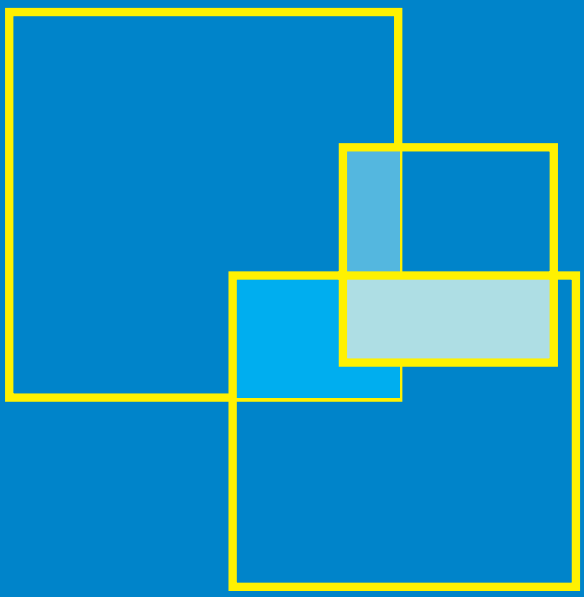
Merab Kakulia Nodar Kapanadze

The Middle Class in Georgia: Quantitative Assessment, Dynamics and Profile

Economic-Statistical Study



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Merab Kakulia Nodar Kapanadze

The Middle Class in Georgia: Quantitative Assessment, Dynamics and Profile

Economic-Statistical Study

Tbilisi
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This study was implemented by the Georgian Foundation for Strategic and International Studies (Rondeli Foundation) with the support of Friedrich-Ebert-Stiftung (FES).

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Leading researcher: Nodar Kapanadze
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Content

Introduction

The middle class is a key factor of stability for any country. Aristotle pointed out that the bigger the middle class – or social group between rich and poor – the more stable the society is.[1] The veracity of this statement is especially clear in modern society, where the middle class acts as an engine of economic growth and social progress. In the first place, this implies that the middle class strives to accumulate human capital and savings. Secondly, it generates creative people, who speed up innovations and stir up economic activity. Thirdly, the consumer capacities of the middle class promote diversification and extension of markets, which in its turn give possibilities for using the economies of scale[2]. And lastly, the middle class can play a decisive role in the improvement of governance – compared with the poor, it has the capacity to demand better public services, more accountability of civil servants and support economic gross-oriented policies.[3]

Due to the aforementioned, it is difficult to overestimate the importance of a study of the quantitative dimension of the middle class and its developmental tendencies, especially in countries with transitional economies - like Georgia - that have acquired sovereignty and undertaken the path for development of the market economy relatively recently.

A quantitative assessment of the middle class in Georgia is provided in studies prepared by World Bank and Asian Development Bank (ADB) experts. In the first study, daily per capita income of households is used as a criterion for identification of the middle class, and in the second – different thresholds of per capita consumer expenditures.[4]

A key particularity of the assessment given in the present study is that the mentioned assessments are not based solely on quantitative limits of per capita incomes/consumer expenditures of the households, but rather it envisages a number of other criteria.

Consequently, the study aims at:

- Defining the middle class identification criteria;
- Assessing the volume of the middle class in Georgia based on these criteria;
- Defining the structure of the middle class;
- Analyzing middle class dynamics from 2009 to 2017;
- Assessing the size of families belonging to the middle class and the average age of their members;
- Studying the resettlement (location) of the middle class;
- Identifying middle class welfare standards;
- Augmenting conclusions for political agendas.

The study was implemented by the Georgian Foundation for Strategic and International Studies (Rondeli Foundation), together with the Friedrich Ebert Foundation (FES), which has extensive experience of fruitful cooperation with the Rondeli Foundation, including in the field of researching socio-economic development trends. In this respect, two projects are most noteworthy – Structure of Unemployment and Structural Unemployment in Georgia (2016) and Chronic Poverty and Income Inequality in Georgia (2017).

The present study, like the above-mentioned studies, was implemented by Senior Fellow of the Rondeli Foundation, Professor at the Georgian Institute of Public Affairs (GIPA) - Merab Kakulia, and leading researcher - Nodar Kapanadze. The statistician Lali Kurkhuli provided technical assistance in data processing.

The study does not have the ambition of providing a comprehensive analysis of the development of the middle class in Georgia. This is one of the first attempts at an economic-statistical assessment of this socio-economic phenomenon in our country and cannot be not be insured from shortcomings. Thus, the authors will be looking forward to receiving comments, feedback and proposals from the audience.

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[1] Aristotle. 1995. Politics. Part one. Translation by Tamar Kukava. Tbilisi. P. 117-118.

[2] Chun, Natalie, Rana Hasan, and Mehmet Ulubasoglu. 2011. The Role of the Middle Class in Economic Development. ADB Working Paper # 245. Asian Development Bank. P. 1. https://www.adb.org/sites/default/files/publication/28751/economics-wp245.pdf

[3] Ibid.

[4] See: De la Torre Augusto, Jamele Rigolini. 2010. MIC Forum: The Rise of the Middle Class. The World Bank. http://www.worldbank.org/content/dam/Worldbank/document/MIC-Forum-Rise-of-the-Middle-Class-SM13.pdf. Asian Development Bank (ADB). 2010. The rise of Asia's Middle Class. https://www.adb.org/sites/default/files/publication/27726/special-chapter-02.pdf

1. Quantitative Assessment of the Middle Class

1.1. Existing Approaches

Generally, absolute and relative indicators of consumer expenditures or incomes are used for identification of a middle class.

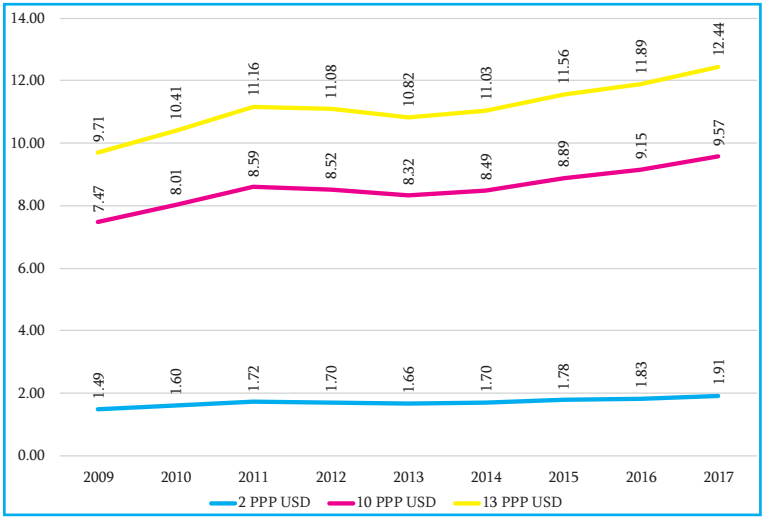
The absolute indicator for identification of the middle class reflects the share of the population whose daily per capita consumer expenditures are within particular quantitative limits, which are expressed in PPP USD.[5]

According to World Bank data, the GEL demonstrated a sharp increase in 1995-2017 against the PPP USD: if one PPP USD in 1995 was 0.3 GEL, by 2017 this indicator increased three-fold and compiled almost one PPP USD (see: attachment 1).

Regarding quantitative limits of consumer expenditures of the middle class, economic literature provides different opinions, based on certain empirical arguments. For example: famous researchers of poverty and inequality - S. Chen and M. Ravalion - propose that the parameters for daily per capita consumer expenditures be set within the range of 2-13 USD (meaning 2005 PPP USD), where 2 USD reflects average national poverty threshold of 70 developing countries, and the 13 USD poverty line in the US.[6] ADB researchers define the per capita consumer expenditures of a middle class in developing countries as being 2-10 PPP USD, per day.[7]

The first chart provides the aforementioned limits of daily per capita consumer expenditures for identification of a middle class, in national currency – GEL.

Diagram #1: Middle Class Identification Boundaries (GEL, per Capita, per Day)



Source: World Bank and the authors' calculations

If we rely on the middle class per capita consumer expenditure parameters as identified by S. Chen and M. Ravalioni (within 2-13 PPP USD per day), the picture in Georgia will be as follows: according to data from the Integrated Household Survey, consumer expenditures for 80 percent of families was within the range of

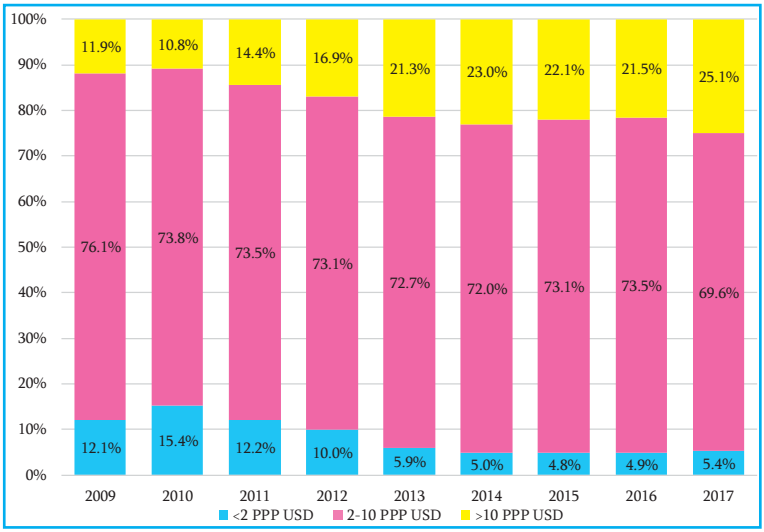
[5] Calculations of international financial institutions, in particular of IMF and WB are used for PPP USD conversion in national currency. See: International Monetary Fund. Implied PPP conversion rate. National Currency per international dollar. http://www.imf.org/external/datamapper/PPPEX@WEO/OEMDC/ADVEC/WEOWORLD; The World Bank. PPP conversion factor, GDP (LCU per international $).https://data.worldbank.org/indicator/PA.NUS.PPP

[6] Chen, S., and M. Ravallion. 2010. The Developing World is Poorer Than We Thought, But No Less Successful in the Fight Against Poverty. Quarterly Journal of Economics 125(4): 1577–625. It shall be mentioned that quantitative criteria of identification of middle class are significantly different in developed and developing countries.

[7] Chun, Natalie, Rana Hasan, and Mehmet Ulubasoglu. 2011. The Role of the Middle Class in Economic Development. ADB Working Paper # 245.

2-13 PPP USD, per day per capita (see: Diagram #2). This figure insignificantly decreased from 2009-2017, due to an increase in the share of households having more than 13 PPP USD per capita consumption.

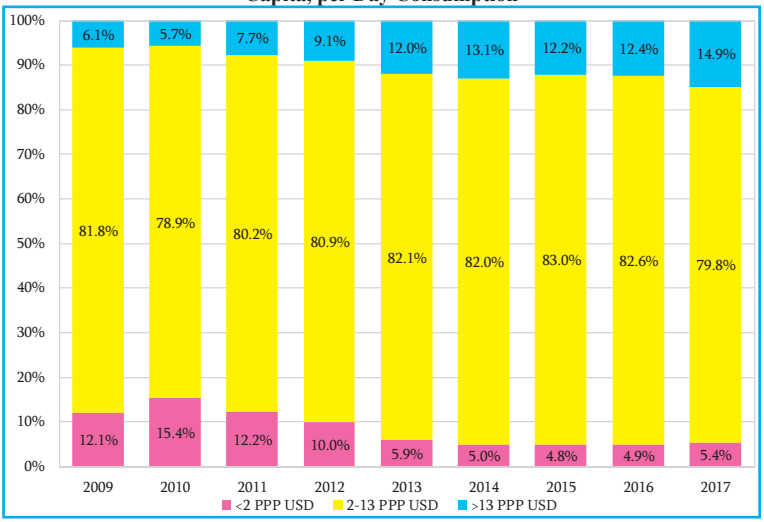
Diagram #2: Distribution of Households in Georgia According to the Limits of 2-13 PPP USD per Capita, per Day Consumption



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Thus, according to the provided criteria, almost 80 percent of households in Georgia belong to the middle class, which is an unimaginably high indicator, and indicates a low relevance of these quantitative limits of identification for the mentioned phenomenon.

Diagram #3: Distribution of Households in Georgia According to the Limits of 2-10 PPP USD per Capita, per Day Consumption



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

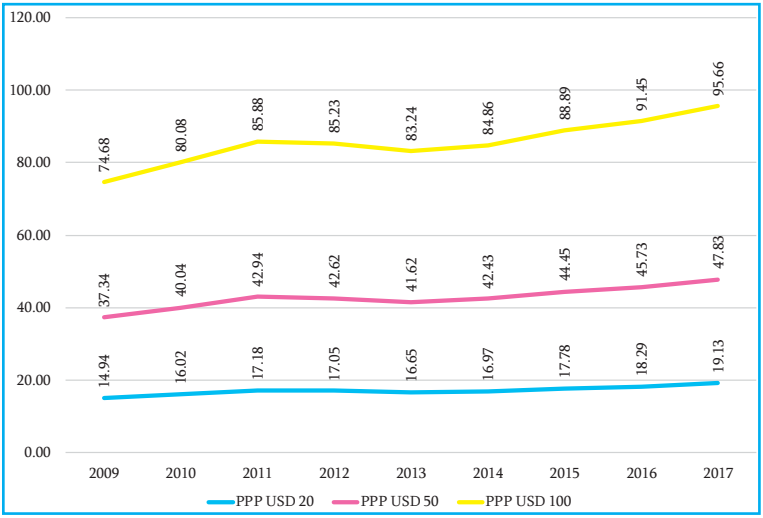
The quantitative assessment of middle class in accordance with the limits provided by ADB experts (2-10 PPP USD per day) (see: Diagram #3) is slightly different: in this case, the middle class in Georgia comprises almost 70 percent of households, which is also too high a figure and does not reflect the real social stratification of Georgian society.

Notably, the lower benchmark of quantitative limits of identification of a middle class cannot match the average poverty level of developing countries. In economic literature, it is clearly highlighted that the lower level of the middle class income should be much higher than the poverty line, to exclude from the middle class those social groups whose cond tions are unstable and there is a high probability of their return to poverty.[8]

A third group of authors defines daily expenditures of middle class as being within 10-20 PPP USD per day, the boundaries of which are equivalent to the average daily per capita incomes of Brazil and Italy, respectively.[9] There is one more viewpoint, according to which average daily per capita income of the middle class is defined as being within the 10-1000 PPP USD range. The lower benchmark in this case portrays the average poverty line of Italy and Portugal; the upper – of Luxemburg, as the richest country having twice more income than median income[10]. Such an approach, according to its initiators, could be used for all – including developed – countries.

Diagram #4 provides the aforementioned limits of daily per capita consumer expenditures for identification of middle class, in national currency – GEL.

Diagram #4: Middle Class Identification Boundaries (GEL, per Capita, per Day)



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

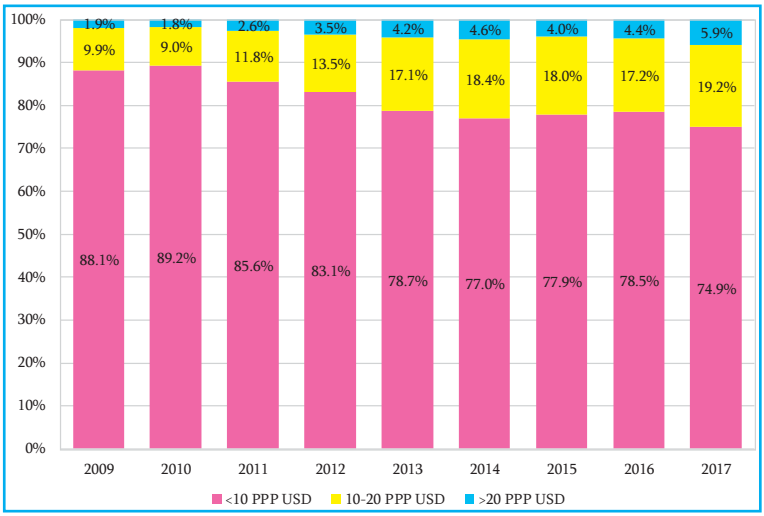
If we define consumer expenditures of households as being within the range of 10-20 PPP USD per day, the weight of the middle class families was 19.2 percent in Georgia in 2017, which at first glance is more aligned with the perception prevalent among society. In the given distribution, an approximately 5 percent share of households have consumption that is more than 20 PPP USD. This is noteworthy, as those that fall into this group are considered to be in the class of the "rich".

[8] Pressman, S. 2015. Defining and Measuring the Middle Class. Working Paper 007. American Institute for economic Research.

[9] Milanovic, B., and S. Yitzhaki. 2002. Decomposing World Income Distribution: Does the World Have a Middle-Class? Review of Income and Wealth 48(2):155–78.

[10] Kharas, H. 2017. The Unpredicted Expansion of the Global Middle Class. An Update. Global Economy & Development Working Paper 100. Global Economy and development in Brookings.

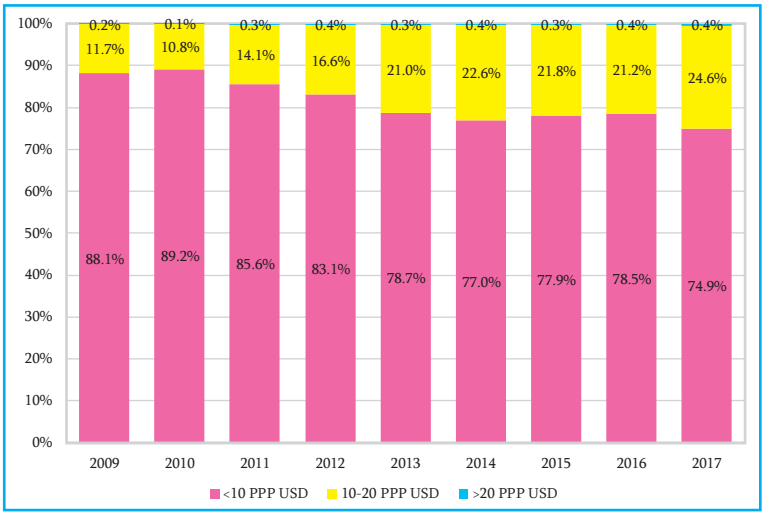
Diagram #5: Distribution of Households in Georgia According to the Limits of 10-20 PPP USD per Capita, per Day Consumption



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

For Georgia, an income equivalent to 100 PPP USD per capita per day is too high a threshold - this is also proven by calculations: the share of households having income more than 50 PPP USD is within the range of statistical error, meaning that this figure is not measurable. Because of this, we used a range from 10-50 USD, according to which the share of middle class families in 2017 was 31 percent – this is the highest figure in the 2009–2017 period. According to these criteria, in 2009, the middle class constituted 14 percent of the population, while the share of the "rich" was lower than 1 percent i.e. non-measurable.

Diagram #6: Distribution of Households in Georgia According to the Limits of 10-50 PPP USD per Capita, per Day income



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

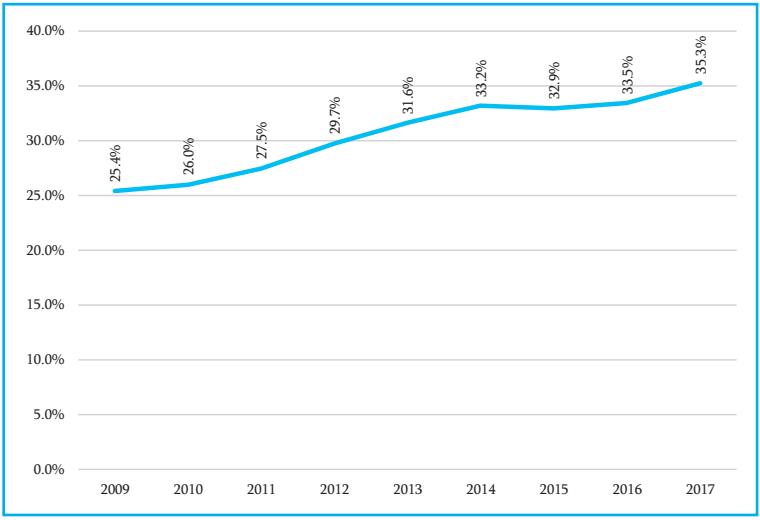
The relative indicator of middle class identification reflects household incomes that belong to a certain segment within the household income distribution scheme (the spectrum). In economic literature, we see two interpretations of this indicator:

1. According to the middle quintile groups of household income distribution i.e. the share those households among total incomes, whose per capita incomes belong to the middle 60 percent of the household spectrum (excluding quintile groups at the edges).[11]

   This method is quite simple and easy to perceive. Nobel laureate in economics Robert Solow – based namely on mentioned method – defined the middle class as the average 60 percent of income receivers.[12] The given approach has one big disadvantage: it assesses only the share of middle class incomes within total incomes, when in reality, the middle class itself constantly compiles 60 percent of households (total of second, third and fourth quintile groups).

   In Georgia, the indicator calculated using this approach was 35.3 percent for 2017, i.e. the middle three quintile groups' share of income within the quintile distribution of per capita income (60 percent of the households) is 35.3 percent of total incomes. It is noteworthy, that this indicator demonstrated a growing tendency from 2009 to 2017. The increasing rate relatively slowed from 2014 to 2016, however a tendency of growth was fully restored in 2016 – 2017.

Diagram #7: Middle Quintile Groups' Income Share Among Total Incomes in Quintile Distribution by Per Capita Incomes



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

2. The second interpretation is based on the criterion of diversion from median incomes or the share of the households whose per capita incomes are within the frameworks of 75-125 percent of median per capita incomes of households.[13]

Unlike the former, this method more precisely defines the weight of households in the middle of the spectrum of income distribution; however, these time series are less useful for an analysis, which is proven by the figures calculated using this approach for Georgia. According to 2017 data, 30.6 percent of the households were in the median 75-125 percent range. The proportion is almost the same in the 2009-2016 period and will be similar in future as well, regardless of whether socio-economic conditions improve or not. Together with the growth of the incomes of the population, the value of the median also increases and almost the same number of households will be within the 75-125 percent range as before. Naturally, the proportion will maintain itself in case of a reduction of incomes as well.

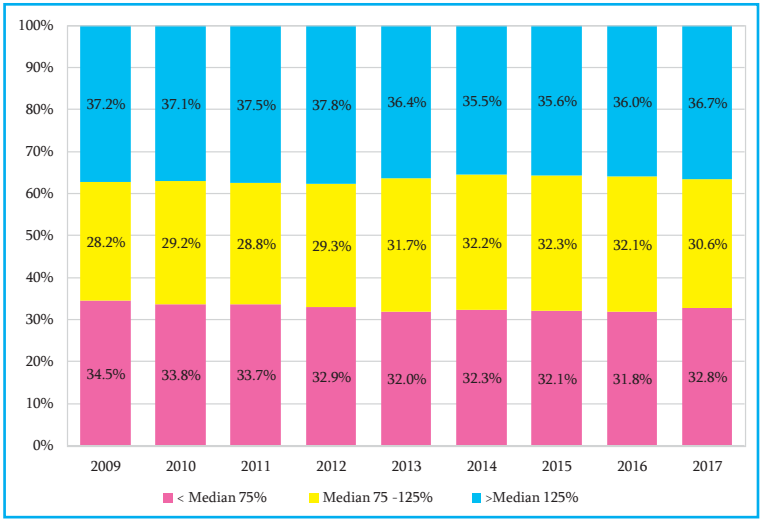
[11] Easterly, W. 2001. Middle-Class Consensus and Economic Development. Journal of Economic Growth 6(4):317–35.

[12] Pressman, S. 2015. Defining and Measuring the Middle Class. Working Paper 007. American Institute for Economic Research.

[13] Birdsall, N., C. Graham, and S. Pettinato. 2000. Stuck in a Tunnel: Is Globalization Muddling the Middle? Working Paper 14. Brookings Institution Center. Washington, DC.

In the course of assessing the middle class, the proportion of median consumption could be interesting in analyzing certain fixed sections of time, but this approach is absolutely useless for analyzing time series, like for calculations of poverty level indicators.

Diagram #8: Distribution of Households by 75-125% of Per Capita Income Median



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The analysis of time series has decisive importance in quantitative analysis of the middle class since it shows how the situation changes, for better or for worse.

1.2. Our Approach

The absolute and relative indicators of the middle class, as we have already mentioned, are based on the household income/consumer expenditures criteria, which is not enough for a full scale quantitative assessment of this important stratum of society and an analysis of its socio-economic profile. According to the volume of incomes or expenditures, the household could be included in any of the above-mentioned ranges, but this does not mean that the given household belongs to the middle class according to qualitative characteristics. It is necessary to use other socio-economic criteria necessary for identification of a middle class together with incomes/expenditures, and to define their statistical intersection. Consequently, a more comprehensive assessment of quantitative and qualitative characteristics of this class of society will become possible.

Among the criteria for identification of a middle class, **the employment profile** should be mentioned in the first place, as this is the decisive factor that ensures the stability of households' incomes/expenditures.[14] The latter could be deconstructed in accordance with the status of employment of the household members (hired employed or self-employed), position (occupies managerial or executive position), occupation in accordance with profession and so on. In this context, the number of employed members of the household and their employment type is very important.

The welfare of the middle class significantly depends on **the level of education** of its representatives. That is why it is considered as a determinant of middle class. Moreover, some researchers define belonging to the middle class as at least one of member of the household having higher than a secondary education, which implies at least a Bachelor's degree.[15] In our opinion, defining a middle class just by educational qualification is unreasonable. For example, in Georgia, there is a large contingent of people who have higher education diplomas, but are unemployed and classify as "poor".[16] Therefore, higher education could be the deter-

[14] Chun, Natalie, Rana Hasan, and Mehmet Ulubasoglu. 2011. The Role of the Middle Class in Economic Development. ADB Working Paper # 245. Asian Development Bank. P. 5.

[15] Pressman, S. 2015. Defining and Measuring the Middle Class. Working Paper 007. American Institute for Economic Research.

[16] Kakulia M., Kapanadze N., Kurkhuli L., Lomjaria V. 2016. Unemployment structure and structural unemployment in Georgia. Rondeli Foundation and Friedrich Ebert Foundation.

minant of belonging to the middle class only in the event that it ensures sustainable employment according to profession and the generation of an income in the respective amount.

Household wealth is also considered one of the key criteria for identification of a middle class, which implies the possession of real estate (residential house or country house), non-pension savings (bank deposits, deposit certificates and son on), pension savings, shares and securities (stocks and bonds), different assets (gold, jewelry items, antiques, etc.) and so on.[17] The listed items are a source of income and a social safety net for the middle class.

Middle class households are characterized by the typical structure of consumption that is characteristic of their respective country, although this structure can vary greatly between different countries. Despite this, there is a list of **durable goods**, the ownership of which could be viewed as a determinant of middle class status. Among them are: automobiles, computers, refrigerators, air conditioners, laundry machines and such.

The same could be said about **access to basic utilities** – this implies the existence of a supply of electricity, water, natural gas and access to the Internet.

Access to high quality healthcare is also an important criterion of middle class.[18] This does not imply the universal health care programs that operate in many countries – including Georgia – and focus mostly on lower income groups, but rather private medical insurance packages.

One of the key profiling characteristics of a middle class is the **possibility for recreation**. It is considered that an average household should be able to partake in an organized recreational activity such as tourism at least once a year. Regular rest abroad is also very important, since this also can be considered as a sign of belonging to the middle class.

Finally, the **self-perception of households** is quite important for identification of a middle class. This considers how the household perceives its own material condition and which class it considers itself in. This provides an opportunity to identify how the population perceives and interprets the quantitative and qualitative middle class defining parameters.

It should be underlined that the middle class is not homogenous: normally, lower, middle and upper middle classes are distinguished, however, as a rule, such classification is done according to per capita incomes/consumptions. In our opinion, belonging of households to the middle class shall be studied in accordance with all nine criteria (including incom es/consumption) mentioned above, which requires the establishment of boundaries according to these criteria.

1.3. Information Sources

The Integrated Household Survey – provided on the website of GeoStat – provides sufficient information for household research in accordance with the nine mentioned criteria (including incomes/consumption).[19] Processing its results provides an opportunity for consolidating data on the households grouped by the mentioned criteria, as well as for defining the boundaries of statistical intersection.

The more diverse the information about one and the same household, the more comprehensive the quality of the assessment. The database of addresses of the General Population Census is used as a sampling base for the Integrated Household Survey. The objects of observation are the households, which live on the sampled addresses. The size of the survey sample is about 3350 households, with which about 2800 interviews are conducted.

At the first stage of the sampling procedure, 336 sample census districts are selected out of 11000 census districts, and in the second phase, 3350 districts are chosen in accordance with selection rules.

