

Rakauskiene, O. G., Strunz, H. (2016), Approach to Reduction of Socioeconomic Inequality: Decrease of Vulnerability and Strengthening Resilience, *Economics and Sociology*, Vol. 9, No 4, pp. 243-258. **DOI:** 10.14254/2071-789X.2016/9-4/15

Ona Grazina Rakauskiene,

Mykolas Romeris University, Vilnius, Lithuania, E-mail: ona.rakaus@mruni.eu

Herbert Strunz,

University A. Dubcek of Trencin, Trencin, Slovakia, E-mail: Herbert.Strunz@fhzwickau.de

Received: May, 2016 1st Revision: October, 2016 Accepted: November, 2016

DOI: 10.14254/2071-789X.2016/9-4/15

JEL Classification: D63

APPROACH TO REDUCTION OF SOCIOECONOMIC INEQUALITY: DECREASE OF VULNERABILITY AND STRENGTHENING RESILIENCE

ABSTRACT. The paper analyses the issue of socioeconomic vulnerability by applying the concept of strengthening resilience of an individual, society and country socioeconomic inequality to reduction. Traditionally, the concept of vulnerability describes the exposure to risk and risk management including insurance against shocks and threats. However, this paper presents a new approach in which the issue of socioeconomic inequality is addressed not by applying traditional social policy measures, but by strengthening individual and societal resilience: by shaping an educated society characterised by high level of culture and morality and based on solidarity; reducing social tensions; fostering a happy individual who perceives the meaning and fullness of life and is involved in the creation of socioeconomic life. The purpose of the paper is to justify the development of inclusive society and reduction of socioeconomic inequality through examination of socioeconomic vulnerability factors and strengthening of individual and societal resilience. This paper presents the key results of a subjective study which we carried out in January -February 2016.

Keywords: socioeconomic inequality, vulnerability, structural vulnerability, cycle vulnerability, vulnerable social groups, resilience, hardiness.

Introduction

In recent years, the world has become increasingly aware of the impact of socioeconomic inequality on the quality of human potential. It is argued that inequality not only hampers economic growth and reduces the quality of life, but also declines the quality of human capital, i.e., beyond a certain critical threshold it impedes human development as such. Inequality increases insecurity and vulnerability of an individual, society and country. According to Stiglitz, the research by the World Bank has shown that for individuals the following two problems are vital – *insecurity and vulnerability*. Vulnerability is perceived as the threat of a drop in the standard of living, which is a particularly worrying phenomenon if

there is a risk that living standards will drop down to deprivation. The traditional one-sided aspirations of economists related to GDP growth have driven the focus away from the issue of vulnerability.

One of the factors that "makes the greatest contribution" to the increase of vulnerability is socioeconomic inequality, when the poor are incapable of overcoming life's difficulties. "We have to think of inequality not as a moral issue, but as an economic challenge, closely linked, firstly, to economic growth and, secondly, to the increase of vulnerability" (Human Development Report 2014, Stiglitz). Gender inequality is also important issue (Kiausiene, Streimikiene, 2013; Streimikene, Kiausiene, 2012; Fernandez-Guadano, 2015; Vveinhardt, Andriukaitiene, 2015).

Progress in the fields of technology, education and income offers to inhabitants a promise of a long, healthy and secure life. However, presently quality of population life, country's economic environment, and international situation only strengthen individuals' sense of insecurity and instability (Delibasic, 2016; Ciegis *et al.*, 2015; Streimikiene *et al.*, 2011; Draskovic and Draskovic, 2012; Draskovic, 2010; Osipov, 2012; Polterovich, 2012). In implementing the project "Social economic inequality: factors, consequences to quality of life and methods of reduction" under GER15055 of the Council of Science of Lithuania, the quality of life studies conducted at Mykolas Romeris University Laboratory (MRU LAB) in 2016 showed that in recent years the largest concerns for more than 80.0% of Lithuanian population are the threats increasing individual vulnerability (unemployment, fall in the standards of living, threat of income loss, rising inequality, decline in moral and ethical values, ineffective economic policy etc.). Trends of migration also reflect insecurity and vulnerability of people (Bilan, 2014; Bilan, 2012).

The 2014 UNDP "Human Development Report: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience" stresses that real progress on human development is not only a matter of enlarging people's critical choices and their ability to be educated, be healthy, have a reasonable standard of living and feel safe. It is also a matter of how secure these achievements are and whether conditions are sufficient for sustained human development. An account of progress in human development is incomplete without exploring and assessing vulnerability.

The following foreign researchers have analysed the issues of vulnerability and resilience (or hardiness) and proposed assessment methodologies and comparative analyses by various composite indicators: M. Gall, J. Birkmann, I. Schauser, E. Tate, B. Beccari, B. Khazai, C. Easter, C. Pfefferbaum, L. Rose, etc. The question is, why some individuals are more resilient to life's difficulties and achieve more than others? The main point here is individual endurance, the ability to withstand the trials of life, which ensures sound choices, stability, both now and in future, and allows better coping with difficulties and adapting to them.

At different stages of their life cycle, individuals are exposed to different levels of insecurity and various forms of vulnerability. Children, the youth, and the elderly are vulnerable most of all social groups, and the question is, what investments and what measures can reduce vulnerability during the most sensitive periods of a human life cycle?

