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ECONOMIC PERFORMANCE OF THE MIDDLE-CLASS TRANSITION IN SERBIA

Ekonomске performanse tranzicije srednje klase u Srbiji

“A strong middle class supports inclusive political and economic institutions, which underpin economic growth.”

(Boushey, H. and Hersh, A., 2012, “The American Middle Class, Income Inequality, and the Strength of Our Economy”, p. 39)

Abstract

The analytical focus in the paper has been intentionally dispersed: the paper primarily focuses on the analysis of the income and consumption of the middle class and its three subclasses in three transitional subperiods: (a) pre-crisis (2006-2008), (b) recession (2009-2014), and (c) recovery period (2015-2019), but the analysis also covers the interdependence between the economic growth and middle class and consumer basket and middle class, as well as the trend of inequality throughout the transitional period.

The middle class is the generator of growth and development of every economy. A strong middle class encourages inclusive economic growth and enhances and strengthens institutions. In the transitional period, and especially in the post-crisis period, the middle class in Serbia failed to secure the position of a stabilizing factor in society and its cohesive influence declined. The costs of property transformation were mostly borne by the middle class, above all by the working class and peasantry. The structure and position of the middle class significantly changed in the transitional period.

Because of its social, developmental, economic, institutional and political influence, the middle class in Serbia faces a number of challenges, the most important issue being the following: Will the middle class in Serbia take responsibility for the poverty, rising inequality and development of stable democratic processes in the future?

Keywords: *middle class, decile and median analysis of income and consumption, economic growth, consumer basket, inequality.*

Sažetak

Analitički fokus u radu je ciljano disperzivan; primarno je usmeren na prihodnu i potrošnu analizu srednje klase i njene tri podklase u tri tranziciona potperioda: (a) predkrizni (2006-2008), (b) recesioni (2009-2014) i (c) period oporavka (2015-2019), ali je, pored toga, analizom obuhvaćena međuzavisnost privrednog rasta i srednje klase, potrošačke korpe i srednje klase, kao i dimenzija kretanja nejednakosti tokom čitavog tranzicionog perioda.

Srednja klasa je generator rasta i razvoja svake ekonomije. Jaka srednja klasa podstiče inkluzivan ekonomski rast, unapređuje i jača institucije. Kako srednja klasa u Srbiji u tranzicionom, a posebno u postkriznom periodu, nije uspela da se pozicionira kao stabilizirajući faktor u društvu, njen kohezioni uticaj je opao. Troškove svojinske transformacije najviše je podnela srednja klasa, pre svega radnička klasa i seljaštvo. Struktura i položaj srednje klase su se značajno izmenili u tranzicionom periodu.

Zbog svog društvenog, razvojnog, ekonomskog, socijalnog, institucionalnog i političkog uticaja srednja klasa u Srbiji suočena je sa nizom izazova, od kojih je najvažnije pitanje: da li će srednja klasa u Srbiji u budućnosti preuzeti odgovornost za stepen siromaštva, rastuću nejednakost i razvoj stabilnih demokratskih procesa?

Ključne reči: *srednja klasa, decilna i medijalna analiza prihoda i potrošnje, privredni rast, potrošačka korpa, nejednakost.*

Introduction

The subject of research in this paper is the transformation of the middle class in Serbia in the transitional period from 2006 to 2018. The research is based on the results of economic analysis of the entire distribution of income (revenue) and household consumption during this period. The primary objective of researching the economic position of the middle class in Serbia in the transitional period is to analyze the sustainability of the middle class and its capacity for cohesion of the upper and lower classes in order for them all to function as a civil society. The middle class is primarily responsible both for other classes and for the functioning of the state and society.

The conducted research on the position of the Serbian middle class in transition was based on empirical, structural, partial and comparative statistical analysis of the databases of the two most meritorious surveys: 2006-2018 Household Budget Surveys (HBS) and 2013-2018 Survey on Income and Living Conditions (SILC).

The middle class is the generator of growth and development of every economy. A strong middle class encourages inclusive economic growth and enhances and strengthens institutions. "Strong middle classes can influence economic development through more active participation in the political process, expressing support for political programs and electoral platforms, in particular those that promote inclusive growth" [16].

Analytical focus has been intentionally dispersed: the paper primarily focuses on the analysis of the revenue

and spending of the middle class and its three subclasses in three transitional subperiods: (a) pre-crisis (2006-2008), (b) recession (2009-2014), and (c) recovery period (2015-2019), but the analysis also covers the interdependence between the economic growth and middle class and consumer basket and middle class, as well as the trend of inequality throughout the transitional period.

Theoretical and methodological context – conceptual definitions, measurement problem, criteria and open questions

The very term "middle class" has a broad context. It should not be equated with "middle-income", either in terms of income or consumption. It is multidimensional: it has its economic, social and educational dimension. In addition to income and consumption, the term includes college education, white-collar work, economic security, property ownership, certain social and political values, and a specific "state of mind". In other words, it could be subject to self-identification [23].

Contemporary classical theories about the middle class mainly use Weber's socio-economic and sociological terms. The definitions of the middle class emphasize that it consists of an elite of professionals and managers who are largely immune to economic recessions and trends. Important determinants of the middle class ensue:

- "The large middle class has a beneficial, stabilizing influence on society: it bears neither possibly explosive (revolutionary) tendencies of the lower

Table 1: Conceptual definitions of the middle class

	Socio-economic and historical definitions
Routledge Encyclopedia of International Political Economy	"A class of people who mediate between upper and lower social classes or positions" "A social, economic, cultural class that has approximately average status, income, education, tastes, etc." "The class that traditionally mediates between the aristocratic class and the working class"
The Drum Major Institute for Public Policy [6]	"Individuals earning \$ 25,000-100,000 per year"
Aristotle [12]	"A class of people in the middle of the social hierarchy" "The most perfect political community is one where the middle class rules and outperforms both classes"
Weber [27, p. 22]	"The middle class is the broad group of people in contemporary society who fall socio-economically between the working class and upper class"
Giddens, A [27, p. 23]	„Heterogeneous environment, the mixture of highly unstable (fluent) old middle class and somewhat more stable but less numerous, called modern middle class“
Tarkhnishvili, A., & Tarkhnishvili, L. [27, p. 23]	"The middle class is a social group of the people with the income more or less stable and sufficient for the satisfaction of a wide range of material and social requirements. The hallmark of this class is its high educational attainment."

Source: Author's selection.

class, nor absolutist (or oligarchic) tendencies of the upper class” [30];

- The middle class “holds the keys to social progress” [11], brings together the most qualified and motivated professionals with the highest potential for civic activity and the deepest civic/social knowledge. The social reputation of the middle class depends, first and foremost, on its influence on technological and economic progress in the society;
- The growth of the middle class is associated with greater entrepreneurial activity, investment in the human capital and democratic development [18, p. 219, 221]. Political transition analysts claim that the declining number of the poor and the growth of the middle class contribute to the emergence of stable democracies.

The research into inequality and the middle class highlights the importance of measurement and data quality [1, p. 95]. The establishment of international standards for comparison of households over a period of time requires continuous corrections of the purchasing power to be made, inflation to be incorporated and equivalence scale to be adjusted. For more accurate comparison of poverty and inequality across countries, purchasing power parity (PPP) [5, p. 8, 11, 16], equivalence scales, and the impact of prices on middle-income growth are of great importance [10]. For example, research shows that the size of the upper middle class changes depending on which index is used: the standard index (CPI – Consumer Price Index) or the index of personal consumption (PCE – Personal Consumption Expenditure) where the effect of inflation is lower [10]. That very research, which was done in the United States, shows that an increase in the participation of the upper middle class is by 4.5 p.p. lower when using CPI instead of PCE.

