ISSN 1822-8011 (print)
ISSN 1822-8038 (online)
INTELEKTINĖ EKONOMIKA
INTELLECTUAL ECONOMICS
2009, No. 1(5), p. 61–71

THE ESSENCE OF SUSTAINABLE SOCIAL DEVELOPMENT AND POSSIBILITIES FOR MEASURING IT

Algimantas MISIŪNAS

Mykolas Romeris University
Ateities str. 20, LT-08303 Vilnius, Lithuania
Vilnius University
Universiteto str. 3, LT-10222 Vilnius, Lithuania
E-mail: algis.misiunas@gmail.com

Ieva BALSYTĖ

Competition Council of the Republic of Lithuania,
A. Vienuolio Str. 8, LT-01104 Vilnius

Abstract. The concept of sustainable development has already been carefully analysed from the theoretical point of view. It is understood as non-declining public value which takes into consideration technological, ecological, social restrictions on activity. Sustainable development has to ensure not only economic growth but also compatibility of economic activity with environmental, social and intellectual aspects. This currently widely-recognised idea means that economic growth as the key and the only objective of development is not sufficient in order to ensure welfare of present and future generations. Moreover, it is impossible to pursue the desired economic, ecological or social development levels in isolation, i.e. without synchronically ensuring at least a minimum development level in each of these development forms. The article explores theoretical and practical aspects of measuring sustainable social development.

JEL classification: Q200, Q580.
Keywords: sustainability, development, capital, welfare.
Reikšminiai žodžiai: tvarumas, raida, kapitalas, gerovė.

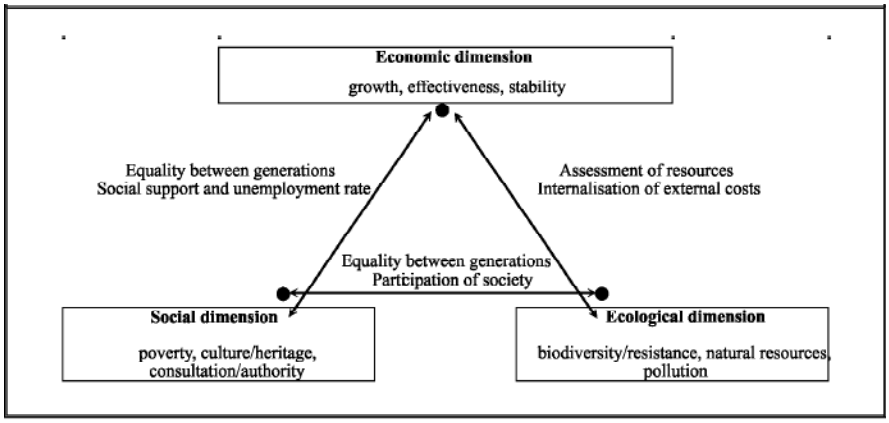
Introduction

In 1987, the UN World Commission on Environment and Development provided a report entitled *Our Common Future*. The report indicated that it was necessary to pursue balanced socioeconomic development, taking into consideration ecological factors, which required a qualitatively new kind of economic growth – i.e. the one that would be rapid yet socially and ecologically balanced.

In pursuance of decisions made at the *Johannesburg World* Summit, Lithuania approved the National Sustainable Development Strategy in 2003. At the end of 2005, the Department of Statistics to the Government of the Republic of Lithuania (Statistics Lithuania) issued the first report on the implementation of the National Sustainable Development Strategy. However, Lithuania conspicuously lacks scientific research, practically applicable sustainable development measurement methods, as well as general public knowledge of sustainable development.

Currently, it is almost publicly recognised that it is impossible to pursue the desired economic, ecological or social development levels in isolation, i.e. without synchronically ensuring at least a minimum development level in each of these development forms. For example, economic growth allows solving social problems related to the income level and unemployment; however, alongside solving the said problems, it employs natural resources and cau-

1 Fig. Interaction of three dimensions of sustainable development



Modified by I. Balsytė (2007) based on Markandya A., Harou P., Bellu L., Cistulli V. (2002).

ses environmental pollution, thus aggravating the process of safeguarding ecological sustainability. Nevertheless, it is the improvement of economic welfare and effective use of social factors in resource management that determines the same or even greater opportunities for future generations to meet their needs. Non-declining opportunities to meet the needs, or, in other words, the principle of equality between generations, is the aspect that is accentuated in all definitions of sustainable development. It is publicly recognised that the opportunity to meet the needs directly depends on available resources or capital stocks, with the only difference that in this case capital is understood in its broadest sense – i.e. as consisting of tangible capital, social and natural resources. Consequently, opportunities to meet the needs which are not decreasing with time and equality between generations mean non-decreasing resources and total (natural, economic, social) capital stocks.

From the definition of sustainable economic development, foreign authors (e.g. Solow) derive the so-called *weak sustainability* condition, stating that the total value of available capital may not decrease with time. However, the *strong sustainability* condition, taking into account not only ecological but also social capital elements, is very important as well.

1. Theoretical Concept of Sustainable Social Development

The aspect of sustainable social development has not been thoroughly researched yet. The assessment of ecological sustainability is complicated because of the multitude of elements and functions constituting the natural environment, whereas social sustainability is even less definable, palpable, it is hardly expressible in quantitative terms. The factors impacting on social development cover the intellectual level, organisational structure, social and legal norms of society, confidence, culture, personal skills and other "soft" elements which may not be expressed in material terms. Possibly, it is the reason why most of the first concepts of sustainable development pursued an objective of establishing the interaction between just two systems – economic and ecological. However, it was noticed later that the differences between development levels cannot be explained solely by economic and ecological factors. It is obvious that ecological principles and principles of economic changes can be successfully applied in practice only if they correspond to public culture and its values, intellectual development, management and decision-making skills. Some authors draw an even stricter conclusion – that development is sustainable only when it improves the quality of life.

