

INEQUALITY, POVERTY, AND SOCIAL EXCLUSION IN BULGARIA

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Abstract

The article examines the evolution of inequalities, poverty, and social exclusion in Bulgaria. The analysis of income inequality is focused not only on the general dynamics but also on the different parts of the income distribution (mainly the two ends of the distribution). Different concepts of income are considered: primary (market) income, income before and after social transfers, and net income. This makes it possible to assess the role of social transfers and taxes on inequality. All other conditions being equal, the levels of the considered inequalities predetermine the positive or negative development of the economy in the country as a whole. Maintaining the balance between rich and poor and achieving the optimal limits of inequality in real life is the key point to the prosperity of any society. The results of the analysis can be used as a basis for the further study of their influence on social, political, and cultural processes in society.

Keywords: *inequality, poverty, social exclusion, regions, labor market.*

Introduction

Poverty and social exclusion are complex problems with many dimensions. They affect not only people's income and material condition, but also their opportunities to actively participate in society. Above all, poverty, inequalities, and social exclusion are tightly interconnected and intertwined. It is the persistence of these phenomena that put the intra- and inter-generational perspectives into debate (Halkos & Aslanidis, 2023).

Monetary poverty is just one aspect of poverty. Other aspects can be considered, as well such as consumption, access to various services - employment, health, education, and social services, the quality of the living environment, and the subjective feeling of well-being and health. At the same time, poverty can be defined as an essential condition for imbalances in the labor market, delay in the process of economic and social cohesion, low purchasing power, and harmful consequences at an individual and social level. In essence, poverty, income inequality, and social exclusion swell and surge status inequality (Ravallion, 2020).

According to this understanding of the complex nature of poverty and the definitions adopted (Joint Report on Social Inclusion, 2005), the implementation of a comprehensive and integrated approach to combating poverty has been affirmed as the main approach of national and European policies in this area. Our approach considers poverty not only as a social phenomenon and an issue that only concerns the social and assistance system, but also as a multifaceted problem that implies pooling resources from all systems (e.g., education, health, economic, financial, and housing), with the aim of achieving better results in supporting vulnerable groups (Cortina, 2022). Zhou and Liu believe that poverty is a “deprivation of basic needs” and not just a matter of low-income standards (Zhou & Liu, 2022). According to Atkinson the comfort and opportunity provided by wealth matter just as much as the consumption that wealth affords (Atkinson, 2015).

The problem of poverty and social exclusion has gained particular sensitivity in the context of the global crisis with COVID-19. The pandemic has brought job problems and put hundreds of thousands of workers at risk of losing their jobs or receiving lower wages. According to the International Labor Organization, the pandemic will cause serious damage to the world economy, which will be more serious than those caused by the global recession in 2008-2009 (International Labour Organization Note: COVID-19 and world of work: Impacts and responses, 2023).

The National Strategy for Reducing Poverty and Promoting Social Inclusion 2030 of the Republic of Bulgaria (National Strategy for Poverty Reduction and Promotion of Social Inclusion with Horizon 2030, 2022) is oriented towards the construction and implementation of a unified, consistent, and sustainable policy in the field of social inclusion. It is based on an integrated approach and intersectoral cooperation at national, regional, district, and municipal levels. The strategy is based on the understanding that territorial differences and socioeconomic inequalities are a cause-and-effect factor that causes poverty. Poverty, in turn, is pointed out by definition, along with

discrimination and lack of basic skills and lifelong learning opportunities, as the main cause of social exclusion. In this way, the triad of inequality, poverty, and social exclusion can be considered a general social phenomenon, characterized by its strong direct and reverse causal relationships.

The subject of the present study is the analysis of income inequality in Bulgaria highlighting the differences in inequalities and poverty at the national and regional levels for the period 2014-2021. It is intended to cover essential aspects of population inequalities according to certain indicators in the context of territorial specificity and the territorial differences that are revealed.

The analysis of inequality in Bulgaria is based on data from various international (OWID, 2023; Eurostat, 2022; OECD, 2022) and national (NSI) sources. For some of the national sources, full comparability with Eurostat data was achieved (Labor Force Survey, EU-SILC), while for others comparability was more limited (Household Budget Survey - HBS). The most recent sources derive from a study carried out in 2022, with the period 2014-2021 as reference years. Tabular and graphical data are presented at the EU-27 level, at the national level, and the level of regions and districts.

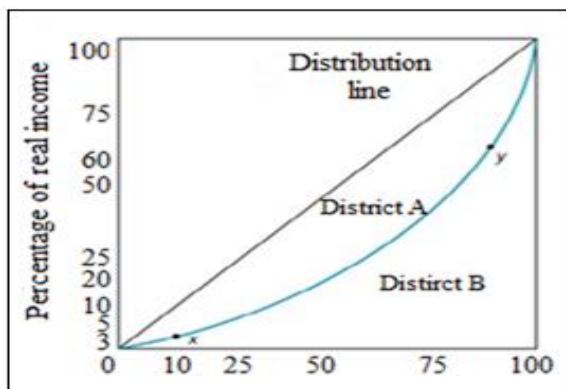
I. Indicators Used

There are several indicators that are most used in international and national analyses and comparisons (Ravallion, 2020; Zhou & Liu, 2022; Cortina, 2022; Halkos & Aslanidis, 2023). Particularly popular in this regard is the Gini coefficient, which is invariably associated with the classic economic theory and practice - the Lorenz curve (Lorenz, 1905). Less frequently, but also for analytical purposes, the Kuznets curve is also used (Kuznets, 1955).

a) Lorenz curve

When we talk about inequality in income distribution, it is necessary to focus on the Lorenz curve. It allows us to track the impacts of tax policy on income inequality (Lorenz, 1905). The curve shows how much the income distribution in the economy deviates from the perfect income distribution (Equal Distribution Line). Of course, in reality there, is no such thing as a perfect distribution.

