

# TARGETED SOCIAL ASSISTANCE PROGRAM IN GEORGIA AND ITS LINK TO ELECTORAL OUTCOMES



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# **Targeted Social Assistance Program in Georgia and Its Link to Electoral Outcomes**





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# Table of Contents

- Key Findings ..... 6
- Introduction..... 8
- I. Literature Review and Study Context** ..... 10
  - 1.1. Overview of Specific Case Studies and Research ..... 11
  - 1.2. Brief Overview of Georgian Electoral System ..... 13
  - 1.3. Social Assistance Programs and Their Development in Georgia: Brief Overview ..... 15
- II. Data and Analysis Approaches** ..... 17
- III. Findings** ..... 19
  - 3.1. Change Over Time: Descriptive Statistical Insights from the Time-series Data ..... 19
    - 3.1.1. Change in Share of Subsistence Allowance Recipients ..... 19
    - 3.1.2. Change Amount of Funding Spent on Families Receiving Subsistence Allowance..... 22
  - 3.2. Electoral Results and Degree of Social Funding Across Municipalities and Electoral Districts ..... 26
    - 3.2.1. Data Analysis Approach and Variable Description ..... 26
    - 3.2.2. Parliamentary Elections ..... 28
    - 3.2.3. Local Elections ..... 40
- Conclusions..... 47
- Used literature ..... 48
- Appendix..... 50

## Key Findings

This report examines the dynamics of subsistence allowance recipients and funding over electoral cycles in Georgia. It uses time-series data on the share of households and individuals benefiting from subsistence allowances, showing their variation during multiple election periods spanning 2012 to 2021. Statistical analysis is employed to determine whether there is a significant manipulation of program recipients and funding during election years.

### 1. Change Over Time in Subsistence Allowance Recipients:

The analysis shows a consistent pattern of increased percentages of subsistence allowance recipients during electoral years compared to non-electoral periods. In particular, 2016 and 2020 stand out with notable increases in the share of recipients relative to other, non-election years. However, this correlational observation requires further investigation and exploration to determine its relevance to specific electoral outcomes.

### 2. Variations in Funding Allocation:

Funding allocated to families receiving subsistence allowances also follows distinct patterns across electoral cycles. While there were no significant increases during the 2012 electoral year, both 2016 and 2020 recorded higher average monthly spending compared to three-year averages in non-election periods. This effect is especially pronounced in rural areas. In addition, variations and changes in the composition of subsistence allowance recipients are partially related to changes in methodology and inclusion criteria.

### 3. Impact of Electoral Dynamics:

Electoral periods, especially parliamentary elections, correlate closely with higher levels of spending on subsistence allowances. The analysis suggests that contested elections generally see greater increases in both the number of beneficiaries and monetary transfers, suggesting the presence of strategic social-political influences on policy decisions.

### 4. Statistical Insights from Regression Models:

Regression analysis finds a significant but nuanced relationship between electoral outcomes in the case of some elections and subsistence allowance metrics. Incumbents receiving higher shares of votes correlate with increased funding and beneficiary counts, but these relationships vary in complexity and context across different election years and types. This is more evident in the case of parliamentary elections. Sometimes in contested municipal elections, electoral districts with higher competition also tend to attract slightly more social spending resources. However, it is important to note that this relationship is not universal, and closer examination is needed to verify these observations. More frequently areas with clear support to incumbent have higher chances of receiving social spending. However, in part of the cases above-described relation is not presented and only geographic and demographic influences matter.

## 5. Geographic and Demographic Influences

Socio-geographic factors such as ethnic composition, rural population density, and geographical features like altitude play significant roles in the allocation of social program resources during election years. Regions with higher shares of non-Georgian ethnic populations and lower urbanization levels tend to favor incumbents and receive greater social support. The data findings also indicate that ethnic minority areas, which usually support the incumbent party, receive less social assistance both in monetary terms and in the number of individuals helped. This discrepancy reduces the overall impact of social funding at the national level.

The findings underscore the intricate interplay between electoral processes, social policy, and economic conditions in Georgia. While electoral cycles consistently impact the distribution of subsistence allowances and associated funding, broader socio-geographic factors also shape these outcomes. Understanding these dynamics is crucial for policymakers aiming to optimize resource allocation and support vulnerable populations effectively across electoral cycles.

## Introduction

This report presents research assessing the level and intensity of the political instrumentalization of social programs and government expenditures in Georgia. The objective is to determine statistically whether there has been manipulation of social spending during the electoral process to favor incumbents, thus creating unequal ground for political and electoral competition. The empirical evidence from Latin America<sup>1</sup>, Africa,<sup>2</sup> and other developing countries<sup>3</sup> indicates that incumbents often politicize social assistance programs to induce voter mobilization. Previous research also suggests that the case of Georgia is no exception<sup>4</sup> with some documentation of electorally motivated social spending in the country.<sup>5</sup>

Politicians utilize various strategies in the design and implementation of social assistance policies to influence voter behavior and secure electoral support. The theory and evidence on this topic provide a diverse menu of the strategies that are used by political actors, especially incumbents, to tilt the balance in their favor. Among these tactics, the most used are the following:

- Targeted distribution of resources: Incumbents can selectively target welfare benefits to specific demographic groups or regions that are key to their electoral success, thereby incentivizing support from these groups.
- Timing of benefits: Social assistance programs or payments can be timed to coincide with elections to create a positive perception of the ruling party or candidate, thereby fostering goodwill among voters.
- Political patronage: Political parties can use social welfare programs to reward loyal supporters, effectively creating a system of patronage in which political loyalty is rewarded with an increase in government benefits.
- Propaganda, communication, and messaging: Political actors can use social assistance programs to convey a message that they are personally responsible for the existence and continued subsistence of those programs, thereby increasing their appeal in the electoral process.
- Electoral Bribery: In extreme cases, officials may trade social services directly for votes, engaging in illegal and/or unethical practices to secure an election victory.

The use of social support programs in electoral manipulation tactics poses significant threats to democratic governance and the rule of law. Such practices can erode the integrity of electoral processes, perpetuate corruption, and impose unsustainable fiscal burdens on governments. Addressing these challenges requires reforms that ensure the fair and transparent administration of social assistance programs, devoid of political interference.

The research that is carried out in this study seeks to show whether or not political manipulation of elections exists in Georgia. However, the scope of the study is constrained by the availability of data and the limitations of resources, which prevent carrying out more extensive causal data analysis, such as quasi-experimental methods. As a result, the study focuses on analyzing the targeting of public resources and the timing of social assistance benefits using publicly accessible administrative data. The statistical analysis employs correlational and regression analysis.

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1 Layton, M. L., & Smith, A. E. (2015). Incorporating marginal citizens and voters: the conditional electoral effects of targeted social assistance in Latin America. *Comparative Political Studies*, 48(7), 854-881.

2 Graham, V., Sadie, Y., & Patel, L. (2016). Social grants, food parcels and voting behaviour: a case study of three South African communities. *Transformation: Critical Perspectives on Southern Africa*, 91(1), 106-135.

3 Zucco, C. (2011). Conditional cash transfers and voting behavior: Redistribution and clientelism in developing democracies. *Unpublished manuscript*. Princeton University.

4 <https://cutt.ly/meWT5ucT>.

5 <https://cutt.ly/XeWT5h1r>.



To comprehensively explore the phenomenon of the manipulation of social programs for political purposes, the initial phase of the research delves into the existing literature dedicated to the nexus between conditional cash transfers, targeted social assistance, and election outcomes. The review shows the variety of strategies adopted worldwide in the political manipulation of social and other government programs. This includes an analysis of the political economy of clientelism, a practice where incumbents in emerging democracies or authoritarian regimes cultivate political support and legitimacy through the strategic allocation of public funds or privileges. By analyzing diverse theoretical models of clientelism and manipulations within social assistance programs, the report aims to establish a theoretical framework for understanding electorally motivated social spending.

In the second part of this report, we present the results of our research using secondary administrative data to investigate potential correlations between conditional and other forms of social spending and electoral outcomes at the municipal level. The data is analyzed using different regression models, with electoral outcome as the dependent variables, social spending independent one, with a controlling number of social, economic, and geographic variables. This empirical analysis seeks to uncover any empirical links between these variables, thereby enriching our understanding of the practical implications of social assistance on electoral dynamics.

## 1. Literature Review and Study Context

The existing literature shows clearly that government spending on social assistance policies, such as conditional cash transfers (CCTs) and other social welfare programs, on public pensions, and public goods can be used strategically to influence electoral outcomes. Although generally directed at poverty reduction, these forms of public spending are frequently manipulated to gain political support, particularly for incumbents, through various mechanisms such as vote buying and patronage.

Many studies find evidence that targeted government spending has a positive impact on voting rates for incumbents. The next section discusses a number of these studies in greater detail. For example, just to select a few ones: CCT programs in Mexico and Brazil have been shown to increase political participation and support for incumbents.<sup>6,7,8</sup> There is also evidence from Tanzania<sup>9</sup> and the Philippines<sup>10</sup> where such spending increases political support for incumbent local governments. Furthermore, the study “*How Welfare Policies Can Change Trust*”<sup>11</sup> by János Betkó and colleagues studied the impact of welfare policies on political and social trust through a randomized social experiment. The findings show that social spending programs do significantly increase support for --and trust in-- local government, providing evidence of the *reciprocity argument*, which states that only incumbents that actively support social assistance programs gain the support of the welfare recipients. Citizens’ satisfaction with these policies is the underlying mechanism proven to mediate the treatment effect in the support and trust of the local political establishment.

However, we want to emphasize in this section that there are nuances in the evidence regarding the political manipulation of social programs. First, there are studies that fail to find such manipulation. For instance, in Uganda, the reverse impact has been observed: anti-poverty programs have increased support for the opposition.<sup>12</sup> In Guatemala, the impact of social policies on poverty reduction was mixed, resulting in varied levels of support for incumbents.<sup>13</sup> In some instances, such as with certain conditional cash transfer programs, there can be a decrease in incumbent support due to perceived inefficiencies or corruption. Moreover, studies across several Latin American countries indicate that CCTs may prompt former incumbent supporters to switch allegiance to the opposition.<sup>14</sup> Additionally, analyses of survey data from 16 Latin American countries revealed that CCT programs generally do not undermine electoral accountability for corruption and economic performance. Only in countries where CCT programs lack strict rules do beneficiaries slightly undervalue government economic performance, albeit to a marginal extent.<sup>15</sup>

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6 Diaz-Cayeros, A., Estévez, F., & Magaloni, B. (2016). *The political logic of poverty relief: Electoral strategies and social policy in Mexico*. Cambridge University Press.

7 De La O, A. L. (2013). Do conditional cash transfers affect electoral behavior? Evidence from a randomized experiment in Mexico. *American Journal of Political Science*, 57(1), 1-14.

8 Constantino, P. (2021). *The effects of conditional cash transfer programs on voting behaviour in Mexico and Brazil* (Doctoral dissertation, University of Sussex).

9 Evans, D. K., Holtmeyer, B., & Kosec, K. (2019). Cash transfers increase trust in local government. *World Development*, 114, 138-155.

10 Labonne, J. (2013). The local electoral impacts of conditional cash transfers: Evidence from a field experiment. *Journal of development economics*, 104, 73-88.

11 Betkó, J., Spierings, N., Gesthuizen, M., & Scheepers, P. (2022). How welfare policies can change trust—a social experiment assessing the impact of social assistance policy on political and social trust. *Basic Income Studies*, 17(2), 155-187.

12 Blattman, C., Emeriau, M., & Fiala, N. (2018). Do anti-poverty programs sway voters? Experimental evidence from Uganda. *Review of Economics and Statistics*, 100(5), 891-905.

13 Sandberg, J., & Tally, E. (2015). Politicisation of conditional cash transfers: the case of Guatemala. *Development Policy Review*, 33(4), 503-522.

14 Corrêa, D. S., & Cheibub, J. A. (2016). The anti-incumbent effects of conditional cash transfer programs. *Latin American Politics and Society*, 58(1), 49-71.

15 Pavão, N. (2016). Conditional cash transfer programs and electoral accountability: Evidence from Latin America. *Latin American Politics and Society*, 58(2), 74-99.

Second, the effectiveness and strategies of using government spending for electoral manipulation vary by region and political context. For instance, strategies differ in Latin America compared to Africa and Asia due to different socio-political environments. The same variation can be found within countries, with different regional, demographic, and socioeconomic groups targeted by the government through various mechanisms and approaches.

One distinct aspect of the ability of political incumbents to manipulate social programs for their advantage is the level of economic development, the extent of social inequality, and the socioeconomic status of the population. For example, a 2004 study from Argentina showed that low-income Argentines were inclined to and in danger of being turned into political clients, compared to more well-off and financially wealthier citizens.<sup>16</sup> Another study on Poverty, social networks, and clientelism<sup>17</sup> in the context of the Philippines showed that the poor can be an easier target for political manipulation through social assistance. At the same time, the study finds that factors that reduce the economic and social vulnerability of families, such as greater social capital – and social networks – also limit the effectiveness of vote buying. Indeed, other studies have found that reducing vulnerability can combat clientelism because decreased vulnerability makes citizens less dependent on incumbent politicians.<sup>18</sup> The research evidence also indicates that broad, universal social protection policies – intended to reduce poverty through general eligibility rules not subject to local or regional variation – can be more effective in reducing clientelism and supporting the poor without political manipulation, as evidence from the Philippines suggests.<sup>19</sup>

These findings suggest that social programs can alleviate poverty without diminishing voters' incentives to hold their governments accountable. However, the evidence also supports that many social programs are regularly manipulated by incumbents all over the world. It should be the goal of more effective and fair policymakers to design government support programs for the poor that do not interfere with elections.

## 1.1. Overview of Specific Case Studies and Research

As mentioned in the previous section, studies on social spending, particularly on CCTs, cover a wide variety of countries and diverse topics, some beyond the primary focus of this report, which is examining the relationship between the government's conditional monetary transfers and political support. Therefore, this section will select and closely examine studies that specifically address this topic, with a preference for contexts like Georgia in terms of size, socio-economic development, and living conditions. However, it is important to note that all comparisons in this context have significant limitations, making it challenging to identify exactly comparable cases.

One study was conducted in Uruguay and examined the impact of the PANES anti-poverty cash transfer program on political support for the government.<sup>20</sup> PANES is an acronym for the country's Plan de Atención Nacional a la Emergencia Social (National Social Emergency Response Plan), which was a temporary two-year program seeking to support the poor during the crisis Uruguay faced in the early 2000s. The study's research strategy was to exploit discontinuities in program assignment based on eligibility scores to determine its causal effects on political support for the government. The researchers found that households receiving

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16 Brusco, V., Nazareno, M., & Stokes, S. C. (2004). Vote buying in Argentina. *Latin American research review*, 39(2), 66-88.

17 Ravanilla, N., & Hicken, A. (2023). Poverty, social networks, and clientelism. *World Development*, 162, 106128.

18 Bobonis, G. J., Gertler, P. J., Gonzalez-Navarro, M., & Nichter, S. (2022). Vulnerability and clientelism. *American Economic Review*, 112(11), 3627-3659.

19 Swamy, A. R. (2016). Can social protection weaken clientelism? Considering conditional cash transfers as political reform in the Philippines. *Journal of Current Southeast Asian Affairs*, 35(1), 59-90.

20 Manacorda, M., Miguel, E., & Vitorito, A. (2011). Government transfers and political support. *American Economic Journal: Applied Economics*, 3(3), 1-28.

benefits were significantly more likely—by 11 to 13 percentage points—to favor the incumbent government over the previous one than households who just missed the eligibility threshold and therefore did not receive transfers. Interestingly, these effects persisted even after the program had ended, suggesting a lasting impact on political preferences. These findings, particularly the last one, align with theories suggesting that voters follow reciprocity, paying-off political parties that provide redistributive programs to them with their current and future support. However, it also aligns with the view that beneficiaries of government assistance programs may (perhaps mistakenly) believe that the benefits they receive reflect a particular and long-lasting commitment of the incumbents towards them and not a selfish, purely politically motivated motive that may not continue after elections. The evidence of the political effects of social programs is relevant for Georgia, as Uruguay is also an upper-middle income country with strong democratic traditions and it is still subject, as the paper finds, that social programs can be utilized for political gains.

Another study, conducted by Camacho and Conover investigates the manipulation of social spending eligibility as a factor for gaining uneven advantage in the context of elections.<sup>21</sup> In the case of Colombia, the study demonstrates how the government targets social welfare programs over time to seek electoral support. Local politicians strategically initiate new social programs before elections, particularly in competitive electoral environments, to enhance their electoral prospects. The research specifically shows that the level of manipulation in certain municipalities correlates positively with the degree of political competition in those jurisdictions. This aspect is crucial for understanding the context in Georgia, as the subsequent analysis in this report also considers the magnitude of competition and political contests in shaping incumbents' rationale for utilizing social spending for electoral gains.

Another example of how social programs, in this case conditional cash transfers (CCTs), may influence electoral outcomes comes from a randomized control trial study in Mexico. The research suggests that targeted government programs increase both turnout and support rates towards incumbents.<sup>22</sup> The article “*Do Conditional Cash Transfers Affect Electoral Behavior? Evidence from a Randomized Experiment in Mexico*” examines the claim that targeted programs influence pro-incumbent voting by swaying beneficiaries away from their initial partisan preferences. It draws on data from the randomized phase of PROGRESA, Mexico's pioneering conditional cash transfer (CCT) initiative. The study finds that early enrollment in PROGRESA significantly boosted voter turnout and increased the incumbent's voting share in the 2000 presidential election, while opposition parties remained unaffected. The paper also concludes that the longer recipients benefit from the program, the more chances the incumbents have to claim credit for initiatives that voters find desirable, potentially translating into more votes.

Another research study on the political manipulation of government programs involves the planning and implementation of infrastructure projects in Argentina. The paper shows that the allocation of government funds—and the public sector jobs associated with them—are based on support for the incumbent political party,<sup>23</sup> an issue that has also been discussed in the Georgian context and often highlighted in journalistic investigations. The lack of civil service rules in Argentina allows the discretionary use of public employment as a mechanism to reward public employees with wages higher than those in the private sector, thereby exchanging jobs for political support. This research finds evidence of clientelism in government employment, with the Peronist Party benefiting more than other parties due to its broader provincial appeal and stronger patronage system. Empirical evidence shows that in provinces with higher public employment relative to population, the Peronist Party receives a significantly higher percentage of Congressional votes, unlike the UCR/Alianza party. The study concludes that the electoral efficiency

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21 Camacho, A., & Conover, E. (2011). Manipulation of social program eligibility. *American Economic Journal: Economic Policy*, 3(2), 41-65.

22 De La O, A. L. (2013). Do conditional cash transfers affect electoral behavior? Evidence from a randomized experiment in Mexico. *American Journal of Political Science*, 57(1), 1-14.

23 Calvo, E., & Murillo, M. V. (2004). Who delivers? Partisan clients in the Argentine electoral market. *American journal of political science*, 48(4), 742-757.

of patronage depends on political parties' access to public jobs at various government levels and the dependence of voters with different skill levels on these jobs. In conclusion, political parties with strong geographic ties to local political machines and constituencies can dominate clientelism by strategically selecting specific groups, such as low-skilled workers, to provide higher wages and more jobs. This approach allows politicians to increase their local influence and meet the distributive expectations of their traditional constituencies. The main takeaway is that strategic patronage by political parties is driven by their perception of partisan returns and is used to strengthen their local dominance and support base.