In the most recent works on sustainable development, the social environment is looked upon as an absolutely equivalent factor, which influences social development to the same extent as economic growth or environmental sustainability. In such case, it should be explored: what is it that forms this social environment? Social capital may be broken down into two types: human and socioinstitutional. Human capital is comprised of those "soft" factors which may be directly attributed to a *certain individual*, e.g. a person's health status, level of education, knowledge and qualifications, management and communication skills, values cherished. Socioinstitutional capital means social relations and norms defining common *social activity* and *interaction* of individuals, which includes institutions regulating social activity, efficiency and quality of their performance, legislation, cultural environment, traditions, religion, political and social system, and similar factors [6, p.2; 8, p.9; 10, p.4]. Social capital determines how efficiently the society may pursue satisfaction of its needs today and in future, as well as how successfully it may shift its development towards the desired direction [4, p.99].

It is not quite clear yet what is it that forms social capital. Some authors accentuate only social relations in society, institutions and norms, while human capital is left aside [4, p.5]. Others suggest attaching the two above-mentioned types of social capital to

separate dimensions of sustainable development – i.e. human and institutional. In fact, the creation of a separate dimension does not change the idea of social sustainability, and the concept of a consolidated social dimension is widely accepted and used. Such a viewpoint is approved by the authors of the article.

It was already in 1987 that the famous Brundtland report stated that sustainable development is directly related to the opportunity to meet the needs. This concept covers the satisfaction of such vital needs as health, education, place of residence, food supply, safety assurance, freedom of communication and association, which determine social capital of society. Hence, even the concept of sustainable development formulated in the said report actually emphasised the importance of sustainable social development. As a matter of fact, it was not the only social aspect stressed. After all, the guarantee of equality between generations is at the same time a certain social commitment to future generations: even the narrowest definition of sustainable development requires the guarantee of social equality between generations, which should be logically extended to include the guarantee of equality within one generation [11, p.43].

The two latter aspects – opportunity to meet vital social needs and equality between generations – may be found in all works on social sustainability. The concept of sustainable development also covers other aspects. For example, McKenzie (2004) states that sustainable social development should additionally ensure the development of human abilities, preservation of cultural heritage, and democracy [8, p.6–10]. Gates and Lee (2005) state that social sustainability requires such a distribution of social capital in time which would ensure the satisfaction of vital needs, development of human and social abilities, as well as resistibility of individuals and society to changes and problems occurring. These social resources have to be distributed and used in such a way that this distribution and use adhere to the four principles: equality, social cohesion, safety, and adaptability. Equality – the principle that was particularly stressed by the Brundtland Commission – in general means proper distribution of resources in time and space, particularly focusing upon the needs of the poorest and the most vulnerable members of society. The guarantee of social cohesion means that each individual has to be provided an opportunity and a right to participate in the social life and communicate with other members of society. Safety covers both the safe economic and healthy natural environment, and mutual social support and confidence of individuals. The last principle stresses the possibility for individuals and society to adapt to changing conditions and occurring problems [5, p. 3].

The importance of non-decreasing social opportunities for social development was broadly analysed by Anand and Sen (1996), who proposed extending the concept of non-decreasing opportunities to meet vital needs and rephrasing it as a guarantee of substantive opportunities for all generations and individuals. The substantive opportunities named by the said authors are as follows:

- first, an opportunity to be an individual, i.e. to be physically, emotionally and mentally healthy;
- second, an opportunity to participate in society, i.e. to be respected, educated, non-discriminated, productive, an opportunity to communicate, participate in decision-making, have relationships with relatives and the family.

Attempts are made to relate social sustainability to non-decreasing human and institutional capital, analogously to the concept of sustainable economic development, where non-decreasing opportunities are directly related to non-decreasing stocks of resources. However, it is even harder to express social capital in quantitative terms than natural or economic capital; therefore, the application of this provision in practice is a more complicated task [4, p.10].

Ultimately, it should be mentioned that increasing attention has been paid to the cultural and ethnical aspects of development. For example, Goodland (2002) focuses on the importance of ethnical knowledge, local experience and traditions for sustainable development, in particular, in poorer countries. According to Goodland, preservation of these social factors is even more important than preservation of natural resources: given the extinction of certain natural resources, they might be regenerated by way of using available knowledge. The exact type of resources to be preserved also depends on ethnical and social values characteristic of a certain territory.

Although there is no common definition of social sustainability, the two main aspects thereof may be distinguished: satisfaction of vital needs and equality between generations. However, in such case, institutional factors, which are very important for both developing and developed countries, are left aside. For example, the Human Development Index (HDI), reflecting social sustainability, also covers the satisfaction of only vital social needs. For the measurement of social sustainability, sets of sustainable development indicators are also used, which, in principle, should reflect institutional potential of the country,

based on the recommendations of the World Bank, the United Nations, the Organisation for Economic Co-operation and Development (OECD).

