
ECONOMICS

Sociology

Okuneviciute Neverauskiene, L., & Rakauskiene, O. G. (2018). Identification of employment increasing possibilities in the context of the EU socioeconomic environment evaluation: The case of Lithuania. *Economics and Sociology*, 11(4), 51-68. doi:10.14254/2071-789X.2018/11-4/3

IDENTIFICATION OF EMPLOYMENT INCREASING POSSIBILITIES IN THE CONTEXT OF THE EU SOCIOECONOMIC ENVIRONMENT EVALUATION: THE CASE OF LITHUANIA

**Laima Okuneviciute
Neverauskiene,**
*Vilnius Gediminas Technical
University
Vilnius, Lithuania,
E-mail:
laima.okuneviciute@dsti.lt*

Ona Grazina Rakauskiene
*Mykolas Romeris University
Vilnius, Lithuania,
E-mail: ona.rakaus@mruni.lt*

Received: April, 2018
1st Revision: May, 2018
Accepted: November, 2018

DOI: 10.14254/2071-
789X.2018/11-4/3

ABSTRACT. Comparative analysis of the EU countries' socioeconomic indicators is carried out here along with the systematic analysis of the global and the EU strategic documents, the European Commission's communiqués, the European Commission's (committees') and individual working groups' studies on employment issues. Potential scenarios for increasing employment are considered basing on the analysis of socioeconomic conditions in Lithuania. The article uses the methods of systematic scientific literature analysis, general and logical analysis, comparison, summation and abstraction as well as the mathematical and statistical processing methods. Situation analysis is based on the data of the Eurostat, specialized surveys and the results of statistical calculations. The article substantiates that in order to increase employment, efficient resource allocation and targeted economic policy focused on social problems of the country are needed, and appropriate measures for its implementation are proposed. Employment-friendly macroeconomic policy-making is seen here as a fundamental strategic guideline to address the problems of employment and social economic inequality. Green economy and green jobs' development are one of the priority directions in increasing employment in Lithuania. Employment policy guidance in green technologies (renewable energy sources, recycling, and green building), the green economy, and promotion of professional skills in this area are recommended. Transition to green economy, eco-villages and ecological communities would be one of the fundamental directions in increasing employment among the most vulnerable groups. Furthermore, regional policies must be intensified in Lithuania to enhance economic (investment) and social attractiveness of less populated areas.

JEL Classification: D63,
O11, O15, J60, J68

Keywords: employment, unemployment, social exclusion, macroeconomic and fiscal policy, strategic guidelines.

Introduction

One of the fundamental objectives of the EU strategy “Europe 2020” is full employment and social cohesion (Europe 2020..., 2010). Employment growth prospects, on the one hand, depend on the EU’s ability to promote economic growth and efficiency through **macroeconomic policies** and, on the other hand, it must be accompanied by appropriate **microeconomic structural policies** designed to foster the conditions for employment – increasing the number of jobs and creating new jobs, facilitating the transition to another job, providing labour supply, corresponding to the growing labour market demand. Employment policy should not only help the economy to recover in the short term, but also to ensure necessary social investments in a longer term, which will enable increased budget revenues.

In fulfilling these objectives it is planned to reach 75% employment among the persons aged 20-64 by 2020 and to reduce the number of those living in poverty and socially marginalized people by at least 20 million. To achieve this objective, the EU needs to create additional 17.6 million job places. It should be noted that employment targets set by the Member States up to 2020 range from 59% and 62.9% respectively in Croatia and Malta to 72.8% in Lithuania and 80% in Denmark, the Netherlands, and Sweden. Unfortunately, the economic crisis started in 2008, the employment rate fell to 68.9% in 2011 and unemployment exceeded 10.0% in 2012. The crisis has affected the Member States to varying extents and not with the same intensity, therefore, it also increased disparities between the Member States. There is a clear increase in the Member States’ activity results gap and regional disparities.

Increases in the numbers of people facing poverty and social exclusion clearly illustrates the negative consequences from the slowing down of the EU’s economic growth. In 2013, 122.6 million people, or 24.5% of the population, in the EU were at risk of poverty or social exclusion. This means that these people were in at least one of the following three conditions: at-risk-of-poverty after social transfers (income poverty), severely materially deprived or living in households with very low work intensity¹.

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%). In Lithuania, this rate also remains high and is significantly above the EU average. The mentioned indicator in this country increased from 27.6% in 2008 to 30.8% in 2013, i.e., about a third of the population was at risk of poverty or social exclusion. Thus, unemployment, poverty, and social exclusion have become the most acute problems in the economy in Lithuania, as well as across the EU.

Moreover, stronger economy and faster economic growth rates create favorable conditions in the country to achieve higher standards of living, reduce poverty and social exclusion, but economic changes as such, taken alone have no significant positive impact on social well-being and material poverty reduction. To achieve this, efficient and well-targeted resource allocation is required so that to solve the social problems of the country. E.g., the Eurostat data shows that the share of persons severely materially deprived in the **EU-28** has decreased during 2008-2010, at the same time, this indicator significantly increased in Lithuania. In the **EU-28** as of 2013, severe material deprivation tortured 9.6% of the population. This indicator is still higher in Lithuania, reaching 16.0%.

The article aims to carry out a systematic comparative analysis of socioeconomic indicators in the EU countries, to analyze the EU strategic documents, studies on topical

¹ People living in the households with very low work intensity are those aged 0-59 who live in the households where on average the adults (aged 18-59) work less than 20% of their total work potential during the past year. Students are excluded from this group.

employment issues, and to identify the most suitable scenarios for their implementation and measures to be taken in relation to the labour market of the country.

The research methodology includes assessment of global and EU strategic documents, the European Commission (committees') documentation as well as studies on employment carried out by individual working groups, highlighting the most relevant scenarios of their implementation under the conditions of Lithuanian labour market development. The research methodology includes such methods as systematic analysis of socioeconomic changes in the EU countries, the EU statistical data comparative analysis, research analysis, critical analysis, assessment of the EU and global institutions strategic documents, identification of increasing employment scenarios in the context of Lithuanian socioeconomic conditions.

1. Review of Employment Research

Scientists' research focus on the problem of employment and unemployment has been increasing across the world; the field of research is extensive, and various aspects of this problem are highlighted. The scientific analysis of the theme of employment and unemployment surveys (carried out in 2009-2017) showed certain basic directions followed in employment and unemployment research. First, it is the influence of the global economic crisis on the employment and unemployment surveys in the 2009-2011 period.

During the times of economic downturn, the employment and unemployment surveys received specific attention. **The interfaces of the global economic crisis with employment and unemployment** are a common theme of employment and unemployment (the report goes about unemployment during an economic downturn) (Cuyvers, De Lombaerde, Rayp, 2011; Dapontas, 2013; Todorov, 2013; Mitev, 2013; Wallace *et al.*, 2015). Themes of **labour market developments and trends** in the economic downturn dominated in the discourse of Lithuanian employment and unemployment in 2009-2011 (Martinkus *et al.*, 2009; Gruževskis, Zabarauskaitė, 2011; Okunevičiūtė Neverauskienė, Pocius, 2011). Problems faced during the economic downturn, causes and consequences of the crisis in Lithuania, the economic recession, and labour market interfaces were mainly analysed. Scientists mentioned interfaces of economic cycles with certain aspects of employment, e.g. wages or active labour market policy measures, along with the analysis of the impact of the global economic crisis on employment and unemployment (Kudlyak, 2010; Lei, Silos, 2012; Nordlund, 2011).

