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in Poland

Does the Polish self-made man exist?

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Key numbers

11-12m	24 to 64-year-olds in the Polish middle class
45%	of people in the middle class have credit obligations
16%	of people in the middle class have a mortgage
45%	of people in the middle class have no savings
26%	of people in the middle class have a university degree
75%	of people in the middle class think that their household's needs are sufficiently met
80%	of people in the middle class think that the poorest members of society are paying too much in taxes
55%	of people in the middle class expect the state to actively help create new jobs

Key findings

Since the start of the transformation after 1989, the size of the Polish middle class has remained the same, while the size of the lower class has decreased. In 1992, it included 41.3% of the adult population; by 2016, this had decreased to 34.3%. The percentage of people who are upper class has doubled, from 7.8% in 1992 to 14.4% in 2016.

Members of the middle class have average income aspirations. They believe that they could easily meet all of their family's needs with (on average) PLN 6600 net per month (per family member), which is on average PLN 1900 higher than the average income in middle-class families (PLN 4700). **Members of the lower class have the highest income aspirations.** They believe that a monthly income of PLN 3700 net per would easily meet all of their family's needs. This is more than double the total average net income of lower-class families.

Possession of a mortgage is linked to one's income. Members of the upper class are the most likely to have a mortgage (32%); it is rarer among members of the middle class (16%) and even rarer in the lower class (6%).

The level of debt among Polish households is one of the lowest in Europe. In 2017, Polish families' total debt amounted to 35.4% of Polish GDP. The average in Eurozone countries is 61.2% of GDP.

Members of the upper class most often see Poland's transformation and EU membership as beneficial. 79% believe that they have brought only benefits, or more benefits than losses. 69% of the middle class and 58% of the lower class share this opinion.

Members of the middle class think that the social system is open and creates opportunities for social mobility. 19% of them consider ambition the crucial factor for success, while 15% say that hard work is key. Just 2% think that a person needs to come from a rich family to succeed.

Education and healthcare: members of the middle class consider these areas the most underfunded. 36% of them say that the state should spend significantly more on the healthcare system and 21% think that significantly more should be spent on the education system.

Terminology and sources

Terminology

Disposable income per household mem-

ber is the total net household income (after tax) from all sources, weighted by the number of household members.

The middle class defined based on income consists of people whose disposable income per household member is in the range of 67-200% of the median in the sample. In this report, this category is also referred to as the economic middle class.

The middle class defined based on occupation consists of people who perform "medium-level" jobs. It includes people whose work requires specialist knowledge, but does not involve supervising other people's work. It also includes self-employed people and farmers with agricultural holdings. In this report, this category is also referred to as the social middle class.

Sources

The data used in this report comes from a survey conducted by the Polish Economic Institute in April 2019 on a random-quota sample of 1208 respondents aged 24-64 (Polski Instytut Ekonomiczny, 2019). It was supplemented

with data from *Polski Generalny Sondaż Społeczny* (1992; 2002) and data from the European Social Survey (2002; 2016). The results in this report were weighted by sex, education, age and the size of the respondent's place of residence.



Introduction

The inequalities observed in daily life in people's assets and income, occupations, standard of living and opportunities – tends to reproduce themselves. A rich person chooses a partner from a similar walk of life. They send their children to the best schools and universities, passing on financial, human and social capital. The poorest people do so, too, by associating with people like themselves. The difference is that they pass on limited financial and social capital to their children. Given the lasting nature of social inequalities, this is called the social structure: the relatively permanent ranking of individuals based on factors that determine their life chances: income, occupation, education and prestige.

In this social structure, who belongs to the middle class? Colloquially, its members are thought of as "neither poor nor rich"; they are "average". However, research shows that the number of people in the middle-class in a society and their financial standing are important for the country's economic development. For this reason, the middle class is the ongoing subject of interest on the part of scholars, commentators and journalists.

This report presents the Polish middle class's situation compared to the upper and lower class, which helps capture its specific nature in terms of its living conditions and views.

It addresses questions such as each class's financial situation and position on the labour market, as well as its members' attitudes to redistribution, taxes, government spending on various areas of life and the government's economic responsibilities. It also looks at their views on the benefits of Poland's European Union (EU) membership. The report also estimates the changes in the size of each social class over the past thirty years and compares the size of the Polish middle class to that of its counterparts in other European countries.

The analysis in this report is based on data collected in a survey commissioned by the Polish Economic Institute in April 2019. Two approaches were used to determine a person's class: an economic one, which defines each class based on income, and a sociological one, which considers people's occupations. Depending on the criterion used, the report refers to "economic class", based on income, and "social class", based on occupation.

The middle class in Poland: definition and size

Why do we need a middle class? Benefits for the country and the economy

The role of the middle class in promoting economic growth is commonly emphasised. Countries where the middle class includes a larger group of people with a relatively high income develop faster (Kharas, Gertz, 2010; Easterly, 1999). Firstly, entrepreneurs are most likely to come from the middle class; inventive and creative, they have enough financial, human and social capital to invest in creating a new business (Banerjee, Duflo, 2008). Secondly, economists cite the middle class's financial capacity to consume and the qualitative diversification of this consumption, which drives the economy on the demand side (Murphy et al., 1989; Easterly, 1999). The third argument centres on the values associated with the middle class, such as aptitude for hard work, saving and accumulating capital; not just financial capital, but also human capital in the form of education and specialist knowledge, the resources needed for the emergence and development of a knowledge-based economy (Becker et al., 1990; Benhabib, Spiegel, 1994).

Another important argument is the middle class's presumed economic independence. It

is seen as consisting of individuals whose income and assets are stable and who are not dependent on state redistribution. For this reason, they support government policies focused on broad economic growth, not just policies that benefit their specific interests (Benabou, Ok, 1998).

The middle class's influence on the quality of public life and the development of democracy is often emphasised, too. Modern democracies are based on extensive bureaucracies, without which the state's basic tasks could not be executed (Weber, 2002). For bureaucracies to operate effectively, occupations such as specialised office workers, a civil service and teachers - jobs considered typically middle-class - are needed (Domański, 2012, p. 16). It is also believed that the middle class can exert pressure on and control government institutions and agencies. Its members have the skills, knowledge and material resources to monitor and control the processes of governing (Adsera, Boix, Payne, 2003; Easterly, 1999).

Who is middle class?

The term "middle class" usually refers to people in the middle of the social structure. They are "neither poor nor rich", as some researchers put it in a very simplified way

(Birdsall, Graham, Pettinato, 2000). In this vein, people with average incomes, an average level of education, doing average jobs could be considered middle class. However, in Polish public

discourse, opinions on the decisive criterion for determining who is middle class are divided. This is visible in how being middle class is often equated with having a mortgage (Lewicki, 2019). Others consider people with income above the tax threshold middle class (Wyżnikiewicz, 2015). Based on research practice in sociology and economics, this report defines class in two ways: based on income and based on occupation.

The income criterion

For economists, the middle class encompasses people with an average income relative to the society they live in. In numerous studies (Birdsall, Graham, Pettinato, 2000; Bigot et al., 2012; Kochhar, 2017), Equivalised Household Disposable Income (EHDI; see the methodological

appendix) is used to mark the boundary between different income categories. This approach. based on the relative income limit (the median in the sample), allows researchers to distinguish between the material situation of households in a certain country, as well as make comparisons over time and between different countries. Following in the footsteps of Bigot et al. (2012) and Kochhar (2017), this report considers people with an EHDI of 67-200% of the median value in the sample middle class. People with an EHDI below 67% are considered lowered class and those whose EHDI is more than double the median are upper class. According to this definition, the median value of the EHDI variable among members of the lower class is PLN 1073, compared to PLN 2546 in the middle class and PLN 5774 in the upper class.

