

DIVERSITY IN THE DEMOGRAPHIC CHARACTERISTICS OF THE MIDDLE CLASSES IN SELECTED CENTRAL EASTERN EUROPEAN COUNTRIES

Joanna Muszyńska¹⁾ – Ewa Wędrowska²⁾ – Małgorzata Szczepaniak³⁾

Abstract

This study analyses demographic diversity in the middle-income class in six Central and Eastern European countries – Poland, Hungary, Czechia, Slovakia, Lithuania, and Estonia – in 2005 and 2021. Using EU-SILC microdata and the concept of economic stratification based on equivalised household disposable income, the analysis distinguishes lower, core, and upper middle-income groups. The main objectives are: (1) to examine how the size of middle-income classes has changed over time; (2) to assess differences in their demographic composition, particularly with regard to age, birth cohorts, and household type; and (3) to identify which cohorts experienced the greatest upward mobility on the income ladder. The results show that the middle class generally expanded, its income situation improved, and younger cohorts progressed the most. Households with children advanced economically, while single-person and elderly households remained vulnerable. Demographic shifts underline the evolving structure and economic relevance of the middle class in post-communist societies.

Keywords: middle class, demographic diversity, income stratification, Central and Eastern Europe, EU-SILC

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1. INTRODUCTION

After the demise of communist rule in the late 1980s, Central and Eastern European (CEE) countries underwent a period of rapid systemic transformation, including liberalisation, macroeconomic stabilisation, structural adjustment, and institutional reforms (Gomulka, 2023; *International Monetary Fund*, 2000; Sachs, 1996). Because of the deep structural transformation from state-led economies to market

economies, Central and Eastern European countries have shared a trend of increasing income inequalities (Brzeziński, 2018; Cakal-Velagic et al., 2024; *World Bank*, 1996), which is considered the economic dimension of stratification (Domański, 2009). Moreover, income were observed to be highly diverse both at the start of the transformation in the early 1990s and after the countries' accession to the European Union (EU) in 2004, with Baltic countries

1) Department of Econometrics and Statistics at Nicolaus Copernicus University in Toruń, Poland. Corresponding author: Joanna.Muszynska@umk.pl.

2) Department of Applied Informatics and Mathematics in Economics at Nicolaus Copernicus University in Toruń, Poland.

3) Department of Economics at Nicolaus Copernicus University in Toruń, Poland.

presenting much greater income inequalities than what was seen in Poland, Slovakia, Czechia, and Hungary (Brzeziński, 2018; World Bank, 1996). Although income inequalities, which are closely related to income class stratification, have been relatively broadly discussed in the post-communist period (Brzeziński *et al.*, 2019; Dorjnyambu, 2024; Porras, 2010; World Bank, 1996), not enough attention is paid to income distribution from the perspective of income class stratification, in particular in the middle-income groups (Atkinson *et al.*, 2013).

Central and Eastern European countries share the experience of being a post-communist type of welfare state and have many similarities in terms of their relatively worse social indicators and social stratification performance (Aidukaite, 2011). However, with the development of a capitalist labour market, a middle class evolved in the post-communist states (Domański, 2012; Kochmar, 2020) and is still in the process of taking shape (Wyżnikiewicz, 2021). It is recognised that the middle class is important for achieving strong economic growth (Dabla-Noris *et al.*, 2015) and economic stability (Pressman, 2007). In some post-communist countries, the middle class promoted the development of strong institutions, which were crucial to economic growth in the systemic transformation (Cakal-Velagic *et al.*, 2024; Piątkowski, 2020). On the other hand, class stratification is based on an institutionalised pattern of inequalities and is regulated by law and social norms (Domański, 2020).

The middle class is clearly definable from a sociological perspective, with occupation considered the identifying criterion of the middle class (Erikson *et al.*, 1992). An economic perspective, which considers an economic criterion (i.e. equalised disposable income per person in the household or the share of the middle, i.e. between the 3rd and the 8th decile, in income distribution) is rare, particularly when it comes to analyses of the middle classes in post-communist states. Although the middle class has been described as vanishing in the United States (Temin, 2018) and other developed Western European countries (OECD, 2019; Vaughan-Whitehead, 2016), in most post-communist countries the middle class has grown in the period since accession to the European Union (Panek, 2017; Vaughan-Whitehead, 2020). There are also expectations that the middle class

in post-communist countries will continue to expand, particularly in high-income economies (Tvaronavičienė *et al.*, 2017). Like the middle class in the rapidly transforming economies of East Asia and the Middle East, many people in CEE countries have entered the middle class (Marsh *et al.*, 2016).

The middle class in post-communist states is an interesting phenomenon not only because it evolved in similar historical circumstances but also because of the historically determined stronger preference for income equality in these states than in Western European countries (Graham *et al.*, 2017). What is more, given that in CEE countries in the post-communist period social status and criteria of class positioning became more closely connected to a person's material standard of living (Zawadzka, 2018), studying this group of society from an economic perspective is both worthwhile and justified. The value system of members of the middle class in CEE countries also changed from collectivist to more individualist (Zagórski, 2011), focusing more on individual effort to move up the economic ladder than on getting a higher education, which used to be related to being a member of the intelligentsia (Kulas, 2017), which was believed to be the equivalent of the middle class in the communist period (Domański, 2012). It was with the change in regime that meritocracy began to have an influence on the social hierarchy (Domański, 2020). The decrease in the strength of the correlation between education, occupation, and affluence causes frustration, which in post-communist societies is expressed by people blaming the government for their failures more often than members of the middle class in Western countries tend to do (Domański, 2020). Moreover, a downturn has been observed in the degree of tolerance there is of differences between the top and bottom income groups in post-communist states (Grosfeld *et al.*, 2008).

With the rise of the middle class, the group also became more complex. When the middle class is considered in economic terms based on OECD criteria, namely equalised disposable income per person in the household, the analysis includes people with different levels of education, age (generations), and gender, as well as diverse household structures. However, the demographic structure of the middle class in CEE countries is not well recognised in the

literature. The present study aims to fill this gap, focusing on changes in the period after the accession of Central and Eastern European countries to the European Union.

The political and socioeconomic transformation that Central and Eastern European countries underwent had an impact on many fields of life, including the demographic behaviour of the population (consistently low birth rates, the systematic postponement of marriage and parenthood, the rise of alternative forms of partnerships, parenthood outside marriage, and changes in nationality). Declining fertility rates and the possibility of emigration resulting from the accession to the European Union caused a decrease in the population in most countries. Compared to 1990, Eurostat data in 2005 show slight population only in Slovakia (+1.6%) and Poland (+0.4%), with a decline in Estonia (-13.5%), Lithuania (-9.2%), Hungary (-2.7%), and Czechia (-1.6%). In turn, in 2021, compared to 1990, we observe more dramatic population declines in Lithuania (-24.3%) and Estonia (-15.3%), but also in Hungary (-6.2%) and Poland (-0.5%). At the same time, the population increased in Slovakia (+3.3%) and Czechia (+1.3%). Populations are also ageing, and the old-age dependency ratio is rising in all countries. Although the population in Central and Eastern Europe is still younger on average than in Western Europe, some countries are ageing even faster than in Western Europe. Key demographic trends are becoming less favourable for the selected CEE countries.

The main aim of this study is to identify and characterise the diversity of the demographic characteristics of the middle class in Central and Eastern European countries. Considering equalised disposable income per person in the household as the criterion of membership in the middle class (in economic terms), we conducted an analysis of the middle-income class (MC). Given the relatively large and growing share of members of the MC in CEE countries, in-depth analysis of the MC was carried out on three of its subclasses: the lower middle-income class (LMC), the core middle-income class (CMC), and the upper middle-income class (UMC). The demographic characteristics of these three middle-class groups in post-communist states were assessed

in terms of selected demographic aspects, including, among others, structure by age and household type. The research was conducted using EU-SILC microdata for 2005 and 2021, covering the period after the accession of Central and Eastern European countries to the European Union in 2004. The countries considered in the study included selected CEE countries for which data were available: Poland, Slovakia, Czechia, Hungary, Estonia, and Lithuania.

The research questions are as follows:

RQ1: How much did the size of the middle class change between 2005 and 2021 in Central and Eastern European countries?

RQ2: Is the middle class ageing in CEE countries?

RQ3: How diverse is the middle class in terms of demographic factors such as household type, age, and birth cohorts?

RQ4: Which birth cohort (generation) or household type experienced the greatest upward mobility on the income ladder in CEE countries?

RQ5: How diverse is the middle class in terms of income structure and distribution?