Even given the lack of a unanimous definition of social sustainability, efforts should be made to try to include the social aspect in the general definition of sustainable development. If non-decreasing welfare or consumption is ensured, opportunities to meet social needs should not, in principle, be decreasing: after all, economic development is the main *means* of satisfying these needs. On the other hand, maintaining of total capital, and, at the same time, natural potential on the same level should not condition more limited opportunities for future generations; therefore, the principle of equality between generations is not infringed. It may therefore be concluded that in case economic and ecological sustainability is maintained at least the key social restrictions are complied with. Meanwhile, many other social aspects, such as proper institutional and management quality, effective distribution of resources, supremacy of law and assurance of democracy, preservation of culture, etc., have to be included in the general concept of sustainability separately. However, when social sustainability is measured in practice, it is possible to take into account only the key factors. The level of importance of the above-mentioned factors depends on the priorities of a certain country and society, which also forms part of the social environment.

2. Practical Measurement of Social Sustainability

As it was already mentioned, the concept of social sustainability has not been thoroughly researched yet, which in turn conditions the fact that there are just a few measures of social sustainability. Probably the main method for measuring the aspect of sustainable development in Lithuania and all over the world are the mentioned sustainable development indicators, which are surveyed by Statistics Lithuania. In addition to these indicators, one more may be distinguished – the Human Development Index (HDI). This index, for the first time mentioned in the UN Human Development Report 1990, measures not only social but also economic development of the country, and is used as a national development criterion in the UN Development Programme. Sen, the creator of this measure, suggests using the HDI as a sustainability measure as well; however, such a use of this measure is not common [2, p.15].

In the 8th decade of the 20th century, a new welfare assessment theory emerged – a human development concept, stating that the level of human welfare is best reflected by key opportunities for social choice, i.e. the opportunity to live a long and healthy life, to acquire knowledge, to stock up with resources necessary for maintaining a normal standard of living, to participate in the social life, to have a duly paid job, to live in a clean environment. For some time, efforts were being made to find a common indicator that would define such welfare, when the HDI was presented in the UN Human Development Report 1990. This index covers the three basic human opportunities: to live a long and healthy life, to receive education and to stock up with resources necessary for maintaining a normal standard of living. In the human development concept, the first two opportunities are considered to be the objective of development, whereas the third one – the means for achieving these objectives.

The degree of success in case of the first objective – the opportunity to live a long and healthy life – is reflected by the indicator of life expectancy at birth. The degree of success in case of the second objective – the opportunity to receive education – is reflected by two indicators: adult literacy and enrolment rates, which reflect the performance of the national education system. The gross enrolment rate is the ratio of students in public and private educational institutions to the population aged 7–24. Ultimately, the opportunity to stock up with resources necessary for maintaining a normal standard of living is measured by per capita gross domestic product (GDP), purchasing power standards. When the calculation of the HDI is made, the indices of the following dimensions are calculated first: life expectancy at birth, education and GDP. Each index is calculated based on a certain common methodology. First, the minimum and maximum values of the dimension are determined; then, based on these values, indicators are normalised on a scale of 0 to 1, i.e. transformed to a uniform measurement scale. At the second stage, the HDI is calculated as a simple average of indices of all dimensions. Hence, the HDI may reveal the relative situation in the country as compared with other counties. The UN has established certain absolute limits of the index, according to which countries are classified into three groups: developed, if the HDI exceeds 0.800; developing, if the HDI ranges from 0.500 to 0.799; underdeveloped, if the HDI is lower than 0.500 [2].

The HDI for Lithuania from 1997 to 2005 is presented in Table 1. It can be seen from the data that the social situation in Lithuania has been constantly improving both in absolute terms and as compared

with other countries: over the period in question, the country's HDI grew from 0.761 to 0.862, while on the global scale Lithuania moved from the 62nd to the 43rd position (while in 1995 it occupied the 79th position). From 1999, the Lithuanian HDI exceeded the limit of 0.800, i.e. the country joined the group of developed countries. Taking a closer look at the key constituents of the index, it can be seen that the main factor which conditioned the HDI growth and improving social opportunities in Lithuania was namely the growing per capita GDP. Over the period in question, the GDP index grew from 0.62 to 0.83; however, the observed improvement in public health was insignificant, whereas the life expectancy index grew by just four percentage points. According to the latter indicator, Lithuania is just in the 70th position. A major positive shift was observed in the level of education – the educational attainment index in Lithuania increased from 0.91 to 0.97, thus reaching the level characteristic of most developed countries [13].

Table 1. HDI and its constituents in Lithuania

	HDI	Rank	Life expectancy index	Educational attainment index	GDP index
1997	0.761	62	0.75	0.91	0.62
2001	0.824	45	0.79	0.94	0.74
2005	0.862	43	0.792	0.965	0.831

Compiled by the authors based on UN reports.

It should be noted that the HDI reflects the satisfaction of basic social needs – population health, education or an opportunity to meet the needs. In this respect, agreement with Sen (1) on the relevance of the HDI as a measure of sustainable social development should be expressed. Based on this index and its changes in 1997–2005, it may be concluded that the opportunities of the Lithuanian population for the satisfaction of basic social needs were not decreasing, and, therefore, the country was developing

Table 2. Social indicators of sustainable development in Lithuania

Social aspect	**Social indicator**
Population activity	Unemployment rate, %
	Employment rate of the population aged 15–64, %
	Long-term unemployment rate (% of the labour force)
Poverty and social exclusion	Relative poverty rate, % (the ratio of disposable income in the fifth quintile to that in the first quintile)
	Income distribution rate (the ratio of disposable income in the fifth quintile to that in the first quintile)
	Useful floor area per capita, m^2
Public health	Life expectancy at birth at age specified
	Birth, mortality rates, natural increase/decrease (per 100 000 population)
	Mortality by cause of death (diseases of the circulatory, respiratory, systems, external causes, traffic accidents)
	Infant mortality: infant deaths (under 1 year of age) per 1000 live births
Education	Enrolment rate (of persons aged 15–19 and 20–24)
	Admissions to post-secondary and higher schools (post-secondary schools, colleges, universities) and graduates therefrom
	General (day, adult primary and secondary) school graduates
	Vocational education for the youth (number of vocational schools and pupils admitted to and graduated from them)
	Information society development (% of households, enterprises, public and municipal authorities having computers, Internet access; number of computers per 100 students)
Preservation of cultural individuality	*The main objective: to revive cultural heritage, to strengthen direct responsibility of public authorities and society for the preservation of cultural heritage.*