With the rise in the standards of living, recent research shows that the middle class has declined over time, while many countries have seen an increase in the upper middle and upper classes. The differences in sizes of the part of the population pertaining to the middle class across countries are huge (from 42% in South Africa to 89% in Denmark) [13]. In general, many countries have

experienced a decline in their middle class in the past three decades.

Modalities of transforming members of one class into members of another in transition economies provoke numerous controversies:

- When and how do the representatives of the working class become middle class members? Is average annual income the only criterion? What is the impact of national, racial, cultural, religious and other factors? There is no single answer as to whether there are borders and margins (“marginal groups”) between classes [10], [26].
- The quantitative margins of the middle class differ from country to country. The middle-class criteria of the United States cannot be applied [26, pp. 6-12] not only in the Eastern European countries, but also in the Western European countries. Paradoxically, the vast majority of former Soviet Union households had multiple reasons for identifying themselves as middle class: they had stable jobs, decent vehicles and recreation, not much impacted on housing and property (plus, free medicines and education).
- Paradoxically, there are multiple reasons to identify the vast majority of households of the former Soviet Union as middle-class: their members had a stable job, decent vehicles and recreation, (plus free medicines and education).
- In a number of developing countries, a significant part of population made progress from the class of the poor to the middle class thanks to the rapid economic growth. At the height of the Great Economic Recession (2009), more than half of the world’s population belonged to the middle class which had “a reasonable amount of discretionary income, about a third of the income was discretionary, to be spent after paying the basic food and shelter” [6]. Interestingly, based on this parameter, the number of middle-class people in Asia had exceeded the number of middle-class members in the West, even before the Great Recession hit in 2009. This has also proven the following economic regularity: when most of the population crosses over into the middle class, the number of people in the middle class grows rapidly.

- OECD estimates suggest that the global middle class will grow to enormous proportions until 2030 [22].
- One of the key and still unanswered socio-economic questions is: How will the new middle class behave in the future? Will it distance itself from the “poor” as much as possible rather than continue taking responsibility for combating continued poverty and inequality [14]? How will the middle class mobilize socially? Can education play a key role in raising awareness and fostering social changes? Will the focus of the middle class remain on strengthening socio-economic dimensions of citizenship, gender equality and women’s empowerment, social mobilization and improving relations between different marginalized social groups (ethnic, cultural, etc.) and the state? The answers to these questions are becoming increasingly more complex as the middle class intensified migration to larger cities, emigration to more developed countries, gentrification of urban areas, etc., as the reaction to the processes of globalization and privatization, marginalization of national governments, and different tax systems. The above questions are complemented by another question, very important for the underdeveloped SEE countries: How to transform brain drain into brain gain?
 - In any case, understanding different patterns of middle-class behavior (both old and new) is part of the solution to development problems, primarily poverty and inequalities. In addition, numerous studies on transition conclude that the decrease in poverty and growth of the middle class contribute to the emergence of stable democracies [8].
 - Whether someone belongs to the middle class depends on the relative definitions of the middle class, i.e., it is determined in relation to particular criteria which are based on average income, assets or a subjective rank and vary depending on the country and historical period. However, these various approaches do not indicate what real or material living conditions are like according to the category of income, making it difficult to compare the changes in the living standards in some countries. The problem is clear

when analyzing the differences in economic prosperity between advanced and emerging economies, which are so large that most middle-income households in emerging economies would continue to be considered poor in the developed countries [25].

- Most contemporary middle-class research uses an absolute measure in relation to the middle income (median income). When defining the middle class, a number of researchers use the middle three quintiles of distribution [24], while others use different parts of the medians [2]. Variations in eminent research define the middle class relative to the median, ranging from 1/2, 2/3 and 3/4 of the median to 1.25, 1.5 and double the median [3].

The research on the economic position of the middle class in transition in Serbia was based on two economic and statistical criteria:

- Decile analysis of income and consumption, based on the 2006-2018 Household Budget Survey (HBS). The cutoff values for the lower class included I-III deciles, the middle class was divided into: lower middle class (IV-V), basic middle class (VI-VII), and upper middle class (VIII-IX), while the upper class is covered by X decile;
- Median income and consumption analysis based on the Survey on Income and Living Conditions (SILC) for 2013-2018. The cutoff values were: $\leq 60\%$ of the median (for the lower class), 60-80% (lower middle class), 80-120% (middle-middle class) and 120-200% of the median (upper middle class), while the cutoff for the upper class was greater than double the median [29].

Quality of life in countries of the region

The basic findings of the quality of life survey (EQLS) for Serbia [9] show that many aspects of the quality of life are similar to the countries in the region, but also that a large number of indicators are below the EU average, in particular: high percentage of the population in the poverty zone [15, pp. 111-114], the problem of lack of balance between work and private life, health and mental well-being. Serbia has the lowest score according to the WHO-5 Well-Being

Index, assessing mental well-being. However, more than two-thirds of respondents in Serbia are optimistic about the future of the next generations, which is above the EU average and most of the countries in the region. In areas such as the perceived quality of certain public services, Serbia is still below the EU average, but it has been making progress in recent years. Serbia stands out as the country with the highest level of perceived corruption, which to a certain degree weakens citizens' confidence in democratic institutions. According to the social exclusion index, Serbia is above the EU average (2.1), but also above most countries in the region. From the perspective of research into the economic performances of the middle class, the findings that are particularly interesting can be found in the following dimensions of observation:

- The level of satisfaction with the standard of living in Serbia is far below the EU average, as compared to Romania and Hungary. According to the Deprivation Index, on average Serbia's population cannot afford 2.1 out of 6 items considered important for living standards, while in the EU countries it is only 1.1, with countries in the region having a similar result;
- The perception of corruption in various public services is an extremely important indicator of economic management. The European Commission is of the opinion that corruption "undermines the confidence of citizens in democratic institutions and processes". EQLS research singles out Serbia as the highest-ranking country when it comes to the level of perceived corruption in relation to all countries surveyed. In its report for Serbia in 2018, the European Commission warns that infrastructure projects, health, education, construction industry and privatization of public companies are particularly vulnerable to corruption;

Table 2: Living standards in the countries of the region and the EU in 2017 (average)

	Albania	North Macedonia	Serbia	Croatia	Bulgaria	Romania	Hungary	EU
Average satisfaction with living standard, scale of 1–10	5.1	5.2	5.7	6.0	5.6	6.7	6.6	7.0
% who make ends meet with some difficulty, with difficulty, or with great difficulty	76%	55%	69%	71%	63%	66%	61%	39%
Deprivation Index: Number out of six items household cannot afford	3.8	2.5	2.1	1.9	2.2	2.4	2.0	1.1

Source: [9].

- The social exclusion index in Serbia exceeds the levels of the EU and the countries of the region, with the exception of Albania, North Macedonia and Bulgaria. It can be said that the specifics of the transition process in Serbia and the variation of economic flows have brought the problem of social exclusion into focus.

Income and consumption analysis of the middle class in Serbia in 2006-2018

Equivalized income decile analysis

Real growth in average equivalized middle-class income in the 2006-2018 period was 0.5% per year (cumulative growth of 5.9%), which is above the average real growth of income of all consumer units (0.3). Structurally, within the middle class, the highest growth of 0.8% per year on average was recorded in the lower middle class, followed by 0.5% in the middle-middle class, while the most modest growth of 0.3% per year was registered in the upper middle class. The cumulative growth of lower-class income was 14.3%, while the cumulative equivalized income of the richest fell by -7.2% (-0.6% annually).