Vulnerable social groups comprise children, the youth, the elderly, females, the disabled. Various other social groups may be vulnerable too – the poor, informal workers, individuals exposed to social exclusion and are at risk of becoming vulnerable, migrants, for example.

In spite of the progress made in recent years, the potential of vulnerable groups, as evidenced by a number of studies, remains unrealised. The limited use of the potential of these groups and their poorer choices interfere with their effort to cope with the difficulties of life. At certain stages of the life cycle, their potential may be limited by the lack of adequate

investment and lack of sufficient and timely attention, which leads to the risk of vulnerability. Vulnerability tends to accumulate and thus become stronger. The insecurity of these groups as a structural problem of vulnerability increases and extends over a long term, which further exacerbates their inequality in respect of employment, social status, income, and quality of life. It is not easy for vulnerable groups to overcome all these obstacles.

In order to maintain progress, today it is necessary to address the issue of vulnerability by reducing systemic vulnerability. The question is, whose prosperity are we observing and what social groups are flourishing? In order to get the real picture of how the quality of life results are distributed among various social groups, communities, and regions, it is necessary to reach beyond the general and extreme margins of indicators. As our research shows, human development losses resulting from inequality have increased in the majority of regions in Lithuania. In the regions, the income gap is increasing and wealth inequality is growing. In order to deal with vulnerability, particularly among young and older people, women, and rural areas inhabitants, it is vitally important to increase the life potential of individuals and society and to seek the situation in which progress would promote the development of individual resiliene to life difficulties.

Although research has been conducted in Lithuania on vulnerable groups proposing to address this issue through active employment and social policy measures (R. Lazutka, B. Gruževskis, A. Bitinas), there is lack of research on strengthening the resilience. This phenomenon requires more indepth research the results of which would reasonably allow determining the effective ways to increase resilience.

1. Theoretical aspects of resilience

The current state of the global economy (which also affects Lithuania) is described by considerable uncertainty, ongoing crises, uncontrolled migration, social and economic inequality, and mass unemployment. In such an unstable world, the issue of how to survive, how to ensure stability, sustainability and balance, and how to defend oneself against blows of life is becoming topical.

Traditionally, the issue of resilience to life's difficulties falls within the area of psychological research. An individual's resilience (that is, hardiness) shows the capability of personality to cope with a stressful situation, while maintaining internal balance and continuing the successful implementation of the activity. The issue, as raised by psychologists, of the capability of personality to cope with stress, disease, enhancing of productivity, and improvement of the quality of life at work has grown into the entire theory of resilience to life's difficulties and the conceptual models (Maddi, 1998) which are applied worldwide.

Resilience by Salvatore R. Maddi is an approach to oneself and to the world and a system of one's relations with the world that reduces internal tension in stressful situations and promotes coping with stress. The following three components of the resilience structure as identified by Maddi are well-known: commitment, control and challenge.

Commitment is a person's belief that active participation in the events of life offers a chance to discover what is meaningful and interesting for him (Maddi, 1998). An individual with a well-developed component of commitment feels satisfaction with his activity. In contrast, at a low level of commitment the person feels being excluded and thrown 'out of life'.

Control is a person's belief that struggle and overcoming of difficulties allow to guide his life in the desired direction, even when the success is not guaranteed. In contrast to this, there is the feeling of helplessness. At a high level of control, the person feels that he is in control of his life and chooses his own way.

Challenge is the belief that it is important to act even when there is no guarantee of success, because a negative result is a useful experience (Just as in the joke: 'I met a guy. I thought I would get married, but it turned out that not, so again, I have gained experience'). Thus, this is the readiness to take on risks. The opposite is the pursuit of simple comfort and security, which diminishes personality development. Risk is based on internal growth and development through self-assessment of knowledge and life experience.

Presently, extensive experience has been accumulated on the role and importance of resilience for health, quality of life, performance at work, productivity, tackling stressful situations.

It should be stressed that studies distinguish individual resilience to life's difficulties and group or team resilience.

Talking about resilience in organisations, the first study was conducted in a large telecommunications company operating in the state of Illinois (Illinois Bell Telephone Company – IBT) (Maddi, 1997). In light of the changing statutory base, US telecommunications companies envisaged major reductions in the number of staff and redundancies within a few months, and all workers were notified accordingly. This led to a stressful situation and increased sickness and absenteeism. According to findings of the study, the sickness rate of employees with low levels of resilience (all three components) over the year accounted for 92.5 per cent, while the sickness rate of those with high level of resilience was as little as 7.7 per cent. Resilience-level research has allowed to provide for the rate of absenteeism due to sickness and has also found that employees with a high level of resilience better withstand tightened work demands than those with low resilience. These patterns reoccur consistently in respect of workers in various occupations, such as drivers, lawyers, medical workers and military personnel in stressful situations, workers abroad, immigrants.

Further investigation has shown links of resilience not only with health, but also with business performance, especially in stressful situations.

Interesting data on top-level managers have been obtained: high levels of resilience are characteristic of the entrepreneurs who have established a major business, but not of the top managerial staff.

Resilience positively affects job satisfaction and confidence in the fact that an organisation provides sufficient independence and a degree of decision-making autonomy (Maddi, Khoshaba, 1984; Otero Lopez *et al.*, 2010).