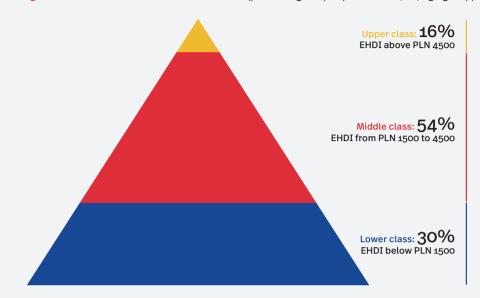
Classes defined based on income			
Description	Lower class	Middle class	Upper class
Criterion	EHDI <= 0.67 * median EHDI	0.67 * median EHDI < EHDI <= 2 * median EHDI	EHDI > 2 * median EHDI
 Median EHDI in each group	PLN 1073	PLN 2546	PLN 5774

EHDI (Equivalised Household Disposable Income) – disposable (net) income weighted by the number of household members, obtained using the following formula:

$$\label{eq:ehdispersion} \text{EHDI} = \frac{\text{household's net disposable income}}{\sqrt{\text{number of household members}}} \quad \text{(see methodological appendix)}.$$

Applying the definition above to the data collected by the Polish Economic Institute resulted in three economic classes. The percentage of

people in the 24-64 age group in each class is presented in Diagram 1.



ν Diagram 1. Size of each class based on income (percentage of people in the 24-64 age group)

Source: prepared by PEI based on survey data.

The occupational criterion

Sociologists define the middle class as a category of people with a similar position in the social hierarchy, with a similar place on the labour market and a shared identity. For this definition, it is assumed that a person's position in the social hierarchy results from their occupation, rather than income. Occupation, the associated qualifications and social capital determine a person's life chances (Domański, 2007). In today's knowledge-based economy, these values are a guarantee of financial security and determine individuals' lifestyle, outlook and broad attitudes.

Drawing on numerous studies on social structure, this report defines class membership using the EGP scheme (Erikson, Goldthorpe, Portocarero, 1979). This scheme is used as

a standard in European comparative research on social structure (Domański, 2007, pp. 243-245; Leiulfsrud, Bison, Jensberg, 2005, p. 8). It is also considered an accurate tool for Polish data, which is why it is often used in research practice. Domański and Przybysz (2003) recommend using it for Polish data.

The EGP typology considers differences in individuals' occupations in four dimensions (Domański, 2007). These differences concern: 1) the type of labour (intellectual/physical/agriculture), 2) the level of qualifications needed, 3) the position in the organisational hierarchy, 4) the ownership of the means of production (entrepreneurs and the self-employed vs. employees). Among these four dimensions, the key factors determining individuals' class are the skills associated with

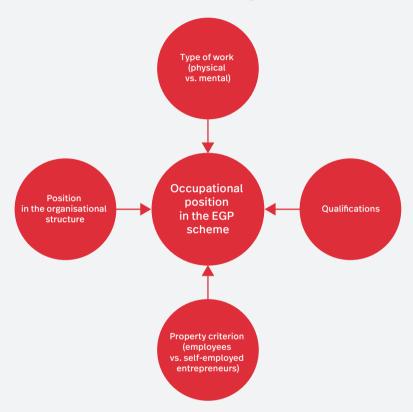
¹ Other schemes used in social research include the Esping-Andersen (1993) and Wright (1997) classifications. These are discussed in detail in Domański (2007) and in the methodological documentation of European Social Survey (2002).

The middle class in Poland: definition and size

their occupation and their position in the organisational structure, which is a determinant of the level

of power exercised within organisational structure (Leiulfsrud, Bison, Jensberg, 2005).

≥ Diagram 2. Definition of occupational position according to the EGP scheme



Source: prepared by PEI based on Domański (2007).

Although the EGP scheme has a strong theoretical foundations and does not consider individual life situations at the construction stage, research shows that individuals' position, determined using this scheme, is one of the strongest determinants of people's social and economic position, measured in terms of education, lifestyle and income (Domański and Przybysz, 2003). In other words, class affiliation defined using the EGP scheme is a rather accurate predictor of social inequalities that are visible and observable in everyday life.

Based on the collected survey data (Polski Instytut Ekonomiczny, 2019), ten categories of the EGP scheme were identified.² They are: senior professionals, lower-level

² In its most detailed version, the EGP scheme distinguishes between 11 social categories (Domański, 2007).

professionals, white-collar workers performing routine work, non-agricultural business owners with employees, non-agricultural business owners without employees, farm owners, physical

supervisors (foremen), skilled workers, unskilled workers and farm workers. This classification, along with the percentage of respondents in each category, is presented in Table 1.

Table 1. Categories in the EGP scheme (% of people in the 24-64 age group)

Number	Category description	Percentage of respondents in this category
1	Senior professionals – owners of large companies, senior management, senior state officials, intelligentsia	12
2	Lower-level professionals – owners of medium-sized companies, high-level technicians, mid-level government administration, middle management	19
3	White-collar workers performing routine office work, including white-collar workers in retail and services	20
4	Non-agricultural business owners with employees, including craftsmen	2
5	Non-agricultural business owners without employees, including craftsmen	3
6	Farm owners and people self-employed in primary production	5
7	Physical supervisors (e.g. foremen, masters), lower-level technicians	3
8	Skilled workers	12
9	Unskilled workers (excluding agriculture)	23
10	Farm workers	1

Source: prepared by PEI based on survey data.

Several occupational groups were included in the upper category defined using the EGP scheme, senior professionals. It includes certain professions related to the performance of wage labour, distinguished by their high level of specialist knowledge and supervision of other employees, such as managers and directors at state and private enterprises or institutions. This category also includes owners of large companies, as well as senior officials in the

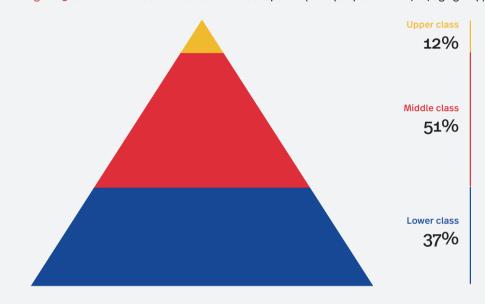
state administration (Domański, 2007, p. 168). It therefore combines the people who rank highest in terms of their financial resources, specialist knowledge and their power over others. The next subgroups in the EGP scheme are characterised by a lower level of specialist knowledge, a lower organisational position and less complex work.

These categories were aggregated into three social classes. Senior professionals were

The middle class in Poland: definition and size

classified as upper class, with lower-level professionals, white-collar workers doing routine work, the self-employed working in agriculture and beyond it and physical supervisors considered middle class. Skilled, unskilled and agricultural workers were classified as lower class.

ע Diagram 3. Size of each social class based on occupation (% of people in the 24-64 age group)



Source: see Diagram 1.

How big is the Polish middle class?

Thirty years after the economic and social transformation, Poland is no longer the country it was in 1989. This is visible in the changes in many areas, such as its successful transformation from a centrally-planned economy to a free-market one, changes in the structure of employment, Poland's demographic structure becoming more like the model in Western countries, as well as the significant increase in Poles' wealth (Arak et al., 2019). Still, researchers remain divided over whether a middle class typical of western countries has emerged in Poland three decades after the change of the system:

economically independent, characteristically attached to meritocratic values, focused on saving and systematic work, and actively involved in social and economic life (Domański, 2012; Wyżnikiewicz, 2015).

An estimated 11-12 million in the 24-64 age group in Poland are middle class. Using the economic and sociological approach leads to classes of a similar size (see Table 2). The percentage of people in the 24-64 age group who are middle class is between 51% and

54%. Given that there are around 22.4 m people in that age range in Poland (Główny Urząd Statystyczny, 2019), there are an estimated 11-12 m people in the middle class.³

≥ Table 2. Size of each class based on the income and occupational criterion

Class	Economic classes (income criterion)		Social classes (occupational criterion)	
	Structure of the population (%)	Number of observations in the sample	Structure of the population (%)	Number of observations in the sample
Upper	16	183	12	138
Middle	54	633	51	583
Lower	30	341	37	416
TOTAL	100	1157	100	1137

Source: see Table 1.

Do occupation and income define which class a person belongs to in a coherent way? This depends on the influence of a person's job on their income. The relationship between people's class membership defined based on income and based on occupation is presented in Table 3.

This data shows that there is a relationship between a person's occupation and their income. Higher professional skills – understood as doing a job that involves specialist knowledge and supervising others' work – generally result in belonging to a higher income category. However, this relationship is moderately strong and individuals' occupational positions are not always reflected in their income. Overall, in 48% of cases, a person's class based on occupation allows their class based on income to be predicted correctly.

