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Veröffentlichungsversion / Published Version

Zeitschriftenartikel / journal article

Empfohlene Zitierung / Suggested Citation:

Voronov, V., Ruza, O., & Stasane, J. (2020). Multidimensional poverty in the Baltic States in the EU context: theoretical and practical aspects. *Baltic Region*, 12(3), 72-88. <https://doi.org/10.5922/2079-8555-2020-3-5>

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MULTIDIMENSIONAL POVERTY IN THE BALTIC STATES IN THE EU CONTEXT: THEORETICAL AND PRACTICAL ASPECTS

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Received 09 April 2020

doi: 10.5922/2079-8555-2020-3-5

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There are several approaches to assessing poverty, namely, the absolute, relative, and subjective ones. They are widely used in studying income dynamics and differentiation at a national level. Yet a new research approach to the study and assessment of 'multidimensional' poverty is gaining popularity in developed states. Central to it is the notion of 'risk of poverty and/or social exclusion' (AROPE). This approach measures both income level and such non-monetary component as access to social services. Despite the versatility and severity of multidimensional poverty in some European countries, this phenomenon has not been sufficiently explored in socio-economic studies carried out in the Baltic countries of the EU – Latvia, Lithuania, and Estonia. This article aims to identify the characteristics of multidimensional poverty in the Baltic countries and the EU. Its objective is to examine the spread of multidimensional poverty in the Baltic countries and compare it to the situation on a European scale. The work uses Eurostat data. Various indicators suggest that the risk of multidimensional poverty in the Baltic States is above the EU average.

Keywords:

multidimensional poverty, poverty measurement indicators, poverty risk assessment, material deprivation, Latvia, Lithuania, Estonia

Introduction

For quite a long time, when analysing social stratification, the researchers of the Baltic states paid much attention to the formation of the middle class, while the poor population groups were considered as its possible reserve, which according to certain criteria did not reach the role of a reliable stabiliser in conditions of complex transformations of society [1, pp. 83–92; 2, pp. 7–27]. Meanwhile, the share of poor groups turned out to be quite large, and after the global financial crisis of 2008 accounts, for example, in Latvia, it was over 90%. The largest gap between candidates for the middle class and poor groups took place according to

To cite this article: Voronov, V. V., Ruza, O. P., Stasane, J. 2020, Multidimensional poverty in the Baltic States in the EU context: theoretical and practical aspects, *Balt. Reg.*, Vol. 12, no 3, p. 72–88. doi: 10.5922/2078-8555-2020-3-5.

the indicator of the monetary income, as well as according to such parameters of assessment as education level, self-identification with the middle class, aggregate resources and capital [1, p. 83–92]. Comparative studies of Latvia and other countries convincingly demonstrate that without solving the problems of poverty it is impossible to develop the social economics as an important prerequisite for the national security of modern society [3, p. 211–231]. All this makes researchers conduct a more thorough and more in-depth study of numerous groups of the poor population (youth, the unemployed, retirees, other socially vulnerable groups), to offer new concepts within the framework of the issues of overcoming extreme inequality and reducing poverty. When looking for solutions to these problems, it seems promising to use the concept of multidimensional poverty, which is receiving increasing attention in the foreign scientific literature. When determining the level of poverty based on this concept, the aspects of the human life that cannot be assessed using absolute and relative value indicators are also taken into account: health, education, living conditions, personal security, enforcement of rights and opportunities for living in society, etc. An initiative group of scientists from the University of Oxford (UK) having researched and measured poverty and the level of human capital development (including the quality of the labour force) in different countries has developed a Multidimensional Poverty Index (MPI), which is now widely used by international research organisations in their statistical reviews and reports.

The topicality of the issue and the main theoretical and methodological approaches

The concept of multidimensional poverty as a manifestation of various aspects of material (income, employment) and non-material (health, education, security) basic needs of people was first introduced in August 1976 within the framework of the International Conference on Employment, organised by the International Labour Organisation [4, p. 1–224]. In addition to the material needs that determine the ability of simple physical survival, education and health services were added as necessary constituents for successful social activity of people, the development of their human capital. At the same time, it was acknowledged that when determining the level of poverty of the population, apart from expenses on food, expenses on education, leisure and healthcare should also be considered. The British sociologist P. Townsend criticised the described concept. The main conclusion of the scientist was the formulation of the concept of poverty as a relative deprivation: people are rich or poor depending on what share of society's resources is available to them [5, p. 85–101]. According to this concept, to determine the poverty level one should use the indicators for the threshold of relative monetary poverty, which is less than 60% of the median income of the population of the surveyed country. Commenting on the works of P. Townsend, A. Sen writes that, from the standpoint of the absolutist approach, the necessity

to meet the needs for necessities is not the same as their constancy over time. The relativist approach, on the other hand, considers deprivation from the point of view of a person as a member of the household who is unable to achieve what others in this society achieve. However, the very necessity to meet the needs of people is absolute; the only thing is that in different societies, in accordance with their opportunities, these needs are satisfied via a different set of goods. Therefore, according to A. Sen, in any case, the poverty line will be a function of some variables, and there is no a priori reason why these variables cannot change over time [6, p. 153–169].