Table 3. Demographic indicators of EU Member States, beginning of 2008

	Population, beginning of 2008, million	Natural increase per 1000 population, 2007	Population ensity, beginning of 2008, per./km²	Life expectancy at birth, years		Females per 1000 males	Infant deaths (under 1 year of age) per 1000 live births
				males	females		
EU-27	**497.5**	**1.0**	**114.8**	**75.4**	**81.5**	**1049**	**...**
Ireland	4.4	9.8	62.3	77.3	82.1	1000	...
Austria	8.3	0.2	99.5	77.3	82.9	1056	3.7
Belgium	10.7	1.9	347.8	77.3	82.3	1043	3.1
Bulgaria	7.6	-5.0	69.4	69.2	76.3	1064	9.2
Czech Republic	10.4	1.0	132.9	73.7	79.9	1047	3.1
Denmark	5.5	1.6	126.2	76.1	80.7	1020	4.0
Estonia	1.3	-1.2	30.9	67.3	78.8	1171	5.0
Greece	11.2	0.2	85.2	77.3	82.2	1019	3.8
Spain	45.3	2.4	87.2	77.8	84.1	1027	3.7
Italy	59.6	-0.1	199.7	78.6	84.1	1059	3.8
United Kingdom	61.2	3.2	250.0	77.6	81.7	1039	...
Cyprus	0.8	4.0	83.5	78.8	82.4	1031	6.2
Latvia	2.3	-4.3	36.7	65.9	76.8	1165	8.7
Poland	38.1	0.3	122.0	70.9	79.7	1069	6.0
Lithuania	**3.4**	**-3.9**	**54.2**	**64.9**	**77.2**	**1146**	**5.9**
Luxembourg	0.5	3.4	182.8	76.8	81.9	1020	1.8
Malta	0.4	1.9	1287.8	77.4	81.9	1013	6.5
Netherlands	16.4	2.9	483.8	78.1	82.4	1022	4.1
Portugal	10.6	-0.1	114.9	75.5	82.3	1066	...
France	63.8	4.6	99.9	77.5	84.4	1058	...
Romania	21.5	-1.7	93.9	69.2	76.1	1052	12.0
Slovakia	5.4	0.1	110.0	70.5	78.1	1060	6.1
Slovenia	2.0	0.7	99.6	74.5	82.0	1037	3.1
Finland	5.3	1.8	17.3	75.9	82.9	1042	2.7
Sweden	9.2	1.7	22.1	78.9	83.0	1015	2.5
Hungary	10.0	-3.5	108.3	69.2	77.8	1106	5.9
Germany	82.2	-1.7	230.7	77.1	82.4	1042	3.8

without breaking social sustainability. On the other hand, it is obvious that the HDI leaves aside many important aspects of sustainable social development. For example, it does not include information about the poverty and social exclusion rates, political development and freedoms, institutional and management quality, strength of law and level of corruption in the country. This problem may be partly solved in the same way as that related to the assessment of ecological sustainability, i.e. by way of complementing the analysis of social sustainability in Lithuania by social indicators of sustainable development.

3. Sustainable Social Development Indicators

The social indicators of sustainable development in Lithuania (see Table 2) define the five aspects: employment, poverty and social exclusion, public health, education and science, and preservation of cultural individuality. Similarly to the previously discussed HDI, these indicators reflect the public health status and level of education. In contradistinction to the HDI, the indicators in question include employment, but exclude GDP, which reveals not only economic opportunities to meet the needs but also individual's possibilities to be an active member of society, communicate, take on responsibility, participate in decision-making. The objectives set in relation to this aspect in the National Sustainable Development Strategy (NSDS) are as follows: by the year 2010, to increase the employment to 68 per cent, to reduce the unemployment rate to 6–7 per cent, to ensure that the qualifications of the labour force meet the needs of the labour market, and to provide conditions for the enhancement of employment capacity.

Poverty and social exclusion reveal a diametrically opposite aspect – restrictions on social opportunities of people. The objectives set in the NSDS in this respect are as follows: to reduce social diffe-

rentiation and poverty, differences in urban and rural poverty rates, as well as to increase the share of GDP allocated to social security about two times. An extra objective of sustainable social development is the preservation of cultural individuality of the country. This objective covers the preservation of the identity, succession, dissemination and competitiveness of Lithuania and its regional ethnic culture, Lithuanian language, historical cultural heritage in the contemporary environment of world cultures[1].

In the review of the indicators, presented in the NSDS Implementation Report, several problems imposing a restriction on sustainable social development are distinguished. As it was already mentioned when discussing the HDI, Lithuania lags behind other countries in terms of the indicator of life expectancy at birth. Based on Eurostat's data (see Table 3), at the beginning of 2008, life expectancy at birth for men in Lithuania was 64.9 (in EU-27 – 75.4), and for women – 77.2 years (in EU-27 – 81.5). Accordingly, life expectancy at birth of the Lithuanian population is by almost 2 years shorter than in the new EU Member States and by 7 years shorter than in the old EU Member States. This problem is to a large extent conditioned by a very short lifespan of the male population in Lithuania. The long-term objective of the NSDS is to prolong life expectancy at birth to 78.8 years; however, since 2000, a contrary trend has been observed. Another problem – the extending period of negative natural increase, which could lead to severe, far-reaching negative demographic consequences.