Figure 1. Lorenz curve



Source: Lorenz, Max O. 1905. *Methods of Measuring the Concentration of Wealth*. American Statistical Association.

Figure 1 shows that the richest 10% of the population receive 3% of the economy's income (point “x”) and the poorest 10% receive 40% of the economy's real income (point “y”). Thanks to the new Lorenz curve, we can track whether fiscal policy is effective in channeling resources to the poorest. If the distance between the new curve and the equal distribution line is smaller, it means that income redistribution is taking place. If this difference is insignificant, it means that the government is not reducing income inequality (Hyman, 2008).

b) Gini coefficient

Among the main indicators for measuring income inequality is the Gini coefficient. The index was first calculated by the Italian statistician and sociologist Corrado Gini in 1912 (Gini, 1912). The ratio measures the extent to which redistribution of income or consumption spending in the economy deviates from perfect (equal) distribution. In other words, we can easily derive it using the Lorenz curve¹.

If the coefficient equals one, one person in the economy receives all income. If the coefficient equals 0, then the economy is perfectly distributed. Therefore, economies where the value of the indicator is closer to 0 achieve a

¹

$$G = \frac{1}{2n^2 \bar{Y}} \left[\sum_{i=1}^n \sum_{j=1}^n |Y_i - Y_j| \right]$$
 - Gini coefficient (Gastwirth, 1997 - normalized between 0 to 1 or 0 to 100%; or presented in a more convenient form for calculation

$$G = (n+1)/n - \left[2 \left(nY_1 + (n-1)Y_2 + \dots + \bar{Y}_n \right) \right] / (n^2 \bar{Y}); Y_1 \leq Y_2 \leq \dots \leq Y_n;$$

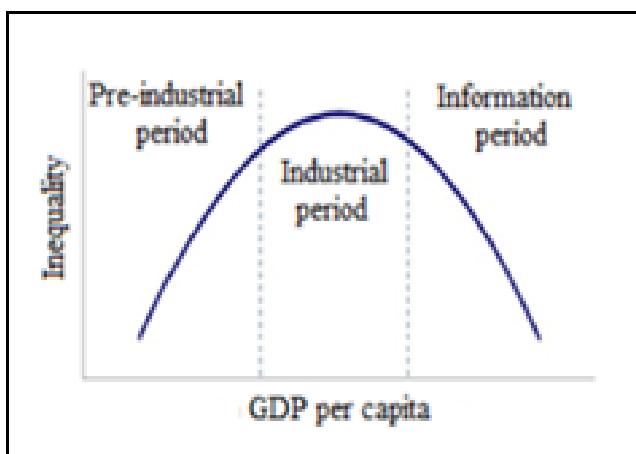
more efficient income distribution between the “poor” and the “rich”. The Gini coefficient is calculated for most regions and countries in the world, including Bulgaria, and statistics are published annually by leading international institutions and statistical agencies.

c) Kuznets Curve

An interesting connection between the different periods of development of an economy and income inequality was pointed out by the Russian economist and Nobel Prize winner Simon Kuznets in 1954. According to him, there is a natural cycle of change in inequality in the economy depending on the stages of development. Kuznets examines 3 main periods: pre-industrial, industrial, and informational. His hypothesis revolves around the idea that, as an economy develops, so do society's preferences. These attitudes are responsible for the peak of income inequality during the industrial period, and the search for equality is characteristic of the information age (fig. 2).

The various social policies to implement a more efficient redistribution of income in developed economies lead to a reduction in inequality and, consequently, in the value of the Gini coefficient (Hristov, 2013). Thus, Kuznets came to the conclusion that the inequality variation curve (over a sufficiently large period of time) has the shape of an inverted “U”.

Figure 2. Kuznets Curve



Source: Kuznets, Simon. 1955. Economic Growth and Income Inequality. *The American Economic Review* 45.

When looking at the problem by region, it is necessary to define the different concepts related to inequality. The literature identifies 3 different approaches to measuring inequality around the world, with each approach having its own merits (Bussolo, Hoyos and Medvedev, 2008):

- Inequality across countries is a concept that measures the change in income inequality around the world, but without weighing individual countries by their population;

- International inequality examines the same problem, but here inequality is already weighted by the population of each country. Thus, the change in the income of the population in China will have a significantly greater weight than the change in the income in Bulgaria, because more people will be subject to this effect;

