.8p.p.), Estonia (11.5p.p.) and Spain (11.3p.p.) (Eurostat, 2014).

Between 2009 and 2013 the unemployment rate in the EU-28 increased from 8,9.1% to 10.8%. Calculated Min–Max indices showed that the highest women unemployment rate was in Spain (18.4%) in the year 2009 and the lowest unemployment rate was in the Netherlands – 3.8%. Actually, the least men unemployment rate was recorded in the Netherlands – in the year 2009 it was 3.7% (men unemployment rate in the year 2009 in comparison with year 2007 increase 0.6p.p.). In Spain, Latvia, Greece, Slovakia, Estonia, Portugal, France, Hungary and Italy in the year 2009 women unemployment rate was higher than the mean of the EU and fluctuated from 18.4% to 9.3%. Men unemployment rate in Latvia (20.3%) overweighed the mean of the EU (9.1%) most in the year 2009 – by 11.2p.p.

Analyzing changes in the unemployment rate in the year 2011 in comparison with the year 2010 men unemployment rate was higher than women's unemployment rate in Ireland (6.9p.p.), Latvia (4.8p.p.), Lithuania (4.8p.p.), Bulgaria (2.2p.p.), United Kingdom (1.4p.p.), Estonia (1.3p.p.), Finland (1.3p.p.), Romania (1.1p.p.), Germany (0.6p.p.), Cyprus (0.4p.p.), Denmark (0.2p.p.), Hungary (0.1p.p.), the Netherlands (0.1p.p.) and Sweden (0.1p.p.). Overall, the unemployment rate for the same period fell in the Baltic countries: in Estonia (4.4p.p.), Latvia (3.6p.p.) and Lithuania (2.4p.p.), and increase in Greece (5.1p.p.). However, it is requested to notice that men unemployment rate in the Baltic States was decreasing more than women's: men unemployment rate in Estonia in the year 2011 in comparison with the year 2010, decreased by 6.4p.p., in Latvia – by 4.5p.p., in Lithuania – by 3.2p.p., and respectively women unemployment rate decreased – by 2.5p.p., 2.9p.p. and 1.5p.p. (Eurostat, 2014).

Table 1	
Unemployment rate in the Euroepan Union countries - members in the year 2012 and the year 2013.	

Country	Women's unemployment rate				Men's unemployment rate			
	2012		2013		2012		2013	
	Min–Max indexes	Mean indexes	Min–Max indexes	Mean indexes	Min–Max indexes	Mean indexes	Min–Max indexes	Mean indexes
Belgium	0,1297	0,7048	0,1245	0,7523	0,1634	0,7404	0,1836	0,8056
Bulgaria	0,2720	1,0286	0,2604	1,0826	0,4505	1,2981	0,4348	1,2870
Czech Republic	0,1632	0,7810	0,1283	0,7615	0,0792	0,5769	0,0483	0,5463
Denmark	0,1339	0,7143	0,0906	0,6697	0,1535	0,7212	0,0870	0,6204
Germany	0,0377	0,4952	0,0038	0,4587	0,0644	0,5481	0,0338	0,5185
Estonia	0,2008	0,8667	0,1245	0,7523	0,3218	1,0481	0,2029	0,8426
Ireland	0,2803	1,0476	0,2189	0,9817	0,6584	1,7019	0,4879	1,3889
Greece	1	2,6857	1	2,8807	0,8515	2,0769	0,9469	2,2685
Spain	0,8703	2,3905	0,8226	2,4495	1	2,3654	1	2,3704
France	0,2301	0,9333	0,2000	0,9358	0,2673	0,9423	0,2609	0,9537
Croatia	0,4895	1,5238	0,4491	1,5413	0,5842	1,5577	0,6184	1,6389
Italy	0,3180	1,1333	0,3094	1,2018	0,2723	0,9519	0,3188	1,0648
Cyprus	0,2845	1,0571	0,3887	1,3945	0,4059	1,2115	0,5652	1,5370
Latvia	0,4059	1,3333	0,2340	1,0183	0,5842	1,5577	0,3720	1,1667
Lithuania	0,3054	1,1048	0,2113	0,9633	0,5347	1,4615	0,3961	1,2130
Luxembourg	0,0628	0,5524	0,0528	0,5780	0,0050	0,4327	0,0338	0,5185
Hungary	0,2636	1,0095	0,2000	0,9358	0,3366	1,0769	0,2560	0,9444
Malta	0,1255	0,6952	0,0528	0,5780	0,0644	0,5481	0,0773	0,6019
The Netherlands	0,0377	0,4952	0,0528	0,5780	0,0446	0,5096	0,1063	0,6574
Austria	0	0,4095	0	0,4495	0	0,4231	0	0,4537
Poland	0,2762	1,0381	0,2340	1,0183	0,2475	0,9038	0,2319	0,8981
Portugal	0,4770	1,4952	0,4415	1,5229	0,5693	1,5288	0,5507	1,5093
Romania	0,0879	0,6095	0,0642	0,6055	0,1584	0,7308	0,1449	0,7315
Slovenia	0,2134	0,8952	0,2264	1,0000	0,1980	0,8077	0,2222	0,8796
Slovakia	0,4268	1,3810	0,3623	1,3303	0,4505	1,2981	0,4396	1,2963
Finland	0,1172	0,6762	0,0981	0,6881	0,1931	0,7981	0,1884	0,8148
Sweden	0,1423	0,7333	0,1132	0,7248	0,1881	0,7885	0,1594	0,7593
United Kingdom	0,1297	0,7048	0,0792	0,6422	0,1931	0,7981	0,1498	0,7407

