THEORETICAL ISSUES OF RELATIONSHIP BETWEEN UNEMPLOYMENT, POVERTY AND CRIME IN SUSTAINABLE DEVELOPMENT

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Abstract. This paper analyzes theoretical issues of relationship between unemployment, poverty and crime in sustainable development. The concepts of these socio-economical categories were analyzed and theoretical aspects of relationship between unemployment, poverty and crime were disclosed. It was found that unemployment, poverty and crime, as distinct socio-economical process is not widely considered in the literature. More often the specific relationships between two of the variables are studied. The evaluation of unemployment and poverty, unemployment and crime, crime and poverty showed that all three components are linked together through a negative connotation with socio-economical consequences, which further reinforces the ignoring of principles of sustainable development in the socio-economical policy of the country.

Keywords: Unemployment, poverty, crime, coherence, sustainable development.

1. Introduction

In recent years the spread of unemployment, poverty and crime has been affected by economic crisis. These three processes are by far the most influential in both economical and social, as well as in psychological sense. Scientific research work often examines the definitions, forms or measurement techniques of unemployment, poverty and crime and examines the reasons for their emergence. However, the relationship between unemployment, poverty and crime has received little attention. The unemployment effect is significant - it slows down the wage increases, reduces government revenues. In addition, it is linked to people's mental and physical health and also provokes poverty and the growth of law violations. These problems are relevant both in Lithuania and European Union, but their solution (particularly in regions where there is an evident differentiation between the indicators characterizing these problems) has not yet become the strategies for sustainable development.

The scientific literature on poverty-related causes (Akoum 2008; Lenagala and Ram 2010; Dao 2008; Smith 2010) identifies the primary factors that can cause poverty are unemployment, which are over-population, unequal distribution of recourses in the global economy, the inability to reconcile the personal income to the cost of living, lack of education, and at the same time - employment opportunities, that are largely shaping the county's sustainable development. It is clear that unemployment and poverty have a direct impact on the growth of crimes.

Most research works explore the relationships between two variables (unemployment and poverty, unemployment and crime, poverty and crime). The

relationship of all three factors (unemployment, poverty, and crime) is examined by just a few foreign authors (Spuy and Röntsch 2008). Meanwhile, the Lithuanian scientific research is lacking in this area. The lack is especially seen while studying sustainable development and the triad of our question in terms, and that is the main reason for further research. Research object and purpose is to analyze the theoretical aspects of relationship between unemployment, poverty, and crime in the view of sustainable development. Research methods: systematic socio-economical literature review, generalization methods, comparative, structural and logical analysis.

2. The concept of unemployment, poverty and crime

Modern literature of unemployment, poverty and crime issues includes a lot of closely related research areas. But firstly we need to look at the views and opinions to unemployment, poverty and crime, as a distinct socio-economical processes and issues that are presented in scientific literature by discussing their concepts, forms, methods of measurement, their causes and consequences. Only then one can switch to the examination of relationship between the categories in question.

For the analysis of theoretical aspects of unemployment, firstly it is necessary to define the concept of unemployment (Table 1).

Table 1. Concept of unemployment

Authors	Description
Berglind (1991); Potts (1999); Green (2000); De Koning (2001); Pavildou *et al.* (2011); Vetlov (2003); Bernument *et al.* (2006)	Unemployment is an economic condition in which the working-age individual is looking for a job, but cannot find it. The unemployment statistics include people, who in the last four weeks were unemployed or people who have been made redundant, but are still willing and able to work.
Collins (1991); Gennard (2009)	Unemployment is the measure of "economic health". This means that the lower unemployment rate in the country indicates that the country's economical situation is good. In economics, unemployment refers to economic situation, which shows the extent of unemployment.

Source: created by the authors, based on scientific literature presented in the table.

It can be generalized that the cause of unemployment is seen as economic condition in which individuals, who actively seek employment remain not hired. The definition of unemployment is also closely linked to the term of "economic health". In addition, the crucial aspect is that unemployment is inevitable, because full employment, even with economy in equilibrium at a potential national product (PNP) point is impossible.