In the lower economic class, 51.2% of people belong to the lowest occupational category and 47.6% to the middle one. The share of people in the highest income category doing simple work does not exceed 1%. The middle class, defined based on income, is 53.6% people doing medium-level jobs, which usually requires specialist knowledge but does not involve supervising other employees, 36.3% people doing lower-level jobs and 10.1% doing upper-level jobs. Just 38.4% of people in the top income category (the upper economic class) has the highest specialist qualifications or supervises other employees (senior professionals in the EGP scheme). 50.2% of people in this category have medium-level jobs and 11.4% lower-level ones.

³ These calculations do not include people under 24 years old or people over 64. Most of these people are not professionally active, which means that they cannot be reliably ascribed a class based on their occupation or income.

ע Table 3. Percentage share of members of different social classes in each economic class (%)

Economic class	Social class	Share (%)
Lower	Upper	0.3
	Middle	47.6
	Lower	52.1
	Total	100
Middle	Upper	10.1
	Middle	53.6
	Lower	36.3
	Total	100
Upper	Upper	38.4
	Middle	50.2
	Lower	11.4
	Total	100

Source: see Table 1.

It therefore seems that a person's qualifications and their position within an organisational structure are not the only factors that determine their income. Moreover, while high

earnings may sometimes result from a medium – or lower-level occupation, the reverse situation, in which an upper-level job generates low earnings, barely exists.

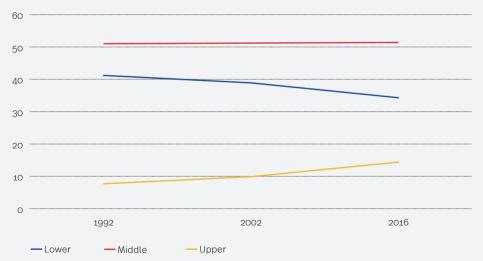
The Polish middle class in comparative perspective

The Polish middle class over the years

The middle class can only emerge in a meritocratic system in which people are remunerated for their skills, abilities and effort at work (Domański, 2012, p. 14). This means that a Polish middle class could only develop after the collapse of the communist system, which largely ignored meritocratic values, creating occupational and income hierarchies based on political criteria (Narojek, 2011).

The necessary condition for the emergence of a middle class was the creation of mechanisms for recruiting, promoting and remunerating people in a way that reflects their qualifications and effort at work. Fulfilling this condition – combined with the transformation of the structure of the Polish economy and changes on the labour market – resulted in an occupational structure in Poland like the model in Western countries





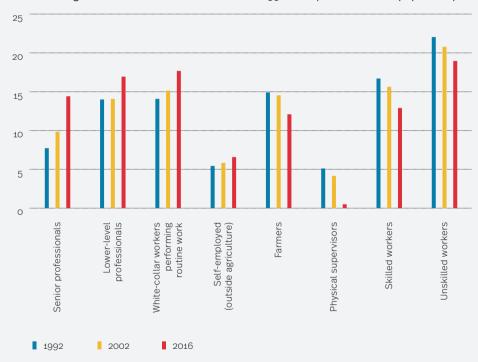
Source: prepared by PEI based on data from *Polski Generalny Sondaż Społeczny* (1992, 2002) and European Social Survey (2002, 2016).

The Polish middle class in comparative perspective

The size of each social class based on occupation can be compared by using data from *Polski Generalny Sondaż Społeczny* and European Social Survey (see Chart 1, above). Since the start of the transformation, the upper class has grown. Its size as a percentage of Poland's adult population has doubled, from 7.7% in 1992 to 14.4% in 2016. Meanwhile, the lower class has shrunk, from 41.2% in 1992 to 34.3% in 2016. At the same time the percentage of people doing jobs that qualify them as middle class has remained the same and oscillates around 51%.

Since the start of Poland's transformation after 1989, the number of job categories that require high qualifications and exercising power within an organisational structure has been growing. At the same time, the number of job categories involving physical labour is falling.

v Chart 2. Categories in the EGP scheme in Poland in 1992-2016 (% of total adult population)



Source: see Chart 1.

A more detailed comparison of the size of each of the subgroups in the EGP scheme over

the years points to changes in several areas (compare Chart 2 and Table A1 in the appendix).

Firstly, occupational categories that require high qualifications and/or exercising power within a workplace organisational structure has grown since the start of the transformation. This is visible in the increase in the share of senior and lower-level professionals, who accounted for respectively 7.7% and 14% of adults in 1992. By 2016, these proportions had risen to 14.4% and 16.9%. Secondly, the share of occupational categories involving physical labour has been decreasing. The share of qualified workers fell from 16.7% in 1992 to 12.9% in 2016; among unqualified workers, it declined from 22% to 18.9%. The share of farm owners and farm workers (presented as

a single farmers' category in Chart 3) has also decreased over the years. In the EGP scheme, the combined share of both these categories among working Poles in 2016 was 12.1%, not far from Główny Urząd Statystyczny estimate for Q4 2016 (10.1%, Główny Urząd Statystyczny, 2016).

The data also shows that the category of self-employed people, which includes entrepreneurs with or without employees, as well as farmers with their own farms, accounted for 16.2% of the adult population in 2016. This is similar to Główny Urząd Statystyczny estimate concerning self-employed people in Poland in Q4 2016 (18%, Główny Urząd Statystyczny, 2016).

The Polish middle class compared to other European countries

Poland is among the top countries in Europe in terms of the size of its middle class. Switzerland has the biggest middle class and Russia the smallest.

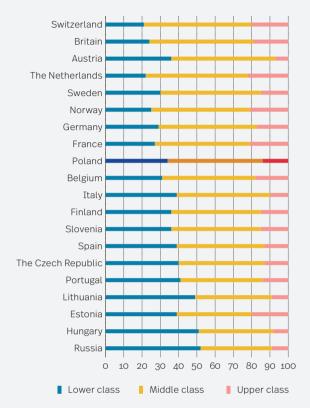
Comparing the size of each social class in the countries covered by European Social Survey of 2016 shows that Poland is among the top countries in terms of the size of its middle class. The countries where the middle class made up the largest percentage of society are in Northern and Western Europe; they include Switzerland, Britain, the Netherlands and Norway. The countries with the smallest middle class are Russia, Lithuania and Hungary, along with Portugal and Spain.

This comparison of the size of social classes in different countries is based on using an international classification - the EGP scheme. Using this standard reduces the accuracy of the measurement, which means that the specificity of the individual countries' occupational structure may not be fully reflected in the coded EGP variable. It might be the case that this situation occurs in relation to farm-owners in Poland. The size of this segment in Poland is still significantly higher than in other European countries,4 which undoubtedly entails its greater diversity in socio-demographic features and attitudes. However, including this group in the middle class is the norm in international studies on social structure (Erikson, Goldthorpe, Portocarero, 1979) and adopting this solution enables comparisons between countries to be made.

⁴ Based on data from European Social Survey of 2016, the size of this category is estimated at 10%, compared to 2% on average in the other countries covered by the survey.



∠ Chart 3. Size of each social class in European countries (occupational criterion, % of total adult population)



Source: prepared by PEI based on data from European Social Survey (2016).

The Polish middle class's material standing

Education and economic independence – two pillars of the middle class

Most of the discussion on the social and economic role of the middle class points to two characteristics that distinguish members of this category. They are education, associated with the possession of specialist knowledge, and financial independence (Domański, 2012; Birdsall, Graham, Pettinato, 2000). Education is the type of capital possessed by the middle class that guarantees its economic independence. It is recognised that the lower class does not have this kind of capital and therefore remains more dependent on the state's social policy. The upper class's economic position is based on its financial and social capital, which are often passed on from generation to generation.

Education

55% of the upper class, 26% of the middle class and 5% of the lower class have completed higher education

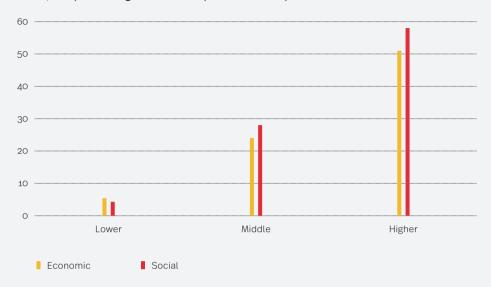
Since the socio-economic transformation, the percentage of Poles with higher education has quadrupled, from 6.6% in 1989 to 26.9% in 2017 (Arak et al., 2019). This fact alone reflects the increase in the percentage of people in the middle class with higher education.