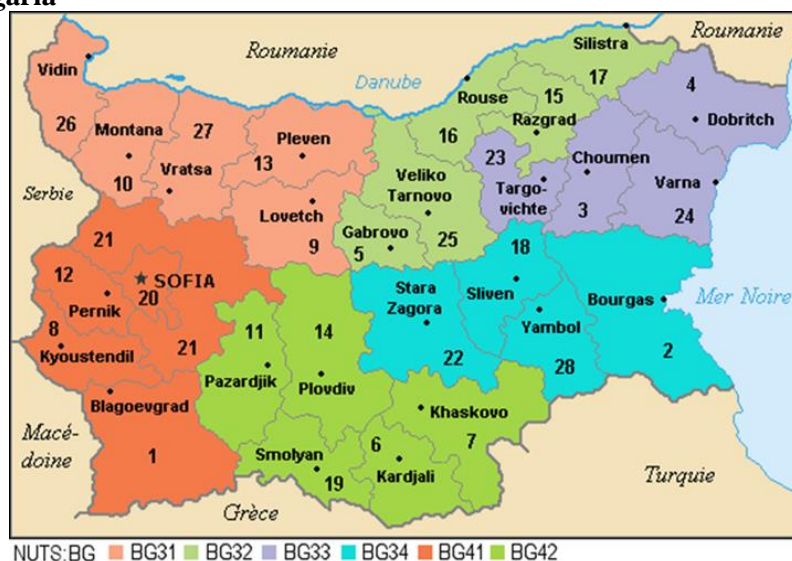
- Global inequality is a relatively new concept (Milanovic, 2020). This takes into account inequality within one's own country – something that is ignored in international inequality, where everyone is assumed to earn the average income of the country they live in. This type of inequality is accurately measured by the Gini Coefficient.

Over time, significant differences have emerged in understanding inequality by region. For example, in Europe, the objective of different countries is to reduce the income gap between the poor and the rich. On the other hand, in Latin American countries and China, the objective of social policy is to achieve equal opportunities. In other words, it emphasizes the extent to which a person's development depends on their parents' income and their social or territorial affiliation (The Economist, 2012).

II. Regional Differences

When we talk about income inequality in Bulgaria, it is necessary to consider the issue at the regional level (the country is divided into 6 regions and 28 districts) in order to maximize the objectivity of the analysis (fig. 3).

Figure 3. Territorial units for statistical purposes (NUTS 2) in the Republic of Bulgaria

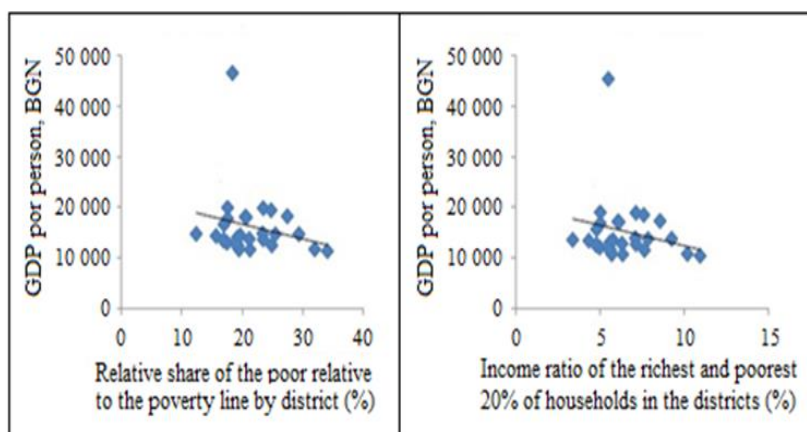


Source: Own elaboration

The reason is simple – weighted data for the whole country do not reveal the difference in the severity of the problem in different regions (IPI, 2021). For example, Haskovo (BGN 9,817) and Silistra (BGN 9,975) districts have poor socio-economic status and negative development trends with an average of BGN 20,212. The high age dependency, the poor educational environment, and the difficult state of the economy in these areas have a negative impact on people's opportunities for achievement. However, this is not the case in the capital Sofia, where the gross domestic product (GDP) per capita (BGN 45,241) is almost five times higher than in Haskovo, and employment is the highest in the country (fig. 4; Fig. 5).

Figure 4. GDP per capita and relative share of the poor in relation to the poverty line by district, 2021

Figure 5. GDP per capita and income ratio of the richest and poorest 20% of households in the districts, 2021

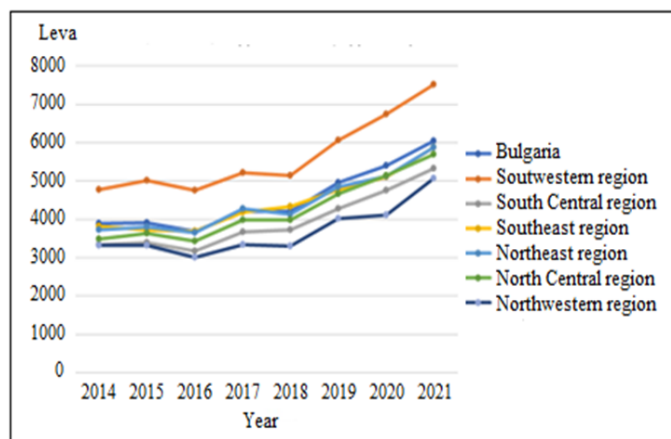


Source: Own elaboration

III. Income – the poverty line

For the 2014-2021 period, with sporadic exceptions, the poverty line in each of the regions was below that of the country. The exception was the Southwest region, which exceeded this line by about 20%. Of the other regions, only the Northeast and Southeast, which had similar indicators, were close to this line, surpassing it in 2017 and 2018, respectively with lower levels of the poverty line.