Table 3: Real growth/decline in average equivalized income per class in 2006-2018

	2006-2008	2009-2014	2015-2018	2006-2018
Lower class	23.1	-20.1	6.3	14.3
Lower middle class	13.0	-13.8	7.5	9.5
Middle-middle class	10.6	-12.6	6.9	6.5
Upper middle class	8.9	-12.2	6.8	4.1
Middle class	10.2	-12.8	7.0	5.9
Upper class	-7.1	-8.3	10.1	-7.2
Average of all classes	7.1	-12.8	7.6	3.4

Source: Author's recalculation based on HBS.

The analysis of the dynamics of the middle-class equivalized income shows that it achieved growth in the 2006-2008 period (10.2%) and in the 2015-2018 recovery period (7.3%, 2.3% on average per year), while the decline in the 2009-2014 recession period was -12.8% (on average -2.7% annually). The drop in the equivalized income of all classes in the recession period was -12.8%, the income in the class of the poorest fell -4.4% per year, while the income of the class of the richest fell at a rate of -1.7% (-8.3% cumulatively). In the period of economic recovery from 2015 to 2018, total equivalized income growth was 7.6%, income of the poorest strata increased by 6.3 (2.1% annually), middle-class equivalized income grew at an annual rate of 2.3%, and that of the upper class at the rate of 3.3%.

The impact of exchange rate on average equivalized income per class shows a trend of increasing disparities between classes in the 2008-2018 period. Equivalized income ratios increased between the middle and lower

classes from 2.28:1 in 2008 (EUR 289 versus EUR 127) to 2.36:1 in 2018 (EUR 318 versus EUR 135) and between the upper and middle classes from 2.18:1 in 2008 to 2.26:1 in 2018. Extreme ratios between the class of the richest and the class of the poorest increased from 4.96:1 to 5.33:1 in 2018 (EUR 720 versus EUR 135).

In 2018, only the upper class reached the real equivalized income it generated in 2009. While the class of the richest in 2018 really reached the real equivalized income of 2009, the backlog of the lower class was 10 index points and the backlog of the middle class was 5.8 index points. Within the middle class, the gap in relation to 2009 was at the level of the lower middle (-5.0 index points) and the upper middle classes (-5.5 index points). The largest decline in income of all classes was recorded in 2012 (average total decline of -13.5 index points).

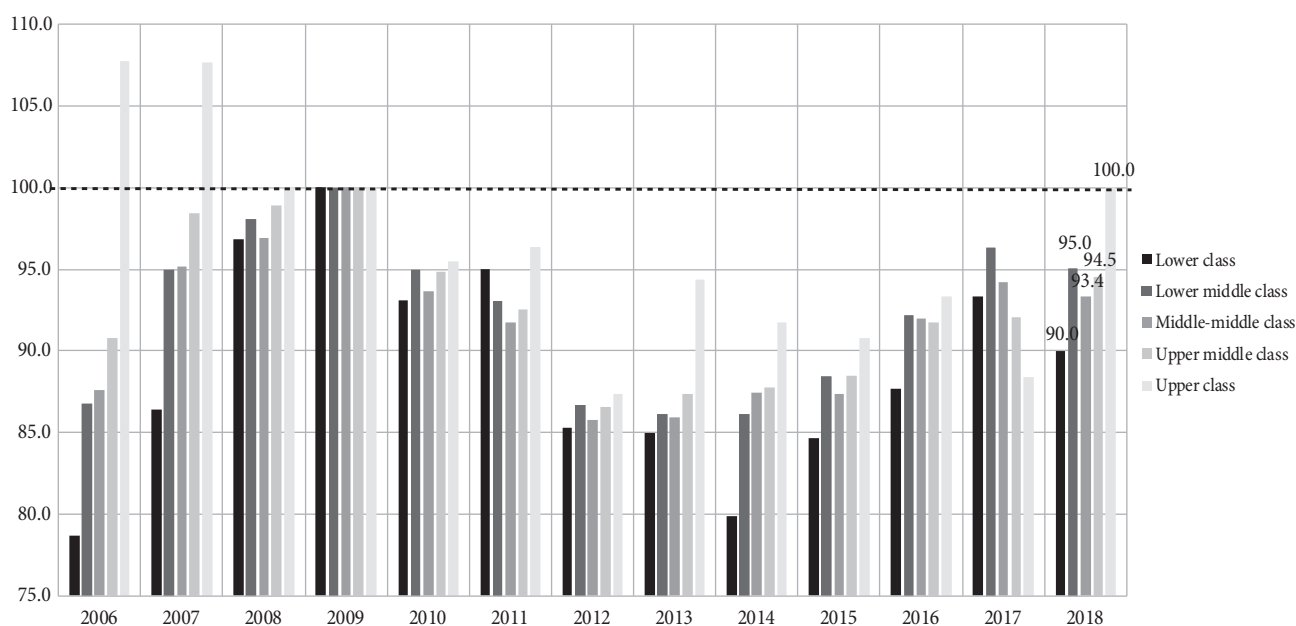
The structural disposition of income classes slightly changed during the transition: the share of middle-class income in 2018 was slightly lower (62.9%) than the share

Table 4: Transitional and structural movements of equivalized income by class in EUR

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Lower class	84	104	127	124	112	128	112	120	112	117	120	134	135
Lower middle class	151	186	210	201	186	204	185	198	196	200	206	226	233
Middle-middle class	203	247	276	268	243	267	243	262	265	262	274	293	304
Upper middle class	285	346	382	363	334	365	332	361	360	360	370	388	417
Upper class	552	618	630	592	549	622	547	637	615	603	615	608	720
Average of all classes	209	249	275	263	241	268	240	264	259	260	267	282	303

Source: Author's recalculation based on HBS.

Figure 1: Impact of recession on equivalized income by class (2009=100)



Source: Author's recalculation based on HBS.

in 2008 (63.2%), and the same goes for the participation of the lower class (from 13.9 % to 13.4%); in contrast, the share of the richest increased from 22.9% to 23.7%. The upper middle class participation slightly fell in the middle-class structure (-0.2%), while the other two classes retained the same share.

Equalized consumption decile analysis

The real growth of average equalized middle-class consumption in the 2006-2018 period was 0.8% per year (cumulative growth of 9.5%), which was equal to the average growth of equalized consumption of all consumer units. Within the middle class, the highest growth was recorded in the upper middle class (0.9%) and the basic middle class (0.8%), while the most modest growth of 0.6% on average per year was registered in the lower middle class. The consumption of the lower class recorded the slowest growth (0.5% on average per year), while equalized

consumption of the richest grew on average by 1% per year (cumulative growth of 12.8%).

Table 5: Real growth/decline in average equalized consumption by class in 2006-2018

	2006-2008	2009-2014	2015-2018	2006-2018
Lower class	6.6	-1.4	-0.6	6.5
Lower middle class	3.6	0.2	2.0	6.8
Middle-middle class	4.2	0.4	4.4	9.5
Upper middle class	2.3	-0.1	9.0	11.1
Middle class	3.3	0.1	5.7	9.5
Upper class	-3.0	-2.6	17.9	12.8
Average of all classes	2.3	-0.7	7.3	9.8

Source: Author's recalculation based on HBS.