G. Betty and the associates believe that an important contribution to the study of multidimensional poverty is the definition of rules for aggregating fuzzy sets, suitable for studying poverty and deprivation [7, p. 68–86].

According to M. Ravallion, in practice, poverty is conceptualised and measured within objective indicators of the income level or consumption of households when the corresponding aspect of poverty is determined based on either economic factors (the cost of the minimum food basket plus the expenditures on basic hygiene and physiological needs), or social norms that prevail in a given society at the moment. One of the main reasons for researchers being dissatisfied with the indicator of the level of objective poverty is that this indicator ignores various signs of material deprivation, social exclusion (support) of households. Therefore, the aim of efforts to monitor the measurement of poverty should be to develop a reliable set of several indices which cover poverty indicators that are most appropriate for specific social conditions [8, p. 235–248].

L. Bellani substantiated the idea that individuals originating from different social groups may have different perceptions of the relative importance of certain indicators measuring multidimensional poverty. Therefore, when assessing the Multidimensional Poverty Index, it is essential to take the position of different social groups in society into account. The main idea of the author of the proposed index is that people compare themselves with other people of the same reference group. The more importance they attach to the weakness of their positions in the general set of non-monetary objects of deprivation in their reference group, the higher their sense of risk of poverty is. Such differentiation of indicators has a certain impact on the measurement of multidimensional poverty in each country and social groups within it [9, p. 495–515].

In 2016, I. Antošová conducted a comparative analysis of indicators of the levels of multidimensional poverty in households of Germany, Poland, Slovakia and the Czech Republic. In identifying households subject to the risk of extreme poverty, she proposed using cluster analysis based on the construction of an index that combines three poverty indicators (income poverty, severe material deprivation, low labour force participation), reflecting trends in measuring the level of multidimensional poverty in the surveyed EU countries [10, p. 4–15].

N. Rogge measures and compares regional indicators of social inclusion in Europe using a free index built on the basis of generally accepted sub-indicators

of the main indicators of Europe 2020. As concerns the factors that determine poverty and social exclusion, the results showed that a low level of education and a high percentage of single-parent households are negatively associated with regional social inclusion [11, p. 325–344].

M. Ledić investigated the level of income and material deprivation in children in Croatia [12, p. 5–57]. G. Grili, A. D’Agostino, A. Potsi paid their attention to the same problem and focused on two specific factors of measuring material deprivation in children, namely, their social participation and safety [13, p. 5–57].

M. Ciani, F. Gagliardi, S. Riccarelli applied a fuzzy set approach to measuring the level of multidimensional poverty over eight years: from 2007 to 2015. They focused on the financial aspects of poverty and its impact on citizens in the Mediterranean region of the EU [14, p. 143].

S. Alkire and J. Foster made a significant contribution to the development of conceptual problems and methods for measuring multidimensional poverty. The principle they developed for measuring multidimensional poverty was called the Alkire-Foster (AF) method. This method allows determining the parameters according to which the population is classified as poor, and also aggregating the information to reflect poverty in society (by indicators, geographic regions, ethnic and other characteristics of social groups). The set of signs of material and social deprivation built according to this method makes it possible to identify the interconnection between the types of deprivation and can be used in the development of social policy priorities [15, p. 476–1487; 16, p. 287–299; 17, p. 983–1006; 18, p. 83–97; 19, p. 25–64; 20, p. 121]. The researchers mentioned above have made significant contributions to various aspects of justifying and applying indicators of multidimensional poverty.

As the review of the studies carried out on the considered topic shows, currently, well-known European scientists distinguish two main approaches to the theoretical and methodological foundations of measuring the level of poverty of the population. The first approach is a one-dimensional analysis based on monetary indicators of income and expenditure of the population. Such an analysis is characterised by the following aspects of measuring poverty: absolute (per capita income is below the official subsistence minimum) and relative (less than 60% of the median per capita income). The second approach is a multidimensional analysis of the risk of poverty based on monetary and social indicators of the well-being of the population as a whole or differentiated according to various criteria (monetary indicators of income and expenditure per capita, the presence of severe material deprivations, the extent of exclusion from the labour market, social exclusion from state benefits)¹.