The analysis contributes to the existing literature from different angles. First, it provides a comparison of within-country analyses of the demographic characteristics of different classes in regard to income stratification. Three middle classes were distinguished to examine the differences between members of the middle class: the lower middle-income class, the core middle-income class, and the upper middle-income class. Our study is also novel for incorporating demographic variables, such as age and household type. When age is considered, there are six generations to study: the Silent Generation (born before 1946), the Baby Boomer Generation (Boomers, born 1946–1964), Generation X (born 1965–1980), Generation Y (Millennials, born 1981–1996), Generation Z (Zoomers, born 1997–2012), and Generation Alpha (born 2013–2025) (*Dimock, 2019; Twenge, 2023*). We use the definition of a generation (birth cohort) as the totality of people born within the same period of about 20 years (in one phase of life) (*Strauss et al., 1991*). The boundaries between generations were slightly adjusted to fit the demographic structure of Central and Eastern European countries. The first generation (Silent) is an open time interval that encompasses individuals

born before 1946 because of their smaller share of the population and greater internal heterogeneity. This approach ensures comparability across countries and reflects the differences in the historical and socioeconomic experiences that shaped the demographic composition of successive cohorts. To date, such a detailed analysis of the characteristics of the middle class in CEE countries from a demographic perspective have not been conducted for the middle class in CEE countries.

The remainder of the article is organised as follows. The introduction discusses the main aims, the novelty of the study, and the literature review addressing the issues of middle-class formation from the perspective of the systemic transformation in Central and Eastern European countries. The data and methodology are described in section two. The empirical research and discussion results are presented in sections three, four, and five. The last section presents the conclusions.

2. DATA AND METHODS

Our study applies micro-level cross-sectional data obtained from the European Statistics of Living Conditions (EU-SILC) conducted by Eurostat. EU-SILC consists of nationally representative surveys with private households as the target group. The units surveyed are households and all their current members. The surveys are conducted annually among all European Union Member States, as well as in some other countries. The samples are considered nationally representative of the population residing in private households within the country, irrespective of language, nationality, or legal residence status. The data used in our study were taken from the 2005 and 2021 surveys and extracted from the EU-SILC 2022 cross-sectional database.

Our study covers six Central and Eastern European countries: Czechia, Estonia, Hungary, Lithuania, Poland, and Slovakia. Detailed information on the sample sizes is presented in Table 1. In this study, the middle-income class is defined according to thresholds relating to the median equivalised disposable income per person in the household, following the OECD approach (OECD, 2019). We focus on the middle class and capture it in terms of three middle-income subgroups defined by the percentage of the median

equivalised disposable income per person in the household (lower middle-income class = 75–100% of the median; core middle-income class = 101–150% of the median; and upper middle-income class = 151–200% of median) to reflect the substantial internal diversity of the middle class, which accounts for around 60% of the population in most Central and Eastern European countries. The approach used here follows that of the OECD (2019) and related comparative studies (Pressman, 2007; Vaughan-Whitehead, 2016; Derndorfer – Kranzinger, 2021), where the three central groups in a five-class income scheme of economic stratification correspond to the lower, core, and upper middle-income strata. This division allows for a more detailed analysis of the structural and demographic differences within the middle class.

In this study, we examine the distribution of household income (total gross income) and individual income (equivalised disposable income per household member). Economic stratification is assessed using the concept of annual equivalised household disposable income (hereinafter referred to as equivalised income) per household member. This measure accounts for differences in household composition and potential economies of scale within households. For each household, the equivalised income is calculated by dividing the household's total disposable income by its equivalised household size, as defined by the modified OECD scale. According to this scale, a weight of 1.0 is assigned to the first adult in the household, 0.5 to each additional member aged 14 or older, and 0.3 to each child under the age of 14. The sum of these weights yields the household-specific equivalence factor. The resulting equivalised income thus represents the income attributable to both the household and each of its members. Using equivalised household income enables the inclusion of economically inactive individuals, such as those fulfilling domestic tasks, students, or retirees, who may nonetheless belong to high-income households (DiPrete, 2003). This relational perspective is particularly important in CEE states, where intra-household resource pooling, informal support networks, and family-based income arrangements remain prevalent. Annual household disposable income was determined as the sum of all household members' annual gross cash income minus

Table 1: Sample size and average measures of income in CEE countries (mean and median expressed in PPS)

Country	2005				2021			
	Households number	Individuals number	National mean income	National median income	Households number	Individuals number	National mean income	National median income
CZ	4,351.0	10,333.0	8,725.8	7,639.9	8,677.0	18,595.0	15,654.6	13,815.3
EE	4,169.0	11,948.0	5,753.7	4,724.8	6,467.0	15,143.0	16,682.3	14,810.5
HU	6,927.0	17,969.0	6,308.1	5,555.5	7,805.0	17,031.0	11,064.8	9,981.9
LT	4,441.0	12,117.0	4,774.5	3,846.9	5,649.0	12,118.0	16,895.3	13,742.2
PL	16,263.0	49,044.0	5,711.0	4,758.9	17,004.0	42,077.0	15,315.1	13,870.3
SK	5,147.0	15,418.0	4,388.4	3,989.3	5,612.0	13,497.0	9,784.4	9,425.4

Source: Authors' calculation using EU-SILC data.

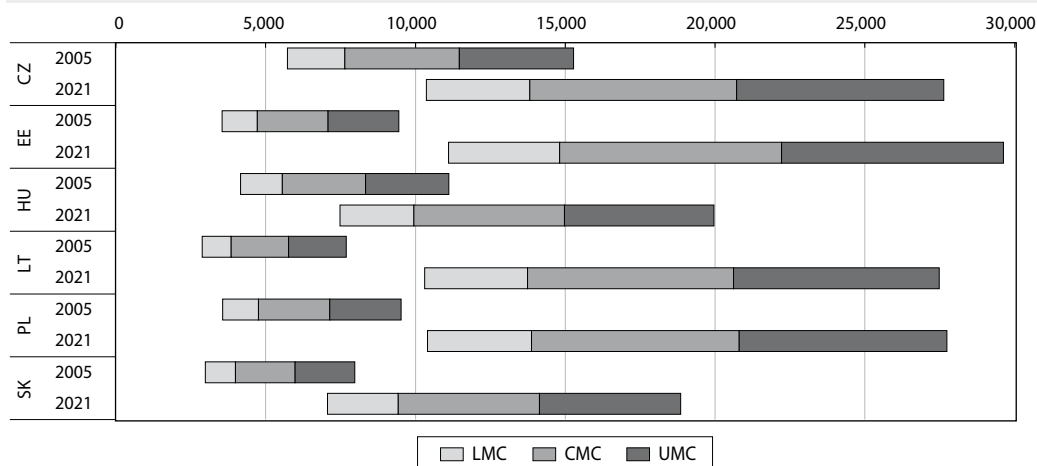
income tax, social security contributions, regular wealth tax, cash transfers to other households, and the balance of settlements with the tax authority. Thus, each household's income was divided by the sum of equivalent units attributable to each household, and then the equalised value was assigned to each household member. In order to obtain results that correspond to an extrapolation of the measures to the whole population, during the calculations we applied two kinds of weights that ensure the representativeness of the samples used: the personal cross-sectional weight (RB050) and the household cross-sectional weight (DB090). In addition to ensuring comparability and eliminating the effect of price level differences

across countries, incomes were expressed in the purchasing power standard (PPS) of an artificial common currency.

According to the criteria used to identify the middle class, the median annual equivalised disposable household income per person was determined for each studied country for both years of study. The bottom and top cut-off points in the corresponding income class were identified on this basis. Figure 1 presents the income ranges in all the middle-income classes.

As Figure 1 shows, the increase in median income in 2021 compared to 2005 shifted the cut-off points and significantly widened the income ranges that define the middle class in each country.

Figure 1: Middle-income classes in CEE countries: ranges of annual equivalised disposable income per person in the household in PPS



Source: Authors' calculation using EU-SILC data.

3. RESULTS

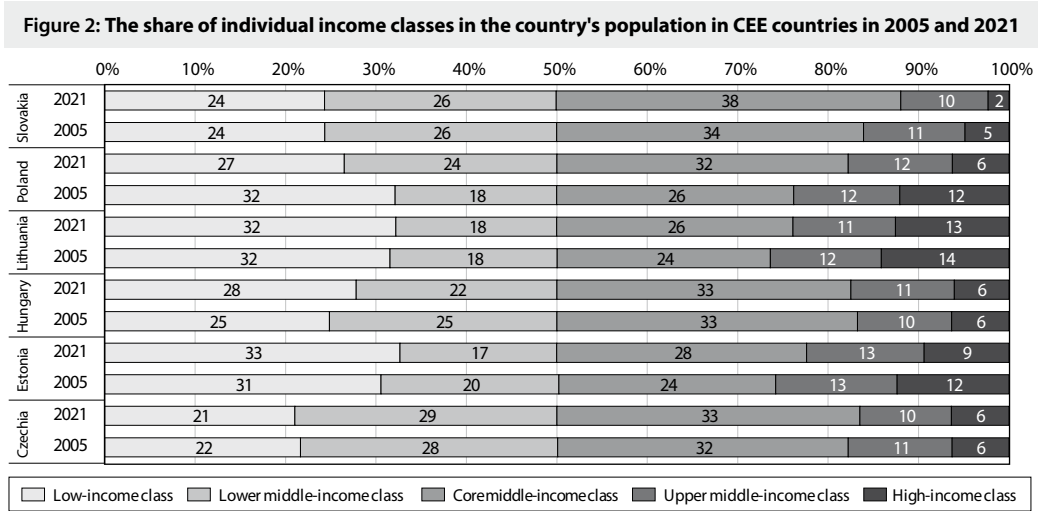
3.1 Middle-class demographics

At the outset of our analysis, we address the question: How did the size of the middle class change between 2005 and 2021 in Central and Eastern European countries (RQ1)?