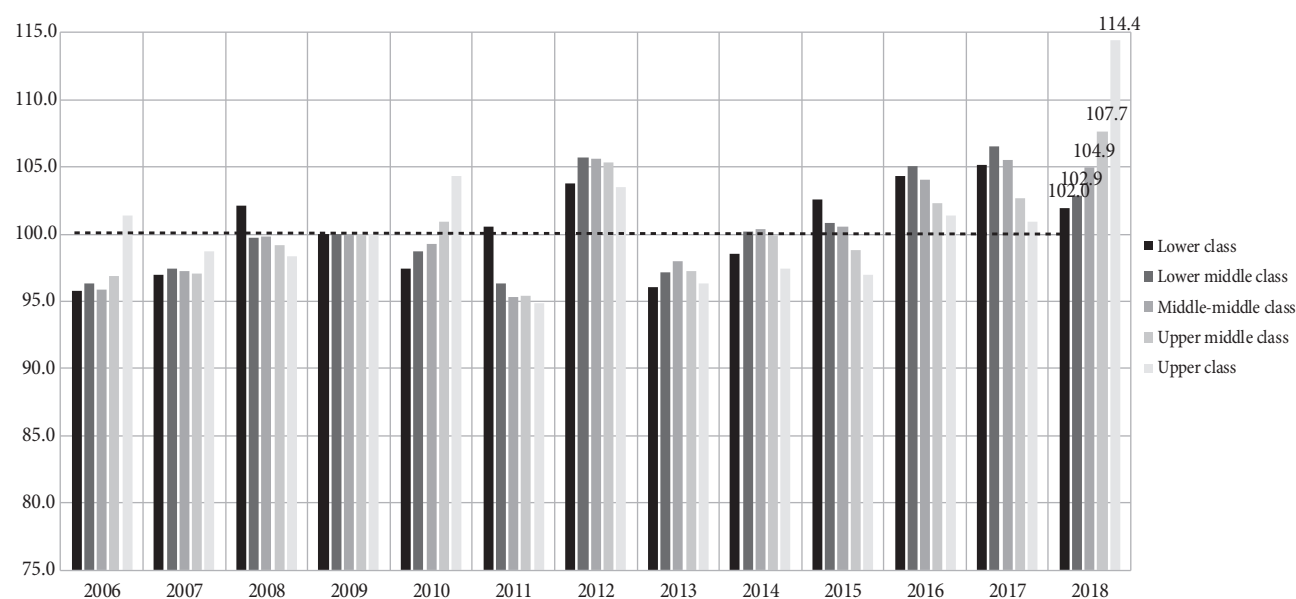
The analysis of the 2006-2018 dynamics by subperiods shows that the growth of the average middle-class consumption in the 2006-2008 period was 3.3%, it was 5.7% (on average 1.9% annually) in the recovery period from 2015 to 2018, while during the 2009-2014 recession period there was no growth of equalized consumption of the middle class.

Table 6: Transitional and structural movements of equalized consumption by class in EUR

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Lower class	103	117	135	124	117	136	136	136	138	142	144	151	154
Lower middle class	157	178	199	188	180	197	210	208	213	212	220	233	235
Middle-middle class	198	225	254	239	230	248	267	267	271	269	277	293	305
Upper middle class	267	300	336	319	312	331	355	354	360	353	363	380	417
Upper class	459	500	547	523	529	540	573	574	576	568	590	613	727
Average of all classes	201	226	253	239	233	250	265	264	268	266	274	288	310

Source: Author's recalculation based on HBS.

Figure 2: Impact of recession on equalized consumption by class (2009=100)



Source: Author's recalculation based on HBS.

Similar to the equivalized income decile analysis, the impact of exchange rate on average equivalized consumption by class shows a trend of increasing disparities between classes in the 2008-2018 period. The equivalized consumption ratios increased between the middle and lower classes – from 1.96:1 in 2008 (EUR 263:EUR 135) to 2.08:1 in 2018 (EUR 319:EUR 154) and between the upper and middle classes – from 2.08:1 to 2.28:1. Extreme ratios between the class of the richest and the class of the poorest increased from 4.06:1 in 2008 to 4.73:1 in 2018 (EUR 727:EUR 154). In the structure of the middle class, a gradual increase in the difference between the subclasses was recorded: the largest was the gap formed between the upper middle class and the other two strata of the middle class.

In 2018, all classes had higher equivalized consumption in real terms than in 2009: by 2 index points in the lower class, by 5.6 index points in the middle class and by 14.4 index points in the wealthiest class. Within the middle class, higher spending relative to 2009 was achieved in all three subclasses.

The structural distribution of spending at the level of classes slightly changed during the transition: the share of middle-class spending in 2018 was slightly lower (61.8%) than in 2008 (62.4%), and the same goes for the participation of the lower class (from 16% to 14.9%); in contrast, the share of the richest increased from 21.6% to 23.4%. In the middle-class structure, the highest decrease was recorded in the middle-lower participation (by 0.6%), followed by the middle-middle class (by 0.3%), while the share of the upper middle class increased from 26.6% to 26.9%.

Decile analysis of income per capita

The transitional growth of the middle-class household income per capita of 10.8% in the 2006-2018 period (on average 0.9% annually) is the result of an 11.6% increase (5.6% annually) in per capita income in the 2006-2008 pre-crisis period and 8.7% (2.8% p.a.) growth over the 2015-2018 recovery period. The decline in per capita income of the middle class in the 2009-2014 recession period was 11.7%. In 2015-2018, per capita income of the poorest class grew by 9.0%, while the richest class recorded an increase of 9.9%.

Table 7: Real growth/decline of income per capita per class by subperiods

	2006-2008	2009-2014	2015-2018	2006-2018
Lower class	25.0	-14.4	9.0	20.3
Lower middle class	15.1	-12.1	9.9	14.2
Middle-middle class	11.8	-11.7	9.4	11.3
Upper middle class	9.1	-8.4	8.0	9.0
Middle class	11.6	-10.3	8.7	10.8
Upper class	-6.0	-6.7	9.9	-4.0
Average of all classes	7.6	-9.9	9.0	7.8

Source: Author's recalculation based on HBS.

In the 2009-2018 post-crisis period, per capita income declined in all classes, except for the class of the richest. The largest decrease was registered in the lower class (-6.8%, -0.8% annually on average), while within the middle class the same decrease was recorded in per capita income in the lower middle and middle-middle classes (-3.4%).

Table 8: Post-crisis growth/decline rates of income per capita by classes in 2009-2018

	Lower middle class	Middle-middle class	Upper middle class	Upper class	
Lower class	-6.8	-3.4	-3.4	-1.1	2.5

Source: Author's recalculation based on HBS.

In 2018, the real average income of the middle class per capita was 0.7% lower than in 2008. Same year, the upper class had by 2.1% higher per capita income, while the decline in real income per capita of the poorest class was -3.7%. Within the middle class, the backlog for 2008 was nearly the same for all subclasses.

Decile analysis of consumption per capita

The middle-class consumption per capita in the 2006-2018 period annually grew by 1.1% (14.1% throughout the period). All classes experienced a similar increase in per capita consumption (around 14%). In 2008-2012, the middle class recorded an increase of 8.9% in per capita consumption, the richest posted a growth of 9.4%, while per capita consumption of the lower class increased by 1.6%. Only in 2018 did the middle and upper classes reach the consumption levels from 2012.

In the 2009-2018 post-crisis period, per capita consumption of all classes increased (overall growth of 9.6%). The lowest growth of 6.4% was recorded by the lower

Table 9: Real growth/decline in per capita consumption per class by subperiods

	2006-2008	2009-2014	2015-2018	2006-2018
Lower class	9.8	-1.3	1.9	13.8
Lower middle class	4.6	0.7	4.8	12.5
Middle-middle class	3.9	1.3	7.1	13.7
Upper middle class	2.7	1.5	10.4	15.3
Middle class	3.5	1.2	7.9	14.1
Upper class	-1.6	1.0	12.4	13.4
Average of all classes	3.2	0.8	8.0	13.9

Source: Author's recalculation based on HBS.

class, followed by 8.9% at the level of the middle class, while consumption of the richest increased the most (13.6%).