The data points to a strong relationship between respondents' education and their class. On average, 55% of the upper class have a university degree, compared to 26% of the middle class and 5% of the lower class. The link between education and class defined by the occupational criterion may seem natural, given that the EGP scheme indirectly considers a person's education. However, the link between education and class defined by the income criterion is less obvious. This link is equally obvious and unidirectional, though. 51% of people in the top income category have a degree, compared to 25% of the middle class and 5% of the lower class.

The strong link between income and education started to become visible in Poland in the second half of the 1990s. Controlling for other relevant variables determining sociodemographic status, Kurkiewicz, Podolec and Sokołowski (1999) estimated that each additional year of studying increased earnings at the time by 1.2% and that people with higher education earned 28% more than people with primary or vocational education. Research has also confirmed that returns on education (the percentage increase in pay resulting from each additional year of education) increased the fastest in the higher occupational categories and the slowest in middle - or lower-level ones. This is considered one of the main factors responsible for the increase in income inequality after the transformation (Zawistowska, 2012).

The Polish middle class's material standing

∠ Chart 4. People with higher education (% of each class)



Source: prepared by PEI based on survey data.

In the second half of the 1990s, people with higher education earned 28% more than those with primary or vocational education. Now, with the labour market saturated with people with higher education, the return on it has decreased.

The latest research shows that the value of higher education has declined, with decreasing return on education among people with higher education and a relative increase in salaries among people with vocational education (Strawiński, Majchrowska, Broniatowska, 2018). This may result from the saturation of the labour market with university graduates. In this situation, formal education ceases to guarantee access to high earnings. Instead it is the quality of

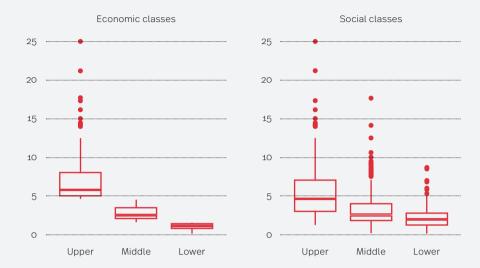
higher education with a series of factors related to a person's social skills, that becomes important (Domański, Tomescu-Dubrow, 2008).

This strong link between class and education, especially class based on income, shows that the mechanisms of meritocracy are working well in Poland. Education and related qualifications are rewarded with higher income. A system in which rewards are allocated based on merit means that the principle of equal opportunity is functioning in practice. Its application is necessary for the development of the state and the economy, given the extent to which above-average effort by individuals is rewarded (Jasiecki, 2018).

Financial standing

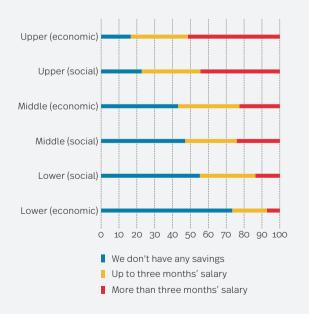
The difference in respondents' income stems from their occupation. In general, a person who is upper class based on occupation has a higher income than someone in the middle or lower class. The median disposable income in

∠ Chart 5. Distribution of disposable income in each class (thousands of PLN)



Source: see Chart 4.

∨ Chart 6. Savings in each class



Source: See Chart 4.

The Polish middle class's material standing

the lower class is PLN 2000, rising to PLN 2500 in the middle class and PLN 4596 in the upper class. In all classes, based on both income and occupation, earnings are more differentiated in the upper categories. In the upper class, there is significantly more variation in earnings than in the middle or lower class.

The income distribution in the middle class defined based on occupation is similar to that in the lower class. The median income in the upper class exceeds the earnings of the 95th percentile of the middle class, whereas the median income in the middle and lower class is similar.

Each class's income corresponds to its assets, measured in terms of a household's savings. Class ranks people clearly: 73% of

the economic lower class and 55% of the social lower class say they have no savings at all. In the middle and upper class, these are 45% and 20% (on average) respectively. Members of the economic and social upper class are most likely to have the equivalent of three months' salary in savings – 51% and 44% of them have it, compared to 23% of people in the middle class, 14% in the social lower class and 7% in the economic lower class.

45% of members of the lower class say they have no savings at all, while 23% have the equivalent of three months' salary in savings.

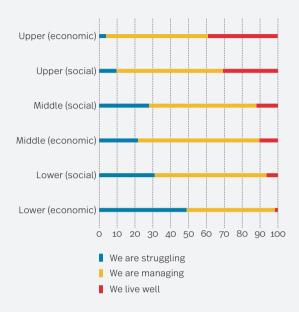
Assessment of households' financial situation

People's assessment of their financial situation is dependent on their income and occupation. 39% of the economic upper class and 31% of the social upper class say their current income easily meets their family's needs, and almost 60% of people in both subgroups consider their income sufficient. Fewer people in the middle class are satisfied with their financial situation. 10% say they meet their needs satisfactorily and 68% sufficiently. People in the lowest class are the least satisfied; 49% of the economic lower class say they struggle to meet their household's needs. Among members of the social lower class, this is 31%.

A person's class reflects their satisfaction with their ability to meet their household's needs.

It can therefore be said that a person's class reflects their satisfaction with their ability to meet their household's needs. This applies to classes based on occupation, as well as those based on income.

ע Chart 7. Satisfaction with their household's financial situation among members of each class (%)



Source: see Chart 4.

The middle class on the labour market

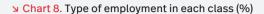
Employment is the dominant model of participation in the labour market among members of all three classes. Members of the economic upper class and social middle class are the most likely to be self-employed: 28% and 23% respectively.

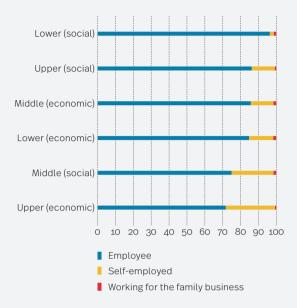
Respondents' place on the labour market is not systematically linked to their class. Employment is the dominant model of participation in the labour market among members of all three classes. Compared to other subgroups,

this type of work is most often performed by members of the occupational lower class (96%) and least often among members of the occupational middle class (75%) and the economic upper class (72%). At the same time members of these two classes are the most likely to work for themselves: 28% and 23% respectively.

Self-employment is usually equated with a privileged position on the labour market. However, if it is enforced by an employer, it may be a sign of the worker's weak position on the market (Kiersztyn, 2014). This may be why it is difficult to find a clear relationship between a person's form of employment and their class in the presented data.

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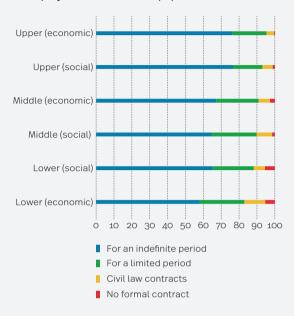


Source: see Chart 4.

Among employees, class is clearly linked to the form of employment. Labour contracts (regardless of how long they are valid for), which give employees the most security and the most extensive powers, are the most common form of employment among members of the upper class concerning, on average, 94% them. It is rarest among employees in the lower class (86% on average), who are most likely to be employed based on a civil law contract or to have no formal employment relationship. 12% of people in the economic lower class and 6% of people in the social lower class say they work based on civil law contracts while 5% of members of the lower class say work without a formal contract.

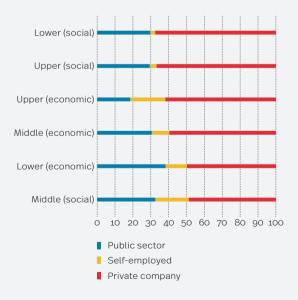
Labour contracts are most common among members of the upper class and least common in the lower class. Work based on a civil law contract or without a formal employment relationship is most widespread among members of the lower class.

∠ Chart 9. Legal form of employment in each class (%)



Source: See Chart 4.

∠ Chart 10. Job sector in each class (%)



Source: see Chart 4.

The Polish middle class's material standing

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In Polish society, there is no clear relationship between class and job sector. Members of the economic lower class are the most likely to work in the public sector; members of the upper economic class are the least likely.

Is there a link between the sector a person works in and their class? Only to a certain degree. People in the upper class are least likely to work in the public sector (central and local administration, central and local government institutions, state-owned companies); just 19% of the economic upper class work there. Almost the same percentage in this category, 20%, are self-employed. It is worth emphasising that

members of the economic upper class are the most likely to be self-employed.