The unemployment scale can be defined by using its measurement term, i.e., unemployment rate. The unemployment rate is an economical indicator, which is expressed as a percentage of unemployed and working people (Berglind 1991; Bernument *et al.* 2006). It reflects the loss of human recourses and moral implications. Unemployment leads to the formation of a number of factors and reasons, most important of which are economical crisis and structural reorganization of economy in technical revolution conditions,

also wage rigidity and so on. However, not all causes of unemployment are constant. The analysis of Bernument *et al.* (2006), Theodossiou and Zarotiadis (2010), Duman (2010), Gennard (2009), Pavildou *et al.* (2011) works show that it is possible to provide an overall classification to the causes of unemployment:
- *Low staff qualification.* Higher qualification reflects in higher employment opportunities;
- *The political environment an national policies;*
- *Economical crisis.* It significantly increases the number of unemployed;
- *Staff replacement with technology.* Technology increases productivity, but has a negative effect on unemployment;
- *Population growth.* Population is an important socio-economical factor. If as the population is growing no new jobs are available, the unemployment increases, when the labor supply exceeds the demand.

Unemployment has affects the whole economical

sphere. Negative economical consequences of unemployment are given in Table 2.

Table 2. Unemployment effects of the economic sectors

Economical indicators	Authors	Consequences
Gross domestic product	Vetlov (2003)	Unemployment has a negative impact on the gross domestic product.
Inflation	Phelps (2007)	The aim to reduce inflation influences the level of unemployment.
Emigration	Blanchflower and Oswald (1995)	Emigration is affected by the rising of unemployment.
Wage	Blanchard and Diamond (1990); Blanchflower and Oswald (1995); Phelps (2007)	Rising of unemployment has a negative impact on wages.

Source: created by the authors, based on scientific literature presented in the table

Gross domestic product and unemployment rate are interrelated. Vetlov (2003) research on economical growth factors over the period of 1995-2002 showed that Lithuania's GDP grew by about 40 percent, but the reduction of employees reduces the GDP growth rate by 5 percentage points. It should be noted that when unemployment exceeds the natural unemployment level, the county is not likely to produce so-called expected national product. The application of unemployment measures to reduce it often encourages inflation. At the same time the fear of unemployment encourages people to emigrate. It is influenced by age, gender, education and work experience.

Wage rate is also one of the consequences of unemployment. Blanchflower and Oswald (1995) have statistically researched 12 countries and have confirmed that the areas that the lower wages are paid in areas where the unemployment rate is high. The researchers noted that the wage elasticity coefficient in regard to unemployment rate was approximately equal to 0,1. Blanchard and Diamond (1990) argue that wages depend not so much on the existing national unemployment rate than on its change.

Unemployment affects not only economic, but also social areas. The consequences of unemployment to social areas are distinguished in Table 3.

Table 3. Unemployment effects of the social sectors

Social indicators	Authors	Consequences
Health and Mortality	Ahn *et al.* (2004); Voss *et al.* (2004)	The rising of unemployment rate affects not only physical, but also mental health.
Poverty	Saunders (2002); Ukpere and Slabbert (2009); Apergis *et al.* (2011)	Poverty levels increase with increasing unemployment rate.
Crime	Fadaei-Tehrani (1989); Fadaei-Tehrani and Green (2002); Bilevičienė and Kažemikaitienė (2008); Fougere *et al.* (2009); Tang (2011)	Increasing unemployment affects the growth of crime rates.

Source: created by the authors, based on scientific literature presented in the table

As a rule, unemployment is higher in rural areas. According to the report on Lithuania's integration into EU's influence of restructuring, high levels of unemployment in rural areas form the unfavorable social background, leads to a low standard of living, increases the gap between rural and urban family income and welfare. These circumstances reduce rural people's access to proper education, medical, cultural, communication and other services. Therefore, it is necessary to pursue a sustainable development in the country.