Table 10: Post-crisis per capita consumption growth rates by classes in 2009-2018

Lower class	Lower middle class	Middle-middle class	Upper middle class	Upper class
6.4	6.7	8.0	10.8	13.6

Source: Author's recalculation based on HBS.

Income decile analysis based on SILC

The real growth of average equivalized middle-class income in 2013-2018 was 1.8% per year (cumulative growth of 9.1%), which is significantly higher than the real growth of income of all consumer units (cumulative growth of 1%). After the fall of the real income in 2014, from 2015 to 2018 the income of the poorest increased, but did not reach

Table 11: Real growth/decline in annual equivalized income by class in 2013-2018 (SILC)

Lower class	Lower middle class	Middle-middle class	Upper middle class	Upper class
-0.4	1.7	1.8	1.4	0.1

Source: Author's recalculation based on SILC.

the level of 2013 (it was lower by 1.8%). The equivalized income of the richest in the 2013-2018 period remained at a similar level.

Coefficient of variation of income and consumption

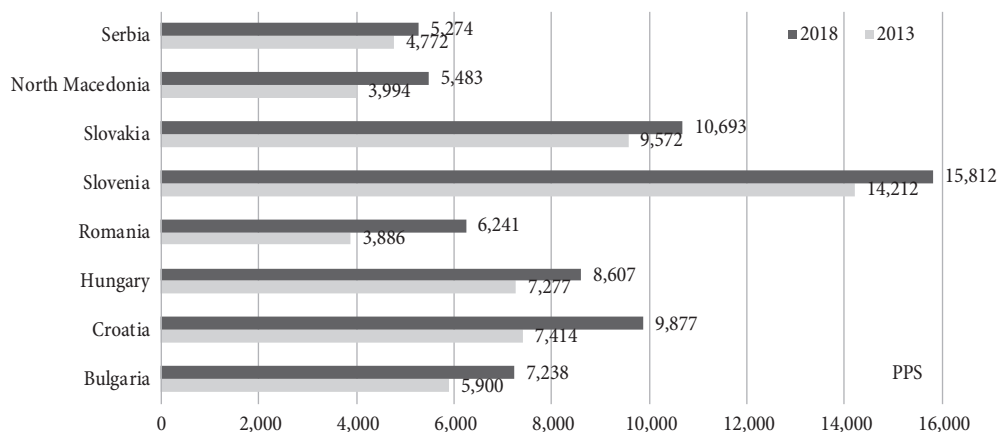
Decile analysis of the coefficient of variation in the crisis of 2009 and 2018 shows significant discrepancies in income and consumption between some deciles. The coefficients of variation of income for all deciles are higher (both HBS and SILC) than of consumption. The basic conclusion is that the gap between the extreme deciles, the poorest and the richest deciles, widened.

Comparative analysis of transition countries shows that Slovenia, Slovakia and Croatia recorded the highest values of the upper limit of equivalized income per decile. Analysis of the trend of changes in the upper limit of equivalized income per decile in PPS (purchasing power standard) in 2015-2018 signals a particularly high growth in Romania (growth of around 50% in all deciles). The value of income per consumer unit in Serbia recorded high growth in the first four deciles (the increase in the upper income limit of the 1st decile was the highest), while modest growth was registered in the 9th decile. The analysis of the central part of the distribution of income by decile (upper limit of the 5th decile) shows large differences between the transition countries, e.g. the Slovenian middle class recorded the highest threshold value (15,812 PPS), which is three times higher than the 5th decile threshold in Serbia.

Table 12. The coefficient of variation of income and expenditure in 2009 and 2018

Decile	HBS-income			HBS-consumption			SILC-income		
	2009	2018	The rate of average income 2009-2018	2009	2018	The rate of average consumption 2009-2018	2013	2018	The rate of average income 2013-2018
1	32.4	41.9	-19.2	22.2	19.9	2.0	70.1	504.9	-40.9
2	6.7	8.6	-8.9	5.9	6.7	1.1	13.2	13.8	8.7
3	4.9	5.6	-6.3	4.0	4.4	2.7	7.4	8.2	9.6
4	4.4	4.4	-4.3	3.8	4.0	2.3	5.4	6.3	11.6
5	3.9	3.8	-5.6	3.4	3.8	3.3	5.2	4.2	10.6
6	4.2	3.5	-6.4	3.3	3.8	4.2	4.7	4.1	8.1
7	4.0	4.2	-6.9	3.5	4.2	5.5	5.4	4.2	4.8
8	4.1	4.6	-6.2	4.8	4.5	6.7	5.3	4.6	2.0
9	6.6	6.9	-4.9	6.0	7.1	8.5	7.9	6.4	-0.4
10	28.6	44.5	0.0	29.8	29.9	14.4	43.6	39.8	-8.4

Source: Author's recalculation based on HBS and SILC.

Figure 3: Upper limit of the 5th decile of equivalized income in transition countries (PPS)

Source: Eurostat, Distribution of income by quintiles - EU-SILC and ECHP surveys.

Economic growth and the middle class in Serbia

The consequences of transition, economic recession and the cyclicity of economic growth had a direct impact on the economic position of the middle class in Serbia in 2006-2018. Econometric studies show that the impact of middle-class growth on economic growth depends on initial level of GDP per capita [4]. The impact of middle-class growth on GDP growth is significantly greater if the country is at a higher level of development. Furthermore, research shows that investment growth has a positive impact on economic growth and middle-class growth. Overall, economic growth does not create middle class; on the contrary, the middle class is the generator of growth: it fosters dynamic entrepreneurship and innovation, creates a stable consumer base that generates productive investments, creates a favorable social environment for growth and, most importantly, promotes education and more efficient functioning of institutions. In the most famous economic doctrine of the last century, John Maynard Keynes explained the relationship between the middle class and economic growth: “stable consumption of the middle class encourages investment and economic growth” [19]. Neoliberal models of growth in transition have ignored economic transformation of the middle class and, primarily its positive influence on institution building. The models of growth induced by the middle class include, above all, stable consumption. Investments foster economic growth, but growth is impossible without the spending of the middle class, because the richest do not

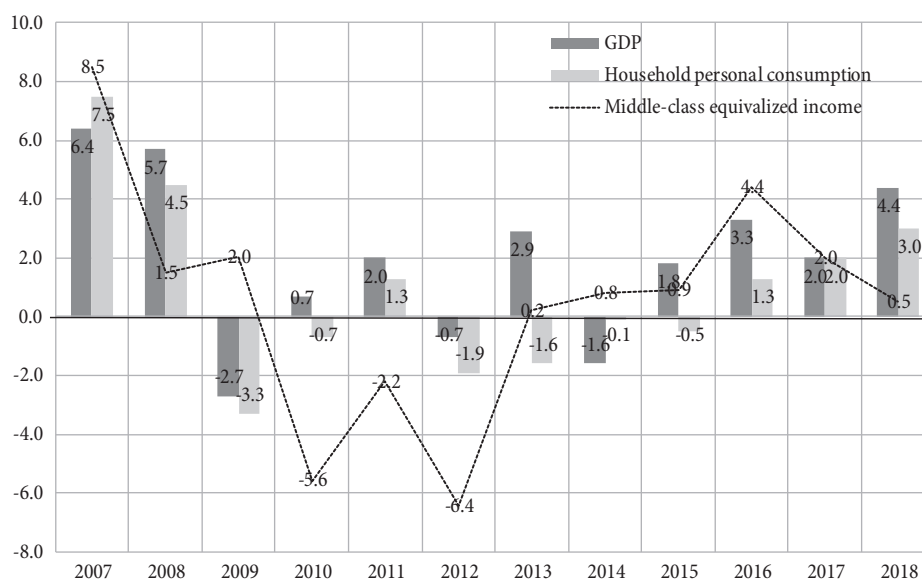
spend enough in order to stimulate economic growth (they save more). The conclusion is clear: to foster sustainable economic growth, the middle class must be able to spend, which is only possible if its incomes grow.