For each region, selected districts are equally divided on strata level into 12 rotation groups, in order to substitute the addresses of respective rotation groups with new addresses each month. Thus, 8.3 percent of the whole sample is updated on a monthly basis, and the whole sample is updated over the course of one year.[20]

[17] Wolff, Edward N. 2012. The Asset Price Meltdown and the Wealth of the Middle Class. New York University.

[18] Banerjee, A., and E. Duflo. 2008. What is Middle-Class About the Middle-Classes Around the World? Journal of Economic Perspectives 22(2):3–28. P.20.

[19] GeoStat. Database of Integrated Household Survey. http://www.geostat.ge

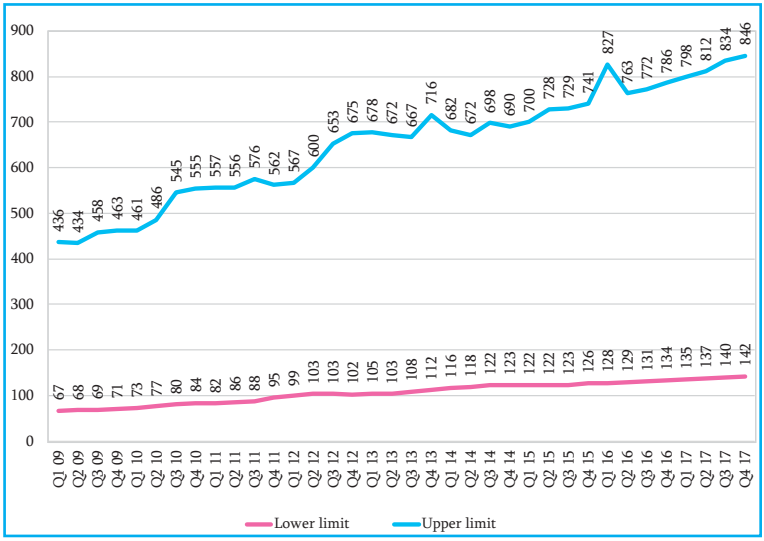
[20] The detailed description of the Integrated Household Survey is given in our study: Kakulia, M., Kapanadze, N., Kurkhuli L. 2017. Chronic poverty and income inequality in Georgia. Economic-statistical research. Rondeli Foundation and Friedrich Ebert Foundation.

2. Selection of Criteria

According to our approach, it is reasonable to use the following parameters for identification of the middle class:

1. **Employment:** assessment of this criterion is a challenge due to the changes implemented in the format of the Integrated Household Survey at GeoStat. Namely, from 2002 until 2016, a detailed analysis of employment was possible within the framework of the IHS. In 2017, GeoStat separated the labor force component and it is no longer carried out together with the household survey. Thus, the use of employment criteria for assessment of middle class has been impossible since 2017.
2. **Educational level:** in this regard, accessibility to education is especially important. However, and regrettably, the respective module of the Integrated Household Survey has been abolished since 2012 and the assessment of accessibility to education is impossible with existing instruments. For the 2009 - 2017 period, a continuous time series can be generated only with the household members' education status data, based on which in the present study we use a dichotomy, where: 1 denotes that at least one member of the household has higher education, while 0 means that no member of the household has higher education. As for the assessment of access to education, it requires a much more complex analysis and will be presented below, separately.
3. **Income:** the approach used in the present analysis for identification of the limits of criteria is different from the examples viewed above, since we assume that selection of the 2-10, 20-13, 10-20 and 10-50 PPP USD per capita per day or any other interval is quite formal and does not fully reflect the socio–economic sense of middle class. Thus, in order to determine income as criteria, we decided to identify a range of income, i.e. upper and lower boundaries, that would encompass the incomes of those households that can serve as candidates for consideration to the middle class. For this purpose, we used the arrays generated in our research,[21] which was prepared in 2017; in particular, we identified out of a panel of households (or households, interviewed 4 times), ones that never appeared to be below the poverty line (throughout 4 interviews). For each panel, we prepared a cumulative distribution and calculated per capita incomes of the households at 5 and 95 percent margins, as upper and lower limits for inclusion in the middle class. The results obtained are as following:

Diagram #9: Upper and Lower Boundaries of Per Capita Incomes (GEL, month)



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

[21] Kakulia M., Kapanadze N. Kurkhuli L. 2017. Chronic poverty and income inequality in Georgia. Economic-statistical research. Rondeli Foundation and Friedrich Ebert Foundation

4. **Dwelling:** taking the overall property that a household owns, as criteria for their appropriation to the middle class, we find that the Integrated Household Survey's database provides relatively comprehensive information only about their dwelling. The following characteristics/definitions of the household dwelling are used in the present survey:

   4.1. Own dwelling: normally, a household appropriated to the middle class is expected live in its own dwellings, which includes mortgaged dwellings as well. This parameter is assessed based on the questionnaire from the Integrated Household Survey – "Shinda-01", which includes a question on the type/form of ownership of the dwelling. A dichotomy indicator is used here for analysis, where 1 implies that the household lives in its own dwelling, and 0 means that the form of ownership is different (rented, bail, etc.);

   4.2. Total area of dwelling: no less than 12 square meters per one member shall be envisaged for a household.[22] A dichotomy indicator is still used for analysis here as well, where 1 signifies that 12 square meters are accounted per household member and 0 means that the area of dwelling per capita is less than 12 square meters. This parameter is also assessed on the basis of the questionnaire on dwelling in the Integrated Household Survey – "Shinda-01", which includes a question regarding the total area of household's dwelling;

   4.3. Number of livable rooms: no less than half a livable room shall be envisaged per household member. This indicator is also determined based on the questionnaire on dwelling – "Shinda -01", and a dichotomous parameter is used for analysis, where 1 suggests that 0.5 or more of a livable room is accounted per household member and 0 suggests that the number of livable rooms per household member is less than 0.5. We wanted to use an indicator based on the number of bedrooms for analysis, but preliminary analysis of the database demonstrated that the data series are incomplete;

   4.4. Bathroom: a middle class household shall have its own bathroom. This parameter is also assessed on the basis of the questionnaire on dwelling – "Shinda-01", and a dichotomy indicator is used for analysis, where: 1 denotes that the household has its own bathroom and 0 indicates that the household does not have own bathroom;

   4.5. Kitchen: a middle class household shall have its own kitchen. This indicator is also calculated based on the questionnaire on dwelling – "Shinda-01", and for analysis, a dichotomous parameter is used, where: 1 infers that the household has its own kitchen and 0 supposes that the household does not have its own kitchen. For analysis, we also wanted to use an indicator based on the availability of flushing toilets that are connected to the sewage system, but ultimately we rejected that, since sewage systems in Georgia are in fact characteristic only to urban areas, and using this parameter would consequent the exclusion of rural populations from the middle class;

   4.6. Subjective assessment of dwelling condition: an important condition of appropriation to middle class is that the dwelling shall be in good condition. Data from the subjective self-assessment of dwelling provided in the Integrated Household Survey is used in the present study. The aforementioned subjective assessment was included in the questionnaire "Shinda-09" from 2009 until 2011 and in the questionnaire "Shinda-01" from 2012 to 2017 and included the following five categories for assessment of own dwelling by the household:
      1. Well renovated;
      2. No renovation is necessary at this stage;
      3. Cosmetic renovation is necessary;
      4. Wholesale renovation is necessary;
      5. Risk of destruction/collapse unless renovated immediately;

A dichotomous parameter is used for analysis, where 1 denotes that the household dwelling is well renovated or no renovation is necessary at this stage, and 0 signifies that wholesale or immediate renovation is necessary.

5. **Saving:** this is a significant component of the property of households belonging to the middle class. Regrettably, the respective module of the Integrated Household Survey has been abolished since 2012 and assessment of this parameter is not possible using available instruments. Thus, in this study, it was not used as a criteria for identification of the middle class, however we did try to make a dichot-

[22] This norm is taken from Soviet standards, no other norm was found.

omy assessments where 1 meant that the household grew its saving and 0 meant that the household did not make savings. Making savings, besides incomes, depends on many other aspects of consumer behavior and its assessment by just one parameter is incorrect. However, due to the non-availability of respective information resources, we have to limit ourselves to this.

6. **Access to basic utilities:** this is an important characteristic of the middle class: owning a dwelling is one thing, ensuring uninterrupted access to basic utilities – such as the following – is yet another:

   6.7. Electricity supply: this characteristic is assessed based on the questionnaire on dwelling "Shinda-01", and for analysis we used a dichotomy parameter where 1 construes that the household is supplied with electricity and 0 implies that the household does not have access to electricity;

   6.8. Hot water supply: a middle class household shall be connected to a central system for hot water supply or shall have an individual system for hot water supply. In the 1990s, the central system for hot water supply in Georgia was almost entirely destroyed (except for cases where the hot water source was natural). Households started installing individual hot water supply systems. This indicator is calculated based on the questionnaire on dwelling "Shinda-01", and for analysis it uses a dichotomy parameter where 1 represents that the household has a central or individual hot water supply system and 0 means that it does not;

   6.9. Gas supply: a middle class household shall be connected to a central system for supply of natural gas or have an individual system of liquid gas supply. Some Georgian villages are provided with a central gas supply and some are not. Thus, we could reject this parameter as we did the sewage system indicator, but households can and do compensate for non-availability of a central gas supply with a supply of liquid gas, and this is possible for any household. This parameter is also calculated based on the questionnaire on dwelling – "Shinda-01", and it also uses a dichotomy parameter for analysis, where 1 symbolizes that the household has a natural or liquid gas supply and 0 represents that the household does not have a natural or liquid gas supply;

   6.10. Heating: a middle class household shall be connected to a central system for heating or have an individual heating system. As before, this indicator is calculated based on the questionnaire on dwelling – "Shinda-01", and uses a dichotomy parameter as well, where 1 surmises that the household has central or individual heating and 0 construes that is has not central or individual heating;

   6.11. Access to Internet: the problem here is that there was no data on provision of Internet to households until 2011. The question on Internet provision was added to the survey questionnaire after 2010. Therefore, for the analysis of this parameter, we have to shorten the analyzed timeline (2009-2017) by two years – which is a significant loss in terms of analyzing trends – but nevertheless, the Internet provision indicator is still examined in the description of parameters.

7. **Ownership of durable goods:** this is a key criteria for assessment of the middle class, since it is one of the main areas of consumer expenditures where the households' incomes are accumulated, making their lives more comfortable. The list of durable goods is too long, but in the present study we used items on which we have constant time series from 2009 – 2017. It should be noted here that due to an unfruitful change to the questionnaire instruments of the household survey in 2007, data from 2007-2008 is in fact useless for analysis in this respect. However, in the beginning of 2008, this change was abolished and its negative impact was almost leveled for the most part in the 2009 database.

   7.12. Refrigerator: this represents an appliance in working condition. This indicator is calculated on the basis of the section on durable goods included in the questionnaire "Shinda-01" in the Integrated Household Survey; a dichotomy parameter is used for analysis, where 1 suggests that the household has at least 1 refrigerator in working condition and 0 implies that the household has no refrigerator in working condition;

   7.13. Washing machine: this represents an appliance in working condition. This indicator is calculated on the basis of the section on durable goods included in the questionnaire "Shinda-01" in the Integrated Household Survey; a dichotomy parameter is used, where 1 signifies that the household has at least 1 washing machine in working condition and 0 denotes that the household has no washing machine in working condition;

7.14. TV set: this represents an appliance in working condition. This indicator is calculated on the basis of the section on durable goods included in the questionnaire "Shinda-01" in the Integrated Household Survey; a dichotomy parameter is used for analysis, where 1 indicates that the household has at least one TV set in working condition, and 0 means that the household has no TV set in working condition;

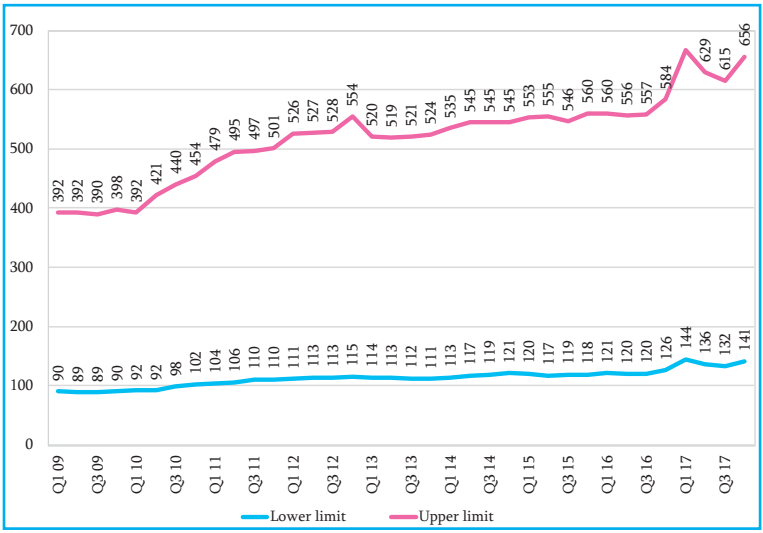
7.15. Passenger automobile: a middle class household shall have at least one passenger car in working condition. This parameter is also assessed based on the section on durable goods included in the questionnaire "Shinda-01" in the Integrated Household Survey; for analysis, a dichotomy parameter is used, where 1 represents a household that has at least one car in working condition and 0 represents a household with no car in working condition;

7.16. Computer: a middle class household shall have at least one computer in working condition. This parameter is also assessed based on the section on durable goods included in the questionnaire "Shinda-01" in Integrated Household Survey; a dichotomy parameter is used for analysis, where 1 connotes that the household has at least one computer in working condition and 0 shows that the household has no computer in working condition;

It would be desirable to include cell phones on this list, but it has been included on the list of durable goods only since 2011, therefore we do not have a time series for the 2009-2017 period. Consequently, ownership of cell phones will be reviewed in the list of parameters, however, in the analysis of the middle class, cell phones will not be included as criteria.

8. **Consumption:** to identify the limits of the parameter of consumption (total consumer expenditures of the household) we used the same approach as in the case of incomes. At first, we tried to identify the range of consumer expenditures, or upper and lower limits, between which the consumption of a potential middle class household could be. For this purpose, we used the arrays generated in our research from 2017 on Chronic Poverty and Income Inequality. In particular: we identified from the panel households (meaning the households interviewed 4 times), the households that never appeared to be below the poverty line (during 4 interviews). For each panel, we prepared a cumulative distribution, and calculated per capita consumption of the households at 5 and 95 percent as the margins for the upper and lower limits of possibility for inclusion in the middle class. The results are as follows:

Diagram #10: Upper and Lower Boundaries of Per Capita Total Consumption (GEL, month)



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

One more important circumstance should be noted: in 2017, GeoStat changed its rotation system for designing a sample of households, and as a result, generating 2017 panel assessments is simply impossible. For this reason, we continued 2009-2016 assessments proportionally to 2017 data, which is acceptable in such cases.

9. **Subjective assessment:** this parameter covers two components, which are important preconditions for appropriation to the middle class:

   9.1. Subjective assessment of own condition by the households based on income: data available in the database of the Integrated Household Survey is used in the present study. From 2009-2011, this data was included in the questionnaire of the survey – "Shinda-09" and from 2012- 2017 – in "Shinda-01". It included five categories of self-assessment for the households:

   1. Good – can spend money freely;
   2. Medium – can easily satisfy daily material requirements;
   3. Satisfactory – can more or less manage to satisfy daily needs;
   4. Bad – income (yield) is enough only for food;
   5. Very bad – even enough food cannot be ensured.

In the given study, a dichotomy parameter is used, where 1 represents that according to income, the household assesses its condition as good, medium or satisfactory, and 0 represents that according to income, the household assesses its condition as bad or very bad.

   9.2. Subjective assessment of own condition according to property: data from the subjective assessment of own condition provided in the database of the Integrated Household Survey is used in this study; from 2009 to 2011, this data was included in the questionnaire of the survey – "Shinda-09" and from 2012 to 2017, in "Shinda-01". It contained five categories of assessment of own condition by the households:

   1. Rich;
   2. Wealthy;
   3. Medium wealth;
   4. Poor;
   5. Extremely poor.

A dichotomy assessment is used for the present analysis, where 1 suggests that the household assesses itself as rich, wealthy or having medium wealth, and 0 implies that the according to property assets the household assesses itself as poor or extremely poor.

10. **Healthcare:** this is a very important parameter for assessment of middle class and here – similarly to the case of access to education – only the analysis of 2009-2011 data is possible. Thus, in the present study, we could not use this criteria either for identification of middle class; but we tried to provide a dichotomy assessment of healthcare and health insurance where: 1 denotes that the household made expenses for disease prevention or health insurance for all or some members (this does not include universal healthcare insurance), and 0 denotes that the household did not make the respective expenses. The healthcare accessibility aspect is discussed separately below, which demonstrates the extent to which our effort was successful.

11. **Recreation:** for full scale assessment of this criteria, as in case of healthcare, only 2009-2011 data is available. Thus, this given parameter was not used either. Despite this, we used data on household expenditures, based on which we calculated a dichotomy parameter, where 1 represents households that make expenses on recreation, entertainment and culture, and 0 represents households that do not make such expenses.

12. **Access to credit:** one key characteristic of a middle class is the availability of credit. This was also covered in the questionnaire – "Shinda-09", which was abolished after 2012. Thus, like in the case of access to healthcare, in depth analysis of the given parameter is possible based only on data from 2009-2011. Although we could not use this criteria in the present study, we tried to provide a dichotomy assessment of the household's access to credit, where 1 denotes a household that has taken credit from a private person or bank, or we can assume that this household is capable of doing so, and 0 signifies that the household has not taken credit or is unable to do so.

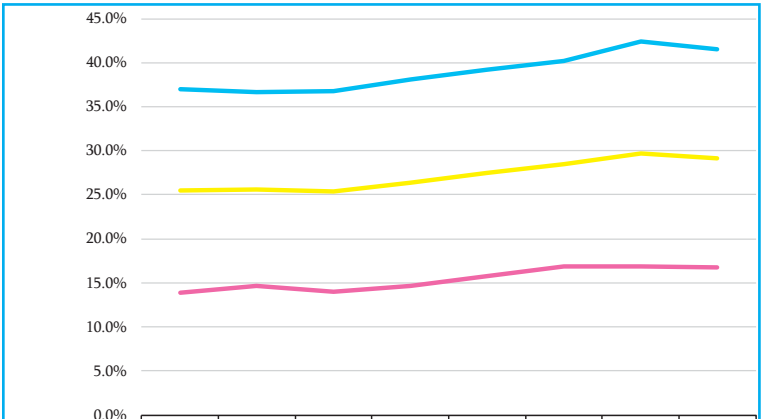
3. Assessment of Parameters

3.1. Employment

Employment is one of the most important criteria for the middle class. People employed with high qualifications may belong to the middle class. Unfortunately, as noted above, this parameter cannot be assessed as of 2017. However, according to our data, it is possible to analyze its dynamics in the years from 2009 until 2016.

In 2016, 29 percent of households had at least one member who was employed with high qualification i.e. according to 1st, 2nd or 3rd groups of the International Standard Classification of Occupation - ISCO.[23] From 2009 to 2016, the share of such families increased by almost four percentage points.

Diagram #11: Share of Households with at least One Member Employed with High Qualification



	2009	2010	2011	2012	2013	2014	2015	2016
Urban areas	37.0%	36.7%	36.8%	38.1%	39.2%	40.2%	42.5%	41.5%
Rural areas	13.9%	14.6%	14.0%	14.6%	15.7%	16.9%	16.8%	16.8%
Country total	25.4%	25.6%	25.4%	26.3%	27.5%	28.5%	29.6%	29.1%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The weight of these households in the cities is almost 2.5 times higher than the analogous indicator in rural areas. However, in 2016, this difference was insignificantly reduced in comparison with 2009. In addition, the growth rate of employment status in rural areas is slightly higher than the corresponding figure for urban areas.

Table #1: Share of Households with at least One Member Employed with High Qualification, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016
Kakheti	15.5	18.0	15.6	18.0	17.4	16.6	20.0	16.9
Tbilisi	43.5	41.9	40.8	42.7	44.5	47.0	49.0	48.7
Shida Kartli	16.6	16.4	15.1	15.0	20.5	18.3	23.9	19.7
Kvemo Kartli	17.1	18.7	17.5	22.7	23.0	21.2	19.4	21.2
Samtskhe-Javakheti	15.8	19.3	18.1	17.0	14.2	19.5	19.6	16.3
Adjara	29.9	26.8	32.5	32.3	31.9	31.9	33.4	31.8
Guria	16.0	18.3	17.7	19.5	17.7	20.3	23.1	20.2
Samegrelo	18.4	18.5	17.1	16.7	21.5	25.0	24.0	24.0
Imereti, Racha-Lechkhumi-Svaneti	19.0	19.8	21.4	20.3	20.4	20.7	20.3	22.6
Mtskheta-Mtianeti	17.9	19.5	19.6	21.9	21.4	24.7	23.5	20.1
Country total	25.4	25.6	25.4	26.3	27.5	28.5	29.6	29.1

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

[23] Managers of all levels of government, heads of institutions, organizations and enterprises belong to 1st group of ISCO; professionals belong to 2nd group and technicians and associated professionals – to the 3rd group.

Among the regions, Tbilisi has a high weight for families having at least one member employed with high qualification (almost 50 percent), and Adjara comes in second place (almost 32 percent). The lowest share of such households is in Samtskhe-Javakheti (16.3 percent) and Kakheti (almost 17 percent).

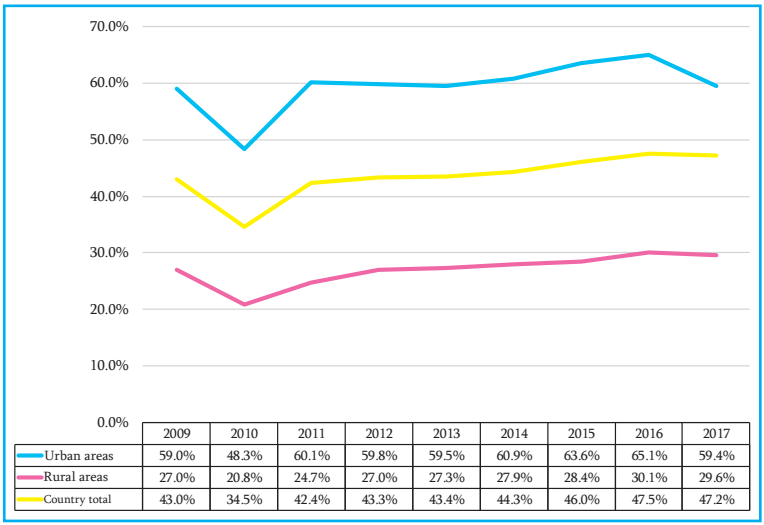
3.2. Education

According to this criterion, based on available data, and for the purpose of creating a full time series, only the analysis of the indicator of achieved level of education is possible.

In 2017, at least one member of 47 percent of households had higher education. The weight of such households in the cities is two times higher than the same indicator in rural areas.

Overall, the weight of those households, at least one member of which has higher education, demonstrated a weak trend of growth in the 2009-2017 period. It should be noted, that the decrease of this indicator in the cities and the cessation of the growing trend in the rural areas in 2017, as well as the sharp decrease in 2009-2010, was related to the change in classification of the reached level of education.

Diagram #12: Share of Households with at least One Member Having Higher Education



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	59.0%	48.3%	60.1%	59.8%	59.5%	60.9%	63.6%	65.1%	59.4%
Rural areas	27.0%	20.8%	24.7%	27.0%	27.3%	27.9%	28.4%	30.1%	29.6%
Country total	43.0%	34.5%	42.4%	43.3%	43.4%	44.3%	46.0%	47.5%	47.2%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The share of households that have at least one member with a higher education is exceptionally high in Tbilisi (almost 60 percent); this significantly influences the high weight of such households for the whole country.

Table #2: Share of Households with at least One Member Having Higher Education, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	33.1	27.0	29.4	29.7	32.4	32.0	29.6	32.9	31.9
Tbilisi	68.3	56.2	67.3	68.2	72.4	70.5	72.7	74.3	67.4
Shida Kartli	32.6	27.8	28.4	30.0	33.9	32.1	35.9	38.3	34.7
Kvemo Kartli	28.2	22.5	30.7	36.8	33.6	34.3	35.3	33.9	39.5
Samtskhe-Javakheti	24.2	20.3	23.6	23.5	19.7	27.6	30.1	31.3	36.3
Adjara	43.7	33.1	48.3	46.8	47.0	45.6	51.2	47.6	43.9
Guria	31.2	24.9	32.2	33.6	29.9	33.3	34.0	31.1	32.4
Samegrelo	33.8	24.7	30.4	32.7	34.4	41.5	43.2	44.6	43.2
Imereti, Racha-Lechkhumi-Svaneti	35.6	27.5	36.4	35.7	30.7	32.1	33.0	37.5	38.5
Mtskheta-Mtianeti	32.4	23.4	29.3	31.1	21.9	32.2	29.8	33.9	36.8
Country total	43.0	34.5	42.4	43.3	43.4	44.3	46.0	47.5	47.2

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

From the rest of the regions, Samegrelo and Adjara are particularly noteworthy, where the weight of such households exceeds 43 percent. This indicator is quite high in Kvemo Kartli and Imereti as well as the Racha-Lechkhumi-Kvemo Svaneti regions. The lowest share of households, at least one member of which has higher education, is in Kakheti and Guria - about 32 percent each.

Relying on existing data, assessment of the education access parameter, as we noted above, can only be done for the 2009-2011 period.

During this period, about 7 percent of the population demonstrated a need for pre-school education services. Of these, almost 80 percent had access to pre-school education. In addition, in the last three years, this indicator has revealed an increasing trend.

In 2011, 11 percent of the population had a need for access to basic education. It is noteworthy, that this figure was characterized by a decreasing trend. 90 percent of this group – i.e. 10 percent of the whole population – had good access to basic education.

In 2009-2011, the need for higher education was revealed in 13-14 percent of the population; 40 percent of which had good access to this level of education, while 60 percent – did not.

In 2011, about 8 percent of the population declared the need for raising qualifications. Only 14 percent of them had good access. The absolute majority (86 percent), had no access to qualification-raising programs or had poor access.

Overall, for the purpose of quantitatively assessing the middle class, we used the existence of households with at least one member having higher or further level of education as a criterion; this is not directly linked to education access but is its direct result.

3.3. Income

In 2017, the per capita income of about 73 percent of households was between the incomes limits determined during the selection of middle class criteria. This does not mean that 73 percent of the population of Georgia is middle class. As mentioned, income is one of the criteria of middle class quantitative assessment but not the only one.

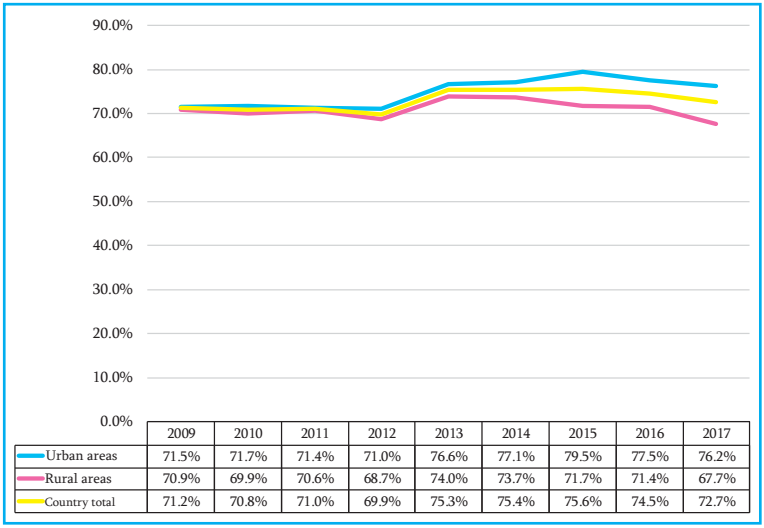
In comparison with 2009, in 2017, the share of households between these limits increased significantly, although, this tendency is not stable. It should be mentioned that in 2017, the weight of households below the lower limit increased, which is quite suggestive.

Diagram #13: Distribution of Households by Lower and Upper Per Capita Income Limits

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

In the 2009-2014 period, the share of households between the established income limits was almost identical in urban and rural areas. From 2015 to 2017, a growing trend of dissimilarity between urban and rural areas was revealed. Overall, in 2017, in comparison with 2009, this indicator significantly increased in urban and decreased in rural areas.