Source: Author's calculation, based on (Eurostat, (2014)) Statistics Database.

In the year 2012, there remained similar change trends of men and women unemployment rate in Lithuania: men unemployment rate decreased more than women's in the year 2012 in comparison with the year 2011. Men unemployment rate in Lithuania, decreased by 2.7p.p. and women's – by 1.3p.p. in comparison of the year 2012 with the year 2011. Change trends of unemployment rate in the remaining Baltic States differed: women unemployment rate more decreased in Estonia (by 2.7p.p.) than men's (by 2.2p.p.), and men unemployment rate decreased by 2.4p.p. in Latvia; meanwhile, women unemployment rate increased by 0.2p.p. Women unemployment rate also increased in some other countries – members of the EU in comparison of the year 2012 with the year 2011, especially in Greece – by 6.7p.p. (Eurostat, 2014).

The applied improvement measures for women employment indicators and taxation measures in order to promote the creation of workplaces, etc., enabled the achievement of positive changes for 28 countries – members of the EU. The analysis in statistic data reveals the least women unemployment rate was in Austria was in the year 2012 and the year 2013 (see Table 1).

Following the Table 1, it can be seen that Austria is a country where there was the least men unemployment rate in the years 2012 and 2013: in the year 2012, it reached 4.4%, and in the year 2013, it slightly increased (by 0.5p.p.) and was 4.9%. Statistic data state that in the year 2013, women situation did not change and the highest rate remained in Greece (31.4%). In the year 2013, women unemployment level was higher than the mean of the EU (10.9%) was in Spain (26.7%), in Croatia (16.8%), Portugal (16.6%), Cyprus (15.2%), Slovakia (14.5%), Italy (13.1%) and Bulgaria (11.8%).

Some people who can't find a job may decide to stop looking and hence drop out of the labour force – what is known as 'the discouraged worker effect'. Others may decide to supplement falling incomes by working more in order to compensate – 'the added worker effect'. In this way, some individuals who were not on the labour market previously may start looking for a job. The 'discouraged worker effect' is overwhelmingly a male phenomenon, while 'added workers' are predominantly female. In a majority of countries, women are more likely than men to increase their offer of labour during the crisis (Report on Progress on equality between women and men in 2013, 2014).

It is necessary to notice that women select a part-time job more frequently than men. In most cases the selection is voluntary; however, sometimes women are simply forced to select a part-time job. Thus, incomplete employment or part-time job as a form of employment is assessed ambiguously (Maslauskaitė, 2008):

- 1. Part-time job is usually interpreted as opening of wider possibilities for women to participate in a professional field that provides women with greater selection and solution freedom to participate in the labor market.
- Part-time job is frequently criticized and interpreted as imitable creation of equal possibilities that sentences women to lower professional positions, lower payrolls and concerning culture, it promotes the consolidation of sexism provisions about the fact that women are not willing and are not powerful to compete in the labor market equivalently.

Analyzing statistic data it can be stated that in different countries-members of the EU, the number of persons, working part-time, is changing unequally. Men still account for less than a quarter of part-time employees. The share of men working part-time is small (8.2%), whereas almost a third of employed women across Europe work part-time (32%). This figure is above 40% in the UK, Germany, Austria, Belgium and the Netherlands. Moreover, fewer women than men transition out of part-time into full-time work. The transition rate is particularly low for women in the Netherlands, Austria and Germany. In other words, part-time status is more likely to be irreversible for women (Report on Progress on equality between women and men in 2013, 2014).