Figure 6. Poverty line in BGN, one person

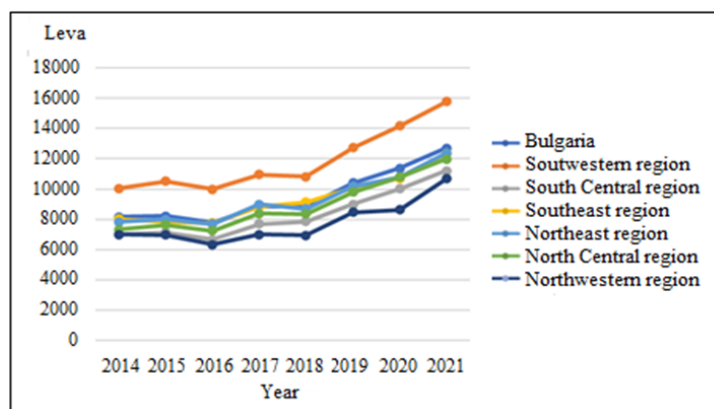


Source: Own elaboration

The general finding of a break in the convergence trend is significant. Territorial differences are increasing and different qualities and social dynamics can now be claimed (fig. 6).

A similar analysis can be done by reviewing the poverty line data, but defined for a nuclear family of two adults with two children under 14 years of age (fig. 7).

Figure 7. Poverty line in BGN, two adults with two children



Source: Own elaboration

It is apparent, the conclusion about the interrupted and not restored convergence as an effect of the past crisis is also fair here.

IV. Inequality in income distribution

Data on the Gini Coefficient and the S80/S20 Coefficient (for Bulgaria, until 2005, the quantile ratio (S80/20) was calculated based on data from the “Household Budget Monitoring” (HBS), and since 2006 it has been calculated using data from the “Statistics on Income and Living Conditions” (SILC). For 2021 we can describe several interesting facts about Bulgaria: according to the S80/S20 Coefficient. The first is in terms of the Gini coefficient. At the other pole are the Center-South and Southwest regions, where inequality is relatively low. According to the data, income inequality in the region is almost 29% greater here than in the EU. Outlines average is a group of up to 4 regions - the northern regions of Bulgaria and the southeastern part of the country - in which income inequality is above the country's average.

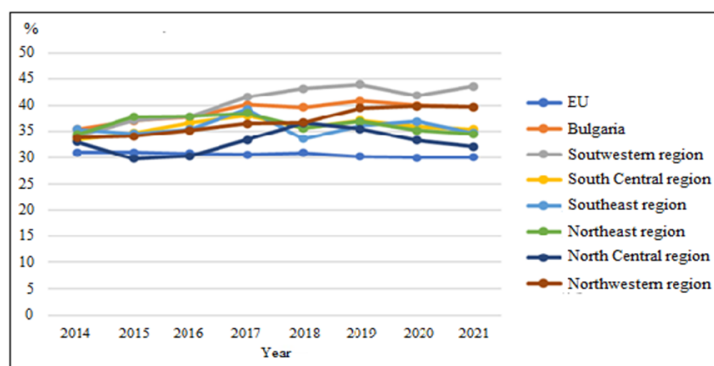
a) Gini coefficient

The Gini coefficient in Bulgaria, which measures the statistical characteristics of the distribution of assets in society, i.e. the monetary difference between the well-being of the poor and the rich in 2021 is 38.4% (ec.europa.eu/eurostat, 2022), which is the highest value among all EU member states. These values are not the result of any annual deviations but have already become regularly established over a decade ago, as our country has occupied the last place in the entire EU in this indicator for more than ten years.

If we look at the Gini coefficient only for the countries of the Balkan Peninsula, regardless of whether they are members of the EU or not, then Bulgaria is also extremely worrying. For example, while the Gini coefficient in Bulgaria is 38.4% (i.e. falling, but still far from its 2009 record of 32.7%), in neighboring Romania for 2021 it is 34.3%, in Serbia is 33.3%, Albania is 33.2%, Montenegro is 32.9%, Bosnia and Herzegovina is 32.7%, Greece is 32.4%, North Macedonia is 31.4 %, in Croatia it is 29.3%, in Slovenia it is 23.0%, etc. (Eurostat, 2022). Therefore, our country is not only behind the average European levels of inequality but is also at the bottom of the Balkan Peninsula in the company of countries with similar economic development.

A review of the data indicates that both poverty-generating factors are present – first, socioeconomic inequality (income inequality) and, second, territorial differences (in the degree of income inequality). Here, too, we cannot fail to notice the fact of growing divergence, even if we exclude the “anomalous” level of income inequality in the Southwest region. Therefore, the territorial difference factor is present (fig. 8).