¹ *Measuring Material Deprivation in the EU. Indicators for the Whole Population and Child-Specific Indicators* // Eurostat. Luxembourg, 2012. URL: <https://ec.europa.eu/eurostat/documents/3888793/5853037/KS-RA-12-018-EN.PDF> (accessed 12.01.2020).

Research and measurement of multidimensional poverty consider the aspects of human life that cannot be measured using monetary indicators: health, education, living conditions, personal safety, enforcement of rights and opportunities, social support, etc. A person may have an average income and simultaneously experience a lack of drinking water, have no access to high-quality healthcare services and education, decent work, live in a region with a high crime rate and/or unfavourable from the environmental point of view. In this case, one experiences deprivation — deprivation of access to certain resources and opportunities [21, p. 3—24; 22, p. 17—19].

The use of indicators of multi-criteria poverty in official statistics is a relatively new practice. Previously, poverty was usually described by the official statistical bodies of various states, international organisations and individual researchers in the context of income inequality, that is, through value indicators as a monitoring of the socio-economic situation of the population, individuals, social, age-sex groups or households. Currently, the academic environment has developed an awareness that in modern economically developed societies, the concept of poverty cannot be limited only to indicators of the income level of the entities mentioned above. Within the framework of a multidimensional approach to determining the level of poverty, not only the lack of financial resources of an individual is taken into account, but also limitations in terms of access to education and healthcare, as well as difficulties associated with housing conditions, food, health and other survival needs [23, p. 305—325].

Eurostat measurement of multidimensional poverty based on the “At Risk of Poverty or Social Exclusion Index” (AROPE)

Measurement of the level of multidimensional poverty is carried out using the database “European Union Statistics on Income and Living Conditions. EU — SILC”².

Determining relevant indicators:

1. The “At Risk of Poverty and/or Social Exclusion Index” (AROPE) is a complex indicator for acknowledging people who fall under at least one of the following three criteria of multidimensional poverty as poor: those with a disposable income below the poverty risk threshold; those experiencing severe material deprivation; those living in households with extremely low labour force participation. The method of constructing the APORE index and its mathematical formula are described in more detail in [24, p. 130—133]. The AROPE index values range from 0 to 100%. The higher the index value, the higher the risk of poverty and/or social exclusion in the country, and vice versa.

² *European union statistics on income and living conditions (EU-SILC) // Eurostat. URL: <https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions> (accessed 12.01.2020).*

2. *Severe material deprivations (as part of the AROPE index)* show what the share of various entities of society having at least four of the following nine characteristics (components) of deprivation is. This applies to a person, a representative of a social, age-sex group, a household member who cannot afford the following: 1) to pay unexpected financial expenses; 2) a week's holiday away from home; 3) to pay overdue arrears (mortgage or rent, utility bills or instalment purchases); 4) meals with the inclusion of meat, chicken, fish every other day; 5) the ability to heat the home at a proper level (even if desired); 6) a washing machine; 7) a colour TV; 8) a telephone; 9) a car. At the level of the European statistical system, since 2016, it has been decided to change and exclude some characteristics of material deprivation, such as the absence of a washing machine, a colour TV and a telephone, since they are outdated and have lost their topicality. However, there has been a proposal to add new entries, such as 1) replacement of dilapidated furniture; 2) replacement of old clothes with new ones; 3) two pairs of well-fitting shoes; 4) spending a small amount of money every week on oneself; 5) regular participation in recreation and leisure activities; 6) connection to an Internet resource for personal use at home; 7) getting together with friends/family at the table at least once a month. In the article, the statistics of indicators for 2017–2018 are given according to the new set of deprivations.

3. *Indicator of the risk of income poverty (as part of the AROPE index)* — the share of the population (as a whole or differentiated by social, age-sex groups, households) whose equivalent disposable income is below the poverty risk threshold set at 60% of the national median equivalent disposable income.

4. *The value of work intensity (exclusion from employment) (as part of the AROPE index)* refers to the number of months during which representatives of the social, age-sex groups, household members, who are of working age, worked in the reporting year in proportion to the total number of months during which they could theoretically have worked in the reporting year. Individuals are classified according to work intensity categories from WI = 0 (unemployed household) to WI = 1 (total work intensity). It is considered that a person lives in a *household with a low work intensity* if $WI \leq 0.2$ ³ [25, p. 1–30; 26, p. 1–43].

The benefit of the AROPE index is its cross-country comparability, which is ensured by the use of uniform survey approaches. At the same time, some authors note that differences in survey methodologies in different EU countries impose some restrictions on the aggregation of criterion data, though in general do not lead to a dramatic deterioration of statistical properties of the aggregate sample for the EU [24, p. 133; 27; 28, p. 26–27].