Summarizing it can be stated that the indicators of the unemployment rate under the conditions of different economical cycles were changing unequally in the countries of the EU. During the latter years, the occurred changes reveal that the European Employment Strategy provided the European Union with the conditions to make progress while fighting with unemployment and creating even much better workplaces. However, due to the dynamics of the labor market, uncertainty and complex functioning of the mechanism there are present differences in different labor market segments. Moreover, the women employment models present in the countries – members of the EU, form unequal structural possibilities for women to participate in the labor market.

4. Links between unemployment and poverty

Unemployment highlights not only economic, but social problems too, as increasing unemployment rate and at the same time decreasing family-income mean that the united expenditure is decreased more and more. One of the most painful problems is poverty. Poverty, according to Bastos et al. (2009), have a significant expression in Europe. Following "Europa 2020" strategy, the EU determined an ambition in the field of social inclusion, to decrease the number of people living in poverty and the number of socially excluded people or people, who are under the threat of poverty by 20 million at least by the year 2020. Each country determined aims and prospected actions for the achievement of the following aims (Kovos su nedarbu ir skurdo mažinimo strategijų tyrimas, 2014).

However, not all 28 countries – members of the EU are successful in solving the present problems. Between the beginning of the crisis in 2008 and 2012, the number of Europeans at risk of poverty or social exclusion increased to 25.1% of the EU-28 population in 2012. While the proportion of the population at risk of poverty or social exclusion has risen in particular in those Member States most hit by the economic crisis (Draft Joint Employment Report, 2014).

In 2010, 115 million people, or 23.4% of the population, in the EU27 were at risk of poverty or social exclusion (AROPE). This means that they were at least in one of the following three conditions: at risk of poverty, severely materially deprived or living in households with very low work intensity. Despite AROPE rates remaining stable overall at EU-27 level between 2009 and 2010, the risk of poverty or social exclusion rose by 3.9p.p. in Lithuania and 2.1p.p. in Spain, decreasing significantly only in Bulgaria, Estonia and Romania (-4.6, -1.7 and -1.7p.p.)



Fig. 1. At risk of poverty rate by sex in EU-28, Source: Created by the author, based on (Eurostat, (2014)) Statistics Database.

(Antuofermo, Di Meglio, 2012). In the year 2011, the situation changed slightly and the part of persons who face poverty risk or social exclusion in the countries – members of the EU, increased by 0.6p.p. (Progress on Equality between Women and Men in 2012, 2013).

In 2013, 122.6 million people, or 24.5% of the population, in the EU were at risk of poverty or social exclusion. The proportion of persons at risk of poverty or social exclusion in the EU28 in 2013 (24.5%) has slightly decreased compared with 2012 (24.8%), but is higher than in 2008 (23.8%). In 2013, more than a third of the population was at risk of poverty or social exclusion in five Member States: Bulgaria (48.0%), Romania (40.4%), Greece (35.7%), Latvia (35.1%) and Hungary (33.5%). On the contrary, the lowest shares of persons being at risk of poverty or social exclusion were recorded in the Czech Republic (14.6%), the Netherlands (15.9%), Finland (16.0%) and Sweden (16.4%) (Eurostat, 2014).

Older women are much more at risk of poverty or social exclusion than older men (22% versus 16.3%). Over the last 5 years, the relative situation of older men and women improved, and the gender gap has shrunk. Also single parents – mainly mothers – are a particularly vulnerable to poverty and exclusion, and 35.5% of them are at risk of poverty. This rate ranges from 26% in Slovenia to 66% in Greece (Report on Progress on equality between women and men in 2013, 2014).

Statistic data give evidence that almost in all EU countries women at risk of poverty rate higher than men's (see Fig. 1).

In the year 2013 the biggest differences between men and women at risk of poverty rate (see Fig. 1) was in Sweden (2.7p.p.), Estonia (2.7p.p.), Bulgaria (2.5p.p.), Cyprus (2.4p.p.), Lithuania (2.2p.p.) and Germany (2.2p.p.). In four countries – Spain (1.0p.p.), Hungary (0.6p.p.), Denmark (0.5p.p.) and Portugal (0.2p.p.) – in the year 2013 women at risk of poverty rate was lower than men's. Despite effectual legal acts regulating the following field, women more and more risk to face the poverty rate. That leads to a presumption that women's average disposable income is lower, that women are paid relatively lower wages, their career development is more complicated thus women's economical status is still lower.