Figure 8. Inequality in income distribution Bulgaria, by region and EU-27 (Gini coefficient)



Source: Own elaboration

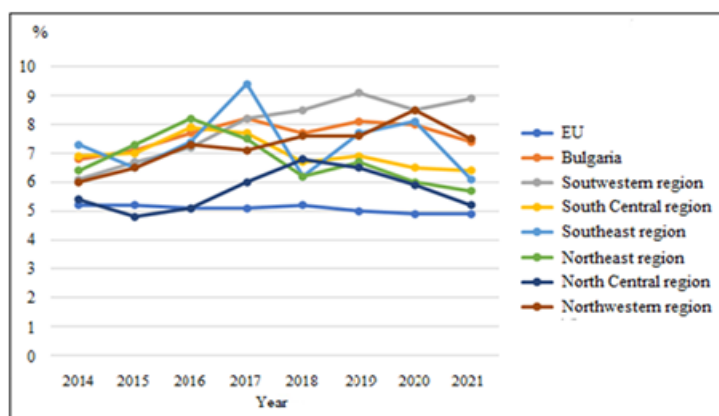
b) Indicator “20-20”

To move from the analysis of income inequality to the problem of poverty, we must consider the dynamics of another very important indicator for the social effect of inequality - the “20-20” indicator. It shows in a relatively objective way the difference between the income of the poor and the rich in a society, it is the so-called S80/S20 quintile ratio – Eurostat's SILC. According to it, the difference between the income of the richest 20 percent of Bulgarians and the poorest 20 percent of Bulgarians in 2021 is 7.45 times (http://appsso.eurostat.ec.europa.eu/nui/show.do?lang=en&dataset=ilc_di11, 2022) (fig. 9). This is again the highest figure among all EU member states. In 2017, this difference was a record – 8.3 times (6.1% in 2012). This is a number common to countries in Africa, Central America, and Asia, but not to Europe.

If we compare again Bulgaria with the countries of the Balkan Peninsula and on this indicator, we will see that, for example, the S80/S20 difference

(http://appsso.eurostat.ec.europa.eu/nui/show.do?lang=en&dataset=ilc_di11, 2022) in neighboring Romania in 2021 is 6.4 times, in Albania 6.3 times, in North Macedonia 5.5 times, in Croatia it is 4.78, etc. Again, our country is in the last place, which means that the width of the gap between the income of the rich and the income of the poor in Bulgaria is much wider compared to any other country in the EU or the Balkan Peninsula.

Figure 9. Income inequality in Bulgaria by region and EU 2014-2021 (S80/S20)



Source: Own elaboration

At the national level, again, even more clearly than the dynamics of the Gini coefficient, the break in the convergence trend after 2014 stands out, combined with a reversal in the trend of the degree of income inequality, measured by the “20- 20”.

It is interesting how, until 2014, convergence was “limited” from above by the Southeast region and from below by the Center-North region, with respectively the highest and lowest degrees of income inequality for the richest 20% and the poorest 20% of the population. By 2017, inequality had increased for the country as a whole and for the Southeast, Center-South, and Northeast regions. After that, inequality increased mainly in the Southwest and Northwest regions. In the remaining 4 regions, we have a reduction in inequality compared to 2014 (table 1).

One of the possible explanations links the growth of income inequality to the loss of (quality) jobs as a result of the crisis and the loss of social protection for the unemployed (end of benefits). Low-skilled and low-paid workers and wage earners are part of the poorest 20% who, with the loss of their jobs, also lost a significant part of their income. Conversely, highly skilled workers and entrepreneurs maintained their jobs and incomes (at least those they report) and even, under the condition of improved productivity, may have increased them.

Table 1: Inequality in income distribution
(Ratio between the income of the poorest 20% and the richest 20%), %

	2014	2015	2016	2017	2018	2019	2020	2021
Bulgaria	6,8	7,1	7,7	8,2	7,7	8,1	8,0	7,4
Southwestern region	6,1	6,7	7,2	8,2	8,5	9,1	8,5	8,9
South Central Region	6,9	7,0	7,9	7,7	6,7	6,9	6,5	6,4
Southeast region	7,3	6,5	7,4	9,4	6,2	7,7	8,1	6,1
Northeast region	6,4	7,3	8,2	7,5	6,2	6,7	6,0	5,7
North Central Region	5,4	4,8	5,1	6,0	6,8	6,5	5,9	5,2
Northwest region	6,0	6,5	7,3	7,1	7,6	7,6	8,5	7,5

Source: Own elaboration

This is the case of the Southwest region - a primary metropolitan region, around a powerful metropolitan center. The new industries were discovered and the old ones preserved a concentration of qualified workforce, with training and professional experience that had been invested for years. Even with the loss of jobs, this region offered more opportunities for its recovery, while the areas of the Northwest region were defined as predominantly rural regions. Arguably, other effects of increasing income inequality as a result of the loss or reduction of employees' income can be explained through the structure of employment.

The traced dynamics of the “20-20” indicator attests to the fact that above certain levels of the degree of income inequality of the poorest 20% and the richest 20% of local communities, vulnerability to the crisis grew significantly and, with it, was at the risk of poverty.

V. Poverty

According to the European definition of poverty adopted by the National Strategy for the Reduction of Poverty and Promotion of Social Inclusion 2030, “the poor are individuals, families and groups whose resources (material, cultural and social) are so limited that they exclude them from the minimum the acceptable way of life in the member states of the European

Union in which they live”. It is apparent, poverty is defined by its social exclusion effect. Individuals, groups, and families who cannot be defined as poor also suffer the adverse effects of poverty through exacerbated environmental pressures and factors. Poverty alters the social environment in a non-linear way. After passing certain levels, it becomes a dominant factor, forming and defining the environment and the local community. In the official documents of the United Nations Development Program, this anthropological phenomenon is called the “culture of poverty”. The results of numerous studies in different countries indicate that the characteristics of the “culture of poverty” are invariant with regard to ethnicity, religion, nationality, etc. Therefore, the impacts of poverty are comparable, regardless of the territorial location of affected local communities, at comparable levels of poverty.