³ *Material deprivation as part of the multidimensional poverty indicator: current situation and future challenges.* United Nations Economic Commission for Europe, Conference of European Statisticians. Expert Meeting on Measuring Poverty and Inequality (Budva, Montenegro 26–27 September 2017). URL: https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.15/2017/Expert-meeting-Montenegro-2017/Informations/PPT_s/Latvia_presentation_rus.pdf (accessed 10.01.2020).

Multidimensional Poverty Index.

The level of relative income poverty and social exclusion in the Baltic states in the EU context

In 2018, 110.0 million people, or 21.8% of the EU population, were at risk of poverty and social exclusion, according to Eurostat data (Fig. 1). This figure means that about one in five people in the EU experienced at least one of the following three forms of poverty: income poverty, severe material deprivation, or very low labour force participation. Over the past 15 years, there were two periods with the changes in the risk of poverty and social exclusion in the EU, — 2009 and 2012. In 2009, the number of the population at risk of poverty began to grow due to the socio-economic consequences of the economic crisis; in 2012, this upward trend changed to the opposite. By 2018, the number of people at risk of poverty had fallen below the level of 2008, which was the base year for the implementation of the EU strategy “Europe 2020” aimed at reducing the number of people at risk of poverty by 20 million [29, p. 29—61; 30, p. 141—150]. Nevertheless, with a gap of 16 million people between the plan and the result, this goal remains to be achieved.

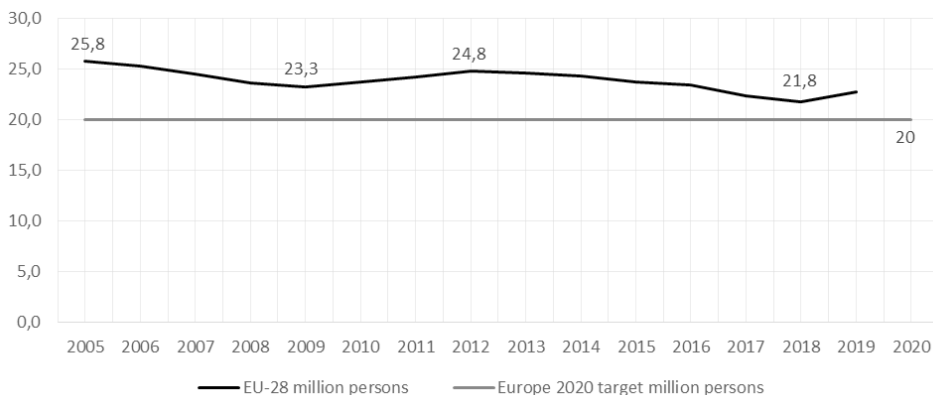


Fig. 1. Indicator of the share of the population at risk of poverty and social exclusion in the EU countries, from 2005 to 2018,%

Compiled from: *People at risk of poverty or social exclusion* // Eurostat.

URL: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=t2020_50&lang=en (accessed 10.01.2020).

In the EU Baltic states (Latvia, Lithuania and Estonia) in 2018 the population of Lithuania and Latvia were most subject to the risk of poverty and social exclusion — with 794 thousand people (29.6%) and 543 thousand people (28.4%) respectively. In Estonia, the situation is slightly better — 318 thousand people or 24.4%.

The Multidimensional Poverty Index AROPE, which reflects trends in poverty measurement among the population of the Baltic states, varied dramatically in 2005, ranging from 25.8% in Estonia to 45.3% in Latvia. Since 2005, there has been a general downward trend in the number of the population at risk of poverty in these countries and the EU (Fig. 2). On average, 21.8% of the EU population were at risk of poverty and social exclusion in 2018.

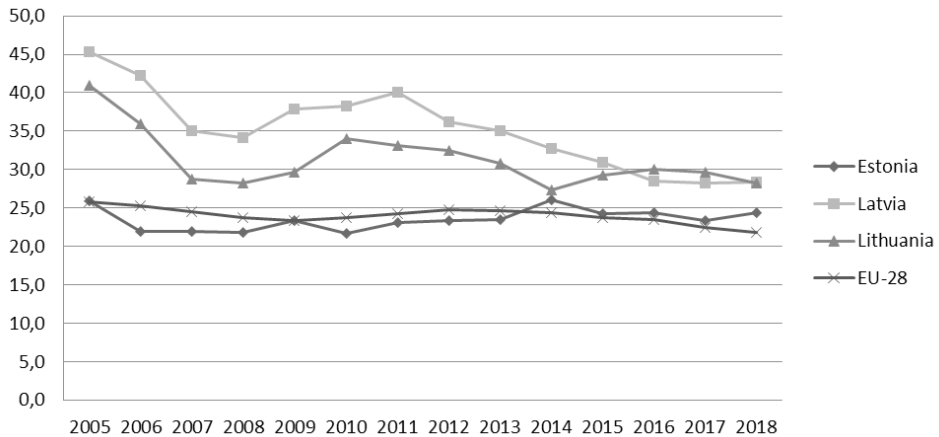


Fig. 2. Indicator of the share of the population at risk of poverty and social exclusion in the EU Baltic states, from 2005 to 2018,%

Compiled from: *People at risk of poverty or social exclusion* // Eurostat. URL: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=t2020_50&lang=en (accessed 10.01.2020).

