

# Income distribution and poverty reduction in Georgia

## A comparative analysis

by Sebastian Staske, Giorgi Mzhavanadze and Ricardo Giucci

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## Executive Summary

This paper analyses income distribution and poverty reduction in Georgia in the period 2010 to 2017/2018. As we have no data for 2019, our findings do not relate to the most recent distributional policies of the Georgian government.

Our results suggest that while Georgia has substantially reduced poverty and income inequality, continuous monitoring of the situation would be helpful.

### Main findings

- Georgia has made significant progress in poverty reduction, almost halving the poverty rate to 16% during 2010 to 2015 (using the World Bank measure for lower middle-income countries). However, poverty did not decline further from 2016 to 2018 and remains high when compared to peer group countries.
- The presence of durable goods in a household can serve as a robustness check for poverty measures because household income is difficult to measure through surveys. We find that the living standards, as measured by the number of durable goods in a household, have increased. Many types of durable goods have become more widely available, particularly kitchen appliances (such as refrigerators and stoves) and mobile phones.
- Inequality in disposable income measured by the Gini index has slightly decreased, but also remains high in an international comparison. About one fifth of the inequality in market income is eliminated through redistribution through taxes and transfers. The income shares of population quintiles are fairly stable in Georgia: the top 20% of the population by income receive an income almost equal to that of the bottom 80% combined. This value is high in international comparison.
- Tbilisi is by far the most important region in terms of GDP, accounting for 51% of the total in 2018. It also outranks all other regions in terms of GDP per capita. Although the gap in GDP per capita between Tbilisi and the rest of Georgia has decreased, Tbilisi still generates 2.4 times as much output per capita as the rest of the country.
- From 2010 to 2018, the regions of Mtskheta-Mtianeti and Kakheti had the highest GDP growth per capita and Tbilisi and Samegrelo-Zemo Svaneti the lowest.

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## 1 Introduction

The Georgian economy has grown strongly at app. 5% per year on average between 2010 and 2019. However, GDP growth is only one part of the picture of a country's economic development. A follow-up question is to look at who benefits from growth. This topic has caught the attention of international organisations such as the IMF, EBRD or OECD. If a significant portion of the population is excluded from economic progress, trust in government may decline and internal struggles increase. The Government of Georgia itself has established “inclusive growth” as an objective on its recent platform.

In this policy paper, we analyse recent developments in income distribution and poverty reduction, taking 2010 as our starting date. However, an important caveat is that we have data only until 2018; therefore, this analysis allows no inference on current distributional policies. We analyse trends in Georgia over time and also compare Georgia to a peer group of countries.

The peer group is a sample of developing and emerging (eastern) European and Central Asian (ECA) countries, a World Bank country category. This sample is chosen because all countries (except Turkey) experienced a transition from socialism after the Cold War.

Unfortunately, poverty data and Gini indices are not available for all potential peer group members. Constraints on data availability and the desire for brevity force us to make a selection. An additional problem is that data is often updated infrequently and unavailable for many countries/ indicators beyond 2017. Hence, we focus on these peer countries: Armenia, Belarus, Bulgaria, Kazakhstan, Kyrgyzstan, Moldova, Poland, Romania, Russia, Serbia, Tajikistan, Turkey and Ukraine.

In Chapter 2, we present the evolution of poverty rates in Georgia. In Chapter 3, we take a closer look at the trends in income distribution, using Gini indices and household income quintiles as indicators. Both chapters also feature an international comparison. The performance of Georgian regions, with a special emphasis on the gap between Tbilisi and the rest of Georgia, is the focus of Chapter 4.

## 2 Poverty reduction

### 2.1 [Poverty rates in Georgia](#)

Poverty definitions differ across countries due to differences in living standards. To allow for a comparison and in line with other research in the field, we base our comparative country analysis on the three poverty lines defined by the World Bank.

These are based on the concept of absolute poverty, meaning that the people covered under the respective poverty lines are not just poor with respect to fellow citizens but suffer from limited access to basic human needs due to lack of monetary means.

**Table 1: World Bank poverty measures**

	Poverty threshold (daily income) in constant 2011 international dollars
upper middle-income (UMI)	5.50
lower middle-income (LMI), <i>benchmark</i>	<b>3.20</b>
low-income (LI)	1.90

Source: World Bank

Each year on July 1, the World Bank categorises countries based on their gross national income (GNI) per capita.<sup>1</sup> Relevant for poverty analysis are the following three classifications: upper middle-income (henceforth, UMI), lower middle-income (LMI) and low-income (LI). The thresholds in Table 1 are derived by the World Bank from typical poverty lines of the countries in the respective income groups. Nevertheless, the World Bank publishes data on the share of poverty using all thresholds regardless of a country’s income classification.

Everyone living on less than the stated amount per day is considered to be poor by the respective definition. While national poverty lines differ across countries, these measures are standardised. All of these are based on the 2011 purchasing power parity (PPP) of the USD, also commonly known as constant 2011 international dollars. Coincidentally, for Georgia USD 1 (in constant 2011 international terms) corresponds to almost exactly GEL 1 in 2019.<sup>2</sup>

For most of our time-span, Georgia was considered to be an LMI country by the World Bank, so we will base the majority of our analysis on this measure. This is also the measure most closely in line with the national statistics office: as mentioned, national poverty thresholds may differ from the ones by the World Bank. It is noteworthy that Geostat uses its own measurements for people in so-called “absolute poverty”. In general, this data is broadly in line both in magnitude and trend with the figures using the LMI definition by the World Bank.