While most research on clientelism focuses on Latin American or Southeast Asian countries, relatively few studies examine Eastern European or post-communist nations. One comparative study, though, explores political party traditions and clientelism in Georgia, Moldova, and Ukraine.<sup>24</sup> This article examines how political parties function as venues for clientelism and identifies party characteristics most closely linked to this practice. The research, based on local expert surveys, indicates that clientelism exists in all three countries but with different main drivers. In Georgia, the notoriety of local politicians is key to fostering clientelism. In Moldova, the territorial coverage of parties plays the strongest role, while in Ukraine, private funding is the primary mechanism through which clientelism operates. Specifically, in Georgia, parties with higher levels of clientelism rely on prominent local leaders to connect with voters. These leaders use their visibility and established relationships to reward voters during campaigns, making clientelism highly personalized. The study concludes that the extent of clientelism in Georgia is closely tied to the prominence and local rootedness of political leaders who deliver goods and services to their communities.

To conclude: government spending on social programs, including cash transfers and public goods, is often strategically used to influence electoral outcomes through vote-buying and patronage. The effectiveness of these strategies has been shown among a variety of countries, even if the details of their mechanisms vary. In Latin America, programs like Mexico's PROGRESA and Brazil's Bolsa Familia increase political participation and incumbent support. In Uruguay, the PANES program was shown to provide lasting increases in incumbent support, but suggesting voters use policy outcomes to assess politicians. In Colombia, local politicians manipulate social spending before elections, especially in competitive areas, a pattern also seen in Georgia where political competition influences social spending for electoral gains. Comparative studies in Eastern Europe show that in Georgia, clientelism is driven by prominent local politicians who use their visibility to build strong voter relationships, unlike Moldova, where territorial party coverage is key, and Ukraine, where private funding drives clientelism. In Georgia, the personalized nature of clientelism relies on local leaders to deliver goods and services, reinforcing their political base, highlighting the regional variations and risks of politicizing social spending.

## 1.2. Brief Overview of Georgian Electoral System

Before delving into the study methodology and its findings, it is crucial to provide some context. This includes a brief overview of Georgia's electoral system and a summary of the targeted social assistance programs in the country. Since 1991, after the restoration of independence, 24 elections have been conducted in Georgia, including seven presidential elections, nine parliamentary elections, and eight local government and municipal elections. Starting in 2024, the president, who serves a 5-year term, will no longer be elected through direct elections but will instead be chosen by the electoral college.<sup>25</sup> The parliament is elected for a 4-year term, as are

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24 Gherghina, S., & Volintiru, C. (2023). Political parties and clientelism in transition countries: evidence from Georgia, Moldova and Ukraine. In *Political Parties and Electoral Clientelism* (pp. 87-103). Cham: Springer Nature Switzerland.

25 The electoral college comprises 300 members. It includes Parliament members from Georgia and representatives from Abkhazia and Adjara. Other members are chosen by political parties based on quotas set by the Central Election Commission, reflecting proportional geographical and local election results. The Commission approves the college's composition. Source: <https://cutt.ly/reWYegOW>.



municipal organs and mayors. However, the length of these terms has varied in different periods.<sup>26</sup> Since 2012, Georgia's political system has changed from a presidential to a parliamentary republic. The president has lost nearly all executive powers, with the parliament and government becoming the key actors in the country's political life.<sup>27</sup> Hence, this paper does not focus on the presidential elections.

The composition of parliament, the number of MPs, the electoral system, and the threshold required for parties or electoral blocks to enter parliament have evolved significantly over the last 30 years. Nevertheless, these changes have consistently faced criticism for benefiting incumbents, creating an unequal field for competition, and leading to the formation of a dominant one-party parliamentary majority, often resulting in a supermajority.<sup>28</sup> These changes have often been implemented from one electoral cycle to the next. The Georgian parliament originally had 250 MPs, gradually reducing over the years and reaching 150 in 2008.<sup>29</sup> For most of its history, the electoral system was a mix of proportional and single-seat majoritarian constituencies, with the number of majoritarian members gradually decreasing from half of all MPs in 2008<sup>30</sup> to 30 in the 2020 elections.<sup>31</sup> Traditionally, majoritarian constituencies were corresponded to the municipalities of Georgia, with certain exceptions of several small constituencies in the adjacent areas of occupied territories and the capital, which was divided into several single-seated majoritarian districts.<sup>32</sup> However, the 2016 and 2020 elections followed a different approach due to changes in the logic of drawing electoral district boundaries and a decrease in the number of majoritarian MPs<sup>33</sup>. Eventually, the majoritarian system was abolished, and starting with the 2024 elections, a fully proportional system with a 5% minimum threshold for parties to enter parliament was adopted<sup>34</sup>. The electoral threshold also changed from 7% (first used in 1999) to 5% in the most recent elections. However, in the 2020 elections, the threshold was lowered to 1%<sup>35</sup> as an extraordinary measure due to a political crisis.

Local and municipal elections are held in every Georgian municipality, with Tbilisi's elections being particularly notable due to its political and economic significance and size. Like parliamentary elections, municipal election systems have undergone multiple changes, including fully proportional, mixed, or fully majoritarian systems<sup>36</sup>. Since 2006, the mixed proportional-majoritarian system has resulted in the dominance of ruling parties in city councils, including Tbilisi, replacing previous opposition influence<sup>37</sup>. Municipal elections can be categorized into three main groups: Tbilisi, other self-governing cities (Kutaisi, Batumi, Rustavi, Poti), and

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26 For example, in 2014, municipal organs were elected for a 3-year term and the next municipal elections were held in 2017.

27 Kakhishvili, L. (2020). From a presidential to a parliamentary government in Georgia. *Caucasus Analytical Digest*, (114), 11-14.

28 Nakashidze, M., & Sirabidze, D. (2020). Constitutional reforms on electoral system for consolidation of parliamentary democracy in Georgia. *International Comparative Jurisprudence*, 6(1), 9-27.

29 History of Georgian elections in 1919-2017 (In Georgian: *საქართველო – არჩევნების ისტორია 1919-2017*). Source: <https://cutt.ly/ceWYeVUS>.

30 Ibid, page 30.

31 Central Election Commission of Georgia: Summary Protocol On the Final Results of the 31 October 2020 Parliamentary Elections of Georgia. Source: <https://cutt.ly/1eWYrqfM>.

32 Source: <https://cutt.ly/6eWYrutM>.

33 Based on the decision of the Constitutional Court of Georgia to ensure equal population representation in single majoritarian constituencies, the traditional borders of majoritarian electoral districts were redrawn: smaller districts were merged, while larger municipalities or cities were divided into several electoral districts. Previously, the size of districts ranged from fewer than 6,000 voters in some districts to over 150,000 voters in others.

34 Source: <https://cutt.ly/feWYrNIw>.

35 Parties receiving at least 1% of the votes received mandates, and electoral blocs needed to achieve a vote percentage equal to 1% times the number of parties in the bloc. Source: <https://cutt.ly/CeWYtwKJ>.

36 Chigladze, N. (2022). Municipal Elections: Peculiarities and Challenges in Georgia. *Journal of Law*, 114.

37 Ibid, page 134.

the remaining 59 self-governing municipalities. Since 2014, both local councils (Sakrebulo) representatives and mayors have been elected, whereas previously mayoral elections were either indirect, limited to Tbilisi, or non-existent<sup>38</sup>. As for the municipal elections, the mixed proportional-majoritarian system is used, which has also been modified from election to election, mainly in relation to the proportion of proportional and majoritarian representatives, as well as the different electoral thresholds used in the elections. Considering the diversity of local elections and the need for a consistent approach across the different elections analyzed, it was decided to use only the results of proportional elections of local councils. Therefore, both for parliamentary and local elections, the source of the election results is a proportional part of the elections.

### 1.3. Social Assistance Programs and Their Development in Georgia: Brief Overview

In 2006, the government of Georgia initiated a targeted social assistance program, which has since become the primary instrument for supporting low-income families. The program employs Proxy Means Testing (PMT) to evaluate household well-being through a range of factors, including housing quality, family size, employment status, health, real estate ownership, and utility expenses. This approach generates a welfare score for each household.<sup>39</sup> In the context of the social assistance program overview, it is important to mention another publication prepared in the context of the same, broader project under which this paper is being produced. The research report “*Targeted Social Assistance Program in Georgia: Social Impact of the Program and Poverty Alleviation Potential*,<sup>40</sup>” authored by Ana Diakonidze, in detail, analyzes the methodology of Georgia’s targeted social assistance program and its effectiveness in combating poverty.

To be included in the targeted social assistance system, the applicant must submit an official application at the local social services office. The social service agency then sends a social agent to the household for an assessment within a month. The collected data is entered into a program that imports information into related systems, such as the tax register and public register. The program calculates the household’s welfare score to determine the assistance amount, and finally, the contract between the household and the Social Service Agency is signed.<sup>41</sup>

The Law of Georgia “On Social Assistance” outlines that social assistance is not an unconditional legal right but a targeted resource for those in special need, including poor families and the homeless.<sup>42</sup> Hence, social allowance, a monetary aid aimed at improving the conditions of identified poor families, is provided based on a rating system where families with scores below legal thresholds are eligible,<sup>43</sup> with monthly disbursements ranging from 30-60 GEL per family member.<sup>44</sup> Moreover, the government enacted a child benefit program in May 2015. This benefit is allocated to households with a score below 120 000, and it provides 200 GEL per month for each child under the age of 16.<sup>45</sup>

38 History of Georgian elections in 1919-2017 (In Georgian: *საქართველო – არჩევნების ისტორია 1919-2017*). Source: <https://cutt.ly/AeWYtjM>.

39 Diakonidze, A. (2024). *Targeted Social Assistance Program in Georgia: Social Impact of the Program and Poverty Alleviation Potential*. Center for Social Justice. Page 9. Source: <https://cutt.ly/xeWYtPD5>.

40 Ibid, page 8.

41 Ibid, page 11.

42 Law of Georgia on social assistance; Source: <https://cutt.ly/5eWYyDmB>.

43 According to the legislation, the threshold score for households is 65 001 points, while for families with a member who is a minor under the age of 16, the threshold is 120 001 points.

44 The more detailed analysis is provided here: Janiashvili, M. (2023). *The role of living allowance in the social protection system and its relationship with other social support services*. Center for Social Justice. Source: <https://cutt.ly/PeWYy0zh>.

45 Diakonidze, A. (2024). *Targeted Social Assistance Program in Georgia: Social Impact of the Program and Poverty Alleviation Potential*. Center for Social Justice. Page 10.

Since the adoption of the targeted social assistance programs, there has been a growing discourse regarding its pros and cons and the attitude toward this system in general is ambiguous. While Georgia's Targeted Social Assistance programs have been considered by some as one of the best in Europe and Central Asia for targeting and coverage, it faces issues with outdated data, transparency, and potential manipulation by recipients; furthermore, concerns were raised regarding the work disincentives to deter beneficiaries from seeking employment or exploring alternative sources of income.<sup>46</sup> The above-mentioned study by Diakonidze revealed that the program suffers from exclusion and exclusion errors, with exclusion errors being particularly severe as they deny assistance to those in genuine need. Despite multiple methodological revisions, the formula still overlooks factors like utility costs and land ownership, and many eligible households refrain from applying due to distrust. The report concludes that the social allowance is inadequate to alleviate poverty and suggests exploring alternative methods, such as wealth testing, for better economic assessment.<sup>47</sup>

Besides the centralized system, there are various social assistance programs at the municipal level targeting (mostly) the same beneficiaries as social allowances. However, the distribution logic for this monetary or non-monetary assistance is not always straightforward or coherent across municipalities. A 2023 study found that in 62 out of 64 municipalities, the threshold points for receiving aid significantly varied.<sup>48</sup>

An important factor in the study is the legislative amendments and changes made throughout the program's existence, often suspiciously timed during election years. For instance, in June 2013, subsistence allowances were doubled from a maximum of 30 GEL to 60 GEL, shortly before the presidential elections and midway through the year.<sup>49</sup> Another example involves the legalization of excessively given subsistence allowances under Georgian law. The Social Service Agency demands repayment if families receive an excess due to termination of social allowance through court. The first amnesty for this occurred in April 2015, a non-election year,<sup>50</sup> but the subsequent two were during election years, in December 2016 after the parliamentary elections<sup>51</sup> and in June 2021 before the local elections.<sup>52</sup>

Another important factor when analyzing social assistance is the general characteristics of the recipients. The 2019 study conducted by UNICEF has revealed that households that are in receipt of targeted social assistance are more vulnerable than others. These households are often located in rural areas with low levels of education, with a high number of children, and with family members with disabilities or suffering from displacement; most beneficiaries rely on small-scale farming, and there are limited job opportunities, with 81% of them working in agriculture and only 10% holding paid jobs. Even though the program was designed to target these vulnerable groups, the capture is not universal. For example, as of 2019, it was only covering 37% of impoverished children.<sup>53</sup> The aforementioned features can have a part in exploring the links between electoral behavior and social assistance spending and the number of recipients in electoral districts.

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46 Baum, T., Mshvidobadze, A., & Posadas, J. (2016). *Continuous Improvement: Strengthening Georgia's Targeted Social Assistance Program*. World Bank Publications. Important to note, that the later claim (about work disincentives) is not supported by the 2019 study cited below.

47 Diakonidze, A. (2024). *Targeted Social Assistance Program in Georgia: Social Impact of the Program and Poverty Alleviation Potential*. Center for Social Justice.

48 Janiashvili, M. (2023). *The role of living allowance in the social protection system and its relationship with other social support services*. Center for Social Justice, page 50.

49 Source: <https://cutt.ly/7eWYohLU>.

50 Source: <https://cutt.ly/ZeWYoOpz>.

51 Source: <https://cutt.ly/ieWYoNOd>.

52 Source: <https://cutt.ly/weWYpzND>.

53 Gugushvili, D & Le Nestour, A. (2019). *A detailed analysis of targeted social assistance and child poverty and simulations of the poverty-reducing effects of social transfers*. United Nations Children's Fund (UNICEF). Source: <https://cutt.ly/keWYpTto>.

## II. Data and Analysis Approaches

This study employs an observational correlation approach using secondary administrative data from public agencies and electoral results at the municipal level. This methodology allows for linking voting data with social spending indicators. Social spending data has been available since 2008, making it theoretically possible to analyze electoral results for parliamentary elections (2008, 2012, 2016, 2020) and local government (municipal) elections (2010, 2013, 2017, 2021). Notably, the 2016 and 2020 elections were exceptional due to the merging and redistricting of districts, which do not always align with municipal boundaries. Consequently, traditional electoral district data was reconstructed to match it with municipal-level social spending data.<sup>54</sup>

Two major dependent variables are used to measure electoral success and the type of political and electoral contest within municipalities and electoral districts. These are operationalized through the electoral outcomes of the investigated elections. Electoral success is measured by observing the vote share received by the incumbent, as well as through the concept of an electoral contest – the gap between the winner and the second-best party within the electoral district. Both indicators are measured percentage-wise.

Political contest and competition are measured by the margin between the first and second parties, specifically the vote difference between the strongest and the second strongest party in each election within the municipality and electoral district. During the analysis results from the proportional elections are used, to have comparability and consistency across all elections investigated.<sup>55</sup> In both cases, multiple regression models are applied for analysis.

Within the regression models, the independent variables (i.e., explanatory or predictor variables) are related to social spending, depending on the model. While there are multiple indicators and ways of operationalizing them, only those variables with publicly available historical and district-level good-quality data were chosen for the analysis. Based on this approach, the following two variables were selected for the final analysis:

- The **number of families/individuals registered** in the database of targeted social programs and receiving **subsistence allowance** per municipalities/districts;<sup>56</sup>
- The **amount GEL** transferred to the **subsistence allowance**.<sup>57</sup>

Besides, control variables, like ethnic and religious composition, population, elevation from the sea level,<sup>58</sup> and the proxies of social well-being indicators of the population on the municipal levels also are included in the regression models aimed at predicting various levels of support for incumbents within the municipality.<sup>59</sup>

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54 More details on the number of observations and limitations of the analysis are discussed in detail in the chapter: **Electoral results and degree of social funding across municipalities and electoral districts** below.

55 In the subchapter on Georgia's electoral system, it was noted that significant changes occurred starting in 2016. These changes affected both the number of majoritarian MPs and the boundaries of majoritarian electoral districts. Consequently, comparing data across elections became challenging. Furthermore, due to administrative data primarily being tied to municipalities, obtaining independent and control variable information for analyzing majoritarian election results in 2016 and 2020 was not feasible. Another reason for using proportional rather than majoritarian election results is that parliamentary and municipal elections use different majoritarian unit structures. Additionally, there might be two rounds of majoritarian elections if none of the contenders surpass the 50% threshold in the first round.

56 In Georgian: მონაცემთა ბაზაში რეგისტრირებული და საარსებო შემწეობის მიმღები ოჯახების რაოდენობა: <https://cutt.ly/aeWYav6e>.

57 In Georgian: საარსებო შემწეობაზე გადარიცხული თანხა. Source from the Social Service Agency of Georgia: <https://cutt.ly/ZeWYaUCk>.

58 Geographic factors play a key role in the context of elections in Georgia. For further reading, please see Sichinava, D. (2017). Cleavages, electoral geography, and the territorialization of political parties in the Republic of Georgia. *Eurasian Geography and Economics*, 58(6), 670-690.

59 This information originates from the 2014 census, based on the information requested from the Georgian Statistics Office.

Other controlling variables used were proxy variables of economic development, like investment in the municipality and quality of life indirect measurement, like medical staff per capita.<sup>60</sup>

When conducting regression analysis, multiple regression statistical models are used to assess the relationships between dependent and independent variables and to understand the extent to which the political instrumentalization of social assistance influences electoral outcomes. The time unit of the analysis is the electoral year. The vote share represents the results of the proportional elections.

As for the social spending statistics, yearly average figures are used in the regression models. It is also crucial to employ specific methods controlling endogeneity and potential omitted variable bias to increase the robustness of the findings. For each model, three types of regression analysis will be implemented: standard OLS regression, robust standard errors regression, and quantile regression models. **The details of the variables and approaches used are presented in the “*Electoral Results and Degree of Social Funding Across Municipalities and Electoral Districts*” chapter of the report.**

While the model utilizes nearly all publicly available data, it may not capture the full diversity of potential influencing factors. For example, besides the variables described, it is theoretically possible to use data from municipal budgets on spending for different types of social programs. However, several limiting factors affect the use of this data, including its availability and format across all municipalities and types of social spending. Economic factors, such as the unemployment rate in municipalities or the economic well-being of the population, provide context for understanding economic conditions that may influence the instrumentalization of social assistance. Nonetheless, this information is not presented coherently on the municipal level.

Policy variables could include the design of social assistance programs, changes in policy over time, and the presence of oversight mechanisms. Lastly, public opinion data can gauge how voters perceive the influence of social assistance programs on their electoral decisions. However, for most of these factors, it is highly probable that electorally disaggregated data does not exist at the municipal or electoral district level. Hence, only available variables can be integrated into the analysis process. These limitations should be considered when analyzing and interpreting the data when interpreting the results from the regression models.

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<sup>60</sup> While this variable was used, it is also important to note that it also has its limitations and not fully capture the picture. For example, the number of medical personnel in a municipality depends on the number of clinics opened or closed, which is related to the municipality's proximity to the regional center.



### III. Findings

The findings section of the report is divided into two parts. The first part is descriptive, evaluating the historical changes in social spending and the number of beneficiaries over time, and connecting these fluctuations with electoral events. The second part focuses on specific electoral outcomes, using regression models to examine the link between social spending—operationalized using the share of subsistence allowance recipients and the number of monetary transfers to households—and electoral results.