In 2005, the proportion of the population that belonged to the middle class ranged from 54.3% in Lithuania to 72% in Czechia. The middle class also made up a high share of the population, around 70%, in Slovakia (70.8%) and Hungary (68.8%). In Poland, the middle class accounted for 55.8% of the population, and this was one of the lower shares among Central and Eastern European countries. In 2021, an increase in the share of the middle class in the population was observed in most of the countries studied. The only exception was Hungary, where the share decreased by 2.7 percentage points. Despite the observed decrease, the middle class still accounts for more than 66% of the Hungarian population and covers a larger share of the population than the middle class in Lithuania (55.2%) and Estonia (58%). The biggest increase in the share of the middle class was observed in Poland, with a rise of 11.4 percentage points. The share of the middle class in Slovakia increased by 2.6 percentage points. In contrast, in other countries, the increase in the share of the middle class did not exceed 1.0 percentage points. Figure 2

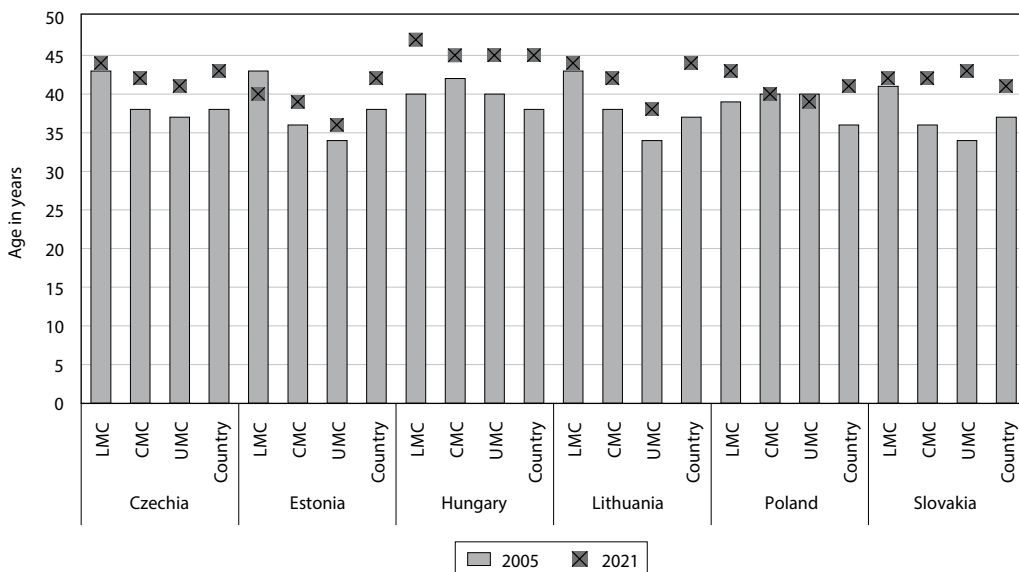
presents the share of all income classes in the country's population in CEE countries over the period studied.

As mentioned above, the largest increase in the share of the middle class in the population was observed in Poland. This was mainly the result of people moving up the income ladder in the left tail of the distribution and a decrease in the share of the high-income class in the population. The middle class appears to be the most stable in Czechia, where it accounts for about 73% of the population. The slight increase in its share (by only 0.5 percentage points) is a result of the widening of the LMC (owing to the transfer of units from the low-income class) and the widening of the CMC, but at the expense of the UMC. Lithuania and Estonia saw an increase in the share of CMCs that was only due to the loss of income status of some units of HMCs and high-income classes and the transfer of units from LMCs to the low-income class. Although the share of the middle class in the income distribution grew in Slovakia, it should be noted that this was not the result of people moving up the income ladder. Slovakia's CMC widened as a result of the loss of income status among some people in the UMC and the high-income class. The decline in the share of the middle class in the Hungarian population may indicate income polarisation in the country. The lower-income class (with an increase in share of 3 percentage points) and the UMC are expanding, while the share of the high-income class remains stable.



Source: Authors' calculation using EU-SILC data.

Figure 3: Median age (in years) of middle classes (LMC, CMC, UMC) and country population in 2005 and 2021



Source: Authors' calculation using EU-SILC data.

In the next step, we examine how the demographic profile of the middle class is shaping up in the face of negative demographic trends (RQ2, RQ3, RQ4). Our results indicate that the median age in the three income classes (LMC, CMC and UMC) decreased as equivalised income increased in both 2005 and 2021 (Figure 3). However, Poland and Hungary in 2005 and Slovakia in 2021 were exceptions. In both 2005 and 2021, individuals in the core middle-income class and upper middle-income class were, on average, younger than the general population in their respective countries, with the same exceptions. Between 2005 and 2021, the median age increased across all income classes in all countries, except in Estonia's LMC and Poland's UMC, where it decreased by 3 years and 1 year, respectively. In 2021, Estonia had the youngest median age across all the middle-income classes (40, 39, and 36 years, respectively), while Hungary had the oldest (47, 45, and 45 years, respectively). In two countries, Czechia and Lithuania, the middle aged more slowly than the overall population between 2005 and 2021. In Poland, the LMC aged more slowly than the population, while the CMC and UMC were, on average, younger in 2021 compared to 2005. In Estonia, the LMC grew younger between 2005 and 2021, while the CMC and UMC aged more slowly than

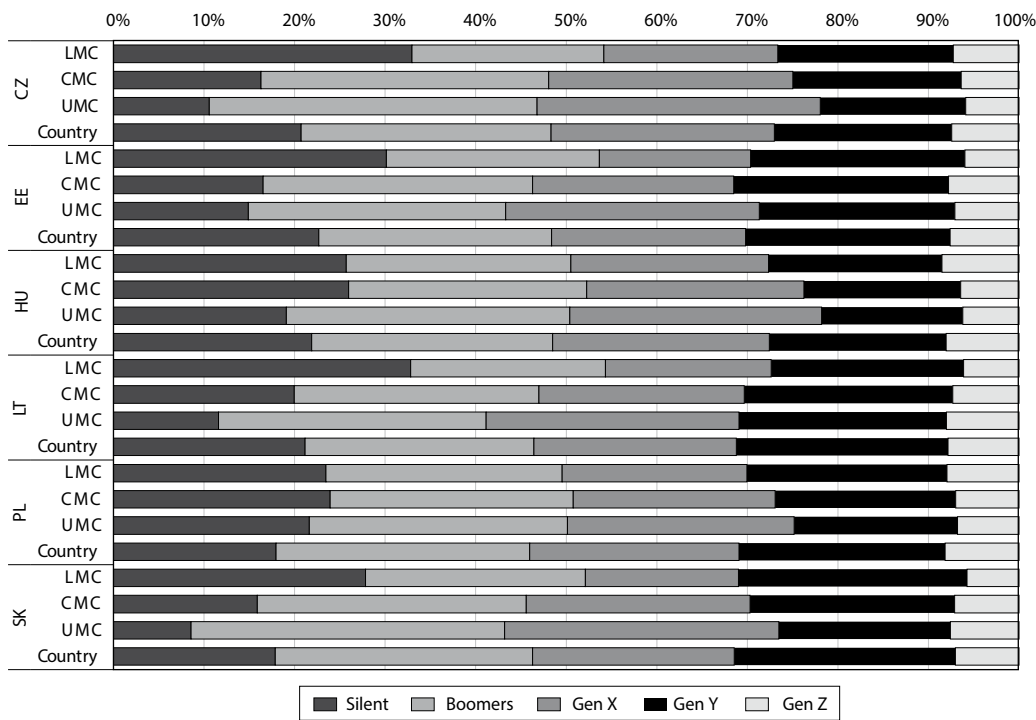
the general population. In contrast, Hungary's LMC aged faster than the population, while the CMC and UMC aged more slowly. Slovakia exhibited a different pattern, with the CMC and UMC ageing much faster than the population, while the LMC aged more slowly.