It should be noted that in no single EU country does the fertility rate ensure generational change. Based on Eurostat data, in 2007 the highest total fertility rate (the average number of children that would be born to a woman during the reproductive period of her life) was recorded in France (1.98), Ireland (1.93), Sweden and Denmark (1.85 in each), while the lowest – in Slovakia (1.25), Poland (1.27), Romania (1.29) and Malta (1.3). In 2007, the lowest number of live births per 1000 population among EU Member States was in Germany – 8.2, Austria – 9, Italy and Slovenia – 9.5 in each, while the highest – in Ireland (15), France (13.1) and the United Kingdom (12.4).

In 2007, the number of deaths per 1000 population in Lithuania was 1.4 times higher than the EU average (9.7), but lower than in Bulgaria (14.9) and Latvia (14.6).

In Lithuania, as well as in other EU Member States, the structure of causes of death has not been changing for many years. In 2007, about 83 per cent of deaths were due to three main causes of death – diseases of the circulatory system, malignant neoplasms and external causes (accidents, poisoning, traumas, etc.) (in 2000 – 87 %).

In recent years, infant mortality has been decreasing. The infant mortality rate (infant deaths per 1000 live births) dropped from 7.9 in 2004 to 5.9 in 2007; however, the indicator remained higher than in most old EU Member States (EU average – 4.7).

Although positive economic changes in the country conditioned a decrease in the unemployment rate to 4.3 per cent in 2007, taking into consideration a slowdown in the employment growth, it is forecasted that the set objective of reaching a 68 per cent employment rate by 2010 will not be achieved. The reason thereof – an insufficient youth activity rate in the national market, which over 2001–2007 decreased from 22.5 to 20.3 per cent, as well as a slowdown in the growth of the employment rate of older people. Another problem is related to the fact that the decrease in the unemployment rate has been for several years in a row conditioned by emigration of the labour force, which led to the shortage of skilled workers.

Based on the data on the declaration of the place of residence, in 2007, 13.9 thousand residents left Lithuania to take up usual residence abroad for good or for a period longer than 6 months (in 2006 – 12.6 thousand). The major share thereof left for the United Kingdom (26.4 %), Ireland (11.7 %), USA (11.1 %), Germany (9.2 %), Russian Federation (6.5 %) and Spain (6.1 %).

In 2007, the number of persons who immigrated to Lithuania made 8.6 thousand, which is by 864 more than in 2006. The major share thereof came from the United Kingdom (1.8 thousand), Ireland (0.9 thousand) and Germany (0.6 thousand), as well as from Belarus (1 thousand), Russian Federation (0.9 thousand) and Ukraine (0.5 thousand). The majority of the arrivals (71.3 %) were returning citizens of the Republic of Lithuani, (in 2001 – 15.2 %). About 67 per cent of citizens returning to Lithuania were aged under 35 (in 2001 – 50.3 %).

Lithuania ranks fourth in the EU in terms of the number of emigrants, which exceeds that of immigrants. Based on Eurostat's data, in 2007, net migration per 1000 population was negative (i.e. more people emigrated than immigrated) only in seven EU Member States: Romania (-4.7), Bulgaria (-4.4), Poland (-3.6), Lithuania (-1.6), Estonia (-1.5), Latvia (-0.8) and the Netherlands (-0.4).

1 NSDS Implementation Report for 2003–2004, available at http://www.esdn.eu/pdf/resources/NSDS-Eval-Report_Lithuania.pdf (in Lithuanian).

In 2007, the unemployment rate in Lithuania was the lowest among the three Baltic States (in Estonia, the unemployment rate made up 4.7, in Latvia – 6 %). The indicator of the long-term unemployment rate is very important from the point of view of social risk. Based on Eurostat data, in 2007, the long-term unemployment rate in Lithuania was among the lowest in the EU (see Figure 2). In recent years, the gradual decrease in the long-term unemployment rate has been conditioned by the processes which emerged after the Lithuania's accession to the EU and joining of the open labour market, as well as given intensified emigration of the working age population. When making a comparison of the old and new EU Member States in terms of the unemployment rate, opposite trends may be observed. In 2001, the unemployment rate in the new EU Member States was higher than that in the old ones, and later has been gradually decreasing. Meanwhile, in the old EU Member States, the indicator in question in 2006–2007 increased. However, because of the global financial crisis, which has started in 2008, as well as the economic slowdown, the unemployment rate has started growing in all countries again.

Rapid economic growth in recent years conditioned a decrease in the poverty rate to 16 per cent; however, vast differences between the urban and rural poverty rates remain problematic.

Based on the Household Budget Survey data, average household disposable income in Lithuania in 2007 made LTL 859 per capita per month. In 2007, against 2006, disposable income grew by 26.2 per cent. An increase was also observed for consumer prices, which over a year grew by 5.7 per cent; accordingly, real household income grew by 19.4 per cent.

After the members of the surveyed households had been grouped on the basis of a level of consumption expenditure, it was found out that consumption expenditure of those 10 per cent of households which spent on consumption the most was 9.3 times higher than that of those 10 per cent which spent on consumption the least. As compared with 2006, this difference increased, which means that the gap between the rich and the poor has been widening.