In this way, resilience is one of the most important human resources allowing to describe work productivity, health and quality of life of workers. However, empirical studies in this area are rather scarce and, as a rule, are conducted on a very restricted and small group (athletes, managers, teachers, military personnel, students).

In this way, resilience is an integral trait of personality helping to overcome a significant share of life's difficulties. Resilience allows to resist negative environmental influences, increases resilience to stress, and makes it possible to predict the desired future. The future is always characterised by uncertainty. Resilience allows to cope with the uncertainty of the future and to overcome rising anxiety and personal helplessness by transforming them into development and growth.

Thus, resilience can be defined as an integrated capacity of a person to preserve his identity and individuality, which ensures the dynamism of life linked with social life and the purpose of human life.

In the subjective sense, resilience means satisfaction with one's life. The result of resilience is active longevity, resilience to stress, good adaptation to difficulties of life, self-regulation, self-expression, self-control, self-organisation, overcoming of occupational and life crises.

Resilience is:

- Certain resource and potential of personality;
- Integral personality trait;
- Integrated capacity to adapt to life's difficulties.

However, the phenomenon of socio-economic vulnerability and resilience remains under-investigated.

Unfortunately, resilience research is most often narrowed down to studies and measurements of an individual's psychological characteristics regardless of their links with socio-economic consequences, such as professional growth, achievements at work, material well-being, quality of life.

Secondly, although original theories of resilience do employ group aspects, the issues of formation of resilience to life's difficulties which are particularly relevant for different social groups, especially vulnerable groups, such as the youth, the elderly, females, migrants, etc., are not sufficiently investigated.

Thirdly, although resilience studies have been initiated by psychologists within an organisation, while the research of resilience of business leaders and companies to life's difficulties is still in early stages, a business' ability to address problems is an important indicator that describes the cohesion and performance of the staff and team of a company. Activity, commitment, the ability to learn from defeats and to face them, and the taking on of risks yields to the company's team general experience of coping with difficulties. In this context, attention must be given to the development of business culture.

Fourthly, it is appropriate to discuss the strengthening of resilience of society and a state as a whole. A sound state social and economic policy not only increases the endurance of an individual, family, social groups, community, and businesses, but also promotes the resilience of the state as a whole to threats and its capability to deal with negative consequences of an economic crisis, war, natural disaster, and climate change. In practice, this aspect has fallen outside the scope of scientific research, although global studies devote considerable attention to individual issues. For example, reduction of excessive inequality is among manifest levers for increasing socio-economic resilience of the state.

2. Concept of socio-economic vulnerability and resilience and research methodology

2.1. Concept

The concept of human vulnerability and resilience has been introduced to describe decrease in human potential and choices. Traditionally, the concept of vulnerability describes exposure to risk and risk management, including insuring against shocks and threats and diversifying income and assets. However, in this article it is present a broader (holistic) approach which emphasises a close link between vulnerability and the creation of inclusive society revealing the role of economic, social, educational, cultural, and psychological factors in strengthening an individual's and country's resilience.

In creating the inclusive society, reduction of socio-economic vulnerability becomes a matter of considerable importance.

The UN concept of vulnerability is based on identifying the questions of who is vulnerable to what and why, that is, what social groups are vulnerable to what threats and why (*Figure 1*).

 Socio-economic vulnerability is the challenge which is posed to certain social groups, communities, regions, and countries by economic crises, natural disasters, climate change, and military conflicts due to limited capabilities, low position in society or sensitive periods in the life cycle.

Thus, individuals are exposed to various forms of social insecurity and vulnerability during certain sensitive life cycles.

• In order to reduce vulnerability, it is necessary to increase the resilience of an individual, society and a state to life's difficulties and threats.

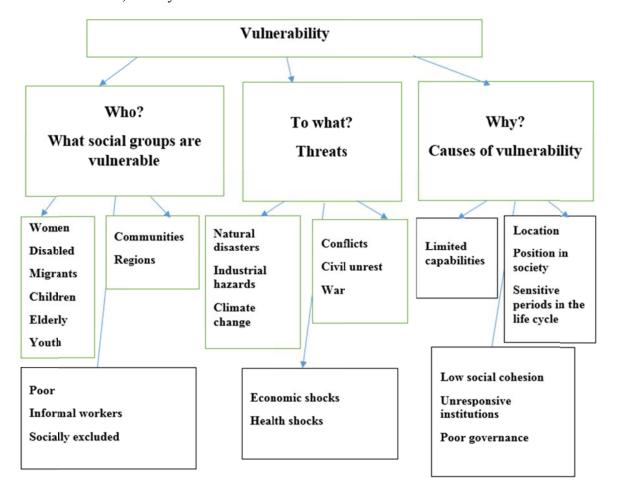


Figure 1. UNDP concept of vulnerability: who is vulnerable to what and why? *Source*: UNDP Human Development Report 2014.

Resilience to life's difficulties is closely linked to vulnerability, this is the basis for vulnerability reduction, the opposite of and offset to vulnerability. These two concepts are the opposites that make up a unified whole.

An individual's resilience to life's difficulties is ensuring of the availability of choices now and in the future, which allows better to cope with negative life events and to better adapt to them. From the psychological point of view, resilience to life's difficulties is a system of the individual's attitudes and beliefs about himself, the world, and relations with the world.