Self-employment is most common among members of the economic upper class and the social middle class.

The data shows that there is no clear relationship between class and job sector in Polish society. The Polish middle class does not stand out in this respect, either. It is not more represented in specific sectors of the economy than other classes. This is an interesting finding in the context of claims that that entrepreneurs or public sector employees are recruited from this class (Birdsall, Graham, Pettinato, 2000; Banerjee, Duflo, 2008).

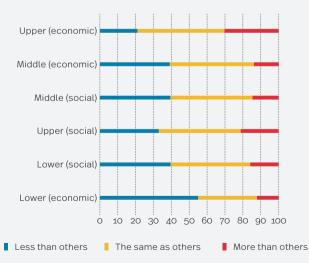
Aspirations and subjective sense of class belonging

A sense of justice with respect to income

Class is also linked to a sense of justice concerning the income that a person receives for their work. In almost all classes – apart from the wealthiest category – there is a sense of injustice concerning one's own earnings, compared to other people with similar qualifications and work experience. In these classes, the percentage of people who think that they earn less than others is greater than the percentage of people who think that they earn more. The lower the class, the bigger the difference in the assessment. On average, 14% of members of the middle class believe that

they earn more than other, similar workers. Almost three times more (40%) see their earnings as lower in comparison to other workers with similar experience. It is only within the top income group that the proportion of people considering their own income as exceeding the income of others is greater than the proportion of those who think they earn less than others. People in this group are also the most likely to consider their earnings similar to those of people with similar professional experience and qualifications. On average, 47% of members of the upper class feel this way.

∠ Chart 11. Assessment of one's earnings, compared to those of other people with similar qualifications



Source: See Chart 4.



People in the economic lower class had the lowest sense of justice when comparing their earnings with their qualifications. While 33% of them consider their earnings just compared to those others, most (55%) think that they do not reflect their qualifications and professional experience.

Income aspirations

Members of the lower and middle class would like to earn more. Comparing their average income with the income that – in their opinion – would enable them to freely satisfy all their family's needs points to a high level of income aspirations among members of the lower class and slightly lower aspirations among members of the middle class.⁵

A person's declared needs are conditioned by their position. Members of households with a lower disposable income name higher amounts when saying how much they would need to satisfy all their family's needs. Members of the economic lower class say they would need an income of PLN 3700 per month (on average). This is twice the total average household net income of members of the lower class. Asked the same question, members of the economic middle class said that they would need PLN 6600 net per month (on average), which is PLN 1900 more than the average total net income of the families of members of this class (PLN 4700).

Increasing the income of people in the middle class to the level they say would enable them to easily satisfy all their family's needs would shift their position into the richest part of

their current class, but it would not be enough to move them into the upper class. In contrast, raising the income of members of the lower class by the desired amount would move them into the middle class. This results from the fact that, in today's Poland, people at the bottom of the social ladder feel a stronger need for advancement than people in the middle.

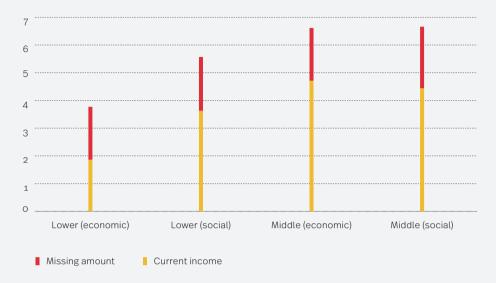
For most Poles, people in the wealthy part of the middle class set the standard for a prosperous life.

The income aspirations of members of the middle class can be described as moderate.

The income aspirations of the lower class are especially developed; the amount its members believes they would need to easily satisfy its family's needs is double the average income in this class.

⁵ People who said that they live well on their current income were not asked the question about how much income would enable them to easily meet all of their household's needs.

∨ Chart 12. Income that people think would easily meet their family's needs (thousands of PLN)



Source: see Chart 4.

Does the middle class live on credit?

45% of members of the middle class have credit obligations.

The survey conducted offers a closer look at the Polish middle class's debt. In public discourse, the middle class is often characterised as the category of people with a mortgage (Lewicki, 2019). However, the image of the Polish middle class drowning in debt is not clearly confirmed by the data, which shows that 45% of members of that class have various types of loans. There is a higher level of debt in the upper class (51% on average). The

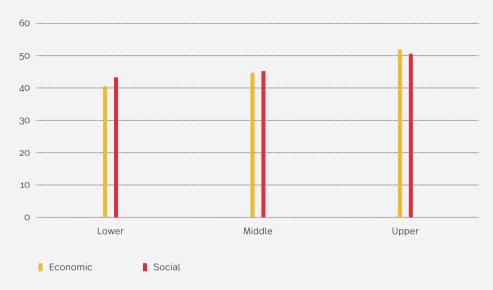
lowest is among members of the lower class (42%).6

Household debt in Poland is one of the lowest in Europe. In 2017, it amounted to 35.4% of Poland's GDP, compared to an average of 61.2% of GDP in Eurozone countries.

⁶ Analysing the responses, it should be remembered that the question concerned loans from financial institutions. However, research indicates that poorer people are more likely to use informal resources (support from family and friends) and borrow money without a formal contract (Letki, Mieriņa, 2015). This means that the level of debt in the lower classes may be underestimated.

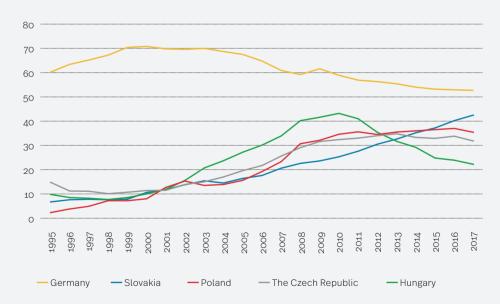
32

∠ Chart 13. Members of each class with debt (%)



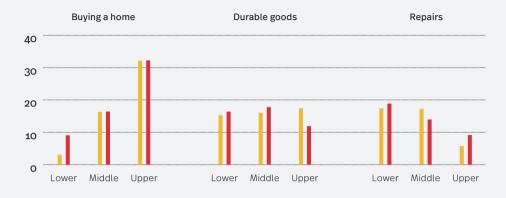
Source: see Chart 4.

≥ Chart 14. Household debt in Poland compared to that in other countries (% of GDP)

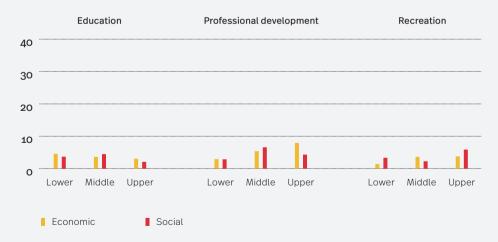


Source: prepared by PEI based on Eurostat data (2019).

∠ Chart 15. How members of each class spend money from loans (%)







Source: see Chart 4.

Aspirations and subjective sense of class belonging

It therefore seems that the level of debt in each class is primarily linked to a person's financial resources, which influence the decision to take out a loan. Moreover, the data shows that the Polish middle class's debt is not vastly different from debt in other classes. For this reason, the question of whether the Polish middle class is in too much debt becomes a question about whether Poles' general level of debt is too high. However, Eurostat (2019) data shows that household debt in Poland is one of the lowest in Europe. In 2017. total household debt in Poland amounted to 35.4% of the country's GDP, more than that in the Czech Republic (31.8% of GDP) and Hungary (22.2% of GDP), but less than in Germany (52.7% of GDP) and Slovakia (42.5% of GDP), and significantly less than the average in Eurozone (61.2%) and EU countries (65.2%). The common belief that the Polish middle class is heavily in debt may result from the rapid growth in the value of households' debt. This grew rapidly in relation to Polish GDP from the start of the 1990s to 2008, when growth in debt slowed down, perhaps due to the economic crisis (Chart 14).

Members of the upper class are most likely to have a mortgage (32%), compared to the middle class (16%) and lower class (6%).

The Polish middle class's debt is largely linked to possession of a mortgage. 16% of its members say they have one. However, members of the upper class are more likely to take out a mortgage (32%). This means that possession of a mortgage – ascribed to the middle class so often – primarily characterises members of the upper class. Purchasing a home is the spending category in which differences between the classes are the most visible, and in which the percentage of people in the upper class with a mortgage is significantly higher than in the other classes.