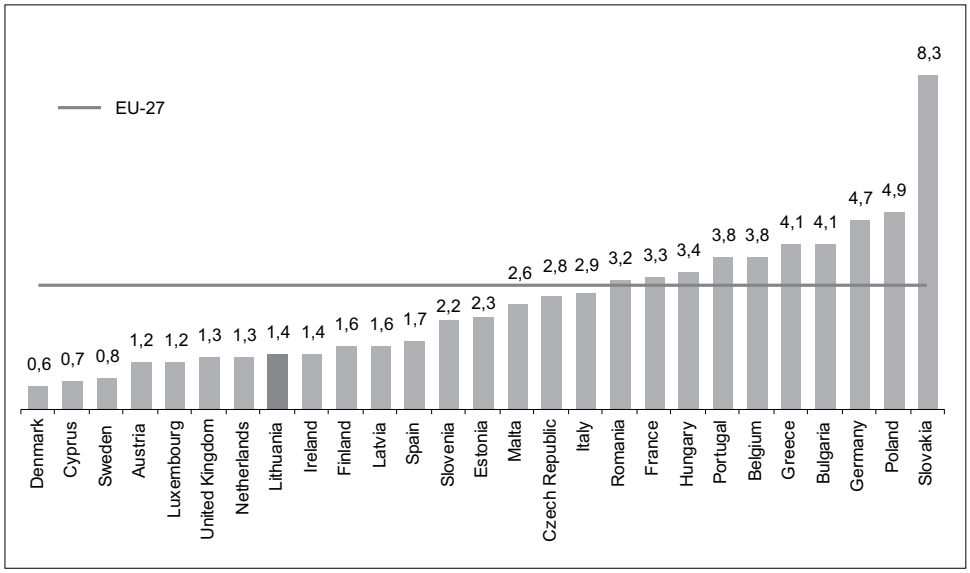
In the course of the Household Budget Survey, households were requested to assess their standard of living. Three per cent of households stated that their standard of living was above the average, 74 per cent – average, 21 per cent – lower than the average, while 2 per cent stated that they were living in poverty.

The at-risk-of-poverty rate in Lithuania is among the highest in the EU; however, it is also high in some of the old EU Member States, e.g. in Greece, Spain. Poverty in Lithuania, as well as in other EU Member States, is characterised by so-called feminisation of poverty, i.e., due to longer female life expectancy at birth and the still prominent gender pay gap (and resulting considerably lower disposable income), a large share in the at-risk-of-poverty group is made up of households of older women. Alongside such households, a considerable share of in the at-risk-of-poverty group was made up of households of parents bringing up more than three children or single parents bringing up children because their disposable income was much lower than that of other households.

Another important factor impacting the indicator of the standard of living and poverty, whose importance will be further growing in future, is the aging population of Lithuania, as well as of the entire EU. The economic burden on persons of working age has been increasing, i.e. the share of dependent persons (especially the older ones) has been growing, which at the same time encouraged to take certain actions, which would ensure solidarity of generations, i.e. increasing the rates of social insurance contributions, prolonging the working age.

Despite the low income level, poverty

2 Fig. Long-term unemployment rate, 2007 (per cent of the total active population)



and social exclusion problems, a rapid increase in the intellectual level of households may be observed. Based on the data of surveys carried out by Statistics Lithuania, in 2000, just 5.3 per cent of households in Lithuania had a personal computer, 2.3 per cent – Internet access, whereas in 2008 these figures were as high as 48.0 and 47.1 per cent respectively. Such a growth in major cities, where 57.0 per cent of households had a PC and 5556.4 per cent – Internet access, is not surprising, whereas the progress of rural households (34.5 per cent had a PC, 32.9 per cent – Internet access) is really impressive. For the new generation, the use of IT is an integral part of their lives. An interview of teenagers aged 12–15 showed that in the beginning of 2008 PCs were used by 98 per cent, Internet – 93 per cent, mobile phones – 94 per cent of persons within this age group.

The extent of effective dealing with social problems mostly depends on the institutional capacity of the country, which might ensure both efficient participation of government authorities and active participation of individuals. The problem is that both mentioned measures of social sustainability reflect neither the country's institutional potential nor its quality. This conclusion is important not only from the point of view of measuring sustainable development but also from the point of view of its implementation. The analysis of the Environmental Sustainability Index (ESI) (Balsytė, 2007) revealed certain problems within the country, related to ineffective resource management, public passivity; therefore, this index could also be used for social sustainability analysis. As a matter of fact, an analysis of the indicators constituting the ESI shows that this index covers quite a number of indicators reflecting the level of institutional capacity. In addition to the indicators which were also included in the practical measurement of ecological sustainability, the following might be mentioned: supremacy of law[2] and corruption[3] indices, calculated by the World Bank, government efficiency[4] and democracy[5], civil and political freedoms[6] measures. Both in respect of the corruption level and the supremacy of law index, Lithuania ranks, respectively, just the 23rd and 35th, in respect of the government efficiency level – 24th in Europe, which proves the insufficient quality and efficiency of management and other institutions [13].

In fact, the main problem is not the low efficiency of management in Lithuania, as compared with other developed European countries. Of greater concern is the shortage of attention paid to the institutional potential of the country. More specifically, the problem with the national institutional potential is that it is not recognised that it has to be measured, which in turn conditions the situation when the related problems are not properly explored, and attempts are not even made to combat them. If the problem of inefficient management and insufficient institutional quality is not properly assessed, and no attempts to solve it are made, it may lead to a situation when it is impossible to achieve the general country's sustainability either in the present or in the future.