As in most post-communistic counties, Lithuania's public discussion and solutions to poverty issues by government policies has no tradition. Although the phenomenon cannot be ignored and social policy pro-

vides some kind of degree of support, but in official documents the category of poverty was avoided for a long time (Poverty Reduction Strategy for Lithuania 2000). Poverty is one of the most relevant problems, which is face not only by Lithuania, but also in developed countries. In 2000 sustainable Millennium Development goals were set by The United Nations Millennium Summit, which was attended by 189 counties. The most important goal was to reduce people poverty and social exclusion. As follows by 2015 halving the population whose income is less than 1.25 U.S. dollar a day and halving those who suffer from hunger (Keršienė 2011). The concept of poverty, based on the views of researchers, is given in Table 4.

Table 4. The concept of poverty

Authors	Description
Akoum (2008); Lenagala and Ram (2010); Smith (2010); O'Boyle, E. and O'Boyle, M. (2012)	Poverty is defined as dissatisfaction of individual's basic needs. These needs include clean water, nutrition, health care, education and shelter, Poverty is a multidimensional social phenomenon whose cause is dependent on sex, age, culture, social and economic factors.
Whright (1996); Smith (2010)	Poverty is associated only with insufficient income as the poverty level is determined in accordance with the income. People who live below poverty level is slightly above are considered poor.

Source: created by the authors, based on scientific literature presented in the table.

So poverty in the most general sense is the shortage of the first necessity goods. It is a condition, when individual lacks some quantity of money or material gods. The concept of poverty is analyzed by foreign authors, such as Akoum (2008), Lenagala and Ram (2010), Smith (2010), O'Boyle, E. and O'Boyle, M. (2012). These authors point out that poverty leads to dissatisfaction of individual's basic personal needs. Personal needs usually include clean water nutrition, housing, clothing and health care. Research results show that poverty is a multidimensional socio-economic phenomenon. Causes of poverty depend on sex, age, culture, social and economic factors. Poverty factors are inter-related. The concept of poverty is also associated with poorer human health, increased mortality, "corruption" of society, i.e. in increased crime or other factors that are not useful for economic growth and social welfare. However, what is a need for one individual, must not be necessary relevant to another. Individuals' personal needs are conditional, based on the socio-economic environment and past experiences.

Objective quantitative definition of poverty is measured statistically and determined as monthly or annual family income amount required for normal functioning. Therefore there is much debate on measurement tools of poverty. In Lithuania, poverty concepts and measurement methodology problems are widely considered in A. Šileika (1967–2011) works, where the concept of poverty was expanded and normative method application expediency and examination practice was based. He was the first in Soviet Lithuania, who estimated the population of different social groups in poverty. While examining views of various scientists (Whright 1996; Smith 2010; Šileika and Zabarauskaitė 2006) poverty measurement concepts can be divided into two approaches to poverty. The first represents the absolute poverty concept, and the second - the concept of relative poverty. The concept of absolute poverty is methodologically based on the view that the calculations must be based on a normative minimum consumption budget, which determines the minimum necessary physical, mental (intellectual) and social need at individual level, ensuring the reproduction of society in terms of minimum qualification for a single low-level employee who performs his work in simple conditions. Calculations show that 24,5 percent of Lithuanian population in 2010 was below absolute poverty line (Šileika 2011). Since 2005 a common European Union (EU) poverty measurement methodology was adopted in Lithuania for calculation of relative poverty. According to it the main indicator for measuring poverty is poverty risk level after social payments. Relative poverty, which is equivalent to 60 percent of disposable median income, is used to calculate poverty risk levels. For comparing the different poverty risk levels in different countries the poverty measuring methodology in EU is unified. However, it should be noted that the relative poverty line should be used in developed EU countries, where the standard of living is high and the income and consumption indicators are high too.

Meanwhile, in Lithuania, as in many other Central and Eastern Europe countries that joined EU after 2004, even minimal personal needs satisfaction remains a problem. Therefore, a calculation made by relative poverty line does not reflect the poverty situation in those countries (Šileika and Zabarauskaitė 2006).