The results suggest that some demographic groups made more progress than others. The middle-class demographic profile in the selected countries reveals that the younger generations were the primary beneficiaries. However, the exception was Slovakia, where the share of the middle class increased, but all the middle-income groups aged faster than the general population.

To better understand which demographic groups advanced up the income ladder, we categorised the population into six birth cohorts: the Silent Generation, the Baby Boomers, and Generations X, Y, Z, and Alfa.

In 2005, the largest age group within the LMC in every country was the Silent Generation, which did not align with their share of the population (Figure 4). In Poland and Hungary, people aged 60+ were also overrepresented in the CMC, and in Poland, they dominated in the UMC. In Poland, those born before 1946 had more opportunities to enter the UMC than younger generations. This disparity can be attributed

Figure 4: The share of different generations in the middle class (LMC, CMC, UMC) and country population in 2005



Source: Authors' calculation using EU-SILC data.

to Poland's high unemployment rate and the lowest employment and economic activity rates among EU Member States at the time, which made it harder for younger generations to enter the middle class. Older generations were often better protected from labour market changes and low-income risks than younger cohorts.

Meanwhile, in the CMC and UMC, the largest group was the Baby Boomers, reflecting their larger share of the overall population. Boomers were particularly overrepresented in these income classes in Czechia, Estonia, Slovakia, and Lithuania. This cohort, born during the post-war baby boom (those aged 41–59 in 2005), was not a 'sacrificed' generation; they benefited from longer labour market experience and did not face the diminishing returns to education that younger generations encountered.

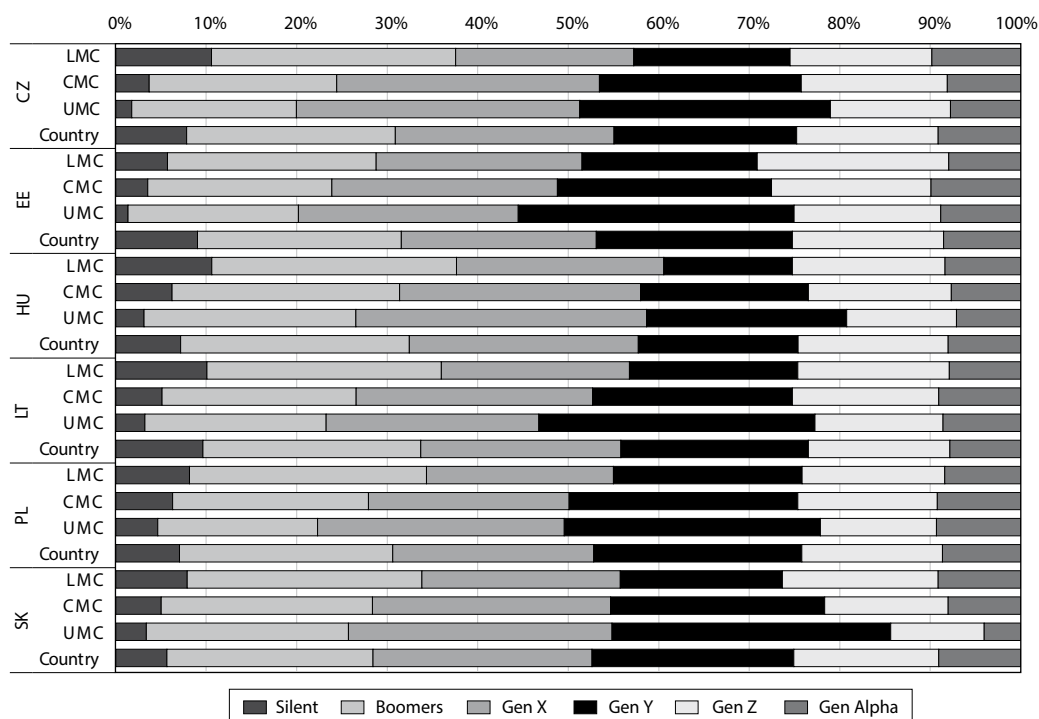
Generation X, across all selected countries, was overrepresented in the UMC, especially in Slovakia, Czechia, Estonia, and Lithuania. Gen Xers were better educated than older cohorts, but in Poland

and Hungary they faced significant challenges entering the labour market during the early post-communist period.

In 2005, Millennials were aged 9–24, and Zoomers were children under 9. Their position in the income distribution generally reflected their parents' income. In Estonia, however, the share of Millennials in the middle class exceeded their population share, while in Slovakia Zoomers were overrepresented in the middle class. In other countries, younger people and children were more likely to be located in the lower parts of the income distribution, reflecting the greater economic challenges faced by households with dependent children.

In 2021, compared to 2005, because of natural movement and migration, the age structure of the population of the selected CEE countries changed (Figure 5). We investigate whether some cohorts benefited from income growth while others – younger or older cohorts – faced stagnation or a decline in status.

Figure 5: The share of different generations in the middle class (LMC, CMC, UMC) and country population in 2021



Source: Authors' calculation using EU-SILC data.

In 2021, the cohorts born before 1965 (the Silent Generation and the Baby Boomers) experienced a significant decline in opportunities to access the core and upper middle-income classes. The Silent Generation was only slightly overrepresented in the LMC, while their share in the UMC was significantly lower than their share in each country's population. In 2021, Boomers were the dominant generation in the LMC in each country, while at the same time their share of the UMC was significantly smaller than their share of the population in each country (except for Slovakia). Boomers were often reaching the end of their careers, retiring, or already retired.

Gen Xers and Millennials made the most notable progress up the income ladder from 2005 to 2021. Their share increased in the upper-income tier while it decreased in the lower-income tier. Progress among these cohorts was likely driven by increased labour force participation and rising educational levels. Here it seems that the winners were the younger generations, especially Generation Y. The share of

Millennials in the UMC increased significantly in 2021 compared to 2005 (an increase ranging between 6.5 percentage points in Hungary and 11.8 percentage points in Slovakia), while, at the same time, the share of this generation in the population remained similar or even decreased in each country. The better positioning of the younger generations was likely the result of the more dynamic economic development in Central and Eastern European countries. These changes opened up job opportunities for younger generations and created a demand for skills and knowledge that are more prevalent among younger people (ICT skills), resulting in an increase in their average wages (*Hammer et al., 2021*). The slightly weaker position of Gen Xers compared to Millennials may have resulted from the unfavourable conditions on their entry into the labour market. If a cohort faces a difficult situation at the time they are entering the labour market, it seems that that cohort will have decreased earnings over their lifetime (*Chauvel et al., 2014*).

The youngest cohorts (Zoomers – aged 9–24 and Gen Alpha – children under age 9 in 2021) also made progress up the income ladder from 2005 to 2021. In contrast to 2005, Zoomers were overrepresented in the LMC and the CMC in Lithuania, Czechia, and Estonia and in the LMC in the other three countries. In turn, Gen Alpha was overrepresented in all middle classes in Lithuania, in the CMC and the UMC in Estonia and Poland, and in the LMC in the other three countries. This generally reflected the income of their parents (Generations X and Y), who were likely to be in their peak wage-earning years. Moreover, the increase in the monetary support of families with children resulted in an increase in households’ income.

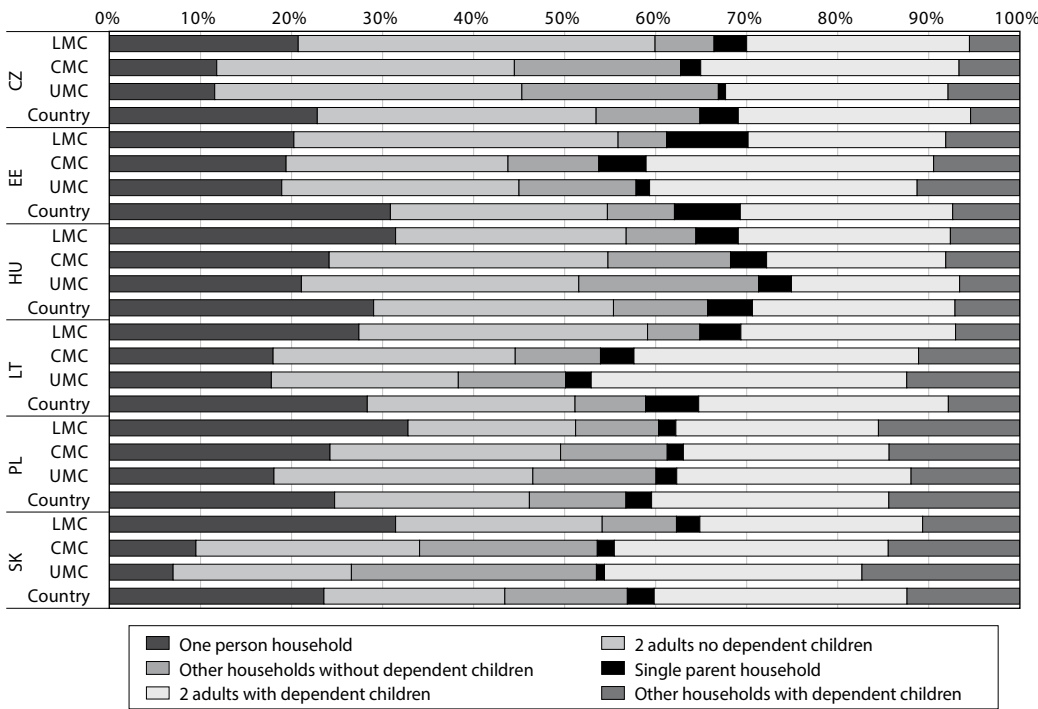
3.2 Types of households in the middle class in Central and Eastern European countries