The impact of unemployment insurance on the employment, as the assessment of labour market policy measures, takes a significant niche between the employment and unemployment research studies conducted in 2009-2011 (Landais *et al.*, 2010; Rothstein, 2011; Andersen, Svarer, 2009; Hairault *et al.*, 2009; Okunevičiūtė Neverauskienė, Moskvina 2010-2011; Bernal-Verdugo, Furceri, Guillaume, 2012). Special attention is given to the assessment of active labour market policy (ALMP) measures in different economic cycles.

A review of the scientific literature shows a change in topics in employment and unemployment studies carried out in 2012-2017. Recently, increasing attention in scientific articles on employment has been paid to the examination of the legal system of employment (Bagenstos, 2013; Avdagic, 2014; Thompson, 2014; Auer, 2016), unemployment measurement issues (Aysun *et al.*, 2014; Mueller, 2017; Tang, Bethencourt, 2017), analysis of the individual submarkets (e.g. low wages submarket) (Kwon 2014; Ortego-Marti, 2017). **Job security issues** (Eichhorn, 2014; Wulfgramm, 2014; Berglund, Furaker, 2016; Caroli, Godard, 2016) and aspects of **labour costs** and their impact on the labour market (Dobele *et al.*, 2014; Lazutka *et al.* 2015; Bayraktar-Saglam, Boke, 2017; Boadway, Song, Tremblay, 2017) are analysed along with discourse on unemployment insurance benefits.

It should be noted that, in recent years, a large part of studies on employment and unemployment issues are associated with vulnerable groups (especially young people) and opportunities to integrate these groups into the labour market (Lawy, Wheeler, 2013; Avis, 2014; Lahusen *et al.*, 2013; Maguire, 2013; Drakaki *et al.*, 2014; De Lange *et al.*, 2014; Rhee-Weise, Horn, 2014; Okunevičiūtė Neverauskienė, 2009-2017; Jakštienė *et al.*, 2013; Klíma, Palát, 2015; Tuzemen, 2017 and others).

As shown by the analysis of the scientific literature, special attention is given to the exploration of employment problems. A number of different studies addressing employment developments and trends, the impact of economic cycles on employment, unemployment problems in vulnerable groups, and assessment of labour market policy measures can be found in the scientific literature. In summary, the analysis of the research and studies suggests that although employment and unemployment issues were quite extensively examined in research works in Lithuania in 2009-2017, systemic analysis of possible guidelines as to solution of this problem, specific measures and evaluation on both micro and macro levels appear to be lacking.

2. Recent Trends in the EU Labour Market

In 2013, the European Commission's Joint Employment Report (COM, 2012) stated that the European Union's labour market recovery has slowed significantly; employment continued to decline, and the forecast for 2013 didn't look optimistic. Jobs are created sluggishly, and the situation is deteriorating across the gross market, despite the untapped potential of job creation in some sectors. Labour market segmentation continues to increase together with the increasing number of temporary and part-time employment contracts. There is still high labour force taxation, and some Member States even increased it. Unemployment continues to rise, having reached the unprecedented level in the Euro zone in 2012. The rapid growth of long-term unemployment is a major concern; it has grown especially in the countries pursuing tight fiscal policies. More than one in five young people are out of employment in the labour market; therefore, this generation can become a so-called 'lost generation'.

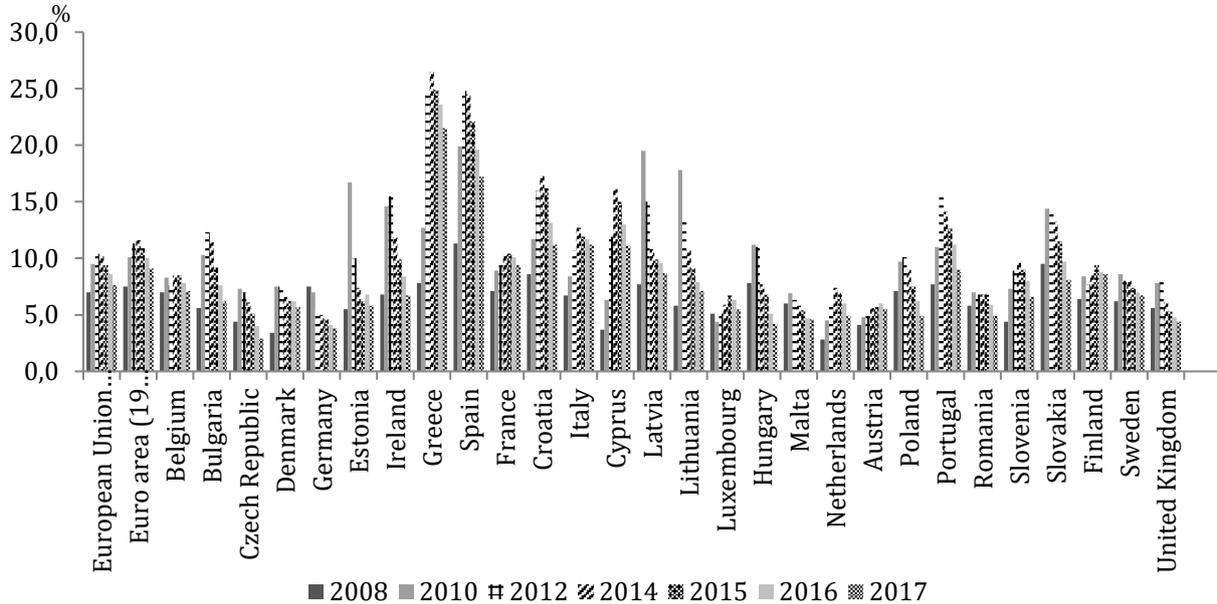
The differences in unemployment rates among EU Member States show that the gap is dramatically increasing; it reflects the asymmetric effect of the impact on, and different resistance of labour markets to, the crisis. Statistical figures show that the process of searching for appropriate job and placement is slowing down on European labour markets; thus, there is a risk of increasing structural unemployment becoming embedded universally.

Average household income has decreased in most Member States. Recent data suggest that poverty is increasing in the majority of Member States, the forms of poverty and social exclusion are getting worse, and poverty of working people, social fragmentation and polarization are growing.

One of the main problems of this time in the European Union is the unprecedented unemployment rate, which accounted for 12% in 2012 and reached an all-time record. The number of the unemployed in the EU exceeded 25 million in 2012. EU Employment and Social Affairs Commissioner Laszlo Andor called such a situation a 'European tragedy'. Unemployment has a particularly adverse effect (increasing the number of the long-term unemployed) on the most vulnerable social groups: young people, the elderly, less educated people.