Diagram #14: Share of Households Having Per Capita Incomes in Accordance with Middle Class Criteria



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	71.5%	71.7%	71.4%	71.0%	76.6%	77.1%	79.5%	77.5%	76.2%
Rural areas	70.9%	69.9%	70.6%	68.7%	74.0%	73.7%	71.7%	71.4%	67.7%
Country total	71.2%	70.8%	71.0%	69.9%	75.3%	75.4%	75.6%	74.5%	72.7%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The shares of households with per capita income in compliance with middle class criteria i.e. whose income is between the upper and lower limit, differ in various regions, but this difference is not dramatic. From 2009 to 2017, the sharp increase in the share of such households in Adjara - 13 percentage points - is worth noting.

Table #3: Share of Households Having Per Capita Income in Accordance with Middle Class Criteria, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	68.9	65.1	63.4	64.9	67.9	68.5	65.0	68.4	63.8
Tbilisi	72.1	72.2	71.7	73.8	77.5	79.1	82.5	79.3	78.6
Shida Kartli	69.5	68.5	75.2	70.4	74.5	73.2	73.1	72.3	68.5
Kvemo Kartli	66.3	64.2	61.6	60.8	66.2	68.8	64.7	63.7	67.8
Samtskhe-Javakheti	74.1	75.8	80.4	75.2	77.5	79.6	72.2	76.1	74.2
Adjara	55.9	58.5	59.3	56.9	73.0	68.9	70.5	67.9	68.6
Guria	74.4	72.8	65.8	66.1	70.1	69.6	73.2	73.0	69.4
Samegrelo	76.6	75.2	72.4	73.4	77.1	77.5	80.7	79.5	71.7
Imereti, Racha-Lechkhumi-Svaneti	77.3	77.8	80.3	74.3	81.8	80.3	80.1	77.6	75.4
Mtskheta-Mtianeti	66.2	68.7	68.6	70.7	72.0	70.9	63.7	70.0	65.4
Country total	71.2	70.8	71.0	69.9	75.3	75.4	75.6	74.5	72.7

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The highest weight of the mentioned households is traditionally marked in Tbilisi (about 80 percent), where, compared to 2009, this indicator has increased substantially. Tied for second place is Imereti and the Racha-Lechkhumi-Svaneti region (75.4 percent). Samtskhe-Javakheti is in third place (74.2 percent). The lowest indicator is in Kakheti (about 64 percent) and Mtskheta-Mtianeti (65.4 percent). In Kakheti, the share of households having per capita income in compliance with middle class criteria has decreased significantly compared with 2009.

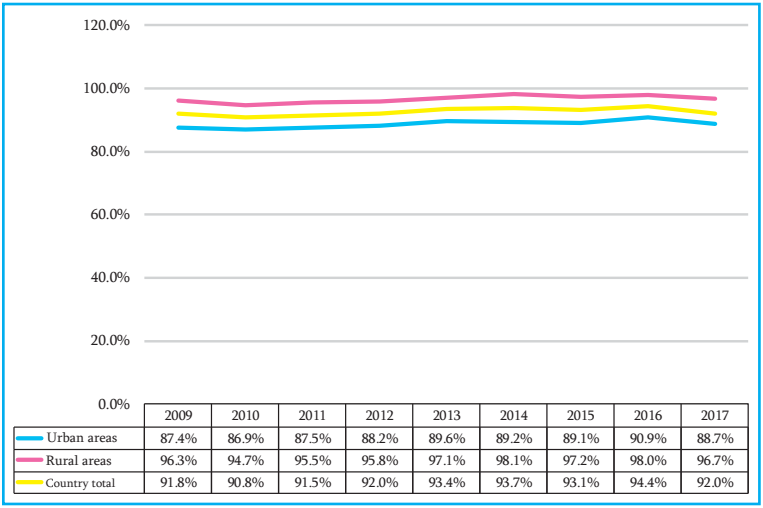
3.4. Dwelling

3.4.1. Form of Ownership

In 2017, 92 percent of households in Georgia lived in their own dwellings. In the 2009-2017 period, this indicator is almost unchanged. The weight of similar households in rural areas is higher than in the city, which is natural due to the fact that living in rented or otherwise not own dwelling is more characteristic for cities.

Depending on the degree of distribution, it can be said that the dwelling ownership parameter will not have much impact on the aggregated assessment of middle class, although it must be included in this process, because own dwelling is one of the basic criteria of appropriation of a household to the middle class.

Diagram #15: Share of Households with Own Dwelling



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	87.4%	86.9%	87.5%	88.2%	89.6%	89.2%	89.1%	90.9%	88.7%
Rural areas	96.3%	94.7%	95.5%	95.8%	97.1%	98.1%	97.2%	98.0%	96.7%
Country total	91.8%	90.8%	91.5%	92.0%	93.4%	93.7%	93.1%	94.4%	92.0%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

By regions, the weight of households living in their own dwellings is the lowest in Tbilisi. This is not surprising – the capital is the only mega polis in Georgia, and residing in a dwelling that is not one's own is characteristic of urban areas. The indicator of the capital has an impact on the overall urban indicator.

Table #4: Share of Households with Own Dwelling, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	98.2	98.0	98.0	98.1	98.1	99.7	99.0	98.5	95.7
Tbilisi	84.8	84.5	85.6	86.0	86.6	87.4	87.2	89.2	85.5
Shida Kartli	94.1	91.7	92.4	92.1	96.4	96.8	98.6	96.3	97.1
Kvemo Kartli	90.0	87.0	86.2	89.1	89.7	91.5	91.0	94.4	91.5
Samtskhe-Javakheti	94.2	91.6	95.0	93.8	93.6	96.0	96.6	96.9	96 .2
Adjara	95.6	94.3	93.7	95.5	95.5	94.1	93.8	95.9	94.5
Guria	95.5	94.8	99.0	97.8	97.2	96.5	98.8	99.6	97.4
Samegrelo	93.2	90.2	89.0	90.4	97.2	94.6	93.1	95.8	93.5
Imereti, Racha-Lechkhumi-Svaneti	94.5	95.2	97.4	96.9	97.6	97.4	95.4	96.0	95.0
Mtskheta-Mtianeti	97.9	96.9	92.5	90.7	93.8	95.6	94.1	97.5	97.5
Country total	91.8	90.8	91.5	92.0	93.4	93.7	93.1	94.4	92.0

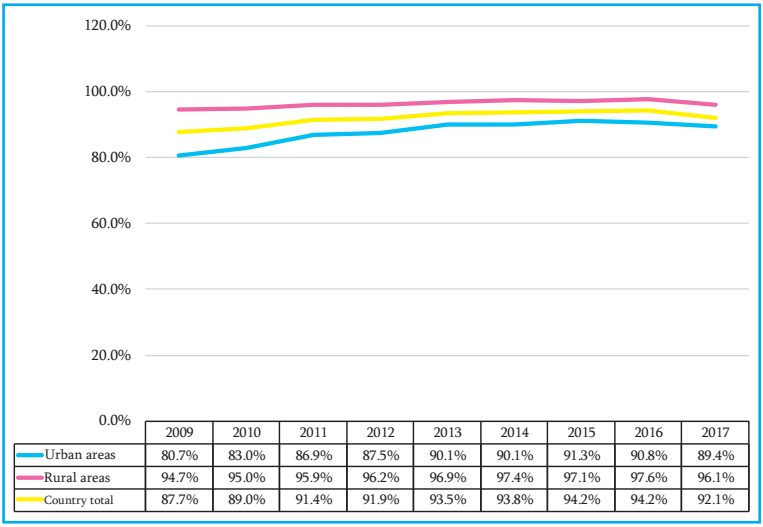
Source: Database of Integrated Household Survey of Georgia, processed by the authors

In other regions, the specific share of households living in their own dwellings is no less than 91 percent. Mtskheta-Mtianeti, Shida Kartli and Guria regions are particularly distinguished in this respect, where more than 97 percent of households live in their own home.

3.4.2. Living Space

In 2017, 92 percent of households had more than 12 square meters of living space per capita. This is a high indicator, and significantly higher than it was in 2009.

Diagram #16: Share of Households with more than 12 Square Meters of Living Space Per Capita



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	80.7%	83.0%	86.9%	87.5%	90.1%	90.1%	91.3%	90.8%	89.4%
Rural areas	94.7%	95.0%	95.9%	96.2%	96.9%	97.4%	97.1%	97.6%	96.1%
Country total	87.7%	89.0%	91.4%	91.9%	93.5%	93.8%	94.2%	94.2%	92.1%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

It should be noted that the weight of households that satisfy this parameter in rural areas is usually higher than in urban areas, which is quite natural due to the fact that living in tenement-houses is characteristic of the city. It is noteworthy that the share of households with more than 12 square meters of living space per capita is increasing in urban areas, while in rural areas this indicator remains unchanged.

Table #5: Share of Households with more than 12 Square Meters of Living Space per Capita, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	98.2	98.0	98.0	98.1	98.1	99.7	99.0	98.5	95.7
Tbilisi	84.8	84.5	85.6	86.0	86.6	87.4	87.2	89.2	85.5
Shida Kartli	94.1	91.7	92.4	92.1	96.4	96.8	98.6	96.3	97.1
Kvemo Kartli	90.0	87.0	86.2	89.1	89.7	91.5	91.0	94.4	91.5
Samtskhe-Javakheti	94.2	91.6	95.0	93.8	93.6	96.0	96.6	96.9	96.2
Adjara	95.6	94.3	93.7	95.5	95.5	94.1	93.8	95.9	94.5
Guria	95.5	94.8	99.0	97.8	97.2	96.5	98.8	99.6	97.4
Samegrelo	93.2	90.2	89.0	90.4	97.2	94.6	93.1	95.8	93.5
Imereti, Racha-Lechkhumi-Svaneti	94.5	95.2	97.4	96.9	97.6	97.4	95.4	96.0	95.0
Mtskheta-Mtianeti	97.9	96.9	92.5	90.7	93.8	95.6	94.1	97.5	97.5
Country total	91.8	90.8	91.5	92.0	93.4	93.7	93.1	94.4	92.0

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

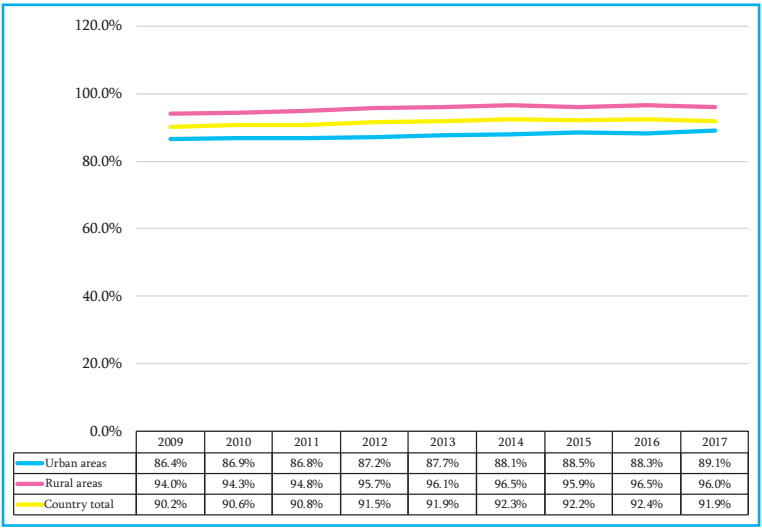
The difference between the regions is mainly due to their level of urbanization: the share of households whose living area per capita is greater than 12 square meters is the lowest in Tbilisi, while the share of such households in Mtskheta-Mtianeti and Guria exceeds 97 percent.

3.4.3. Number of Rooms

The number of livable rooms per capita was determined as one of the most important parameters of appropriation to the middle class. The number of bedrooms would be more correct, but in the database, for unknown reasons, this time series of data stops in 2010-2011. Due to this, the time series is shortened by 2 years, which will significantly worsen the value of the research.

In 2017, nearly 92 percent of households had more than 0.5 livable rooms per capita. This indicator has not changed substantially throughout the 2009-2017 period. In rural areas, the share of households with more than 0.5 rooms per capita exceeds the weight of analogous households in urban areas. The reason for this is that dwellings located in tenement houses are usually spread across the city. The average family size in rural areas is relatively large, but the number of livable rooms, as well as living space, is much higher than in the city.

Diagram #17: Share of Households with more than 0.5 Livable Rooms Per Capita



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	86.4%	86.9%	86.8%	87.2%	87.7%	88.1%	88.5%	88.3%	89.1%
Rural areas	94.0%	94.3%	94.8%	95.7%	96.1%	96.5%	95.9%	96.5%	96.0%
Country total	90.2%	90.6%	90.8%	91.5%	91.9%	92.3%	92.2%	92.4%	91.9%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Across the regions, the indicator for weight of households with more than 0.5 rooms per capita is largely consistent. The difference depends only on the degree of the regions' urbanization.

Table #6: Share of Households with more than 0.5 Livable Rooms Per Capita, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	95.6	95.6	96.8	96.1	95.9	97.1	96.4	98.3	95.8
Tbilisi	83.0	84.6	83.5	83.2	84.5	84.4	84.7	86.6	86.7
Shida Kartli	90.9	91.3	90.7	91.9	93.1	92.8	92.8	91.5	95.5
Kvemo Kartli	89.7	89.3	86.7	90.5	87.8	91.6	91.6	91.1	89.6
Samtskhe-Javakheti	93.4	93.6	93.3	95.0	94.3	96.4	95.3	92.7	97.4
Adjara	91.6	90.2	92.8	95.1	95.3	95.9	93.9	94.7	92.1
Guria	96.8	96.5	97.5	98.2	98.2	99.0	99.4	99.9	99.1
Samegrelo	93.6	94.0	95.2	95.4	98.1	97.3	97.4	95.8	97.8
Imereti, Racha-Lechkhumi-Svaneti	93.5	94.2	95.7	95.9	96.0	94.6	95.0	94.6	93.2
Mtskheta-Mtianeti	91.3	88.2	90.3	89.3	89.9	92.9	93.2	92.7	94.6
Country total	90.2	90.6	90.8	91.5	91.9	92.3	92.2	92.4	91.9

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

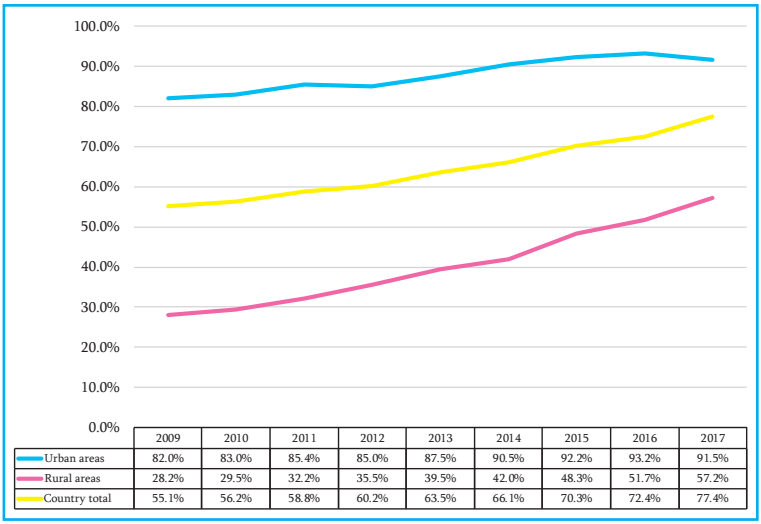
3.4.4. Availability of a Bathroom

An own bathroom is an attribute of decent living, and the middle class represents the strata of society that has already achieved a decent standard of living.

According to household survey data, in 2017, 57 percent of households in Georgia had their own bathroom. By this parameter, the difference between urban and rural areas is essential, but it should also be noted that the share of households having their own bathroom in rural area has demonstrated a sharp increasing trend – over the last 9 years, it has doubled. The weight of households having their own bathroom is increasing

in urban areas as well, however the growth rate is much lower here; this is quite natural. The basic point of growth in rural areas was much lower than in the cities.

Diagram #18: Share of Households That Have Their Own Bathroom



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	82.0%	83.0%	85.4%	85.0%	87.5%	90.5%	92.2%	93.2%	91.5%
Rural areas	28.2%	29.5%	32.2%	35.5%	39.5%	42.0%	48.3%	51.7%	57.2%
Country total	55.1%	56.2%	58.8%	60.2%	63.5%	66.1%	70.3%	72.4%	77.4%

Source: Database of Integrated Household Survey of Georgia, processed by the authors

Families living in rural areas are purposefully improving their living conditions. The bathroom is the element of family infrastructure that does not exceed the ability of one household to equip it and thus the population copes with this problem independently.

Table #7: Share of Households That Have Their Own Bathroom, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	40.2	36.0	34.1	36.9	43.6	49.8	57.3	56.1	64.8
Tbilisi	88.5	90.9	91.4	90.7	94.3	95.0	95.8	96.2	94.5
Shida Kartli	40.1	39.1	43.0	45.1	46.6	50.1	52.5	62.9	62.0
Kvemo Kartli	44.1	41.7	47.6	53.0	59.5	64.4	64.7	64.8	79.9
Samtskhe-Javakheti	24.5	28.1	31.2	35.0	36.1	37.2	46.7	52.0	56.7
Adjara	74.0	81.4	82.6	84.2	82.9	81.8	87.8	88.0	85.7
Guria	35.6	33.0	43.0	45.3	50.1	57.1	70.7	74.2	68.7
Samegrelo	33.6	31.9	40.6	43.0	47.6	51.2	51.7	57.9	66.1
Imereti, Racha-Lechkhumi-Svaneti	43.4	44.7	46.6	47.2	50.6	54.1	61.9	63.1	69.5
Mtskheta-Mtianeti	30.7	43.1	48.5	51.5	41.9	40.7	41.2	48.0	58.0
Country total	55.1	56.2	58.8	60.2	63.5	66.1	70.3	72.4	77.4

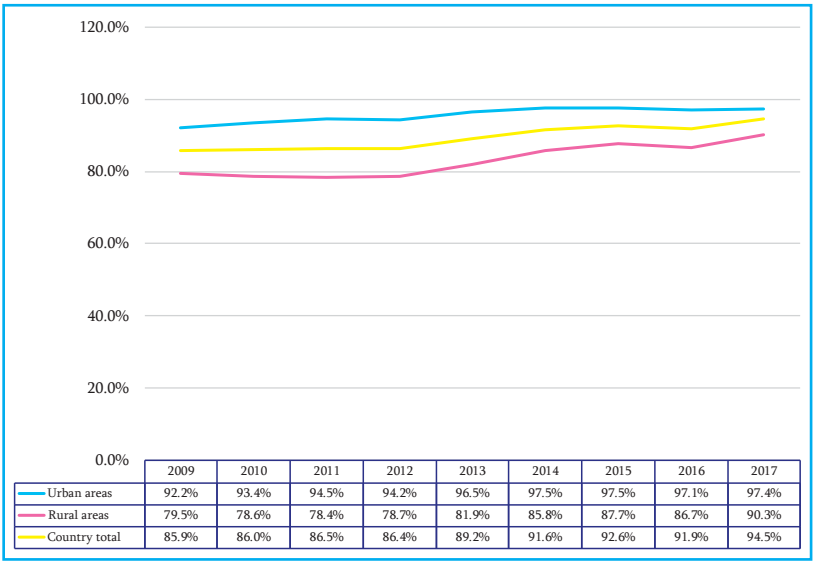
Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The indicator of bathroom availability is substantially different by regions, which is not due only to the degree of urbanization. Households living in Samtskhe-Javakheti, Mtskheta-Mtianeti and Shida Kartli have their own bathrooms least of all (57, 58, 62 percent respectively), while this element of family infrastructure most widespread in Tbilisi (more than 94 percent). It should also be noted that the share of families with bathrooms is increasing, especially in regions where this infrastructure was less common.

3.4.5. Availability of a Kitchen

One of the essential features of a middle class household is the presence of an own kitchen, which has almost 100 percent distribution in the cities and 90 percent in rural areas. It should be noted, that in comparison with 2009, this indicator has increased both in urban and rural areas. It is noteworthy that this indicator has grown very rapidly in rural areas in 2013-2017, while it remained practically unchanged in urban areas during this period.

Diagram #19: Share of Households That Have Their Own Kitchen



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	92.2%	93.4%	94.5%	94.2%	96.5%	97.5%	97.5%	97.1%	97.4%
Rural areas	79.5%	78.6%	78.4%	78.7%	81.9%	85.8%	87.7%	86.7%	90.3%
Country total	85.9%	86.0%	86.5%	86.4%	89.2%	91.6%	92.6%	91.9%	94.5%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Guria and Samegrelo are most distinguished among the regions based on the parameter of having an own kitchen (almost 100 percent each). They are followed by Adjara and Imereti and the Racha-Lechkhumi-Svaneti broadened region. The prevalence of a designated kitchen within the household is relatively low in Shida Kartli, Mtskheta-Mtianeti and Samtskhe-Javakheti.

Table #8: Share of Households That Have Their Own Kitchen, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	72.3	70.6	71.3	67.3	67.9	74.8	80.0	79.6	88.1
Tbilisi	93.4	95.1	94.9	94.8	96.6	96.7	97.3	97.0	96.7
Shida Kartli	69.7	66.3	66.0	66.2	78.4	81.7	83.0	87.0	86.1
Kvemo Kartli	82.5	80.4	76.0	73.9	80.7	80.8	80.0	76.1	90.2
Samtskhe-Javakheti	69.0	64.0	76.4	81.8	86.7	91.7	92.3	85.9	88.5
Adjara	96.8	97.4	97.4	95.0	99.0	97.8	99.1	98.2	98.0
Guria	98.4	98.1	98.6	97.6	97.0	98.7	99.8	99.3	99.8
Samegrelo	95.5	97.2	98.0	98.9	99.0	99.0	100.0	99.3	99.9
Imereti, Racha-Lechkhumi-Svaneti	83.9	84.4	86.4	89.0	89.9	96.6	98.0	96.5	97.1
Mtskheta-Mtianeti	73.7	82.5	78.6	74.4	75.2	75.8	67.1	76.3	86.9
Country total	85.9	86.0	86.5	86.4	89.2	91.6	92.6	91.9	94.5

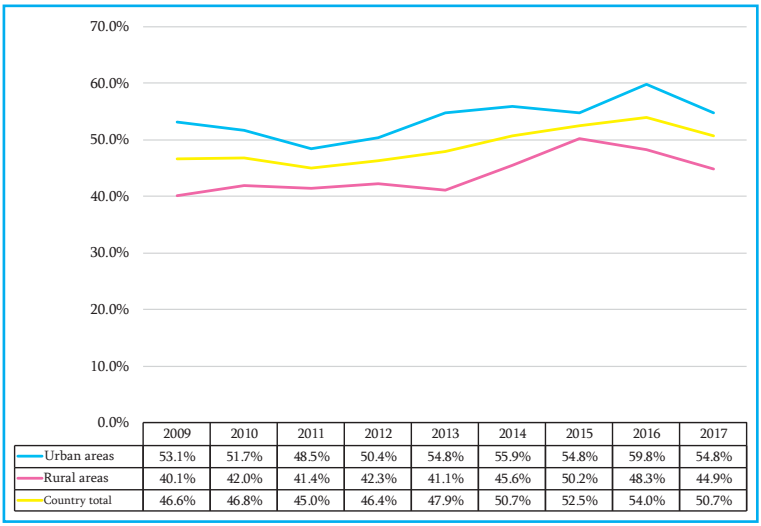
Source: Database of Integrated Household Survey of Georgia, processed by the authors

3.4.6. Self-assessment of the Dwelling Condition

As we mentioned in the selection of criteria section, the dwelling's condition is an important component by which the middle class should be distinguished from the rest of the population. The household dwelling of a middle class household, naturally, cannot be in a run-down state.

According to 2017 data, half of the households evaluated their own dwelling conditions as "satisfactory" or "superior", i.e. the other 50 percent of households self-assess their dwellings as requiring wholesale or immediate renovation. It would be wrong to consider them as middle class.

Diagram #20: Share of Households Who Evaluate Own Dwelling Condition as „Satisfactory" or „Good"



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	53.1%	51.7%	48.5%	50.4%	54.8%	55.9%	54.8%	59.8%	54.8%
Rural areas	40.1%	42.0%	41.4%	42.3%	41.1%	45.6%	50.2%	48.3%	44.9%
Country total	46.6%	46.8%	45.0%	46.4%	47.9%	50.7%	52.5%	54.0%	50.7%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

As a rule, the share of households who evaluate their own dwelling condition as satisfactory or superior is greater in urban areas than in rural ones.

It is interesting that in the 2009-2016 period, the share of households who positively evaluated their dwelling conditions revealed growth, but in 2017 this trend turned towards the opposite direction. It should be noted that the decrease of this indicator in rural areas started a year earlier. This might be the result of a change in attitude rather than an actual deterioration of dwelling condition.

Table #9: The Share of Households Who Evaluate Own Dwelling Conditions as „Satisfactory" or „Good", by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	34.9	36.6	35.2	37.4	34.9	39.6	46.1	44.6	43.5
Tbilisi	55.4	52.6	49.6	54.5	56.6	56.2	56.8	62.9	54.8
Shida Kartli	32.9	34.4	28.9	22.8	30.9	41.3	41.3	41.2	44.8
Kvemo Kartli	63.0	64.5	62.1	58.4	50.4	57.9	56.4	59.9	59.1
Samtskhe-Javakheti	55.5	56.0	45.8	53.5	59.6	58.0	61.0	48.0	48.2
Adjara	55.0	53.3	54.2	55.7	54.5	57.4	59.6	68.0	59.9
Guria	39.9	43.9	44.8	42.1	44.1	37.8	40.2	46.2	38.5
Samegrelo	32.7	33.0	38.3	37.4	40.8	43.9	43.3	43.6	49.6
Imereti, Racha-Lechkhumi-Svaneti	42.4	44.4	41.0	43.4	47.3	50.7	54.0	51.8	43.9
Mtskheta-Mtianeti	26.5	30.0	37.3	35.5	40.0	44.2	53.1	44.0	45.7
Country total	46.6	46.8	45.0	46.4	47.9	50.7	52.5	54.0	50.7

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

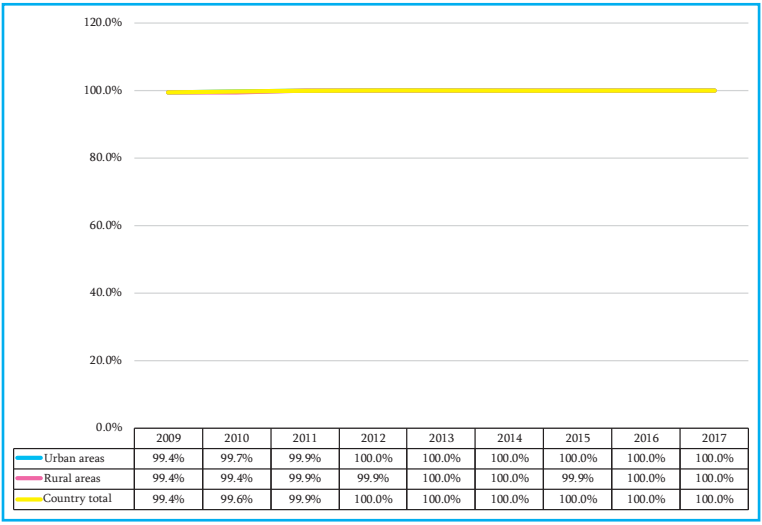
In 2017, households from Kvemo Kartli, Adjara and Tbilisi were distinguished by particularly high positive assessments of dwelling conditions (i.e. evaluating dwelling condition as satisfactory or superior). Households most rarely assess the condition of their dwelling as satisfactory or superior in Guria.

3.5. Access to Utilities

3.5.1. Electricity Supply

In Georgia, electricity supply is a parameter that covers one hundred percent of households. Therefore, perhaps it should not even be considered as a parameter for defining the middle class, but this would not be justified. The fact that the whole population of Georgia is provided with electricity supply implies that this parameter of middle class designation is achieved by 100 percent.

Diagram #21: Share of Households with Electricity Supply



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	99.4%	99.7%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Rural areas	99.4%	99.4%	99.9%	99.9%	100.0%	100.0%	99.9%	100.0%	100.0%
Country total	99.4%	99.6%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The situation is comparable in the regions.