The statistical data analysis reveals that an increasing unemployment rate not always causes the growth risk of poverty rate (see Fig. 2).

Fig. 2 shows that in 28 countries – members of the EU, during the analyzed period, women and men unemployment rate was increasing: women unemployment rate increased by 2.0p.p. during the period of 2009–2013, and men unemployment rate – by 1.8p.p. Having taken into consideration poverty data in 28 countries – members of the EU, it can be seen that the risk of poverty rate was changing unevenly. Analyzing the men risk of poverty rate it is not difficult to mention that during the period 2009–2012, the men risk of poverty rate increased (it increased most (by 0.5p.p.) in the year 2011 in comparison with the year 2010); however, in the year 2013, the



Fig. 2. Dynamics of unemployment and at risk of poverty rate in EU-28, Source: Created by the author, based on (Eurostat, (2014)) Statistics Database.

situation changed: in the year 2013, men at risk of poverty rate decreased by 0.2p.p. in comparison with the year 2012. Women at risk of poverty rate did not change in the year 2010 in comparison with the year 2009; however, already in the year 2011, in comparison with the year 2010, it increased by 0.6p.p. In the remaining years, the women at risk of poverty rate in 28 countries – members of the EU was decreasing annually: from 17.7% in the year 2011 to 17.2% in the year 2013.

In the years 2012 and 2013 was recorded the lowest women's unemployment rate in the Austria (4.3% and 4.9%) and Germany (5.2% and 5.0%) (see Table 2).

However, according to the indicator of poverty, the following countries did not join the countries, those solve poverty problems effectively (see Table 2): in the year 2012, Austria was in the 9th pace and Germany in the 18th place. In the year 2013, Austria moved up to the 8th place (the situation in Austria, improved a little: women at risk of poverty rate decreased by 0.1p.p.) in the year 2013 in comparison with the year 2012), and Germany up to the 16th place (women at risk of poverty rate in Germany remained the same as in the year 2012). The least women at risk of poverty rate in the years 2012 and 2013 was in the Czech Republic and the Netherlands. In the Czech Republic, women at risk of poverty rate in the year 2012 was 10.5%, and in the year 2013 in comparison with year 2012, it decreased by 1.1p.p., and in the Netherlands, during the both analyzed years, it was 10.6%.

Greece is the least successful in solving social problems. The following country was the last under the indicator of women unemployment rate and the women at risk of poverty rate: women unemployment rate in the year 2013 in comparison with the year 2012 increased by 3.2p.p. and was 31.4%, and the indicator women at risk of poverty rate increased from 23.6% in the year 2012 to 23.8% in the year 2013.

Analyzing the links between women unemployment and women poverty it was determined that only in two countries of the analyzed ones (in the Greece and Slovenia), there is present a very strong direct correlation between women unemployment rate and women at risk of poverty rate. It was found that correlation coefficients in the years 2009–2013, relatively are 0.9944 and 0.8937. The direct correlation reveals that in case of the increase of women unemployment there increased women poverty in the following countries as well. Determination coefficients are as following: in Greece – $R^2 = 0.9889$; in Slovenia – $R^2 = 0.7988$, Stjudent *t* factual meaning (16.3726 and 3.6510) is higher than Stjudent *t* critical meaning 3.1825. I.e. correlation coefficient between unemployment rate and the risk of poverty rate in 2009–2013 is meaningful. Such great dependence could have been caused by the fact that in case of the unemployment increase there increased poverty in Greece and Slovenia in 2009–2013.

Assessing in general the links between women unemployment and women poverty in 28 countries – members of the EU, there was determined weal inter-correlation between women unemployment rate and women at risk of poverty rate (in the years 2009–2013, the meaning of correlation coefficient is 0.0881) (see Fig. 3).

Determination coefficient is lower than 0.25 ($R^2=0.0078$) (see Fig. 3), thus it can be stated that unemployment rate during the period of 2009–2013, does not explain the spread at risk of poverty rate. That is proved under the gained less factual meaning of Stjudent criteria in comparison with critical one: Stjudent *t* factual meaning 0.5162 is less than critical Stjudent *t* meaning 3.1825. I.e. correlation coefficient between women unemployment

Table 2 Women's unemployment rate and women at risk of poverty rate in the European Union Member – States.