#### 3.1. Change Over Time: Descriptive Statistical Insights from the Time-series Data

##### 3.1.1. Change in Share of Subsistence Allowance Recipients

The first set of data examined in this report pertains to the share of households and individuals registered to receive the subsistence allowance (Table 1). These figures offer a comprehensive perspective on how the number and proportion of households and individuals benefiting from subsistence allowances have evolved over time, reflecting trends influenced by electoral cycles and broader economic conditions. One prominent trend observed across all electoral cycles is that the percentage of subsistence allowance recipients in the total population tends to be higher during electoral years compared to the preceding three-year averages. Although the difference is minimal for the 2012 elections, it becomes notably considerable for the 2016 and 2020 elections. While the absolute figures vary from year to year, another notable observation from the data is that during the 2016 and 2020 parliamentary elections, the percentage share of subsistence allowance recipients among registered households and individuals increased when compared to the same figure for the previous three-year average period. However, it should be noted that a general upward trend from 2013 to 2020 is observed in terms of the number and percentage of recipients. When it comes to the 2020 elections, increased social spending due to COVID-19 also needs to be taken into account.

*Table 1. Share of households and individuals registered and receiving subsistence allowance social transfers<sup>61</sup> by Parliamentary electoral year and previous 3-year average figures. (Source: Social Service Agency)*

	2009-2011 average	2012 average	2013-2015 average	2016 average	2017-2019 average	2020 average
Number of registered: HH	530 535	518 210	520 559	433 786	324 431	315 035
Number of registered people: individuals	1 724 668	1 659 521	1 630 749	1 338 076	974 712	957 329
Number of subsistence allowance recipients: HH	149 383	143 631	138 169	141 276	128 208	135 839
Number of subsistence allowance recipients: individuals	426 001	435 961	415 500	459 619	443 919	484 122
Percentage share of subsistence allowance recipients with registered: HH	28.1%	27.7%	26.5%	32.9%	39.5%	43.1%
Percentage share of subsistence allowance recipients with registered people: individuals	24.7%	26.2%	25.4%	34.7%	45.6%	50.5%
Percentage of subsistence allowance recipients in the total population: household*	12.7%	12.0%	12.6%	13.3%	12.0%	12.7%
Percent share of subsistence allowance recipients in the total population: individuals <sup>62*</sup>	9.7%	9.9%	9.6%	12.3%	11.9%	13.0%

61 In Georgian: მიზნობრივი სოციალური პროგრამების მონაცემთა ბაზაში რეგისტრირებული და საარსებო შემწეობის მიმღები ოჯახებისა და მოსახლეობის რაოდენობა.

62 According to the social service agency, this data is based on the preliminary result of the general population census of November 5, 2014, and the sum of the total increase (natural increase + migration balance) of the last 2 months of 2014.

While yearly averages offer a broad view of budget cycle fluctuations, examining electoral years provides more nuanced insights. For example, as previously mentioned, during the last two parliamentary elections, the proportion of subsistence allowance recipients increased. Interestingly, similar fluctuations occur when analyzing pre-electoral and electoral periods. According to the Georgian electoral code, the pre-election campaign and agitation begin 60 days before election day. This period is highly contested for political parties as they vie to attract voters. Based on this, the electoral year is divided into three distinct periods: the Non-electoral period, which spans the month preceding the 60-day interval before elections; the Pre-election period, occurring during the 60 days leading up to elections; and the Post-election period, encompassing the days following the casting of ballots.

When analyzing the data using the above-mentioned approach, it becomes evident that during all three of the most recent parliamentary elections, the percentage share of subsistence allowance recipients in the total population was higher during the pre-election period compared to the month immediately preceding it (60 days before elections). Interestingly, for the 2012 and 2020 elections, there was also a marginal increase in the share of subsistence allowance recipients, suggesting a carryover effect<sup>63</sup> (Table 2).

**Table 2. Percent share of subsistence allowance recipients in the total population (individuals) during the electoral years. Monthly average figures presented (Source: Social Service Agency)**

Parliamentary election year	Non-election period (period, till 60 days before elections)	Pre-election period (60 days before election)	Post-election period
2012	9.2%	10.1%	10.9%
2016	11.9%	12.9%	12.9%
2020	12.6%	13.6%	13.9%

The analysis of local elections revealed varying outcomes. In the cases of the 2010 and 2017 elections, the difference between pre-election periods and other periods was marginal. However, for the 2014 election, there was no observable increase during the pre-election period. Conversely, the data for the 2021 elections demonstrates a notable increase in the percentage share of subsistence allowance recipients in the total population (Table 3). Like 2020, the echo of COVID-19 social spending might be observed behind these figures.

**Table 3. Percent share of subsistence allowance recipients in the total population (individuals) during the electoral years. Monthly average figures presented. (Source: Social Service Agency)**

Local election year	Non-election period (period, till 60 days before elections)	Pre-election period (60 days before election)	Post-election period
2010	10.2%	10.7%	9.6%
2014	9.8%	9.8%	9.5%
2017	12.0%	12.3%	12.2%
2021	14.9%	16.8%	17.2%

Besides the above-mentioned COVID-19 impact, there are several possible explanations for these outcomes. The hypothesis revolves around two factors: the type of elections and the overall increase in social spending characteristic of the Georgian Dream government, which succeeded the United National Movement in 2012.

<sup>63</sup> Parliamentary elections are traditionally held in mid-autumn. During the post-election period, typically November or December, the existing group of recipients tends to remain in the recipient pools by inertia.

Generally, local elections, except for 2021, were largely uncontested, giving winners a significant advantage over competitors (Table 4). Conversely, the 2012, 2016, and 2020 elections were highly competitive, albeit with distinct differences. In 2012, the incumbent party was defeated, whereas in 2016 and 2020, the ruling party retained power. Interestingly, these two parliamentary elections saw the most significant increase in the percentage of subsistence allowance recipients in the total population (individuals). Therefore, there might be a link between the electoral contest and the ability of the ruling party to stay in power. Also, the peculiarities of 2012 and the other influencing factors might also explain observer trends.<sup>64</sup>

**Table 4. Political contest during the elections (source: CEC of Georgia)**

Incumbent	Election year and type	Winner / Incumbent votes share	Second best result from opposition party	Difference
UNM in power	2010 Local elections	65.75%	11.94%	53.81%
	2012 Parliament elections	40.34%	54.97%	-14.63%
GD in power	2014 Local elections	50.82 %	22.42%	28.40%
	2016 Parliament elections	48.68%	27.11%	21.57%
	2017 Local elections	55.81 %	17.08 %	38.73%
	2020 Parliament elections	48.22%	27.18%	21.04%
	2021 Local elections	46.75%	30.67%	16.08%

Another potential explanation is the general increase in social spending, characterized by the post-2012 Georgia, in more details discussed in the subsequent subchapter. Besides the external shocks, like measures directed against COVID-19, increased social spending and increased rates of people receiving social assistance<sup>65</sup> are other potential explanatory factors.

Figure 1 summarizes the number of individuals registered in the database and receiving subsistence allowances over the electoral years. A significant trend shift appears to have begun in mid-2015 when the number of registered people fell dramatically, but the share of those registered who receive assistance increased substantially. One plausible explanation for this shift is the government’s May 2015 decision to enact a child benefit program, which expanded the potential pool of recipients. However, this does not fully explain why the absolute number of registered people started declining while the percentage of subsistence allowance recipients among those registered increased. Another potential factor influencing these changes is the modification and amendments of the methodology, which started being implemented in January 2015.<sup>66</sup> Those changes are in detail analyzed in the study by Diakonidze.<sup>67</sup> The key takeaways include changes to the types of individuals included in the vulnerable list. For example, internally displaced persons (IDPs) were initially considered vulnerable but were later excluded because displacement alone was not deemed a vulnerability factor. Pensioners were another affected group—the share of single, non-working pensioners in the system decreased in favor of families with children.

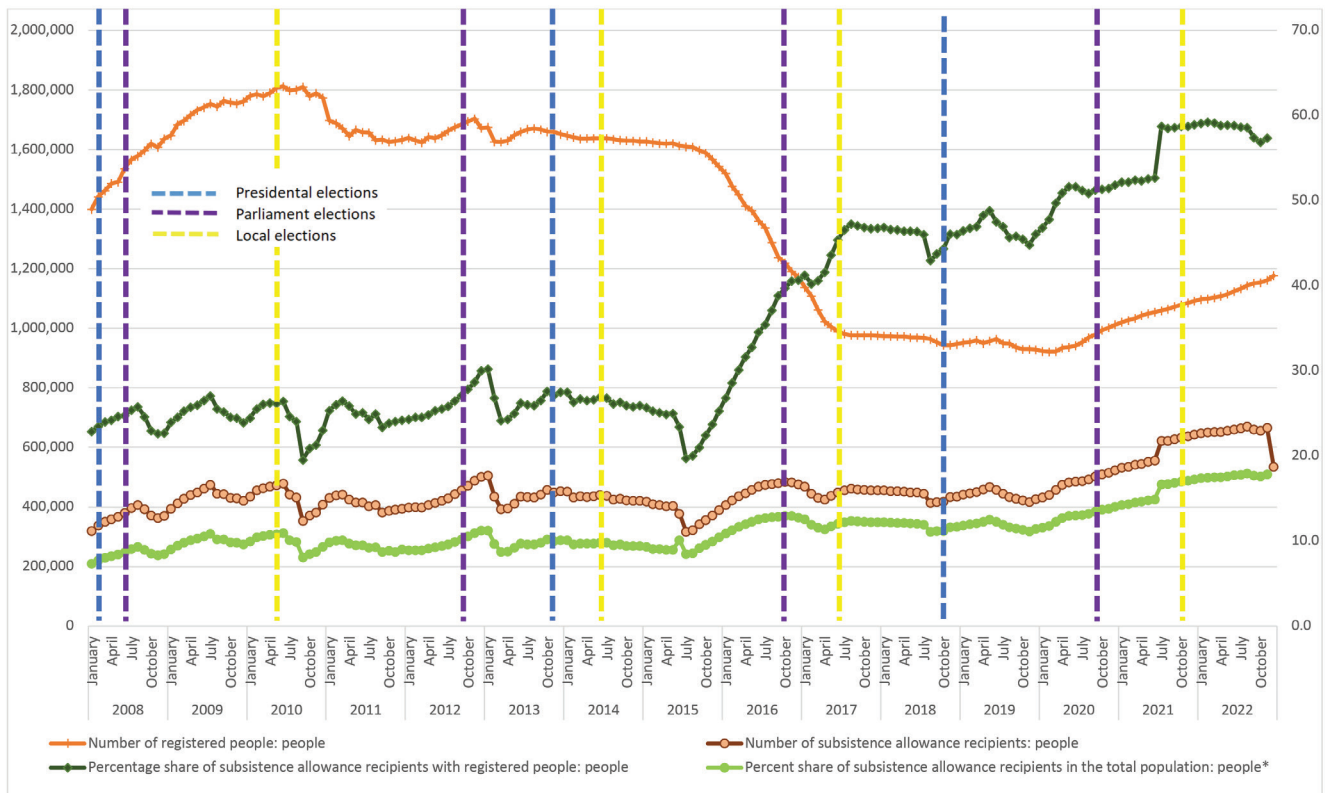
64 For instance, please see Gugushvili, D. (2017). Lessons from Georgia’s neoliberal experiment: A rising tide does not necessarily lift all boats. *Communist and Post-Communist Studies*, 50(1), 1-14. and Gugushvili, A. (2012). Material Deprivation and the District Level Outcomes of the 2012 Parliamentary Elections in Georgia. *Tbilisi, Georgia: Center for Social Sciences, Applied Social Research Programme*.

65 National Statistical Office of Georgia. Source: <https://cutt.ly/3eWYffG0>.

66 Resolution No. 758 of the Government of Georgia dated December 31, 2014 “On approval of the methodology for assessing the socio-economic status of socially vulnerable families (households)” Source: <https://cutt.ly/xeWYfVr1>.

67 Diakonidze, A. (2024). *Targeted Social Assistance Program in Georgia: Social Impact of the Program and Poverty Alleviation Potential*. Center for Social Justice. Pages 13-14.

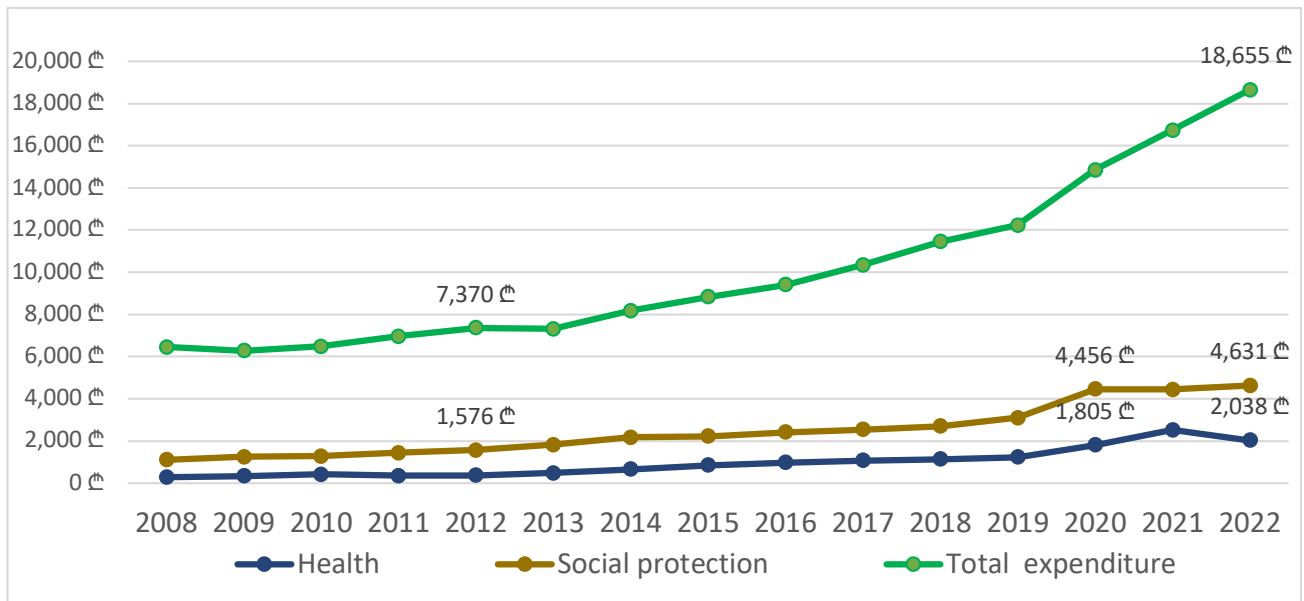
Figure 1. The number of individuals registered in the database and receiving subsistence allowance (2008-2022)



### 3.1.2. Change Amount of Funding Spent on Families Receiving Subsistence Allowance

While in absolute numbers the number of people who are registered in the system to receive subsistence allowance is decreasing over time, the number of people receiving funds under this system has increased both in absolute, as well as in relative terms (Figure 1). Healthcare and social protection is the most significant part of governmental expenditure in recent years (Figure 2). Therefore, increases and fluctuations are not solely attributed to only electoral purposes, but represent the general logic of governmental policies that are social spending oriented.

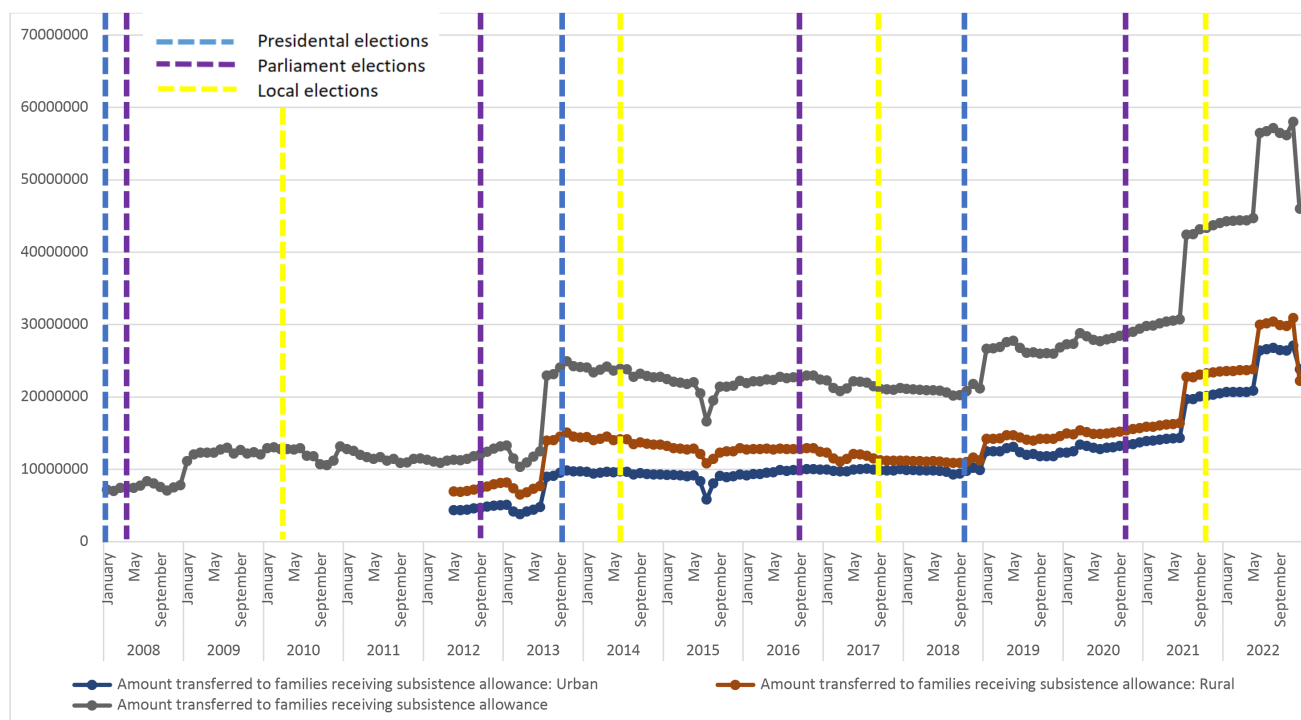
**Figure 2. Expenditure by Functions of Central Government, Million Lari. Source: Ministry of Finance of Georgia and National Statistics Office of Georgia**



Therefore, it is not surprising that alongside the increase in social spending, the funds transferred to families receiving subsistence allowances have also generally risen (Figure 3). When breaking down these figures between rural and urban settlements, transfers in rural areas are consistently higher than those in urban areas. This reflects the broader context of Georgian socio-economic development, where most of the socially vulnerable population resides in rural areas. Additionally, money transfers show several points of rapid increase over the years, most notably in mid-2013, the first half of 2019, and mid-2021. The mid-2013 sharp increase is most likely related to an increase in the maximum cash transfer, as in June 2013, the government doubled the monthly allowance per person from a maximum of GEL 30 to GEL 60. Further analysis of money transfer amounts, comparing electoral and non-electoral years, reiterated and confirmed the major findings from the previous subchapter.



Figure 3. Amount transferred to families receiving subsistence allowance (GEL) (2008-2022)



While the findings for 2012 do not indicate an increase in spending on families receiving subsistence allowances during the electoral year compared to the previous three-year average, the 2016 and 2020 data show that the average monthly spending in both electoral years was higher than the three-year average figures (Table 5). While these tendencies are visible both in rural and urban families, in both cases the gap is bigger in cases of urban households. Partially, this can be related to the family structure (more extended families in rural areas, compared to the nuclear families in urban areas<sup>68</sup>), as well as to the fact that households in rural areas are more vulnerable in terms of socioeconomic underdevelopment.<sup>69</sup>

68 According to the National Statistical Office of Georgia, the average household size in rural areas is larger than in urban areas. Source: <https://cutt.ly/leWYg4WT>.

69 As discussed above, based on the UNICEF study of analysis of targeted social assistance and child poverty and simulations of the poverty-reducing effects of social transfers.