In contrast, members of the lower class are the most likely to take out a loan to cover repairs (18% on average), cover current expenses and fixed charges (15% on average), medical treatment (6%) and the repayment of previous debts (9% on average).

We all feel middle class: class based on people's own declarations

The division of people into different classes used in this report ascribes them a place in the social structure from above. However, many studies indicate that respondents' subjective sense of their own position in society is as important as their objective income or occupation when it comes to making decisions

(Cruces, Perez-Truglia, Tetaz, 2013). To measure respondents' subjective class position, respondents were asked to estimate what percentage of households has an income that is higher or lower than their own household's. Their answers were used to calculate individuals' subjective (self-perceived) position in the

⁷ The questions were phased in the following way: 1) "In Poland, there are significant differences in how much people earn. What percentage of households do you think have a higher income than your household?" 2) "And what percentage of them, in your opinion, have a lower income than your household?"

decile distribution of earnings. This distribution was then compared to the one obtained based on households' actual earnings. A comparison of these two distributions – the objective one and the subjective one – shows that respondents systemically underestimate or overestimate their own position in terms of income, and that their tendency to underestimate or overestimate it is linked to their class.

Members of the lower classes overestimate their position in the income hierarchy significantly more often than other people, whereas members of the upper classes are more likely to underestimate theirs. In other words, when assessing their income compared to others', the highest earners usually place themselves in the middle class. Members of the lower class also classify themselves as middle class. Overall, just 13% of the upper class and 11% of the lower class estimate their position in the country's income distribution correctly. A similar mechanism applies in the middle class, with its members underestimating or overestimating their income compared to other people's equally often.

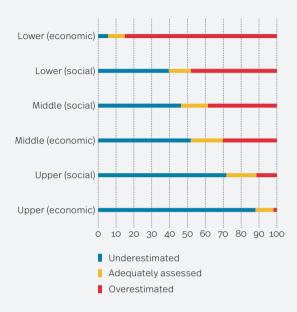
Members of the lower classes are much more likely to overestimate the size of their earnings compared to others'. In contrast, members of the upper classes are much more likely to underestimate theirs.

This results in a systematic error being made by people when estimating the size of their income compared to others'. Individuals compare themselves to the people they have the most contact with; that is, people with similar social and demographic characteristics. That means they situate their income in relation to that of people like themselves, rather than the general population. Rich people compare themselves to other rich people and people in the lowest income category compare their earnings to other people in that category whom they know (Cruces, Perez-Truglia, Tetaz, 2013). As a result, people in the highest income category are much more likely than others to underestimate the size of their earnings compared to others', while those in the lowest category overestimate theirs.

Assessing their income compared to other people's, Poles usually place themselves in the middle. 75% of people consider their own income to be in the range of the 4th to 7th deciles. In other words, 75% think of Poles that they are among the 40% with average income. If the size of the middle class were based on subjective assessments of one's own revenue, it would include 16.5 m people in the 24-64 age group (rather than the 11-12 m who meet the objective criteria). 14% of respondents think they are among the 30% lowest-earning Poles (1st-3rd deciles) and 11% place themselves among the 30% highest earners (8th-10th deciles).

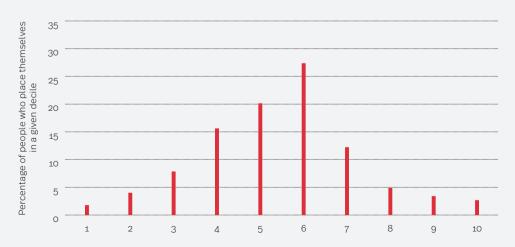
36

ע Chart 16. Subjective assessment of the size of one's earnings compared to actual earnings in each class



Source: see Chart 4.

ע Chart 17. Subjective assessment of one's income compared to Poles' overall income: decile income group distribution (%)



Source: see Chart 4.

Aspirations and subjective sense of class belonging

What determines success? Class views on the sources of success

Previous research on the middle class has identified a set of factors that are considered decisive for its professional success. It is said that members of the middle class have high aspirations when it comes to education (their own and their children's), ambitious professional plans and high expectations regarding future income. The role of the factors such as hard work, saving money and respecting the principles of open competition based on meritocratic values is also emphasised (Domański, 2012, p. 16). Comparing the factors that each class considers decisive for success with the theoretical assumptions presented above, which are often based on Western research on the middle class, leads to interesting conclusions. Members of the upper class are much more likely than others to emphasise the importance of hard work. On average, 26% of them agree that it is absolutely necessary for success. Members of the middle and lower class are less likely to share this view (15% and 13% respectively). When assessing this factor's importance, a person's situation in the occupational hierarchy was as important as their situation in the earnings hierarchy. Respondents' revenue also influences the importance they attach to ambition. 25% of the economic upper class consider ambition absolutely necessary for success. 19% of people in the middle-income category and 16% in the lowest one share this view.

Members of the upper class are much more likely than others to emphasise the importance of hard work and ambition for success in life. Members of the upper class probably consider ambition and hard work so important because they think that their own success results from personal engagement and effort. They consider themselves the source of their own success, which is probably (in their opinion) supposed to justify their current position in the earnings hierarchy.

It seems interesting that members of the lowest income category consider education very important. They are the most likely to agree that a high level of education is a significant factor that determines a person's chances of success in life. 15% of them consider it absolutely necessary for success, compared to 10% of people in the highest income category. It may be that the poorest people are convinced that education has an automatic impact on a person's chances of social advancement, which could be linked to the influence of higher education on earnings observed in Poland in the years shortly after the transformation. It may also be that people with middle and high income no longer believe in the automatic impact of higher education on earnings. The upper and middle classes' confined attachment to formal education may reflect the changing mechanisms of social advancement and these classes' conviction that education alone does not guarantee success.

There are noticeable differences in the importance that each class attaches to internal factors, related to an individual's own resources, and external ones, which are to some extent beyond individual efforts. Members of the upper class tend to attribute success to internal factors, such as hard work and ambition, whereas poorer people are somewhat more likely to emphasise the role of external factors beyond their control, such as being from a rich family, contacts or political influence (connections).

Aspirations and subjective sense of class belonging

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ע Chart 18. Factors that determine success in life (% of respondents in each class who consider a factor absolutely necessary)



Source: see Chart 4.

Those external factors are not important for members of the analysed classes. Just 2% of respondents consider coming from a rich family absolutely necessary for success; 4.1% say

that connections and political influence are absolutely necessary. These results indicate that Poles believe that success is primarily dependent on factors that they can influence. The result

may also suggest that Poles consider the social system open and offering everyone the opportunity for advancement.

Poles consider the social system open and offering everyone the opportunity for advancement. This is visible in how they see ambition and hard work as a much more important determinant of success than a person's background and connections.

The middle class does not appear as a clear category with coherent views in this respect. It does not come across as especially attached to meritocratic values. There is also no proof that its members are attached to the ethos of hard work, ambition and independence. In the Polish context, the values usually associated with the middle class – such as ambition, diligence and faith in the possibility of advancement through work and education – apply more to the upper class. It can therefore be said that the Polish middle class holds the values traditionally ascribed to the middle class.



Classes' views on the economy

Income redistribution: who's for and who's against?

Many researchers consider the middle class to have a specific attitude to redistribution, which involves moving financial resources from richer to poorer people using a tax mechanism (Domański, 2012). This mechanism aims to level – through state intervention – differences in the standard of living and material conditions. With its independent financial position and economic position earned through hard work, the middle class ought to oppose redistribution and advocate reducing government spending. Is this really the case?

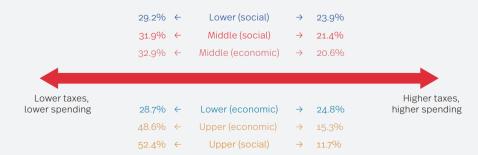
Higher taxes or lower spending?

To answer this question, the first step is to analyse respondents' preferences when it comes to raising public spending (at the cost of raising taxes) or lowering taxes (at the cost of reducing public spending). The data indicates that respondents' place on the spectrum between "higher spending and higher taxes" and "lower spending

and lower taxes" results primarily from their financial situation. Members of the upper class are the most likely to support a reduction in public spending and taxes. On average, 51% of them do, compared to 32% in the middle class and 29% in the lower class. Almost half of people in these two classes (47%) would prefer to keep taxes and public spending at their current level. Wealthier people's financial contribution, in the form of taxes, enables social transfers to be made to other individuals, which is why wealthier people largely oppose income redistribution. As net recipients, poorer people are more likely than others to support redistribution mechanisms.