Conclusions

The main objective of this article was to analyse the theoretical concept of sustainable social development and practical ways of measuring it. The prevalence of different concepts of sustainability proves a real need for comparing these viewpoints. A comparative analysis allows discovering not only the interrelation between different theories but also possible controversies about them. The identification of differences and similarities in turn allows identifying the basis for conjoining the different theories into a common concept or for rejecting such a possibility. Analogously, the analysis of various practical measures of sustainability, their drawbacks and advantages, identification of possible gaps in the measurement allows identifying the best and the most precise method for measuring sustainable development in the country.

The analysis of the theoretical concept of sustainability revealed several important aspects. First, the general concept of sustainable development, proposed in the Brundtland Report, is publicly acknowledged and accepted by scientists engaging in different fields; however, it is mostly due to the fact that the defined concept itself is rather abstract, not attaching particular importance to any of the three sustainability dimensions. On the one hand, the Brundtland definition is hardly applicable to practical measurements of sustainable development; on the other hand, it became a basis for all other attempts to define sustainability in greater detail, which stress only one of the sustainability dimensions. The presented economic, ecological and social viewpoints are always formed taking into consideration the extent to which they meet the key principle of sustainable development –

2 An index covering such aspects as: perceived prevalence of criminality, court efficiency and forecastability, execution of contracts and agreements [13, p.310].

3 Corruption costs estimated in the course of interviewing households, enterprises and institutions [Ibid].

4 An aggregated government efficiency index, calculated by the World Bank, including 25 indicators from different sources. It covers such aspects: public sector's service quality and independence from political forces, bureaucratic quality, civil servants' competence, etc. [Ibid].

5 By the Polity IV Project, University of Maryland [Ibid].

6 By the interviews and surveys conducted by the Freedom House [Ibid].

the guarantee of social opportunities which would not be decreasing with time. Finally, sustainable development means that equal opportunities are guaranteed not only in one of the three sustainability dimensions separately but in all of them simultaneously.

The drawback with the models of sustainable economic development lies in the fact that they do not take into consideration social capital and its role in the satisfaction of social needs. The problem is that it is still not clear how social capital and sustainability should be defined. If social sustainability was guaranteed only by the principles of non-decreasing opportunities to meet basic social needs and equality between generations, it might be concluded that the provided model of sustainable economic development does not contravene social sustainability. On the other hand, given increasing attention paid to the social aspect by scientists and researchers, it becomes clear that it covers much more than just the satisfaction of basic social needs and equality between generations. That is, the socioinstitutional potential of the country or even the preservation of cultural heritage and traditions is equally important.

The most complicated task is the practical measurement of social sustainability. The reason thereof is both the actually underdeveloped concept of social sustainability and a rather limited choice of practical measures of social sustainability. The general analysis of the Human Development Index and social indicators of sustainable development revealed certain social problems: quite a low youth employment rate, an increasing difference between the urban and rural poverty rates, life expectancy at birth that is lower than the EU average, a protracted decline in the population, and rather low resources allocated for scientific research. It should be mentioned, however, that the two mentioned measures cover just part of factors determining social development because they leave aside the quantity and quality of the national institutional capital. After all, it is the institutional potential of the country that is one of the key factors determining the development of developed countries. Quite a broad spectrum of indicators reflecting institutional quality and government efficiency is covered by the mentioned Environmental Sustainability Index (ESI), which revealed certain management problems in the course of surveying environmental sustainability. The analysis of the ESI shows quite a poor situation in Lithuania compared with the other European countries with regard to the national corruption level, strength of law and government efficiency. An even bigger problem is that these indicators of institutional potential in Lithuania are not even measured; they are not devoted adequate attention.

The general measurement of sustainable development in Lithuania revealed certain ecological, economic and social problems; however, the main problem is the disregard for the importance of institutional and government efficiency for guaranteeing sustainable development. If institutional quality is disregarded, it means that the related problems are not tackled today nor will they be tackled in future; consequently, guaranteeing sustainable development may become an objective that would be really difficult to achieve.

References

1. Anand, S.; Sen, A. *Human Development Index: Methodology and Measurement.* Occasional Paper 12, UNDP, 1994.
2. Anand, S.; Sen A. *Sustainable Human Development: Concept and Priorities.* Discussion Paper Series, No. 1. New York: UNDP, 1996, p.58.
3. Balsytė, I. Sustainable Development: Ecological Aspect. *Survey of the Lithuanian Economy*. Vilnius, 2007-II: 118.
4. Banes, J.; Morgan, B. *Sustainability Appraisal: A Social Perspective*. Taylor Baines & Associates, New Zeeland, 2005.
5. Gates, R.; Lee, M. *City of Vancouver.* Policy Report: Social Development. Sustainability Group, 2005.
6. Goodland, R. Sustainability: Human, Social, Economic and Environmental. *Encyclopaedia of Global Environmental Change*, 2002.
7. Markandya, A.; Harou, P.; Bellu, L.; Cistulli, V. *Environmental Economics for Sustainable Growth: A Handbook for Practitioners*. *Edward Elgar Publishing, Incorporated, Northampton, USA, 2002.*
8. *McKenzie, S. Social Sustainability: Towards Some Definitions.* Hawke Research Institute, Working Paper Series, No. 27, 2004.
9. Pierantoni, I. *A Few Remarks on Methodological Aspects Related to SD*. Meeting on "Accounting Frameworks to Measure Sustainable Development", Paris, 14–16 May, 2003.
10. Solow, R.M. Intergenerational Equity and Exhaustible Resources. *The Review of Economic Studies*. 1974, 41: 29-45. .
11. *Where is the Wealth of Nations?* The International Bank for Reconstruction and Development, World Bank. Washington D.C., 2005.
12. Žičkienė, S. Sustainable Development of Lithuania: Tentative Evaluation. *Aplinkos tyrimai, inžinerija ir vadyba.* 2004, 1 (27): 15–20.
13. 2005 Environmental Sustainability Index. Benchmarking National Environmental Stewardship. Yale Center for Environmental Law and Policy, Yale University, 2005.