**Table 5. Amount of funds (in GEL) transferred to families receiving subsistence allowance by Parliamentary electoral year and previous 3-year average figures. Monthly average figures presented. (Source: Social Service Agency)**

	2009-2011 average	2012 average <sup>70</sup>	2013-2015 average	2016 average	2017-2019 average	2020 average
Amount transferred to families receiving subsistence allowance: Urban	No Data	4 662 538 ₾	8 380 783 ₾	9 720 530 ₾	10 665 267 ₾	13 094 973 ₾
Amount transferred to families receiving subsistence allowance: Rural	No Data	7 388 056 ₾	12 410 167 ₾	12 795 309 ₾	12 330 556 ₾	15 178 147 ₾
Amount transferred to families receiving subsistence allowance	12 047 063 ₾	11 743 535 ₾	20 797 555 ₾	22 515 839 ₾	23 002 727 ₾	28 273 120 ₾

A close inspection of electoral years and a comparison of pre-electoral and other periods of spending suggest that even in the case of the 2012 parliamentary elections, there is an increase in the amount transferred to families receiving subsistence allowances (Table 6).

**Table 6. Amount transferred to families receiving subsistence allowance during the electoral years. Monthly average figures presented. (Source: Social Service Agency)**

Parliamentary election year	Non-election period (period, till 60 days before elections)	Pre-election period (60 days before election)	Post-election period
2012	11 223 344 ₾	11 940 879 ₾	12 825 753 ₾
2016	22 345 981 ₾	22 708 935 ₾	22 783 444 ₾
2020	27 941 192 ₾	28 639 624 ₾	29 234 331 ₾

The same trend is observed when comparing spending at different points in time for local elections. The general pattern of increased spending is not visible in the case of the 2010 elections and is marginal for the 2014 and 2017 elections (Table 7). However, the gap is significant for the 2021 elections. These observations align with the findings from the statistics of subsistence allowance recipients, suggesting that the most contested elections exhibit the highest fluctuations in spending during electoral years and periods, as was the case of the 2021 elections.

<sup>70</sup> Urban versus rural data is available only from May to December. Therefore, for the year 2012, yearly averaged data is available only for those months.

**Table 7. Amount transferred to families receiving subsistence allowance during the electoral years (Source: Social Service Agency)**

Local election year	Non-election period (period, till 60 days before elections)	Pre-election period (60 days before election)	Post-election period
2010	13 005 726 ₾	12 810 076 ₾	11 879 168 ₾
2014	23 858 463 ₾	23 777 200 ₾	23 020 020 ₾
2017	21 665 333 ₾	21 092 864 ₾	21 120 909 ₾
2021	31 994 656 ₾	42 811 597 ₾	43 864 567 ₾

In conclusion, while the absolute number of individuals registered for subsistence allowances has diminished, the number of recipients has increased both absolutely and relatively. This trend reflects the government’s social spending priorities, with healthcare and social protection representing significant expenditure areas. The allocation of social spending, including funds for subsistence allowances, has increased over time, particularly in rural areas, where the majority of the vulnerable population resides. Notable increases in money transfers were observed during mid-2013, early 2019, and mid-2021, often coinciding with changes in policy or election periods. While the spending pattern varies between rural and urban areas, electoral years tend to see higher spending on subsistence allowances, particularly during highly contested elections such as those in 2021. Public discourse often links social assistance to voting behavior favorable to the incumbent. For example, a 2021 nationally representative survey posed a hypothetical question about whether it is realistic that a family receiving social assistance could lose this support if they did not vote (though no specific party was mentioned). 48 percent believed this scenario was plausible.<sup>71</sup> Therefore, it is important to understand the actual relationship between voting behavior and the receipt of social assistance.

## 3.2. Electoral Results and Degree of Social Funding Across Municipalities and Electoral Districts

### 3.2.1. Data Analysis Approach and Variable Description

While descriptive statistics provide an overview of the figures and tendencies, they do not offer an in-depth understanding of the relationships between social spending and the electoral process. A more robust analysis can be achieved through regression analysis, which aims to reveal the underlying relationships between the observed variables. The analysis presented below is divided into two broad dimensions, separately exploring parliamentary and local elections. In both cases, elections under two different ruling parties over several electoral cycles are investigated to determine if the observed tendencies are general features rather than standalone examples or occurrences.

Before presenting the findings of the regression models, it is important to briefly explain the variables and logic used in the analysis. In all cases, the unit of observation is the electoral district, corresponding to municipalities in Georgia. Because social spending and beneficiary data are not available for electoral districts based in Tbilisi, these are not included in the regression analysis. Overall, the analysis is done on the 63 electoral districts corresponding to the 63 municipalities of Georgia.<sup>72</sup>

71 Public attitudes towards electoral processes, 2021. ISFED. Page 32. Source: <https://cutt.ly/zeWYjma6>.

72 Of Georgia’s 69 municipalities, 64 are self-governing communities and 5 are self-governing cities, although legally they are treated the same. Since 2008, Russia has occupied five of these municipalities. Tbilisi, the capital city, is considered a unified municipality but is typically divided into ten electoral districts for elections due to its large size.

Two types of dependent variables are used in separate models: a) the voting share received by the incumbent per electoral district, which measures the success of socially oriented spending, and b) the variable measuring the difference between the first and second-placed parties in each electoral district, which assesses the level of contest and political rivalry within the electoral district. To control over the population size, both variables are standardized per population size (divided by the number of populations in the given municipality). Important to note that for each year's calculations, information from the National Statistics Office of Georgia regarding the population size within municipalities was used.<sup>73</sup> This approach differs slightly from how the Social Service Agency calculates the shares of recipients per population size. The Agency bases its calculations on the preliminary results of the general population census of November 5, 2014, and the sum of the total increase (natural increase + migration balance) in the last two months of 2014. However, the approach suggested above is more precise as it measures the actual number of inhabitants of municipalities at a specific point in time.

Two major independent variables are used in the reported models. The first is the amount of money transferred to families receiving subsistence allowances, and the second is the Size of the population receiving subsistence allowances per capita per electoral district. In all regression models, the following control variables are used: the share of the ethnic Georgian population, the share of the urban population, the share of the population with higher education, the share of the Orthodox population in the municipalities, and the median altitude of the municipalities. In addition to these socio-geographic variables, the share of medical staff per capita and business sector investments in fixed assets per municipality is also included to indirectly measure the level of economic development in the municipalities.

To summarize, there are four principal regression models used in the report across different elections. The first model includes "Share of incumbent votes" as the dependent variable, with "Size of the population receiving subsistence allowances per capita" as the primary independent variable. The share of the ethnic Georgian population, the share of the urban population, the share of the population with higher education, the share of Orthodox Christians, median altitude, the amount of investments in the municipalities, and medical staff per capita in the municipalities are used as control variables. The second model is the same, but the primary independent variable is "Subsistence allowance monetary transfers per capita." The third and fourth models follow the same logic, but the difference between the first- and second-placed parties' variables is the dependent variable. This approach is repeated across the 2020 and 2016 parliamentary elections, as well as the 2021, 2017, and 2014 local elections. There are two exceptions: the 2012 parliamentary and 2010 local elections. In 2012, the variable "Receivers of social package per capita" was added. In 2010, only the subsistence allowance monetary transfers per capita models were used due to the lack of data on the "Size of the population receiving subsistence allowances per capita."

Lastly, all reported models will be analyzed using three different regression approaches. The first is standard ordinary least-squares (OLS) linear regression. In addition, the same models will be run using robust regression to mitigate potential problems arising from outliers or extreme observations. Lastly, quantile regression will be performed at the 50th percentile (median). While the method of least squares estimates the conditional mean of the response variable across values of the predictor variables, quantile regression estimates the conditional median (or other quantiles) of the response variable. Quantile regression is an extension of linear regression that is particularly useful when the assumptions of linear regression are not met.

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<sup>73</sup> Section "Population by regions and self-governed units, as of 1 January". Source: <https://cutt.ly/1eWYkNiU>.

### 3.2.2. Parliamentary Elections

*Table 8. 2020 Parliamentary Elections Regression Outcomes Results*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5

	Dependent variable: Share of incumbent votes variable model				
Size of the population receiving subsistence allowances per capita	-6.359 (15.76)	14.64 (10.45)	48.10*** (12.06)		4.066 (9.985)
Subsistence allowance monetary transfers per capita	-0.113 (0.245)	0.189 (0.145)	0.779*** (0.121)		0.0636 (0.144)

	Dependent variable: Difference between the first and second-placed parties' variable model				
Size of the population receiving subsistence allowances per capita	-0.440 (24.97)	37.99 (52.77)	28.95** (12.62)		14.84 (21.37)
Subsistence allowance monetary transfers per capita	-0.0608 (0.389)	0.442 (0.878)	0.377 (0.352)		0.208 (0.374)

Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The detailed regression outcome tables for each election, reporting figures for every controlling variable, are presented in the appendix of the report. In the main body of the text, only results for the main independent variables are presented. For example, Table 8 displays results for all three types of regression models for different types of dependent variables. The tables are interpreted as follows: the first row of each independent variable shows the regression coefficient, with robust standard errors presented in parentheses. An asterisk denotes the statistical significance of the observations.

Starting with the 2020 parliamentary elections, most models do not indicate a statistically significant link between either the share of votes received by the incumbent or the size of the population receiving subsistence allowances, or subsistence allowance monetary transfers (Table 8). Only in the case of robust regression was there a statistically significant connection between the incumbent's votes and the subsistence allowance monetary transfers per capita and the size of the population receiving subsistence allowances—an increase in voting shares is associated with a higher number of people receiving subsistence allowances and more money transferred to those districts. The same is true for the model measuring the difference between the first and second-placed parties. However, this relationship does not appear to be straightforward and linear. The easier way of interpreting these findings is by presenting figures by comparing means per different categories, rather than using the regression coefficients.



**Table 9. Mean figures Subsistence allowance monetary transfers per capita and Size of the population receiving subsistence allowances per capita during the 2020 Parliamentary elections**

	incumbent > 50%	incumbent < 50%	Std. Err.	Std. Dev.	T-Test P-value
Subsistence allowance monetary transfers per capita (€)	12.42	9.05	1.36	8.36	0.07*
	(n= 38)	(n=25)	0.91	4.54	
Size of the population receiving subsistence allowances per capita (persons)	0.22	0.16	0.02	0.13	0.07*
	(n= 38)	(n=25)	0.02	0.08	
Percentage share of subsistence allowance recipients with registered individuals	51.8%	47.0%	2.21	13.64	0.15
	(n= 38)	(n=25)	2.50	12.50	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 10. Mean figures Subsistence allowance monetary transfers per capita and Size of the population receiving subsistence allowances per capita during the 2020 Parliamentary elections. Disaggregated results show varying levels of differences between the first and second-best parties.**

	Difference < 10%	Difference bet. 10%-20%	Difference bet. 20%- 30%	Difference > 30%	Std. Dev. (total)	ANOVA P-value
Subsistence allowance monetary transfers per capita (€)	9.32	9.58	9.10	14.18	7.24	0.08*
	(n=8)	(n=14)	(n=18)	(n=23)		
Size of the population receiving subsistence allowances per capita (persons)	0.15	0.18	0.17	0.25	0.12	0.07*
	(n=8)	(n=14)	(n=18)	(n=23)		
Percentage share of subsistence allowance recipients with registered individuals	56.2%	44.0%	50.0%	51.31%	13.32	0.19
	(n=8)	(n=14)	(n=18)	(n=23)		

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Among the electoral districts, where incumbents received more than half of all votes, on average more money was spent on the subsistence allowance monetary transfers and slightly more people received the subsistence allowances package, though the T-Test comparison shows a moderate statistically significant difference<sup>74</sup> (Table 9). When it comes to the different levels of political competition measured through the difference between the first and second-placed parties, results are mixed. In the case of monetary transfers, we observe that municipalities with less political contest (difference of more than 30% of vote share) receive on average more money and the size of the population receiving subsistence allowances per capita is also high (Table 10). However still in these cases, this difference is only moderately significant.

<sup>74</sup> A p-value measures the probability of obtaining the observed results, assuming that the null hypothesis is true. **The lower the p-value, the greater the statistical significance of the observed difference.** A p-value of 0.05 or lower is generally considered statistically significant, meaning there is a 5% probability of being wrong when claiming a difference. Other levels of statistical significance are 0.01 (more conservative) and 0.1 (more liberal).

The above-provided analysis potentially indicates that the incumbent tried to maximize its reach to beneficiaries, at the same time also pleasing the areas where they anticipated receiving many votes. However, this hypothesis requires further elaboration, additional investigation, and detailed analysis. One way to test this hypothesis was introducing the new variable in a similar analysis—the percentage share of subsistence allowance recipients among registered individuals—it turns out that, on average, their share is slightly higher in districts where the incumbent crossed the 50% threshold compared to places where it failed to gain a majority. When analyzing this variable across the difference between the first and second-placed parties, the percentage share of subsistence allowance recipients among registered individuals is highest in the most contested areas. However, in the case of the 2020 elections, thus the gap is not wide enough and in both cases, the difference is not statistically significant (Tables 9 and 10).

Going forward, a similar analysis yielded mostly the same results for the 2016 parliamentary elections. A weak connection was observed between the number of votes cast for the incumbent and the prevalence of subsistence allowance recipients and monetary transfers (Table 11).

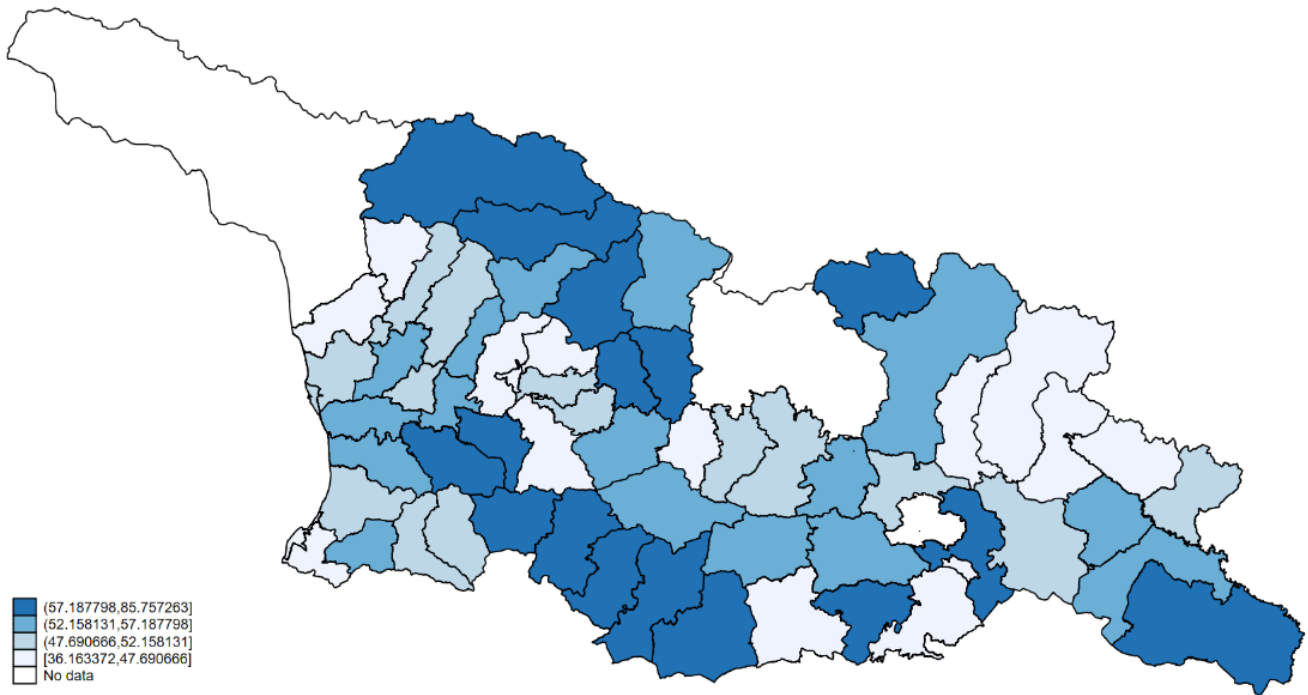
**Table 11. 2016 Parliamentary elections regression outcomes results**

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
<b>Dependent variables: Share of incumbent votes variable model</b>					
Size of the population receiving subsistence allowances per capita	1.725 (19.13)	18.41* (9.758)	2.720 (17.40)		15.31 (15.53)
Subsistence allowance monetary transfers per capita	-0.0249 (0.373)	0.315* (0.169)	0.0945 (0.311)		0.256 (0.258)
<b>Dependent variable: Difference between the first and second-placed parties' variable model</b>					
Size of the population receiving subsistence allowances per capita	30.12 (36.29)	60.53** (25.35)	1.034 (21.26)		62.85* (33.28)
Subsistence allowance monetary transfers per capita	0.425 (0.703)	1.060** (0.420)	0.421 (0.447)		1.109* (0.614)

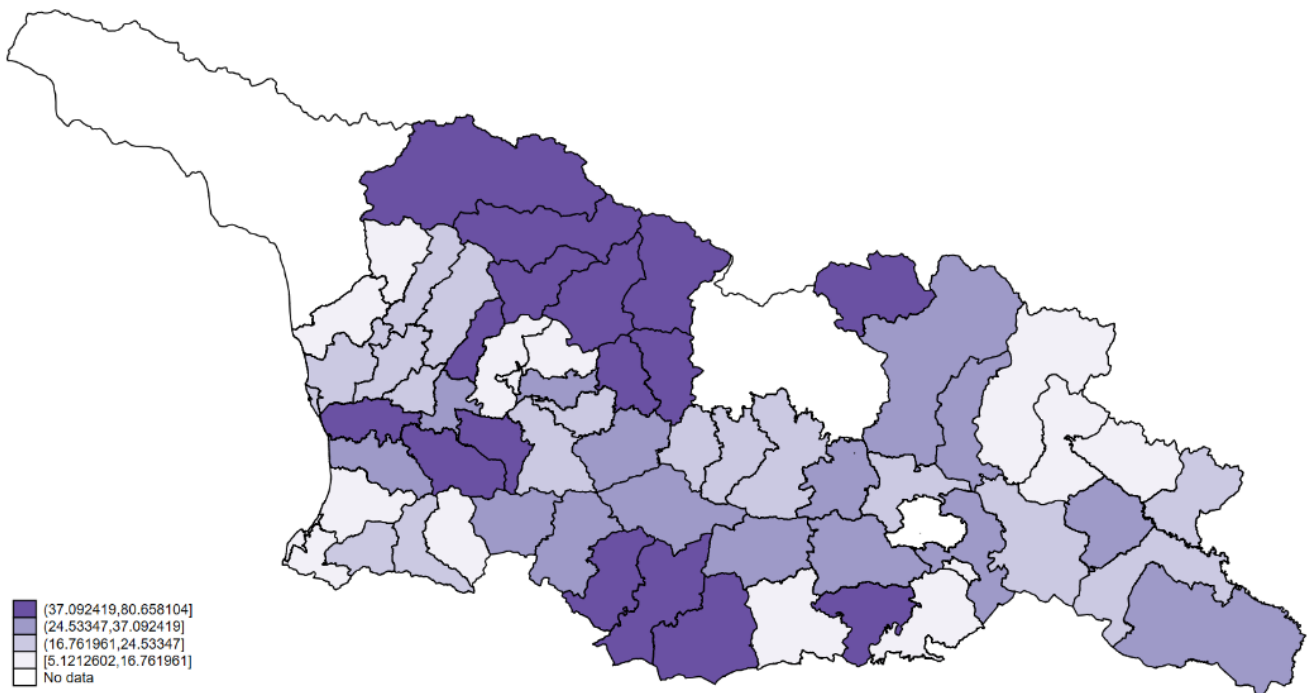
Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