Members of the upper class are the most likely to support a reduction in public spending and taxes. People in the middle and lower class are less likely to support this move.

≥ Chart 19. Higher spending or lower taxes - preferences in each class

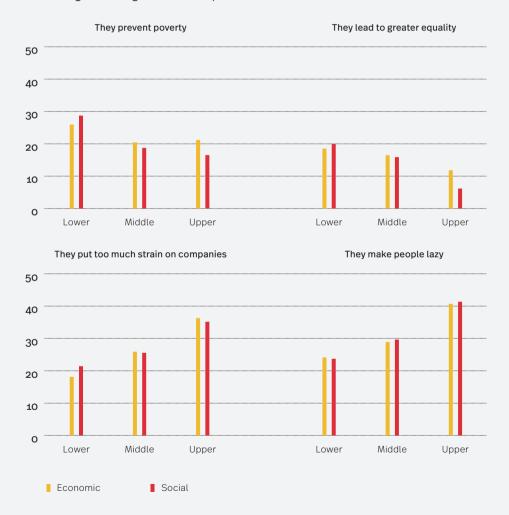


Assessing the consequences of redistributive mechanisms

In Poland, how people perceive the social and economic benefits of redistributive mechanisms is negatively related to their class. Those with a lower income and lower position on the professional hierarchy are

more likely to notice the positive consequences of these mechanisms. In contrast, those with a higher income and higher position on the professional hierarchy tend to notice the negative consequences. For each class's attitude to various aspects of the social benefits system, see Chart 20.

V Chart 20. Attitude to the social benefits system (% of respondents in each class who firmly agree with a given statement)



Classes' views on the economy

The people with the highest earnings and performing high-profile jobs are the most likely to agree with the statement that the social benefits system in Poland puts too much strain on companies, 36% of the upper class, 26% of the middle class and 20% of the lower class agree with this view. Presented with the statement that social benefits make people lazy, the distribution was similar. 41% of the upper class, 29% of the middle class and 24% of the lower class agree with this statement. On average, 27% of the lower class think that social benefits prevent poverty from spreading, a view shared by 20% of the middle class and 19% of the upper class. 20% of the lower class, 16% of the middle class and 9% of the upper class agree that the social benefits system leads to greater social equality.

Attitudes to redistribution: estimating a rearession model

Members of the middle class – people with a mid-level salaries or doing mid-level work – assess the social benefits system in Poland in a balanced way. They are more likely than upper-class people to perceive its positive sides and less likely than lower-class people to pay attention to its flaws. The data indicates that the Polish middle class is not especially opposed to social programmes and that its attitude to redistributive mechanisms is similar to that of the lower class.

However, attitudes to redistribution may depend on a series of other factors correlated with class. They include a person's assessment of their material situation and their earnings compared to others', education, income and the size of the town where they live. To simultaneously assess the impact of all these variables on attitudes to redistribution, an estimation of the linear regression model was performed. The dependent (modelled) variable was a synthetic index created using the

average of four variables concerning respondents' attitudes to the social benefits system in Poland.

Using a regression makes it possible to capture the characteristics that have a real impact on the probability of a given phenomenon occurring, which is particularly important if there is a correlation – and therefore co-occurrence – of individual variables. This correlation occurs in the case being analysed, where education and income are related to individuals' class, defined in a subjective and objective way.

In the regression, the relationship between class (based on occupation and income), a person's subjective location in the income hierarchy, disposable income per household member, a person's subjective assessment of their household's financial situation, the size of the town where they live, education and age were examined. For the estimated model, the value of the R2 coefficient is 0.08. Chart 21 presents the impact of variables that are related to attitudes towards redistribution in a statistically significant way.

Each factor presented on the chart has a positive value if it increases support for the social benefits system in Poland and a negative value if it reduces support. Of the variables used in the regression model, attitudes to redistribution are most strongly correlated to class based on occupation. Other significant factors are respondents' age, household income and subjective assessment of their household's material situation.

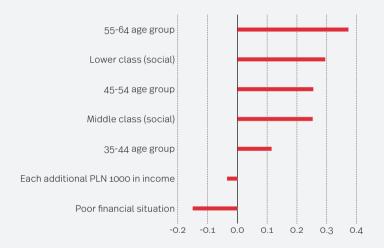
Factors negatively correlated with support for the social benefits system in Poland are household income (the higher the income, the lower the support) and considering the family's income insufficient. For income, the value of the effect was estimated at – 0.035. This means that every additional PLN 1000 in disposable income per household member lowers

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the value of the index that defines attitudes to redistribution by 0.035. In contrast, people who consider their household's income barely sufficient or insufficient for satisfying their family's basic needs consider the social benefit system in Poland worse than people who consider their income sufficient. The value of the effect was

estimated at – 0.152. This value is the different between the value of the index predicted for people who are negative about their household's situation and that for people positive about it when controlling the other independent variables.

Chart 21. Factors determining support for the social benefits system (based on the linear regression model)



Source: see Chart 4.

Does this mean that the potential recipients of redistribution consider the social benefits system worse than people who do not receive social benefits? This is not the obvious interpretation, because, when assessing their own household income, people include the value of the social transfers they are receiving (such as benefits and assistance). People who are negative about their household's financial situation either do not receive any social transfers, even though their family's needs are not satisfied, or do not receive enough in social transfers.

A higher income per household member is correlated with a negative assessment of the consequences of the social benefit systems in Poland.

The factor that makes people inclined to see the positive consequences of the social benefits system in Poland is being a member of the social middle or lower class, along with respondents' age. Older people were more likely

than younger people to notice the positive side of redistributive mechanisms. The value of the effect among people in the 35-44 age group, compared to the 24-34 one, is 0.146. For people in the 45-55 age group it is 0.255 and for those aged 55-64 it is 0.373. People in the lower and middle class notice the positive consequences of redistribution more often than people in higher-level occupations. The value of the effect for the lower class, estimated at 0.253, represents the difference between the value of the index predicted for members of the lower class and its value predicted for members of the upper class when controlling for other variables, such as a person's economic class, income, assessment of their family's financial situation, education and age. The analogous difference for members of the middle and upper class was estimated at 0.292. It can therefore be concluded that, asked to assess the consequences of redistributive mechanism, members of the middle and lower classes differ significantly from members of the upper class. The difference in the estimated effects for members of the upper and lower class is minimal and reflects both subgroups' similar attitude to redistribution.

Members of the middle and lower class are more likely to see the positive consequences of redistributive mechanisms than members of the upper class.

The impact of social class, defined based on occupation, was estimated by considering other variables, such as a person's household income per capita, education and age, the size of the town they live in and their economic class. This means that the influence of other variables correlated with the effects is excluded. It turns out that a person's occupation and place in the organisational hierarchy, rather than their education, income or subjective assessment of their own earnings, is responsible for how they view the social benefits system in Poland.

Preferences when it comes to spending public money

Classes also differ in their preferences concerning where more public money should be spent. 36% of respondents firmly support increasing government spending on healthcare, while 23% would like to increase spending on education. Support for increased spending on healthcare rises as household income decreases. The poorest people are the most likely to think that the healthcare system requires more funding: 39% of them, compared to 33% of people in the highest income category.

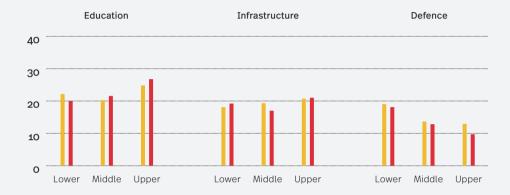
36% of respondents firmly agree that the government should increase spending on healthcare.

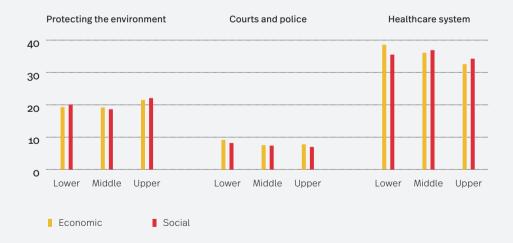
The second area in which the most respondents would like to see higher government spending is education. In this area, the richest people are the most likely (27%) to say that more funding is needed, compared to 20% among the lowest occupational category. The classes also differ in their support for increasing government spending on defence: 18% of people in the social lower class say they support it, compared to 10% in the upper class.