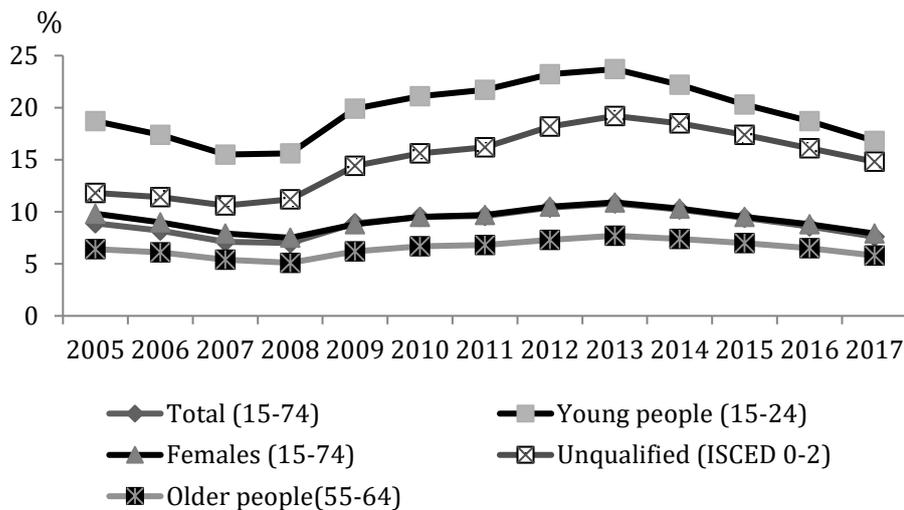
The EU Draft Joint Employment Reports (COM, 2012-2017) state that the EU-28 Member States reached an unprecedented level of unemployment. The unemployment rate in the EU-28 increased from 7.0% in 2008 to 9.4% in 2015 (unadjusted data) (see Graph 1)

(Labour Market and ..., 2015). A similar tendency has been observed in the euro area (EA-19) during the period under consideration. The unemployment rate increased from 7.6% in 2008 to 10.9% in 2015 in the EA-19.



Graph 1. Unemployment Rate, 2012-2017 (%)
Source: based on Eurostat data

The structural differences indicate that **the highest unemployment rate is among young, unskilled workers, women, and older workers** (see Graph 2).



Graph 2. Unemployment Rate Development in the EU 28: Total, Young People, Older Workers, Unskilled Workers, and Females Unemployment, 2005-2017 (%)
Source: based on Eurostat data

Long-term unemployment is increasing. From 2008 to 2015, the long-term unemployment rate increased by 1.9% in the EU-28 (from 2.6% to 4.5%). The long-term unemployment rate stood at 10.9 million of the long-term unemployed, i.e., 4.5% of active population in 2015. In 2015, if compared to 2013, a slight decrease was observed in long term unemployment (0.6 percentage points). Nevertheless, this level is unprecedented. Long-term unemployment has doubled in the EU-28 since 2008. It should be noted that the sizeable increase is registered among those who were unemployed for two or more years (from 1.5 % in 2008 to 2.8% in 2015).

The unemployment differences are high and continue to rise in most Member States. From 2012 to 2015, the unemployment rate remained low in Germany. It varied from 4.9% (Austria) to 24.8% (Spain) in 2012 and from 4.6% (Germany) to 24.9% (Greece) in 2015. Greece and Spain had the highest unemployment rates in 2012-2015 (24.9% and 22.1% in 2015, respectively).

High youth unemployment. The European Commission has recently emphasized youth unemployment in particular as a special problem. *Firstly*, youth unemployment rates are at their highest: in February 2016, 4.381 million young persons (under 25) were unemployed in the EU-28; 3.011 million of them were in the euro area. Since 2013, the youth unemployment rate has slightly decreased, but it remains at a worrisome level. The unemployment rate among people aged 15-24 is 20.4% (23.6% in 2013, and 15.6% in 2008). The youth unemployment rate was above 30% in five Member States in 2015 (49.7% in Greece, 48.3% in Spain, 44.6% in Croatia, 33.2% in Cyprus, and 32% in Portugal). *Secondly*, this is long-term youth unemployment, when many young people are out of work for more than a year. These trends are characteristic for Lithuania, too. According to the Lithuanian Department of Statistics, youth unemployment stood at 26.4% in 2012, i.e. exceeded twice the overall unemployment rate of 13.2%. Although a downward trend has been observed in the youth unemployment rate in recent years in Lithuania, this indicator still remains significantly higher than the overall unemployment rate (in 2015, the youth unemployment rate was 16.3% in Lithuania, while the overall unemployment rate was 9.1%).

The share of young people neither in employment nor in education and training (NEET) has increased. The unemployment rate for NEET (people aged 15 to 24) was rising in the period between 2008 and 2012 (from 10.9% to 13.2%). If compared to 2012, the unemployment rate for young people neither in employment nor in education and training (NEET) has slowly decreased by 1.2 percentage points (12% in 2015). The highest unemployment rate was among NEET aged 20-24 (17.3%). Since 2013, the unemployment rate among young people aged 15-34 neither in employment nor in education and training (NEET) has been slowly decreasing (from 17.1% to 16.1%), but NEET unemployment is still a major issue. In 2015, the highest proportion of NEETs was recorded in Greece (27.1%) and Italy (26.9%), the NEET rate (aged 15-34) was within the range of 20–27% in Spain, Bulgaria and Croatia, Italy and Greece. There are more young women than men (aged 15-34) neither in employment nor in education and training (19.3% and 13.0% in 2015, respectively).

Long-term unemployment seriously affects young, older, and less educated people. In 2011-2015, the risk for older people (aged 55-64) to become long-term unemployed was about 60%, for young people (aged 15-24) – about 30%; the unemployment rate of low-skilled workers was four times higher than the unemployment rate of qualified workers. It slightly more affects men (49.0% in 2015) than women (48.0% in 2015).

The **draft Joint Employment Report 2016** from the Commission and the Council and the Communication from the Commission on the Annual Growth Survey 2016 indicate that employment slowly improves but signs of divergence among and within Member States

persist. Strong levers of increasing employment are required to achieve a set of 75% employment in EU Strategy 'Europe 2020'. In 2015, the employment rate among people aged 15-64 was 65.6% in the EU-28 and even reached the pre-crisis level (65.7% in 2008). In 2015, the employment rate in the EU-28 for those aged 20-64 was 70.0% and slowly increased for young people aged 15-24 from 32.4% in 2013 to 33.0% in 2015.

In 2015, the highest employment rate was in Austria, the United Kingdom, Denmark, the Netherlands, Germany, and Estonia (the employment rate was within the range of 71% to 74.1%, and 75.5% in Sweden).

Employment imbalances among social groups. Employment varied differently during the crisis. Although men's (aged 20-64) employment decreased about 3 percentage points since 2008 (from 77.8% in 2008 up to 74.6% in 2012), women's employment almost did not decrease, and even increased slightly since 2011 (+ 2 percentage points since 2011 and reached 64.2% in 2015) in the EU-28. Since 2014, men's employment slightly increased and reached 75.8% in 2015.

The employment of older workers (aged 55-64) had a sizeable increase (+ 7.8 percentage points from 2008 reaching 53.3% in 2015; this is particularly true for women (+ 10.1 percentage points from 2008).

Measured by education, employment of unskilled workers has decreased most significantly; employment of individuals having tertiary education decreased the least.

Temporary and part-time employment increases. The labour market segmentation remains high. 13.3% employees aged 20-64 and 43.5% young people aged 15-24 were employed on temporary contracts in the EU-28 in 2015. Youth employment is characterized by temporary work and part-time work: slightly more than 40% and 30% (of total employment) in 2012-2015.