Next, we examine whether different household types experienced substantial shifts in middle-class membership. One household group’s movement up the income ladder does not necessarily reflect its

economic standing relative to other household types at any given point in time. In all countries, single-person households and single-parent households were more likely to be concentrated in the lower parts of the income distribution in both 2005 and 2021. These two types of households were consistently underrepresented in the middle class, particularly in the core middle-income class and the upper middle-income class, as illustrated in Figures 6 and 7. Estonia and Lithuania had the highest proportion of single-person households among the selected countries. For instance, in Estonia, the share of single-person households rose from 30.9% in 2005 to 43.1% in 2021, while their share in the upper middle-income class increased from 18.9% in 2005 to 25.7% in 2021.

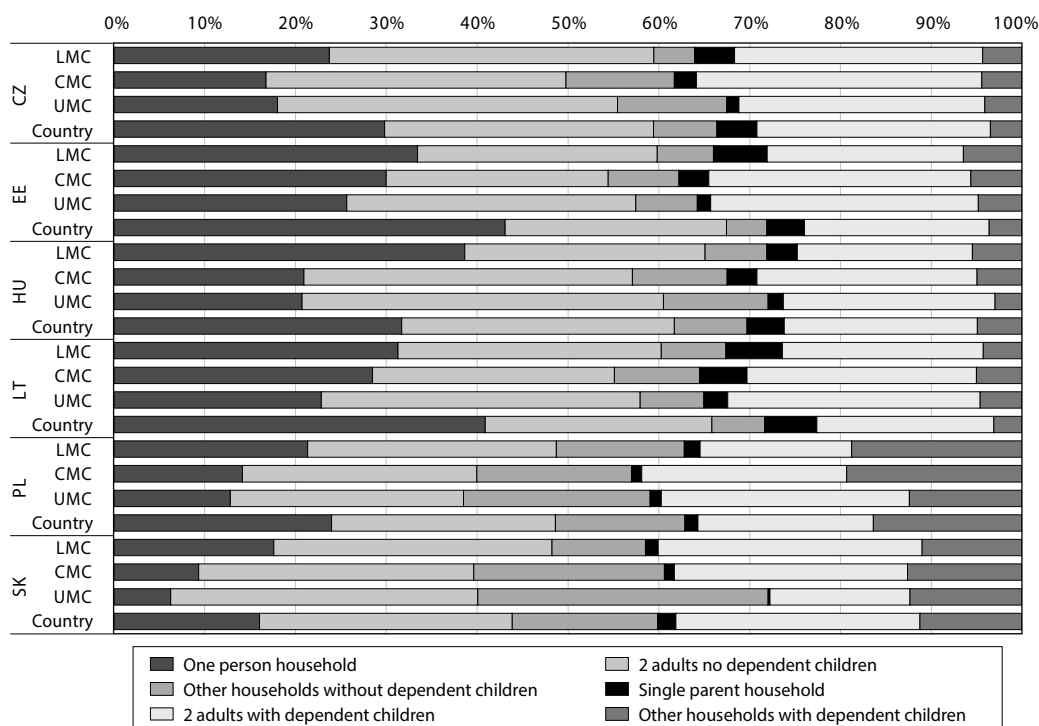
Single-person households, especially those composed of elderly individuals, and single-parent families are particularly vulnerable to poverty. Partnered adults tend to fare better across various economic indicators than their unpartnered counterparts.

Figure 6: The share of each household type in the middle class (LMC, CMC, UMC) and country population in 2005



Source: Authors’ calculation using EU-SILC data.

Figure 7: The share of each household type in the middle class (LMC, CMC, UMC) and country population in 2021



Source: Authors' calculation using EU-SILC data.

In Czechia and Hungary in both 2005 and 2021, across household types, individuals in married or cohabiting households without dependent children had the highest incidence of being in the middle class, reflecting the highest share of the overall population. Also in the other four countries, households of two adults without dependent children were overrepresented in 2021 in each middle-income class. Meanwhile, in 2005 they were only underrepresented in Poland in the LMC and in Slovakia and Lithuania in the UMC. Only in Poland, the share of households with two adults without dependent children living in the UMC decreased from 28.4% in 2005 compared to 25.7% in 2021, when at the same time the share of these households in the household population increased (from 21.4% to 24.7%). In all selected countries, households with two adults with dependent children were much more likely than households with two adults without dependent children to be in the lower-income tier in 2005. Households of two adults with dependent children were overrepresented only

in Czechia (in the CMC), Estonia, Lithuania, Slovakia (in the CMC and the UMC), and Hungary (in the LMC). Meanwhile, in Poland, this group of households was underrepresented in each middle-income class. Households with two adults with dependent children made more progress up the income ladder from 2005 to 2021 than their immediate counterparts without dependent children. According to Eurostat data, this is particularly true in Poland, Lithuania, and Estonia, where child and family allowances increased significantly in 2021 compared to 2005. In contrast, in Slovakia, the share of households of two adults with dependent children in the UMC declined significantly from 28.3% in 2005 to 15.4% in 2021 and in the CMC from 30.1% in 2005 to 25.7% in 2021.

3.3 Income situation of the middle class in Central and Eastern European countries

Finally, we analyse how diverse the middle class is in terms of income structure and distribution (RQ5). In the first year of the study, Czech households boasted

the highest income, while Slovak and Lithuanian households were at the bottom of the spectrum. Hungarian, Polish, and Estonian households exhibited similar income levels but were still significantly lower than Czech households. Fast forward to 2021, and the landscape has changed dramatically. Czechia, which once led the income rankings, has now been surpassed by Lithuania, which experienced a remarkable increase in mean income. Despite this, Estonia holds the highest median income among the studied countries. Poland has made significant progress, ultimately matching the income levels of Czechia. Meanwhile, Hungary and Slovakia continue to lag behind as the poorest countries among the studied group.

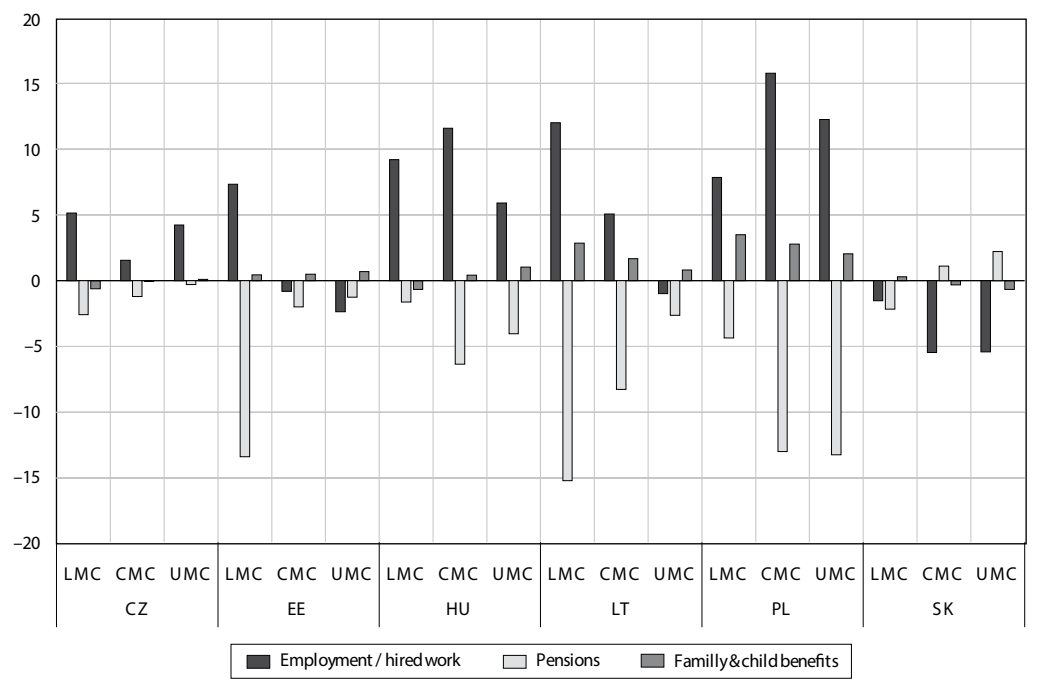
The analysis of middle-class incomes in Central and Eastern European countries confirms the relation between incomes in whole countries' populations and notable shifts in income levels between 2005 and 2021.