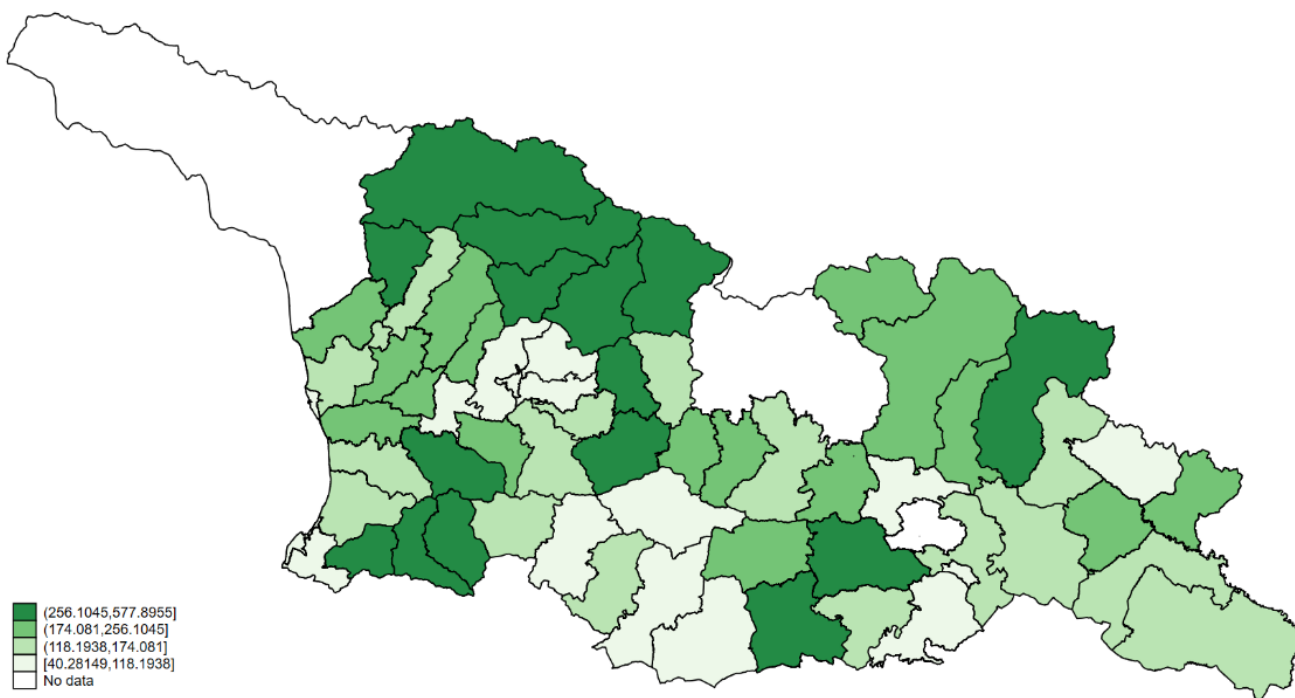
Figure 4. Distribution of core dependent and independent variables across municipalities, 2020 Parliamentary elections, Data for Tbilisi and occupied territories not presented



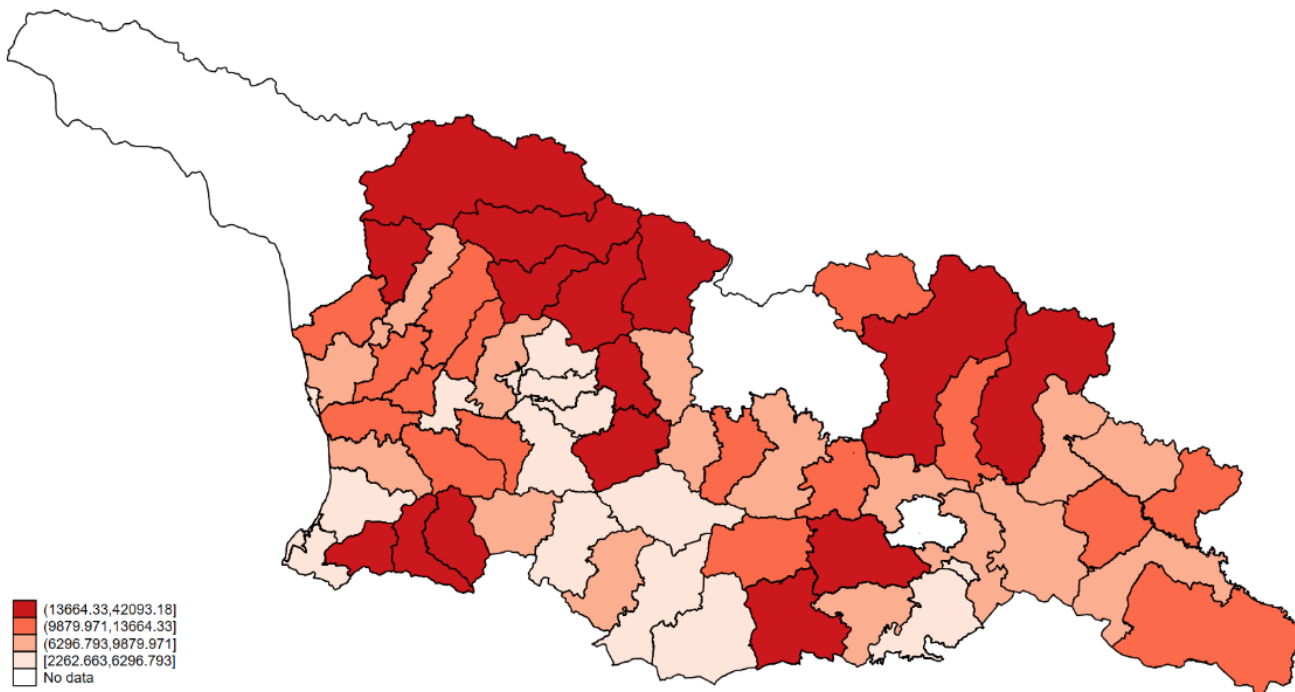
Share of incumbent votes



Difference between the first and second-placed parties'



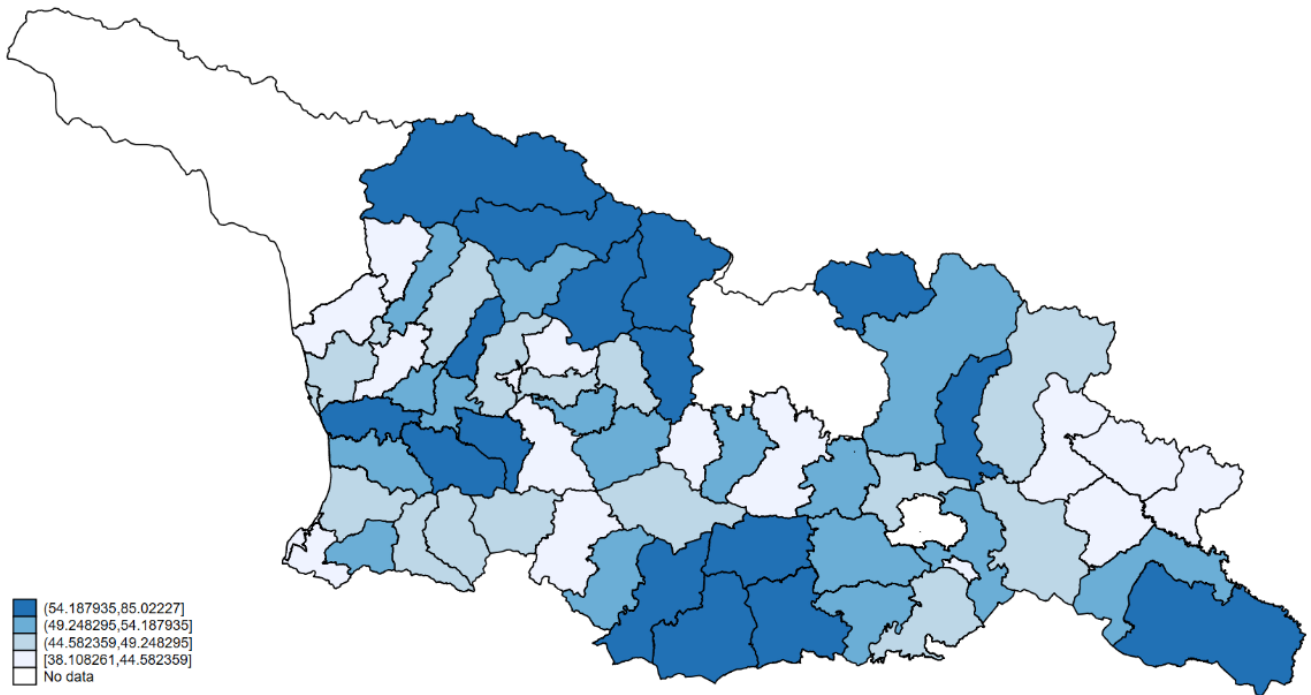
Size of the population receiving subsistence allowances per capita



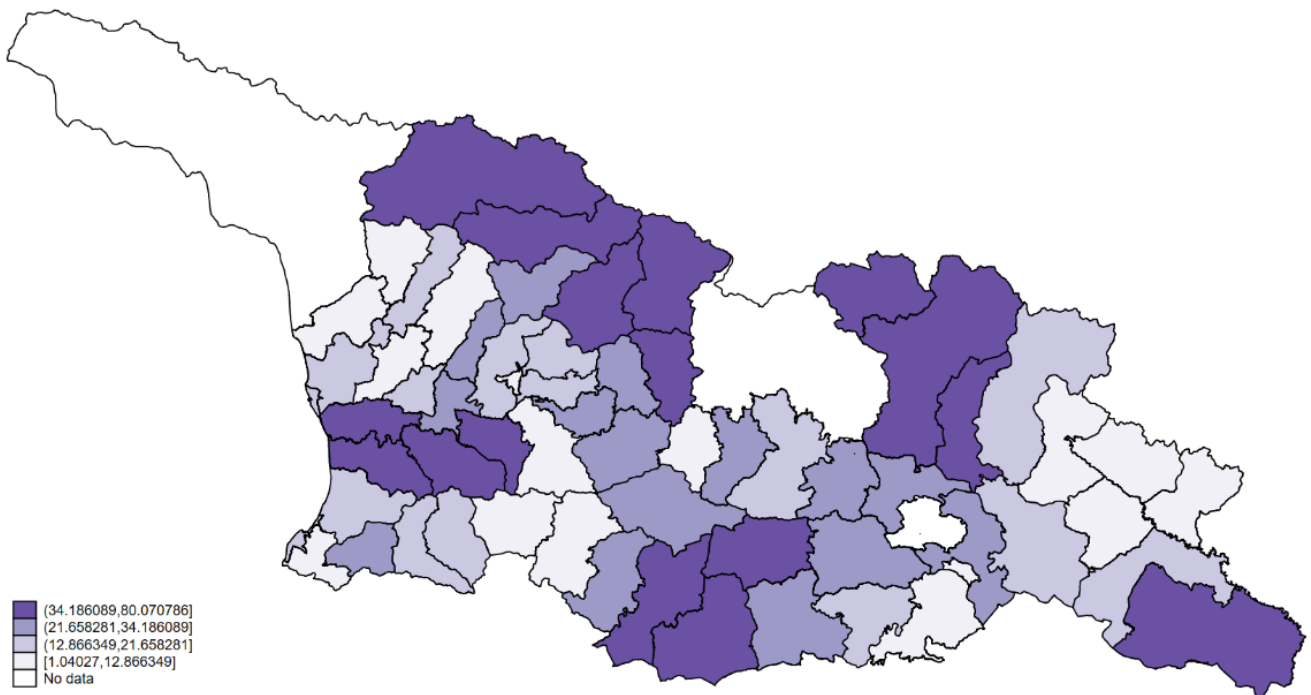
Subsistence allowance monetary transfers per capita

*The intensity of the color indicates the higher frequency of the variable. For example, the darker palette of blue on the “Share of Incumbent Votes” map indicates higher shares of voters received by the incumbent during the 2020 parliamentary elections.*

Figure 5. Distribution of core dependent and independent variables across municipalities, 2016 Parliamentary elections, Data for Tbilisi and occupied territories not presented

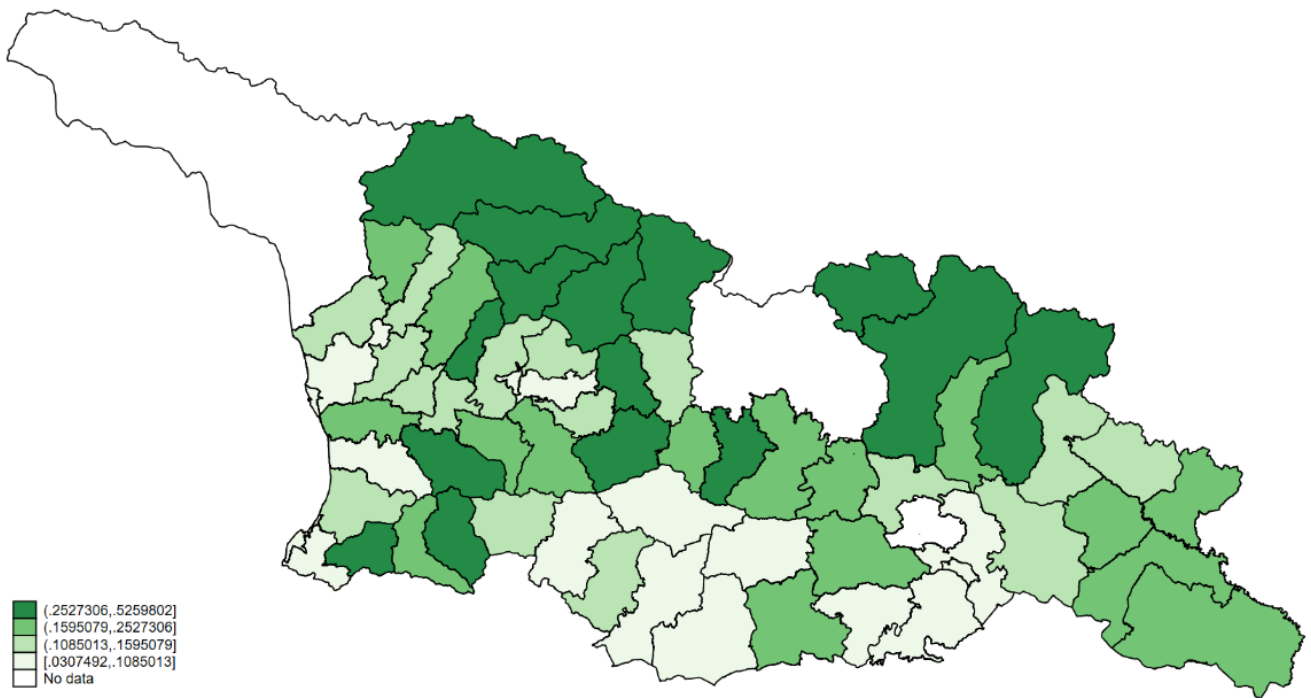


Share of incumbent votes

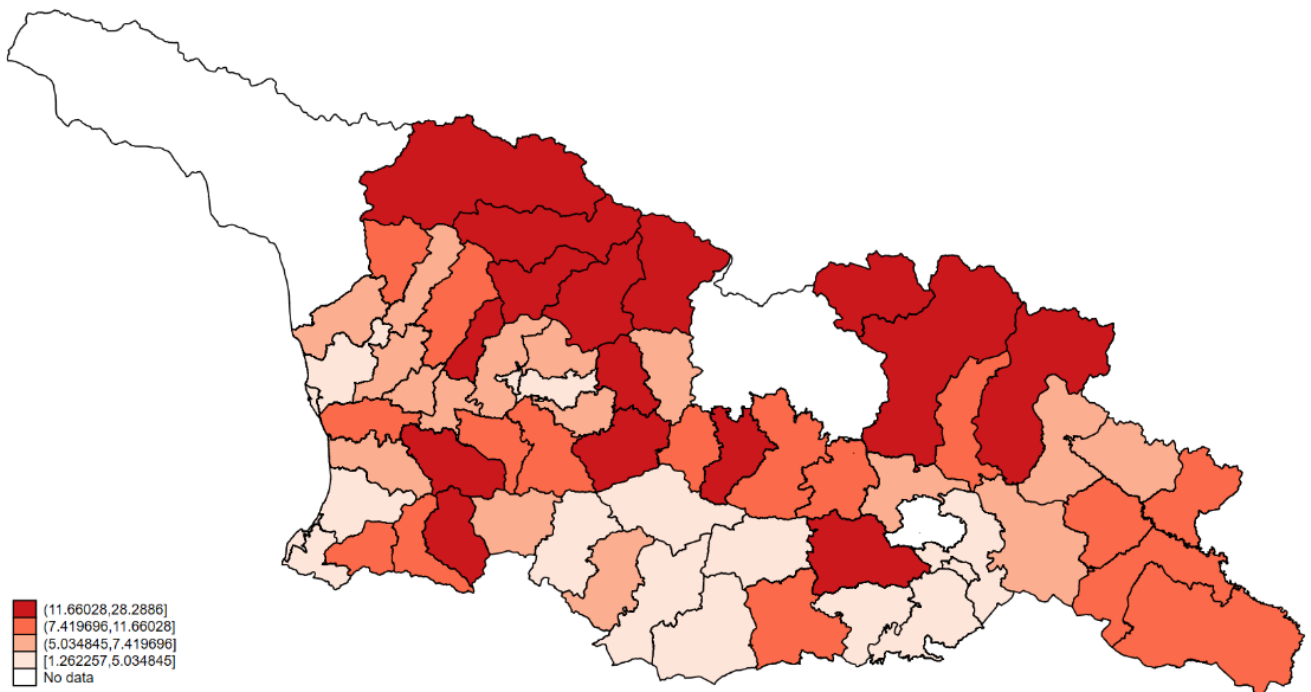


Difference between the first and second-placed parties'





Size of the population receiving subsistence allowances per capita



Subsistence allowance monetary transfers per capita

*The intensity of the color indicates the higher frequency of the variable. For example, the darker palette of blue on the “Share of Incumbent Votes” map indicates higher shares of voters received by the incumbent during the 2016 parliamentary elections.*

When comparing instances where the ruling party received more than half of the votes to those where they received less, electoral districts where they garnered more than half the votes typically received more money and had more beneficiaries selected on average. In all cases, differences were statistically significant (Table 12).