The socio-economic situation of the EU Baltic states depends on many factors. However, most of the current discrepancies in social development outcomes, in comparison with the “old” EU countries, are to some extent a legacy of the ongoing economic and financial crisis in Latvia, Lithuania and Estonia.

The data in Table 1 confirm that the population of the Baltic states is currently subject to a higher risk of multidimensional poverty than the population of other EU countries. This is especially true for socially vulnerable population groups: children, women, retirees. In most EU member states the share of retirees aged over 65 considered to be at risk of multidimensional poverty ranges from 10 to 30%. In 2018, the EU leaders in the risk group of citizens aged 65 and older according to the AROPE index were citizens of Estonia (47.4%), Latvia (43.9%), Lithuania (42.7%). At the same time, the threat of poverty in the Baltic states has an ethnic connotation. Thus, in Estonia, it is higher for Russian-speaking retirees, which was highlighted by the Council of Europe Commissioner for Human Rights Dunja Mijatović in 2018. The lowest value of the AROPE index for senior citizens of the EU in 2018 was recorded in Slovakia (6.4%).

A particular incidence of severe material deprivation is observed in the group of children aged from 0 to 17. In 2018, its average level in the EU was 14.5% (Table 1); the indicators of severe material deprivation among children in the Baltic states: Latvia – 10.3%, Lithuania – 10.0%, Estonia – 3.5%.

Table 1

Indicators of the share of the population at risk of multidimensional poverty (including its three components) in general and by age-sex groups, in the EU and the Baltic states in 2018, %

| EU and Baltic states, 2018 | AROPE | Risk of relative income poverty | Risk of severe material deprivation | Risk of exclusion from the labour market |
|----------------------------|-------|---------------------------------|-------------------------------------|--|
| The EU-28 including: | 21.8 | 17.1 | 5.9 | 8.8 |
| men | 20.8 | 16.3 | 5.7 | 8.3 |
| women | 22.8 | 17.8 | 6.1 | 9.3 |
| aged 0-17 | 23.4 | 19.9 | 14.5 | 7.4 |
| aged 18-64 | 22.1 | 16.4 | 13.2 | 9.4 |
| aged 65+ | 18.1 | 16.1 | 11.1 | – |
| Latvia, including: | 28.4 | 22.1 | 11.3 | 7.8 |
| men | 24.9 | 19.1 | 10.7 | 7.9 |
| women | 31.1 | 24.6 | 11.8 | 7.6 |
| aged 0-17 | 23.9 | 18.4 | 10.3 | 6.4 |
| aged 18-64 | 24.5 | 17.5 | 11.2 | 8.2 |
| aged 65+ | 43.9 | 39.9 | 12.7 | – |
| Lithuania, including: | 29.6 | 22.9 | 11.1 | 9.0 |
| men | 25.7 | 20.7 | 9.9 | 9.5 |
| women | 30.5 | 24.9 | 12.2 | 8.5 |
| aged 0-17 | 28.0 | 23.9 | 10.0 | 10.4 |
| aged 18-64 | 23.8 | 18.0 | 10.5 | 8.5 |
| aged 65+ | 42.7 | 37.7 | 14.1 | – |
| Estonia, including: | 24.4 | 21.9 | 3.8 | 5.2 |
| men | 21.8 | 19.3 | 3.7 | 5.7 |
| women | 26.6 | 24.2 | 3.8 | 4.8 |
| aged 0-17 | 17.9 | 15.2 | 3.5 | 3.6 |
| aged 18-64 | 19.2 | 16.4 | 3.6 | 5.8 |
| aged 65+ | 47.4 | 46.3 | 4.4 | – |

Compiled from Eurostat data (<https://ec.europa.eu/eurostat/web/income-and-living-conditions/quality/eu-and-national-quality-reports> (accessed 12.01.2020)).

In 2018, the rate of poverty risk among female retirees was over ten percentage points (pp) higher than among male retirees in six EU member states: Lithuania (18 pp), Estonia (17 pp), Bulgaria (15 pp), Czech Republic (13 pp), Latvia

and Romania (11 pp). Also, the overall share of women in the Baltic states at risk of multidimensional poverty is currently high: from 26.6% in Estonia to 31.1% in Latvia (Lithuania — 30.5%).