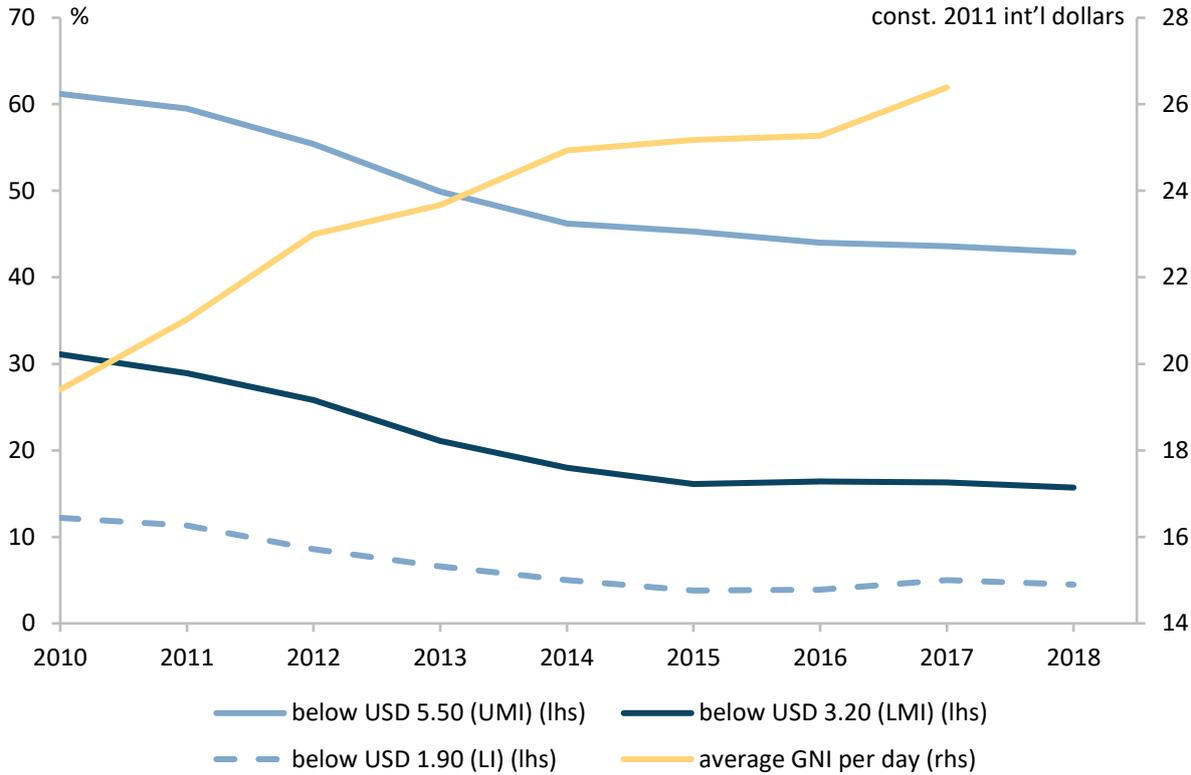
Nevertheless, we will use all three poverty measures as the other two offer additional insight. In recent years, Georgia has always been close to the upper income threshold for LMI countries and is currently considered an UMI country. If Georgia continues on its growth path, it will likely stabilise this assessment. Despite the fact that Georgia was not categorized as an LI country anymore since mid-2004, using this indicator can shed light on the development of the absolute poorest.

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<sup>1</sup> Gross national income (GNI) is an indicator closely related to GDP:  
 $GNI = GDP + [\text{money inflow from foreign countries}] - [\text{money outflow to foreign countries}]$ . For most countries, the difference between both figures is relatively small.

<sup>2</sup> This figure is derived from the World Bank conversion rates for GDP, since the rates for private consumption are unavailable for Georgia. However, looking at data for other countries indicates that the differences between these two conversion rates are generally small and should therefore not alter the result here meaningfully.

**Figure 1: Share of the Georgian population living in poverty and GNI per day**



Note: poverty lines and average GNI per day are in constant 2011 international dollars. No data for GNI for 2018.

Source: World Bank

Figure 1 shows the evolution of the three poverty measures in Georgia. Unfortunately, no data is available beyond 2018. In 2010, almost one out of three Georgians (31.1%) was living in poverty using our benchmark LMI definition. This figure has halved in the time-span, with only 15.7% of the population still in poverty. Of these, about one third (4.5%) is living in extreme poverty (using the LI definition). The decrease in poverty was accompanied by an increase in average GNI per day.

This shows that growth was also shared by the poorest of the population in the sense that some of them managed to escape poverty as a result. As visible in the graph, the decline is most pronounced when applying the LI and LMI definitions. By both of these definitions, poverty has approximately halved.

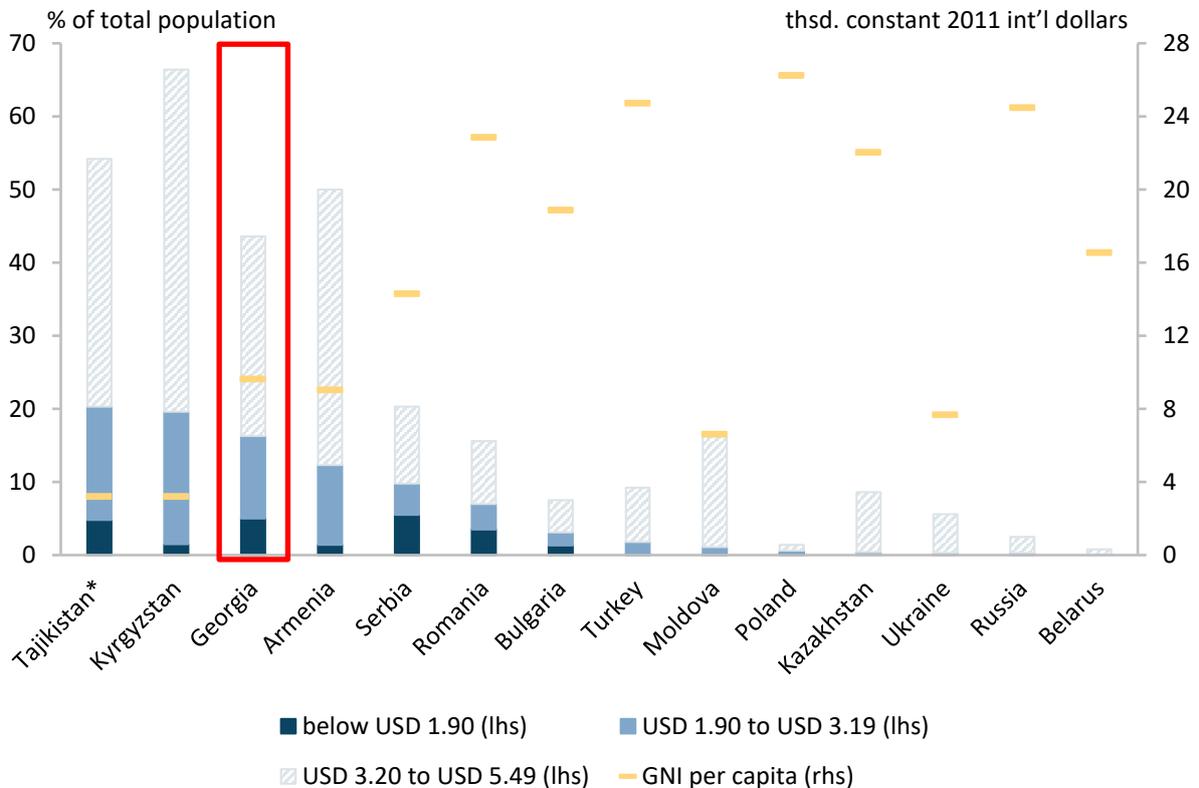
Arguably, lifting people out of most dire poverty is the most important concern when it comes to the various poverty measures. Georgia has been successful in this regard. However, while there was a steady decline by all definitions from 2010 to 2015, poverty did not decline further from 2016 to 2018.