One of the tools that the State uses to combat poverty – be it primary or secondary – are social transfers. For this reason, it is essential to trace how social transfers affect the structure of poverty.

Data on the relative shares of the poor before and after social transfers are presented and analyzed below. When defining the poor, the poverty line is used, which is related to the income of individuals. In fact, this indicator is also informative with regard to income inequality, which it determines its average size through the relative shares of those who earn more or less than it. This is useful, although the limited scope of this analysis does not for he relationship between income at the poverty line and the relative share of the poor.

For example, an “anomalous” dynamic is possible, in which the poverty line passes through increasingly lower incomes, and the relative share of the poor, instead of decreasing (becoming less and less “below the line”), rises sharply. This is a sign of an extremely negative trend - a sharp drop in the income of a growing group of people and growing income inequality. In such cases, if the relative proportion of the poor is determined in relation to previous higher levels of the poverty line, the true extent of impoverishment in the local poverty-stricken community becomes clear.

In some regions, inequality is relatively higher, while in others the trend is the opposite. Although the South West region performs well for the country on all three indicators, when we compare the results with EU average levels, we can see that across Bulgaria the problem with income inequality is greater.

In the previous part of the section, we examined the different aspects of the inequality problem by means of the relevant indicators. The data show that Bulgaria is among the countries with the greatest inequality in terms of wealth distribution in the economy. Analysis at the regional level shows that in some places this problem is even more serious. A large part of the population lives in regions where inequality is above the country's average - the Southeast, Central-North, and Northwest regions (table 2).

Thus, we can conclude that social transfers lead to a loss of consolidation, due to the different “sensitivity” to their contribution for each region of the country. This finding is also confirmed by data on the relative share of the poor after social transfers.

Table 2: Relative share of the poor before social transfers, %

	2014	2015	2016	2017	2018	2019	2020	2021
Bulgaria	46,2	42,9	45,5	44,8	45,2	42,2	41,7	44,3
Southwestern region	40,6	40,2	42,2	39,9	40,4	38,8	38,2	41,6
South Central Region	52,2	47,2	48,0	46,5	47,1	42,8	44,3	43,2
Southeast region	44,8	41,0	45,1	47,2	46,1	42,5	45,7	46,9
Northeast region	47,0	43,8	48,8	47,4	51,2	44,1	40,3	40,7
North Central Region	48,6	43,4	44,1	42,4	42,5	41,7	41,7	44,5
Northwest region	50,1	48,6	52,7	50,9	52,0	45,6	46,8	49,3

Source: Own elaboration

As can be seen, social transfers decrease by 1/3 of the relative share of the poor in Bulgaria. However, there is a significant loss of consolidation due to the different ways in which its introduction affects local communities in different regions of the country (table 3).

Table 3: Relative share of the poor before social transfers (including pensions), %

	2014	2015	2016	2017	2018	2019	2020	2021
Bulgaria	27,3	28,4	27,9	29,2	29,5	29,6	29,9	31,5
Southwestern region	23,4	26,6	26,1	25,6	27,1	27,7	27,8	29,7
South Central Region	31,7	32,7	29,3	30,2	31,4	29,0	32,3	30,2
Southeast region	26,3	25,2	27,9	31,8	29,9	27,7	32,3	33,1

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Northeast region	28,1	29,7	30,5	30,3	30,3	30,2	26,9	28,1
North Central Region	22,5	24,2	25,8	26,2	25,5	27,1	29,0	30,6
Northwest region	27,3	30,0	28,6	28,9	31,3	30,2	31,4	33,9

Source: Own elaboration

The trend is unfavourable. Adjusted for fluctuations in the unemployment rate, with a general trend towards an increase in the relative share of the poor in general, with the aging of our population, the fact that the share of retirees is decreasing and that of employees is increasing among the poor. The busy get poorer.

The “working poor” population is increasing its participation in local communities. Employment does not provide an effective countermeasure to rising poverty. The low cost of labor, combined with the low quality of employment, leads to motivation problems, following passive life strategies, and refusal of personal development.

VI. Poor - rich

According to the official WID (World Income Inequalities Database, 2022), income inequalities in Bulgaria are extremely acute. The latest updated data is for 2021, showing that the poorest 50% in Bulgaria own only 16.5% of the total gross national income created in the economy. By comparison, two decades earlier, in 2001, they owned just over 20%, and in 1991, around 24%. There is a redistribution of income from majority to minority at relatively higher absolute levels. This is a prerequisite for a chronic problem of inequalities, which has been developing in the country for several decades (World Income Inequalities Database, 2022).

WID (2022) also provides data for other groups in society: the richest 1%, the richest 10%, and the so-called “middle class”, which represents about 40% of the population according to the methodology used. In 2022, the richest 1% of Bulgaria's population owns 18.2% of total income. For comparison, in 2008 they had no more than 8%. The conclusion can easily be drawn that the richest 1% of Bulgarians have more national income than the poorest 50% of Bulgarians. If we look at the richest 10%, we see that they held up to 43.5% of the national income in Bulgaria by the end of 2021, while in 2008 they held 33%. The middle class, or 40% of Bulgarians with middle incomes, owned 40% of the national income in 2021, while in 2008 it held 45.1%. The conclusion is that there was a decrease in the share of resource concentration in 90% of Bulgarians to the detriment of the remaining 10%. This is yet another proof of the existence of a serious problem in the distribution of the additional added value created in the economy and in the distribution of total income in society.