The dynamics and values of the three components of the AROPE index in the EU countries in the period from 2005 to 2018 are shown in Figure 3.

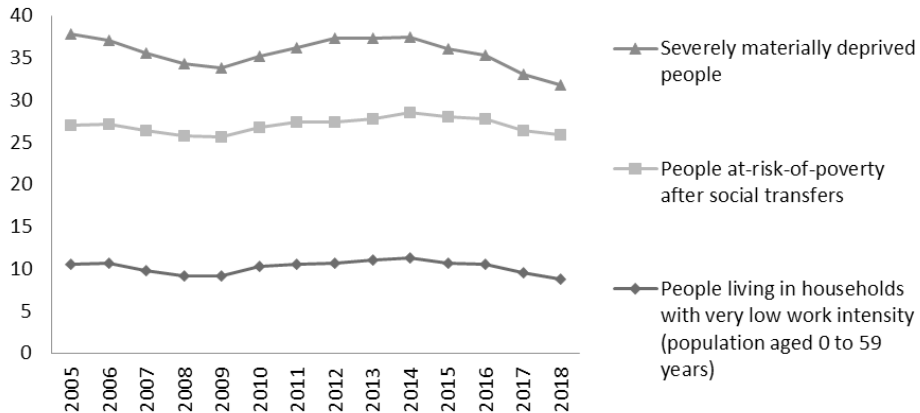


Fig. 3 Sub-indicators reflecting the number of people at risk of poverty and social exclusion in the EU-28, from 2005 to 2018, %

Compiled from: *People living in households with very low work intensity* // Eurostat. URL: https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=t2020_51 (accessed 10.01.2020); *People at risk of poverty after social transfers* // Eurostat. URL: https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=t2020_52 (accessed 10.01.2020); *Severely materially deprived people (million people)* // Eurostat. URL: https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=t2020_53 (accessed 10.01.2020).

The level of severe material deprivations in the EU and the Baltic states

An important component of measuring the level of poverty, according to the methodology of the APORE index construction, is the presence of severe material deprivations. A person is acknowledged severely deprived if, due to insufficient funds, he/she cannot afford to have at least four out of nine items (after 2015 — out of 13) of a fixed set of goods or services.

On the whole in the EU, since 2012, there has been a tendency towards a decrease in the level of severe material deprivation of the population. The number of people in the EU countries experiencing severe material deprivations decreased from 50 million in 2012 to 33.1 million in 2017, or from 9.8% in 2012 to 5.8% in 2018⁴.

⁴ Compiled from: *Severe material deprivation rate by age and sex* // Eurostat. URL: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mddd11&lang=en (accessed 10.01.2020).

The greatest success in reducing the level of severe material deprivation of the population from 2012 to 2018 was achieved by Bulgaria, where this indicator decreased by 23.2 pp, in Latvia — by 16.1 pp, in Romania — by 15.3 pp. The comparison of the Baltic states with each other shows that in 2018 Estonia had the lowest risk indicator of a severely deprived population — 3.8%, Latvia and Lithuania — 11.3 and 11.1%, respectively (see Table 1).

Figure 4 presents the data characterising specific components of severe material deprivation in the share of the population of all EU countries and the corresponding data for the three Baltic states, from 2012 to 2018. For all components of the indicator of the level of severe material deprivation, a tendency towards their decrease is apparent.

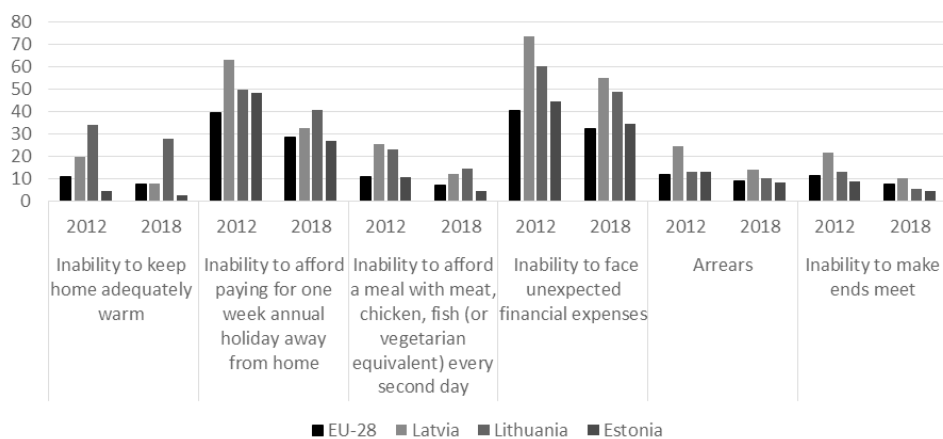


Fig. 4. Components of the indicator of the severe material deprivation level among the population in the EU-28 and the Baltic states from 2012 to 2018, population share in %