Analysis of statistical data shows that both temporary employment and part-time employment has grown in recent years. An upward trend in part-time employment was observed in 2008-2015 (from 16.8% in 2008 to 19% in 2015).

The Netherlands has the highest share of part-time workers aged 20-64 (46.9% in 2015), and Bulgaria has the lowest share of part-time workers (2.2%). The proportion of workers on temporary contracts is very high in Poland (27.7% in 2015) and Spain (24.9% in 2015). Romania and Lithuania have the lowest share of older temporary workers (1.4% and 2.0% in 2015, respectively). 31.5% of women (aged 15-64) and 8.2% of men were employed on part-time contracts. Under the present conditions, temporary and part-time forms of employment that are not always selected on a voluntary basis can help create jobs and become permanent and/or a full-time jobs (for example, for young people) in the medium and long term. Segmentation is also evidenced by the unrelenting pay gap between men and women and low indicators of transition to safer workplaces where people work under contracts. The latter indicators are to the detriment of groups that usually work on temporary contracts, particularly young people.

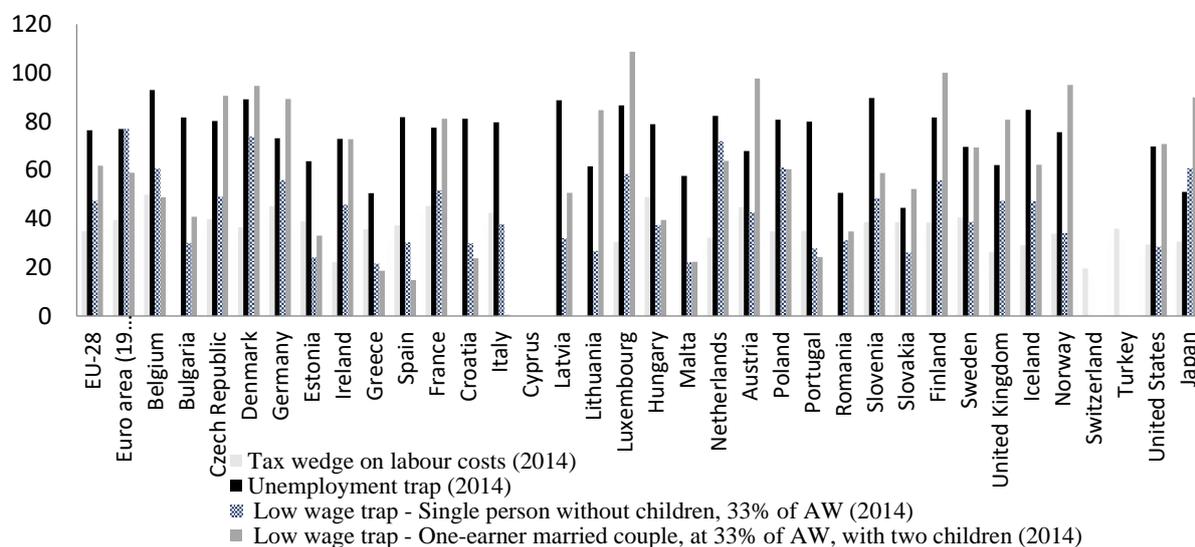
The supply of skills lags behind and does not meet changes in the demand for skills. Changes in technologies are based on the globalization and capabilities, and gradually change the labour demand. The relative demand for skilled workers has increased, while the relative demand for the medium and low-skilled workers has decreased (i.e. there is a demand for higher-skilled workers). Moreover, some movements in the area of skills assessment have been observed: ICT related skills and socio-emotional skills are becoming increasingly important in many occupations.

Although the average level of education and the quality of supplied skills improved in the long run, the available staff skills do not meet the requirements of demand. This is even more evident in the negative trends in the area of participation in lifelong learning in several

Member States. Better employment opportunities for skilled workers, as compared to medium- and low-skilled workers, are a result changes in skills supply and demand. Labour market projections indicate that this trend will continue.

Structural shortages of skills base threaten the European economy's growth and competitiveness. Approximately 20% of the working-age population has very scarce skills; there are even more such people in some individual countries (Estonia, Italy). A high share of people having a very good level of skills is only in a few countries (Finland, the Netherlands, Sweden); most European countries are lagging far behind the most advanced countries in this area (such as, Japan or Australia). Data show that European investments in education and capacity building are ineffective, thus threatening medium-term competitiveness and employment opportunities for a large portion of labour force. In absolute terms, ten Member States have cut expenses for education and twenty Member States have reduced the relative proportion of GDP allocated to investment in education.

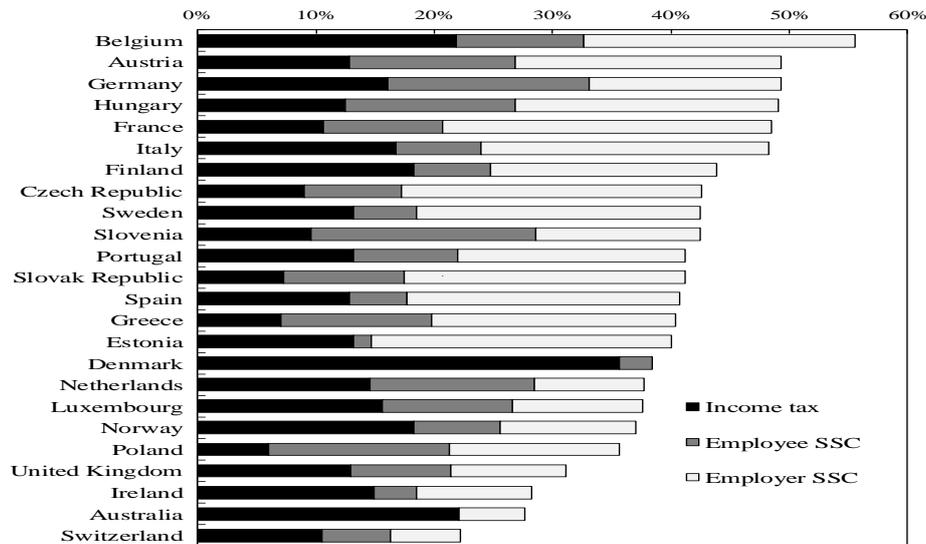
Excessive taxation on labour. In 2014, the tax wedge for the EU-28 was 34.9%, which is a disincentive to work for low-skilled workers and has a negative impact on employment. It should be noted that tax wedge on labour costs has been slowly declining since 2012, but is still high in many Member States. The high, and in some cases continuing to rise, tax wedge (particularly, for low-wage earners and recipients of the second household income) remains an important problem in many Member States. In 2014, the tax wedge ranged from 18.8% to more than 49%. In 2005-2014, tax wedges grew in thirteen Member States and decreased in fourteen Member States. In 2014, the highest tax burdens on low-wage earners were recorded in Belgium, Hungary, France, Germany, Italy, Austria, Romania, Latvia and Sweden (all above 40.0%). On the other hand, the lowest tax burdens on low-wage earners were recorded in Malta, Ireland and the United Kingdom (below 30.0%) (see Graph 3).



Graph 3. Tax rate indicators on low wage earners, 2014 (%)

Source: based on Eurostat data

There were some changes in the tax burden components (see Graph 4). The average personal income tax as a percentage of total labour costs increased in seventeen Member States in 2014-2015. The increase in personal income tax mainly determined changes in the overall tax wedge. In assessing personal income tax and social security contributions in general, the burden on employees has increased.