The concept of absolute poverty is associated with minimal personal satisfaction level, which, as the production grows and the whole society progresses, also has a tendency to increase. It is the absolute poverty line that is the objective poverty measurement indicator, which is not provided in databases of Lithuania's Department of Statistics (Šileika and Zabarauskaitė 2006). So if there is an opportunity and access to data for poverty measurement, it is appropriate to use both absolute and relative poverty line and according to them calculate the indicators of poverty. But in order to monitor and evaluate the effectiveness of poverty reduction policies and designing poverty reduction measures in the country it is more appropriate to use absolute poverty line (Šileika and Zabarauskaitė 2006). There are also two main indicators for measuring poverty that can be found in scientific literature (Akoum 2008) poverty level, which is defined as minimal income level, below which an individual is officially considered to be living in poverty and the depth of poverty, which is defined as an average deviation of expenditure by poor people from the poverty line.

In common economic sense (Dao 2008; Smith 2010; Akoum 2008) the forms of poverty are divided into: 1) income-related poverty and 2) not related to income poverty. The first (related to income) poverty is influenced by the fact that household income are not enough for food or other necessary physical needs. The poverty that is not related to income is influenced by the fact that households do not have access to affordable intellectual and social services (education, health care, culture).

The population poverty are affected by both political decisions and historically formed family's socio-economic differences, as well as cyclical fluctuations of the country, which impede sustainable development of economics. Poverty Reduction Strategy for Lithuania (2000) states that "the main cause of poverty in Lithuania is low GDP and high income inequality combination, undeveloped social protection because of low recourses allocation and the lack of the social protection a accuracy" (Poverty Reduction Strategy for Lithuania 2000).

One of the main goals of criminal law in the context of sustainable development in the country is to ensure the legality and order, prevent and restrain criminal elements of individual members, perform preventative function in all regions of the country. In other words, the purpose of criminal law is the protection of human rights and freedoms, all kinds of property, public security and public order, environment and the protection of constitutional order from criminal intent, which must reduce crime and ensure public safety. The approaches to the concept of crime are shown in Table 5.

Table 5. The Concept of crime

Authors	Description
Sakalauskas (1999)	Crime is the breach of rules or laws for which the law governing institutions give convictions.
Fadaei-Tehrani and Green (2002); Scerra (2011); D'Amico and Block (2007)	Crime is a rational act, since the individual chooses whether or not to carry out the crime.

Source: created by the authors, based on scientific literature presented in the table.

The crime can be defined as illegality and is classified differently in each country. National law defines what is prohibited and how the violators have to be punished. Crime is a serious problem, which affects the whole society. It affects victims and perpetrators, as well as their families. Theoretical aspects of crime are analyzed through economic, sociological and psycho-logical perspectives. Looking at the economic aspects, the crime firstly is a rational action. In deciding how to use their time, individuals can choose between legal work, illegal work or not to work in general (Fadaei-Tehrani and Green 2002). Crime poses a threat not only to an individual, but also harms an overall social development of the country, destroy the main

communal relations, thus in democratic country a constant attention should be given to crime prevention and control (Sakalauskas 1999). The problem of public safety and crime control still remains as one of the most relevant in Lithuania and its citizens. Lithuania remains the overall highest rate of crimes, long-term growth of number of crimes trend, and also the rise of citizen victimization and hence the rise of their sensitivity and vulnerability. A part of normal life and job security is public and business safety (Bilevičienė and Kažemikaitienė 2008). Psychological aspects of crime are discussed in psychological theory, but it does tell specifically about the criminalist, as it covers the importance of childhood experiences for future individual development and behavior (Fadaei-Tehrani and Green 2002). Research papers of criminalists cover moral, psychological, IQ, personality characteristics and the aspects of problems.