This is a certain inner courage which allows a person to be less dependent on circumstances. This feature helps the person to cope with anxiety, fear, and threats and to make the correct choice and to take the right decision.

Our study of reduction of socio-economic vulnerability and increase of resilience is based on a conceptual model which consists of three groups: factors, vulnerable social groups by life cycles and structure and promotion of resilience to life's difficulties by applying key levers, such as health, culture, reduction of excessive inequality, creation of solidarity-based community and happiness aspiration (*Figure 2*).

Thus, we propose a new approach according to which the issue of socio-economic vulnerability is resolved not by implementing traditional social policy measures, but by strengthening the resilience of an individual and society as a whole to life's difficulties through, first, the development of an educated society characterised by a high level of culture and morality and based on solidarity; second, reduction of excessive inequality and social tensions; third, fostering of a happy individual who is able to create his own life and perceives the meaning and fullness of life.

Globally, there is an ongoing debate about the concept of viability, endurance, and resilience. However, we emphasise an individual's resilience, which ensures for individuals the stability of choices and reliability now and in the future and allows them to better cope with negative phenomena and adapt to them. The resilience is the ability to eliminate the obstacles that prevent an individual from acting freely and taking part in the creation of his life.

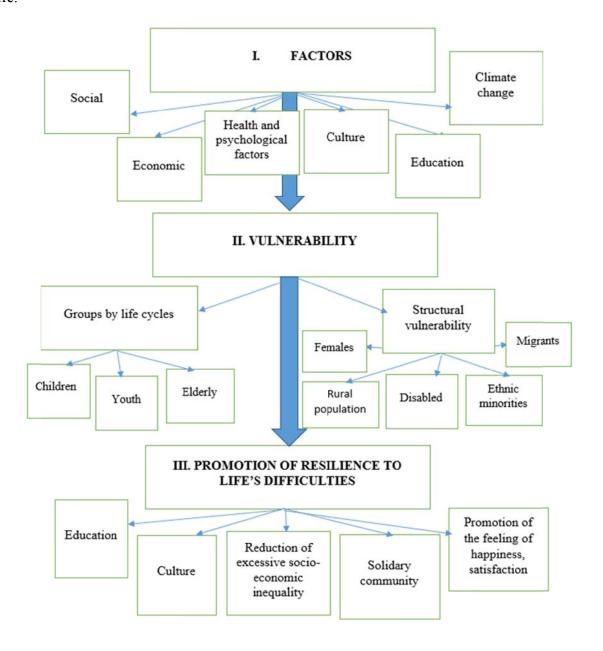


Figure 2. Conceptual model of reduction of vulnerability and strengthening of resilience *Source*: UNDP Human Development Report 2014.

Promotion of resilience (or hardiness) is the development of choices, increase of competencies (knowledge and expertise) and strengthening of psychological properties. The bottom line is that every person should be able to live the life which he perceives as valuable and meaningful.

An individual's potential is built over a lifetime, and it is necessary to nurture and maintain it, otherwise it may stagnate. Most forms and types of individual vulnerability are the result of such individual's life history; in addition, past outcomes influence the risks and threats of vulnerability and ways of coping with it.

In building an individual's life potential, the following circumstances are vital: first, an individual's potential is affected by investments in studies and education at all stages of his life cycle. The earlier such investments are made, the better are the individual's prospects. In contrast, the lack of timely and continuing investments makes it highly likely that the individual will not be capable of realising his potential and achieving self-fulfilment. Later interventions may help the individual to recover and to further advance along a human development path. In this context, investments in studies and education of children and youth play a fundamental role.

Secondly, culture and a value system can influence – increase or decrease – a country's and an individual's resilience to life's difficulties. Answering the question of why one country is underdeveloped, while another is developed, and whether an underdeveloped country may become a leader, the growing number of researchers worldwide (A. Auzan, D. North, B. Weingast) argue that in modern economic theory there exists 'path dependence': a country enters a trodden track, tries to escape from it, but all the time slips back. From the researchers' point of view, what keeps the country in the trodden track is associated not with economic growth or the effectiveness of economic policy, but with values and norms of behaviour: what people consider to be right and wrong, what is acceptable and what is unacceptable. Thus, it is a matter of culture, but a culture that can change depending on upbringing, education and long-term work with people.

Creative potential is developed where there is universal awareness, where no barriers are built, and where there exist opportunities of internal growth. The development capability of a country and an individual is based on available resources and properties. It is not so much material resources and not so much technologies and innovations as specific features of the life and behaviour of individuals, moral ethical norms, and value system.

It is necessary to find such resources and such mentality properties which can be relied upon at the beginning, and subsequently it is required to develop the properties which are not yet available. New properties which are not genetically-programmed are acquired through socialisation, which is determined, first and foremost, by school, universities, the army and other institutions that develop socio-cultural properties of the population, behavioural preferences, habits, and value system.

Thirdly, economic policy and society may enhance an individual's chances in overcoming obstacles and threats, however excessive inequality may reduce the capacities of various social groups to overcome the obstacles. One of the factors that 'makes the greatest contribution' to the increase of vulnerability is excessive inequality, particularly when the poor are incapable of overcoming life's difficulties.