**Table 12. Mean figures Subsistence allowance monetary transfers per capita and Size of the population receiving subsistence allowances per capita during the 2016 Parliamentary elections**

	incumbent > 50%	incumbent < 50%	Std. Err.	Std. Dev.	T-Test P-value
Subsistence allowance monetary transfers per capita (€)	10.90	7.44	1.24	6.93	0.02**
	(n= 31)	(n=22)	0.78	4.40	
Size of the population receiving subsistence allowances per capita (persons)	0.22	0.16	0.02	0.12	0.01**
	(n= 31)	(n=22)	0.02	0.09	
Percentage share of subsistence allowance recipients with registered individuals	41.7	33.7	3.0	17.0	0.02**
	(n= 31)	(n=22)	2.10	11.90	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

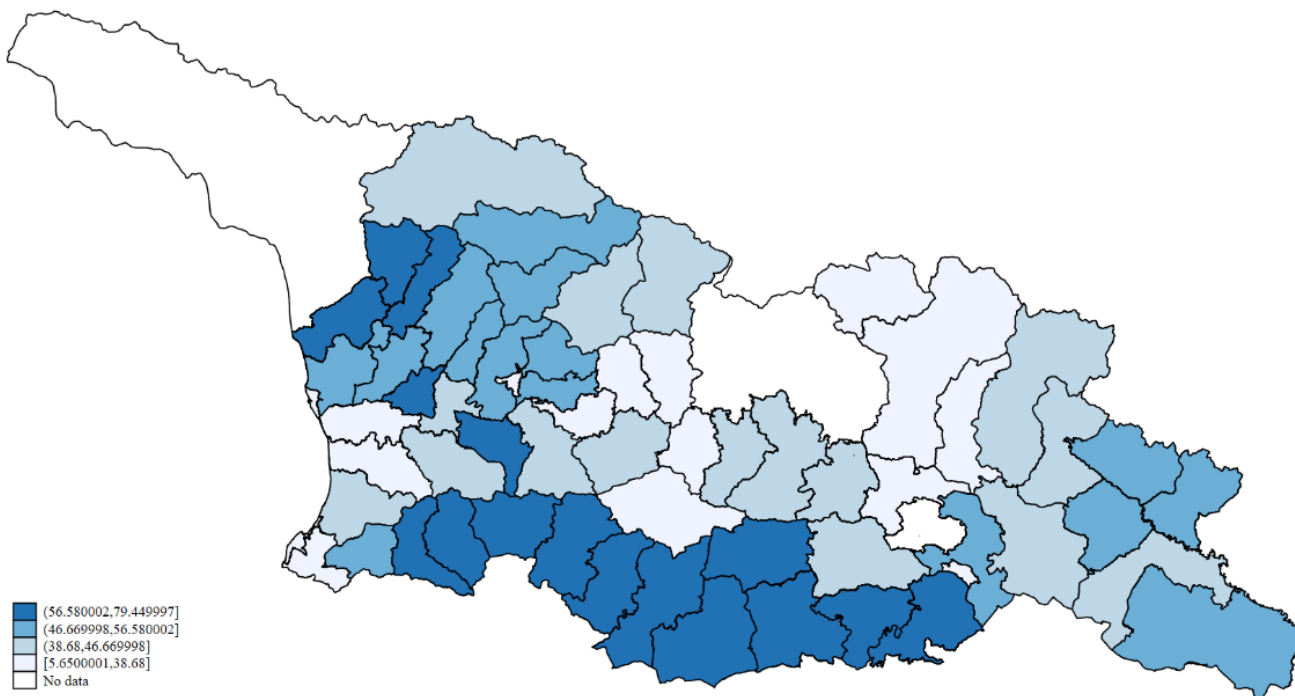
When looking at the electoral competitiveness figures in Table 13, the story is the same as in the case of the 2020 elections – municipalities that were “easy to win” (difference of more than 30%) attracted on average more money, as well as more people received subsistence allowance (Table 13).

**Table 13. Mean figures Subsistence allowance monetary transfers per capita and Size of the population receiving subsistence allowances per capita during the 2016 Parliamentary elections. Disaggregated results show varying levels of differences between the first and second-best parties**

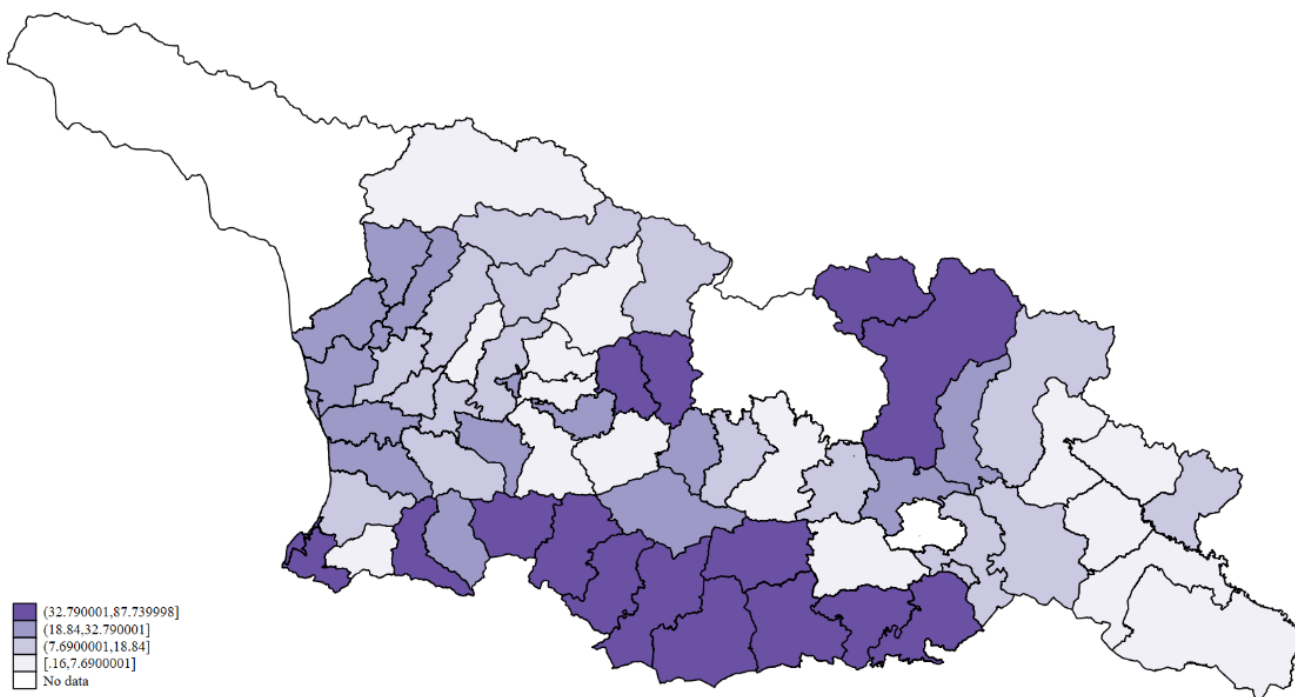
	Difference < 10%	Difference bet. 10%-20%	Difference bet. 20%- 30%	Difference > 30%	Std. Dev. (total)	ANOVA P-value
Subsistence allowance monetary transfers per capita (€)	6.23	6.89	10.00	12.58	6.00	0.01**
	(n=8)	(n=21)	(n=18)	(n=16)		
Size of the population receiving subsistence allowances per capita (persons)	0.13	0.15	0.21	0.25	0.11	0.02**
	(n=8)	(n=21)	(n=18)	(n=16)		
Percentage share of subsistence allowance recipients with registered individuals	32.3%	31.5%	42.2%	43.3%	15.05	0.03**
	(n=8)	(n=21)	(n=18)	(n=16)		

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

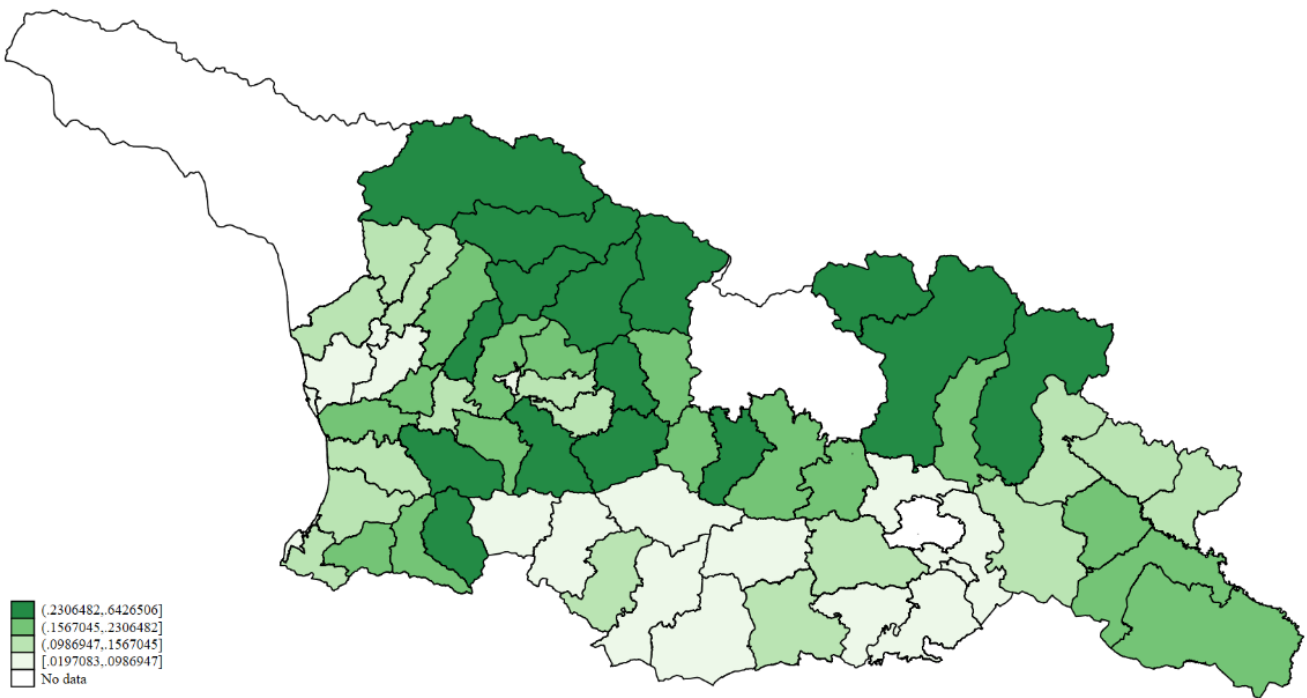
Figure 6. Distribution of core dependent and independent variables across municipalities, 2012 Parliamentary elections, Data for Tbilisi and occupied territories not presented



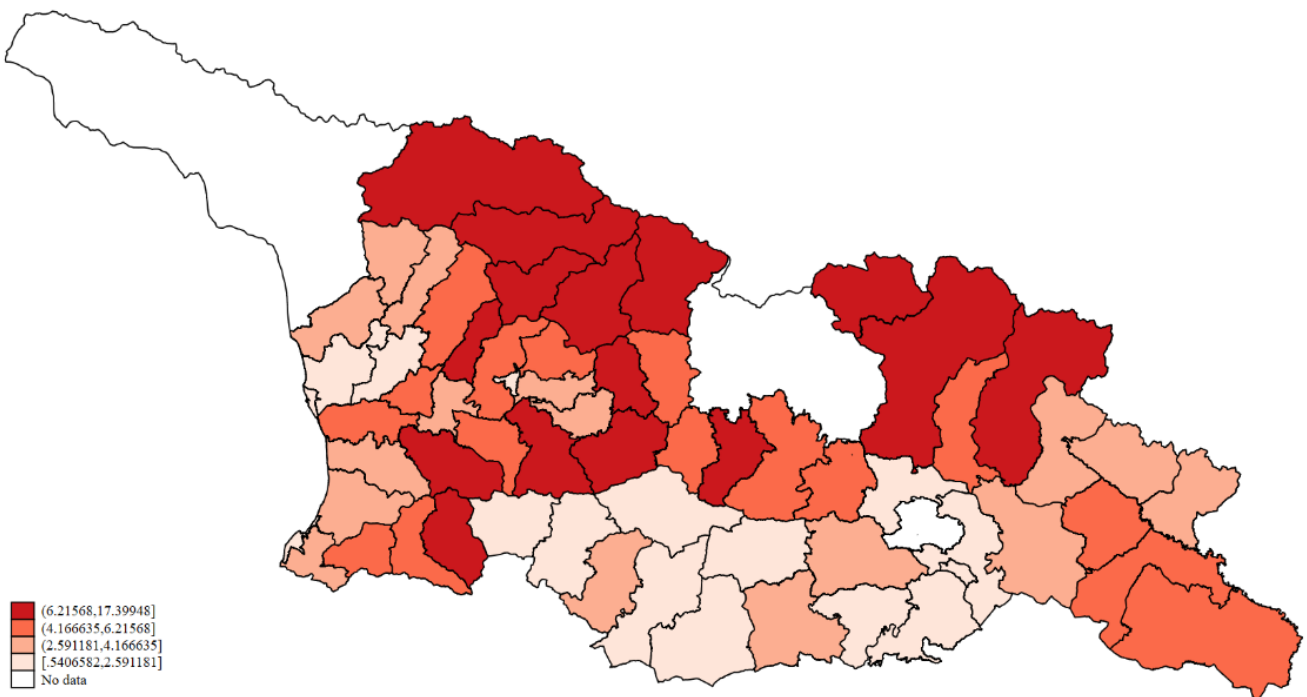
Share of incumbent votes



Difference between the first and second-placed parties'



Size of the population receiving subsistence allowances per capita



Subsistence allowance monetary transfers per capita

*The intensity of the color indicates the higher frequency of the variable. For example, the darker palette of blue on the “Share of Incumbent Votes” map indicates higher shares of voters received by the incumbent during the 2012 parliamentary elections.*

During the 2012 parliamentary elections, the picture remained predominantly the same as in other parliamentary elections, with no statistically significant observations (see appendix for 2012 parliamentary regression models). However, the regression model applied for the 2012 elections was a bit different. As discussed earlier, together with the subsistence allowance variables, in this particular case the regression model of receivers of social package per capita was also added. For OLS and robust regression models high share of social package receivers was associated with a higher vote share of incumbent (in this case UNM).

Despite no statistically significant findings, other interesting findings can be found too. Namely, due to the contested nature of these elections, some unusual variations were observed. Specifically, in the districts where the incumbent underperformed (receiving less than half of the votes), on average, more money, and many individuals were affected by the subsistence allowance program. Similarly, districts with higher competition also attracted more resources (see Table 14 and Table 15). The percentage share of subsistence allowance recipients among registered individuals is also higher in cases where the incumbent received less than a majority of the votes. The districts where the difference between the winner and the second-best party was the smallest also experienced the highest shares of subsistence allowance recipients among registered individuals. In the case of 2012, it can be argued that there was an association between the incumbent's performance and social spending policy: municipalities, where the incumbent had more political competition, received a larger allocation of social spending. This can be linked to the hypothesis that in areas where the incumbent faced bigger challenges, more resources were allocated. However, more detailed research is needed to verify this hypothesis.

**Table 14. Mean figures Subsistence allowance monetary transfers per capita and Size of the population receiving subsistence allowances per capita during the 2012 Parliamentary elections**

	incumbent > 50%	incumbent < 50%	Std. Err.	Std. Dev.	T-Test P-value
Subsistence allowance monetary transfers per capita (€)	4.27	5.41	0.84	4.09	0.20
	(n= 24)	(n=39)	0.46	2.89	
Size of the population receiving subsistence allowances per capita (persons)	0.16	0.20	0.03	0.15	0.20
	(n= 24)	(n=39)	0.02	0.11	
Percentage share of subsistence allowance recipients with registered individuals	23.0%	31.5%	3.03	14.85	0.01**
	(n= 24)	(n=39)	1.80	11.23	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1



*Table 15. Mean figures Subsistence allowance monetary transfers per capita and Size of the population receiving subsistence allowances per capita during the 2012 Parliamentary elections. Disaggregated results show varying levels of differences between the first and second-best parties.*

	Difference < 10%	Difference bet. 10%-20%	Difference bet. 20%- 30%	Difference > 30%	Std. Dev. (total)	ANOVA P-value
Subsistence allowance mon- etary transfers per capita (€)	6.08 (n=17)	5.99 (n=17)	4.11 (n=11)	3.48 (n=18)	3.41	0.06*
Size of the population re- ceiving subsistence allow- ances per capita (persons)	0.22 (n=17)	0.22 (n=17)	0.15 (n=11)	0.13 (n=18)	0.12	0.05*
Percentage share of subsis- tence allowance recipients with registered individuals	33.5% (n=17)	33.1% (n=17)	25.9% (n=11)	20.2% (n=18)	13.27	0.00**

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

To summarize, 2020 parliamentary elections, most models do not show a statistically significant link between the share of votes received by the incumbent and the size of the population receiving subsistence allowances, except in robust regression models which show an increase in votes correlating with more recipients. This trend is also observed in selected cases of closely contested districts but on a certain level. Aside from the regression models, a comparison of mean values of selected variables revealed that in many cases districts that are won by incumbents without significant competition tend to attract more social spending. Similar patterns were found in the 2016 elections, where a connection between incumbent votes and subsistence recipients was noted. During the 2012 elections, while no significant observations were generally found, districts, where the incumbent received fewer votes or faced higher competition, received more money and had more beneficiaries per capita. These observations, which contradict the 2020 and 2016 election results, suggest that the type of election—whether the incumbent remains in power or loses—could potentially lead to different types of relationships between electoral outcomes and social funding spending. However, this hypothesis needs more in-depth exploration with more relevant observations and cases.

Another consistent feature observed across all elections is that areas with higher shares of ethnic minorities (southern municipalities) tend to vote predominantly for incumbent parties. However, these areas receive less monetary transfers per capita and have a lower average share of individuals receiving welfare allowances compared to other municipalities (figures 4, 5, and 6). These municipalities act as outliers that moderate or minimize the overall effect of social spending when analyzing electoral data outcomes at the municipal level. This is an important factor to consider when interpreting the findings.

### 3.2.3. Local Elections

When analyzing electoral outcomes, it is important to differentiate between the types of elections, as the strategies, motivations, and tools used by incumbents may vary. Parliamentary elections often hold more political significance, leading the government to potentially use more resources to create an uneven playing field, such as manipulating social spending. Conversely, during municipal elections, the centralized nature of subsistence allowance allocation limits the influence of local politicians on social funding distribution. However, even municipal elections can become highly contested and significant, especially during intense political competition, as seen in the 2021 municipal elections.