Researchers (Fadaei-Tehrani and Green 2002) refers to economic factors such as unemployment, poverty, cultural factors (specifically, education), excessive population growth as the main causes of crime. It should be noted that criminological studies abroad cannot change the criminological studies in Lithuania, thus the findings of crime and prevention strategies developed abroad cannot be mechanically used to solve similar problems in Lithuania (Bilevičienė and Kažemikaitienė 2008). Losses caused by crime the impact to some extent affects all citizens. However, in terms of crime, it is possible to not only calculate the loss of income, which are lost because the perpetrators and their victims do not produce the domestic product, but also on socio-economic decrease in economy (due, for example, "shadow" economy). Hence crime is not only economic, but also social and multi-dimensional and is closely related to unemployment and poverty. And since the negative occurrences in the country are unevenly distributed, then all of its sustainable regional development can significantly reduce crime and delinquency. In order to reveal all of the mutual relationships, in the further sections the analysis of theoretical approaches of authors on unemployment and poverty, unemployment and crime, crime and poverty issues will be analyzed.

3. Relationship between unemployment, poverty and crime

Unemployment and poverty. Scientists approach to unemployment and poverty relationship is two-fold.

Some scholars argue that unemployment is directly influenced by poverty (Saunders 2002; Ukpere and Slabert 2009; Apergis *et al.* 2011), others (Clifton and Marlar 2011) indicate that poorer countries do not always have higher unemployment rates. One can accept the scientific view that unemployment and poverty are two closely related problems facing the present world economy.

Unemployment is exacerbating the economic crisis and reduces the overall purchasing power of the nation. This leads to poverty, which in turn, increases the debt burden and unemployment. Unemployment and poverty are more common in less developed countries. However, due to the global economical downturn, the recently-developed counties face their challenges.

One of the indicators of well-being is a low poverty rate. Selected welfare model and the implementation of social policy determine the lining standards and the expression levels of poverty, unemployment and social exclusion. Saunders (2002) states direct and indirect impact of unemployment on poverty and inequity. Finally, unemployment is destroying the funding base of welfare programs and increases poverty and social inequality. Namely unemployment worsens poverty. High poverty, as a rule, coexists with unemployment, thus the direct relationship between these two problems can be seen. However it is often discussed that relationship between uneplyment abnd poverty depends on controversy. The analysis units to determine labor force status are individual, and poverty research focus on income units, thus, a person may have low income and still not be bankrupt until other family members have revenue that is shared - this is sufficient to say that the family is living above poverty line. Being unemployed does not necessary mean living below or above poverty line.

Ukpere and Slabert (2009) in a conducted qualitative study found that there is a positive correlation between unemployment, currently wide spread globalization, income inequity and poverty. This view is shared by Tsaliki (2009). He states that efforts to increase labor flexibility by liberalizing labor market contributes to the polarization of income and increase poverty levels. The survey data of other authors (Apergis *et al.* 2011) showed that there is a two-way relationship between poverty and income inequity in both short and long terms. In the short term both income inequality and unemployment have a posi-

tive and statistically significant impact on poverty. It is worth noting that there is a correlation between export and poverty reduction. Since export and poverty ratio are asymmetrical, the export reduction may increase poverty and unemployment. Thus, each national export development strategy should include poverty reduction (Skae and Barclay 2007).

Clifton and Marlar (2011) Gallup media research should be distinguished from abundance of other research on unemployment and poverty. It was found that there is no significant relationship between unemployment rate and GDP per capita. Employment growth does not necessary reduce poverty. There is a tendency that in "productive" sectors even a small elevation in employment reduces poverty, but in "less productive" sectors a slightly bigger employment growth is needed (Hull 2009).

Altogether, according to the works analyzed, it can be argued that a higher unemployment rate means that there are more unemployed people who may find themselves below the poverty line. However, unemployment and poverty is complex phenomenon and should be examined only by individual exiting conditions of a country (in particular - the structure of the family), but also by individual regions of the country. This issue is very relevant in Lithuania, where the region's socio-economic development inequality is clearly noticeable. In 2011 unemployment in Vilnius region was 14,3 percent, while in Utena region - 23,2 percent (thus, there were 8,9 percent difference in interregional unemployment rate). A significant differentiation prevails in regional poverty indicators. A tendency is seen that in economic slowdown has reduced jobs and working hours in value adding areas. And only after economy recovered, people of these regions had a greater opportunity to return to the job market, get out of poverty, while the socio-economic difference between regions declined. It should be noted that this is positive for sustainable national development.