Although extensive scientific research has been conducted in Lithuania on vulnerable groups proposing to address the issue through active social policy measures and other measures (Lazutka, Gruževskis, Bitinas, Rakauskienė, etc.), there is a lack of studies on the strengthening of resilience. This would be an innovative aspect in addressing the issue of a country's and an individual's vulnerability emphasising, in particular, the importance of education and culture, as well as economic, social and psychological factors in combating vulnerability.

Account must be taken of the following methodological assumptions of the present research:

- 1. The study of vulnerability and resilience (VR) should be multidisciplinary, encompass economy and culture, and be conducted at the macro- (country) and micro- (individual) levels. The study have to analyse not only the underlying macro-economic factors influencing VR, such as employment policy, income policy and excess inequality, social policy, but also other factors, such as culture and value system, education policy, psychological factors influencing vulnerability through state socio-economic policy. An analysis at the micro-level must bring together the study of the economic, social and psychological state of the youth, the elderly, women, rural residents and strengthening of resilience through facilitated access to education, culture and value system, reduction of excessive inequality, and other social, economic and psychological levers.
- 2. VR is assessed comprehensively by analysing, first, the economic, social, educational, and cultural and psychological factors that affect the country's and individual's vulnerability; second, by revealing the essence and content of vulnerability by life cycle and structural factors; third, by presenting levers and tools of strengthening resilience to life's difficulties.
- 3. Important aspect: assessment of threats to the country's economic and social progress and the development of an inclusive society (threat of unemployment, threat of the loss of income, decline of the quality of life, inefficiency of state economic policy, emigration, etc.).

2.2. Types of vulnerability by life cycle and target groups

Individuals with insufficient basic potential (level of education, state of health) have fewer opportunities to live the life that they consider to be of value. Their choices are limited or narrow due to social barriers. Generally limited potential and narrow choices hinder the countering of threats. During certain periods of the life cycle, such potential may be limited due to the lack of investment and lack of attention at the right time. This leads to vulnerability, which can accumulate and increase. The factors that determine how obstacles are viewed and addressed are the circumstances of birth, age, personality structure, social and material status, that is, the factors which are beyond the control of individuals.

An individual's potential is built over a lifetime, and it have to be nurtured and maintained, otherwise it may stagnate and stop. Many of individual vulnerabilities are the result of such individual's life history; in addition, past outcomes influence the overcoming of negative factors of vulnerability and ways of coping.

The building and development of life potential is characterised by two features. First, life potential is affected at any stage of life by the investments made in the preceding stages of life. It is also influenced by the environment, the local community and society. Second, short-term shocks have long-run consequences. An individual's recovery and his return to the original state depend on various circumstances.

The earlier investments in life potential are made, the better are a person's prospects. Conversely, the lack of timely and continuing investments in life potential may seriously impair the individual's capacity for self-fulfilment. Later interventions may help the individual to recover and to further advance along a human development path.

Children. Poverty often destroys the normal course of development in early childhood: more than one in five children in underdeveloped countries lives in absolute poverty and is vulnerable to hunger. Malnutrition and lack of hygiene increase the risk of infectious diseases and determine low height. In the absence of adequate nutrition, medical care and healthy

height, the majority of children from poor families who start school are not ready to study, study bad, remain to repeat the course, and are highly likely to drop out of school.

Youth. Youth (persons aged 15-25) is a key transitional period during which children learn to participate in public life and enter the world of employment. Young people around the world are affected by marginalisation in the labour market, because they do not have work experience, social contacts and skills to search for jobs, nor financial resources to become employed. In this way, they are more likely to stay unemployed or work in an insecure employment market.

Elderly. For the elderly, the biggest problems are poverty and social exclusion. When growing old, individuals are becoming more vulnerable physically, mentally and economically. Material deprivation in old age is often chronic, as insecurity and lack of economic opportunities accrued in the past become vulnerability in old age. The cumulative effect of exclusion factors over past years promotes the passing of poverty from generation to generation.

2.3. Structural vulnerability

In the cases when social and legal institutions, government authorities, socio-cultural norms and traditions serve members of society differently and create interferences for certain groups and individuals in exercising choices and rights, structural vulnerability emerges and manifests itself through deep inequality and scale of poverty, which is linked with horizontal inequality or inequality of social groups. The poor, females, ethnic, linguistic and religious minority groups, migrants and different sexual orientation groups, rural residents, and persons with disabilities usually face relatively higher barriers in building their potential and exercising available choices. The insecurity of these groups of the population facing structural vulnerability is growing and remains for a long time thus creating gender, ethnic, employment and social status inequality, which is very difficult to overcome.

It can lead to cross inequality, for example, disabled women, the poor belonging to ethnic groups, etc. Three-quarters of the poor are rural residents. They are characterised by low labour productivity, seasonal employment and small wages. More than 46 per cent of individuals aged over 60 worldwide are disabled and face serious problems hampering their full-fledged participation in life.

The aim of the research is to investigate vulnerability factors and vulnerable social groups in support of the policies and measures focused on reduction of vulnerability and increase of resilience to life's difficulties.

Four main methodological principles of vulnerability reduction and resilience increase are identified:

- Universal principle individuals have equal value and are entitled to protection and support.
- First, an individual (individual in the foreground). Macroeconomic policy must be focused on the individual, it is a means, rather than a goal.
- Societal and communal collective action to overcome the challenges of vulnerability. The role of the public sector should also be noted.
- Uniform coordination of actions of national authorities. Government and other institutions.