If we look at things in absolute terms, the average annual income figure of the poorest 50% of Bulgarians in 2021 was BGN 5,787 or BGN 482 on average per month, while at the same time, the average annual income figure of the top 1% of Bulgarians richest was approximately BGN 320,000 (an average of BGN 26,666 per month). The average annual income of the richest 10% of Bulgarians for 2021 is BGN 76,269 (BGN 6,355 per month), and the average annual income of the so-called “middle class” (40% of the population) was just BGN 17,547 (BGN 1,462 per month). This means that the richest 1% receive 55 times more income than the poorest 50% of Bulgarians. The richest 10% receive income 13 times higher than the poorest 50% of Bulgarians (World Income Inequalities Database, 2022).

Social transfers are increasingly important for reducing inequalities in the country, with their influence progressively increasing over the years. The reasons for its growing importance relate to: the negative and crisis processes in the development of the economy as a whole and in the alteration of the country's demographic structure: the emigration of a young and capable population; the aging of the population; the increase in the number of people of retirement age. In the period from 2014 to 2021, the population aged 65 and over in Bulgaria increased by more than 10%. But as of December 31, 2021, more than 2/3 of retirees have a total monthly income below the poverty line for the year (National Statistical Institute, 2022).

The Economic and Social Council (ESC) draws attention to the fact that expenditure on social assistance and insurance in Bulgaria (16.1% of GDP) is below the EU average (26.9%), which contributes to the high level of poverty in our country and is a prerequisite for considering and acting. For this reason, ISS considers it important to distribute transfers more efficiently and fairly. On the other hand, the continuous provision of social benefits without creating opportunities for achievement in the labor market does not solve the problem of poverty. A balance needs to be found.

A strong influence is exerted by the demographic factor, which over the years has been characterized by a permanent trend of decreasing population numbers and aging. This means that the over-54 employee group is becoming a significant part of the workforce in today's societies, and their share will increase in the coming years.

Inequality in the labor market by educational attainment in Bulgaria is increasing. The group of low-skilled workers is the most vulnerable. It can be complemented with an analysis of inequality among the discouraged group (do not work and do not look for work). This group occupies a significant portion of the healthy population in Bulgaria, with a recurring predominance of people with basic and secondary education.

Bulgaria is among the countries where the population's risk of poverty is above the EU average level, especially among unemployed and economically inactive people. According to the economic situation, in 2021 the risk of poverty is greater for the unemployed - 58.9%, pensioners - 34.3%, and other economically inactive - 29.8%. These trends lead to the conclusion that

economic activity and participation in the labor market reduce the probability of being at risk of poverty.

The imbalance in the territorial distribution of the population is aggravated by the unequal distribution of investments (about 50% of them in the capital Sofia). It also affects long-term sustainable development and slows down the country's overall economic growth. Territorial differences, together with socioeconomic inequalities, are a cause-and-effect factor that causes poverty. To date, the Northwest region remains the least populated, due to the lower birth rate and natural increase, but also the higher death rate and lower life expectancy. Due to the insufficient number of vacancies, the labor market and poverty indicators are the worst compared to other regions.

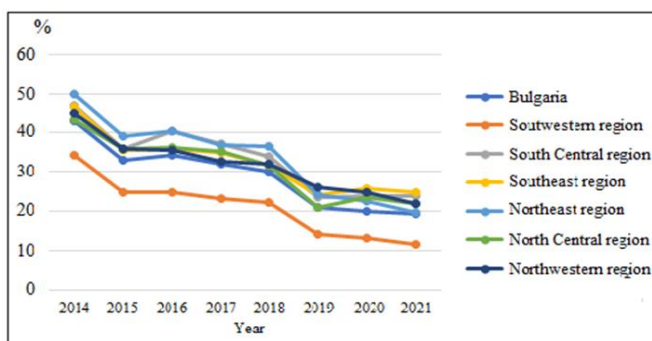
Another aspect that conditions inequality is the fact that men's salaries remain significantly higher than women's (around 13.5%) (<https://www.europarl.europa.eu/news/bg/headlines/society/20200227STO73519/razlikata-v-zaplashchaneto-mezhdu-mzhete-i-zhenite-infografika>, 2022), with the percentage ratio being the inverse for the employed (men – 54%, women – 46%) (National Statistical Institute, 2022).

VII. Social exclusion

Social exclusion is a defining effect of poverty. But social exclusion is also an effect of inequality. Recent research around the world shows that social exclusion is a direct effect of inequality, not just an indirect effect of poverty. It turns out that social exclusion exists even where there is no poverty, but there is a high degree of inequality (Estratégia Nacional..., 2022).