Unemployment and crime. Since ancient times, correlations between unemployment and crime can be seen, although unemployment is just one of the factors that influence crime. It is believed that unemployment causes crime. Unemployment and crime relationship is analyzed quite widely in the scientific literature. The most studies show (Elliott and Ellingworth 1996; Fadaei-Tehrani 1989; Fougere *et al.* 2009; Tang 2011) a positive link between these events, but in the long period the results are not very consistent. Tang (2011) found that in the long-term crime correlates with unemployment and the number of tourists. This was done according to Johansen-Juselius integration test.

Unemployment has a direct impact on recidivism (Fadaei-Tehrani 1989). If the unemployment rate is reduced, a reduction in crime can be seen (Fadaei-Tehrani and Green 2002). Fougere *et al.* (2009) analyzed youth unemployment and crime causation in France. Tackling youth unemployment can actually help to reduce property and drug-related crimes. Meanwhile, other economic or violent crimes tend to correlate less thou youth unemployment. Elliott and Ellingworth (1996) studied 11 713 households in England and Wales in order to determine whether there is a causal relationship between male unemployment and crime. It was found that on the regional level male unemployment affect crime, in particular ones that are real estate or property related.

Unemployment and crime relationship is studied by Lithuanian scholars. In 2001 Ministry of Social Security and labor ordered a research "Sociological research of social and occupational needs of the convicted" (research leader prof. habil. dr. A. Šileika). It was found that unemployment is one of the main factors influencing criminal activity. Before getting into prison 52 percent of respondents had not worked. Of these, 58 percent have been long-term unemployed (had been out of job for more than 12 months). Among them 43 percent had not been working for two years. People on there last year of penalty would like that the government would provide material support, would help to find a job and handle their documents, after their freedom date. The study also showed that former prisoners have more trouble trying to employ than other unemployed groups. In most cases it is non-professional, low-educated people, whose conviction reduces the chances of employment even more. A similar view is shared by other authors. For example, S. Raphael and R. Winter-Ember (2000) argue that a person, who has committed crime, has lower chance of employment. Logical assumption that unemployment is a key factor in making crime is supported in table 5, which include unemployment rate (percent) and a number of recorded offenses per 100 000 people dynamics of all Lithuania, Vilnius and Utena regions in the period of 2005-2011.

Table 5. Unemployment rate (percent) and the number of registered criminal offenses (number) per population of 100 000 in 2005-2011

Indicator, year		2005	2006	2007	2008	2009	2010	2011
Unemployment rate (percent)	Lithuania	8,3	5,6	4,3	5,8	13,7	17,8	15,3
	Vilnius region	8,6	5,0	4,5	6,3	14,3	16,2	14,3
	Utena region	6,0	5,9	4,4	5,4	10,0	21,3	23,2
The number of registered criminal offenses (number) per population of 100 000	Lithuania	2631	2421	2185	2325	2492	2363	2468
	Vilnius region	3653	3470	3170	3533	3657	3231	3315
	Utena region	1993	1759	1569	1692	1804	1816	2122

Source: created by the authors, based on Department of Statistics under Lithuanian Republic Government

As it can be seen both in the whole country and in individual regions (Vilnius and Utena) the number of offenses per 100 00 population in 2005-2011 period basically correlates with unemployment trend rate indicators (except for the year 2010-2011, when administrative sanctions had a greater impact on the decline in crime). It should be also noted that unemployment can cause psychological problems such as reduction in self-esteem and stress, which undoubtedly encourages criminal offense. So it can be concluded that measures for unemployment reduction are effective in the fight against crime and in turn, is a strengthening factor in sustainable development of the country.

Poverty and crime. Impact of poverty on crime can be explained by various reasons. Poverty can lead to a greater or lesser stress, which, in turn, may encourage an individual to make a theft, robbery or other violent crime. Criminal action is the way for poorer people to acquire economic goods, which could not be attained legally. The can acquire more material goods by threatening or force, thus leading to brutal and violent crimes. For many people, especially for impoverished ones, goods acquired from crime can outweigh the risks, so it can be suggested that poverty should increase crime rate.