Target groups of the research: youth, elderly, women, rural population, long-term unemployed, migrants.

Levels of the research of vulnerability and resilience: individual, family; enterprise, organisation; social groups; communities, society, region, country.

The study consists of two parts: objective (analysis of statistical data and data provided by other information sources) and subjective (public opinion survey) research.

In the course of the objective research, the situation of the youth, the elderly, women, inhabitants of rural areas, the long-term unemployed and other vulnerable groups is analysed taking into account the official data accumulated by statistical bodies (the Lithuanian Department of Statistics, Eurostat), the World Bank, the OECD, and Lithuanian state institutions and performing a secondary analysis of data of the European Social Survey, the European Values Study, and Eurobarometer surveys.

In the course of the subjective research (sociological survey of the Lithuanian population ensuring a representative sample), the economic, social, and psychological condition of target vulnerable groups and opportunities for the strengthening of resilience are investigated by applying the levers of increasing access to education, fostering culture and a value system, reducing excessive inequality and other social, economic and psychological levers.

2.4. Subjective research methodology

Duration of the research: 21 January – 5 February 2016.

Number of respondents: N=1001.

Object of the research: Lithuanian population aged 18 and over.

Manner of survey: interview at a respondent's home.

Method of sampling: multi-stage random sampling. The selection of respondents has been designed so that every inhabitant of Lithuania would have an equal chance of being interviewed.

Survey held in: Vilnius, Kaunas, Klaipėda, Šiauliai, Panevėžys, Alytus District, Šakiai District, Utena District, Tauragė District, Švenčionys District, Raseiniai District, Kupiškis District, Molėtai District, Akmenė District, Rokiškis District, Telšiai District, Mažeikiai District, Marijampolė District, Trakai District, Varėna District, Kretinga District and Ukmergė District. The research was conducted in 19 cities and 24 villages.

Values of statistical errors, with different results:

	%	%	%	%	%	%	%	%	%
	3	5	10	15	20	25	30	40	50
	97	95	90	85	80	75	70	60	50
N									
100	3.4	4.4	6.0	7.1	8.0	8.7	9.2	9.8	10.0
200	2.4	3.1	4.2	5.0	5.7	6.1	6.5	6.9	7.1
300	2.0	2.5	3.5	4.1	4.6	5.0	5.3	5.7	5.8
400	1.7	2.2	3.0	3.6	4.0	4.3	4.6	4.9	5.0
500	1.5	1.9	2.7	3.2	3.6	3.9	4.1	4.4	4.5
750	1.2	1.6	2.2	2.6	2.9	3.2	3.3	3.6	3.7
1000	1.1	1.4	1.9	2.3	2.5	2.7	2.9	3.1	3.1

3. Research results: Vulnerability of the Lithuanian population and resilience

3.1. Considerable vulnerability of the population

A specific manifestation of vulnerability is individuals' fear of decline in the quality of life, such as deterioration in the state of health, fear of sickness and disability; deterioration in material well-being and the threat of income decrease; the fear of social injustice, old age and

loneliness, etc. (*Table 1*). The results of the research show a high level of vulnerability of the Lithuanian population. Depending on risk factors, 30-60 per cent of the population experience anxiety caused by various fears and threats.

Table 1. Vulnerability, per cent (N=1001, public opinion survey 2016)

No	Vulnerability factors	Experience absolutely no fear	Experience no fear	Yes and no, partially	Experience fear	Experience large fear	Total percentage of responders experiencing fear
1	2	3	4	5	6	7	6+7
1.	Fear of sickness and loss of family members	5.8	10.6	23.0	38.0	22.5	60.5
2.	Fear of becoming disabled	9.8	14.4	20.2	30.2	25.2	55.4
3.	Fear of deterioration in the state of health, fear to fall sick	9.2	11.1	27.7	33.6	18.4	52.0
4.	Threat of deterioration in the standard of living	7.4	9.5	32.0	36.5	14.6	51.1
5.	Threat of income decrease	10.7	10.5	30.9	34.5	13.1	47.6
6.	Threat of poverty and material deprivation	10.7	15.3	26.8	32.1	15.2	47.3
7.	Fear of old age	16.5	25.4	26.4	20.4	11.1	31.5
8.	Fear of social injustice	16.2	22.8	29.3	21.8	9.4	31.2
9.	Fear of losing job	42.3	14.1	17.0	16.8	9.4	26.2
10.	Fear of loneliness	26.4	24.4	24.3	17.3	7.6	24.9
11.	Fear of not finding proper job	46.0	13.2	18.1	16.4	5.7	22.1
12.	Fear of emigration	49.8	18.9	14.5	10.0	6.3	16.3

In the first place, there are health factors. As much as 60.5 per cent of inhabitants fear sickness and loss of their family members, which is a relatively natural phenomenon. The fear of deterioration in the state of health and sickness is a concern for as much as 52 per cent of the population. The fear of becoming disabled is topical for as much as 55.4 per cent of the respondents.