Graph 4. Income tax plus employee and employer social security contributions, 2014 (as a % of labour costs)

Source: based on OECD data

These trends are highlighted in ILO Report: **Global Employment Trends 2014** (a document on increasing employment) (ILO, 2014):

In the European Union, a recovery in economic activity lasted throughout 2013, but the European Union as a whole was growing only at a moderate pace (1.3 per cent in the second quarter of 2014 among the EU-28). However, improvements in both productivity and competitiveness have not yet been strong enough to make a significant change in the employment gap which is still large. A recovery remains in economic activities, not in jobs. According to the **World Employment Social Outlook** (ILO, 2015), the unemployment rates continued their downward trends throughout 2014, however, wage growth remained weak and increases in wages continue to lag behind productivity growth. Wage growth appears to react less strongly to changes in the unemployment rate after 2009.

Labour market conditions have continued to worsen in the EU during 2013. The unemployment rate was expected to gradually decline under 8 percent around 2018, but it was still significantly above the rate in 2008. The youth unemployment rate was expected to fall after having peaked in 2012 in the region. However, adults faced an unemployment rate of 9 per cent in the second quarter of 2014 in the EU-28, whereas young people faced a jobless rate of 22 per cent (ILO, 2015).

Labour force participation continues to slide downwards, albeit at a slow rate; it can be partly explained by demographic changes. Nevertheless, scientists still expect labour force to increase by 8 million people in advanced economies by 2018.

Labour market mismatch has increased since the peak of the crisis in many EU countries. Unemployed people face difficulties in finding employment opportunities in their previous sector of activity. Shift in the mismatch between skills supply and skills demand will complicate labour market recovery. Long-term unemployment is on the rise along with increasing skills mismatch.

‘High and progressive levels of long-term unemployment are of particular concern. Firstly, as the share of long-term unemployed increases, skills are lost, and social exclusion rises, which in turn further reduces the likelihood of the long-term unemployed re-entering the

labour market. Secondly, as the average duration of long-term unemployment is increasing in many countries, a large share of the long-term unemployed is no longer covered by any kind of income support or social protection' (ILO, 2015:36).

3. The Situation in the Lithuanian Labour Market

Unemployment dramatically increased in Lithuania during the economic recession and reached the record-breaking levels (17.8% in 2010). Despite a decrease in the period from 2011 to 2015, the unemployment rate still remains high (unemployment reached 13.3% in Lithuania in 2012 and 10.5% in the EU respectively; in 2017, it stood at 9.1% in Lithuania and 9.4% in the EU-28). The rise of the long-term and low-skilled unemployment rates aggravates the problem of unemployment.

The rate of labour force participation (aged 15-64) was 74.1% in 2015, i.e. 25.9% of the working-age population were neither working nor seeking employment. Inadequate needs of the labour market qualifications and skills of looking for work, inactive persons, as well as the lack of suitable employment experience are among the main problems. Low-educated people, youth (due to the lack of work experience), older persons, and persons with disabilities particularly often face difficulties in the labour market.

Some individual groups' (**women, older people**) position in the labour market is much worse: the participation rate among women aged 55-64 was 63.3% in 2015 (men – 69.8%). In 2015, the employment rate of older persons (aged 55-64) having less than primary, primary and lower secondary education was only 28.0% (those with upper secondary and post-secondary non-tertiary education had a rate of 55.0% and those with tertiary education – 78.4% in 2015). The lower activity of part of older people influences the working life expectancy; the working life expectancy is one of the Europe 2020 employment indicators, which was 34 years in Lithuania in 2012 (the EU average – 35 years).

More than half of the unemployed in Lithuania are the long-term unemployed, i.e. looking for a job for over a year; every fourth unemployed individual is looking for a job for more than two years. According to the data from the Lithuanian Labour Exchange, 266.2 thousand unemployed persons were registered in 2015, only one in ten went back to work in less than one month, while as many as half of all unemployed people did not work for a year or longer. About 40% of people had no professional training in 2013-2015.

Long-term unemployment affects mostly young people, the elderly and low-skilled workers. In 2011, the long-term unemployment rate (% of active population) amounted to 8.0% in Lithuania. In 2013, this indicator reached the EU average in Lithuania (i.e., was 5.1% in 2013). In 2014-2015, the long-term unemployment rate was below the EU-28 average in Lithuania. In 2015, long-term unemployment decreased slightly to 3.9%, but it was still above the pre-crisis level.

The position of low-skilled people and people with disabilities in the labour market and their employment rates are still lower than the national average. In 2015, the unemployment rate of the low skilled workers in Lithuania was the second largest among EU countries and accounted for 27.3% in 2015 (17.9% in EU).

The number of the unemployed is increasing in rural areas; out of them, the long-term unemployed account for about half of all unemployed people. In 2008-2010, the unemployment rate significantly increased in rural areas (from 5.9% to 18.1%). The unemployment rate started slowly decreasing in rural areas from 2011 (from 15.7% in 2011 to 9.3% in 2015). The unemployment rate of the working-age population in the rural areas is 1.8 times higher than in urban areas because of the regional differences in business development and job creation.

Young, unskilled rural men (aged 15-34) without professional competence and neither in employment nor in education/training (there were even 15.3% of such men in 2015) and rural women (aged 55-64) compose the main contingent of the long-term unemployed in Lithuania. In 2014-2015, the long-term unemployment rate of the rural men fell by 1.9 percentage points (from 8.8% in 2014 to 6.9% in 2015) and the long-term unemployment rate of rural women fell from 6.5% in 2014 to 5.8% in 2015, but the level was still relatively high.

As shown by the analysis of the statistical data, the most urgent problem is youth unemployment. **The unemployment rate for youth under 25** is higher in Lithuania compared with the overall unemployment rate. The unemployment rate of youth aged 15-24 was the highest in 2009-2012. Almost every third of youth aged 15-24 was unemployed in Lithuania in 2009-2012. The unemployment rate of young people (aged 15-24) has decreased slightly since 2014; in comparison to 2009-2012, it amounted to 16.3% in 2015. According to the data from the Lithuanian Labour Exchange, 28,467 young unemployed people under 29 were registered at the beginning of 2016 (17.5% of the total unemployed). 12.5% of them were registered as the long-term unemployed. About 40% of young unemployed people did not have a professional qualification, thus being unable to compete in the labour market, and almost a third of young unemployed people were starting their working activities (32.2%).

It should be noted that the activity and employment rate of people aged 55-64 in Lithuania exceeds the total indicator for all age groups in Lithuania (respectively, 66.2% and 60.4% in 2015). At the same time, it should be emphasized that the group of young people aged 15-24 shows low rates of both activity and employment (respectively, 33.8% and 28.3%).

The mismatch between youth qualifications and labour market needs and the lack of skills and experience are identified among the main reasons for high youth unemployment and often impede smooth transition from education to the labour market. The increase of employment opportunities (including youth employment through the Youth Guarantee *Initiative*) will tackle the problem of high unemployment rates which are emphasized in the Council's Recommendation 2013 for Lithuania concerning high unemployment.