Table #10: Share of Households with Electricity Supply, by Region (%)

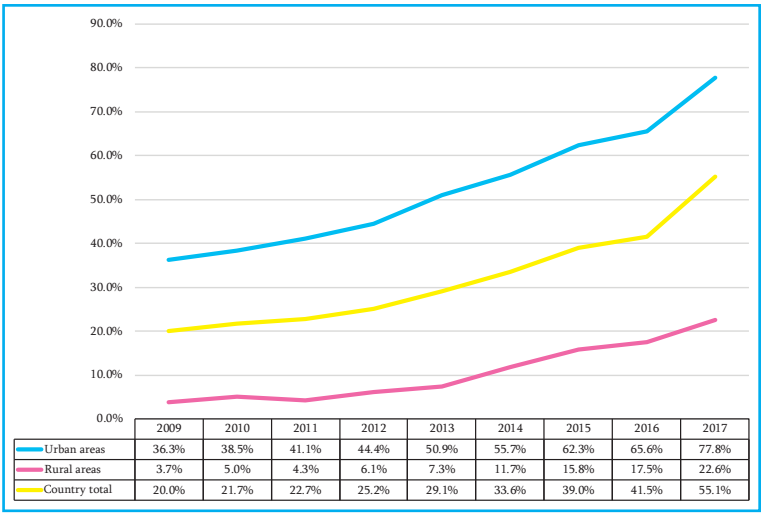
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	99.3	99.3	99.7	99.6	99.9	100.0	99.8	99.9	100.0
Tbilisi	99.6	99.8	99.9	100.0	100.0	100.0	100.0	100.0	100.0
Shida Kartli	99.8	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Kvemo Kartli	99.3	99.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Samtskhe-Javakheti	99.4	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Adjara	99.0	99.4	99.9	100.0	100.0	100.0	100.0	100.0	100.0
Guria	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Samegrelo	99.3	99.9	99.9	100.0	100.0	100.0	99.9	99.8	100.0
Imereti, Racha-Lechkhumi-Svaneti	99.2	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mtskheta-Mtianeti	99.4	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Country total	99.4	99.6	99.9	100.0	100.0	100.0	100.0	100.0	100.0

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.5.2. Hot Water Supply

In 2017, 55 percent of households were provided with central or individual systems of hot water supply. The prevalence of a hot water supply in urban households is almost 3.5 times higher than in rural households. It should be noted, that this indicator demonstrates a sharp growth trend, both in urban and rural areas.

Diagram #22: Share of Households with Central or Individual Systems of Hot Water Supply



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	36.3%	38.5%	41.1%	44.4%	50.9%	55.7%	62.3%	65.6%	77.8%
Rural areas	3.7%	5.0%	4.3%	6.1%	7.3%	11.7%	15.8%	17.5%	22.6%
Country total	20.0%	21.7%	22.7%	25.2%	29.1%	33.6%	39.0%	41.5%	55.1%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Among the regions, Tbilisi is distinguished according to provision of hot water supply (almost 90 percent). Compared to other regions, the situation is also relatively better in Adjara. The worst situation in this regard is in Guria and Mtskheta-Mtianeti. It is important to mention that a trend of growth is clear in all regions.

Table #11: Share of Households with Central or Individual Systems of Hot Water Supply, by Region (%)

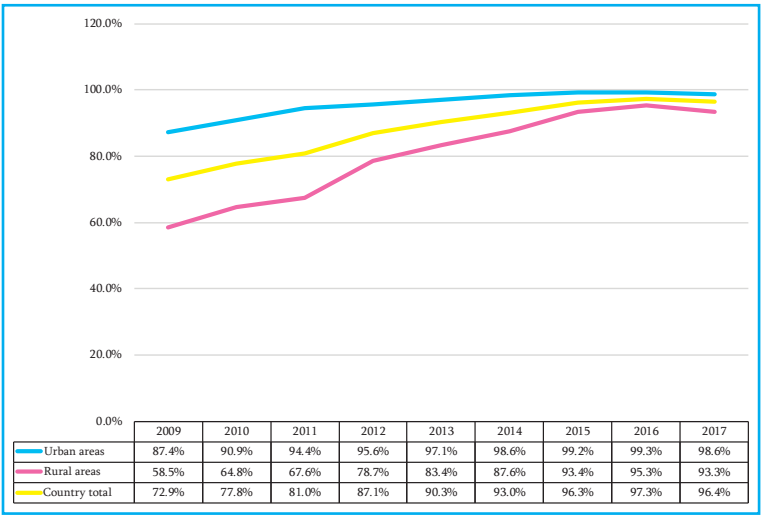
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	4.0	5.4	6.8	10.1	16.2	19.5	26.7	28.9	38.7
Tbilisi	50.7	51.5	55.1	63.1	72.5	76.8	80.7	84.5	87.8
Shida Kartli	6.5	9.6	10.4	12.2	18.3	25.3	28.7	33.1	43.9
Kvemo Kartli	9.7	13.8	15.8	22.7	24.0	27.8	30.8	31.9	46.3
Samtskhe-Javakheti	2.4	5.0	5.9	7.2	10.3	13.3	29.1	37.8	37.9
Adjara	38.6	42.6	30.4	21.1	4.8	11.1	23.5	20.7	52.2
Guria	2.6	2.7	6.8	7.6	6.6	11.7	22.1	33.1	26.2
Samegrelo	1.1	2.7	4.9	5.1	11.9	23.2	24.8	23.4	39.5
Imereti, Racha-Lechkhumi-Svaneti	5.3	4.9	6.1	6.4	9.5	11.8	15.9	17.5	36.7
Mtskheta-Mtianeti	9.3	11.3	12.9	15.7	19.8	19.2	21.9	23.7	30.6
Country total	20.0	21.7	22.7	25.2	29.1	33.6	39.0	41.5	55.1

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.5.3. Natural and Liquid Gas Supply

As of 2017, natural or liquid gas supply has been a parameter with almost 100 percent coverage, but in 2009 this was not the case. The level of natural or liquid gas supply in rural areas was less than 60 percent; this was significantly lower than the urban indicator. By 2016-2017, the indicators for urban and rural areas were almost equal.

Diagram #23: Share of Households with Natural or Liquid Gas Supply



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	87.4%	90.9%	94.4%	95.6%	97.1%	98.6%	99.2%	99.3%	98.6%
Rural areas	58.5%	64.8%	67.6%	78.7%	83.4%	87.6%	93.4%	95.3%	93.3%
Country total	72.9%	77.8%	81.0%	87.1%	90.3%	93.0%	96.3%	97.3%	96.4%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The highest indicator for natural or liquid gas supply was in Tbilisi. Kakheti, Shida Kartli and Samtskhe-Javakheti are distinguished from other regions as well.

The lowest indicator for natural or liquid gas supply is in the Mtskheta-Mtianeti region, where it is less than 90 percent.

The regions of Imereti, Racha-Lechkhumi and Svaneti demonstrated the sharpest rate of growth in terms of natural or liquid gas supply in the 2009-2017 period.

Table #12: Share of Households with Natural or Liquid Gas Supply, by Region (%)

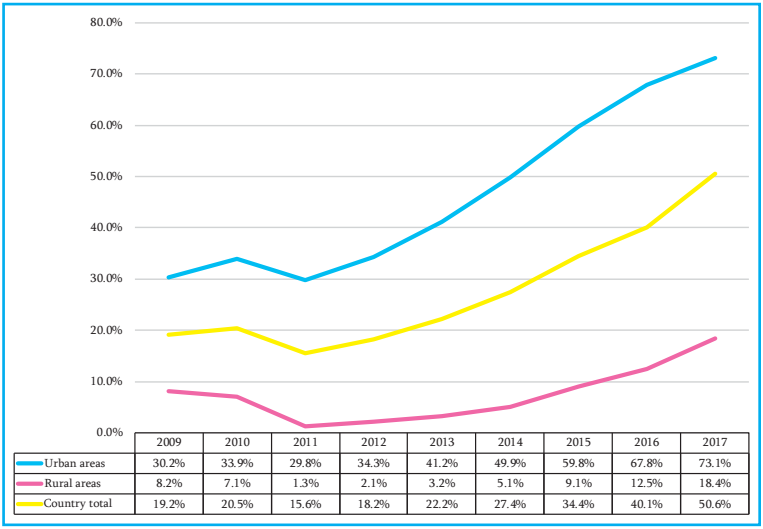
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	79.0	83.3	81.5	90.0	94.0	97.0	95.9	97.7	97.8
Tbilisi	91.0	93.1	95.7	96.5	98.3	99.3	99.8	99.8	98.6
Shida Kartli	74.1	73.2	85.7	87.6	88.5	94.6	98.5	97.9	97.3
Kvemo Kartli	81.5	84.7	77.3	83.6	89.5	95.1	97.5	96.1	95.4
Samtskhe-Javakheti	71.3	82.4	90.2	94.3	94.5	97.0	98.3	98.8	97.5
Adjara	79.5	85.1	97.3	99.0	98.5	98.5	96.6	96.6	96.9
Guria	64.0	78.8	80.5	91.1	90.3	90.4	98.2	98.8	95.8
Samegrelo	60.6	60.3	66.4	82.1	89.3	95.0	97.5	97.5	93.2
Imereti, Racha-Lechkhumi-Svaneti	47.4	58.5	60.5	70.9	77.0	79.5	90.5	94.7	95.3
Mtskheta-Mtianeti	50.5	54.4	62.8	73.7	68.9	72.5	81.1	88.6	85.3
Country total	72.9	77.8	81.0	87.1	90.3	93.0	96.3	97.3	96.4

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.5.4. Heating

Nearly half of Georgia's households had individual or central heating in 2017. The heating supply level in urban areas is almost four times higher than in rural areas. It should also be noted that since 2011, a rapid growth of this indicator has been observed both in urban and rural areas. Overall, the weight of families provided with heating nearly tripled in the country in the 2009 to 2017 period.

Diagram #24: Share of Households with Central or Individual Heating System



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	30.2%	33.9%	29.8%	34.3%	41.2%	49.9%	59.8%	67.8%	73.1%
Rural areas	8.2%	7.1%	1.3%	2.1%	3.2%	5.1%	9.1%	12.5%	18.4%
Country total	19.2%	20.5%	15.6%	18.2%	22.2%	27.4%	34.4%	40.1%	50.6%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

With regard to central and individual heating supply, the best situation is in Tbilisi (84 percent). The indicators for other regions are quite different. This figure is relatively high in Kvemo Kartli, Adjara and Shida Kartli (47-50 percent). A relatively poor situation is observed in Guria and Samegrelo, but in recent years, the situation in these regions has improved significantly.

Table #13: Share of Households with Central or Individual Heating System, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	4.5	3.3	0.9	0.9	3.0	3.7	15.4	19.8	26.9
Tbilisi	42.2	44.8	46.1	52.4	57.2	64.9	72.5	79.0	83.9
Shida Kartli	5.6	6.4	2.8	3.0	6.9	13.0	17.6	27.0	46.6
Kvemo Kartli	8.7	13.0	10.1	17.8	22.8	23.4	29.8	38.2	51.4
Samtskhe-Javakheti	2.0	5.3	1.7	3.8	5.3	11.3	19.3	26.0	28.6
Adjara	58.6	49.9	7.7	1.6	9.9	15.9	27.9	36.0	49.4
Guria	5.9	3.4	1.1	2.2	2.0	7.5	9.3	12.2	18.7
Samegrelo	2.0	7.0	0.2	0.0	0.4	1.1	8.7	9.3	19.1
Imereti, Racha-Lechkhumi-Svaneti	4.8	6.5	5.2	9.2	14.2	22.9	25.4	29.6	35.5
Mtskheta-Mtianeti	7.4	5.0	3.2	3.8	6.3	6.7	19.0	25.2	26.0
Country total	19.2	20.5	15.6	18.2	22.2	27.4	34.4	40.1	50.6

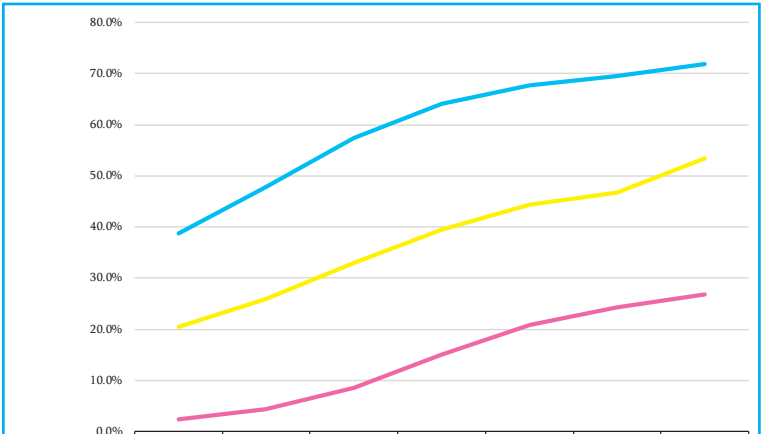
Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.5.5. Access to Internet

Due to the lack of data on the analyzed period, access to Internet is not considered in this analysis as a criterion. Relevant data has only been available since 2011, and it shows a significant improvement in the Internet access rate: from 2011 to 2017, it increased 2.6-fold in the country.

The difference between urban and rural areas is stark: Internet access in urban households is 2.7 times higher than in rural areas, but a trend of improvement has been observed in both, especially in rural areas. Internet access in rural households increased 11-fold in the 2011-2017 period.

Diagram #25: Share of Households with Access to Internet



	2011	2012	2013	2014	2015	2016	2017
Urban areas	38.7%	47.7%	57.4%	64.2%	67.7%	69.5%	71.9%
Rural areas	2.4%	4.3%	8.5%	15.1%	20.9%	24.2%	26.7%
Country total	20.5%	25.9%	32.9%	39.5%	44.3%	46.8%	53.3%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The improving trend in terms of access to Internet is irreversible in all regions, but the achieved levels are substantially varied. This indicator reaches almost 80 percent in the capital. Adjara is in second place with almost 54 percent. It is followed by Kvemo Kartli at 52 percent. The direst situation in this regard is in Guria (23.5 percent)

Table #14: Share of Households with Access to Internet, by Region (%)

	2011	2012	2013	2014	2015	2016	2017
Kakheti	3.6	6.5	13.5	18.5	23.9	27.3	29.7
Tbilisi	49.1	56.8	68.2	72.9	76.3	78.8	79.6
Shida Kartli	9.3	10.2	17.4	24.8	27.1	33.1	43.9
Kvemo Kartli	10.8	21.5	27.2	35.2	40.2	42.3	52.4
Samtskhe-Javakheti	8.7	12.6	17.5	27.5	31.0	33.9	43.5
Adjara	24.7	26.9	31.4	37.9	52.2	49.8	53.7
Guria	2.5	3.0	4.4	15.5	22.8	23.9	23.5
Samegrelo	7.7	11.9	18.9	27.7	29.6	31.4	38.9
Imereti, Racha-Lechkhumi-Svaneti	9.8	16.7	21.3	27.8	32.0	35.9	40.5
Mtskheta-Mtianeti	8.2	11.8	10.1	19.4	25.0	22.0	33.1
Country total	20.5	25.9	32.9	39.5	44.3	46.8	53.3

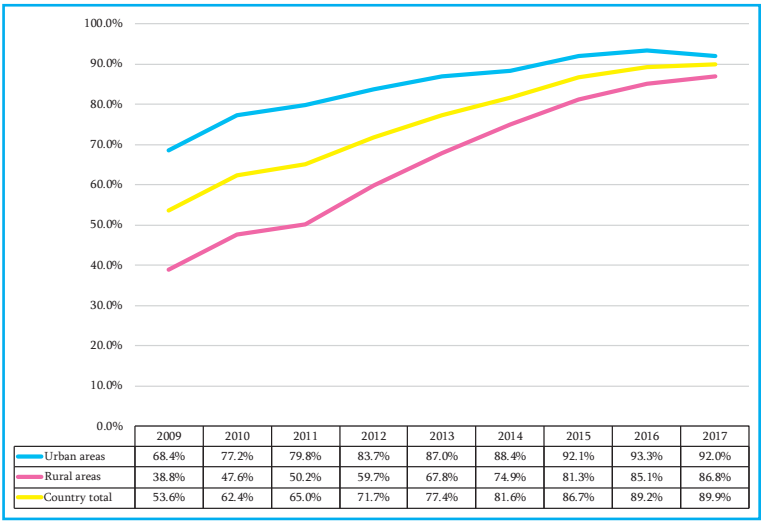
Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.6. Ownership of Durable Goods

3.6.1. Refrigerator

In 2017, more than 90 percent of households of Georgia had at least one refrigerator in working condition. The difference between urban and rural areas in 2017 was marginal, which could not be said prior to 2009-2010 when only 54 percent of households had at least one functional refrigerator. The share of such households was only 38 percent in rural areas. In this regard, the situation in the country has improved dramatically in the period from 2009 - 2017.

Diagram #26: Share of Households with at least One Functional Refrigerator



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	68.4%	77.2%	79.8%	83.7%	87.0%	88.4%	92.1%	93.3%	92.0%
Rural areas	38.8%	47.6%	50.2%	59.7%	67.8%	74.9%	81.3%	85.1%	86.8%
Country total	53.6%	62.4%	65.0%	71.7%	77.4%	81.6%	86.7%	89.2%	89.9%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

In 2017, the difference between regions was not substantial. In this regard, Adjara is distinguished, as 95 percent of households report owning at least one functional refrigerator. This is more than the corresponding indicator for the capital.

Table #15: Share of Households with at least One Functional Refrigerator, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	46.4	54.3	55.3	58.3	68.6	74.7	81.6	84.1	85.9
Tbilisi	76.7	86.6	87.0	89.1	91.5	91.0	94.5	96.1	92.2
Shida Kartli	39.2	44.3	44.8	56.4	61.3	64.9	70.4	76.2	83.6
Kvemo Kartli	54.6	65.9	62.7	72.9	81.5	83.9	85.4	89.2	91.9
Samtskhe-Javakheti	41.8	50.7	59.1	67.8	78.6	79.4	87.2	82.1	86.3
Adjara	59.4	71.9	79.5	84.5	91.5	93.2	96.5	96.0	95.4
Guria	35.6	38.1	43.0	57.6	56.5	74.3	87.6	90.6	88.4
Samegrelo	33.0	38.2	44.8	57.6	61.0	75.0	83.3	86.5	89.7
Imereti, Racha-Lechkhumi-Svaneti	45.2	53.1	58.9	66.6	74.5	79.4	85.5	88.9	88.9
Mtskheta-Mtianeti	40.8	54.1	49.4	55.7	59.1	68.5	62.5	74.4	82.6
Country total	53.6	62.4	65.0	71.7	77.4	81.6	86.7	89.2	89.9

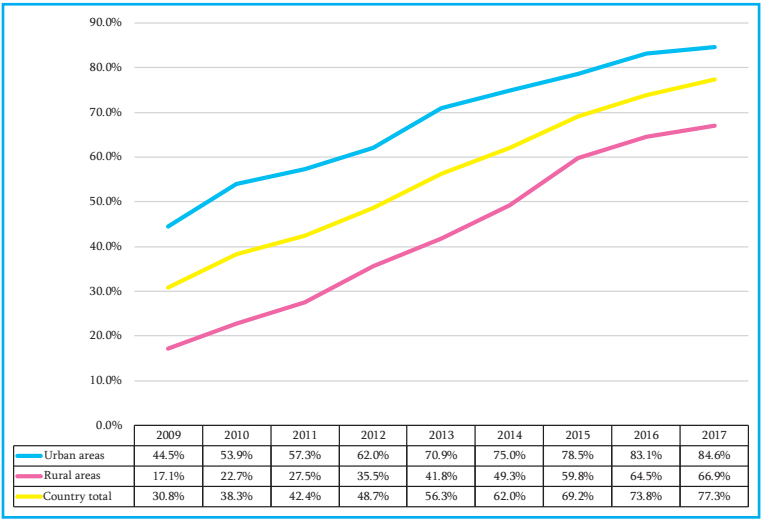
Source: Database of the Integrated Household Survey of Georgia, processed by the authors

With regard to refrigerator ownership, the situation improved for all regions in the 2009-2017 timespan. A very high rate of improvement was observed in Guria and Samegrelo. In 2009-2010, the situation in these regions was relatively worse than in other regions.

3.6.2. Laundry Machine

In 2017, 67 percent of households in Georgia reported having at least one functional washing machine. In the 2009-2017 period, the coverage indicator for this durable good showed a sharp growth trend. It should be noted that this indicator is sharply rising in both urban and rural areas, and the growth rate in rural area is higher than in the cities.

Diagram #27: Share of Households with at least One Functional Laundry Machine



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	44.5%	53.9%	57.3%	62.0%	70.9%	75.0%	78.5%	83.1%	84.6%
Rural areas	17.1%	22.7%	27.5%	35.5%	41.8%	49.3%	59.8%	64.5%	66.9%
Country total	30.8%	38.3%	42.4%	48.7%	56.3%	62.0%	69.2%	73.8%	77.3%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The differences between regions are glaring, but a growth rate is visible everywhere. Thus, its is very likely that the laundry machine will soon become a durable good with one hundred percent coverage.

Table #16: Share of Households with at least One Functional Laundry Machine, by Region (%)

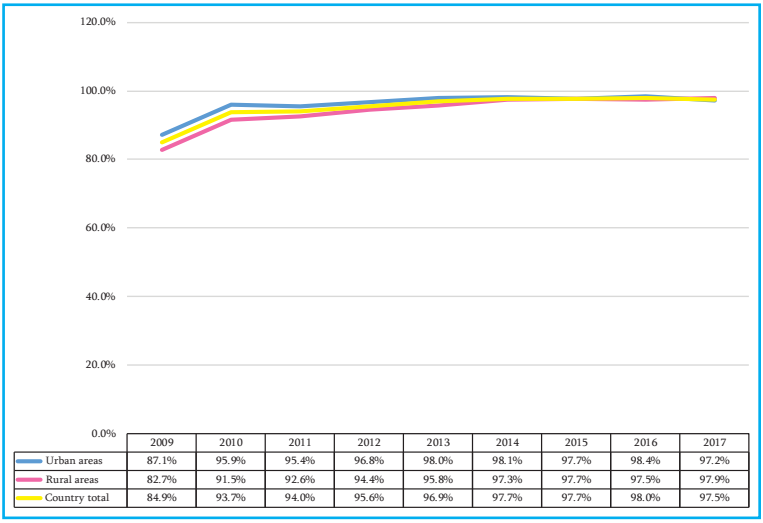
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	20.7	26.6	31.7	37.1	45.7	54.8	62.2	70.6	72.6
Tbilisi	52.3	63.1	65.6	70.9	80.7	79.7	82.7	86.5	85.1
Shida Kartli	20.1	30.0	34.1	37.9	45.6	50.3	58.7	66.8	69.0
Kvemo Kartli	24.5	29.6	31.6	45.0	58.0	63.1	67.7	71.5	79.6
Samtskhe-Javakheti	21.3	27.9	40.0	50.5	54.8	61.2	75.5	73.6	80.1
Adjara	31.5	39.1	48.2	54.7	63.8	72.8	84.0	80.5	89.6
Guria	17.5	19.3	26.6	38.2	39.3	51.1	63.7	71.7	70.2
Samegrelo	18.3	21.6	28.0	31.8	34.6	49.5	62.9	65.5	65.7
Imereti, Racha-Lechkhumi-Svaneti	24.8	30.7	33.4	38.8	44.7	51.8	58.1	65.5	71.4
Mtskheta-Mtianeti	19.0	31.0	29.8	35.6	37.2	41.6	43.6	53.6	61.7
Country total	30.8	38.3	42.4	48.7	56.3	62.0	69.2	73.8	77.3

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.6.3. Television

The TV set is a durable good with vast distribution, as practically all households have at least one. The difference between urban and rural areas in terms of possession of this good is nearly zero.

Diagram #28: Share of Households with at least One Functional Television



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	87.1%	95.9%	95.4%	96.8%	98.0%	98.1%	97.7%	98.4%	97.2%
Rural areas	82.7%	91.5%	92.6%	94.4%	95.8%	97.3%	97.7%	97.5%	97.9%
Country total	84.9%	93.7%	94.0%	95.6%	96.9%	97.7%	97.7%	98.0%	97.5%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The difference is the same between regional indicators.

Table #17: Share of Households with at least One Functional Television, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	82.3	91.9	91.1	91.2	94.9	97.3	97.0	96.6	97.4
Tbilisi	88.5	97.1	96.7	97.4	98.4	97.8	97.7	98.1	96.5
Shida Kartli	83.9	91.8	90.5	91.9	95.4	97.5	96.6	98.1	97.7
Kvemo Kartli	81.5	90.8	94.0	93.7	95.2	97.2	96.7	97.8	97.2
Samtskhe-Javakheti	89.5	95.6	96.4	98.3	98.8	99.4	98.9	97.4	99.3
Adjara	88.0	96.0	98.3	99.2	99.6	100.0	99.8	99.1	98.9
Guria	81.5	93.4	94.6	95.7	95.8	98.8	99.2	98.5	98.0
Samegrelo	84.7	94.2	92.8	96.1	96.7	98.3	98.3	97.9	97.7
Imereti, Racha-Lechkhumi-Svaneti	82.6	90.7	92.2	95.5	96.1	97.0	97.6	98.0	97.9
Mtskheta-Mtianeti	76.6	89.3	86.5	93.5	95.9	92.8	95.0	98.9	98.2
Country total	84.9	93.7	94.0	95.6	96.9	97.7	97.7	98.0	97.5

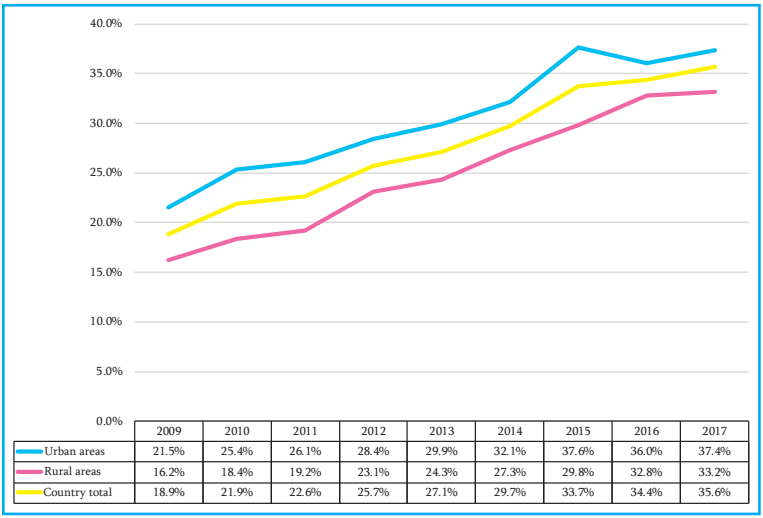
Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.6.4. Automobile

In 2017, about 36 percent of households owned at least one serviceable automobile, which exceeds the 2009 indicator two-fold.

As a rule of thumb, the share of households that have cars in rural areas is usually lower than the corresponding indicator for urban areas. In the 2009-2017 period, the weight of such families increased by 74 percent in the cities, and two-fold in rural areas.

Diagram #29: Share of Households with at least One Functional Personal Automobile



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	21.5%	25.4%	26.1%	28.4%	29.9%	32.1%	37.6%	36.0%	37.4%
Rural areas	16.2%	18.4%	19.2%	23.1%	24.3%	27.3%	29.8%	32.8%	33.2%
Country total	18.9%	21.9%	22.6%	25.7%	27.1%	29.7%	33.7%	34.4%	35.6%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The share of households that own personal automobiles is the highest in the Kakheti region. This does not suggest that there are more cars in Kakheti than in Tbilisi, as this indicator shows the weight of households that have at least one car, and not the total number of cars owned by the households. Based on the latter, the capital is leading. It should be noted, that in the 2009-2017 period, the growth rate of this indicator nearly doubled in all regions, while in Tbilisi it constituted only 74 percent.

Table #18: Share of Households with at least One Functional Personal Automobile, by Region (%)

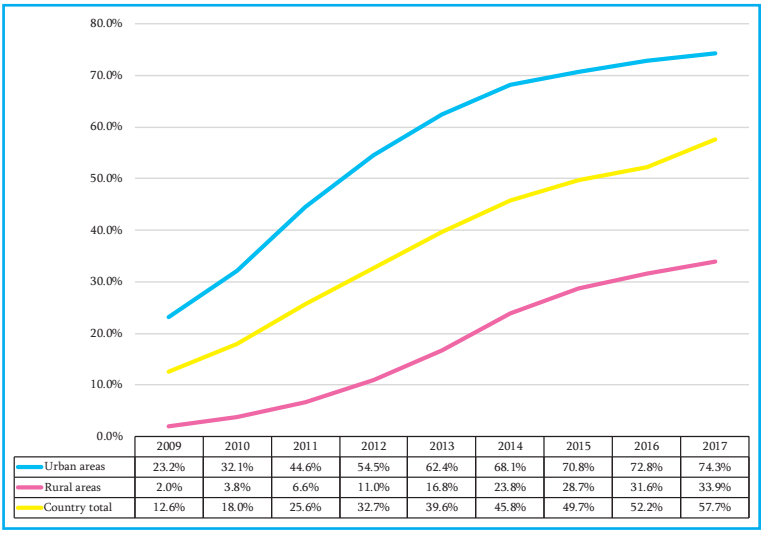
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	22.9	23.1	23.8	26.6	32.0	37.2	37.5	39.9	40.0
Tbilisi	23.9	30.1	27.1	31.3	32.0	35.2	42.8	39.9	38.2
Shida Kartli	13.6	15.0	12.7	20.2	19.4	18.9	25.2	26.9	27.9
Kvemo Kartli	18.4	21.1	24.6	24.1	25.4	27.3	29.3	34.7	36.9
Samtskhe-Javakheti	18.6	20.4	27.0	29.7	25.1	28.5	35.5	30.8	38.9
Adjara	16.9	19.8	24.9	32.0	31.9	28.8	33.4	34.4	36.1
Guria	14.6	13.6	16.6	17.8	21.0	24.8	34.1	36.0	28.7
Samegrelo	16.3	16.8	18.0	20.8	24.9	29.4	32.2	33.2	35.7
Imereti, Racha-Lechkhumi-Svaneti	15.6	17.9	19.7	21.6	23.6	26.8	26.6	29.2	32.6
Mtskheta-Mtianeti	13.2	19.3	23.5	19.7	15.8	18.4	18.5	21.2	29.0
Country total	18.9	21.9	22.6	25.7	27.1	29.7	33.7	34.4	35.6

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.6.5. Personal Computer

In 2017, almost 58 percent of households of Georgia had at least one computer in working condition. Compared to 2009, this indicator has increased almost 5-fold. At least three out of four households in cities have a computer. It is particularly noteworthy that in 2009, only 2 percent of rural households had computers. In 2017, this indicator increased 17-fold and compiled 33 percent, but the difference between rural and urban areas is still quite significant in this regard.