In 2005, the highest income levels were recorded across all sub-classes of the Czech middle class. Households in the lower middle-income class in Czechia

achieved incomes comparable to those of the core middle-income class in Hungary and the upper middle-income class in Lithuania and Slovakia. The average income (both mean and median) of the Czech core middle-income class was at the level of the average income of the upper middle-income class in Hungary, exceeding that of the upper middle-income class in other countries.

Significant increases in middle-class incomes were observed across all CEE countries between 2005 and 2021. The differential growth rates, however, altered the relative income standings among these countries. The most notable change was the equalisation of middle-class incomes among the countries studied. In 2021, households in Estonia exhibited the best income situation across all middle-class subclasses, although the difference was not substantial. Comparable middle-class income levels were recorded in Czechia, Poland, and Lithuania. In contrast, the lowest income levels across all middle-class subclasses were found in Hungary and Slovakia.

Figure 8: Changes in the share of selected income sources in the middle-class income structure, 2005–2021 (percentage points)



Source: Authors' calculation using EU-SILC data.

The income structure of the middle class in Central and Eastern European countries is shown in Annex 1 in the annex. The analysis of gross household income in the studied countries highlights the dynamics of various income sources over time. The primary sources of household income were paid employment (wages and salaries), pensions, and self-employment, with paid work dominating in all countries. In 2005, wages and salaries accounted for between 45% of income in the LMC in Poland and 88% in the UMC in Estonia, while in 2021 this share ranged from 52% in the LMC in Czechia to 85% in the UMC in Estonia. As can be seen, the increase in the median income corresponded to a higher share of income from paid work. In most of the countries studied, the share of income from hired work increased in 2021 compared to 2005. The exceptions were Slovakia, where the share of income from paid employment decreased in all the subclasses of the middle-income class, and Estonia, where the share of income from this source decreased in the core and upper middle-income classes.

After paid employment, pensions were the second source of income for households in the countries studied. However, it should be emphasised that, unlike income from paid employment, the increase in the median disposable income was accompanied by a decrease in the share of income from pensions. Their share in the LMC in 2005 ranged from 33% in Czechia, Poland, and Lithuania to only a few percent in the UMC class. The exceptions are Poland and Hungary, where this proportion was 25% and 14%, respectively. In 2021, all countries except Slovakia saw a decrease in the share of household incomes from pensions. This decrease corresponded to an increase in the share of income from hired work. Conversely, in Slovakia a decrease in the share of income from hired work was offset by increased income from self-employment and pensions (the CMC and the UMC).

Another source of income for households in the middle class was self-employment, which in 2005 in most of the studied countries accounted for between 6–8% of income in the LMC and 7–10% in the UMC. Czechia was the only country in which the share of income from self-employment in this middle-income class was higher, at 19%. A surprisingly low share of income from this source was recorded in Estonia,

ranging from 1.07% to 2.08%. In 2021, a decrease in the share of income from self-employment was observed in Czechia, Hungary, and Estonia (to less than 1%). A decrease in income from this source was also seen in Poland and Lithuania, but just in the LMC and the CMC. In both Poland and Lithuania, an increase in the share of income from self-employment was observed in the UMC and in Slovakia it was observed in all middle-income classes.

The share of other sources of household income was relatively small. Income from capital in the first year of the study ranged from 0.05% (the UMC in Slovakia) to 1.19% (the same class in Czechia). However, it should be stressed that the share of income from this source increased in most of the countries studied, i.e., in all middle-income classes in Estonia and Lithuania, in the core and upper middle-income classes in Czechia, and in the UMC in Hungary and Slovakia. Only in Poland did the share of income from capital decrease in the subsequent middle-income classes to 0.14%, 0.26%, and 0.47%, respectively.

Unemployment benefits also accounted for a small proportion of household income. The highest, in 2005, was in Poland, where the share of income from unemployment benefits ranged from 2.46% in the LMC to 0.95% in the UMC. Over the period studied, the share of income from this source fell in Hungary, Poland, and Slovakia, while it increased in Estonia, Lithuania, and Czechia. Their highest level, in 2021, was recorded in Lithuania (2.45%–1.13%).

In 2005, income from family allowances and child benefits represented between 0.42% of household income in the UMC in Poland and 6.12% in the LMC in Hungary. It is important to note that the increase in the median income corresponded to a higher share of income from this source. When comparing the two years studied, an increase in the share of income from family allowances and child benefits was recorded in most of the countries studied. The share of income from this source increased in all the middle-income classes in Poland, Lithuania, and Estonia, and in the core and upper-middle-income classes in Czechia and Hungary. The exception was Slovakia, where income from family and child benefits fell by 15% and 53% in the core and upper middle-income classes, respectively.

The analysis indicates a significant reliance on paid employment as a stable income source for the middle

class, with a shift away from pensions in several countries. The observed increases in family allowances and child benefits reflect the changing societal support structures in the countries studied. The results underscore the shifting landscape of income sources in the middle-income classes and highlight areas of vulnerability, such as reliance on pensions and self-employment, particularly in countries exhibiting declines in these areas.

4. DISCUSSION AND CONCLUSIONS

Even though the formation of the middle class after the systemic transformation that started in the early 1990s in Central and Eastern European countries has been thoroughly described in the sociological literature (*Domański, 2012*), class stratification from an economic perspective, considering disposable income per person in the household, is not well-explored. Moreover, it is unclear how the middle class changed in terms of such demographic characteristics as age (born cohorts) and type of households in the period after accession to the European Union, which our study aimed to fulfil.

The analysis we conducted enabled us to address all the research questions. The income situation of the middle class in Central and Eastern European countries has been improving, as reflected in the increases in annual equivalised household disposable income per household member (mean and median), both at the national level and within different income classes.

Concerning RQ1, most of the CEE countries studied experienced an increase in the share of the middle class within the population. The most notable changes were observed in Poland, where not only did the middle class undergo record growth but this occurred through upward mobility within the income distribution. Slovakia also saw a significant expansion of its middle class; however, this was primarily due to a decline in the income status of individuals who previously belonged to the high-income class. The middle class appears to be the most stable in Czechia, with movement occurring mainly between its sub-groups. In contrast, Hungary is an exception, where income polarisation is evident. Here, the lower and core middle-income classes have contracted, with their

shares shifting into both the low-income and high-income classes.

Regarding RQ2, overall, between 2005 and 2021, the middle-class population aged more slowly than the country's population in the selected countries (except Slovakia). This was particularly evident in the core and upper middle-income classes in Poland, which grew even younger in 2021 compared to 2005. Regarding RQ3 and RQ4, in 2005, the oldest cohorts (Silent Generation and Boomers) were not disadvantaged generations. They benefited from extensive experience in a dynamic labour market following the socioeconomic transformation, unlike Gen X and Gen Y. Boomers were significantly overrepresented in the core and upper middle-income classes in Czechia, Estonia, Slovakia, and Lithuania, while the Silent Generation was overrepresented in all middle-income classes in Poland. However, by 2021, cohorts born before 1965 experienced a marked decline in their access to the core and upper middle-income classes, suggesting that younger generations, particularly Generation Y, emerged as the economic winners. The youngest cohorts (Zoomers and Generation Alpha) also made notable progress up the income ladder between 2005 and 2021. By 2021, the core and upper middle-income classes were predominantly young – an under-recognised transformation that signals a generational relocation of economic power.

Across countries, single-person and single-parent households were more likely to be at the lower end of the income distribution and less likely to belong to the middle class in both 2005 and 2021. However, as a result of increased cash support for families with children (especially in Poland, Lithuania, and Estonia), households with dependent children made greater strides up the income ladder between 2005 and 2021 compared to their childless counterparts.

Regarding RQ5, the primary sources of income for middle-class households were employment (wages and salaries), pensions, and self-employment, with employment being the dominant source across all countries. In most of the countries studied, the share of income from employment increased in 2021 compared to 2005, while the share of pensions decreased. Slovakia was the exception, where a decline in income from employment was offset by increases in income from self-employment and pensions within the

core and upper middle-income classes. The analysis highlights a significant reliance on paid employment as a stable source of income for the middle class, along with a shift away from pensions in several countries. This trend aligns with the demographic analysis, which shows decreasing opportunities for older generations to remain within the middle class. Additionally, increases in family and child benefits reflect evolving social support structures across the countries studied. Households with two adults and dependent children experienced more upward mobility from 2005 to 2021 compared to their childless counterparts. This was especially evident in Poland, Lithuania, and Estonia, where child and family allowances saw substantial growth in 2021 compared to 2005.