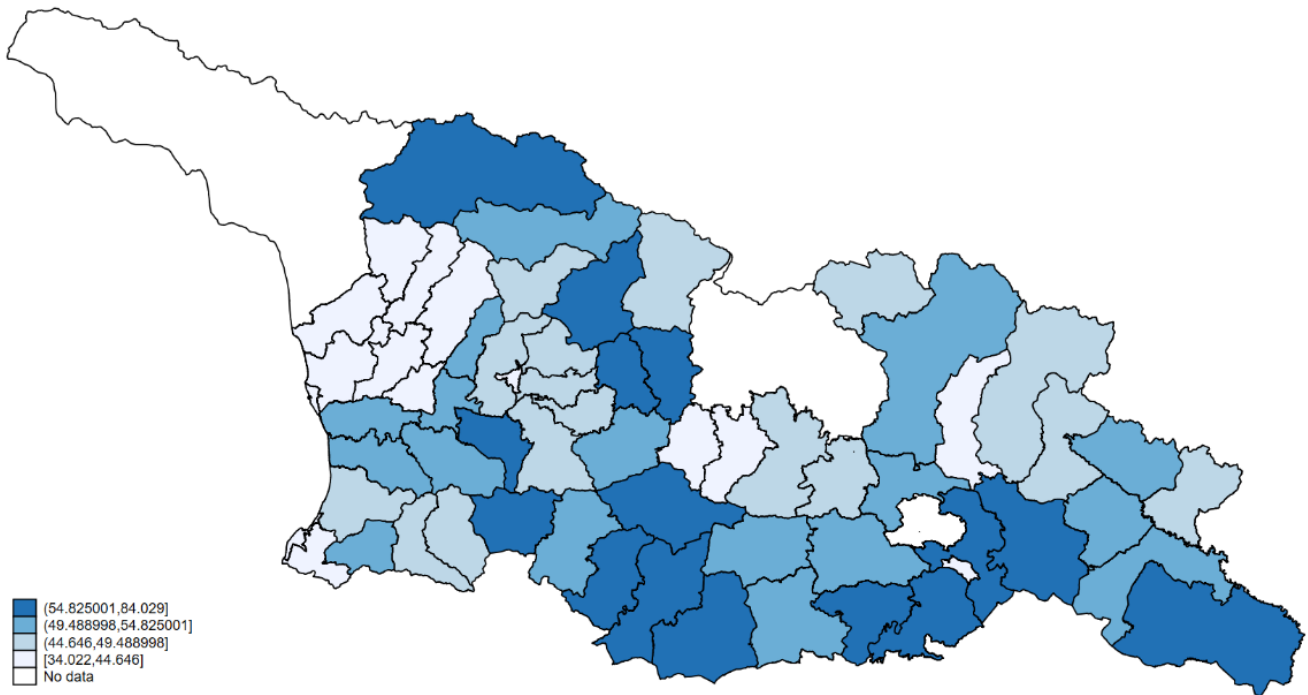
*Table 16. 2021 Local elections regression outcomes results*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
<b>Dependent variable: Share of incumbent votes variable model</b>					
Size of the population receiving subsistence allowances per capita	-10.90 (12.09)	3.723 (10.24)	-4.618 (18.54)		-7.837 (15.00)
Subsistence allowance monetary transfers per capita	-0.160 (0.194)	0.0309 (0.157)	-0.0482 (0.221)		-0.135 (0.228)
<b>Dependent variable: Difference between the first and second-placed parties' variable model</b>					
Size of the population receiving subsistence allowances per capita	2.923 (22.46)	37.83*** (13.61)	31.53*** (11.38)		35.64** (14.13)
Subsistence allowance monetary transfers per capita	0.0150 (0.333)	0.480*** (0.171)	0.339** (0.136)		0.508** (0.251)

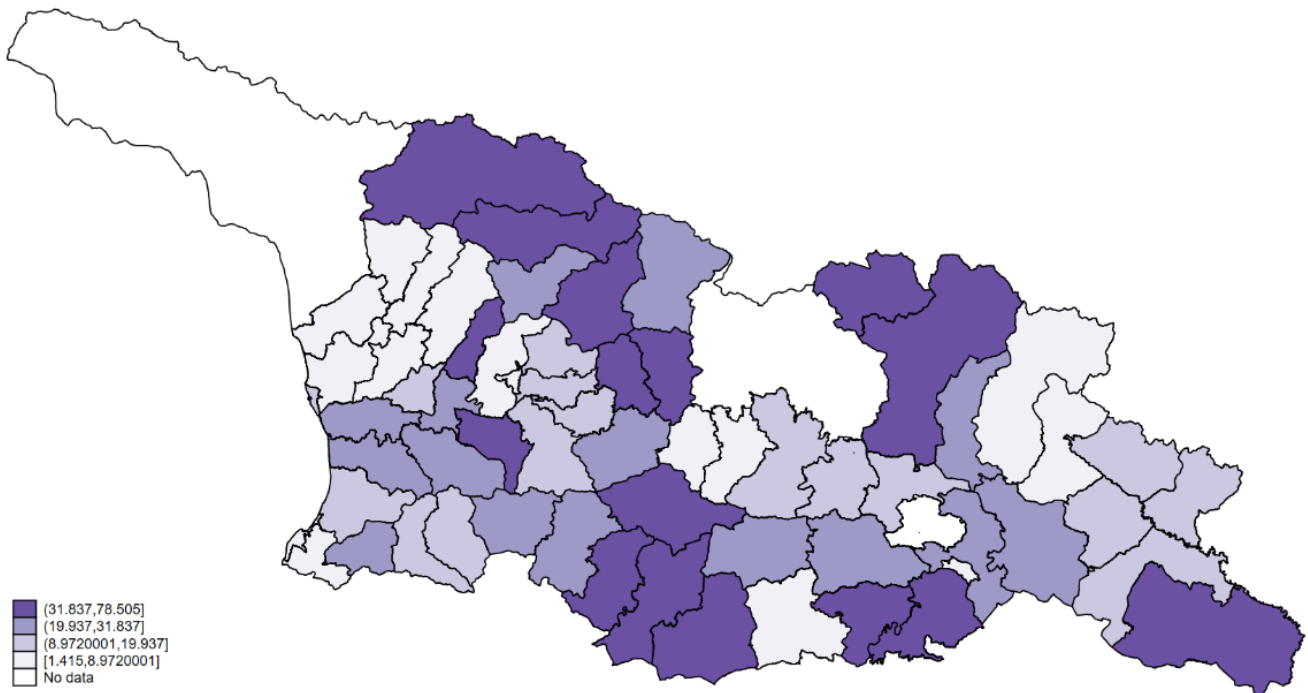
Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The regression models for local elections generally fail to show a connection between the size of the population receiving subsistence allowances per capita or subsistence allowance monetary transfers per capita and electoral performance. However, when it comes to the dimension of competition (the difference between the first and second-placed parties), the smaller gap between the incumbent and opposition is associated with higher spending and a share of the population receiving subsistence allowances (Table 16).

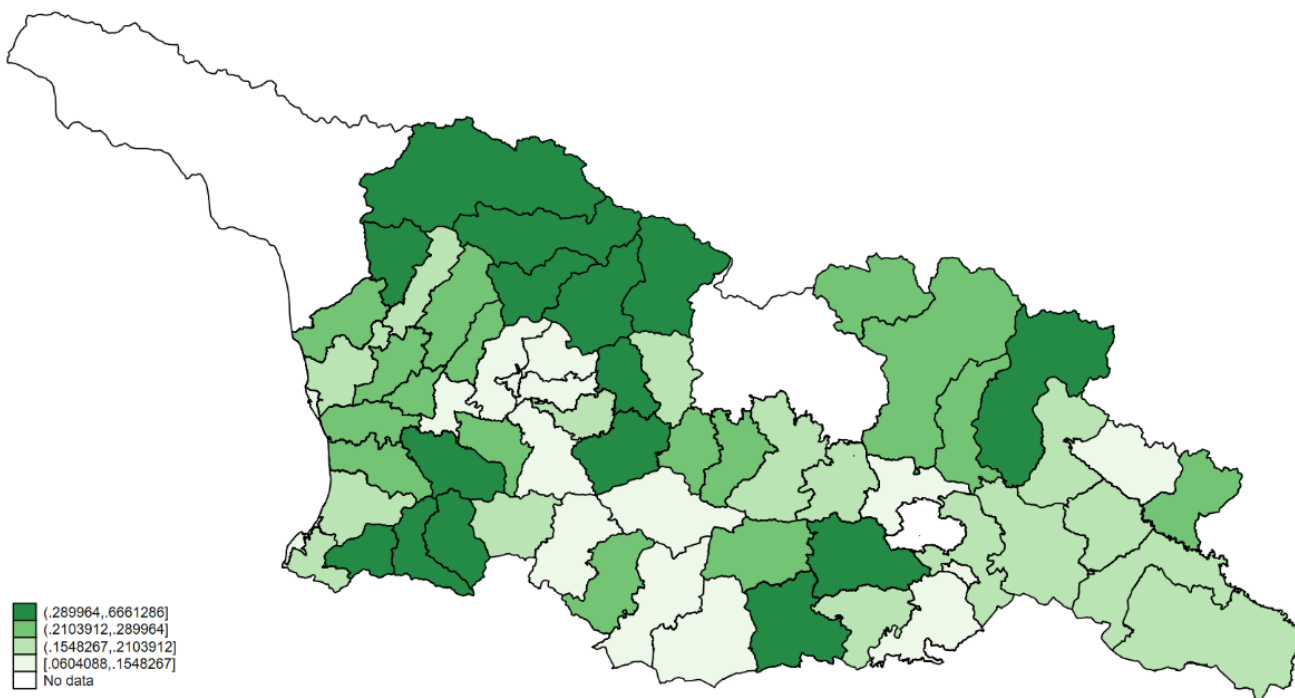
Figure 7. Distribution of core dependent and independent variables across municipalities, 2021 Local elections, Data for Tbilisi and occupied territories not presented



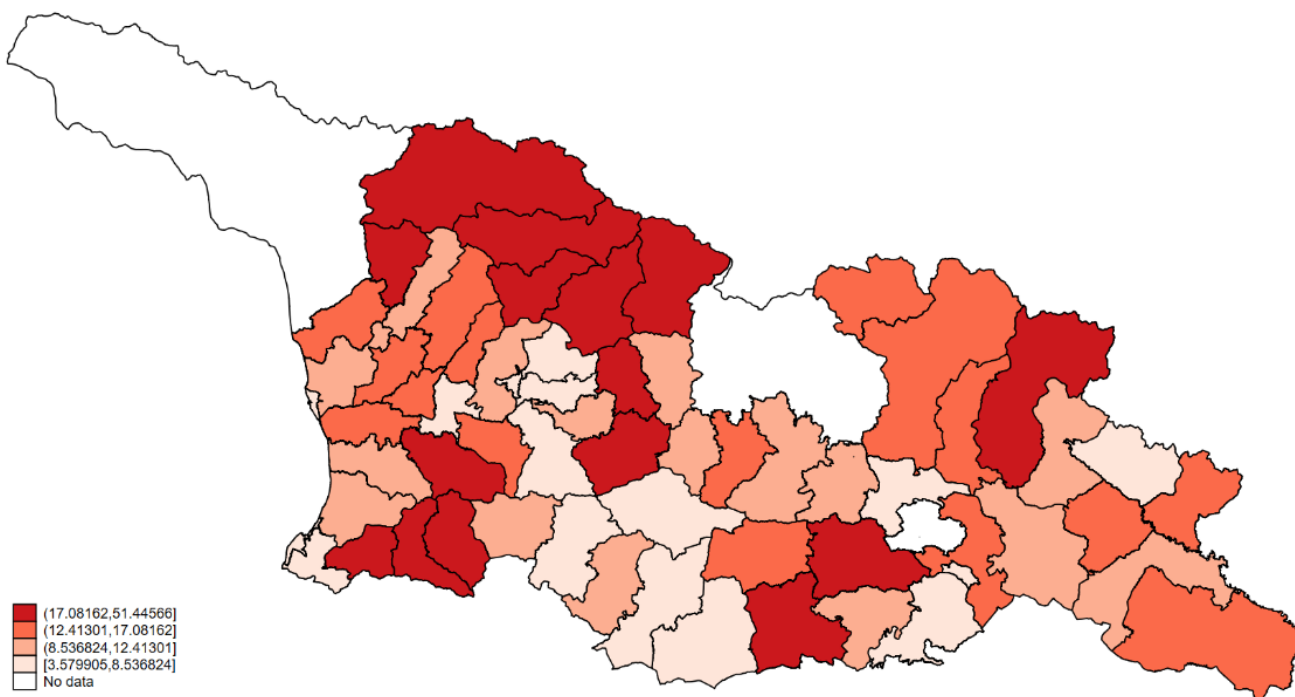
Share of incumbent votes



Difference between the first and second-placed parties'



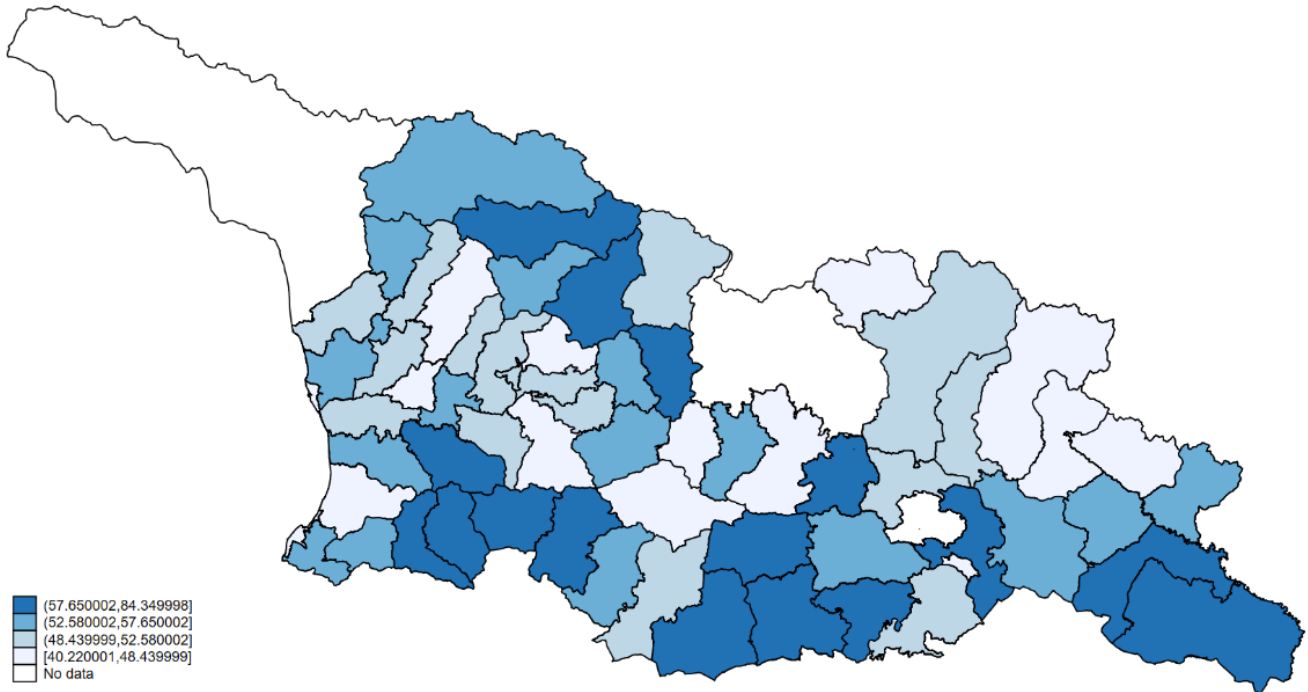
Size of the population receiving subsistence allowances per capita



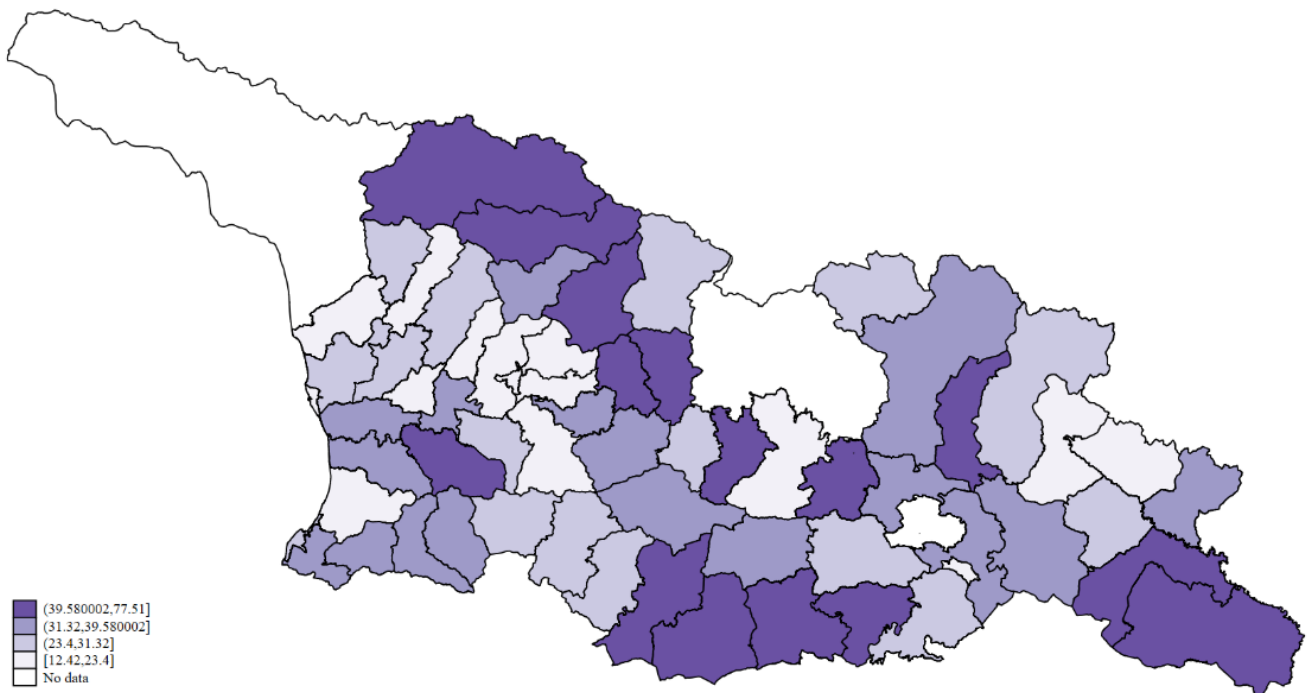
Subsistence allowance monetary transfers per capita

*The intensity of the color indicates the higher frequency of the variable. For example, the darker palette of blue on the “Share of Incumbent Votes” map indicates higher shares of voters received by the incumbent during the 2021 local elections.*

*Figure 8. Distribution of core dependent and independent variables across municipalities, 2014 Local elections, Data for Tbilisi and occupied territories not presented*

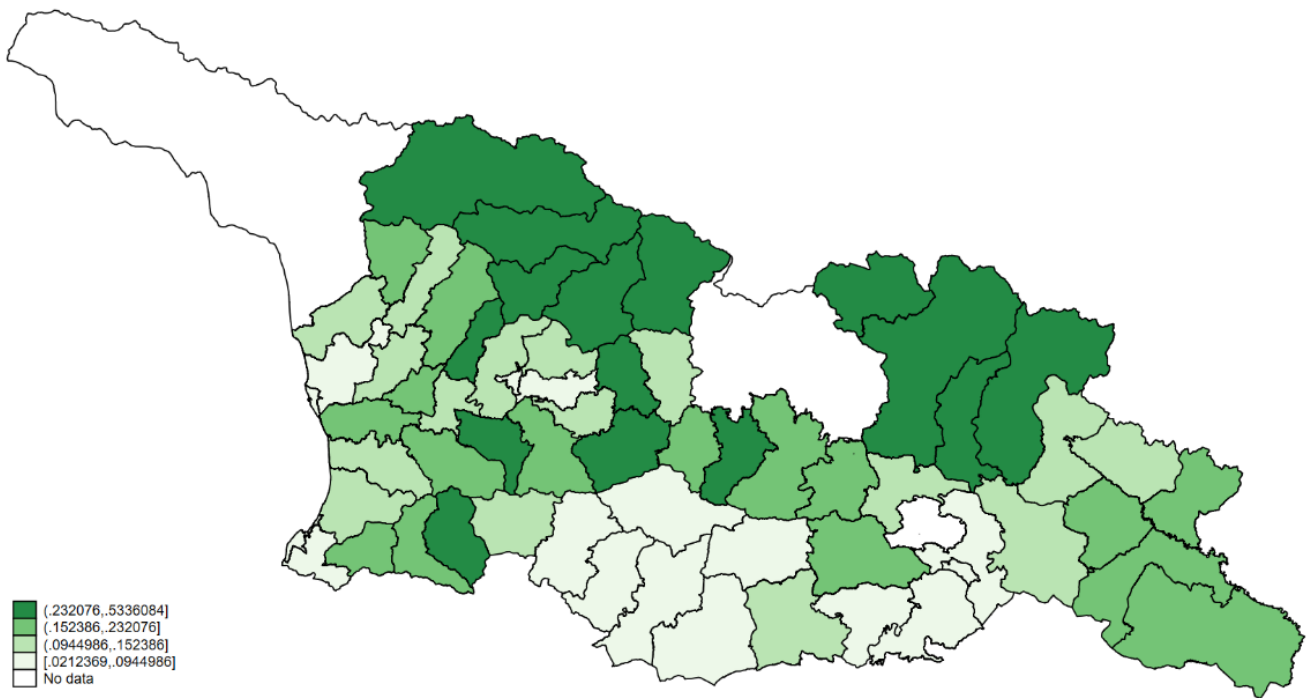


Share of incumbent votes

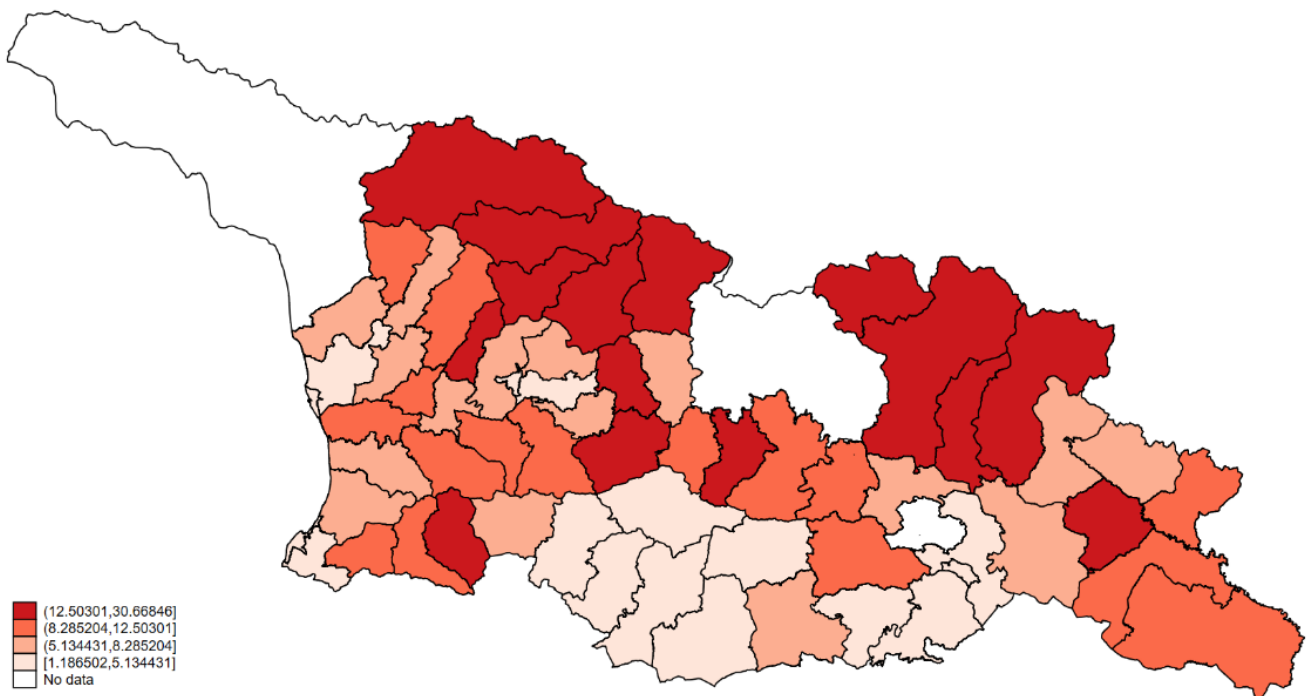


Difference between the first and second-placed parties'