Diagram #30: Share of Households with at least One Functional Personal Computer



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	23.2%	32.1%	44.6%	54.5%	62.4%	68.1%	70.8%	72.8%	74.3%
Rural areas	2.0%	3.8%	6.6%	11.0%	16.8%	23.8%	28.7%	31.6%	33.9%
Country total	12.6%	18.0%	25.6%	32.7%	39.6%	45.8%	49.7%	52.2%	57.7%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

There is a substantial difference between the regions in terms of computer ownership by households: The share of households that own a computer is the highest in the capital (81 percent). Adjara region is in second place (about 63 percent), and Kvemo Kartli – in third place (almost 57 percent). Among the outsiders, Guria is especially noteworthy (29 percent).

Table #19: Share of Households with at least One Functional Personal Computer, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	3.7	6.3	9.0	13.4	20.8	25.3	29.6	34.9	35.8
Tbilisi	32.3	44.0	55.9	63.7	72.3	76.2	78.4	80.6	81.3
Shida Kartli	3.5	7.6	12.3	18.2	24.9	36.5	41.0	43.1	47.3
Kvemo Kartli	6.9	12.5	16.6	29.0	33.9	39.8	43.0	44.6	56.7
Samtskhe-Javakheti	2.6	4.7	16.3	21.8	26.3	35.5	40.6	45.3	52.2
Adjara	11.2	16.1	28.7	34.4	41.7	48.4	58.4	56.0	62.5
Guria	1.8	1.4	6.2	9.5	14.0	25.2	33.0	32.7	28.8
Samegrelo	4.5	4.2	10.5	15.5	24.4	36.4	42.4	42.0	45.0
Imereti, Racha-Lechkhumi-Svaneti	5.4	7.8	13.6	22.4	27.9	32.6	34.1	39.8	44.7
Mtskheta-Mtianeti	6.8	8.9	14.2	21.7	25.1	30.0	29.1	29.3	39.6
Country total	12.6	18.0	25.6	32.7	39.6	45.8	49.7	52.2	57.7

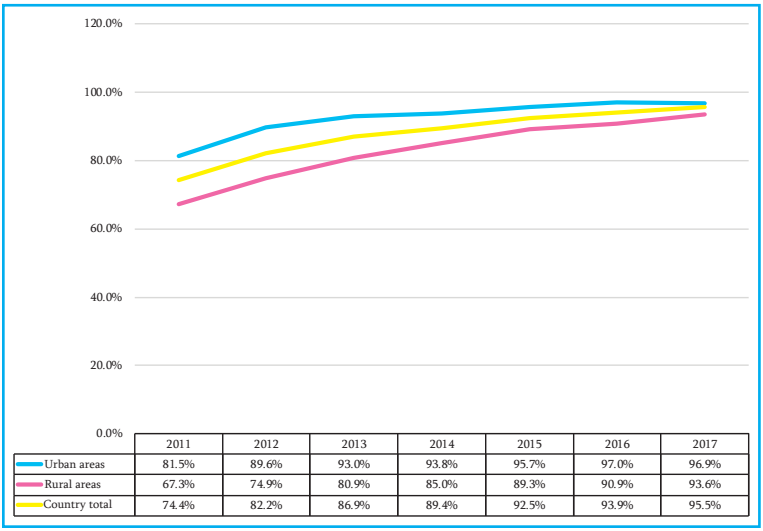
Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Throughout the 2009-2017 period, the specific share of households with at least one operable personal computer increased sharply in all regions, except Tbilisi.

3.6.6. Cellular Phone

Due to a lack of data, cellular phone ownership, as a middle class quantitative assessment factor, will not be considered in this study. Relevant data has only been available since 2011, and it shows almost one hundred percent cell phone ownership in the country.

Diagram #31: Share of Households with at least One Functional Cellular Phone



	2011	2012	2013	2014	2015	2016	2017
Urban areas	81.5%	89.6%	93.0%	93.8%	95.7%	97.0%	96.9%
Rural areas	67.3%	74.9%	80.9%	85.0%	89.3%	90.9%	93.6%
Country total	74.4%	82.2%	86.9%	89.4%	92.5%	93.9%	95.5%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The difference between urban and rural areas is no longer significant as of 2017. Since 2011, an improving trend has been undeniable.

Cellular phone distribution in all regions is equally high. Adjara is particularly noteworthy in this regard, where this indicator is higher than in Tbilisi.

Table #20: Share of Households with at least One Functional Cellular Phone, by Region (%)

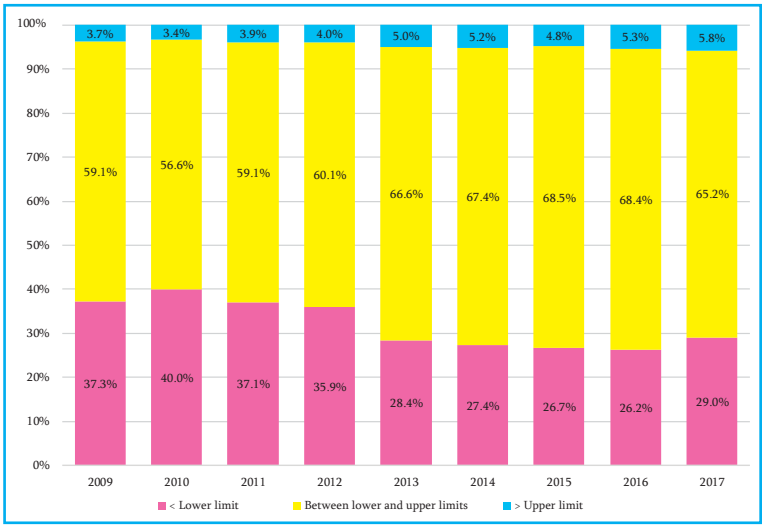
	2011	2012	2013	2014	2015	2016	2017
Kakheti	68.2	75.8	79.6	82.3	87.9	90.1	92.7
Tbilisi	83.4	91.3	95.3	94.9	96.4	98.0	97.6
Shida Kartli	69.4	80.4	87.3	87.8	89.7	91.2	92.6
Kvemo Kartli	66.5	69.9	79.3	85.2	92.4	93.8	95.6
Samtskhe-Javakheti	79.1	80.2	78.9	88.6	92.3	91.2	93.9
Adjara	88.0	90.7	93.8	97.4	98.2	98.7	98.5
Guria	65.9	79.2	89.5	90.0	93.9	96.3	94.4
Samegrelo	67.3	81.1	85.0	89.8	93.4	93.4	96.7
Imereti, Racha-Lechkhumi-Svaneti	69.5	79.2	83.1	85.3	88.1	90.4	93.5
Mtskheta-Mtianeti	69.0	71.7	79.6	84.3	84.9	88.5	92.8
Country total	74.4	82.2	86.9	89.4	92.5	93.9	95.5

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.7. Consumption

In 2017, about 65 percent of households' consumption (consumer expenditures) calculated per capita was between the limits determined during the selection of middle class criteria. This does not suggest that the middle class in Georgia comprises 65 percent of the population. We believe that households' consumption, as well as their income, should serve as criteria for identification of a middle class, but not exclusively. It is noteworthy, that the share of households within the determined limits is increasing against the background of a decrease in the share of households below the lower limit. It should also be mentioned that in 2017, the share of such households increased, which is quite suggestive.

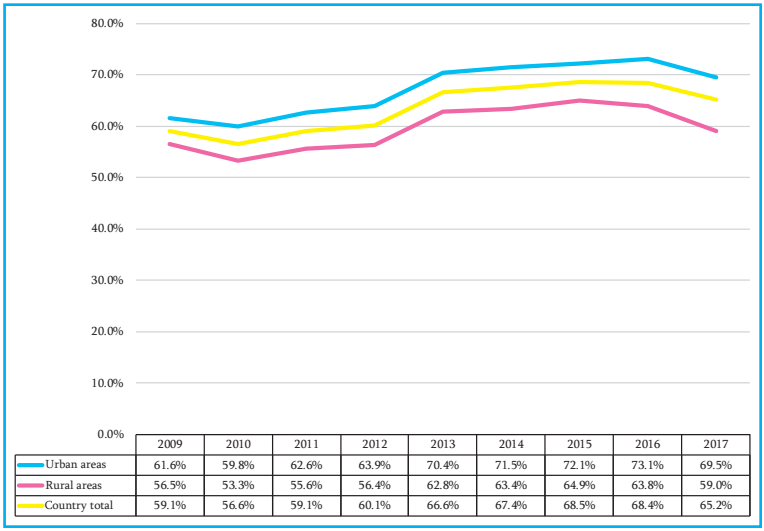
Diagram #32: Distribution of Households by Lower and Upper Limits of Per Capita Consumption



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The share of households between the limits specified during the criteria selection process is usually lower in rural areas compared to the cities. In 2017, a decline was observed in both, but the rate of decline was higher in rural areas.

Diagram #33: Share of Households Appropriated to the Per Capita Consumption Parameter of the Middle Class



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	61.6%	59.8%	62.6%	63.9%	70.4%	71.5%	72.1%	73.1%	69.5%
Rural areas	56.5%	53.3%	55.6%	56.4%	62.8%	63.4%	64.9%	63.8%	59.0%
Country total	59.1%	56.6%	59.1%	60.1%	66.6%	67.4%	68.5%	68.4%	65.2%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The difference between the regions is quite substantial. After Tbilisi, Samtskhe-Javakheti is distinguished in this regard (72 percent). Samegrelo and Imereti, and Racha-Lechkhumi-Svaneti are tied for third place (about 65 percent each). The lowest indicator was in Mtskheta-Mtianeti (49 percent).

Table #21: Share of Households Appropriated to the Per Capita Consumption Parameter of the Middle Class, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	47.1	46.1	53.7	55.9	62.0	67.2	63.5	66.3	59.3
Tbilisi	64.4	62.7	64.8	67.8	73.2	73.7	76.5	75.2	73.2
Shida Kartli	51.7	52.3	54.9	50.8	55.8	55.8	59.1	56.7	61.9
Kvemo Kartli	50.5	50.0	44.9	45.2	58.7	56.8	56.9	56.8	58.0
Samtskhe-Javakheti	53.2	62.3	71.1	72.4	77.8	83.2	78.6	82.6	72.2
Adjara	53.8	53.0	55.9	55.5	67.2	63.7	66.8	59.4	59.3
Guria	59.0	57.0	57.0	59.1	63.0	60.7	71.0	66.7	60.7
Samegrelo	63.9	57.2	58.1	60.9	65.4	68.7	70.6	72.0	64.5
Imereti, Racha-Lechkhumi-Svaneti	67.2	58.7	63.2	62.1	67.6	69.7	68.2	71.1	64.4
Mtskheta-Mtianeti	49.7	50.7	49.7	53.6	55.6	47.0	52.7	54.2	48.7
Country total	59.1	56.6	59.1	60.1	66.6	67.4	68.5	68.4	65.2

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

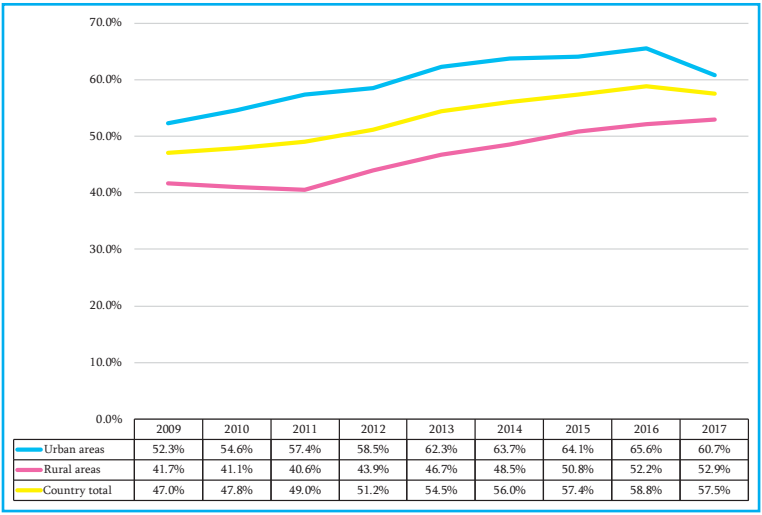
In the 2009-2017 period, the share of households appropriated to the mentioned parameter increased by 6 percentage points in the country. Particularly noteworthy in terms of growth based on this indicator are: Samtskhe-Javakheti (by 19 percentage points), Kakheti (by 12 percentage points), and Shida Kartli (by 10 percentage points).

3.8. Self-assessment

3.8.1. Self-assessment of Income

According to income, in 2017, almost 60 percent of households assessed their own status as "good", "average" or "satisfactory". It should be noted that this indicator was characterized by a growing trend from 2009 until 2016, but in 2017 it fell sharply. This decrease was caused by a deterioration of self-assessments within urban households.

Diagram #34: Share of Households Who Assess Their Own Condition based on Income as "Good", "Average" or "Satisfactory"



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	52.3%	54.6%	57.4%	58.5%	62.3%	63.7%	64.1%	65.6%	60.7%
Rural areas	41.7%	41.1%	40.6%	43.9%	46.7%	48.5%	50.8%	52.2%	52.9%
Country total	47.0%	47.8%	49.0%	51.2%	54.5%	56.0%	57.4%	58.8%	57.5%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Assessments of familial income by the households were the worst in Kakheti and Mtskheta-Mtianeti, and the best in Adjara.

In 2017, compared to 2009, self-assessment by income had improved in all regions. However, it is noteworthy that in 2017 this figure deteriorated for 4 regions out of 10, including in the capital.

Table #22: Share of Households that Assess Their Own Condition based on Income as "Good", "Average" or "Satisfactory", by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	38.9	36.6	39.0	43.1	44.6	50.5	48.3	52.6	48.5
Tbilisi	52.5	56.0	56.7	54.2	59.2	59.4	62.0	62.3	56.0
Shida Kartli	37.7	42.5	39.8	41.5	41.1	38.9	36.3	43.0	51.2
Kvemo Kartli	54.1	51.3	45.1	48.1	50.5	51.7	50.1	50.9	57.8
Samtskhe-Javakheti	52.5	53.1	58.0	64.9	61.1	65.9	69.0	64.4	65.6
Adjara	47.3	47.7	55.1	60.7	72.3	69.3	72.5	69.7	71.9
Guria	40.5	41.5	47.7	52.9	54.0	48.6	58.8	65.3	59.0
Samegrelo	41.9	38.9	42.2	45.3	52.4	58.6	60.3	64.1	59.0
Imereti, Racha-Lechkhumi-Svaneti	47.6	48.6	49.8	54.4	55.4	57.6	59.2	60.6	59.2
Mtskheta-Mtianeti	32.6	30.3	33.3	31.7	29.9	36.5	36.0	35.4	48.1
Country total	47.0	47.8	49.0	51.2	54.5	56.0	57.4	58.8	57.5

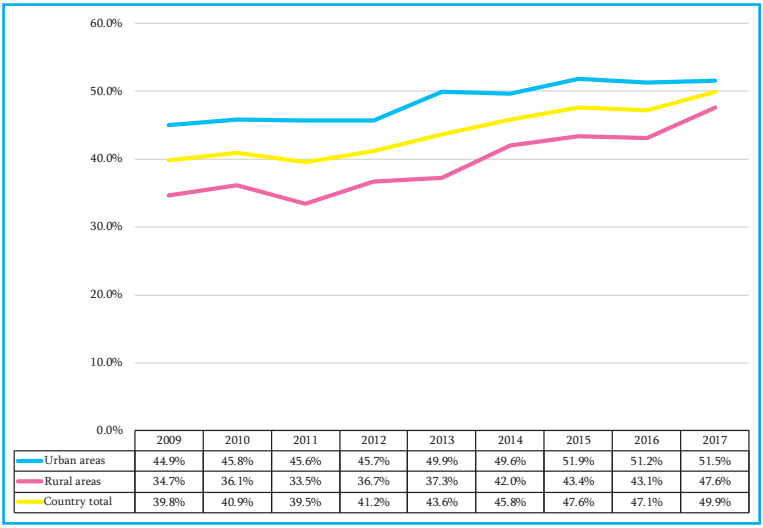
Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.8.2. Self-assessment of Own Status by Property

In 2017, almost half of households in Georgia assessed their own status based on property as "rich", "wealthy" or "medium wealthy". This indicator showed a growing trend from 2009 to 2017.

Regarding the assessment of own status by property, in 2017, urban and rural indicators did not differ significantly. However, in 2009 this difference was substantial and constituted 10-percentage points.

Diagram #35: Share of Households Who Assess Their Own Status by Property as "Rich", "Wealthy" or "Medium Wealthy"



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	44.9%	45.8%	45.6%	45.7%	49.9%	49.6%	51.9%	51.2%	51.5%
Rural areas	34.7%	36.1%	33.5%	36.7%	37.3%	42.0%	43.4%	43.1%	47.6%
Country total	39.8%	40.9%	39.5%	41.2%	43.6%	45.8%	47.6%	47.1%	49.9%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Among the regions, households in Kakheti and Mtskheta-Mtianeti gave the worst assessment of their status based on property, while households living in Adjara had the highest ind icator in this regard. The corresponding indicator for Tbilisi is much less than that of the latter.

In 2017, compared to 2009, self-assessment of own status based on property has improved in more or less every region.

Table #23: Share of Households Who Assess Their Own Status by Property as "Rich", "Wealthy" or "Medium Wealthy", by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	28.9	28.5	28.9	31.2	32.5	38.5	35.9	39.3	41.0
Tbilisi	46.4	47.3	43.3	42.4	48.1	48.5	53.0	51.5	48.4
Shida Kartli	30.9	36.7	28.9	30.6	30.1	31.5	28.1	31.8	45.9
Kvemo Kartli	45.4	46.8	41.8	43.2	47.1	48.4	49.6	52.0	55.2
Samtskhe-Javakheti	45.0	46.8	44.7	53.1	44.3	47.9	53.8	48.7	60.4
Adjara	48.1	46.7	51.2	58.8	66.6	63.4	66.2	63.9	66.8
Guria	37.8	43.7	50.6	55.4	56.9	51.5	64.4	66.3	59.4
Samegrelo	36.8	27.5	29.4	32.0	34.6	40.6	41.6	43.3	44.4
Imereti, Racha-Lechkhumi-Svaneti	35.7	41.3	41.8	41.7	41.1	44.9	45.8	41.6	48.0
Mtskheta-Mtianeti	24.3	25.3	25.9	26.0	26.8	35.7	28.0	30.1	39.6
Country total	39.8	40.9	39.5	41.2	43.6	45.8	47.6	47.1	49.9

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

3.9. Significant Factors that could not be Assessed

3.9.1. Healthcare

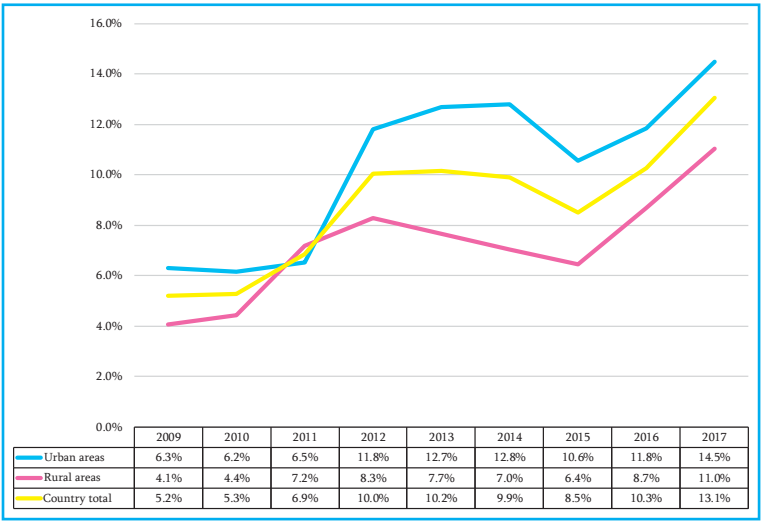
As in the case for education, access to health care is very important for quantitative assessment of the middle class, but the calculation of this parameter is possible only for the 2009-2011 period. To build a complete time series, only the expenses made on health care can be analyzed.

For the purpose of research, we used expenditures made by the household on healthcare prevention and insurance. In 2017, only 13 percent of households had made expenditure on preventative examinations or insurance. The share of such households is 15 percent in cities, and 11 percent in rural areas.

Compared to 2009, this indicator increased 2.5-fold in the country. It is noteworthy that the growth rate in rural areas was much higher than it was in cities.

The more or less linear trend of 2009-2011 changed with sharp increases starting in 2012, which lasted until 2014. In the years 2014-2015, the expenses in question shrunk, but they grew again in 2016-2017.

Diagram #36: Share of Households Who Make Expenses on Prophylactic Examination or Health Insurance



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	6.3%	6.2%	6.5%	11.8%	12.7%	12.8%	10.6%	11.8%	14.5%
Rural areas	4.1%	4.4%	7.2%	8.3%	7.7%	7.0%	6.4%	8.7%	11.0%
Country total	5.2%	5.3%	6.9%	10.0%	10.2%	9.9%	8.5%	10.3%	13.1%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The difference between regions is visibly noteworthy. Samtskhe-Javakheti is particularly distinguished in this regard, where 50 percent of households made expenses on prophylactic examinations or insurance. The population of Samtskhe-Javakheti became particularly interested in their own health in the last two years. In 2010-2012, a similar change took place in Adjara, and for the 2011-2015 period, an analogous phenomenon was witnessed in Shida Kartli. Such dynamics require further examination.

Table #24: Share of Households Who Make Expenses on Prophylactic Examinations or Health Insurance, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	4.3	6.1	14.3	18.4	17.9	14.5	15.4	12.6	13.8
Tbilisi	6.5	4.4	4.0	11.2	12.4	13.2	12.2	13.3	16.3
Shida Kartli	2.8	9.3	17.1	19.2	22.2	23.8	20.4	16.8	12.1
Kvemo Kartli	4.1	1.8	1.4	1.6	1.8	1.8	0.9	1.3	6.5
Samtskhe-Javakheti	3.1	3.6	9.2	6.9	6.0	1.1	4.5	31.3	50.2
Adjara	6.7	14.9	12.9	17.5	12.8	10.0	5.3	9.9	9.5
Guria	2.6	2.6	4.4	6.8	8.7	8.7	9.2	11.8	6.6
Samegrelo	5.8	3.8	3.6	4.4	7.3	7.6	6.1	6.0	5.4
Imereti, Racha-Lechkhumi-Svaneti	5.4	3.5	4.3	5.6	4.4	5.4	2.3	3.9	8.2
Mtskheta-Mtianeti	4.3	9.4	12.4	14.2	11.3	9.9	10.8	10.5	17.6
Country total	5.2	5.3	6.9	10.0	10.2	9.9	8.5	10.3	13.1

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Access to healthcare services within the framework of the Integrated Household Survey can only be presented in general terms. Calculations of dichotomy indicators for access to various forms of healthcare were made on the basis of existing information.

In 2011, 14 percent of the population had the need for treatment of chronic disease, from which 71 percent had good access to treatment. It is noteworthy, that in the 2009-2011 period, respective indicators were growing.

Only 3 percent of the population expressed a need for emergency assistance, from which half reported having good access to medical care.

In the 2009-2011 period, about 1 percent of the population reported a need for surgical intervention. The subsequent disaggregation of such a small frequency is less reliable, but it is noteworthy, that more than 70 percent of the population with such a need also had good access to it.

9-10 percent of the population reported a need for treatment, from which 62 percent claimed that they had good access to such treatment. It should be noted, that the dynamics of both – the need and the good access – has been growing in the past three years.

The indicator related to access to prophylactic examinations shows that 57-59 percent of the population required such medical care, from which only 10-15 percent reported having good access. It should be noted that the dynamic of need is rising and the dynamic for good access is declining.

44 percent of the population reported having the need for dental treatment, from which only 12 percent had access to this service. Data from 2009-2011 shows a growing dynamic coupled with a consistent low level of good accessibility. It is difficult to say what the current situation is in this direction. It should also be noted that this data is less useful for quantitative assessment of the middle class.

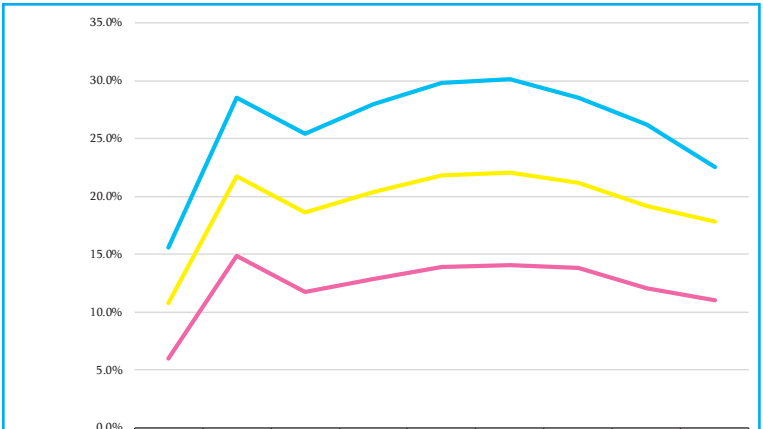
In general, the use of these healthcare parameters for quantitative assessment of the middle class is not recommended, since:

- Health care expenditure does necessarily translate into good access to health care, and extensive expenditure in this direction is a more a sign of serious illness than well-being;
- The dynamics of expense and access to insurance and prophylactic examinations during the three years (when both indicators were being collected) are opposite, which once again demonstrates that the healthcare access indicator is not a household's (micro) level indicator, as access to education is. This is more an urban or municipal (macro) level indicator, which can be calculated as a result of systemic analysis.

3.9.2. Recreation, Entertainment, Culture

The parameter of accessibility to recreation – as with education and health care – can only be analyzed for the 2009-2011 period. In order to build a complete time series, in this research we tried to use the expenditures made by households on recreation, leisure and culture. In 2017, 18 percent of households made expenses to this end. The difference between urban and rural areas is conspicuous. It is interesting that the weight of such families revealed a decreasing trend in the 2014-2017 period, which, against the background of growth in households' nominal expenses, points to an unenviable course for the overall social setting.

Diagram #37: Share of Households that made Expenses on Recreation, Leisure and Culture



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	15.6%	28.6%	25.4%	27.9%	29.8%	30.1%	28.6%	26.2%	22.6%
Rural areas	6.0%	14.9%	11.8%	12.9%	13.9%	14.1%	13.9%	12.1%	11.0%
Country total	10.8%	21.7%	18.6%	20.4%	21.9%	22.1%	21.2%	19.2%	17.8%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The differences between the regions are stark and the trends differ as well. According to 2017 data, the share of families who made expenses on recreation, leisure and culture was the highest in Tbilisi. The weight of such households was high in Imereti, Racha-Lechkhumi, the Svaneti broadened region and Kvemo Kartli. The mentioned indicator sharply decreases for Guria and Mtskheta-Mtianeti.