One possible explanation for the lack of a further decline in these years is a period of lower growth around 2015/16 in combination with a depreciation of the Lari.

**Conclusion 1:** Between 2010 and 2015, the poverty rate in Georgia (based on the World Bank’s threshold for lower middle-income countries of USD 3.20 per day) almost halved to around 16%. However, poverty did not decline further between 2016 and 2018.

## 2.2 International comparison of poverty measures

**Figure 2: International comparison of poverty measures (2017)**



Notes: Poverty lines and GNI per capita are in constant 2011 international dollars, \*) value for GNI per capita for Tajikistan from 2013, value for poverty measures from 2015

Source: World Bank

Figure 2 presents the comparison of Georgia to the other countries. Unfortunately, figures for a comprehensive comparison are not available for many countries beyond 2017, so we use this year as the base.

One can infer that Georgian poverty rates are high relative to other comparable countries, with only Tajikistan and Kyrgyzstan having a higher rate, when applying our LMI benchmark (which corresponds graphically to the sum of the dark and light blue bars). However, to put these figures into perspective, it is helpful to compare countries along average incomes as well. Unsurprisingly, poverty rates tend to decline with rising levels of GNI per capita. Of the countries with lower poverty rates than Georgia, almost all have higher levels of average income. Notable exceptions are Moldova and Ukraine, both with very low poverty rates according to the LMI poverty measure, despite having relatively low incomes.

It should also be noted that while most of the countries in this sample are classified as UMI currently, the majority of these has a longer record of this assessment than Georgia and therefore arguably has had more time and resources for poverty reduction.

Additionally, looking more closely at the various poverty measures reveals a more nuanced picture: taking only extreme poverty (LI definition) into consideration, Georgia with around 4 to 5% is in a

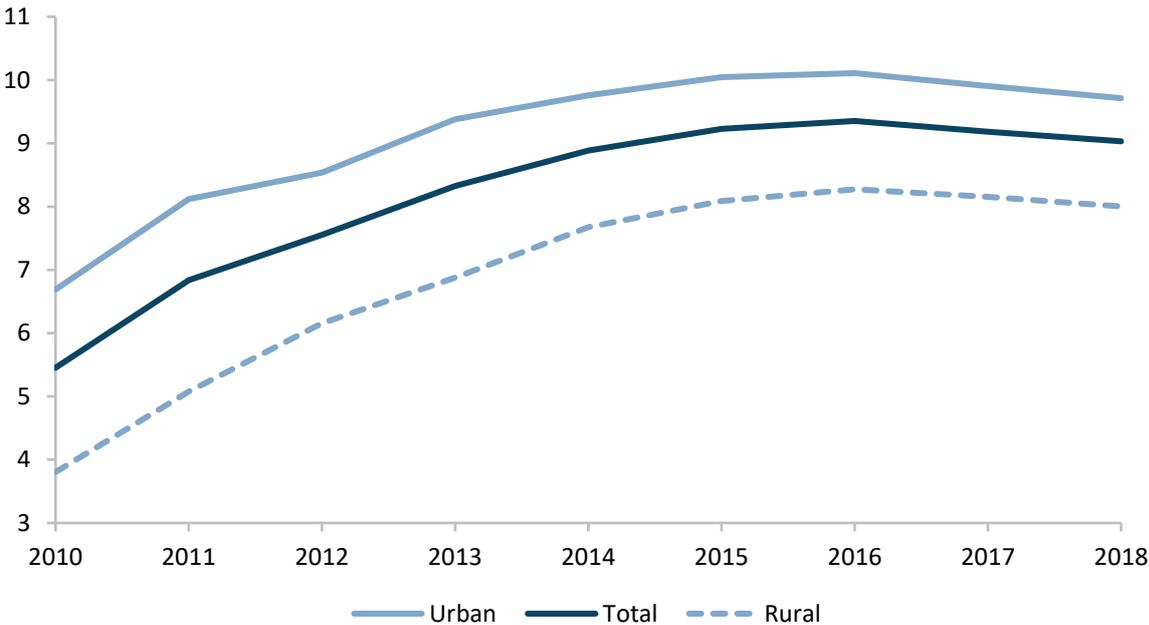
similar situation as EU member Romania and EU candidate Serbia. This example shows the importance of the poverty classifications.

**Conclusion 2:** Poverty in Georgia remains high compared to the peer group countries. However, most of these peers have higher per capita incomes.

### 2.3 Durable goods

Another interesting and more unusual indicator for poverty reduction is the number of durable goods per household. The presence of (not strictly essential) durables indicate the ability to accumulate savings and therefore a move away from absolute poverty. Data comes from the Integrated Household Survey conducted yearly by Geostat. Recorded goods include e.g. refrigerators, washing machines and TV sets. The full list can be found in Annex 1. In general, durables can be seen as a proxy for income and therefore growth in their number are an indication for improvement in living standards. As household surveys tend to have problems recording income, the presence of durable goods can also serve as a robustness check.

**Figure 3: Average number of durables per household**



Sources: Integrated Household Survey (Geostat), GET calculations

Figure 3 shows that over the time-span the average number of durables per household increased. On the country-wide level, the number went from 5.5 to 9.0 goods. There is an urban-rural divide with urban households owning an average of 9.7 durables in 2018, compared to 8.0 for rural ones. However, the trend shows that this gap has receded as the difference was 2.9 in 2010, indicating a convergence in living standards as measured by durables.

It is also visible that since around 2015, the average number has remained roughly constant around 9 goods nationally, with a slight downward trend. Unlike GDP or income, there is the possibility of a saturation with household goods, particularly in light of their durability. If saturation has been achieved,

the simple number (without taking into account the value of goods), will lose some of its significance as an indicator in the future. Therefore, the development in recent years should not be mistaken for a decline or stagnation in living standards.

In this context, it is also important to point out that many durables tend to be imported. A depreciation of the Lari around 2015/16 thus led to increased prices for these goods.

Looking specifically at averages in the regions shows that there is now not very much variation in the number of durables. Whereas Tbilisi used to stand out compared to the others in the early years of our time-span, there has since been a convergence, with the differences between regions largely related to the aforementioned urban-rural divide.