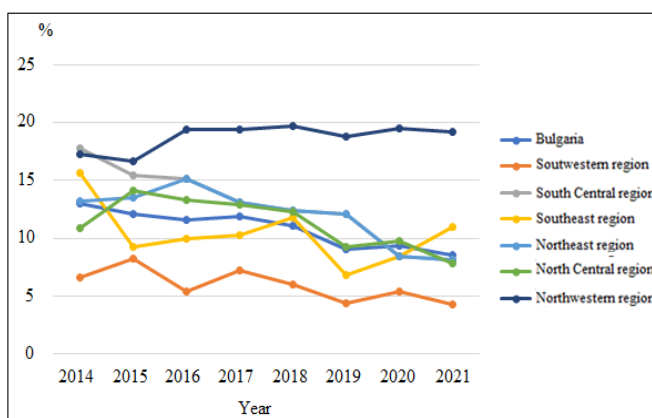
The methodology applied by INE in recent years measures social exclusion through a combined indicator of three components. The three contributing factors that INE assesses are, firstly, the risk of poverty, secondly, the low intensity of economic activity and, thirdly, material deprivation. Poverty was analyzed in detail above. Let's review the other two factors.

Data are presented on the percentage of the population living in material deprivation over the period 2014 to 2021. It should be noted that the general trend both for the country and for individual regions is towards a decrease in the percentage of the population living with material deprivation. Of course, the Southwest region also stands out here, which has rates well below the national average for obvious reasons. All other regions have indicators above the country's average, with the Center-South and Southeast regions being the worst represented (fig. 10).

Figure 10. Percentage of population living with material deprivation

Source: Own elaboration

What is the picture for the other component of the combined indicator of social exclusion – the low intensity of economic activity. Here, the trend over the period 2014-2021, albeit with insignificant fluctuations in individual areas, is downward. The proportion of people living in households with low intensity of economic activity is decreasing. Decreases in total for the country. With values below the country's average, the Southwest, Northeast, and Center-North regions stand out. The Northwest region once again has the worst indicators, which are more than double the average values for the country (fig. 11).

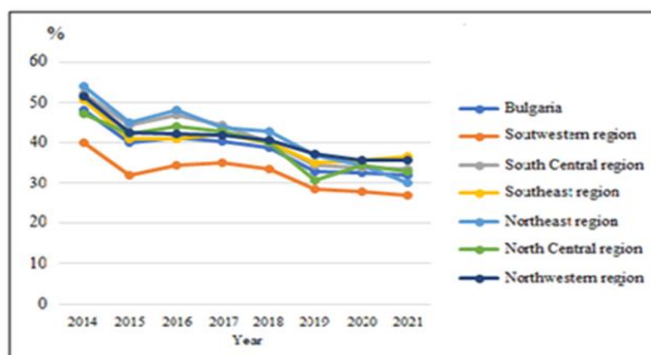
Figure 11. Individuals living in households with low intensity of economic activity (*less than 60 years old)

Source: Own elaboration

Finally, let's see how the three components together form the profile of the composite indicator of the share of the population at risk of poverty or social

exclusion used by INE. With a few exceptions in 2020, the rate of decline was sustained over the period. Here, too, the Southwest region is leading, while the Southeast and Northwest regions are lagging behind (fig. 12).

Figure 12. Population at risk of poverty or social exclusion



Source: Own elaboration

Adding income inequality to the composite indicator will give a clearer view of the population at risk of poverty and social exclusion. Of course, given the specifics of the country, it is not at all difficult to predict how the addition of this component will change the overall picture. The direct effect (with the attraction of the “20-20” indicator, for example) will be, firstly, the increase in the degree of consolidation of trends in the Southwest region and, secondly, the distancing of the Northwest and Southeast regions will increase significantly.

Conclusions

From what has been said so far, we can draw the following conclusions:

- Poverty and social exclusion are one of the great problems of our time. They are discussed globally and within the EU, as well as at national and regional levels;
- There is not a common rule on the acceptance and implementation of a specific poverty or inequality index: the application of two or more indices and their comparison might lead to better interpretation of the extent and depth of poverty or inequalities;
- Discrepancies between indicators provided by institutions (i.e., the World Bank and the UN) ought to be adjusted in order to have a unique poverty indicator;
- Bulgaria is among the countries with the highest income inequality in the EU. This difference in 2021 in Bulgaria is about 1/3 higher compared to EU average levels and almost 2 times higher compared to the leader in Europe (Norway). The Gini coefficient values and the ratio between the incomes of the richest 20% and the poorest 20% reached their peak,

respectively, in 2017-2019. In the following years, again, income inequality in Bulgaria remained the highest in the whole EU;

➤ The increase in inequality in the country after 2014 cannot be explained by demographic changes. The country fits into the category of countries where changes in the birth rate and the age dependency ratio (relative to young people) are unlikely to have an impact on income inequality. Among the main causes of inequality in the possibility of achievement in the labor market are education and the conditions in which children grow up. In 2021, it was reported that young people up to the age of 29 both with qualifications and without qualifications have difficulties in performing;

➤ The combined indicator shows that Bulgaria has the highest share of people at risk of poverty or social exclusion. Data indicate that 1/3 of the population falls into this group. There are large differences in the severity of the problem at the regional level. According to data from the S80/S20 coefficient, in 2021, about 40% of the population lives in regions with greater income inequality than the national average and 56% of the population lives in regions with an above-average share of people at risk of poverty or social exclusion;

➤ Hence, there emerges for a more effective regional policy, from an economic and social point of view. The EU must continue to encourage Member States to develop active policies to overcome poverty and social exclusion, allowing people to lead a normal existence.

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