Much attention on the problems of poverty and crime was paid by Fadaei-Tehrani (1989). His studies have shown that the official crime rate is almost always higher among the poor. Poor people are often arrested and convicted for committing crimes. In other words, the decision to commit crime is based on the self-centered cost-benefit analysis assessment and psychological elements. People often have to make decisions on which activities (legal or illegal) to do. This issue was analyzed by other authors, but their studies were more specialized - in order to prove that the poorest children living in families are more prone

to crime than growing in affluent families (Griggs and Walker 2008). Griggs and Walker (2008) examined the impact of poverty on children's growth and their further development. Relationship between children living in poverty and their subsequent behavior is obvious. Such children are more prone to engage in riskier activities, initiate early smoking, become more aggressive and commit crimes. Thus, as Wong (2007) study results show, crime is influenced by poverty, also - through family dysfunction. According to this, in his opinion, it is possible to distinguish two main groups of models:

1) Working models - they are characterized by the fact that the decision to engage in illegal activities lead o a decision on how much of property an individual is willing g to risk. Therefore, the result of illegal activity should be expresses in monetary equivalent.

2) Time distribution models - they are characterized by the fact that illegal activity consumes a lot of time, and its consequences cannot be determined. According to this perspective, in opinion of this author, participation in illegal activities is considered "labor supply with uncertain consequences".

So in general connection between poverty and crime is undeniable, because those who suffer from poverty, deprivation, can often reject the legal and social norms. However, there should be noted that the poorest countries and poorest people are not prone to crime. Costa Rika, which is the richest country in Central America, And Nicaragua, which is the poorest country in Central America, both lead as the safest countries in the region (United Nations Office on Drugs and Crime 2007). Zhao *et al.* (2002) presented a mathematic model, which studies the dynamics of poverty and crime? It was found that government intervention and control of criminal activity in poor countries can often reduce crime, and also to mitigate the problem of poverty.

Some studies reveal how poverty affects property un-related crime rate, specifically - terrorism. This area was studied by Kreuger and Malečkova (2003). These researchers while examining interrelations between poverty and terrorism found that a possible link is indirect and very week. It was found that Palestinian suicide bombers often come from affluent families. On the other hand, poverty at the national level may indirectly affect terrorism through economic conditions and political instability.

To summarize the research on relationship between poverty and crime, it should be stated that the strength of this relationship depends on the nature of crime. Poverty correlates the strongest with property related crimes. In addition, children who grow up in poverty are more likely to commit crimes than the ones that had not experienced poverty. Also it should be noted that the link between poverty and terrorism are not strong or directly related. Alongside, it should be stated that poverty and crime interrelations also depend on the particular characteristics of the country in which these relations are analyzed.

<u>Unemployment, poverty and crime.</u> The triad that this paper examines (unemployment - poverty - crime) as a causal - consequential socio-economical process and explores in terms of sustainable development has

the lack of attention in scientific literature. There are two works (Gillani *et al.* 2009; Spuy, Röntsch 2008), which analyze the relationship between all three elements. Gillani *et al.* (2009) studied to determine whether poverty or unemployment leads to an in crime in Pakistan. Their analysis of data showed that both unemployment and poverty lead to crime. Increasing unemployment reduces income - and that's what makes people to commit crimes. However, not only low income, but rising inflation encourages individuals to transcend their own moral boundaries. In the research in Africa, Spuy and Röntsch (2008) found out that majority of respondents think that crimes are influenced by poverty and unemployment, while emphasizing "civil paralysis" and "inaction of civic problems". Separately it should be noted that social exclusion processes also often associate with unemployment, poverty and crime at the appropriate level in the country. On the other hand, the exclusion of clusters is determined by the views of people in that country and their place of residence (Institute of Social Research 2004).

The examination off the relationship between unemployment, poverty and crime national wide and in cross-selection of "city-rural areas" (Table 6).