Table #25: Share of Households that made Expenses on Recreation, Leisure and Culture, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	9.5	21.2	20.5	18.1	20.6	16.4	16.4	13.6	15.0
Tbilisi	15.7	26.6	24.7	26.3	29.3	29.1	27.6	25.0	23.4
Shida Kartli	8.1	20.3	12.8	15.3	19.5	19.8	15.2	17.7	11.0
Kvemo Kartli	5.0	15.1	11.8	15.1	20.9	17.0	14.5	13.7	19.6
Samtskhe-Javakheti	2.6	11.9	6.9	7.2	9.1	8.2	7.8	8.7	11.6
Adjara	6.6	18.8	11.7	14.2	10.9	19.1	24.8	17.8	14.1
Guria	19.3	30.1	36.5	34.7	25.5	30.6	32.9	26.9	14.3
Samegrelo	15.6	24.7	17.6	17.7	24.3	24.7	21.0	20.3	14.0
Imereti, Racha-Lechkhumi-Svaneti	8.7	19.3	16.6	21.9	19.8	21.6	21.4	19.4	18.4
Mtskheta-Mtianeti	5.8	21.9	25.7	22.7	14.6	9.5	10.0	9.0	9.3
Country total	10.8	21.7	18.6	20.4	21.9	22.1	21.2	19.2	17.8

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

As with the education and healthcare parameters, assessment of access to recreation is very important, although the analysis of this indicator can be made only for three years of the research target period. Calculations of dichotomy indicators for recreation access were made on the basis of the aforementioned module.

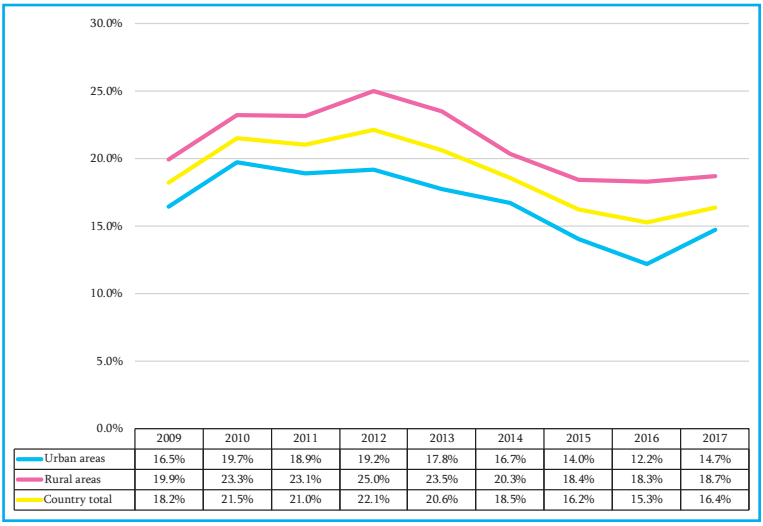
86-87 percent of the population declared a need for recreation, from which only 14 percent reported having good access. The stable dynamics of this indicator are noteworthy. It must also be mentioned that they differ markedly from the percentage share of households that made expenses on recreation, leisure and culture.

Overall, for the assessment of the recreation parameter, using expenses made in this direction is not recommended, because it greatly differs from the access to recreation indicator for the same period.

3.9.3. Access to Credit

In 2017, 16 percent of households retrieved credit from banks or private persons. It is hard to say how much this indicator describes actual accessibility to credit, which requires a separate detailed study, but in our case we do not have any other data. It should be noted that the share of such households has decreased since 2012.

Diagram #38: Share of Households that Retrieved Loans



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	16.5%	19.7%	18.9%	19.2%	17.8%	16.7%	14.0%	12.2%	14.7%
Rural areas	19.9%	23.3%	23.1%	25.0%	23.5%	20.3%	18.4%	18.3%	18.7%
Country total	18.2%	21.5%	21.0%	22.1%	20.6%	18.5%	16.2%	15.3%	16.4%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Samtskhe-Javakheti is distinguished by a high concentration of borrowing money, as 33 percent of households retrieved credit in 2017. This indicator is two times higher than the national average indicator and is almost three times higher than that of Tbilisi. In the second place is Kakheti (25 percent) and in the third place is the aggregated statistic for Imereti, Racha-Lechkhumi and Svaneti (22 percent). The share of households utilizing credit is the lowest in Mtskheta-Mtianeti (11 percent).

Table #26: Share of Households that Retrieved Credit, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	25.9	30.3	30.3	30.3	27.1	25.3	24.9	22.8	25.2
Tbilisi	10.5	15.1	13.8	13.0	12.4	10.3	7.0	5.1	11.5
Shida Kartli	25.6	23.7	24.2	21.9	21.1	19.2	18.4	13.1	14.2
Kvemo Kartli	8.8	13.8	15.8	13.8	13.7	11.8	10.3	11.3	12.8
Samtskhe-Javakheti	16.0	22.4	20.9	28.9	26.6	20.6	26.7	30.8	32.9
Adjara	20.5	21.7	16.2	19.6	17.2	14.8	12.1	10.4	11.5
Guria	31.9	39.4	39.8	49.9	41.6	34.4	29.8	25.5	20.4
Samegrelo	20.9	21.6	24.0	21.4	20.5	18.9	18.9	14.3	15.7
Imereti, Racha-Lechkhumi-Svaneti	22.7	25.5	24.3	29.3	28.0	26.9	22.5	25.7	23.2
Mtskheta-Mtianeti	21.4	24.9	29.7	26.8	26.3	26.5	17.2	16.7	10.8
Country total	18.2	21.5	21.0	22.1	20.6	18.5	16.2	15.3	16.4

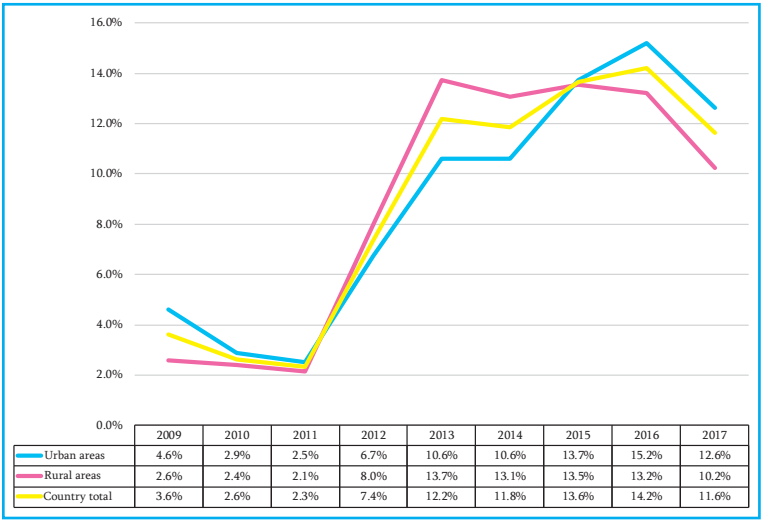
Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Overall, using the credit parameter for quantitative assessment of the middle class is not recommended, because assuming credit does not automatically imply having good access to it. Moreover, marketing activities carried out by various credit institutions affect the frequency of this indicator, which has less impact on the formation of the middle class.

3.9.4. Savings

In 2017, 10 percent of households made savings. The share of such households in rural areas is less than in the cities. In the 2009-2011 period, the share of households that made savings was within the scope of statistical error. In the 2012-2013 period it sharply increased, and in 2017 it dropped.

Diagram #39: Share of Households That Have Made Savings



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	4.6%	2.9%	2.5%	6.7%	10.6%	10.6%	13.7%	15.2%	12.6%
Rural areas	2.6%	2.4%	2.1%	8.0%	13.7%	13.1%	13.5%	13.2%	10.2%
Country total	3.6%	2.6%	2.3%	7.4%	12.2%	11.8%	13.6%	14.2%	11.6%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The highest share of households with savings is in Samtskhe-Javakheti (18.5 percent). This indicator is also high in Adjara, the Imereti, Racha-Lechkhumi and Svaneti aggregated region and Tbilisi. Savings are rarely observed in families living in Guria and Shida Kartli.

Table #27: Share of Households That Have Made Savings, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	2.8	3.3	2.8	6.0	11.5	11.2	13.4	13.6	10.6
Tbilisi	4.7	3.2	3.3	7.0	10.1	11.5	13.6	15.1	13.8
Shida Kartli	6.0	4.0	2.5	3.3	3.4	6.8	6.4	7.8	4.5
Kvemo Kartli	0.6	1.4	1.0	9.8	8.0	5.1	7.8	8.8	6.8
Samtskhe-Javakheti	4.8	4.1	2.8	22.7	58.5	35.9	27.9	17.4	18.5
Adjara	3.9	2.6	2.2	2.1	18.1	11.1	16.3	24.3	16.4
Guria	1.5	0.8	0.3	7.2	8.8	10.5	7.6	8.5	4.4
Samegrelo	4.1	1.9	2.9	3.1	2.5	8.5	10.3	11.2	10.9
Imereti, Racha-Lechkhumi-Svaneti	3.0	2.0	1.5	8.5	13.5	15.4	17.8	16.5	13.2
Mtskheta-Mtianeti	1.3	1.9	0.8	16.6	11.1	7.2	15.4	11.0	7.0
Country total	3.6	2.6	2.3	7.4	12.2	11.8	13.6	14.2	11.6

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Using the savings parameter for quantitative assessment of the middle class is not recommended, due to the fact that in addition to studying savings made, it is necessary to study households' attitudes towards savings in general. Marketing activities carried out by various banking/financial institutions effect the frequency of this indicator, i.e. the frequency of savings is very dynamic and the quantitative assessment of the middle class should be based on more sustainable indicators.

4. The Middle Class in Georgia

As indicated previously, solely income and consumer expenditures are not enough to be used as criteria for assessment of a middle class. The study of this complex socio-economic phenomenon requires a multifarious approach, which is based on a wide range of factors. The aforementioned criteria are not homogenous in their essence; for example, within the context of identifying a middle class, household incomes and ownership of durable goods (refrigerator, washing machine, TV set, passenger car and so on) cannot be viewed on one plane. Consequently, it is reasonable to rank the various criteria used for assessing the middle class based on a consideration of the criteria's importance to the definition of a middle class.

In our opinion, the nine parameters for quantitative assessment of a middle class (discussed in previous chapters of this study) can be divided into three groups according to their significance to the formation of the social group in question. Resultantly, we get the following three-point assessment scale:

1. **Primary factors - 3 points:**
   1.3. Education;
   1.4. Employment;
   1.5. Income;
2. **Secondary factors - 2 points:**
   2.1. Dwelling;
   2.2. Access to basic infrastructure;
   2.3. Ownership of durable goods;
   2.4. Consumption;
3. **Tertiary factors - 1 point:**
   3.1. Subjective self-assessment of own income;
   3.2. Subjective Self-assessment of own status by property;

It can be said that this grouping of criteria for identification of a middle class is somewhat subjective, however, it is based on a particular logic. It is generally indisputable that the level of education, a job profile on the basis of this education, and the generation of a steady income on the basis of stable employment are the decisive factors for formation of the middle class as social group. That is why this group of criteria has the highest rating. These primary factors naturally serve as prerequisites – or at least heavily affect – the household's capacity to own property (mainly ownership of real estate and durable goods), as well as their ability to access modern utility services. They also directly influence the structure of the household's consumption. Accordingly, these factors that are largely affected by the primary factors were assessed as secondary factors, and assigned a lower rating. These two groups of factors provide grounds for subjective perception of households, which is a significant, but not decisive, source for quantitative assessment of the middle class.

One more disclaimer should be mentioned here: out of the 9 factors grouped above, statistical information about one of the most important – employment – exists only including 2016. Thus, in the present study we analyze two series of data: from 2009 to 2016 and from 2009 to 2017. Consequently, we provide two versions of a quantitative assessment of the middle class: with 9 criteria (including employment) for the period from 2009 to 2016, and with 8 criteria (without employment) for the period from 2009 until 2017.

Next, compliance of each household with the middle class defining factors was determined in accordance with the provided criteria, and the following household groupings were identified:

1. Households that satisfied the criteria for middle class by less than 50 percent
2. Households that satisfied the criteria for middle class by 50-75 percent
3. Households that satisfied the criteria for middle class by 75-90 percent
4. Households that satisfied the criteria for middle class by 90-100 percent
5. Households that fully satisfied the criteria for middle class.
6. Households that are higher than middle class i.e. those whose income or consumption were above the defined limits, despite satisfying all other parameters.

Finally, we defined households belonging to the middle class as those that satisfy 75-100 percent of the respective criteria. Further, we broke the middle class down into three sub-classes and defined those households that met 75-90 percent of the criteria as **lower middle class**; households that met 90-100 percent of the criteria as **middle middle class**; and those that satisfied 100 percent of the criteria as **upper middle class**.

4.1. Quantitative Assessment of the Middle Class u sing Nine Criteria

The weight of households that met middle class criteria by 75-100 percent using nine parameters, (including the employment criteria in 2016, when using this parameter was still possible), compiled just 16 percent. Among them, 7.3 percent belonged to the lower middle class, 5.4 percent to middle-middle class, and just 3.3 percent belonged to the upper middle class.

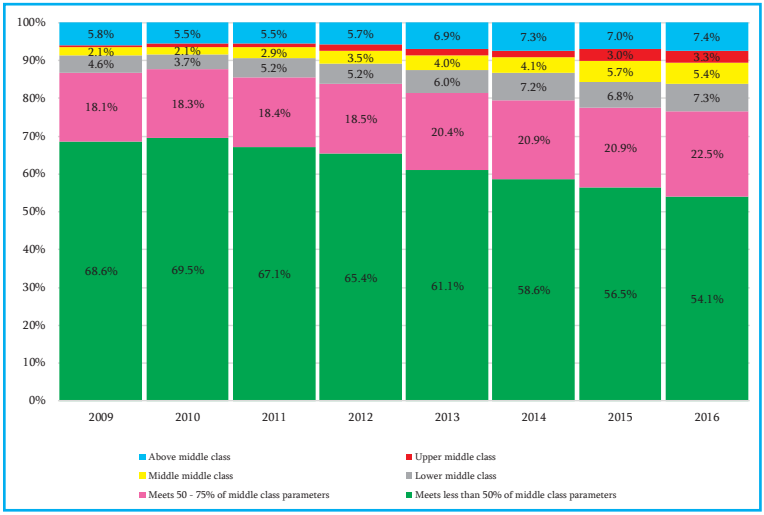
Adding just one factor – employment – decreased the middle class's share in household distribution by almost 7 percentage points (see: Diagram #41 and #43).

In 2009, i.e. the beginning of the analyzed period, 7.4 percent of households belonged to the middle class, from which 4.6 percent belonged to the lower middle class, 2.1 percent - to middle-middle class and just 0.7 percent - to the upper middle class.

Thus, according to our calculations, in the 2009-2016 period, the share of households assessed with 9 criteria more than doubled, which can be considered a positive trend. The share of upper middle class households increased especially – almost 5-fold. The growth rate of the middle-middle class was also impressive – almost 3-fold. As for the lower middle class, it grew by about 60 percent.

The only group of households, whose weight is characterized by an irreversible decline, is that which comprises households that satisfy the middle class defining criteria by less than 50 percent, i.e. those that do not belong to this social group. According to strict criteria, this group does not belong to the "poor" category either. This is a broad and vulnerable social group, which is closer to "poor" than to middle class. It is precisely at the expense of the shrinkage of this group that the percentage share of middle class households is growing. It is worth mentioning, that the weight of these households according to 8 criteria – i.e. without the employment factor – was almost 45 percent in 2016, while based on 9 criteria it reached 54 percent. Thus, adding the employment parameter makes a considerable impact on the quantitative assessment of the middle class.

Diagram #40: Distribution of Households Based on Compliance with Middle Class Criteria, Assessed by 9 Criteria

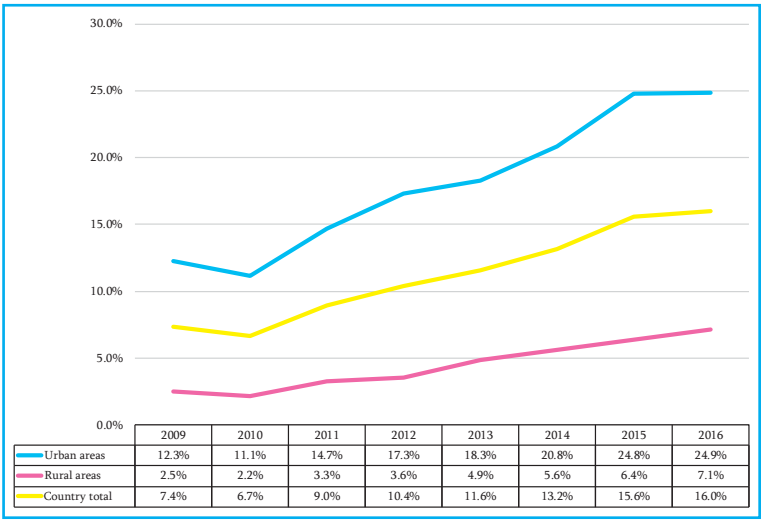


Source: Database of the Integrated Household Survey of Georgia, processed by the authors

As mentioned above, the relative share indicator according to nine criteria demonstrates a growing tendency in general. Nearly similar dynamics are expressed in urban and rural dimensions. In urban areas, the relative share of the middle class doubled in the 2009-2016 period, while in rural areas it nearly tripled. Notably, urban middle class growth discontinues in 2016, although this could be of episodic nature.

It is also noteworthy that in urban areas, the relative share of middle class households is much higher compared with rural areas. However, these differences were reduced in recent years. It should also be noted that adding the employment parameter has a special impact on the relative share indicator for middle class households in rural areas.

Diagram #41: Share of Middle Class Households, Assessed by 9 Criteria



	2009	2010	2011	2012	2013	2014	2015	2016
Urban areas	12.3%	11.1%	14.7%	17.3%	18.3%	20.8%	24.8%	24.9%
Rural areas	2.5%	2.2%	3.3%	3.6%	4.9%	5.6%	6.4%	7.1%
Country total	7.4%	6.7%	9.0%	10.4%	11.6%	13.2%	15.6%	16.0%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

When analyzed by regions and according to 9 criteria, the highest relative share of the middle class is in the capital (31.4 percent), where this figure almost doubled from 2009 to 2016. Adjara is in second place (16.7 percent). Kvemo Kartli occupied third place (12 percent), and notably, this indicator more than tripled in this region during the analyzed period. Shida Kartli is in fourth palace (10.5 percent), and is characterized by a doubling of the weight of middle class households over the course of the analyzed period.

Table #28: Share of Middle Class Households, Assessed by 9 Criteria, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016
Kakheti	3.0	2.5	3.7	4.4	4.6	6.6	7.9	7.8
Tbilisi	16.1	14.4	17.1	21.5	24.1	26.8	31.3	31.4
Shida Kartli	4.1	4.4	3.8	2.4	5.1	8.1	9.6	10.5
Kvemo Kartli	3.6	4.1	5.7	8.2	8.3	7.6	8.7	12.0
Samtskhe-Javakheti	2.1	2.9	3.5	5.9	4.5	6.9	8.3	9.7
Adjara	9.3	7.5	14.7	11.3	13.2	12.6	18.6	16.7
Guria	4.2	3.4	4.2	4.6	4.0	8.3	9.8	7.5
Samegrelo	4.1	2.2	4.5	6.4	7.6	7.6	7.6	8.9
Imereti, Racha-Lechkhumi-Svaneti	3.7	3.7	6.3	6.4	6.7	8.5	9.6	9.9
Mtskheta-Mtianeti	1.8	2.3	4.7	6.2	6.3	7.4	9.4	8.2
Country total	7.4	6.7	9.0	10.4	11.6	13.2	15.6	16.0

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Based on the 9 parameters method, the share of middle class households is lowest in Guria (7.5 percent), although this indicator did almost double in the 2009-2016 period. The share of middle class households is low in Kakheti as well (7.8 percent), but in this region it increased 2.6-fold. The share of middle class households is also low in the Mtskheta-Mtianeti region (8.2 percent), however the indicator mentioned here demonstrated impressive dynamics as it increased 5-fold in the analyzed period.

4.2. Quantitative Assessment of the Middle Class using Eight Criteria

Using eight parameters – i.e. excluding the employment factor – the share of households that 75-100 percent satisfied the middle class defining criteria was 24.6 percent in 2017. This number is comprised of approximately 11 percent belonging to the lower middle class, 8.3 percent to the middle-middle class, and just 5.4 percent to the upper middle class.

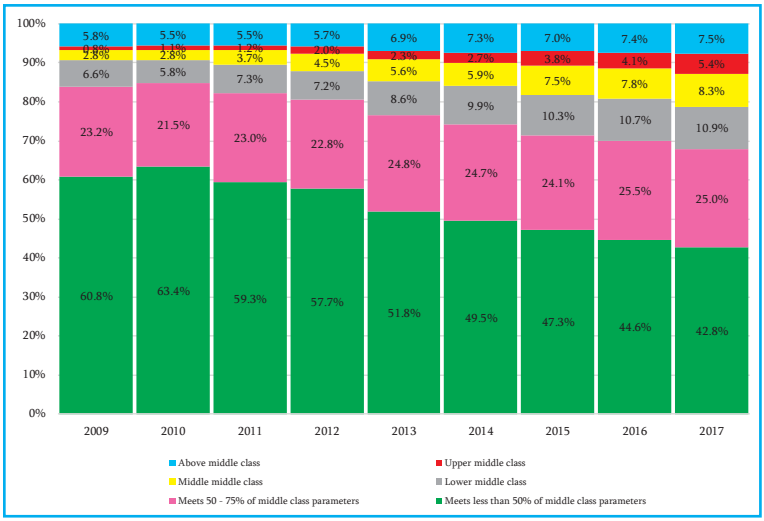
In 2009, i.e. at the beginning of analyzed period, 10.2 percent of households belonged to the middle class; comprised of 6.6 percent belonging to the lower middle class, 2.8 percent to the middle-middle class and just 0.8 percent to the upper middle class.

Thus, in the 2009-2017 period, and according to 8 criteria, the share of middle class households more than doubled, which should be considered a positive development. The share of upper middle class households increased especially rapidly in this period – almost 7-fold. The increase of middle-middle class households was also impressive – nearly tripling. As for the lower middle class, it increased by almost 65 percent.

The relative share of households above the middle class also grew insignificantly, although it is well understood that a drastic growth for this indicator is very difficult to achieve.

As was the case during assessment using 9 parameters, the only group of households whose relative share is characterized by an irreversible and decreasing tendency, is the group that comprises families that meet less than 50 percent of the middle class defining criteria. Just like in the previous scenario, the percentage share of middle class households is increasing at the expense of a contraction of this group.

Diagram #42: Distribution of Households Based on Compliance with Middle Class Criteria, Assessed by 8 Criteria

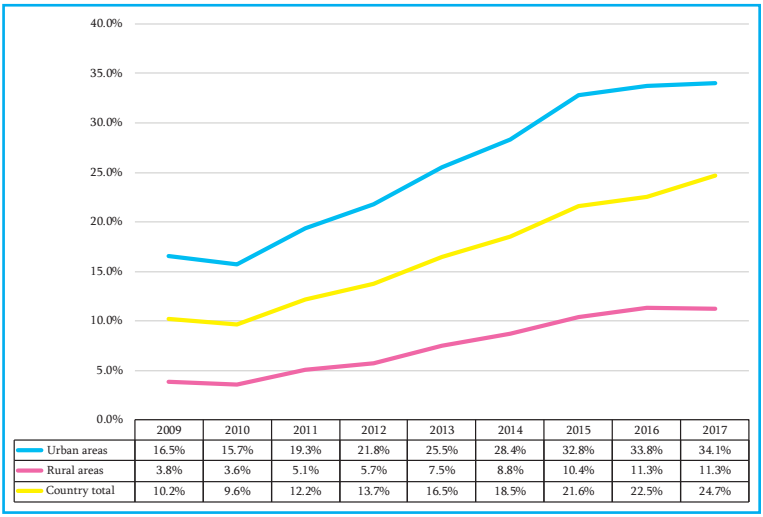


Source: Database of the Integrated Household Survey of Georgia, processed by the authors

As mentioned above, the relative share of middle class households also demonstrates a growing tendency according to 8 criteria. The dynamics are almost identical in urban and rural dimensions. In urban areas, the share of middle class households doubled from 2009 to 2017, while in rural areas it almost tripled. Notably, the growth of the middle class decelerated in urban areas in 2016-2017.

It is also worth mentioning, that the share of middle class households is much higher in urban areas than in rural areas, however this difference has contracted in recent years.

Diagram #43: Share of Middle Class Households, Assessed by 8 Criteria



	2009	2010	2011	2012	2013	2014	2015	2016	2017
Urban areas	16.5%	15.7%	19.3%	21.8%	25.5%	28.4%	32.8%	33.8%	34.1%
Rural areas	3.8%	3.6%	5.1%	5.7%	7.5%	8.8%	10.4%	11.3%	11.3%
Country total	10.2%	9.6%	12.2%	13.7%	16.5%	18.5%	21.6%	22.5%	24.7%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

When analyzed by regions, and using 8 parameters, the relative share of middle class households is the highest in the capital (38.6 percent), where this indicator almost doubled from 2009 to 2017. Adjara is in second place (25.1 percent), and boasts a pace of middle class growth that is almost the same as in Tbilisi. The aggregated region of Imereti and Racha-Lechkhumi-Svaneti comes in third (18.5 percent), however, in this region, the mentioned indicator more than tripled. In the fourth place is Samegrelo (18.3 percent), where the share of middle class households also increased almost three-fold in the analyzed period.

Table #29: Share of Middle Class Households, Assessed by 8 Criteria, by Region (%)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Kakheti	5.1	4.3	4.6	5.7	7.2	10.3	11.5	12.7	13.4
Tbilisi	21.1	19.5	22.3	27.2	32.4	35.4	40.5	41.3	38.6
Shida Kartli	4.9	5.3	5.8	4.9	7.5	11.8	12.9	15.6	17.4
Kvemo Kartli	6.8	6.8	8.6	10.2	12.4	11.7	13.8	16.2	22.2
Samtskhe-Javakheti	3.4	4.8	4.6	7.8	6.4	9.8	14.3	15.6	17.6
Adjara	12.2	12.4	17.6	15.6	20.0	18.4	24.9	24.2	25.1
Guria	6.2	4.8	6.8	7.9	8.7	10.8	14.7	14.1	13.3
Samegrelo	6.4	3.7	7.0	8.9	12.1	13.9	13.3	14.3	18.3
Imereti, Racha-Lechkhumi-Svaneti	5.3	6.0	9.7	9.0	10.0	12.2	14.5	14.8	18.5
Mtskheta-Mtianeti	2.7	2.4	7.6	6.8	6.4	9.9	11.6	12.8	13.4
Country total	10.2	9.6	12.2	13.7	16.5	18.5	21.6	22.5	24.7

Source: Database of Integrated Household Survey, processed by the authors

Using 8 criteria, we see that the share of middle class households is the lowest (13.3 percent) in Guria, although this indicator doubled here in the 2009-2017 period. The relative share of middle class households is almost identical in Kakheti and Mtskheta-Mtianeti (13.4 percent each, respectively). Contrastingly however, this indicator increased 2.6-fold in Kakheti, while in Mtskheta-Mtianeti it increased nearly five-fold.

5. Profile of Middle Class Households

5.1. Size, Average Age and Resettlement of Middle Class Households

While discussing the profile of middle class households, the issue of household size is high on the agenda. The table below demonstrates that on average, in 2017, the household belonging to the middle class consisted of 3.9 persons and its size had not changed substantially compared with 2009. The size of lower middle class households somehow fluctuated in the 2009-2017 period, but by the end of the period it comprised 3.7 persons. The size of middle-middle class households is in fact unchanged compared with 2009. As for the upper middle class, its size significantly changed in the 2009-2017 period as it decreased from 4.5 to 4.1.

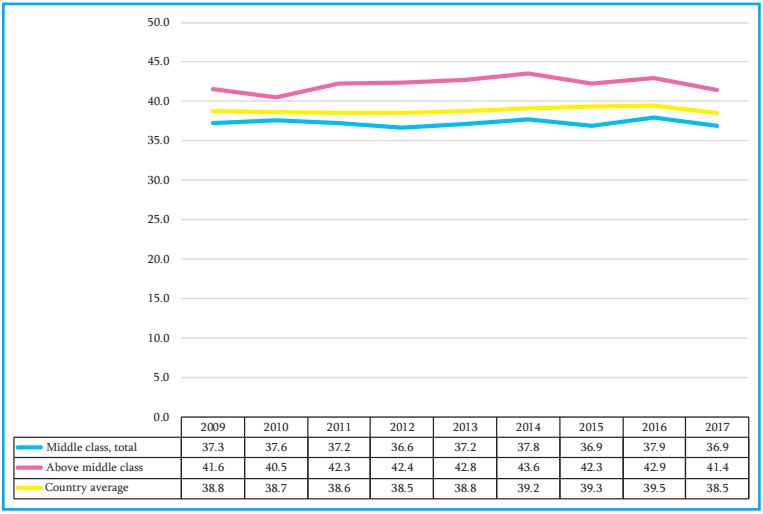
Table #30: Size of Middle Class Households* (persons)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Meet less than 50% of middle class criteria	3.69	3.65	3.61	3.64	3.53	3.56	3.49	3.50	3.54
Meet 50-75% of middle class criteria	3.78	3.64	3.65	3.60	3.70	3.66	3.57	3.54	3.43
Lower middle class	3.96	3.91	3.93	3.88	3.99	4.01	4.08	3.82	3.67
Medium middle class	4.10	4.38	4.20	4.12	4.30	4.10	4.17	4.00	4.12
Upper middle class	4.46	4.50	4.37	4.04	4.14	4.23	4.26	4.45	4.06
Middle class, total	4.04	4.11	4.06	3.98	4.12	4.07	4.14	4.00	3.91
Above middle class	2.63	2.69	2.59	2.41	2.49	2.54	2.64	2.43	2.21
National Averages	3.68	3.64	3.62	3.61	3.60	3.60	3.59	3.54	3.50

Source: Database of the Integrated Household Survey of Georgia, processed by the authors
*Note: Middle class assessed by 8 criteria.