The interdependence of the middle-class income, personal consumption and economic growth in Serbia is legitimate to some extent only in the 2006-2008 pre-crisis period and the economic recovery period from 2015 to 2018:

- In the pre-crisis period, the growth of the middle-class equivalized income influenced the growth of personal consumption and GDP (in 2008 the growth of the middle-class equivalized income, personal consumption and GDP was 1.5%, 4.5% and 5.7%, respectively);
- The 2009-2014 crisis period is characterized by an asymptotic trend: in 2009 and 2014, there was an increase in the middle-class equivalized income, as opposed to a decline in personal consumption and GDP (in 2010 and 2011, there was a large decrease in middle-class income versus a rise in personal consumption and GDP);
- The period of economic recovery from 2015 to 2018 was also characterized by economic growth and growth of the middle-class income (in 2016 the growth of the middle-class income, GDP and personal consumption was 4.4%, 3.3% and 1.3%, respectively).

The economic position of the middle-class was hit hard by the recession in 2009, which is why in 2018 the middle-class revenue per capita was still

Figure 4: Economic growth, personal consumption and middle-class income (growth rates)



Source: Author's recalculation based on HBS and RSO data.

significantly lagging behind that of 2008. Economic growth per capita increased by 18% in real terms, but the real growth in net earnings, after a huge decline in 2009, significantly recovered only in the 2015-2018 period. If we change the analytical perspective in comparison to 2009, the year of crisis (2009=100), GDP per capita increased by 21% in real terms, net salaries per employee increased by 2%, but the middle-class income per capita dropped by 3% in real terms.

Consumer basket and the middle class

Since 2001 the implementation of the neoliberal model of privatization, wrapping up privatization goals in an ideological cloak, has been in line with the dynamics dictated by the members of new elites (political, economic). The costs of property transformation were mostly experienced by the middle class, primarily the working class and peasantry. "Privatization served to create a new capitalist class and to efface the working class" [21, p. 102]. The structure and position of the middle class significantly changed in the transitional period. The growth of the private sector managed to partly amortize the huge influx of unemployed workers; however, due to a lack of labor regulations in the field of the protection of economic and social rights of workers, a large number of members of the middle class resorted to illegal employment, especially in the pre-crisis

period. The polarization in the society was becoming more pronounced: on the one hand, a rather new, heterogeneous, powerful capitalist class emerged, while, on the other, the material status and reputation of the middle class declined (class stratification of peasantry, deterioration of middle and small estates, insecurity of employment of white-collar workers) and poverty grew. The middle class was divided, with very little capacity to absorb the shock caused by the conflict between the capitalist and the working class. The contents of the consumer basket in transition was becoming scarce. The major consequence of the applied model of ownership transformation in Serbia is an increase in inequality [14].

The standard of living in the post-crisis period had been constantly declining until 2015. The consumer basket to net earnings ratio rose from 1.34 in 2008 to 1.51 in 2015 (for an average consumer basket a household needed 1.5 average net income). In 2015-2018, living standards improved, so that the ratio of consumer basket to net earnings in 2018 was the same as in 2012 (1.44).

Table 13: Consumer basket to net earnings ratio in 2008-2018

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1.34	1.50	1.47	1.46	1.44	1.48	1.48	1.51	1.46	1.45	1.42

Source: Author's recalculation based on RSO data.

The general downward trend in the number of members per household influenced the annual fluctuations in the

Table 14: Consumer basket growth/decline rates and net earnings (at constant prices in RSD in 2018)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Average consumer basket per household	-0.3	-0.8	-0.2	-0.5	1.0	-1.1	-0.5	-0.4	0.1	-0.4
Average net earnings per employee	-10.6	1.0	0.2	1.1	-1.5	-1.5	-2.1	2.5	0.9	1.6

Source: Author's recalculation based on RSO data.

consumer basket. The largest real decline in average net earnings occurred in 2010 (-10.6%), while the real increase in net earnings occurred in the 2015-2018 period.

The post-crisis decline and the increasing economic stratification of the middle class illustrate quite well the trend of income and consumption lagging behind the average consumer basket over the whole period, especially from 2012.

- Growth in the middle-class income and consumption lags behind the value of the average consumer basket. The backlog was the largest in 2013 (11% and 9%, respectively). It was significantly reduced in 2015-2018, but an upward trend was observed in the middle-class consumer spending gap in relation to the average consumer basket;
- The largest backlog of the middle-class revenue in relation to the consumer basket was in 2012-2013. (11%), only to be halved in 2018 (5%);
- The relationship between the middle-class consumption and the average consumer basket shows significant fluctuations, especially in the period from the first post-crisis years through 2013.

Inequality and the middle class

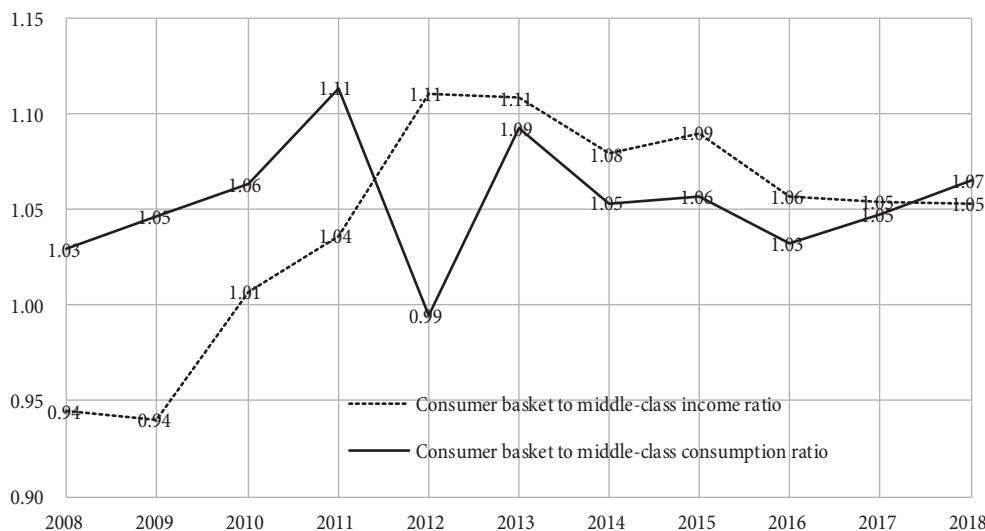
Since the graph showing the situation in Serbia in the 2009-2018 post-crisis period of transition is approximating to the famous elephant curve [17], which shows the global income distribution, we could conclude that transitional post-crisis losses were unequally distributed. The whole post-crisis transition elephant was submerged, all percentiles of income were in the negative zone and only 5% of the richest had a positive per capita income growth rate.

The post-crisis income distribution in the period of transition highlights three points in the graph: (A) the median value of total income distribution per capita (the top of the elephant's head dividing the population into richer and poorer halves); (B) members of the upper middle class (the highest point); and (C) the highest point of the richest percentile.