Another interesting aspect to consider is the share of households which own specific durable goods. While TV sets were already present in nearly all households at the beginning of the period and therefore show little change (2010: 94%, 2018: 97%), many others show more development. On the national level, kitchen goods like refrigerators and stoves were present in around 65% of households in 2010, rising to 90% in 2018. A strong increase can also be seen in consumer electronics: the presence of mobile phones rose from 32% to 96% and for personal computers from 20% to 58%. Cleaning appliances such as washing machines (from 41% to 78%) and vacuum cleaners (from 22% to 30%) are nowadays also much more widespread than they used to be at the beginning of the time-span.

Coverage of most consumer goods is usually slightly higher in urban than rural households, but the differences are mostly small. However, there are exceptions. One example are personal computers, which were present in 75% of urban, but only 33% of rural households in 2018. Additionally, another interesting point to consider is the variation in the presence of cleaning appliances by regions: washing machines and vacuum cleaners are present in 92% and 45% of households in Adjara A.R., respectively, compared to only 65% and 15% of households for the same goods in Samegrelo-Zemo Svaneti.

**Conclusion 3:** The average number of durables in Georgian households has strongly increased. There is an urban-rural gap, but it is shrinking. There seems to be a saturation since around 2015. Coverage of many household appliances increased, particularly for kitchen goods and consumer electronics.

### 3 Income distribution

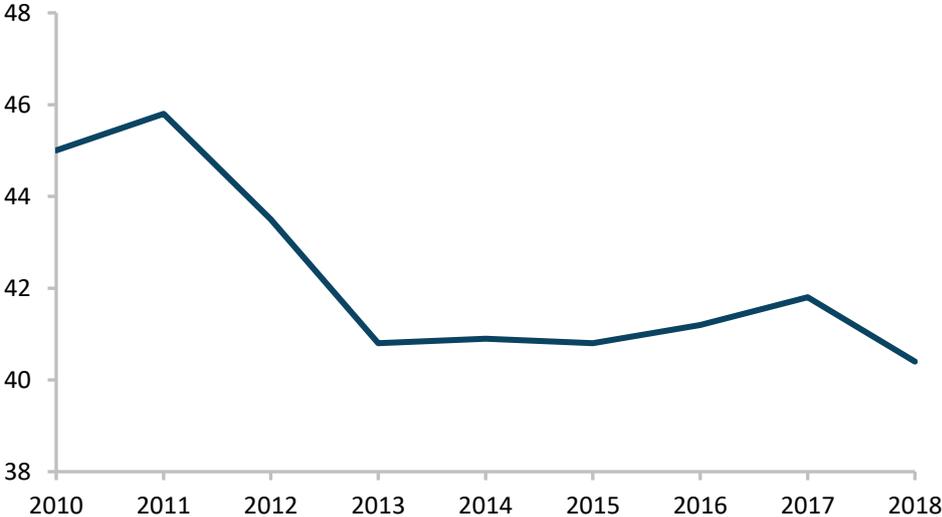
In this chapter we look at income distribution. One of the most common indicators for economic disparities is the Gini coefficient, measuring inequality on a scale of 0 (perfect equality) to 100 (perfect inequality). We first analyse the Gini coefficient and afterwards look more closely at the evolution of household income quintiles.

#### 3.1 [Development of Gini index in Georgia](#)

In this section, we look at the evolution of inequality in Georgia. Data comes from the Integrated Household Survey. For our analysis, we use the most extensive income definition available, taking into account all cash and non-cash inflows after taxes and transfers.

The corresponding national Gini index decreased from 45.0 in 2010 to 40.4 in 2018. Most of the decrease occurred until 2013 (Figure 4). This data shows that Georgia has achieved a more equal distribution of incomes.

**Figure 4: Gini coefficients**



Sources: Integrated Household Survey (Geostat); GET calculations

**Conclusion 4:** Income inequality went down in Georgia.

### 3.2 International comparison of inequality

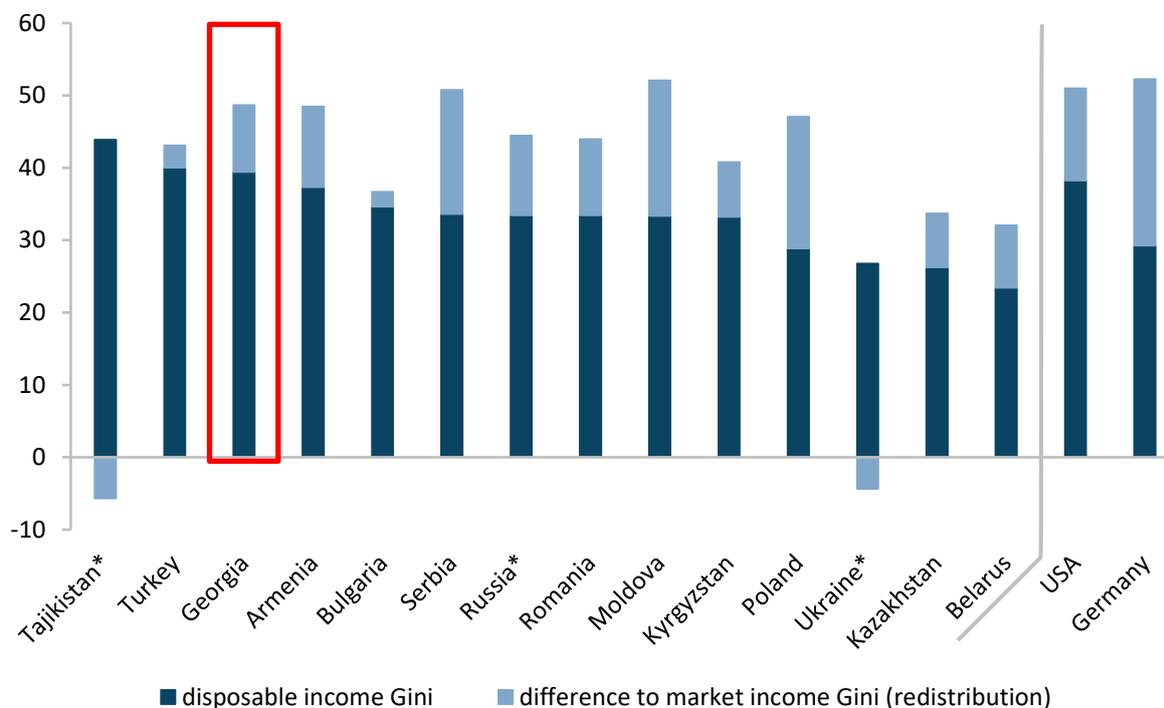
Having established the development of the Gini coefficient for Georgia during our time-span, it is insightful to look at how Georgia fares relative to its peer countries.