The economic crisis has greatly affected the employment prospects of the young generation. Young people belonging to the NEET group are heterogeneous (Table 1). Young people not in employment and education/training lack incentives to learn, gain professional qualifications or work. The high youth unemployment rate may have a negative long-term effect, i.e. the high youth unemployment rate increases the risk to have no work in the future and get lower incomes.

Table 1. Young people neither in employment, nor in education, or training in Lithuania (NEET rates, %)

Year group	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
15-29	11.9	15	17	14.7	13.9	13.7	12.9	11.8	10.7	10.2
15-24	8.9	12.1	13.2	11.8	11.2	11.1	9.9	9.2	9.4	9.1
15-19	2.9	4.2	4.1	3.6	3.4	3.1	2.9	2.9	2.9	2.9
20-24	14.9	20.2	22.2	19.8	18.3	18	15.7	14.4	15.3	14.9
25-29	19.1	21.4	26.6	25.5	26	24.5	19.1	17.2	13.4	12.3

Source: based on Eurostat data

Low entrepreneurship and self-employment rate is one of serious challenges for employment. Labour market statistics analysis shows that **in Lithuania** there emerge **unfavourable conditions for employment growth**. It is necessary to look for other under-exploited opportunities to increase the coverage of individualized ALMP measures and apply new measures to encourage self-employment and business start-ups.

One has to accept the view in the **Lithuanian Employment Enhancement Programme for 2014-2020** that **rapid economic growth and business development is the base of employment growth in Lithuania**. Business creates new businesses and jobs, opens new markets, and encourages the acquisition of new skills and abilities. Given that fewer than 250 employees were employed in 99.4% of the country's business, **small and medium business is the most important source of new jobs**. In recent years, employment growth in Lithuania has been based on the growth of employment in the private sector and self-employment: the number of self-employed persons increased by 16% during 2012-2015 (from 124.3 thousand people in 2012 to 148.5 thousand people in 2015) and the number of employees in the private sector increased by 5 percentage points during this period (from 906.2 thousand in 2012 to 955.3 thousand in 2015). However, a large proportion of small- and medium-sized enterprises recover with difficulties and fail to revive, hence, the lack of jobs emerges in Lithuania, i.e. there are no objective possibilities to integrate the available labour resources in the labour market. It is expected that promoting the development of new businesses and job creation will help tackle challenges to increasing employment by giving a knee to business start-up and increasing the availability of business services and financial resources for beginners and advanced business persons.

The program states that Lithuania must develop business and increase the number of entrepreneurs to create jobs and increase employment. The results of the Eurobarometer survey in 2012 show the desire to be an entrepreneur: even 58% of respondents would choose self-employment (the EU average – 37%). However, entrepreneurs are faced with the unfriendly business environment: a coherent system of entrepreneurship education, which would encourage young people to start a business after completion of education and training, is not in place; it is difficult to obtain credits and enter the market; administrative regulatory procedures are complex, and labour laws are strict. Therefore, the process of SM businesses is extensive, sluggish, and the number of SMB is not large.

4. Identification of Employment Scenarios in Relation to the General European Commission Recommendations on the Formulation and Implementation of Employment Promotion Policy

In order to increase employment in Lithuania, our proposed approach is based on the global and EU strategic documents and includes two groups of strategic guidelines, as well as specific labour market policies: **macroeconomic policy and microeconomic policy**.

ILO Director-General Guy Ryder offers to **mitigate the austerity measures of macroeconomic policies** for young people and to increase investment in the jobs recovery. He stresses that unemployment benefits and losses related to youth unemployment will cost much more than timely investment in youth employment promotion measures. The bigger the investment, the lower the rate of youth unemployment. It may be added in this situation that **the softer macroeconomic policy, the lower unemployment rate**.

In order to address the problems of employment and socioeconomic inequality, it is necessary to create macroeconomic policies supportive for employment. Deficit in aggregate demand prevents a faster recovery in the global labour markets. Currently, the ongoing fiscal consolidation in most of the developed economies is hampering more rapid

output growth in addition to low private consumption. The Global Employment Trends 2014 report emphasizes that macroeconomic policy and higher employment income could significantly improve labour market prospects. The simulation results show that in high-income countries, such as the G20, the appropriate uniformity of income distribution could reduce unemployment by 1.8 percentage points by 2020, which corresponds to 6.1 million new jobs. These achievements would justify easier fiscal policy.

According to G. Ryder, **microeconomic policy**, i.e. **employment policy measures**, such as vocational training (apprenticeship) programs, national programs to increase employment, business development, cooperatives and socially responsible companies, employers who employ young people, and promotion measures can also help to solve youth employment problem. However, individual fragmented measures are not enough to solve this problem. **Targeted measures** that give a much greater effect, e.g. youth employment guarantees, are necessary.

In order **to increase employment of older people**, it is proposed to take measures to increase older people's employment opportunities and improve the working environment adapted to the elderly. It is recommended that Lithuania base its pension reform on measures that enhance the employability of older people.

With regard to long-term unemployed and low-skilled persons, it is suggested promoting the activity of long-term social beneficiaries and increasing their participation in the labour market. Lithuania has to deal with a large number of low-skilled workers and long-term unemployment, concentrating resources on active labour market policies, while increasing the coverage and effectiveness, reforming the system of cash social assistance, and better linking it to activation measures.

In the most general sense, **austerity policy, focused on reducing the budget deficit** by reducing costs rather than increasing revenues, undermines the objectives of increasing employment and reducing poverty and inequality. Lithuania's target is to implement macroeconomic policies aimed at full employment, to ensure dignified jobs, to expand employment opportunities, to promote the adoption of the measures necessary for the labour market, entrepreneurship in order to eliminate the consequences of the crisis and at the same time to provide the stability of public finances and the tax base. However, it is necessary to find the right balance between economic growth, promoting the creation of new jobs, and the state budget policy. This means that there is a need for real public expenditure plans, focusing on job creation, and, in parallel, on fiscal objectives. Such measures may include the introduction of a progressive tax system, incentives for households with low income, an increase in tax revenue collection and the tax base. Budget consolidation policy must be implemented together with employment support policy.

Lithuanian companies are working on weak demand and uncertain prospects conditions. In order for economic growth and promoting of job creation to be realistic, it is necessary **to support the stable growth of enterprises** and enhance their ability to create jobs.

It is necessary to urgently find solutions to activate **crediting of SMEs which represent a share of the employed and constitute the greatest source of increasing employment**.

To encourage investment in the real economy:

- Tax measures to encourage private investment (concessions, etc.);
- Innovative public investment, promoting employment (education);
- Credits to SME;
- Structural changes and innovations.

Employment policy in higher value-added industries is recommended.

Employment policy guidance in **green technologies** (renewable energy sources, recycling, and green building), the green economy, and the promotion of professional skills in this area are recommended. The transition to the green economy, eco-villages and eco-communities would be among the fundamental directions towards increasing employment of risk groups (the elderly, women, youth). Ecology-oriented policy should be incorporated in the national employment plan. Also, it is necessary to invest in skills development in this area and make use of European Union structural support for the creation of green jobs.

Creating a mechanism for sustainable wage is targeted; it would help to prevent wage deflation, as well as to link wages to productivity.

Wage policies that promote job creation and adapt anti-inflationary policy:

- To prevent wage deflation (wage cuts is the wrong path; it leads to the opposite result: debt increases, investment declines);
- Wage increase by combining it with the growth of labour productivity;
- Residents' income support measures (unemployment benefits, social security payments).