This kind of anxiety can be explained by several objective factors. First and foremost, this is the consequence of the liberal and brutal market economy ignoring the social component. A person feels fear of becoming incapable for work, because in such a case he would lose the actual source of income (A well-known phenomenon in our market economy when sick people go to work and do not take sickness leave). Social guarantees in Lithuania are among the lowest in the EU, so inhabitants do not expect to receive any social support. Secondly, a considerably commercialised system of health care does not provide medical assistance to the population due to expensive health services, reduced accessibility and often also lack of professional medical skills.

The second group of threats are the threats of deterioration in the standard of living, i.e. deterioration in material well-being and income decrease, the risk of poverty, which are faced by respectively 51.1 per cent, 47.6 per cent and 47.3 per cent of the population. The situation in which half of the Lithuanian population is exposed to the threat of decline in

material well-being is not normal and speaks eloquently about the ineffective economic policy of the state. Not surprisingly, emigration from Lithuania has affected a third of the population and six times exceeds the normal annual migration rate (3 per cent).

A sword of Damocles is hanging over an individual, especially a young educated and highly qualified person. This is the concern of how to survive and not to enter the ranks of the unemployed and the marginalised.

The fear of social injustice may be attributed to the third group of threats (31.2 per cent). It is likely that it is socio-economic inequality that hurts and adversely affects more than a third of the population, and they are exposed to the threat of social injustice. The more so that Lithuania is one of the 'leaders' in the European Union according to this indicator. Secondly, it is likely that actual inequality in Lithuania is much larger than that declared by statistical data.

It should be noted that the fear of not finding a suitable job or losing one's job is experienced by respectively 22.1 and 26.2 per cent of individuals. Such a relatively small part compared to other threats can be explained by the structure of selection of inhabitants for the study, which includes Lithuanian inhabitants of various age. Meanwhile, young individuals (aged 18 to 35) account for 21.2 per cent, middle-aged inhabitants – 30.4 per cent, while older persons (aged 55 to 70 and over) – 49.4 per cent. Thus, it can be claimed that the concern over employment is particularly true in respect of the majority of young inhabitants and partly middle-aged inhabitants. This is confirmed also by the fact that fear of emigration is experienced by 16.3 percent of the population.

However, the majority of Lithuanian inhabitants consider the following as the biggest threats in the country increasing vulnerability (*Table 2*): unemployment (83.8 per cent), ineffective economic policy (indicated by 82.3 per cent of the population) and poverty (81.7 per cent).

Moral decline in ethical values and the threat of public degradation are noted by 80.7 per cent of the respondents, the threat of social and economic inequality – by 78.4 per cent of the population. In the hierarchy of threats, the threat of climate change ranks last (39.4 per cent).

Table 2. Largest threats in the country increasing human vulnerability, per cent (N=1001, public opinion survey 2016)

No	Description of threats	Completely disagree	Disagree	Yes and no, partially	Agree	Completely agree	Total percentage of agreeing respondents
1	2	3	4	5	6	7	6+7
1.	Unemployment	2.2	2.7	11.2	45.8	38.0	83.8
2.	Ineffective economic policy	0.9	1.3	14.1	41.0	41.8	82.8
3.	Poverty	1.2	1.9	15.1	48.5	33.2	81.7
4.	Decline of moral and ethical values, degradation of society	1.0	2.5	15.7	45.6	35.1	80.7
5.	Socio-economic inequality	0.9	2.0	18.6	46.5	31.9	78.4
6.	Climate change	6.5	15.6	38.1	25.6	13.8	39.4

Thus, vulnerability indicators present a sad image of Lithuania. These are the biggest challenges for Lithuanian government authorities, however the majority of the population express apathy in respect of addressing these issues at the state level and rely exclusively on their own efforts. Therefore, the issue of resilience to life's difficulties is becoming extremely topical in the real life of the Lithuanian population.

3.2. High level of resilience of the Lithuanian population

The results of the research on resilience (*Table 3*) show that it could reasonably be claimed that Lithuanian inhabitants actively participate in the building of their own lives, which is a rather optimistic picture compared to threat assessment. Over 60.0 per cent of the Lithuanian population respond to current difficulties calmly and without panic and try to do everything in their power: 63 per cent try to resolve problems calmly and step by step; 66.2 per cent do everything in their power and then leave events to chance; 69.7 per cent calmly respond to stress and gradually solve problems. Helplessness in overcoming the difficulties of life is experienced by only about 20 per cent of the population: as little as 17.6 per cent of the population postpone resolution of problems and do not struggle; problems crush 20.7 per cent of the population and do not elicit their willingness to act.

Moreover, approximately 42.3 per cent of the population view emerging difficulties of life as the life challenges that must be overcome without fear by checking oneself, gaining experience and developing one's capacities.