While there are different approaches related to the calculation of the Gini coefficient, we will focus our analysis on disposable income (i.e. post-tax and post-transfer) and compare these figures to market income inequality (i.e. pre-tax and pre-transfer). Market income inequality is typically larger than disposable income inequality, because internationally, tax systems are often progressive, so people earning more have a higher tax rate and those with low incomes are often eligible for social benefits. Both of these measures reduce inequality.

Generally speaking, disposable income is a better indicator for welfare from an individual’s perspective, because people tend to be more interested in their net than gross income. The differences between market and disposable income can be large. Its size therefore offers an indication for how strongly the government intervenes in the market and redistributes through the tax and social welfare system. The evolution and international comparison can be seen in Figure 5. Data in this section come from Solt (2019), the author of the Standardized World Income Inequality Database (SWIID), which provides the

most extensive data for international inequality analysis.<sup>3</sup> Sadly, data availability does not stretch beyond 2017 for most countries in our sample, so we base our analysis on this year.

**Figure 5: Disposable and market income Gini indices and redistribution (2017)**



Source: Solt (2019); Remarks: \*) value for Tajikistan from 2015, for Russia and Ukraine from 2016

In 2017, the Gini value for disposable income for Georgia was 39.4. This is a high value in international comparison. Among our peer group only Tajikistan (43.9) and Turkey (40.0) had a higher coefficient. Market income inequality was 48.7. Subtracting the disposable income Gini from the one for market income results in a measure for absolute redistribution, which was 9.3 in 2017.

Graphically, this corresponds to the light blue bar in Figure 5. Taking this value and dividing it by the value for market income inequality (which is the sum of the dark and light blue bars) gives a figure for the relative level of redistribution. This was approximately 19%, meaning that almost one fifth of the inequality present as a result of market outcomes was reduced through taxes and social transfers. This value is roughly the average for countries in our sample. However, there is much variation: While countries like Serbia and Moldova start from higher market inequality than Georgia, their eventual disposable income inequality is lower due to higher redistribution, whereas Turkey for example starts from a lower level of market inequality but redistributes less than Georgia so that disposable income inequality ends up higher.

It should be noted however that Gini levels of Georgia’s proportion are not only a phenomenon of middle-income countries. To illustrate, Germany and the USA have been added to the comparison in Figure 5. Germany started with a level of market income inequality of 52.3, a value higher than that for Georgia, but redistributed considerably more, ending up with a disposable income Gini of 29.2. On

<sup>3</sup> Data in Solt (2019) deviates slightly from the figures in Section 3.1. This can be explained by adjustments to the data to allow for international comparability. These adjustments to the data either by Solt himself or in his data sources concern in particular the equivalence scale.

the other hand, the USA, occasionally referred to as the “land of opportunity”, had disposable and market income Gini levels of 38.2 and 51.0, respectively. These figures are only slightly below the ones for Georgia.

This also shows also that Gini coefficients by themselves are not a sufficient measure for the economic development of a country. Additionally, it is important to point out that redistribution itself is also a societal question of weighing arguments of (perceived) fairness and social justice against those of creating incentives for economic efforts. At least in democracies, voters can ultimately choose their desired level of redistribution.

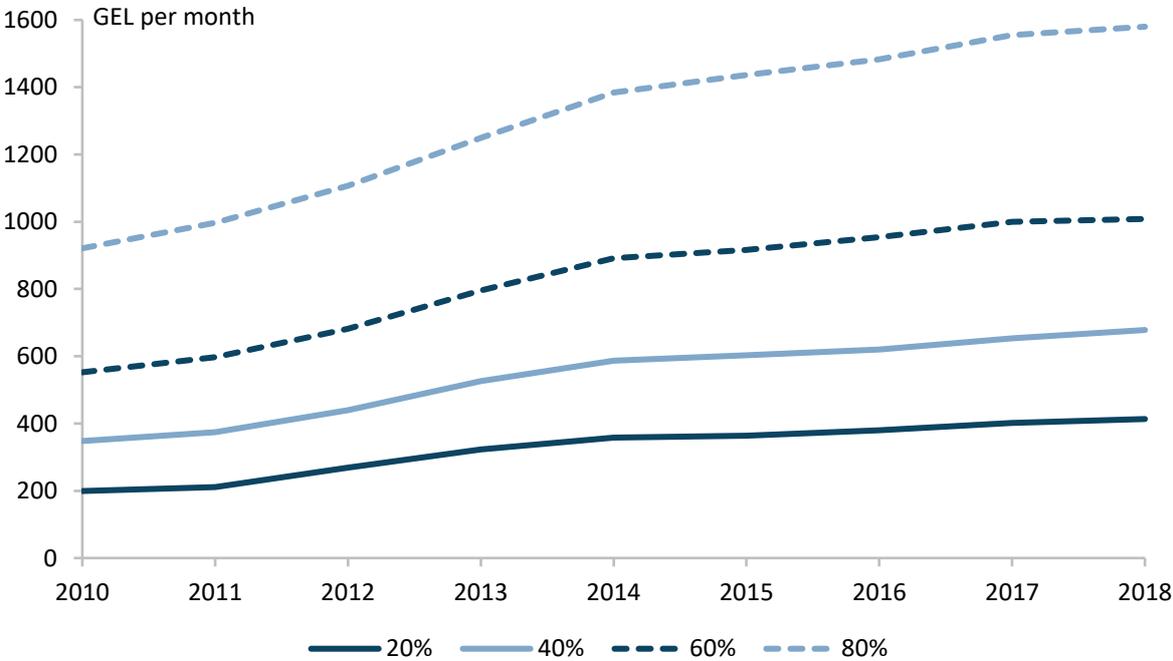
**Conclusion 5:** The level of disposable income inequality in Georgia is high compared to the peer group, even though redistribution reduces the inequality of market income by around one-fifth.

### 3.3 Household income quintiles in Georgia

Gini coefficients are a useful measure to assess income inequality in a region or country using only a single metric. Higher Gini coefficients imply that a larger share of income must accrue to the richer segments of the population. Nevertheless, additional information can be inferred by looking at the performance of income classes relative to one another.

For this, we divide the population into five groups of equal size, called quintiles, according to their income. The first quintile thus represents the poorest 20%, while the fifth quintile comprises of the richest 20% of the population.