Inclusive measures of population income support (unemployment benefits, social benefits) to encourage people to be active participants in the labour market are also necessary.

Strengthening the role of social partnership in job creation and implementation of effective employment policy; promotion of collective bargaining.

Social dialogue, partnership and strategic cooperation between employers and employees are crucial to the state in terms of the development of effective employment policies. Ministry of Social Security and Labour, Ministry of Finance, Ministry of Economy and other ministries, trade unions, employers, non-governmental and public organizations must closely cooperate.

The European semester is the first step in the implementation of the new EU-level instrument under which Member States and EU institutions aim to strengthen the fiscal and economic coordination and to develop a coherent economic policy. In addition, it is an effective governance method to monitor and manage activities in support of the 'Europe 2020' objectives. The so-called 'six-pack' and 'two-pack' regulations and the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union strengthened economic and fiscal policy coordination. Better EU employment governance and coordination are required at least for two reasons. *Firstly*, participation in the labour market, unemployment and labour costs are very important in ensuring macroeconomic stability, therefore, they are reflected in the new legislation related to the prevention of macroeconomic imbalances and corrections. *Secondly*, the crisis has shown the interdependence of the EU economies and labour markets and underlined the need to coordinate the new management of the economy with more active employment and social policy coordination considering the European employment strategy, as provided by the Treaty.

Taking into account the European Union's Council recommendations to Lithuania, the following employment guidelines and **measures** proposed are distinguished:

- 1) **To improve the environment for business, self-employment, and creation of new jobs** (review of labour relations, reduction of monetary liabilities for employers);
- 2) **To strengthen measures to promote the transition from informal or undeclared work into legal employment;**
- 3) **To develop cooperation with employers, educational service providers and municipalities** in the formulation and implementation of employment policies;
- 4) **To integrate social benefits recipients into the labour market;**

- 5) **To take care of population health as the factor directly influencing the ability to work** (higher productivity operates the country's economic growth, increases competitiveness).

Conclusion

1. The analysis of the main socioeconomic indicators in the country has shown that Lithuania lacks targeted and timely applied policy actions to solve social problems (primarily to promote economic activity and employment). It is primarily reflected by a clearly expressed jobless growth trend in Lithuania, when during the economic growth period employment of the population did not increase (even decreased), or increased very slightly. For instance, in 2010, Lithuania's GDP grew by 1.6 percent; the total number of the employed decreased by 5.3 percent. In 2011, GDP grew by 6 percent, while the total number of the employed increased just by 1.76 percent. In 2013-2014, similar trends were recorded – increase in GDP led to a lower change in the number of the employed. At the same time, it is necessary to pay attention to a decline in the total number of firms in 2010-2012: during the period under consideration, this number dropped from 65.232 thousand up to 62.586 thousand and began to grow again only in recent years.

2. In order to mitigate the socioeconomic consequences determined by the downturn, targeted Government policies must be in place. It is very important, because, in the long run, poverty of population increases as a result of negative social consequences, labour quality declines (lost qualifications and reduced work motivation), as well as the potential of country's economic growth weakens.

3. It is important to note that population change rates in different regions of Lithuania accumulate the effects of uneven social development and changes in the labour market situation. Depopulation in smaller and less economically attractive regions of the country may lead to a further increase in social and economic disparities between larger and smaller (less populated) regions. Larger regions so far have managed to compensate labour shortages by workforce flows from smaller donor regions to the three largest cities of the country. However, the steady shrinkage of labour resources in smaller regions exposes them to the risks of economic and social downturn. This negative trend may increase the share of disadvantaged people in smaller regions experiencing social exclusion and poverty. Therefore, regional policies must be intensified in Lithuania to enhance economic (investment) and social attractiveness of less populated areas.

4. It is necessary to implement **macro-economic policies aimed at full employment** in Lithuania; macro-economic policies should ensure dignified job creation, expand employment opportunities, facilitate adoption of necessary measures in the labour market, foster business in order to eliminate the effects of the crisis and, at the same time, to ensure public finance and tax base stability.

Firstly, it is necessary to find the right balance between economic growth stimulating creation of new jobs and state budget policy in Lithuania. Budgetary consolidation policy should be pursued in conjunction with active labour market policies.

Secondly, it is necessary to implement policies that promote productivity, technological developments, especially **in green technologies, promote professional skills in this field.** It is crucial to effective economic transformation, transition to organic production in Lithuania; it would ensure economic growth, contributions of agriculture to GDP and create jobs.

Such policy should be directed towards:

- Increase in labour productivity, competitiveness and employment;

- Promotion of diversification into higher-value-added industries;
- Creation of green branches of the economy and green jobs.

References

- Andersen, T.G., & Svarer, M. (2009). Business Cycle Dependent Unemployment Insurance. *CEPR Discussion Paper*, No. DP7334.
- Auer, P. (2016). From Security 'Beyond Employment' to Security 'in Employment'. In *Den Arbeitsmarkt verstehen, um ihn zu gestalten* (pp. 283-300). Springer Fachmedien Wiesbaden.
- Avdagic, S. (2014). *Does Deregulation Work? Reassessing the Unemployment Effects of Employment Protection*. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1111/bjir.12086>
- Avis, J. (2014). Comfort Radicalism and NEETs: A Conservative Praxis. *International Studies in Sociology of Education*, 24(3), 272-289.
- Aysun, U., Bouvet, F., & Hofler, R. (2014). An Alternative Measure of Structural Unemployment. *Economic Modelling*, 38, 592-603. DOI: 10.1016/j.econmod.2014.02.009.
- Bagenstos, S. R. (2013). Employment Law and Social Equality. *Michigan Law Review*, 112(2), 225-273.
- Bayraktar-Saglam, B., & Boke, S.S. (2017). Labor Cost and Foreign Direct Investment: A Panel VAR Approach. *Economies*, 5(4), Article Number 36.
- Berglund, T., & Furaker, B. (2016). Employment Protection Regulation, Trade Unions and Tenure of Employment: An Analysis in 23 European Countries. *Industrial Relations Journal*, 47 (5-6), 492-512.
- Bernal-Verdugo, L.E., Furceri, D., & Guillaume, D. (2012). Labor Market Flexibility and Unemployment: New Empirical Evidence of Static and Dynamic Effects. *Comparative Economic Studies*, 54(2), 251-273.
- Boadway, R., Song, Z., Tremblay, J.F. (2017). Optimal Income Taxation and Job Choice. *Scandinavian Journal of Economics*, 119(4), 910-938.
- Caroli, E., & Godard, M. (2016). Does Job Insecurity Deteriorate Health? *Health Economics*, 25(2), 131-147.
- COM. (2012). *Joint Employment Report*. EC, Briusels, 28.11.2012, 750 final.
- COM. (2013). *Joint Employment Report*. EC, Briusels, 13.11.2013, 801 final.
- COM. (2014). *Joint Employment Report*. EC, Brussels, 28.11.2014 906 final.
- COM. (2015). *Joint Employment Report*. EC, Brussels, 26.11.2015 700 final.
- COM. (2016). *Joint Employment Report*. EC, Brussels, 16.11.2016 729 final.
- COM. (2017). *Joint Employment Report*. EC, Brussels, 22.11.2017 674 final.
- Cuyvers, L., De Lombaerde, Ph., & Rayp, G. (2011). The Labour Market Consequences and Regionalisation Introduction. *International Journal of Manpower*, 32(3), 252-256.
- Dapontas, D. (2013). Examining Eurozone Crisis and Unemployment Relationship Using Var Models. *Scientific Annals of Economics and Business*, 60(2), 241-248.
- De Lange, M., Gesthuizen, M., & Wolbers, M.H.J. (2014). Youth Labour Market Integration across Europe. *European Societies*, 16(2), 194-212.
- Drakaki, M., Papadakis, N., Kyridis, A., & Papargyris, A. (2014). Who's The Greek Neet? Neet's Profile in Greece: Parameter, Trends and Common Characteristics of a Heterogeneous Group. *International Journal of Humanities and Social Sciences*, 4(6), 240-254.