The average age of the population belonging to middle class stood at almost 37 years in 2017, which was slightly behind the corresponding indicator for 2009. This indicator was substantially behind the national average age (38.5 years), whilst the respective indicator for the population belonging to the higher-than-middle-class group (41.4 years) was much higher than the national average age. The age difference between the population belonging to the middle class and those belonging to the "higher" class was 4.5 years in 2017, which is a bit more than the analogous indicator for 2009. Explaining this tendency is quite difficult. We can assume that, surpassing the middle class requires a certain amount of time.

Diagram #44: Average Age of the Population Belonging to the Middle Class and Above



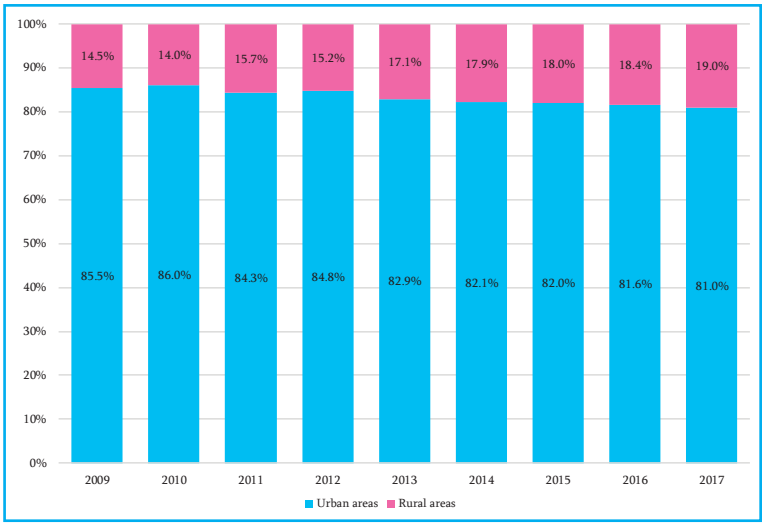
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Middle class, total	37.3	37.6	37.2	36.6	37.2	37.8	36.9	37.9	36.9
Above middle class	41.6	40.5	42.3	42.4	42.8	43.6	42.3	42.9	41.4
Country average	38.8	38.7	38.6	38.5	38.8	39.2	39.3	39.5	38.5

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

Our study demonstrated that based on 8 criteria, 81 percent of households belonging to the middle class live in urban areas. Despite certain fluctuations from 2009 to 2017, this indicator was consistently above 80 percent. The number of households living in rural areas was four and more times less than the corresponding

indicator for urban areas and stood at 14-18 percent. Notably, the share of such households living in rural areas demonstrated a weak but irreversible growing tendency for the 2009-2017 period.

Diagram #45: Distribution of Middle Class by Urban and Rural Areas

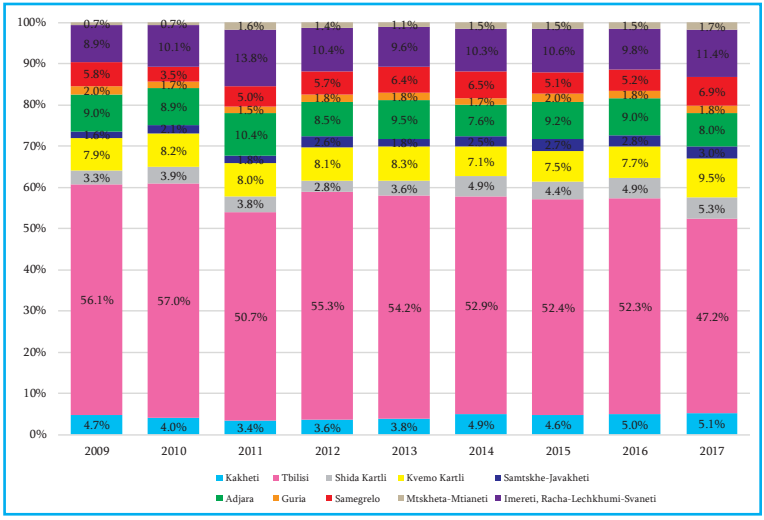


Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The regional distribution of households belonging to the middle class is interesting, however it should be noted that 2009-2015 data is not overly reliable, since an expected outcome of less than 10 percent is less reliable for a statistical perspective. Thus, we considered aggregation of regions to be reasonable.

Almost half of middle class households live in Tbilisi (47 percent). Moreover, 75 percent of middle and upper middle class households live in the capital. Conspicuously, these indicators significantly decreased in the 2009-2017 period – from almost 65 percent to 47 percent, which is the result of a growth of the middle class in the regions, especially in the number of lower middle class households.

Diagram #46: Distribution of Middle Class, by Region



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

In recent years, a middle class growing trend is obvious in the regions, especially in 2016-2017. Samegrelo and the aggregated region of Imereti and Racha-Lechkhumi-Svaneti are distinguished by an irreversible growth of the middle class's share.

5.2. Middle Class Welfare

Out of many opportunities provided by the Integrated Household Survey, a really special one is the possibility for determination of a subjective well-being threshold. The households answer the question – "what is the minimum amount of GEL necessary for the well-being of the household?" Naturally, by answering this question, a household indicates the minimal amount of money it needs for a decent life as it views it. Consequently, the answer to this question provides a fairly precise impression of minimal welfare standards that exist in society.

On the other hand, within the framework of the household survey, a fair amount of objective indicators are accrued, based on which the total household consumer expenditure indicator i.e. the indicator of actual consumptions is generated.

Comparison of the actual consumption of households with the subjective well-being threshold provides valuable information on the welfare of the population. Moreover, the importance of this threshold is quite high, since it includes the subjective perception of inflation by the population. The subjective well-being threshold per household per month was 1265 GEL in 2017. This indicator demonstrated an irreversible growing tendency in the 2009-2017 period, and increased 1.5-fold in this period.

The subjective welfare level indicator is quite interesting from the prospective of compliance of households with middle class criteria.[24] It is noteworthy that the subjective welfare threshold for households above middle class, calculated per household, is normally lower than the subjective welfare threshold for middle class households. At first glance, this is a peculiar phenomenon, unless we take into consideration the indicator for average size of the households in the respective groups. As a rule, middle class households are substantially (1.8-fold on average) bigger than the households in the above-middle-class group. If we calculate the subjective welfare threshold according to per capita averages, based on the average size of the household, we see that the subjective welfare threshold calculated per capita clearly repeats the gradation of parameters of assessment of the middle class as provided in the present analysis. In other words, the higher a household's compliance with middle class criteria, the higher its subjective welfare threshold. This tendency is consistent, without exceptions, throughout the 2009-2017 period.

The growth of the subjective welfare threshold in parallel to increasing compliance of households with middle class criteria is absolutely natural and easily explained. An increase of compliance with middle class parameters indicates an increase in the material welfare level, and naturally, higher welfare levels achieved by households predicate higher subjective welfare standards. Overall, two important conclusions can be made based on this data:

1. The selected parameters are accurate, since the indicators of subjective well-being seen from this prospective accurately reflects the same gradation, i.e. the level of compliance with middle class criteria fully complies with households' subjectively assessed minimal welfare standards;
2. In general, the Georgian population is quite objective in its assessments. A true sign of this is that the minimal standard of welfare calculated per household substantially deviates from the gradation calculated based on objective data, but when taking into consideration the size of households, it precisely reflects it. This implies that while calculating their own subjective welfare threshold, the respondent households took into consideration the number of members. This means that we can trust the answers to this question, since the veracity of this answer is confirmed by objective data.

Summarizing the subjective and objective indicators shows that on average, 80 percent of households, including middle class families, consume less than the minimal welfare standard expressed by them in monetarily. In the 2009-2017 period, this indicator expressed an unstable tendency and compiled 78.3 percent on average. For middle class households, this indicator was 77 percent i.e. substantially behind the average.

Consumption that was lower than the minimal welfare threshold was observed in upper middle class households – 74 percent, while for middle-middle class households this indicator stood at 78 percent and for lower middle class – 77 percent.

[24] Middle class assessed by 8 criteria

Table #31: Self-Indicated Welfare Threshold by the Level of Compliance of Households with Middle Class Criteria*, 2009-2017

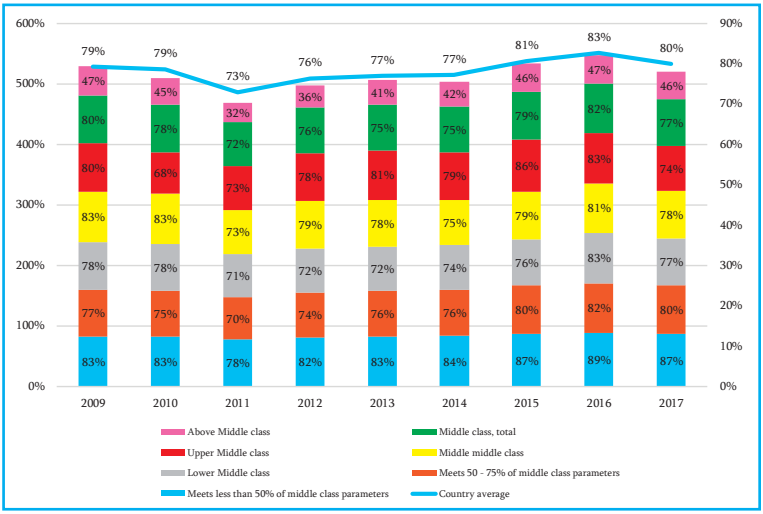
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Subjective well-being level (GEL, in average in month per household)									
Meets less than 50% of middle class criteria	683	655	650	729	747	794	844	877	933
Meets 50-75% of middle class criteria	964	924	940	1029	1091	1097	1188	1239	1264
Lower middle class	1154	1187	1164	1183	1314	1405	1508	1519	1530
Middle-middle class	1445	1653	1589	1511	1666	1630	1841	1733	1781
Upper middle class	1593	1622	1717	1758	1992	1962	2028	2047	1978
Middle class, total	1267	1370	1346	1374	1526	1559	1716	1688	1713
Above middle class	1133	1101	1092	1211	1381	1502	1647	1624	1693
National Averages	835	807	826	914	1005	1062	1172	1208	1265
Subjective well-being level (GEL, in average in month per capita)									
Meets less than 50% of middle class criteria	185	179	180	200	212	223	242	251	264
Meets 50-75% of middle class criteria	255	254	257	286	295	300	333	350	369
Lower middle class	291	304	296	305	329	351	369	398	417
Middle-middle class	352	378	378	367	388	397	441	433	432
Upper middle class	357	360	393	436	481	464	476	460	488
Middle class, total	314	334	332	345	371	383	414	423	438
Above middle class	432	410	422	502	555	591	625	668	766
National Averages	227	222	229	253	279	295	326	341	361

Source: Database of the Integrated Household Survey of Georgia, processed by the authors
*Note: middle class assessed by 8 criteria

The population assesses its minimal welfare standard quite realistically. A clear example of this is that the subjective welfare indicator is especially low in households above middle class (42.2 percent on average in the 2009-2017 period).

Compared to the subjective threshold, an 80-percent welfare level is absolutely normal, since this line, which is compared with actual consumption, already covers the existing welfare standards and wishes of households, which in the case of the latter, is well known to not have a limit.

Diagram #47: Share of Households whose Total Consumption is less than the Self-Indicated Welfare Threshold, According to the Level of Compliance with Middle Class Criteria



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

One of the key parameters for quantitatively assessing the middle class is the self-assessment of the change of own socio-economic status by the household. The Integrated Household Survey questionnaires provide such possibilities.[25]

Distribution demonstrates that the average attitude of Georgian households is leaning towards declination. It is difficult to say to what extent this attitude is realistic, given that objective data give us an opposite picture, but this is the households' view, and it less so considers complex indicators such as economies of scale or equivalence scales.

Table #32: Assessment of the Change of Own Socio-Economic Status in the previous 12 months by the Households, According to Compliance with Middle Class Criteria

		Worse	Unchanged	Improved	Total
Meets less than 50% of middle class criteria	2009	50.7%	40.3%	9.0%	100.0%
	2010	49.4%	43.6%	7.0%	100.0%
	2011	51.7%	41.7%	6.6%	100.0%
	2012	46.3%	46.6%	7.1%	100.0%
	2013	35.1%	56.3%	8.6%	100.0%
	2014	28.6%	60.9%	10.5%	100.0%
	2015	41.6%	52.4%	6.0%	100.0%
	2016	49.6%	46.9%	3.5%	100.0%
	2017	50.7%	46.5%	2.7%	100.0%
Meets 50-75% of middle class criteria	2009	40.9%	47.0%	12.1%	100.0%
	2010	42.2%	48.8%	9.0%	100.0%
	2011	43.1%	49.6%	7.3%	100.0%
	2012	38.7%	51.6%	9.7%	100.0%
	2013	30.0%	60.6%	9.4%	100.0%
	2014	26.4%	60.9%	12.6%	100.0%
	2015	34.9%	57.4%	7.8%	100.0%
	2016	40.6%	52.6%	6.7%	100.0%
	2017	38.7%	55.1%	6.2%	100.0%
Lower middle class households	2009	28.1%	52.8%	19.1%	100.0%
	2010	36.8%	50.5%	12.7%	100.0%
	2011	34.9%	51.2%	13.9%	100.0%
	2012	27.5%	60.6%	11.9%	100.0%
	2013	20.1%	68.0%	11.9%	100.0%
	2014	20.1%	67.5%	12.4%	100.0%
	2015	26.3%	65.2%	8.5%	100.0%
	2016	34.1%	59.8%	6.1%	100.0%
	2017	30.0%	62.1%	7.9%	100.0%
Middle-middle class households	2009	24.5%	63.0%	12.5%	100.0%
	2010	35.4%	51.7%	12.9%	100.0%
	2011	44.0%	41.7%	14.4%	100.0%
	2012	25.3%	60.7%	14.0%	100.0%
	2013	18.7%	66.5%	14.8%	100.0%
	2014	21.7%	64.5%	13.7%	100.0%
	2015	30.9%	58.9%	10.2%	100.0%
	2016	26.9%	61.1%	12.0%	100.0%
	2017	29.6%	62.4%	8.0%	100.0%

[25] In preliminary interviews, households assess the change of their own status in the previous 12 months. For the purpose of improving the reliability of answers, we aggregate d 5 expected answers to the question to 3:

1. Became worse – substantially or slightly;
2. Unchanged;
3. Improved – substantially or slightly.

		Worse	Unchanged	Improved	Total
Upper middle class households	2009	21.1%	65.1%	13.9%	100.0%
	2010	31.1%	58.1%	10.8%	100.0%
	2011	23.2%	66.2%	10.6%	100.0%
	2012	20.7%	67.5%	11.9%	100.0%
	2013	20.5%	67.8%	11.7%	100.0%
	2014	19.9%	70.5%	9.7%	100.0%
	2015	31.8%	58.1%	10.0%	100.0%
	2016	36.3%	57.6%	6.1%	100.0%
	2017	20.1%	69.6%	10.3%	100.0%
Total middle class households	2009	26.5%	56.5%	16.9%	100.0%
	2010	35.8%	51.7%	12.5%	100.0%
	2011	36.5%	49.8%	13.7%	100.0%
	2012	25.8%	61.6%	12.6%	100.0%
	2013	19.7%	67.5%	12.8%	100.0%
	2014	20.6%	67.0%	12.4%	100.0%
	2015	28.9%	61.8%	9.4%	100.0%
	2016	32.0%	59.8%	8.2%	100.0%
	2017	27.7%	63.9%	8.5%	100.0%
Above middle class households	2009	31.5%	50.1%	18.4%	100.0%
	2010	34.3%	53.4%	12.3%	100.0%
	2011	33.5%	56.9%	9.6%	100.0%
	2012	25.7%	61.2%	13.2%	100.0%
	2013	19.0%	62.5%	18.6%	100.0%
	2014	19.1%	64.0%	16.9%	100.0%
	2015	29.6%	57.7%	12.6%	100.0%
	2016	26.7%	58.2%	15.2%	100.0%
	2017	26.1%	59.9%	14.0%	100.0%
Country total	2009	44.9%	44.1%	11.0%	100.0%
	2010	45.7%	46.1%	8.3%	100.0%
	2011	46.9%	45.3%	7.8%	100.0%
	2012	40.6%	50.6%	8.8%	100.0%
	2013	30.2%	59.6%	10.2%	100.0%
	2014	25.9%	62.2%	11.9%	100.0%
	2015	36.4%	56.0%	7.6%	100.0%
	2016	41.7%	52.1%	6.2%	100.0%
	2017	40.2%	54.0%	5.9%	100.0%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

For the purpose of calculating the change in socio-economic status in the last 12 months of 2017, we recalculated the distribution given in the table above and assigned answers numerical values as follows:

1. Worsened condition: -1;
2. Unchanged condition: 0;
3. Improved condition: +1.

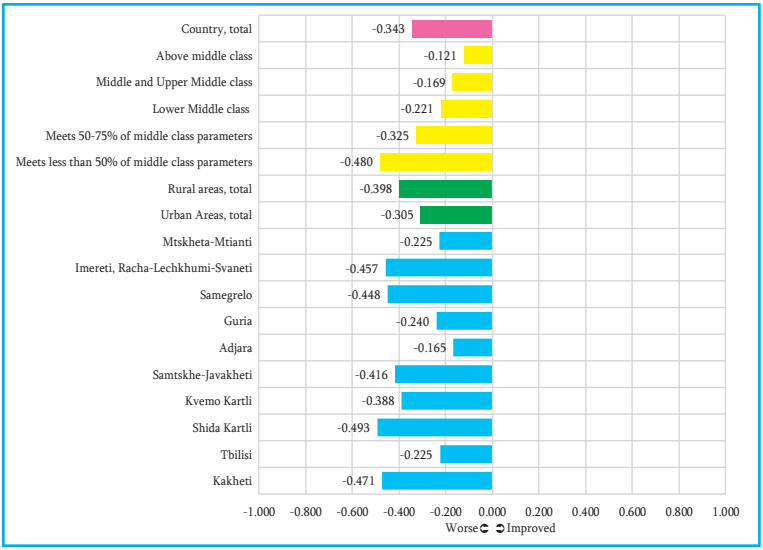
By means of multiplying respective shares to these coefficients and summarizing them, we received an average indicator for subjective assessment of socio-economic status, which can range from -1 to +1: a "- 1" value is received if all households report worsening conditions, while a value of "+1" is attained if all households declare improving conditions.

The trends revealed through average assessment of changes fully match the gradation of compliance with middle class criteria. A positive correlation is unmistakable between higher household compliance with middle class criteria, and a positive average subjective assessment of its change in status. Assessment of middle class groups in this context is quite important.

For 2017, the change in condition in the previous 12 months was most negatively assessed by lower middle class households (-0.221). The attitudes of middle and upper middle class households is much more positive (-0.169), however still negative.

It should also be underlined that the middle class's attitudes towards the changes are much more positive than they are in country in general, according to urban/rural areas.

Diagram #48: The Vector of Assessment of Change in Own Socio-Economic Status by Households in the Previous 12 Months, in 2017



Source: Database of the Integrated Household Survey of Georgia, processed by the authors

The attitude of the population, i.e. public opinion, has decisive importance for economic, social, and political stability. A society that is saturated with negative attitudes is volatile: interest groups that possess relevant skills, images/reputations and financial resources can cause significant social unrest in such societies.

In this context, assessment of households according to urban/rural areas and regions is quite interesting (see: annex 1). The average assessment of the change in status is negative in all these areas, but compared with the rest, changes in conditions are more negatively assessed in Kakheti, Imereti and Racha-Lechkhumi-Svaneti, Shida Kartli, Samegrelo and Samtskhe-Javakheti. Relatively less negative assessments were made in Guria, Adjara, Tbilisi and Mtskheta-Mtianeti. In this case, it is very difficult and almost impossible to determine exactly what changes the respondents allude to, but in general, the attitude is unambiguously negative.

It should be noted, that the assessment of the change in status still contains objectiveness – there is still a link between this and the objective data time series. For example, in rural areas, households most frequently reported improvements in 2012, 2013 and 2014 (10 percent, 12 percent and 16 percent respectively). The poverty reduction rate was the highest precisely in these years and precisely these years were distinguished by proactive social policies by the government.

The households' expectations regarding changes to their own status is an even more important parameter to consider while making quantitative assessment of the middle class. The questionnaires of the Integrated Household Survey provide opportunities to do just that.[26]

The distribution demonstrates that the average expectations of Georgian households also lean towards declination, however, and somehow, less so than in the case of average assessments of changes in status for the previous 12 months (see: annex 2).

[26] In preliminary interviews, households assess their expected change to own socio economic condition in coming 12 months. For the purpose of improving reliability of answers, we aggregated the expected a nswer from six to four:
1. Will worsen substantially or slightly;
2. Will remain unchanged;
3. Will improve substantially or slightly;
4. Difficult or unable to answer or unsure.

Table #33: Expectations of Change to Own Socio-Economic Status in the Upcoming 12 months, 2009-2017, According to Compliance with Middle Class Criteria

		Will Worsen	Will Remain Unchanged	Will Improve	Unsure/No Response	Total
Meets less than 50% of middle class criteria	2009	15.5%	23.4%	11.1%	50.0%	100.0%
	2010	12.0%	24.3%	10.1%	53.6%	100.0%
	2011	15.3%	20.4%	7.2%	57.2%	100.0%
	2012	12.9%	18.2%	9.7%	59.2%	100.0%
	2013	5.8%	19.6%	16.3%	58.4%	100.0%
	2014	5.6%	22.0%	12.1%	60.4%	100.0%
	2015	10.3%	22.6%	7.3%	59.8%	100.0%
	2016	12.6%	23.8%	6.2%	57.3%	100.0%
	2017	19.2%	29.7%	6.7%	44.4%	100.0%
Meets 50-75% of middle class criteria	2009	11.7%	22.5%	15.9%	49.9%	100.0%
	2010	11.3%	23.2%	14.9%	50.6%	100.0%
	2011	13.1%	20.6%	12.3%	54.0%	100.0%
	2012	10.9%	20.9%	14.1%	54.1%	100.0%
	2013	5.2%	21.1%	18.3%	55.4%	100.0%
	2014	5.6%	25.5%	13.1%	55.8%	100.0%
	2015	10.2%	28.2%	9.3%	52.3%	100.0%
	2016	10.2%	27.0%	9.1%	53.7%	100.0%
	2017	14.2%	33.9%	9.0%	42.9%	100.0%
Lower middle class households	2009	8.8%	20.6%	21.5%	49.1%	100.0%
	2010	10.9%	25.7%	17.2%	46.2%	100.0%
	2011	11.3%	24.8%	15.2%	48.7%	100.0%
	2012	6.6%	27.0%	16.7%	49.8%	100.0%
	2013	4.0%	23.4%	23.4%	49.2%	100.0%
	2014	3.1%	25.9%	20.8%	50.2%	100.0%
	2015	6.9%	31.6%	17.2%	44.3%	100.0%
	2016	8.1%	31.9%	10.6%	49.4%	100.0%
	2017	11.7%	35.1%	15.3%	37.9%	100.0%
Middle-middle class households	2009	4.4%	22.9%	22.2%	50.5%	100.0%
	2010	7.8%	21.1%	17.0%	54.1%	100.0%
	2011	8.2%	20.8%	15.7%	55.3%	100.0%
	2012	3.5%	40.9%	19.0%	36.6%	100.0%
	2013	4.3%	29.1%	23.8%	42.8%	100.0%
	2014	6.1%	30.2%	20.5%	43.2%	100.0%
	2015	8.9%	31.1%	19.6%	40.4%	100.0%
	2016	8.7%	35.4%	16.4%	39.5%	100.0%
	2017	11.0%	35.1%	13.2%	40.7%	100.0%
Upper middle class households	2009	7.6%	26.9%	11.9%	53.5%	100.0%
	2010	6.3%	19.3%	16.9%	57.5%	100.0%
	2011	1.8%	36.3%	24.8%	37.1%	100.0%
	2012	2.9%	40.0%	30.1%	27.0%	100.0%
	2013	4.6%	30.3%	29.6%	35.5%	100.0%
	2014	3.3%	38.1%	30.7%	27.9%	100.0%
	2015	7.2%	27.9%	25.0%	39.9%	100.0%
	2016	4.2%	36.6%	13.5%	45.7%	100.0%
	2017	5.9%	40.4%	14.8%	39.0%	100.0%

		Will Worsen	Will Remain Unchanged	Will Improve	Unsure/No Response	Total
Total middle class households	2009	9.0%	24.6%	19.1%	47.2%	100.0%
	2010	9.0%	23.1%	17.6%	50.3%	100.0%
	2011	8.2%	23.7%	15.8%	52.4%	100.0%
	2012	8.0%	29.9%	15.4%	46.7%	100.0%
	2013	4.9%	19.4%	24.7%	51.0%	100.0%
	2014	2.3%	26.0%	20.2%	51.4%	100.0%
	2015	6.7%	29.4%	16.2%	47.7%	100.0%
	2016	6.3%	29.4%	16.4%	47.9%	100.0%
	2017	9.1%	36.8%	15.6%	38.5%	100.0%
Above middle class households	2009	13.4%	23.1%	13.7%	49.8%	100.0%
	2010	11.5%	24.0%	12.2%	52.4%	100.0%
	2011	13.7%	21.1%	9.9%	55.3%	100.0%
	2012	11.1%	21.6%	12.3%	55.0%	100.0%
	2013	5.3%	21.0%	18.7%	55.0%	100.0%
	2014	5.1%	24.4%	14.8%	55.7%	100.0%
	2015	9.4%	26.2%	11.0%	53.4%	100.0%
	2016	10.4%	27.3%	9.3%	53.0%	100.0%
	2017	15.0%	32.9%	9.9%	42.3%	100.0%
Country total	2009	15.5%	23.4%	11.1%	50.0%	100.0%
	2010	12.0%	24.3%	10.1%	53.6%	100.0%
	2011	15.3%	20.4%	7.2%	57.2%	100.0%
	2012	12.9%	18.2%	9.7%	59.2%	100.0%
	2013	5.8%	19.6%	16.3%	58.4%	100.0%
	2014	5.6%	22.0%	12.1%	60.4%	100.0%
	2015	10.3%	22.6%	7.3%	59.8%	100.0%
	2016	12.6%	23.8%	6.2%	57.3%	100.0%
	2017	19.2%	29.7%	6.7%	44.4%	100.0%

Source: Database of the Integrated Household Survey of Georgia, processed by the authors

For the purpose of calculating the average assessment of the expected change in status, we recalculated the distribution given in the table above and assigned answers numerical values as follows:

1. Will worsen: -1;
2. Will remain unchanged: 0;
3. Will improve: +1.
4. Unclear assessments (meaning the respondent found it difficult to answer the question or did not participate in the assessment) were proportionally distributed among the share of respondents who did manage to express their expectations. Such an approach is fully acceptable for calculation of the average expectation vector; however, the share of such respondents is subject to separate analysis. A higher share of such responders usually attests to a lower quality of adequate awareness in society. Such respondents do not have a model for the future and consequently found difficult to assess expectation of change. The share of such households is quite high. In 2017, the share of such responders was the lowest (42 percent), but this is still too high an indicator, and a sign of very low quality of stability. It should be taken into consideration that in previous years, the share of such households even reached 55 percent.