Compiled from: *Inability to keep home adequately warm* — EU-SILC survey // Eurostat. URL: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdes01&lang=en (accessed 10.01.2020); *Inability to afford to pay for a one-week annual holiday away from home* — EU-SILC survey // Eurostat. URL: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdes02&lang=en (accessed 10.01.2020); *Inability to afford a meal with meat, chicken, fish (or vegetarian equivalent) every second day* — EU-SILC survey // Eurostat. URL: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdes03&lang=en (accessed 10.01.2020); *Inability to face unexpected financial expenses* — EU-SILC survey // Eurostat. URL: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdes04&lang=en (accessed 10.01.2020); *Arrears* (mortgage or rent, utility bills or hire purchase) from 2003 onwards — EU-SILC survey // Eurostat. URL: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdes05&lang=en (accessed 10.01.2020); *Inability to make ends meet* — EU-SILC survey // Eurostat. URL: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdes09&lang=en (accessed 10.01.2020); *Persons who cannot afford to get-together with friends or family (relatives) for a drink or meal at least once a month by age, sex and income group*. URL: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdes10a&lang=en (accessed 10.01.2020).

The most common type of severe material deprivation in general for the population of the EU countries is the inability to cope with unexpected financial expenses. This component of material deprivation reflects a real and significant aspect of life difficulties experienced by 32.5% of the EU population in 2018. The indicator of this component received a higher value than the EU average in Latvia — 55.3%, Lithuania — 48.8% and Estonia — 34.7%. This means that half of the population in Lithuania and Latvia and over a third in Estonia cannot afford to pay unexpected financial expenses. Such situation manifests the ineffectiveness of the instruments of the state social policy (taxes, allowances, benefits, etc.) pursued in the Baltic states aimed at reducing the poverty level of the population and its socially vulnerable groups.

Another common type of material deprivation is the inability to afford an annual week's holiday away from home. In the EU countries in 2018, this type of deprivation was experienced by 28.5% of the population, in the Baltic states the situation is ambiguous. In Estonia, this is 26.7% of the population (less than the EU average); 40.7% of the population of Lithuania and 32.8% of the population of Latvia are deprived of this opportunity (more than the EU average).

Every eleventh EU resident (8.9%) has mortgage or rent arrears, utility bills or instalment purchases, and 7.3% of residents cannot provide sufficient heating for their homes, 7% cannot afford food with meat, chicken, fish (or the vegetarian equivalent) every other day. In the EU Baltic states, the situation in this respect is ambiguous. The data in Figure 4 show that the percentage of the population experiencing severe and diverse material deprivation in Latvia is higher than in Lithuania and Estonia.

The risk level of exclusion of the working-age population from the labour market in the EU and the Baltic states

A person is acknowledged as excluded from the labour market if the indicator of labour activity (in measuring the risk level of such exclusion) takes values under 0.2. According to the methodology of measuring the AROPE index, the indicator is defined as a share of people aged 0 to 59 who are representatives of social, age-sex groups, members of households, with a very low work intensity. These are individuals, excluding students, who worked 20% or less of their total work potential during the reporting year. According to Eurostat, the indicator of the risk of exclusion from the labour market is quite significant for representatives of social, age-sex groups, and household members in EU countries. The EU average value of the indicator is 13.4%. In the Baltic states,

the indicator of the risk level of exclusion from the labour market of the working-age population turned out to be lower: in Lithuania — 8.5%, Latvia — 8.2%, Estonia — 7.0%.

In general, across the EU countries, the indicator of the risk level of exclusion of the working-age population from the labour market from 2012 to 2018 decreased slightly: by 1.8 pp. The leaders of the decrease in this indicator from 2012 to 2018 were countries such as Ireland, where the risk level of exclusion from the labour market of the working-age population decreased by 10.3 pp, Hungary — by 7.8 pp, Great Britain — by 4.4 pp. Among the EU Baltic states, Latvia took the leading position, where the indicator of the risk of exclusion from the labour market of the working-age population from 2012 to 2018 decreased by 4.1 percentage points, in Estonia and Lithuania — by 3.9 pp and 2.4 pp, respectively. At the same time, in Sweden, Finland, Norway, the risk level of exclusion from the labour market of the working-age population, the representatives of social, age-sex groups, members of households with a very low work intensity, increased: by 1; 1.5 and 2.1 pp, respectively⁵.