**Figure 6: Income thresholds**



Sources: Integrated Household Survey (Geostat), GET calculations

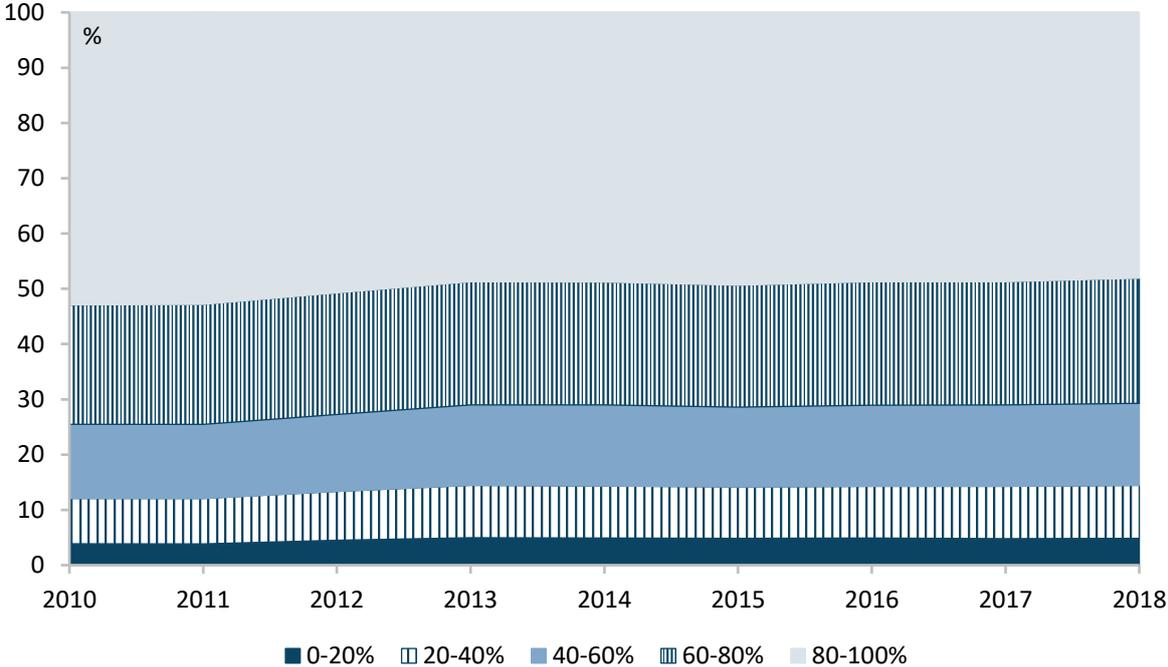
To put income quintiles into perspective, it is helpful to look at the income thresholds for the different quintiles (Figure 6). In 2018, everyone with an income below GEL 413 per month was part of the

poorest 20%; the upper thresholds for being part of the second and third quintiles were GEL 678 and GEL 1008, respectively, while people with total inflows of above GEL 1,580 belonged to the richest quintile. Incomes and thus the thresholds for all groups have increased over time.

Figure 7 shows the development of the shares of each quintile in total income for the country as a whole. This figure is interesting for inclusiveness, because significant differences in the shares may indicate that parts of the population are “left behind” in terms of their incomes.

Among the first things to notice is the relative stability of the respective shares over time, indicating that income inequality has remained roughly the same. Another interpretation is that increases in income have accrued to each group at about the same rate as their present share in total income.

**Figure 7: Share of income by household quintiles**



Sources: Integrated Household Survey (Geostat), GET calculations

A completely egalitarian society would have a Gini coefficient of 0 and see each quintile at exactly 20%, meaning that deviations from this value are an indication for inequality. The share of the richest quintile went down slightly from 52.9% in 2010 to 48.1% in 2018, offset by increases in the shares for the other four quintiles. These figures imply that the top 20% have almost the same income as the bottom 80% combined. Looking more closely at the distribution within this lower group shows that the fourth quintile (which could also be described as the upper middle-income class) accounted for 22.7% of total inflows in 2018, only slightly above their share in the population. The poorest quintile with 4.9% of the total income in 2018 has about one tenth of the income of the richest fifth of the population.

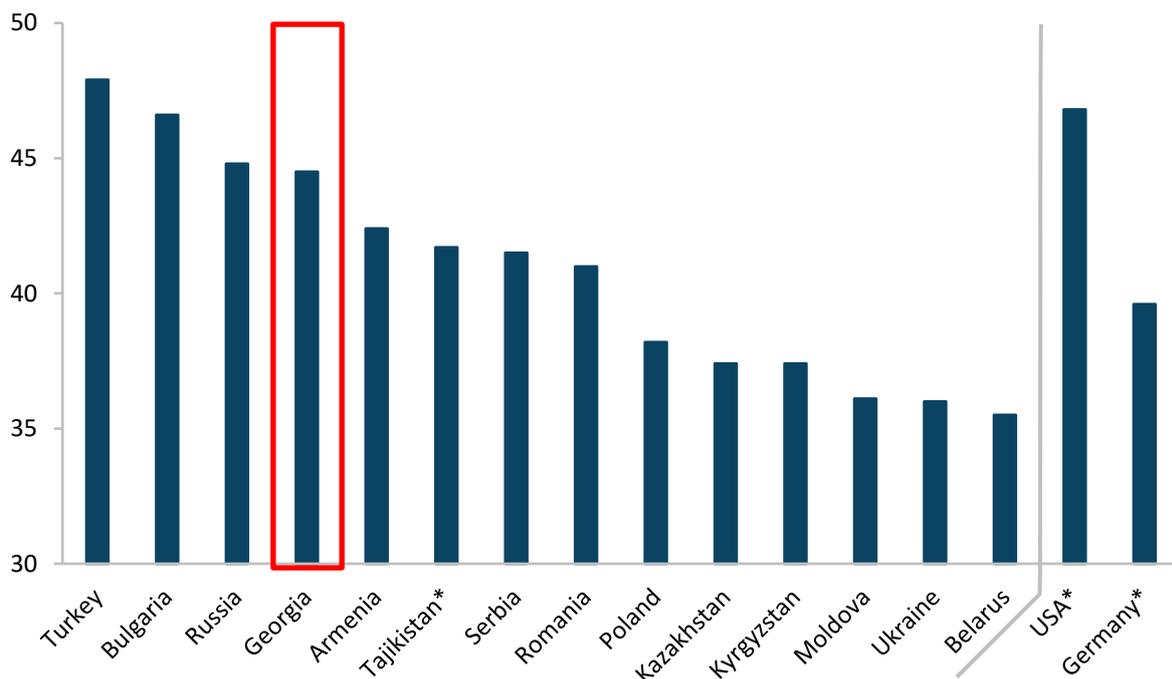
Looking at the evolution of incomes in the regions shows that the income quintile shares are fairly similar to the country-wide average and do not show a substantial urban-rural divide. All regions have stable ratios and a slight downward trend in the income for the richest quintile.