Despite the differences in support for increasing government spending on healthcare and education between members of the upper and lower class, the data points to relatively universal support for the general principles of Poland's current public healthcare and

education system. Government spending in these two areas can be seen as aiming to level the chances of social advancement of people on the lower rungs of the social ladder. Members of the upper class, who are more likely to use private healthcare and education, do not deny that this system should exist. This result points to the egalitarian views in Polish society, which wants the authorities to provide basic public services.

∠ Chart 22. Support for higher public spending in different areas (% of people who support a clear increase in spending)





Who pays too much in taxes?

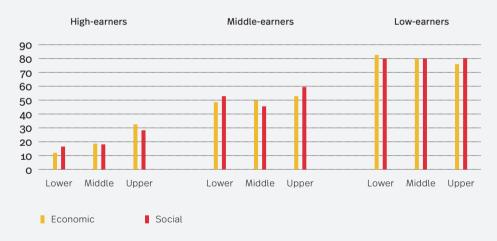
Attitudes to taxes also reflect Poles' egalitarian views. 80% of respondents agree or strongly agree that the lowest-earners pay too much in taxes. Members of the lowest income category are the most likely to agree (83%), while ones in the highest one are the least likely (76%).

Just 21% of respondents think that the rich pay too much in taxes. Here, differences in views were much more dependent on respondents' households' material situation. People

in the highest income category were the most likely (33%) to consider the taxes paid by the highest-earners too high, compared to people in the middle (19%) and lowest income categories (12%).

80% of respondents agree or strongly agree that the lowestearners pay too much in taxes.

ע Chart 23. Opinions on how much high-, middle – and low-earners pay in taxes (% of people in each class who think that the taxes paid are too high)



Source: see Chart 4.

On average, 52% of respondents think the taxes paid by middle-earners are too high. This view was most common among people in the social upper class. Surprisingly, relatively few people in the middle class (both social and economic) think that they are paying too much in taxes.

The differences between classes concerning how much each income group pays in taxes

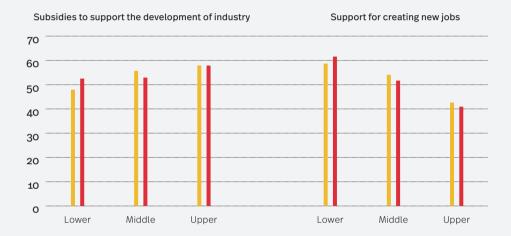
are not significant. Most respondents agree that the lowest-earners pay too much in taxes. This points to the relatively high level of egalitarianism among Poles. This result is consistent with the high level of acceptance for levelling differences in income observed in Polish studies (Domański, 2012, pp. 98-99).

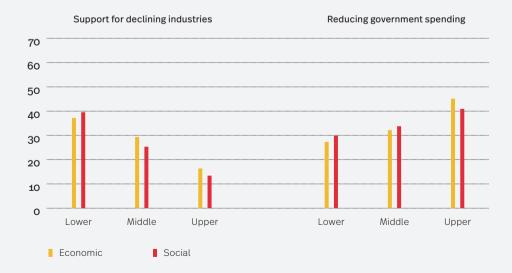
Perception of the government's economic responsibilities

Members of the lower class are more likely to support government intervention in the economy than people in the middle or upper class. On average, 60% of them strongly support

government funding for creating new jobs, compared to 53% in the middle class and 42% in the upper class. They are also the most in favour of the government supporting declining industries

∠ Chart 24. Perception of the government's economic responsibilities (% of people in each class who strongly support a given action)





(39%), compared to 27% and 15% in the other two classes. Views on reducing government spending also vary according to class. On

average, 43% of the upper class, 33% of the middle class and 29% of the lower class support this idea

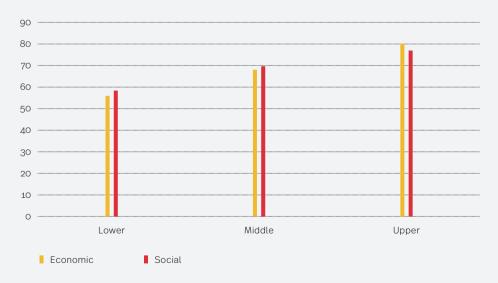
Classes' attitude to Poland's transformation and EU membership

Members of the upper class are the most likely to see the benefits of Poland's transformation and EU membership. People in the lower class are the least likely.

Overall, 67% of respondents said that the process of socio-economic transformation after 1989 brought Poland only benefits or more

benefits than losses. This result is almost identical to the estimate by the Public Opinion Research Centre (CBOS) in May 2019 (68%; Public Opinion Research Centre, 2019). Members of the upper class are more inclined to see the positive consequences of Poland's transformation; 79% of them agree that the process brought Poland only benefits or more benefits than losses, compared to 69% of the middle class and 57% of the lower class.

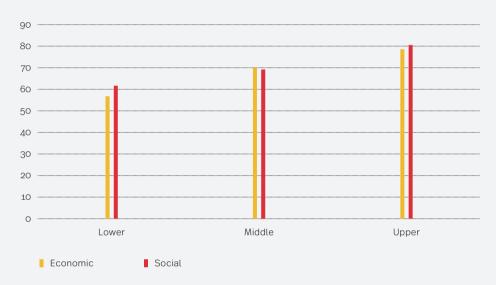
د Chart 25. Assessment of Poland's transformation (% of respondents who say that it has brought Poland only benefits or more benefits than losses)



The upper class also holds a more positive assessment of the consequences of Poland's EU membership. On average, 80% of its members

agree that it has brought Poland only benefits or more benefits than losses, compared to 70% of the middle class and 59% of the lower class.

ע Chart 26. Perception of Poland's EU membership (% of respondents who say that it has brought Poland only benefits or more benefits than losses)



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Methological appendix

Lable A1. Social classes in Poland in 1992-2016: the occupational criterion (% of adults)

Description	1992	2002	2016
Senior professionals	7.7	9.9	14.4
Lower-level professionals	14.0	14.1	16.9
White-collar workers performing routine work	14.1	15.1	17.7
Self-employed people with employees	2.4	3.0	4.7
Self-employed people without employees	3.0	2.8	1.9
Physical supervisors (e.g. foremen, masters)	5.1	4.2	0.5
Skilled workers	16.7	15.6	12.9
Unskilled workers	22.0	20.8	19.0
Farm workers	2.5	2.5	2.4
Self-employed farmers	12.4	12.0	9.7

Source: prepared by PEI based on data from Polski Generalny Sondaż Społeczny (1992, 2002) and European Social Survey (2002, 2016).

Economic class based on the income criterion

Equivalised Household Disposable Income (EHDI) – total household income, after deducting taxes and public transfers, weighted by the square root of the number of household members, calculated according to the following formula:

$${\rm EHDI} = \frac{DHI}{\sqrt{number\ of\ household\ members}}$$

where:

DHI (Disposable Household Inocme) – a household's total disposable income from all sources, minus taxes and other charges.

People with an EHDI from 67% to 200% of the median were considered middle class. In the lower class, EHDI was below 67% of the median, and in the upper class it was over 200%.

Social class based on the EGP scheme

The following variables were used to encode the variable situating respondents in the EGP scheme: the ISCO o8 variable coding, in a standardised manner that allows international comparison, the respondent's occupation, a variable identifying the relationship between the respondent's property and their (employees / running their own business or working for the family business) and how many subordinates they have at work.

In the study, 763 people (63% of respondents) said they do paid work (even if they are

taking a temporary break). For these people, the variables used to encode the EGP scheme concerning their current work. For 381 people, the data related to previous work and, for 14, it concerned the work of their husband, wife or partner.

The respondent's occupation was assigned to a social class in the EGP scheme using the "iskoegp" package developed in the STATA programme by John Hendrickx, based on the syntax of the SPSS programme by Harry Ganzeboom and Donald Treiman (2003).



The Polish Economic Institute

The Polish Economic Institute is a public economic think-tank dating back to 1928. Its research spans trade, macroeconomics, energy and the digital economy, with strategic analysis on key areas of social and public life in Poland. The Institute provides analysis and expertise for the implementation of the Strategy for Responsible Development and helps popularise Polish economic and social research in the country and abroad.