Table 6. Unemployment rate (percent), poverty risk level (percent) and the number of registered criminal offenses (number) per population of 100 000 in 2005-2011

Indicators, years		2005	2006	2007	2008	2009	2010	2011
Unemployment rate (percent)	Lithuania	8,3	5,6	4,3	5,8	13,7	17,8	15,3
	City	8,6	5,5	4,2	5,7	12,6	16,0	12,8
	Rural areas	7,6	6,0	4,4	6,1	16,5	22,4	21,0
Poverty risk level (percent)	Lithuania	20,5	20,0	19,1	20,0	20,6	20,2	20,0
	City	13,5	13,1	12,7	13,6	14,7	16,2	14,7
	Rural areas	34,6	34,0	32,2	32,9	32,7	28,4	30,7
The number of registered criminal offenses (number) per population of 100 000	Lithuania	2631	2421	2185	2324	2492	2363	2468
	City	3036	2814	2508	2678	2836	2595	2705
	Rural areas	1820	1630	1505	1583	1750	1846	1968

Source: created by the authors, based on Department of Statistics under Lithuanian Republic Government (2012)

As we can see, the table essentially confirms the socio-economic causal-consequential sequence. The trend indicates a strong and logical dependence between unemployment, poverty and crime, although in rural areas the relationships between processes are more inert, because of rural lifestyles. At the same time it shoes that the processes in question and relationships

between them need to be analyzed in the respect of sustainable development in the whole country.

Conclusions

This paper analyzes theoretical issues of relationship between unemployment, poverty and crime in sus-

tainable development. It shows that the relationship between these socio-economical categories is not widely discussed both in local and foreign literature. More often the relationships between two categories are discussed and thus causes relevance for the triad mentioned in the context of sustainable development.

The cooperative analysis of both local and foreign authors was performed on the theoretical concepts of unemployment, poverty and crime in assessment of these negative processes, causes and effects. The authors expresses a reasoned opinion that assessment of poverty should be calculated based on a normative minimum consumption budget, which determines the minimum necessary physical, mental (intellectual) and social need at individual level, ensuring the reproduction of society in terms of minimum qualification for a single low-level employee who performs his work in simple conditions.

This paper systematically analyzes research of Lithuanian and foreign authors and their theoretical approaches to the relationships between unemployment rate and poverty, poverty and crime, unemployment rate, poverty, crime and their interactions. It can be summarized that in the evaluation of the concepts encountered in the relationship between unemployment and poverty problems, the higher unemployment rate means that there are more unemployed people who may find themselves below the poverty line. However, unemployment ad poverty are complex phenomenon and should be examined not only by individual existing conditions of the country (especially - structure of the family), but also by individual regions of the country. This issue is very relevant in Lithuania, where the region's socio-economic development inequality is clearly noticeable.

There are a lot of discussions on the relationship between unemployment and crime issues in scientific literature. Studies, as a rule, have a conclusion about the positive effects among this phenomenon. Logical assumption that unemployment is a key factor in delinquency is evident in the research that was conducted in Lithuania over the past decade. An analogous conclusion can be drawn today, while this article provides statistical material for that. It shows that both in Lithuania, and in its regions offenses per population of 100 000 mainly correlated with unemployment trends.

To summarize the relationship between poverty and crime in the scientific literature it can be stated that the strength of relationship depends on the nature of crime. Poverty correlates the strongest with property crimes. The same is true of children grown in poverty - they are more likely to commit crimes than those who had not experienced poverty. Also it should be notes that poverty and terrorism are not directly or strongly related.

The triad that this paper examines (unemployment - poverty - crime) as a causal - consequential socio-economical process and explores in terms of sustainable development has the lack of attention in scientific literature. However there are few works from which a definite conclusion can be made about the relationship of these processes. The same trend can be seen in this article and allaying material presented on unemployment, poverty and crime indicators and their dynamics in Lithuania. Although in rural areas the relationships between processes are more inert, because of rural lifestyles. At the same time it shows that the considered processes and relationships between them need to be analyzed in the context of sustainable development country wide.

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