Table 3. Resilience to life's difficulties, per cent (N=1001, public opinion survey 2016)

No	Statement describing resilience to life's difficulties	Completely disagree	Disagree	Partially agree, partially disagree	Agree	Completely agree	Total percentage of agreeing respondents
1	2	3	4	5	6	7	6+7
1.	I react badly to problems, they crush me, paralyse the initiative and do not elicit the willingness to act	8.2	31.1	40.1	18.4	2.3	20.7
2.	I react very sensitively to problems and difficulties of life, it causes much tension for me, but after coming to my senses I try to do something, to act	5.3	19.4	39.8	32.0	3.6	35.6
3.	I try to calmly deal with problems step by step	1.4	6.8	28.8	54.9	8.1	63.0
4.	It is most important to calmly respond to stress and to gradually resolve emerging problems	1.0	5.8	23.5	58.9	10.8	69.7
5.	I do everything in my power, and be as it may be	1.4	3.9	28.5	56.5	9.7	66.2
6.	I postpone resolution of problems until later, do not fight, as life itself will show hot to resolve them and will resolve them	6.0	34.2	42.3	16.6	1.0	17.6

7.	I view emerging problems as the challenges of life which must be accepted without fear, they help me to check myself as to whether I can overcome them	2.8	13.4	41.3	37.0	5.6	42.6
8.	It 'drives' me, I struggle and take the initiative and active steps to deal with difficulties of life	8.1	31.9	37.8	17.9	4.4	22.3

It must also be borne in mind that a significant proportion of the population partially agrees and partially disagrees with proposed statements of the study. In this way, it may be hypothetically claimed that there are actually even more resistant, hardy and viable inhabitants in Lithuania.

To sum up, it can be claimed that in spite of the considerable vulnerability of the Lithuanian population, its resilience to life's difficulties is relatively high. The data of the study show that characteristics of the country's population correspond to the high criteria of RLD formulated by the coryphaeus of US psychology, Salvatore Maddi. Firstly, inhabitants of our country are characterised by high commitment: they actively participate in the building of their lives, enjoy their activities, and do not feel themselves being at the margins of life. Secondly, struggle and coping with difficulties allow the inhabitants to control and manage their lives, and the feeling of helplessness is not typical of them. Thirdly, Lithuanian inhabitants are willing to take on risks, they act and do everything in their power without being under pressure of any guarantee of success and gain useful and enriching life experience. However, it cannot be claimed that our individual refuses simple comfort and social security for higher goals, such as personal development and inner spiritual growth. Such is the mentality of an individual in Lithuania, and such is the model of resilience of the Lithuanian population to life's difficulties.

Acknowledgements

This research is funded by the Research Council of Lithuania (No. GER-009/2015).

References

- Bilan, Y. (2014), Labour migration of ukraine's population: scientific and public discourse. *Transformations in Business & Economics*, 13(1), pp. 196-208.
- Bilan, Y. (2012), characterizing the migration of the inhabitants of west pomeranian voivodship, *Transformations in Business & Economics*, 11(2A), pp. 361-384.
- Ciegis, R., Dilius, A., Mikalauskiene, A. (2015), Evaluation of Economic Growth in Terms of Sustainability, *Transformation in Business and Economics*, Vol. 14, No. 1 (34), pp. 105-126.
- Delibasic, M. (2016), Hypothetical Matrix for Institutional Modeling of the Basis for Economic Development in the Countries of Southeast Europe, *Montenegrin Journal of Economics*, Vol. 12, No. 2, pp. 147-159.
- Drašković, V. (2010), The Real Institutionalization as a Condition of the Efficient Economic Politics and Economic Development, *Montenegrin Journal of Economics*, 7(1), pp. 5-20.
- Draskovic, V., Draskovic, M. (2012), Institutional Nihilism of the Post-Socialist Transition, *Montenegrin Journal of Economics*, 8(2), pp. 191-206.

- Fernandez-Guadano. J. (2015), Employee-Owned Firms: a Business Model of Social Economy with Potential, *Transformation in Business and Economics*, Vol. 14, No. 2 (35), pp. 191-204.
- Human Development Report 2014 (2014), Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience, UNDP, New York.
- Kiausiene, I., Streimikiene. D. (2013), Significance of Institutional Factors for the Implementation of Gender Equality in the Labour Market, *Transformations in Business and Economics* 7, Vol. 12, No. 3 (30), pp. 61-72.
- Maddi, S., Khoshaba, D. (1994), Hardiness and Mental Health, *Journal of Personality Assessment*, Oct. No. 2, Vol. 63.
- Osipov, Y. M. (2012), Neo-Dirigisme Plus Neo-Liberalism: Economic Relevance, *Montenegrin Journal of Economics*, Vol. 8, No. 3, pp. 75-77.
- Polterovich, V. (2012), Reform Design: How to Search for Interim Institutions, *Montenegrin Journal of Economics*, Vol. 8, No. 2, pp. 25-44 (in Russian).
- Stiglitz, J., Sen, A., Fitoussi, J. P. (2009), *The Measurement of Economic Performance and Social Progress Revisited*, Fichier pdf, 390 Ko (accessed January 20, 2014).
- Stiglitz, J. (2012), Price of Inequality, NY, WW Norton and Company.
- Streimikiene, D, Kiausiene, I. (2012), Gender equality measurements in Lithuania, *Transformations in business and economics*, 12(1A), pp. 398-412.
- Streimikiene, D, Mikalauskiene, A, Barakauskaite-Jakubauskiene (2011), Sustainability Assessment of Policy Scenarios, *Transformation in Business and Economics*, 10 (2), pp. 168-165.
- Vveinhardt, V., Andriukaitiene, R. (2015), Determination of the Level of Management Culture and Social Responsibility in a Regional Organisation of Local Self-Government, *Transformation in Business and Economics*, Vol. 14, No. 2 (35), pp. 204-224.