Analysis of the post-crisis income distribution shows:

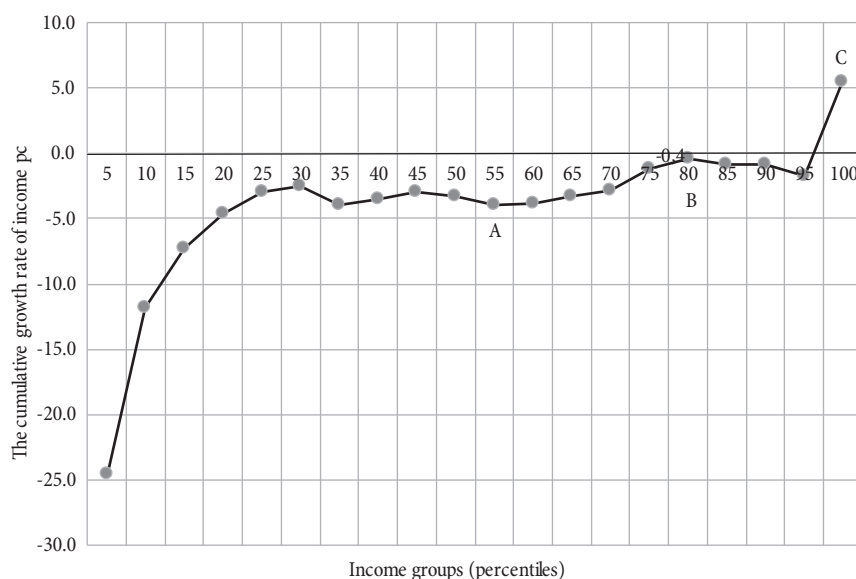
- The middle class (A) is the loser of the transition in the post-crisis decade from 2009 to 2018 (percentiles around the median (35-60) had a decade-long decline in revenue of -4%). The contribution of the

Figure 5: Consumer basket to middle-class income and consumer basket to middle-class consumption ratios in 2008-2018



Source: Author's recalculation based on HBS and RSO data.

Figure 6: “Elephant curve” of inequality in Serbia in 2009-2018



Source: Author’s recalculation based on HBS.

decline in the middle-class income to the overall decline is -0.9%;

- The income of the members of the upper middle class (80th percentile) is at the same level as in 2009 (B);
- The percentile of the richest (X) is the only winner in the last decade. The income of this class actually increased by 5.5% during this period. While in 2009 5% of the income of the richest was the same as the income of 25% of the poorest, in 2018 it was the same as the income of 28% of the poorest;
- In 2009 a half of the poorest population accounted for 30% of total income, and a decade later this percentage dropped by 1% (29% of the total revenue).

Decile analysis of inequality faces a number of methodological pitfalls [28, pp. 21-23, 32, 44-45]. However, inequalities of both revenue and consumption models are among the largest in Europe. The analysis employed the most representative indicators of inequality: the Gini coefficient, C90/C10 decile ratio (income to consumption ratio between the richest and the poorest decile) and the C80/C20 quintile ratio (income to consumption ratio between

the richest and the poorest quintile). Generally, income inequality is much larger than consumption inequality.

According to both surveys (HBS and SILC), inequalities were permanently decreasing in the 2006-2017 period. Due to a more complex methodological inclusion of the richest decile, according to HBS, inequalities significantly increased in 2018. The gap between income and spending was the narrowest in 2017 and 2018: the difference between the Gini coefficients of income and consumption in 2017 and 2018 was 2.3 p.p. and 2.0 p.p., respectively, indicating a more equal trend in income and consumption. According to SILC, since the beginning of the survey in 2013, the Gini income coefficient was at its lowest in 2018 (35.6%).

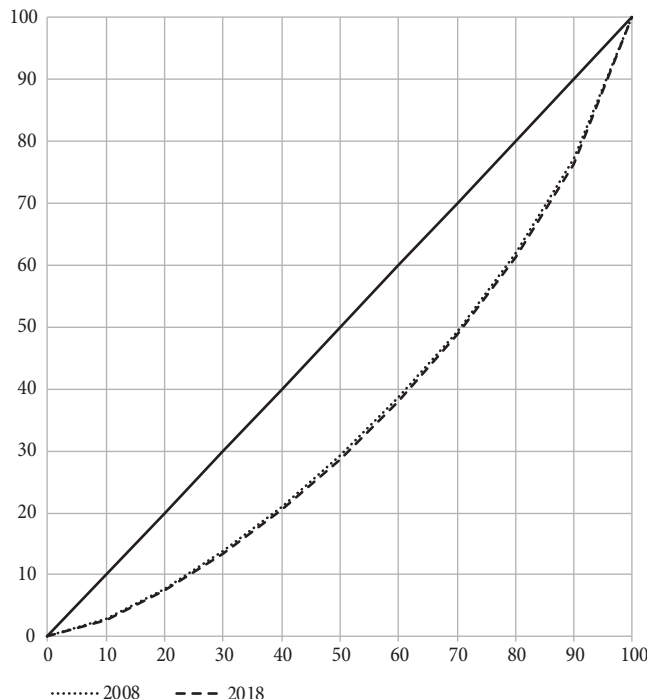
Decile analysis of inequality based on the income model shows that in the 2009-2018 post-crisis period all deciles reduced their participation or remained at the same level, with the exception of the tenth decile (the richest class) which increased its share in total revenues from 22.5% to 23.7%. The three poorest deciles reduced their share in total income.

Table 15: Gini coefficient of income (HBS and SILC) and consumption (HBS)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Income (HBS)	34.8	33.2	30.3	29.6	30.1	29.9	30.0	31.4	31.8	30.7	30.5	27.8	31.3
Consumption (HBS)	28.2	27.5	26.6	27.2	28.4	26.2	27.2	27.3	27.0	26.2	26.6	25.5	29.3
Income (SILC)								38.0	38.3	40.0	39.8	37.8	35.6

Source: Author’s recalculation based on HBS and SILC.

Figure 7: Lorenz curve of income in 2008 and 2018

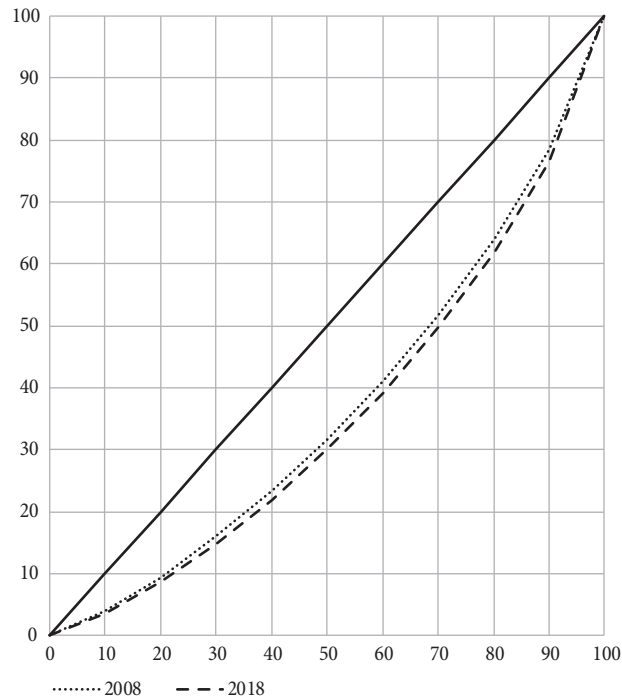


Source: Author's recalculation based on HBS

The research into the qualitative dimension of income inequality between different social groups using the Lorenz curve (curve of income/consumption distribution of different social groups) shows slight shifts (curves almost overlap) in 2008-2018. Inequality analysis based on the spending model is sharper than the analysis based on the revenue model. In the 2009-2018 post-crisis period all deciles reduced their share, except for the tenth and ninth deciles (the richest class) which together increased their share in total spending from 36.4% to 38.1%. Both the lower and middle class reduced their share in total spending.