2012				2013					
Country	Unemployment rate	Country	At risk of poverty rate	Country	Unemployment rate	Country	At risk of poverty rate		
Austria	4,3	Czech Republic	10,5	Austria	4,9	Czech Republic	9,4		
Germany	5,2	The Netherlands	10,6	Germany	5	The Netherlands	10,6		
The Netherlands	5,2	Denmark	12,9	Luxembourg	6,2	Denmark	12,1		
Luxembourg	5,8	Slovakia	13,3	Malta	6,3	Finland	12,3		
Romania	6,1	Finland	13,6	The Netherlands 6,3		Slovakia	12,9		
Finland	7,1	Hungary	13,9	Romania	6,3	Hungary	14		
Malta	7,3	France	14,6	United Kingdom	7,1	France	14,3		
Belgium	7,4	Slovenia	14,6	Denmark	7,3	Austria	15,2		
United Kingdom	7,4	Austria	15,3	Finland	7,5	Slovenia	15,4		
Denmark	7,5	Luxembourg	15,6	Sweden	7,9	Belgium	15,5		
Sweden	7,7	Sweden	15,6	Belgium	8,2	Luxembourg	16		
Czech Republic	8,2	Malta	15,8	Estonia	8,2	Malta	16,1		
Estonia	9,1	Belgium	15,9	Czech Republic	8.3	Sweden	16,1		
Slovenia	9,4	Ireland	15,9	France	10,2	United Kingdom	16,4		
France	9,8	United Kingdom	16,3	Hungary	10,2	Cyprus	16,5		
Hungary	10,6	Cyprus	16,4	Lithuania	10,5	Germany	17,2		
Bulgaria	10,8	Poland	17,1	Ireland	10,7	Poland	17,3		
Poland	10,9	Germany	17,2	Slovenia	10,9	Portugal	18,6		
Ireland	11	Estonia	18,1	Latvia	11,1	Latvia	19,8		
Cyprus	11,1	Portugal	18,2	Poland	11,1	Estonia	19,9		
Lithuania	11,6	Lithuania	19	Bulgaria	11,8	Spain	19,9		
Italy	11,9	Latvia	19,1	Italy	13,1	Italy	20,1		
Latvia	14	Italy	20,7	Slovakia	14,5	Croatia	20,3		
Slovakia	14,5	Croatia	21,3	Cyprus	15,2	Lithuania	21,6		
Portugal	15,7	Spain	22,1	Portugal	16,6	Bulgaria	22,2		
Croatia	16	Bulgaria	22,8	Croatia	16,8	Romania	22,5		
Spain	25,1	Romania	23,2	Spain	26,7	Greece	23,8		
Greece	28,2	Greece	23,6	Greece	31,4	Ireland	:		

Source: Compiled by the author, based on (Eurostat, (2014)) Statistics Database.



Fig. 3. The link between women unemployment rate and the women at risk of poverty rate in 28 countries – members of the EU in 2009–2013, Source: Created by the author, based on (Eurostat, (2014)) Statistics Database.

rate and the risk of poverty rate is not meaningful in 2009–2013. Such little dependence was caused by the fact that in case of women unemployment rate increase there decreased the women at risk of poverty rate. During the analyzed period, the risk of poverty rate in 28 countries – members of the EU, could change due to different factors; e.g. due to the decreased gap between men and women payroll in some countries and the change in the disposed income, that they depend on, etc.

5. Conclusions

- 1. The indicators of women unemployment rate were changing unequally in the countries members of the European Union under the conditions of different economical cycles. The applied measures for the improvement of women employment indicators and taxation measures in order to promote the creation of workplaces, etc., enabled the achievement of positive changes for 28 countries members in the EU: women's participation in the economy and their contribution to family finances have increased. On the other hand, women are still selecting the kind of a part-time job more frequently than men and that leads to the presumption related to lower women income in future and greater expectation to join the destitute.
- 2. The analysis of statistic data disclosed that unemployment rate of both women and men increased in many members countries of the EU in 2009–2013 and the risk of poverty rate changed unevenly: decreased and increased. However, the women at risk of poverty rate in many countries members of the EU is higher than men and that proves that despite legal acts in force, there are still more women, who risk to appear at the poverty level; the income, disposed by women, is lower; they are paid relevantly lower payroll and the possibilities, related woman's material safety, career and self-expression in life in general, are restrained.
- 3. Analyzing the links between women unemployment and women poverty it was determined that only in two countries (in the Greece and Slovenia) is very strong direct correlation between women unemployment rate and women at risk of poverty rate. But assessing in general the links between women unemployment and women poverty in 28 countries members of the EU, there was determined weal inter-correlation between women unemployment rate and women at risk of poverty rate. Such little dependence was caused by the fact that in case of women unemployment rate increase there decreased the women at risk of poverty rate.

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