- Europe 2020. (2010). *Pažangaus, tvaraus ir integracinio augimo strategija* [Smart, sustainable and inclusive growth]. European Commission, COM, 2020 final. Retrieved from http://ec.europa.eu/europe2020/index_en.htm.
- Eurostat. Database. Retrieved from <http://ec.europa.eu/eurostat/data/database>.
- Gruževskis, B., & Zabarauskaitė, R. (2012). Social consequences of the economic downturn in Lithuania. *Social Development of Lithuania, 1*, 5-22.
- Hairault, L.O., Langot, F., Menard, S., & Sopraseuth, T. (2009). Optimal Unemployment Insurance for Older Workers. *Discussion Paper*, No. 4071. http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/introduction
- ILO. (2013). *Global Employment Trends 2013: Recovering from a second jobs dip*. [Online]. Available at: http://www.ilo.org/global/research/global-reports/global-employment-trends/2013/WCMS_202326/lang--en/index.htm.
- ILO. (2013a). *Jobs, Growth and Social Justice*, 9th European Regional Meeting Oslo, April 2013, Report of the Director – General International Labour Office.
- ILO. (2014). *Global Employment Trends 2014: The risk of a jobless recovery*. [Online]. Available at: <http://www.ilo.org/global/research/global-reports/global-employment-trends/2014/lang--en/index.htm>.
- Jakštienė, S., Purvinis, O., & Susnienė, D. (2013). Analysis of the Most Vulnerable Labour Market Segments during the Period of Economic Development in Lithuania. *Engineering Economics, 24*(4), 331-342.
- Klíma, J., & Palát, M. (2015). Development of the Rate of Employment and Unemployment of Males and Females in Ten Associated Countries of EU. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, 52*(6), 87-104.
- Kudlyak, M. (2010). Are Wages Rigid Over the Business Cycle? *Economic Quarterly, 96*(2), 179-199.
- Kwon, H. S. (2014). Economic Theories of Low-Wage Work. *Journal of Human Behavior in the Social Environment, 24*(1), 61-70. DOI: 10.1080/10911359.2014.844615.
- Labour Market and Wage Development in Europe*. (2016). European Commission. 157 P.
- Lahusen, C., Scgultz, N., & Graziano, P. R. (2013). Promoting Social Europe? The Development of European Youth Unemployment Policies. *International Journal of Social Welfare, 22*(3), 300-309.
- Landais, C., Michailat, P., & Saez, E. (2010). Optimal Unemployment Insurance over the Business Cycle. *Working Paper 16526*. National Bureau of Economic Research, Cambridge. DOI: 10.3386/w16526.
- Lawy, R., & Wheeler, R. (2013). The Experiences of Long-Term Unemployed Young Adults in the South West of England: Some New Insights. *Research in Post – Compulsory Education, 18*(1-2), 159-174.
- Lei, F., & Silos, P. (2012). Wages and Unemployment across Business Cycles: A High-Frequency Investigation. *Working Paper Series, 16*, 1-34.
- Maguire, S. (2013). Will Raising the Participation Age in England Solve the NEET Problem? *Research in Post - Compulsory Education, 18*(1-2), 61-76.
- Marques, P. (2011). Youth Unemployment in Southern Europe: Social Cohesion at Risk. Multidisciplinary. *Doctoral Workshop on “Post-Crisis Post Lisbon Economic and Social Policy: A New Era?”*, September, 14-16, Odense, Denmark.
- Martinkus, B., Stoškus, S., & Beržinskienė, D. (2009). Changes of Employment through the Segmentation of Labour Market in the Baltic States. The Economic Conditions of Enterprise Functioning, *Engineering Economics, 63*(4), 41-48.

- Mitev, M.G. (2013). The Impact of the Global Economic Crisis on the Labour Market and Social Services in Macedonia, in: W. Bartlett, M. Uvalić (Eds.), *The Social Consequences of the Global Economic Crisis in South East Europe*. London School of Economics and Political Science (LSE). LSEE Research on South Eastern Europe, pp.109-120.
- Mueller, A. I. (2017). Separations, Sorting and Cyclical Unemployment. *American Economic Review*, 107(7), 2081–2107.
- Nordlund, M. (2011). Whatworks Best When? The Role of Active Labour Market Policy Programmes in Different Business Cycles. *International Journal of Social Welfare*, 20(1), 43-54.
- OECD. Database. Retrieved from <http://www.oecd.org/ctp/tax-policy/taxing-wages-tax-burden-trends-latest-year.htm>.
- Okunevičiūtė Neverauskienė, L., & Moskvina, J. (2012). *Active labour market policy: theory and practice*. Monograph. Vilnius: Technika.
- Okunevičiūtė Neverauskienė, L., & Pocius, A. (2011). Trends of Hidden Employment in Lithuania and Problems in Methodical Calculations. *Technological and economic development of economy*, 17(3), 484-500.
- Ortego-Marti, V. (2017). The Cyclical Behavior of Unemployment and Vacancies with Loss of Skills during Unemployment. *Macroeconomic Dynamics*, 21(6), 1277–1304.
- Rhee-Weise, M., Horn, M.B. (2014). Learning to Do” during High Unemployment”. *Journal of Higher Education*, 4.
- Rothstein, J. (2011). Unemployment Insurance Job Search in the Great Recession. *Working Paper No 17534*. NBER Working Paper Series, National Bureau of Economic Research, Cambridge.
- Statistics Lithuania Database. Retrieved from <http://osp.stat.gov.lt/en/web/guest/home>.
- Tang, B., & Bethencourt, C. (2017). Asymmetric Unemployment-output Tradeoff in the Eurozone. *Journal of Policy Modeling*, 39(3), 461–481.
- Thompson, F. R. (2014). Bias in the Air: Rethinking Employment Discrimination Law. *Stanford Law Review*, 66(6), 1381-1421.
- Todorov, T. (2013). The Social Impact of the Global Crisis in Bulgaria, in: W.Bartlett, M.Uvalić (Eds.), *The Social Consequences of the Global Economic Crisis in South East Europe*. London School of Economics and Political Science (LSE). LSEE Research on South Eastern Europe, pp.63-75.
- Tuzemen, D. (2017). Labour Market Dynamics with Endogenous Labor Force Participation and on-the-Job Search. *Journal of Economic Dynamics & Control*, 75, 28–51.
- Wallace, H., Pollack, M. A., & Young, A. R. (Eds.). (2015). *Policy-making in the European Union*. Oxford University Press, USA.
- World Employment Social Outlook* (2015). ILO.