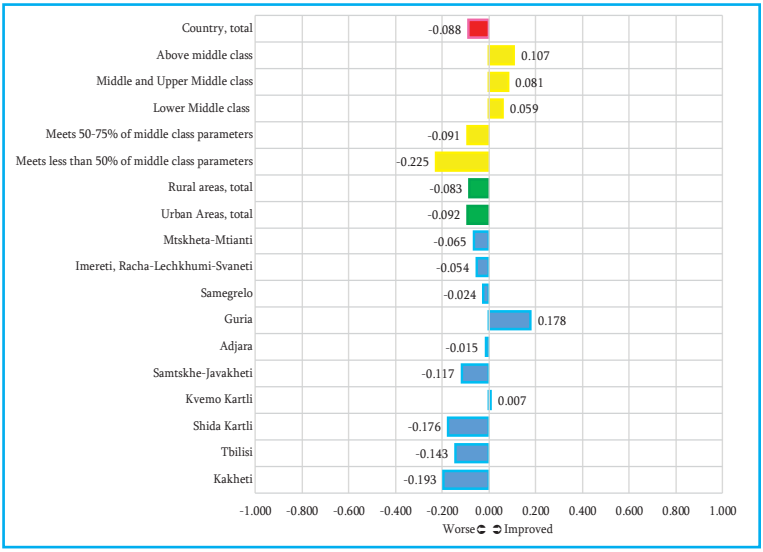
By means of multiplying respective shares to these coefficients and summarizing them, we received the average indicator for subjective assessment of expected socio-economic status, which can range from -1 to +1; a "-1" value is attained if all households declare an expectation of worsening conditions, while the value "+1" is achieved if all households report an expectation of improving condition.

The trend of average assessment of expected changes fully aligns with the gradation of compliance with middle class criteria. Higher compliance of the household with middle class parameters is positively correlated to optimistic expectations with regard to changes in conditions.

Furthermore, it is important that the expectations of lower, middle and upper middle class households are inclined towards improving conditions. Expectations of above middle class households are even more pos-

itive. This once again and indubitably demonstrates that the middle class is a guarantee for the stability of society. It will become possible to speak about social stability only when the share of middle class households reaches at least 50 percent.

Diagram #49: Vector of Expectations of Households with Regard to Own Socio-Economic Status in the Upcoming 12 months, in 2017



Source: Database of Integrated Household Survey, processed by the authors

Based on these calculations, the indicator for average assessment of expected changes in status is slightly negative for 2017: -0.088 (minimum value is -1). The average assessment of expected changes in status varies according to urban/rural areas and regions. Negative expectations of changes in status are relatively higher in Kakheti, Tbilisi, Shida Kartli and Samtskhe-Javakheti. No expected change in conditions is expected in Kvemo Kartli, Adjara and Samegrelo. The most optimistic is region is Guria.

Key Findings

1. Based on 9 criteria, i.e. including the employment factor, the share of households appropriated to the middle class comprised 16 percent in 2016. This is a summation of 7.4 percent that belonged to the lower middle class, 5.4 percent to the middle-middle class and just 3.3 percent to the upper middle class.
2. Throughout the 2009-2016 period, the share of middle class households (assessed by 9 criteria) more than doubled in Georgia, which should unmistakably be considered a positive trend.
3. From 2009 to 2016, the upper middle class's share increased especially rapidly: almost 5-fold. The rate of growth of the middle-middle class was also sharp as it nearly tripled. The lower middle class households' share increased by about 60 percent.
4. From 2009 to 2016, the percentage of middle class households increased at the expense of households that met less than 75 percent of the middle class defining criteria, i.e. those that do not belong to this group. This is a broad and vulnerable social group, which is closer to poverty than to the middle class, however based on strict parameters they do not satisfy the criteria for poverty either.
5. In urban areas, the share of middle class households doubled from 2009 to 2016, and almost tripled in rural areas. The growth of middle class households waned in 2016 in urban areas; this could be an episodic event.
6. The weight of the middle class, assessed by 9 criteria, is normally much higher in urban areas than in rural ones, however this difference has been dwindling recently. Including the employment parameter makes a special impact on the indicator of the weight of middle class households in rural areas.
7. According to 9 criteria, the share of middle class households is the highest in the capital (31.4 percent), where this indicator virtually doubled from 2009 to 2016. The second highest share is observed in Adjara (16.7 percent), where the rate of increase of the share of middle class households is almost the same as in Tbilisi. Kvemo Kartli takes third place in this regard (12 percent), and notably, the indicator in question more than tripled during the analyzed period.
8. Based on 8 criteria, i.e. excluding the employment factor, the weight of households appropriated to the middle class was 24.6 percent in 2017. This is an amalgamation of 11 percent belonging to the lower middle class, 8.3 percent to the middle-middle class and 5.4 percent belonging to the upper middle class.
9. According to 8 criteria, the share of middle class households more than doubled in the period from 2009 to 2017.
10. From 2009 to 2017, the share of upper middle class households increased especially rapidly – almost 7-fold; the growth rate of middle-middle class households was also quite sharp – almost tripling. The lower middle class households' share increased by almost 65 percent.
11. In the 2009-2017 period, the percent share of middle class households increased at the expense of a decrease of households that met less than 75 percent of middle class criteria, i.e. those that do not qualify for this group.
12. According to 8 criteria, the share of middle class households doubled in urban areas and almost tripled in rural areas from 2009 until 2017. It is also worth mentioning however, that the growth rate of middle class households in rural areas decelerated in 2016-2017.
13. Using 8 criteria, we see that the share of middle class households is much higher in urban areas than in rural ones, although this difference has shrunk recently.
14. Based on 8 criteria, the share of middle class households is the highest in the capital (38 percent), where this indicator almost doubled from 2009 to 2017. Adjara comes in second (25.1 percent), and reveals a rate of growth in the share of middle class households that is almost the same as in Tbilisi. Kvemo Kartli is in third place (22.2 percent) – this region witnessed a tripling of the mentioned indicator during the analyzed period.
15. In 2017, and on the basis of 8 criteria, a family appropriated to the middle class consisted of 3.9 members, and its size did not substantially change compared with 2009. The size of lower middle class households fluctuated throughout the 2009-2017 period, and by the end of the period it compiled 3.7

persons. The size of middle-middle class households has in fact remained unchanged compared with 2009 statistics. As for the upper middle class, its size decreased significantly from 4.5 to 4.1 persons in the 2009-2017 period.

16. According to 8 criteria, we see that middle class households are normally bigger (on average 1.7-times) than upper class households, i.e. those higher than middle class.
17. The reported average age of the population appropriated to the middle and upper middle class in 2017 was almost 37 years, which is slightly behind than the respective data from 2009. Furthermore, the average age of the population appropriated to the middle class was substantially less than the average age of the national population (38.5 years), while the average age of the population appropriated to the upper class i.e. higher than middle class – 41.4 years – was much higher than the national average.
18. Also based on 8 criteria, we see that the average age difference between the population appropriated to the middle class and the upper class (higher than middle class) was 4.5 years in 2017; this is slightly higher than the corresponding indicator for 2009.
19. In 2017, the subjective welfare threshold, calculated per household, was 1265 GEL. In the 2009-2017 period, this indicator demonstrated a steadfastly growing tendency and increased 1.5-fold in this period.
20. In the analyzed period, we see a strong positive correlation between a household's compliance with middle class defining criteria, and their subjective welfare threshold, i.e. the more a household satisfied middle class parameters, the higher its subjective welfare threshold was.
21. Using the 8-criteria approach, we see that 80% of households – including those belonging to the middle class – incur less expenditure than the subjective minimal welfare threshold they expressed in monetary terms. In the 2009-2017 period, this indicator exhibited an unstable tendency, and amounted to 78.3 percent on average. Among middle class households, the mentioned indicator was 77 percent, which is less than the average indicator.
22. In relation with the subjective minimal welfare threshold, lower actual consumption was observed in upper middle class households (74 percent), middle-middle class households (78 percent), and lower middle class households (77 percent).
23. Higher compliance of households with middle class defining parameters correlates positively with a positive average self-assessment with regards to change in socio-economic status. In 2017, lower middle class households (determined by 8 criteria) report the worst assessment of changes in socio-economic status in the previous twelve months. The attitudes of middle and higher middle class households are much more positive, but still negative.
24. The attitudes of middle class households towards changes in socio-economic status are far more positive than they are in the country in general and by urban/rural areas.
25. There is also a positive correlation between compliance with middle class defining criteria, and positive expectations with regard to future changes to socio-economic status.
26. Average expectations with regards to changes in socio-economic status are positively inclined for lower, middle and upper middle class households (as defined by 8 parameters). The expectations of households that are higher than middle class (upper class) are even more positive.

Conclusion

Increasing the size of the middle class is one of key objectives for the stable development of a country. A society is considered socially stable if in its composition, the share of the middle class among the population is at least 50 percent. Otherwise, the likelihood of societal polarization is much higher, and this often translates into a society that is inclined towards social fluctuations and conveys destructive energy. Based on our approach and calculations, the share of middle class households in Georgia amounted to just 16 percent according to 9 criteria (2016) and 24.6 percent according to 8 criteria (2017). This means that even without taking the employment stability factor into consideration, the weight of middle class households was about half of the minimum necessary for stability of the country in the long term perspective. Furthermore, the socially less stable lower middle class comprised almost 45 percent of the entire middle class.

The present study demonstrates that the size of the middle class – as identified by both nine and eight criteria – more than doubled over the 2009-2017 period. In both cases however, this largely took place due to a sharp growth of the relatively sustainable middle and upper middle classes. This points to significant changes that have taken place in the country in recent years, although society does not have always a positive perception of this, which could be explained by the fact that often times these changes have been spontaneous and inconsistent in nature. Maintaining positive growth for the middle class requires great political effort, which entails the following four key components:

- Economic component – ensuring effective employment, generation of income and savings
- Infrastructural component – improving living conditions, providing access to basic infrastructure and durable goods
- Social component – access to education, healthcare and other social services
- Informational component – management of attitudes and formation of expectations.

Consequently, it is essential to implement targeted and synchronized activities in all four directions, as they are knit together so tightly that the collapse of one of them will precipitate the fall of the others in a domino effect.

- The economic direction requires an inclusive economic growth strategy, which will be first and foremost focused on the generation of jobs, incomes and savings. The existing official document – the Social-Economic Development Strategy of Georgia 2020 – is in fact obsolete. The government replaced it with the declarative Four Point Plan. The strategy should be precisely defined in time and space and include measurable indicators for monitoring and evaluation.
- The infrastructural direction, initially, requires the government to study households' access to basic infrastructure, and on the basis of this study to develop a strategy, whose effectiveness and success largely depends on the instillation of detailed and measurable indicators for monitoring and evaluation purposes.
- The social direction requires the development of an effective system for accessing social services, for which the following components are vital: provision of access to schools and higher education, implementation of an effective state program for preventative healthcare, and the reorganization of existing formats of targeted social assistance.
- The information direction would benefit from improvements to the efficiency of the government's communication strategy. The present analysis demonstrated that several positive trends in recent times were fully absent from the information medium. The government should develop an efficient format for communication with the population and the media in order to provide the population with objective, justified information about existing tendencies.

As the present analysis demonstrates, a significant hindrance to the growth of the relative share of the middle class is the deep difference between urban and rural areas, which is applicable for almost all selected parameters. Thus, in the process of elaborating a strategy in the aforementioned directions, it is essential to take this factor into consideration. The urban/rural factor is the number one discriminant of socio-economic life, which preconditions de-population of villages and high urbanization. Thus, it should be possible to develop a separate rural development strategy (and not just agricultural), based on the indicated directions.

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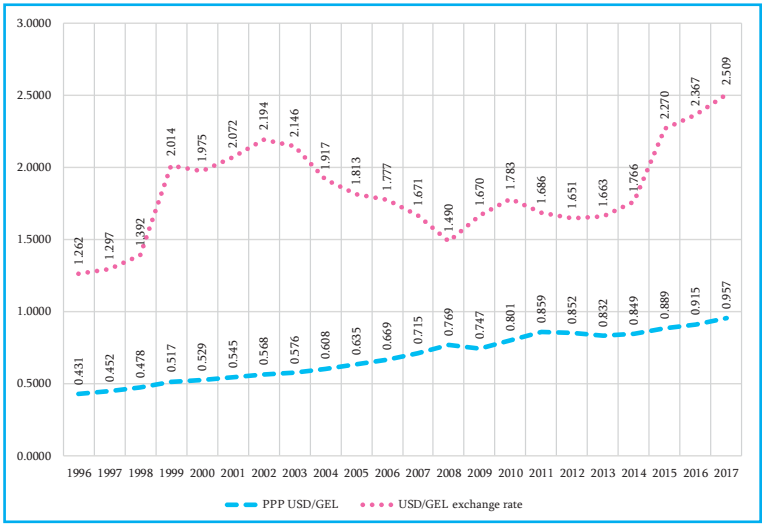
Annex 1

Dynamics of PPP USD/GEL Conversion and USD/GEL Nominal Exchange Rates



Source: World Bank

Annex 2

Evaluation of Changes to Own Socio-Economic Status in the Previous 12 months by Households, by Regions and Urban/Rural Areas

		Worse	Unchanged	Better	Total
Kakheti	2009	55.7%	36.2%	8.1%	100.0%
	2010	55.3%	37.2%	7.6%	100.0%
	2011	57.8%	36.4%	5.9%	100.0%
	2012	55.2%	37.3%	7.4%	100.0%
	2013	42.4%	44.1%	13.5%	100.0%
	2014	33.1%	50.7%	16.1%	100.0%
	2015	38.5%	50.3%	11.2%	100.0%
	2016	46.0%	47.7%	6.4%	100.0%
	2017	51.3%	44.6%	4.1%	100.0%
Tbilisi	2009	45.0%	47.4%	7.6%	100.0%
	2010	47.1%	46.1%	6.9%	100.0%
	2011	49.0%	44.4%	6.6%	100.0%
	2012	43.9%	50.2%	6.0%	100.0%
	2013	31.2%	61.0%	7.8%	100.0%
	2014	29.6%	63.9%	6.5%	100.0%
	2015	35.7%	58.6%	5.7%	100.0%
	2016	35.8%	56.7%	7.5%	100.0%
	2017	29.8%	62.9%	7.3%	100.0%
Shida Kartli	2009	61.2%	30.8%	8.0%	100.0%
	2010	62.4%	30.9%	6.7%	100.0%
	2011	65.1%	29.4%	5.4%	100.0%
	2012	47.8%	41.2%	10.9%	100.0%
	2013	35.4%	56.8%	7.7%	100.0%
	2014	35.6%	55.6%	8.8%	100.0%
	2015	50.2%	46.1%	3.7%	100.0%
	2016	59.4%	35.1%	5.6%	100.0%
	2017	52.3%	44.7%	3.0%	100.0%
Kvemo Kartli	2009	36.8%	44.1%	19.1%	100.0%
	2010	37.4%	52.0%	10.6%	100.0%
	2011	39.5%	49.4%	11.0%	100.0%
	2012	38.3%	51.2%	10.5%	100.0%
	2013	26.5%	61.7%	11.9%	100.0%
	2014	22.5%	63.6%	13.9%	100.0%
	2015	37.5%	57.5%	4.9%	100.0%
	2016	35.8%	60.0%	4.2%	100.0%
	2017	43.5%	51.7%	4.8%	100.0%
Samtskhe-Javakheti	2009	58.9%	33.8%	7.4%	100.0%
	2010	53.6%	38.1%	8.2%	100.0%
	2011	55.3%	37.4%	7.3%	100.0%
	2012	41.6%	45.9%	12.5%	100.0%
	2013	42.3%	46.5%	11.2%	100.0%
	2014	30.2%	50.2%	19.5%	100.0%
	2015	39.1%	47.1%	13.8%	100.0%
	2016	53.9%	42.1%	3.9%	100.0%
	2017	46.3%	49.0%	4.7%	100.0%

		Worse	Unchanged	Better	Total
Adjara	2009	39.0%	43.2%	17.8%	100.0%
	2010	36.7%	54.0%	9.3%	100.0%
	2011	30.9%	61.0%	8.1%	100.0%
	2012	23.3%	66.9%	9.7%	100.0%
	2013	17.4%	71.9%	10.7%	100.0%
	2014	14.8%	71.7%	13.5%	100.0%
	2015	19.3%	70.7%	10.0%	100.0%
	2016	11.4%	83.5%	5.2%	100.0%
	2017	23.3%	69.9%	6.8%	100.0%
Guria	2009	38.3%	49.7%	12.0%	100.0%
	2010	41.5%	46.5%	12.0%	100.0%
	2011	43.4%	46.9%	9.7%	100.0%
	2012	42.1%	47.9%	10.0%	100.0%
	2013	27.7%	58.4%	13.9%	100.0%
	2014	23.2%	59.7%	17.0%	100.0%
	2015	31.1%	56.3%	12.6%	100.0%
	2016	36.0%	56.7%	7.4%	100.0%
	2017	33.1%	57.8%	9.1%	100.0%
Samegrelo	2009	40.1%	43.7%	16.2%	100.0%
	2010	39.4%	51.3%	9.2%	100.0%
	2011	42.0%	49.3%	8.7%	100.0%
	2012	36.4%	52.5%	11.1%	100.0%
	2013	27.1%	60.3%	12.5%	100.0%
	2014	18.0%	70.5%	11.5%	100.0%
	2015	30.7%	58.2%	11.1%	100.0%
	2016	51.2%	40.4%	8.4%	100.0%
	2017	49.4%	46.1%	4.5%	100.0%
Imereti, Racha-Lechkhumi-Svaneti	2009	39.6%	50.5%	9.9%	100.0%
	2010	41.4%	50.1%	8.5%	100.0%
	2011	41.5%	49.7%	8.8%	100.0%
	2012	34.8%	56.5%	8.7%	100.0%
	2013	26.4%	64.4%	9.2%	100.0%
	2014	24.1%	63.1%	12.8%	100.0%
	2015	41.7%	52.4%	5.8%	100.0%
	2016	50.3%	44.3%	5.4%	100.0%
	2017	51.2%	43.3%	5.5%	100.0%
Mtskheta-Mtianeti	2009	45.3%	45.6%	9.1%	100.0%
	2010	50.3%	41.0%	8.7%	100.0%
	2011	53.3%	37.3%	9.4%	100.0%
	2012	48.5%	40.0%	11.4%	100.0%
	2013	34.7%	51.7%	13.7%	100.0%
	2014	20.0%	57.5%	22.5%	100.0%
	2015	31.4%	57.4%	11.2%	100.0%
	2016	39.3%	55.1%	5.6%	100.0%
	2017	30.7%	61.2%	8.2%	100.0%

		Worse	Unchanged	Better	Total
Urban areas, total	2009	45.1%	45.1%	9.8%	100.0%
	2010	47.8%	44.5%	7.7%	100.0%
	2011	47.2%	45.5%	7.3%	100.0%
	2012	39.7%	52.8%	7.6%	100.0%
	2013	29.3%	61.8%	8.9%	100.0%
	2014	27.6%	64.4%	8.0%	100.0%
	2015	37.6%	56.3%	6.1%	100.0%
	2016	40.2%	53.7%	6.2%	100.0%
	2017	37.0%	56.6%	6.4%	100.0%
Rural areas, total	2009	44.6%	43.1%	12.3%	100.0%
	2010	43.5%	47.6%	8.8%	100.0%
	2011	46.5%	45.2%	8.3%	100.0%
	2012	41.5%	48.4%	10.0%	100.0%
	2013	31.0%	57.5%	11.5%	100.0%
	2014	24.1%	60.1%	15.7%	100.0%
	2015	35.1%	55.7%	9.2%	100.0%
	2016	43.2%	50.5%	6.3%	100.0%
	2017	44.8%	50.2%	5.0%	100.0%
Country total	2009	44.9%	44.1%	11.0%	100.0%
	2010	45.7%	46.1%	8.3%	100.0%
	2011	46.9%	45.3%	7.8%	100.0%
	2012	40.6%	50.6%	8.8%	100.0%
	2013	30.2%	59.6%	10.2%	100.0%
	2014	25.9%	62.2%	11.9%	100.0%
	2015	36.4%	56.0%	7.6%	100.0%
	2016	41.7%	52.1%	6.2%	100.0%
	2017	40.2%	54.0%	5.9%	100.0%

Source: Database of Integrated Household Survey, processed by the authors

Annex 3

Expectations of Change in Socio-Economic Status in the Upcoming 12 months, by Regions and Urban/Rural Areas

		Will worsen	Will remain unchanged	Will improve	Unsure	Total
Kakheti	2009	17.1%	24.1%	7.6%	51.2%	100.0%
	2010	14.1%	23.6%	6.1%	56.1%	100.0%
	2011	12.8%	15.0%	7.1%	65.1%	100.0%
	2012	14.9%	14.7%	9.4%	61.0%	100.0%
	2013	5.5%	15.0%	18.9%	60.6%	100.0%
	2014	2.7%	18.9%	15.3%	63.0%	100.0%
	2015	5.2%	20.0%	11.2%	63.5%	100.0%
	2016	10.2%	21.5%	6.5%	61.9%	100.0%
	2017	15.9%	31.7%	5.6%	46.8%	100.0%
Tbilisi	2009	12.0%	24.3%	10.8%	53.0%	100.0%
	2010	11.4%	24.9%	13.9%	49.7%	100.0%
	2011	15.5%	28.1%	9.8%	46.6%	100.0%
	2012	14.5%	34.1%	12.1%	39.2%	100.0%
	2013	7.8%	31.1%	19.1%	42.0%	100.0%
	2014	8.3%	39.1%	15.7%	36.9%	100.0%
	2015	12.8%	36.3%	14.7%	36.2%	100.0%
	2016	14.2%	43.0%	10.1%	32.7%	100.0%
	2017	17.2%	41.4%	7.8%	33.6%	100.0%
Shida Kartli	2009	19.1%	17.9%	11.0%	52.0%	100.0%
	2010	13.9%	15.9%	12.1%	58.2%	100.0%
	2011	16.4%	13.7%	6.8%	63.1%	100.0%
	2012	10.1%	10.4%	9.4%	70.0%	100.0%
	2013	4.1%	14.4%	8.5%	73.1%	100.0%
	2014	4.1%	11.8%	7.6%	76.4%	100.0%
	2015	9.6%	19.9%	5.1%	65.3%	100.0%
	2016	7.8%	10.0%	6.5%	75.7%	100.0%
	2017	16.4%	35.6%	6.2%	41.9%	100.0%
Kvemo Kartli	2009	8.9%	19.2%	14.0%	57.9%	100.0%
	2010	10.2%	24.2%	11.9%	53.7%	100.0%
	2011	15.9%	17.9%	13.5%	52.7%	100.0%
	2012	16.4%	26.3%	9.2%	48.1%	100.0%
	2013	8.6%	26.5%	14.6%	50.3%	100.0%
	2014	7.4%	22.4%	12.3%	57.9%	100.0%
	2015	16.1%	24.3%	7.7%	51.9%	100.0%
	2016	11.5%	31.8%	7.1%	49.6%	100.0%
	2017	16.2%	35.4%	16.6%	31.8%	100.0%
Samtskhe-Javakheti	2009	20.7%	22.8%	11.9%	44.6%	100.0%
	2010	10.0%	17.0%	12.3%	60.6%	100.0%
	2011	5.4%	15.7%	11.6%	67.4%	100.0%
	2012	5.8%	19.6%	20.8%	53.7%	100.0%
	2013	3.7%	6.6%	27.4%	62.3%	100.0%
	2014	2.4%	9.3%	30.8%	57.5%	100.0%
	2015	6.7%	22.9%	16.8%	53.6%	100.0%
	2016	10.9%	24.7%	5.5%	59.0%	100.0%
	2017	11.8%	31.3%	6.1%	50.8%	100.0%

		Will worsen	Will remain unchanged	Will improve	Unsure	Total
Adjara	2009	12.2%	26.8%	28.2%	32.9%	100.0%
	2010	10.9%	32.7%	14.5%	41.9%	100.0%
	2011	7.1%	19.2%	7.6%	66.2%	100.0%
	2012	2.6%	16.7%	8.6%	72.0%	100.0%
	2013	0.9%	16.5%	10.7%	71.9%	100.0%
	2014	2.2%	26.7%	7.6%	63.5%	100.0%
	2015	4.5%	27.4%	8.3%	59.8%	100.0%
	2016	1.0%	37.6%	4.2%	57.2%	100.0%
	2017	8.0%	30.8%	7.3%	53.8%	100.0%
Guria	2009	26.1%	34.7%	16.7%	22.5%	100.0%
	2010	28.5%	37.5%	18.1%	15.9%	100.0%
	2011	22.2%	43.9%	13.5%	20.4%	100.0%
	2012	12.4%	27.6%	24.6%	35.4%	100.0%
	2013	5.3%	24.5%	40.8%	29.4%	100.0%
	2014	7.8%	29.3%	27.7%	35.2%	100.0%
	2015	12.5%	28.8%	21.5%	37.2%	100.0%
	2016	6.8%	29.8%	20.0%	43.4%	100.0%
	2017	7.4%	27.3%	16.5%	48.7%	100.0%
Samegrelo	2009	12.2%	27.1%	22.7%	37.9%	100.0%
	2010	9.1%	26.7%	15.3%	48.9%	100.0%
	2011	16.5%	28.5%	12.7%	42.2%	100.0%
	2012	8.9%	15.5%	19.6%	56.0%	100.0%
	2013	2.5%	19.5%	22.8%	55.2%	100.0%
	2014	2.2%	25.1%	14.9%	57.8%	100.0%
	2015	8.4%	27.2%	12.3%	52.0%	100.0%
	2016	15.3%	24.7%	14.7%	45.3%	100.0%
	2017	13.4%	30.9%	12.0%	43.7%	100.0%
Imereti, Racha-Lechkhumi-Svaneti	2009	10.3%	18.7%	11.9%	59.0%	100.0%
	2010	8.3%	19.5%	9.2%	62.9%	100.0%
	2011	9.8%	13.6%	9.0%	67.6%	100.0%
	2012	7.6%	13.8%	9.9%	68.8%	100.0%
	2013	4.4%	15.4%	17.6%	62.5%	100.0%
	2014	4.0%	15.8%	13.7%	66.6%	100.0%
	2015	6.7%	18.9%	7.2%	67.2%	100.0%
	2016	7.8%	11.2%	10.1%	71.0%	100.0%
	2017	15.9%	18.3%	13.3%	52.5%	100.0%
Mtskheta-Mtianeti	2009	17.8%	26.5%	7.8%	48.0%	100.0%
	2010	14.5%	27.4%	12.9%	45.2%	100.0%
	2011	21.8%	17.2%	14.1%	46.9%	100.0%
	2012	10.7%	21.1%	16.2%	52.0%	100.0%
	2013	3.5%	16.8%	30.4%	49.2%	100.0%
	2014	2.6%	10.3%	18.1%	69.0%	100.0%
	2015	3.6%	16.0%	8.3%	72.0%	100.0%
	2016	7.6%	13.7%	8.0%	70.6%	100.0%
	2017	11.7%	30.6%	8.4%	49.3%	100.0%

		Will worsen	Will remain unchanged	Will improve	Unsure	Total
Urban areas, total	2009	11.9%	20.9%	14.5%	52.8%	100.0%
	2010	10.6%	23.2%	13.5%	52.8%	100.0%
	2011	13.8%	23.5%	10.4%	52.4%	100.0%
	2012	11.9%	25.7%	11.2%	51.1%	100.0%
	2013	6.0%	24.2%	18.1%	51.7%	100.0%
	2014	5.6%	30.0%	13.1%	51.3%	100.0%
	2015	9.7%	31.0%	11.6%	47.7%	100.0%
	2016	10.2%	32.8%	9.0%	48.0%	100.0%
	2017	15.3%	35.4%	9.8%	39.5%	100.0%
Rural areas, total	2009	15.0%	25.3%	12.9%	46.8%	100.0%
	2010	12.4%	24.7%	10.9%	52.0%	100.0%
	2011	13.6%	18.8%	9.5%	58.1%	100.0%
	2012	10.2%	17.5%	13.5%	58.8%	100.0%
	2013	4.7%	17.8%	19.2%	58.2%	100.0%
	2014	4.5%	19.0%	16.4%	60.1%	100.0%
	2015	9.2%	21.4%	10.4%	59.0%	100.0%
	2016	10.6%	21.8%	9.6%	57.9%	100.0%
	2017	14.4%	29.3%	10.0%	46.3%	100.0%
Country total	2009	13.4%	23.1%	13.7%	49.8%	100.0%
	2010	11.5%	24.0%	12.2%	52.4%	100.0%
	2011	13.7%	21.1%	9.9%	55.3%	100.0%
	2012	11.1%	21.6%	12.3%	55.0%	100.0%
	2013	5.3%	21.0%	18.7%	55.0%	100.0%
	2014	5.1%	24.4%	14.8%	55.7%	100.0%
	2015	9.4%	26.2%	11.0%	53.4%	100.0%
	2016	10.4%	27.3%	9.3%	53.0%	100.0%
	2017	15.0%	32.9%	9.9%	42.3%	100.0%

Source: Database of Integrated Household Survey, processed by the authors