State and trends of manifestation of the risk level of multidimensional poverty of the population simultaneously for all three components of measurement in the EU, including the Baltic states

The most considerable contribution to the value of the Multidimensional Poverty Index is made by the first component of the index — the risk level of income poverty. This indicator shows that a significant share of the population in the EU countries is subject to income poverty: 84.9 million people (17.1%). Moreover, for 54.8 million (11.4%), this component of the AROPE index is the only criterion for their poverty level. Another 30.1 million (5.7%) are subject to the manifestation of a high level of poverty in one or two other components of the AROPE index. 6.5 million people (1.30%) are poor simultaneously in all three components of the AROPE index. Figure 5 shows the dynamics of the share of the population of the EU Baltic states, who are acknowledged to be poor simultaneously for all three components of multidimensional poverty, from 2009 to 2018. In Lithuania, there were 74 thousand such people in 2018 (2.6%), in Latvia — 34 thousand people — (1.8%) and in Estonia — 8 thousand people (0.6%).

⁵ *People living in households with very low work intensity* // Eurostat. URL: https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_lvgl21&lang=en (accessed 10.01.2020).

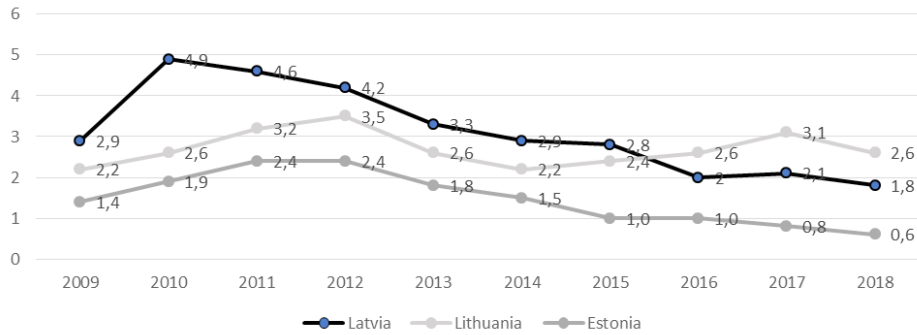


Fig. 5. Indicators of the share of the population of the Baltic states subject simultaneously to the risk of income poverty, severe material deprivation, low work intensity, from 2009 to 2018, %

Compiled from: *Persons by the risk of poverty, material deprivation, work intensity of the household, age and sex of the person — intersections of Europe 2020 poverty target indicators* // Eurostat. URL: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_pees01&lang=eng (accessed 10.01.2020); *People at risk of poverty or social exclusion by age and sex* // Eurostat. URL: http://appsso.eurostat.ec.europa.eu/nui/show.do?lang=en&dataset=ilc_peps01 (accessed 10.01.2020).

Figure 5 shows a decline in recent years in some indicators of the level of multidimensional poverty in the EU Baltic states, though to a varying extent. However, the consequences of the 2020 coronavirus pandemic may negatively affect this somewhat positive trend.

Conclusions

The Multidimensional Poverty Index is an attempt to rethink the measurement of poverty. It demonstrates that even being a necessary element of measurement income is not a good indicator of the social well-being of the population of a country, its various groups. The use of only one of the two basic theoretical and methodological concepts as the main one for the analysis and understanding of poverty seems one-sided, as this leads to the loss of a significant share of the poor population as a subject of analysis. The analysis of indicators of the level and value of multidimensional poverty showed that the incidence of poverty in the EU Baltic states is quite large — almost every fifteenth citizen of these countries is poor according to this method of measuring the level of social well-being of the population. Although according to the indicators presented in the article, the number of people subject to the risk of relative income poverty, material deprivation, and low work intensity (employment) in the EU countries is decreasing over the years, the situation remains quite severe. For this reason, it is necessary to continue the research in this area, especially in the Baltic states, and look for socio-economic and political solutions to reduce the number of people living under the threat of poverty.

A high level of poverty and social exclusion characterises the Baltic states (Latvia, Lithuania, Estonia) and in recent years, these countries have even taken leadership in terms of the index of risk of poverty and social exclusion (AROPE). This is especially true for socially vulnerable groups of citizens: children (aged 0–17), women, older people aged over 65, according to such components of the AROPE index as the risk of income poverty, the risk of severe material deprivation. Only Estonia, according to the latter indicator, takes a better position than the other Baltic states.

The use of the Multidimensional Poverty Index can contribute to a deeper understanding of the component structure of poverty, especially in vulnerable population groups, which can enhance the targeting of social policies carried out by various state and public institutions of the EU Baltic states at different levels. At the same time, these efforts will receive a scientifically balanced quantitative test and assessment in statics and dynamics.

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