TVARIOS SOCIALINĖS RAIDOS ESMĖ IR VERTINIMO GALIMYBĖS

Algimantas MISIŪNAS

Mykolo Romerio universitetas, Vilniaus universitetas, Lietuva

Ieva BALSYTĖ

Lietuvos Respublikos konkurencijos taryba, Lietuva

Santrauka. Tvarios raidos koncepcija suprantama kaip nemažėjanti visuomenės gerovė atsižvelgiant į technologinius, ekologinius ir socialinius veiklos apribojimus. Tvari raida turi užtikrinti ne tik ekonominį augimą, bet ir ekonominės veiklos suderinamumą su aplinkos, socialiniais ir intelektiniais aspektais. Ši dabar jau plačiai pripažinta idėja reiškia, kad ekonominio augimo, kaip pagrindinio ir vienintelio raidos tikslo, neužtenka dabarties ir ateities kartų gerovei užtikrinti. Taip pat neįmanoma atskirai siekti norimo ekonominio, ekologinio ar socialinio tvarumo lygio, neužtikrinant bent jau minimalaus kiekvienos iš šių formų tvarumo lygio. Nemažėjančios galimybės patenkinti poreikius, arba kitaip – lygybės tarp kartų principas yra tas aspektas, kurį pabrėžia visi tvarios raidos apibrėžimai. Visuotinai sutariama, kad galimybė tenkinti poreikius tiesiogiai priklauso nuo turimų išteklių arba kapitalo atsargų, tik šiuo atveju kapitalas suprantamas plačiąja prasme, kaip susidedantis iš materialaus kapitalo, socialinių bei gamtinių išteklių. Taip nemažėjančios galimybės tenkinti poreikius laike ir kartų lygybė reiškia nemažėjančius išteklius ir visuminio kapitalo atsargas.

Remiantis tvarios ekonominės raidos apibrėžimu formuluojama vadinamoji silpnoji tvarumo sąlyga, kuri reiškia, kad bendra turimo kapitalo vertė turi nemažėti laike. Tuo tarpu socialinis tvarios raidos aspektas yra mažiausiai ištirtas. Ekologinį tvarumą sunku įvertinti dėl daugybės elementų ir funkcijų, sudarančių gamtinę aplinką, tad socialinis tvarumas yra dar mažiau apibrėžtas, apčiuopiamas, jį sunkiausiai išreikšti kiekybiškai. Socialinei raidai įtakos turntys veiksniai apima visuomenės intelektinį lygį, organizacinę struktūrą, socialines ir teisines normas, pasitikėjimą, kultūrą, individų įgūdžius ir kitus materialios išraiškos neturinčius „minkštuosius“ elementus.

Straipsnyje nagrinėjami teoriniai ir praktiniai tvarios socialinės raidos vertinimo klausimai. Tarp šių matų bene svarbiausias yra žmogaus socialinės raidos indeksas (ŽSRI). Šis indeksas, pirmąkart pristatytas 1990 metų JT Pranešime apie žmogaus socialinę raidą, matuoja ne tik šalies socialinę, bet ir ekonominę raidą ir yra naudojamas kaip šalių išsivystymo kriterijus JT Vystymosi programoje. Šio mato kūrėjas ŽSRI siūlo naudoti ir kaip tvarumo matą. Iš straipsnyje pateiktų duomenų matyti, kad Lietuvos socialinė padėtis nuolat gerėjo tiek absoliučiai, tiek kitų šalių požiūriu: nuo 1997 metų šalies ŽSRI padidėjo nuo 0,761 iki 0,862, o per šį laikotarpį Lietuva pasaulio mastu pakilo į 43 vietą iš 62-os.

Straipsnyje taip pat apibūdinami kiti Lietuvos tvarios socialinės raidos rodikliai, apimantys penkis aspektus: užimtumą, skurdą ir socialinę atskirtį, visuomenės sveikatą, švietimą ir mokslą bei kultūros savitumo išsaugojimą.

Algimantas Misiūnas – Asociate Professor, Dr. (Soc. Sci.) Department of Banking and Investments, the Faculty of Economics and Finance Management, Mykolas Romeris University; and Department of Quantitative Methods and Modelling, the Faculty of Economics, Vilnius University.

Algimantas Misiūnas – Mykolo Romerio universiteto Ekonomikos ir finansų valdymo fakulteto Bankininkystės ir investicijų katedros ir Vilniaus universiteto Ekonomikos fakulteto Kiekybinių metodų ir modeliavimo katedros docentas, socialinių mokslų daktaras. Mokslinių interesų kryptys: makroekonominė analizė, makroekonominiai modeliai, prognozavimas.

Ieva Balsytė – senior expert, Competition Council of the Republic of Lithuania. The main scholarly interests are macroeconomics, sustainable development, competition.

Ieva Balsytė – Lietuvos Respublikos konkurencijos tarybos vyriausioji specialistė, ekonomikos magistrė. Mokslinių interesų kryptys: makroekonomika, tvari raida, konkurencija.