Income thresholds differ more strongly as regions with higher real GDP per capita tend to have households who report higher incomes. However, the differentiation is not as vast as in the real GDP data, which is analysed in Chapter 4.

**Conclusion 6:** The relative distribution of income in Georgia is fairly stable with a downward trend for the top 20% (from 53% to 48%). The top 20% thus receive almost the same income as the bottom 80% combined.

### 3.4 International comparison of household income quintiles

**Figure 8: Share of top 20% in total income (2017)**



Notes: \*) value for Tajikistan from 2015, values for USA and Germany from 2016.

Source: World Bank

For the international comparison, we will focus on the share of the top 20% in total income. Similar to the poverty rates, this data is not available for many countries beyond 2017, so that we will use this year for the comparison.

Looking at Figure 8 reveals that Georgia with a level of 44.5% ranks high in international comparison, with only Turkey, Bulgaria and Russia having higher shares among our peer group.<sup>4</sup> However, similar values to Georgia's are not only found in middle-income countries, but also in high-income countries like the USA (at around 47%).

**Conclusion 7:** Georgia's share of the top 20% in total income is high compared to its peer group.

<sup>4</sup> Similar to the Gini data, this data differs slightly from Section 3.3 due to adjustments to allow for international comparability.

## 4 Regional disparities in income levels

In the previous chapter, we put Georgian income statistics into an international perspective. In this chapter, we will examine the intra-national dimension in further detail. When comparing countries, a higher GDP (per capita) is usually associated with a higher average standard of living. Usually, GDP figures are compared internationally using only country-wide averages. As will be pointed out below, looking at the regions in more detail can significantly alter the picture. We will therefore look more closely at the relative performance of the regions.

In terms of living standards, GDP growth does not offer much information without taking into account the population growth. Georgian population has slightly declined from 3.80 million in 2010 to 3.73 million in 2018. While the resident population was thus nearly unchanged, some regions (especially Tbilisi at 0.7% annually) saw their populations grow, whereas most of the other regions experienced population declines. This is noticeable, because a simple comparison of growth rates in the regions might give a biased picture: if one region is economically thriving, it may attract people from other less prosperous regions. A detailed table with the regional shares in total GDP and total population, GDP per capita, population and population growth can be found in Annex 2.

Real GDP per capita uses beginning of year population and regional GDPs as reported by Geostat.

### 4.1 [The importance of Tbilisi](#)

Georgia's economy is characterised by the major importance of Tbilisi: in 2018, it accounted for 51% of total GDP.<sup>5</sup> In the same year, 31% of the population resided in Tbilisi. Average figures for Georgia as a whole are therefore very sensitive to changes in Tbilisi figures and the significant differentiation in economic performances is lost when focusing solely on country-wide measures. To look more closely at inclusive growth within Georgia, it therefore makes sense to report figures separately for Tbilisi and the rest of Georgia (henceforth, RoG). While there is still much variation across the other regions, this comparison already offers valuable insights.

When comparing economic development, it is important to distinguish between absolute measures, which look at differences in the amount of real GDP, and relative measures, comparing fractions of different regions. As will be pointed out below, conclusions may vary by the method that is used.

Figure 9 shows the development of real GDP per capita in Tbilisi and the RoG, as well as the average across the country. It shows that Tbilisi far outranks the other regions and therefore significantly affects the country-wide average. A noticeable addition from Table 2 is that in 2018 even the region with the second-highest real GDP per capita, Adjara A.R. with GEL 11,594, ranks slightly below the nation-wide average of GEL 11,958, emphasizing again the need for a regionally differentiated analysis.

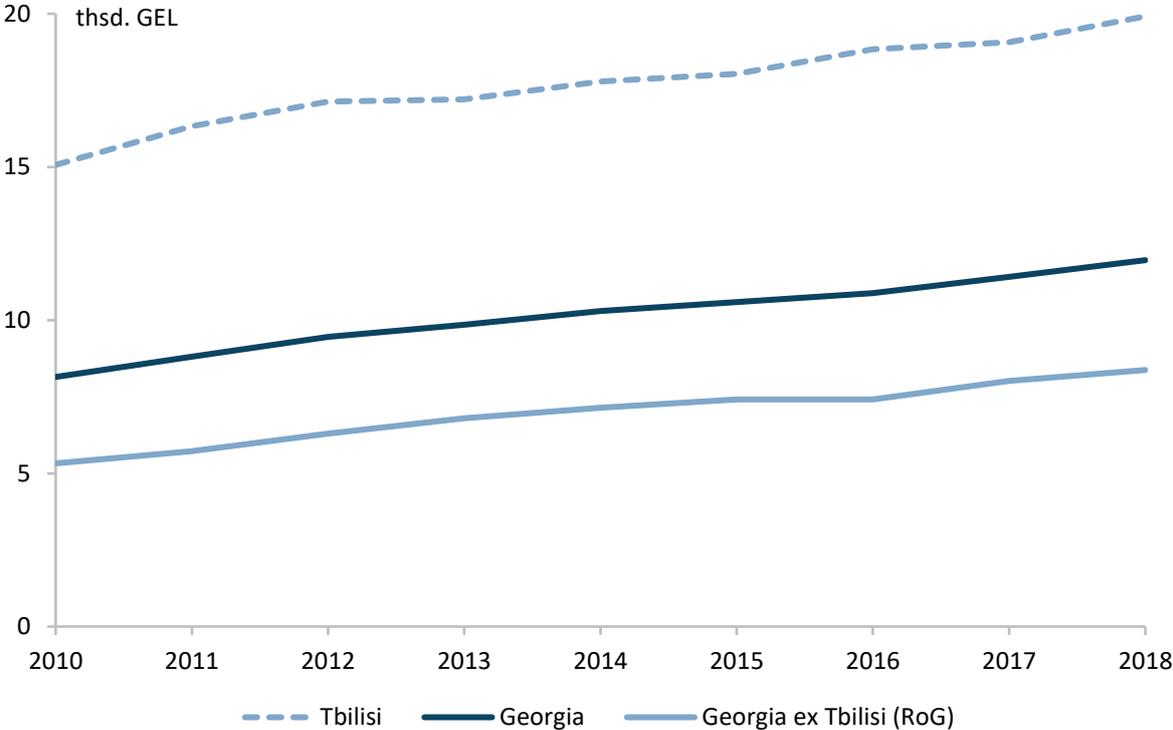
From 2010 to 2018, real GDP per capita grew from GEL 8,146 in to GEL 11,958 in Georgia as a whole, implying an average growth rate of approx. 4.9%. Splitting up the growth shows that Tbilisi averaged 3.5% per year (GEL 15,066 to GEL 19,915) and the RoG 5.8% (GEL 5,326 to 8,372).