The present study is not without limitations. Its methodological framework is based exclusively on economic stratification using equivalised household disposable income. While this approach ensures comparability and highlights income-related mobility, it does not capture other dimensions of social differentiation, such as occupation, education, or labour market status (Hugree *et al.*, 2020). Future research could combine income-based and sociological classifications and incorporate demographic factors, such as age, household type, or generation, to better reflect the multidimensional nature of stratification in post-communist societies.

Another future direction of research will focus on exploring the relationship between income class stratification in post-communist and Western European states and life satisfaction across different demographic groups. This study would provide a deeper understanding of whether the processes identified in post-communist Central and Eastern European countries are homogenous owing to their shared historical background or if they diverge from those in European Union countries with longer capitalist, market-oriented traditions. Furthermore, the findings would offer valuable insights for policymakers in tailoring policies to the demographic and economic conditions of specific age and generational groups, ultimately aiming to enhance individuals' life satisfaction.

The changes observed in the size and demographic structure of the middle class in Central and Eastern European countries have significant implications for policymakers. It is essential to focus on the most vulnerable households within the middle class, particularly those who experienced downward mobility in the period following EU accession. In this regard, policies should prioritise support for older generations, particularly the Silent Generation, whose position in the middle-class income hierarchy has deteriorated the most.

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References

- Aidukaite, J. 2011. *Welfare Reforms and Socio-Economic Trends in the 10 New EU Member States of Central and Eastern Europe. Communist and Post-Communist Studies*, 44(3), p. 211–219. <https://doi.org/10.1016/j.postcomstud.2011.07.005>.
- Atkinson, A. B. – Brandolini, A. 2013. *On the Identification of the Middle Class*. In Gornick, J. – Jäntti, M. (eds.). *Economic Disparities and the Middle Class in Affluent Countries*. Pp. 77–100. Stanford, CA: Stanford University Press. <https://doi.org/10.11126/stanford/9780804778244.003.0003>.
- Brzezinski, M. 2018. *Income Inequality and the Great Recession in Central and Eastern Europe. Economic Systems*, 42(2), p. 219–247. <https://doi.org/10.1016/j.ecosys.2017.07.003>.

- Brzeziński, M. – Myck, M. – Najsztub, M. 2019. *Reevaluating Distributional Consequences of the Transition to Market Economy in Poland: New Results from Combined Household Survey and Tax Return Data*. IZA Discussion Papers 12734. Available at: <https://docs.iza.org/dp12734.pdf>. (cit. 29. 03. 2025). <https://doi.org/10.2139/ssrn.3483972>.
- Čakal-Velažić, J. – Silajdžić, S. 2024. *The Effects of Macroeconomic and Financial Development on Income Inequality: Evidence from the Western Balkans*. *South East European Journal of Economics and Business*, 19(1), pp. 50–62. <https://doi.org/10.2478/jeb-2024-0004>.
- Chauvel, L. – Schröder, M. 2014. *Generational Inequalities and Welfare Regimes*. *Social Forces*, 92(4), pp. 1259–1283. Available at: <http://www.jstor.org/stable/43287569>. (cit. 29. 03. 2025). <https://doi.org/10.1093/sf/sot156>.
- Dabla-Norris, E. – Kochhar, K. – Suphaphiphat, N. – Franto, R. – Tsounta, E. 2015. *Causes and Consequences of Income Inequality: A Global Perspective*. IMF Staff Discussion Notes 15/13. Available at: <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2016/12/31/Causes-and-Consequences-of-Income-Inequality-A-Global-Perspective-42986>. (cit. 10. 05. 2025).
- Derndorfer, J. – Kranzinger, S. 2021. *The decline in the middle class: New evidence for Europe*. *Journal of Economic Issues*, 55(4), pp. 98–114. <https://doi.org/10.1080/00213624.2021.1982338>.
- Dimock, M. 2019. *Defining Generations: Where Millennials End and Generation Z Begins*. Available at: <https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins>. (cit. 10. 05. 2025).
- DiPrete, T. A. 2003. *Do cross-national differences in household standard of living mobility parallel cross-national differences in occupational mobility? A comparison of Germany, Sweden and the USA*. *Current Sociology*, 51(5), pp. 483–498. <https://doi.org/10.1177/00113921030515003>.
- Domański, H. 2009. *Spółeczeństwa europejskie: Stratyfikacja i systemy wartości*. Warsaw: Wydawnictwo Scholar.
- Domański, H. 2012. *Polska klasa średnia*. Toruń: Wydawnictwo Naukowe UMK.
- Domański, H. 2020. *Zmiany w stratyfikacji społecznej w Polsce*. *Ekonomista*, 2, pp. 286–305. <https://doi.org/10.52335/dvqp.te156>.
- Dorjnyambuu, B. 2025. *A Systematic Literature Review of Income Inequality in Central–Eastern European Countries*. *Comparative Economic Studies* 67, pp. 1–49. <https://doi.org/10.1057/s41294-024-00240-2>.
- Erikson, R. – Goldthorpe J.H. 1992. *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon Press.
- Gomulka, S. 2023. *Global Long-term Economic Growth and the Economic Transformation of Poland and Eastern Europe*. Warsaw: Scholar.
- Graham, C. – Werman, A. 2017. *Well-Being in the Transition Economies of the Successor States of the Former Soviet Union: The Challenges of Change*. In *The Pursuit of Human Well-Being: The Untold Global History*, edited by R. J. Estes and M. J. Sirgy, pp. 493–521. Cham: Springer. https://doi.org/10.1007/978-3-319-39101-4_15.
- Grosfeld, I. – Senik, C. 2008. *The Emerging Aversion to Inequality: Evidence from Poland, 1992–2005*. William Davidson Institute Working Paper No. 919. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1128465. (cit. 10. 05. 2025). <https://doi.org/10.2139/ssrn.1136285>.
- Hammer, B. – Spitzer, S. – Prskawetz, A. 2022. *Age-Specific Income Trends in Europe: The Role of Employment, Wages, and Social Transfers*. *Social Indicators Research*, 162, pp. 525–547. <https://doi.org/10.1007/s11205-021-02838-w>.
- Hugree, C. – Penissat, E. – Spire, A. 2020. *Social Class in Europe: New Inequalities in the Old World*. London and New York: Verso.
- International Monetary Fund. 2000. *Transition Economies: An IMF Perspective on Progress and Prospects*. Available at: <https://www.imf.org/external/np/exr/ib/2000/110300.htm>. (cit. 10. 05. 2025).
- Kochhar, R. 2020. *A Global Middle Class Is More Promise than Reality*. In Suter, C. S. – Madheswaran, S. – Vani, B. P. (eds.). *The Middle Class in World Society: Negotiations, Diversities and Lived Experience*. Pp. 15–48. New York: Routledge. <https://doi.org/10.4324/9781003049630-3>.
- Kulas, P. 2017. *Inteligencja Zaprzeczona*. Warsaw: Wydawnictwo Scholar.
- Marsh, L. L. – Li, H. 2016. *The Middle Class in Emerging Societies: Consumers, Lifestyles and Markets*. Taylor and Francis. <https://doi.org/10.4324/9781315717692>.
- OECD. 2019. *Under Pressure: The Squeezed Middle Class*. Paris: OECD Publishing. Available at: https://www.oecd.org/en/publications/under-pressure-the-squeezed-middle-class_689afed1-en/full-report.html. (cit. 10. 05. 2025).
- Panek, T. 2017. *Polaryzacja ekonomiczna w Polsce*. *Wiadomości Statystyczne*, 62, pp. 41–61. <https://doi.org/10.5604/01.3001.0014.0856>.
- Piątkowski, M. 2020. *Europejski Lider Wzrostu. Polska Droga Od Ekonomicznych Peryferii Do Gospodarki Sukcesu*. Warsaw: Poltext.