The previous findings are complemented by an analysis of extreme inequalities: C90/C10 decile ratio (income ratio of the richest and poorest deciles) and the C80/C20

Figure 8: Lorenz curve of consumption in 2008 and 2018



quintile ratio. The rise of extreme inequality is shown by the following data: while in 2009 10% of the richest had 7.3 times higher income than 10% of the poorest, in 2009 that ratio increased to 9:1. Quintile analysis over the same period shows that 20% of the richest in 2009 had 4.7 times higher income than 20% of the poorest. A decade later the ratio increased to 5.2:1.

Analysis of extreme inequalities in the consumption model shows that they grew at a slower rate and were at a lower level than extreme differences in the revenue model. The C90/C10 ratio increased from 5.8:1 in 2009 to 6.5:1 in 2018, while the C80/C20 quintile ratio increased from 4.0:1 to 4.4:1 in 2018.

Comparative analysis of inequalities in the countries of the region and in relation to the EU average (based on

Table 16: Indicators of income inequality

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
C90/C10	11.4	10.1	7.8	7.3	7.4	7.2	7.8	8.2	9.1	8.4	8.6	7.4	9.0
C80/C20	6.3	6.0	4.9	4.7	4.9	4.7	4.9	5.0	5.4	5.1	5.0	4.6	5.2

Source: Author's recalculation based on HBS.

Table 17: Extreme proportions of consumption inequality

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
C90/C10	6.4	6.0	5.5	5.8	6.3	5.2	6.0	5.8	5.7	5.5	5.8	5.7	6.5
C80/C20	4.2	4.0	3.8	4.0	4.2	3.7	4.0	4.0	4.0	3.8	3.9	3.9	4.4

Source: Author's recalculation based on HBS.

SILC survey) shows that inequalities in Serbia decreased in 2013-2018, but also that they were the highest in Europe, with the exception of Bulgaria and Romania. The Gini coefficient, as one of the key indicators of economic vulnerability [7, p. 6], is the lowest in Europe in successful transition countries, such as Slovenia and Slovakia (23%) and in Hungary and Croatia where it is below the EU average (30.6%). Serbia made a major positive shift compared to 2015 (when the Gini coefficient reached a record high of 40%), while in some neighboring countries a reverse trend was registered: inequalities increased in Bulgaria, Romania and Hungary.

Comparative analysis of the quintile ratio shows a positive trend of reducing extreme differences in Serbia, compared to the countries of the region; however, the quintile ratio is still high: 20% of the richest have an income that is 8.6 times higher than 20% of the poorest. High inequalities also exist in some of our neighboring countries like Bulgaria (7.7) and Romania (7.2), extreme differences in Hungary and Croatia are below the average of the EU-28, while Slovenia and Slovakia had the lowest S80/S20 ratio in 2018 (3.4 and 3.0, respectively).

Conclusion

In the transition period, and especially in the post-crisis period, the middle class in Serbia failed to secure the position of a stabilizing factor in society and its cohesive influence declined. This was initially caused by the consequences of applied models of social system transformation at the beginning of the new millennium, which opened the Pandora's box of structural problems of transforming the working class into the middle class and decline in the social status of the middle class (middle-class pauperization), as well as by devastating post-crisis recession effects, the most developmentally difficult of which are migration processes and brain drain. Because of its social, developmental, economic, social, institutional and political influence, the middle class in Serbia faces a number of challenges, the most important issue being: Will the middle class in Serbia take responsibility for the poverty, rising inequality and development of stable democratic processes in the future?

Overall, the main findings of the study of the economic transition of the middle class in Serbia in 2006-2018 are the following:

- Low real growth of average income per consumer unit (equivalized income) of the middle class in 2006-2018 (0.5% annually) contributed to the fact that no class in 2018 actually reached the equivalized income they generated in 2009. In the period of recession from 2009 to 2014, there was virtually no growth of revenue per middle-class consumer unit;
- On the other hand, real growth of average equivalized consumption of the middle class in the same period (0.8% annually) made it possible for all classes in 2018 to have realistically higher equivalized consumption compared to 2009. During the recession, the middle-class spending stagnated;
- The structural disposition of classes changed with regard to both income and spending: the share of income of the middle and lower classes decreased, while the share of the richest increased;
- The analysis of the middle-class per capita income shows a 0.7% decline in 2018 compared to 2008. At the same time, all classes had similar per capita consumption growth (around 14%), which is why in the middle class it was by 10.2% higher in 2018 compared to 2008. Income analysis based on SILC 2013-2018 shows that the average middle-class income in 2016 reached the levels of 2013 and saw significant growth thereafter;
- The income coefficient variations for all deciles are higher for income (both BHS and SILC) than for consumption. The highest coefficient of variation is found in the poorest and richest deciles.

Economic growth does not create the middle class; on the contrary, the middle class is the generator of growth: it encourages dynamic entrepreneurship and innovation, productive investments, creates a favorable social environment for growth and most importantly it promotes education and efficient operation of institutions. Investments are driven by economic growth [20], but they are impossible without the spending of the middle class. To foster sustainable economic growth, the middle class must

be able to spend, which is only possible if its income goes up. Interdependence of the income of the middle class, personal consumption and economic growth displays a pattern only in periods of conjuncture. The recession did not equally affect the decline in per capita income of all subclasses of the middle class in Serbia: the lower middle class was hit the most.

The costs of property transformation were mostly borne by the middle class, above all the working class and peasantry. The structure and position of the middle class significantly changed in the transitional period. Polarization in the society is increasingly pronounced: on the one hand, a new, rather heterogeneous, powerful capitalist class emerged, while, on the other, the material position and reputation of the middle class declined (class stratification of peasantry, deterioration of medium and small estates, employment insecurity of white-collar workers) and poverty grew. The middle class was divided, with very little capacity absorb the shock caused by the conflict between the capitalist and the working class. The contents of the consumer basket in transition was growing scarce. The research shows that both income and consumption of the middle class were lagging behind the average consumer basket.

The elephant curve clearly indicates the uneven distribution of the transition burden: post-crisis losses are unevenly distributed across classes. The biggest loser was the middle class, whereas the richest percentile was the only transition winner in the last decade. While in 2009 5% of the income of the richest was the same as the income of 25% of the poorest, in 2018 it was the same as the income of 28% of the poorest. The growth of inequality is confirmed by both decile and quintile analysis. Although, according to the SILC analysis, inequalities in Serbia decreased in the 2013-2018 period compared to the EU average, they were, with the exception of Bulgaria and Romania, the highest in Europe;

Globalization processes, transition models of growth and transformation of the economy and economic recession are the largest causes of the economic decline of the middle class in Serbia. Growth models did not support the recovery and strengthening of the middle class. Recession shocks only further contributed to the

weakening of the economic position of the middle class. The burden of fiscal consolidation was largely borne by the middle class. The recovery period, from 2015 until now (with the average growth rate of 3.5% in the 2015-2019 period), creates a much more favorable environment for state intervention measures, primarily within the tax and social policy.

The spectrum of measures aimed at economic empowering of the middle class includes targeted measures in different fields: the application of a growth model based on high-productivity jobs, technological development, and innovations; reforming the education system; progressive taxation; raising the minimum wage; labor market policies aimed at tackling the problems of vulnerable groups (women, youth); regional policy; social policy; housing policy; family leave and union strengthening.

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