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<sup>5</sup> An important caveat with the data is that regional GDP is based on the location of the headquarters of a firm rather than the actual location of economic activity. This effect skews GDP towards Tbilisi.

In absolute terms, the gap thus increased from GEL 9,740 to GEL 11,543. However, more important is the relative performance of Tbilisi compared to the RoG. In 2010, Tbilisi had approx. 2.8 times the real GDP per capita of the RoG. As a result of the lower Tbilisi growth, this ratio went down to approx. 2.4 by 2018. In relative terms, the RoG is catching up to Tbilisi. Another notable fact is that the data implies that the RoG in 2018 still clearly lags behind the real GDP per capita of Tbilisi in 2010.

**Figure 9: Real GDP per capita in Georgia**



Sources: Geostat, GET calculations; Remark: values are in constant 2018 prices

**Conclusion 8:** Tbilisi stands out in terms of GDP per capita and due to its size affects the country-wide average in a major way. GDP per capita is around 2.4 times as high as it is on average in the rest of the country. However, the gap between Tbilisi and the rest of Georgia has narrowed considerably.

4.2 Relative evolution of the regions

Table 2 shows the evolution of real GDP per capita for all regions separately. This offers insight into the relative performance of the regions in the past years.

The highest average growth rate was achieved by Mtskheta-Mtianeti, with 8.9%, which corresponds to almost doubling its real GDP per capita. Similarly successful were the regions Racha-Lechkhumi and Kvemo Svaneti as well as Kakheti with 8.1% and 8.0%, respectively. The lowest growth rates were generated by Samegrelo-Zemo Svaneti and Tbilisi (both around 3.5%). However, as pointed out before, Tbilisi started from a very high base and remains the clear front-runner. An interesting point given these growth rates is that Kakheti, the region with the lowest per capita output in 2010 ranked clearly behind Samegrelo-Zemo Svaneti and has now nearly caught up.

**Table 2: Growth of real GDP per capita in Georgia by region**

	2018 (GEL)	2010 (GEL)	Average yearly growth rate (%)
Tbilisi	19,915	15,066	3.5
Adjara A.R.	11,594	6,680	7.1
Mtskheta-Mtianeti	11,419	5,754	8.9
Samtskhe-Javakheti	8,854	6,308	4.3
Imereti	8,137	4,710	7.1
Racha-Lechkhumi and Kvemo Svaneti	8,136	4,374	8.1
Kvemo Kartli	8,087	6,049	3.7
Samegrelo-Zemo Svaneti	7,412	5,624	3.5
Kakheti	7,374	3,985	8.0
Guria	6,777	4,790	4.4
Shida Kartli	6,715	4,645	4.7
Georgia	11,958	8,146	4.9
Georgia ex Tbilisi (RoG)	8,372	5,326	5.8

Sources: Geostat, GET calculations; values for real GDP are in constant 2018 prices

There is no obvious link in growth rates to the changes in sectoral composition during the time-span. While high-growth regions Mtskheta-Mtianeti and Racha seem to have benefitted from a shift from agriculture towards industry, Samegrelo-Zemo Svaneti experienced a similar development but below-average growth. Another counterexample is Kakheti with the third-highest growth overall paired with a rising share of agricultural production (from 27% to 37%).

Data from the Integrated Household Survey show that except for Kakheti with Gini rising from 46.1 to 47.5, all regions experienced a reduction of income inequality. Particularly strong decreases materialised in Adjara A. R. (50.7 to 38.8) and Mtskheta-Mtianeti (45.9 to 34.3). Combining this finding with the fact that growth in these regions was among the strongest in the country shows that strong growth rates can be accompanied by reductions in inequality. So, there is not necessarily a trade-off between high growth and inclusive growth. However, the case of Kakheti, whose growth ranks third overall but experienced an increase in income inequality (46.1 to 47.5) shows that high growth does not necessarily lead to a decline in inequality.

**Conclusion 9:** Mtskheta-Mtianeti and Kakheti experienced the highest growth rates, Tbilisi and Samegrelo-Zemo Svaneti the lowest.

## Annex 1: Owned durable goods questionnaire

As part of its Integrated Household Survey, Geostat asks its participants to answer the following question and name the corresponding number of goods:

Do you have below listed durable goods, which are in working condition, in your ownership?

Item		Item	
1	Refrigerator	15	Car
2	Washing machine	16	Minibus or truck
3	Radio set	17	Mini-tractor or motor-block
4	TV set	18	Tractor
5	Vacuum cleaner	19	DVD
6	Sewing machine	20	Musical Player
7	Record-player	21	Gas stove/ electric stove
8	VCR	22	Mobile phone
9	Cassette player	23	Wireless phone
10	Piano or Grand-Piano	24	Video Camera
11	Camera	25	Air conditioner
12	PC	26	Satellite Antenna
13	Bicycle	27	Heater
14	Motorcycle/quadrocycle	28	Other (please specify)

Source: *Integrated Household Survey (Geostat)*

## Annex 2: GDP and population statistics for the regions

	Share of total GDP (%)	Share of total population (%)	GDP per capita (GEL)	population (thsd.)	Average yearly population growth (%)
Tbilisi	51.7	31.1	19,915	1158.7	0.7
Imereti	9.3	13.6	8,137	507.0	-1.4
Adjara A.R.	9.0	9.3	11,594	346.3	0.5
Kvemo Kartli	7.8	11.6	8,087	432.3	0.3
Samegrelo-Zemo Svaneti	5.3	8.6	7,412	320.8	-1.6
Kakheti	5.2	8.4	7,374	314.7	-0.6
Shida Kartli	3.9	7.0	6,715	259.3	-0.3
Samtskhe-Javakheti	3.1	4.2	8,854	155.9	-1.1
Mtskheta-Mtianeti	2.4	2.5	11,419	93.9	0.2
Guria	1.7	3.0	6,777	110.5	-0.7
Racha-Lechkhumi and Kvemo Svaneti	0.6	0.8	8,136	30.2	-2.3
Georgia	100.0	100.0	11,958	3729.6	-0.2
Georgia ex Tbilisi (RoG)	48.3	68.9	8,372	2571.0	-0.6

Note: All figures are for the year 2018. Average yearly population growth covers the period from 2010 to 2018.

Source: Geostat, GET calculations

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