- Porras, L. 2010. *Income Inequality in the Post-Socialist Transition: An Institutional Approach to the Czech, Hungarian and Russian Cases*. *Revue d'études comparatives Est-Ouest*, 41, pp. 69–109. <https://doi.org/10.4074/S0338059910002044>.
- Pressman, S. 2007. *The Decline of the Middle Class: An International Perspective*. *Journal of Economic Issues*, 41(1), pp. 181–200. <https://doi.org/10.1080/00213624.2007.11507000>.
- Sachs, J. 1996. The Transition at Mid Decade. *The American Economic Review*, 86 (2), pp. 128–133.
- Strauss, W. – Howe, N. 1991. *Generations: The History of America's Future, 1584 to 2069*. New York: Morrow.
- Temin, P. 2018. *The Vanishing Middle Class: Prejudice and Power in a Dual Economy*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/11787.001.0001>.
- Tvaronavičienė, M. – Rimantas, G. 2017. Peculiarities of Income Distribution in Selected Countries. *Economics and Sociology*, 10(4), pp. 113–123. <https://doi.org/10.14254/2071-789X.2017/10-4/9>.
- Twenge, J.M. 2023. *Generations: The Real Differences Between Generation X, Y, Z, Baby Boomers, and the Silent Generation and What They Mean for the Future of the Western World*. Simon and Schuster.
- Vaughan-Whitehead, D. 2016. *Europe's Disappearing Middle Class? Evidence from the World of Work*. Geneva: Edward Elgar Publishing and International Labour Office. <https://doi.org/10.4337/9781786430601>.
- Vaughan-Whitehead, D. 2020. *European Middle Class Under Threat*. In Suter, C. S. – Madheswaran, S. – Vani, B. P. (eds.) *The Middle Class in World Society: Negotiations, Diversities and Lived Experience*. Pp. 49–92. New York: Routledge. <https://doi.org/10.4324/9781003049630-4>.
- World Bank. 1996. *World Development Report: From Plan to Market*. Washington, DC: World Bank. Available at: <https://documents1.worldbank.org/curated/en/917191468155732199/pdf/World-development-report-1996-from-plan-to-market.pdf>. (cit. 29. 03. 2025).
- Wyżnikiewicz, B. 2021. *Dlaczego jedni są bogaci a inni nie?* Warsaw: Wydawnictwo Nieoczywiste.
- Zagórski, K. 2011. *Income and Happiness in Time of Post-Communist Modernization*. *Social Indicators Research*, 104, pp. 331–349. <https://doi.org/10.1007/s11205-010-9749-6>.
- Zawadzka, K. 2018. *The Lifestyle and Value System of Professionals and Managers After Two Decades of Capitalism in Poland*. *Societas/Communitas*, 25(1), pp. 165–177.

JOANNA MUSZYŃSKA

Assistant Professor in the Department of Econometrics and Statistics at Nicolaus Copernicus University in Toruń, Poland. Her research includes projects on the level, structure, and diversity of income and expenditure of individuals and households, income inequalities and their determinants, decomposition of income inequality, quality of life, and socioeconomic development.

EWA WĘDROWSKA

Associate Professor in the Department of Applied Informatics and Mathematics in Economics at Nicolaus Copernicus University in Toruń (Poland). Most of her research is about income inequality, income distribution, inequality measurement, and mobility. Her work addresses topics such as socio-demographic factors and their contribution to recent increases in inequality.

MAŁGORZATA SZCZEPANIAK

Assistant Professor of Economics at Nicolaus Copernicus University in Toruń, Poland. Her scientific research focuses on income inequalities, middle-class issues, and life satisfaction. She is a member of the Polish Economic Society and the International Society of Quality-of-Life Studies. She is a subject editor for the scientific journal *Economics and Law*. She is also an author and a co-author of more than 40 research publications in economics, with particular emphasis on income inequality, economic stratification, and quality of life.

SUMMARY

The article examines the diversity of demographic characteristics in the middle class in six Central and Eastern European (CEE) countries: Poland, Czechia, Slovakia, Hungary, Estonia, and Lithuania. Using EU-SILC data from 2005 and 2021 and asking the equivalised disposable income per person in the household as the criterion for membership in the middle class (in economic terms), the article explores how income levels and class composition evolved over time, with a particular focus on structure by age and household type. The findings show that the middle class expanded in most countries. The income thresholds defining the middle class rose, indicating improvements in income levels. Younger generations improved their economic position the most. In contrast, older generations, particularly those living alone, were more likely to fall below the middle-income threshold. Households with children generally advanced economically, while single-person and elderly households showed signs of stagnation or

decline in their share of the middle class. Educational attainment emerged as a key factor: individuals with higher education were more likely to enter and remain in the middle class. Cross-country comparisons revealed that Poland experienced the most robust middle-class growth, while Hungary showed more modest progress and still maintained higher shares of population below the middle-income line. Although the middle class is becoming more demographically diverse, it remains exposed to risks such as inequality and economic volatility. Demographic shifts within the middle class reveal emerging social divisions and new vulnerabilities. Structural factors such as age, education, and household composition increasingly determine opportunities for upward mobility. These findings contribute to understanding class restructuring and social change in post-communist Europe and suggest the need for targeted policies to strengthen and protect vulnerable segments of the middle-income population.

Annex

Annex 1: Structure of gross income of households in the middle class by source of income								
Country	Middle class	Employment / hired work	Self-employment	Income from capital	Pensions	Unemployment	Family and child benefits	Other
Czechia	2005							
	LMC	46.7%	7.4%	0.5%	32.8%	0.7%	3.3%	8.6%
	CMC	69.9%	10.5%	0.7%	11.7%	0.3%	1.5%	5.3%
	UMC	70.8%	19.5%	1.2%	4.7%	0.2%	0.7%	3.1%
	2021							
	LMC	51.9%	6.8%	0.4%	30.2%	0.5%	2.7%	7.6%
	CMC	71.5%	10.1%	1.0%	10.5%	0.4%	1.4%	5.1%
	UMC	75.0%	15.3%	1.4%	4.4%	0.3%	0.8%	2.8%
Estonia	2005							
	LMC	61.7%	1.1%	0.1%	27.5%	0.4%	4.3%	5.0%
	CMC	81.5%	1.7%	0.4%	10.0%	0.4%	3.5%	2.5%
	UMC	87.8%	2.1%	0.3%	6.2%	0.2%	2.4%	1.0%
	2021							
	LMC	69.0%	1.0%	0.8%	14.0%	1.7%	4.8%	8.6%
	CMC	80.7%	0.8%	0.8%	8.0%	1.5%	4.0%	4.3%
	UMC	85.4%	0.8%	1.2%	4.9%	1.3%	3.1%	3.3%
Hungary	2005							
	LMC	46.4%	7.4%	0.4%	28.4%	1.3%	6.1%	10.0%
	CMC	57.3%	7.9%	0.2%	24.1%	0.7%	3.1%	6.7%
	UMC	70.2%	8.7%	0.2%	14.0%	0.5%	1.8%	4.5%
	2021							
	LMC	55.7%	5.0%	0.2%	26.8%	0.6%	5.4%	6.3%
	CMC	69.0%	6.0%	0.2%	17.7%	0.2%	3.5%	3.4%
	UMC	76.2%	7.6%	1.1%	9.9%	0.3%	2.9%	2.0%

Annex 1: (continuation)								
Country	Middle class	Employment / hired work	Self-employment	Income from capital	Pensions	Unemployment	Family and child benefits	Other
Lithuania	2005							
	LMC	50.5%	6.4%	0.1%	32.6%	0.4%	1.6%	8.3%
	CMC	71.3%	6.2%	0.2%	15.7%	0.1%	1.7%	4.8%
	UMC	80.7%	6.8%	0.2%	7.1%	0.2%	1.3%	3.7%
	2021							
	LMC	62.6%	5.8%	1.0%	17.3%	2.4%	4.5%	6.3%
	CMC	76.4%	5.9%	0.9%	7.4%	1.6%	3.4%	4.4%
	UMC	79.7%	8.1%	1.0%	4.5%	1.1%	2.1%	3.5%
Poland	2005							
	LMC	45.3%	8.1%	0.3%	32.7%	2.5%	2.0%	9.3%
	CMC	52.1%	7.3%	0.3%	31.2%	1.8%	1.1%	6.2%
	UMC	62.3%	8.1%	0.5%	24.6%	0.9%	0.4%	3.1%
	2021							
	LMC	53.2%	7.6%	0.1%	28.3%	0.3%	5.5%	4.9%
	CMC	68.0%	6.9%	0.3%	18.1%	0.1%	3.9%	2.7%
	UMC	74.6%	9.7%	0.5%	11.3%	0.1%	2.5%	1.4%
Slovakia	2005							
	LMC	54.1%	2.8%	0.2%	29.7%	0.8%	3.3%	9.2%
	CMC	74.2%	2.6%	0.1%	15.0%	0.6%	2.5%	4.9%
	UMC	85.6%	3.7%	0.1%	6.4%	0.4%	1.9%	1.9%
	2021							
	LMC	52.5%	8.3%	0.2%	27.5%	0.5%	3.6%	7.4%
	CMC	68.7%	7.6%	0.1%	16.1%	0.4%	2.2%	4.9%
	UMC	80.2%	6.5%	0.1%	8.6%	0.1%	1.3%	3.3%

Source: Authors' calculation using EU-SILC data.