Size of the population receiving subsistence allowances per capita



Subsistence allowance monetary transfers per capita

*The intensity of the color indicates the higher frequency of the variable. For example, the darker palette of blue on the “Share of Incumbent Votes” map indicates higher shares of voters received by the incumbent during the 2014 local elections.*

Though, when analyzing the mean values of subsistence allowance monetary transfers per capita or the size of the population receiving subsistence allowances, different levels of political rivalry or the ease of winning elections usually do not show statistically significant differences (Tables 17 and 18).

**Table 17. Mean figures Subsistence allowance monetary transfers per capita and Size of the population receiving subsistence allowances per capita during the 2021 Local elections**

	incumbent > 50%	incumbent < 50%	Std. Err.	Std. Dev.	T-Test P-value
Subsistence allowance monetary transfers per capita (€)	14.21	13.98	1.64	8.97	0.91
	(n=30)	(n=33)	1.34	7.69	
Size of the population receiving subsistence allowances per capita (persons)	0.24	0.23	0.02	0.13	0.95
	(n=30)	(n=33)	0.02	0.12	
Percentage share of subsistence allowance recipients with registered individuals	55.2%	53.8%	2.47	13.55	0.66
	(n=30)	(n=33)	1.97	11.30	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 18. Mean figures Subsistence allowance monetary transfers per capita and Size of the population receiving subsistence allowances per capita during the 2021 Local elections. Disaggregated results show varying levels of differences between the first and second-best parties.**

	Difference < 10%	Difference bet. 10%-20%	Difference bet. 20%- 30%	Difference > 30%	Std. Dev. (total)	ANOVA P-value
Subsistence allowance monetary transfers per capita (€)	12.72	10.62	15.08	17.31	8.26	0.09*
	(n=17)	(n=15)	(n=11)	(n=20)		
Size of the population receiving subsistence allowances per capita (persons)	0.21	0.19	0.26	0.28	.12	0.10
	(n=17)	(n=15)	(n=11)	(n=20)		
Percentage share of subsistence allowance recipients with registered individuals	55.1%	48.0%	56.4%	57.8%	12.34	0.11
	(n=17)	(n=15)	(n=11)	(n=20)		

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

While the 2017 municipal elections failed to show any statistically significant findings, the 2014 elections suggest that political competition to a certain degree could be associated with different levels of social spending (Table 20). Specifically, in municipalities where the competition was low (the difference between the first and second places is high, more than a 30% gap), more monetary transfers were made on average. Additionally, the share of recipients was also higher in the areas where incumbent received higher votes on average compared to other areas (Table 20). However, statistical tests do not return statistically significant observations.

**Table 19. Mean figures Subsistence allowance monetary transfers per capita and Size of the population receiving subsistence allowances per capita during the 2014 Local elections**

	incumbent > 50%	incumbent < 50%	Std. Err.	Std. Dev.	T-Test P-value
Subsistence allowance monetary transfers per capita (€)	10.12	9.63	1.11	7.02	0.78
	(n=41)	(n=22)	1.31	6.16	
Size of the population receiving subsistence allowances per capita (persons)	0.19	0.18	0.20	0.13	0.78
	(n=41)	(n=22)	0.02	0.11	
Percentage share of subsistence allowance recipients with registered individuals	28.3%	29.3%	2.19	14.00	0.78
	(n=41)	(n=22)	2.53	11.87	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 20. Mean figures Subsistence allowance monetary transfers per capita and Size of the population receiving subsistence allowances per capita during the 2014 Local elections. Disaggregated results show varying levels of differences between the first and second-best parties.**

	Difference < 10% <sup>75</sup>	Difference bet. 10%-20%	Difference bet. 20%- 30%	Difference > 30%	Std. Dev. (total)	ANOVA P-value
Subsistence allowance monetary transfers per capita (€)	NA	8.72	7.77	11.28	6.69	0.17
	NA	(n=11)	(n=16)	(n=36)		
Size of the population receiving subsistence allowances per capita (persons)	NA	0.16	0.14	0.20	0.11	0.17
	NA	(n=11)	(n=16)	(n=36)		
Percentage share of subsistence allowance recipients with registered individuals	NA	27.47	25.41	30.45	13.21	0.42
	NA	(n=11)	(n=16)	(n=36)		

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

To summarize, compared to parliamentary elections, municipal elections show less connection between the incumbent’s performance and social spending. However, it is evident that the election’s significance and the level of contest (e.g., in 2014 and 2021), could play some role. In some cases, areas considered “battleground” districts could experience higher levels of social spending and slightly higher shares of subsistence allowance beneficiaries. At the same time, clearly, pro-incumbent areas also can reserve more resources (e.g. 2014). However, this relationship might not be universal and not equally widespread across all electoral districts.

75 Not relevant, only one case in this group.

## Conclusions

The data examined in this report highlights several notable trends related to subsistence allowance recipients and electoral cycles. Across the 2012, 2016, and 2020 parliamentary elections, a relative increase in the percentage of subsistence allowance recipients was observed during election years compared to the preceding three-year averages. This increase was particularly notable in the 2016 and 2020 elections, suggesting a possible link between electoral cycles and social spending. The impact of COVID-19 in 2020 likely contributed to these trends, reflecting the broader economic conditions and social policies in place during these periods.

When analyzing the pre-election and electoral periods, it becomes evident that the percentage of subsistence allowance recipients tends to be higher during the pre-election period. This trend is consistent across the most recent parliamentary elections, indicating that the incumbent may increase social spending to garner voter support. The local elections show more varied outcomes, with significant increases in subsistence allowance recipients during the highly contested 2021 elections, potentially influenced by COVID-19 social spending.

For all parliamentary elections data, most regression models show no significant link between incumbent vote share and subsistence allowance recipients, except in robust regression models which indicate an increase in votes with more recipients and monetary transfers. Similar weak connections were noted in the 2016 elections. When comparing the mean figures of subsistence allowance monetary transfers per capita and the number of recipients, outside the regression models, the general trend suggests that in 2020 and 2016 districts where the incumbent was successful were getting more resources. Conversely, in 2012, higher social spending and more beneficiaries were observed in districts where incumbents faced more competition or received fewer votes. Important to note that in 2012 incumbent lost, while in 2016 and 2020 incumbent retained the power. Thus, it can be hypothesized, that the type of elections, whether the incumbent secures the victory or not, could also have some say about the way social spending is distributed.

Municipal elections show less correlation between the incumbent's performance and social spending compared to parliamentary elections. However, in certain cases, the significance of the election and the level of competition or its absence (e.g., in 2014 and 2021) can lead to higher levels of social spending and slightly higher shares of subsistence allowance beneficiaries in "battleground" districts. However, these observations are isolated, and no significant trend can be observed.

While summarizing the general observation that districts where incumbents perform better usually receive more funds, it is important to exercise caution and consider significant caveats. Although the regression models do not show a strong statistically significant link between social spending and electoral performance, higher shares of incumbents' votes are consistently associated with significant socio-geographic features of Georgia, such as the ethnic composition of electoral districts, the share of the rural population, and altitude.<sup>76</sup> A nearly universal trend across all elections, confirmed by regression models, suggests that a high share of the non-Georgian ethnic population, low levels of urbanization, and being in mountainous areas are linked to higher votes for incumbents and lower political competition, indicating that incumbents win more easily in these areas. Important to note that municipalities with such features are usually with the most socially vulnerable population and it is logical that they receive such funds. Another important factor revealed by this analysis suggests that ethnic minority areas, which typically vote for the incumbent party, receive less social assistance on average, both in terms of monetary transfers and the number of individuals affected. Therefore, this factor also mitigates or minimizes the impact of social funding on a national level.

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<sup>76</sup> These findings, mostly resonate and repeat what was already suggested by Sichinava (2020) in the paper "Cleavages, Electoral Geography, and the Territorialization of Political Parties in the Republic of Georgia".

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## Appendix

### 2020 Parliamentary Elections Regression Models

Table 21. Share of incumbent votes variable model, 2020 parliamentary elections

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Size of the population receiving subsistence allowances per capita	-6.359	14.64	48.10***		4.066
	(15.76)	(10.45)	(12.06)		(9.985)
Share of ethnic Georgian	-1.803	-12.83	-37.30***		-0.235
	(8.742)	(9.960)	(4.094)		(10.69)
Share of Urban population	-12.37*	-6.933	-4.468		-5.898
	(6.618)	(5.837)	(6.956)		(10.40)
Share of population with higher education	-5.696	34.53*	60.76***		24.53
	(39.79)	(20.00)	(16.22)		(29.50)
Share of orthodox	5.845	6.235*	5.392**		1.184
	(4.571)	(3.620)	(2.443)		(7.083)
Median altitude	0.00705***	0.00587**	-0.00443		0.00955***
	(0.00229)	(0.00279)	(0.00271)		(0.00217)
Investments	0.0118	-0.00162	-0.0220***		-0.000453
	(0.0166)	(0.0114)	(0.00781)		(0.0185)
Medical staff per capita	0.149	-0.276	-0.431		-0.306
	(0.349)	(0.207)	(0.269)		(0.352)
Constant	49.56***	51.40***	70.96***	5.775***	45.56***
	(4.785)	(7.072)	(3.732)	(1.057)	(4.970)
Observations	62	62	62	62	62
R-squared	0.261				0.217

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 22. Share of incumbent votes variable model, 2020 parliamentary elections

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	-0.113	0.189	0.779***		0.0636
	(0.245)	(0.145)	(0.121)		(0.144)
Share of ethnic Georgian	-2.060	-10.91	-3.519*		0.260
	(7.782)	(9.407)	(1.790)		(9.802)
Share of Urban population	-12.48*	-7.178	-7.036*		-5.830
	(6.615)	(6.025)	(4.143)		(10.61)
Share of population with higher education	-6.441	31.29	63.92**		24.65
	(39.26)	(19.04)	(24.19)		(29.53)
Share of orthodox	6.327	5.470	0.532		0.656
	(4.851)	(4.111)	(1.898)		(7.023)
Median altitude	0.00718***	0.00610**	-0.00799***		0.00954***
	(0.00234)	(0.00279)	(0.00247)		(0.00221)
Investments	0.0128	-0.00234	-0.0167**		-0.000753
	(0.0175)	(0.0117)	(0.00702)		(0.0190)
Medical staff per capita	0.159	-0.261	-0.496**		-0.314
	(0.351)	(0.212)	(0.216)		(0.364)
Constant	49.35***	51.42***	45.98***	5.561***	45.72***
	(4.918)	(7.529)	(1.589)	(1.474)	(5.051)
Observations	62	62	62	62	62
R-squared	0.262				0.215

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 23. Difference between the first and second-placed parties' variable model, 2020 parliamentary elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Size of the population receiving subsistence allowances per capita	-0.440	37.99	28.95**		14.84
	(24.97)	(52.77)	(12.62)		(21.37)
Share of ethnic Georgian	-6.002	-32.75	-40.34**		2.271
	(13.84)	(71.98)	(18.13)		(18.80)
Share of Urban population	-16.53	-11.11	-27.66***		-19.14
	(11.59)	(12.06)	(7.851)		(14.90)
Share of population with higher education	11.16	94.29	72.72***		-14.71
	(74.92)	(81.28)	(25.83)		(114.8)
Share of orthodox	12.83	13.30*	14.90		13.71
	(7.940)	(6.782)	(17.53)		(10.59)
Median altitude	0.0151***	0.0115	0.0141***		0.0152***
	(0.00381)	(0.0111)	(0.00325)		(0.00481)
Investments	0.00324	-0.0232	-0.00835		0.0119
	(0.0258)	(0.0725)	(0.0154)		(0.0339)
Medical staff per capita	0.289	-0.277	0.443*		0.531
	(0.589)	(0.535)	(0.249)		(0.607)
Constant	13.30*	22.36	29.36***	10.39***	1.930
	(7.689)	(57.46)	(4.670)	(2.503)	(10.13)
Observations	62	62	62	62	62
R-squared	0.332				0.294

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 24. Difference between the first and second-placed parties' variable model, 2020 parliamentary elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	-0.0608	0.442	0.377		0.208
	(0.389)	(0.878)	(0.352)		(0.374)
Share of ethnic Georgian	-5.387	-23.32	-39.52*		3.547
	(12.57)	(86.35)	(23.16)		(15.88)
Share of Urban population	-16.98	-12.18	-28.40**		-19.38
	(11.67)	(11.53)	(11.34)		(20.33)
Share of population with higher education	7.320	80.63	66.15**		-30.01
	(74.41)	(89.33)	(32.25)		(172.1)
Share of orthodox	13.16	11.24	16.04		14.69
	(8.486)	(7.590)	(36.17)		(9.334)
Median altitude	0.0155***	0.0124	0.0144**		0.0145*
	(0.00389)	(0.00907)	(0.00577)		(0.00857)
Investments	0.00449	-0.0197	-0.00835		0.0136
	(0.0274)	(0.0791)	(0.0374)		(0.0385)
Medical staff per capita	0.319	-0.200	0.489*		0.592
	(0.595)	(0.513)	(0.283)		(0.652)
Constant	13.31*	19.09	29.68***	10.56***	2.987
	(7.710)	(69.88)	(8.522)	(2.583)	(14.20)
Observations	62	62	62	62	62
R-squared	0.333				0.282

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 2016 Parliamentary Elections Regression Models

Table 25. Share of incumbent votes variable model, 2016 parliamentary elections

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Size of the population receiving subsistence allowances per capita	1.725 (19.13)	18.41* (9.758)	2.720 (17.40)		15.31 (15.53)
Share of ethnic Georgian	-5.459 (6.267)	-11.22** (4.342)	-11.32** (4.812)		-11.86** (5.609)
Share of Urban population	-16.46** (7.787)	-12.35** (5.853)	-15.89 (10.79)		-12.02 (8.037)
Share of population with higher education	-1.643 (40.66)	28.73 (19.82)	8.856 (17.64)		30.47 (33.88)
Share of orthodox	6.288 (4.245)	3.360 (3.176)	7.757*** (2.388)		7.123 (4.295)
Median altitude	0.00570** (0.00254)	0.00415* (0.00215)	0.0081*** (0.00245)		0.00633** (0.00268)
Investments	0.0226 (0.0157)	0.0245* (0.0133)	0.0211 (0.0128)		0.0151 (0.0204)
Medical staff per capita	0.542 (0.492)	0.176 (0.282)	0.604 (0.475)		0.146 (0.415)
Constant	47.44*** (3.203)	48.80*** (3.179)	45.55*** (3.122)	5.469*** (1.393)	45.16*** (3.679)
Observations	62	62	62	62	62
R-squared	0.347				0.312

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1



Table 26. Share of incumbent votes variable model, 2016 parliamentary elections

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	-0.0249	0.315*	0.0945		0.256
	(0.373)	(0.169)	(0.311)		(0.258)
Share of ethnic Georgian	-4.807	-10.23**	-11.78**		-12.89**
	(5.803)	(4.336)	(4.497)		(5.325)
Share of Urban population	-16.95**	-12.33**	-14.81		-12.04
	(8.068)	(5.838)	(10.27)		(7.257)
Share of population with higher education	-3.410	27.42	9.867		26.94
	(40.83)	(19.80)	(15.78)		(29.36)
Share of orthodox	6.537	2.894	7.414***		6.054
	(4.797)	(3.578)	(2.600)		(3.974)
Median altitude	0.00599**	0.00423*	0.00784***		0.00578**
	(0.00270)	(0.00215)	(0.00246)		(0.00264)
Investments	0.0220	0.0232*	0.0217		0.0218
	(0.0158)	(0.0130)	(0.0130)		(0.0173)
Medical staff per capita	0.577	0.166	0.544		0.257
	(0.523)	(0.287)	(0.461)		(0.372)
Constant	47.21***	49.11***	45.96***	5.449***	47.31***
	(3.513)	(3.297)	(3.664)	(1.376)	(4.606)
Observations	62	62	62	62	62
R-squared	0.347				0.302

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 27. Difference between the first and second-placed parties' variable model, 2016 parliamentary elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Size of the population receiving subsistence allowances per capita	30.12 (36.29)	60.53** (25.35)	1.034 (21.26)		62.85* (33.28)
Share of ethnic Georgian	-6.098 (12.82)	-16.32 (10.70)	20.41* (10.18)		-21.81 (23.51)
Share of Urban population	-19.38 (13.16)	-9.147 (9.684)	3.822 (20.28)		-20.83 (13.00)
Share of population with higher education	34.68 (76.87)	83.69** (40.80)	-112.2 (77.98)		111.2* (61.16)
Share of orthodox	10.62 (7.716)	5.406 (5.494)	-0.200 (3.449)		3.465 (11.08)
Median altitude	0.0117** (0.00527)	0.00888* (0.00518)	0.0209*** (0.00385)		0.00817 (0.00729)
Investments	0.0415 (0.0279)	0.0467* (0.0264)	0.0461* (0.0271)		0.0379 (0.0394)
Medical staff per capita	0.303 (0.869)	-0.420 (0.510)	0.628 (0.724)		-0.111 (0.711)
Constant	5.883 (6.693)	8.018 (7.378)	3.744 (5.171)	10.84*** (2.472)	12.89 (14.24)
Observations	62	62	62	62	62
R-squared	0.355				0.315

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 28. Difference between the first and second-placed parties' variable model, 2016 parliamentary elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	0.425	1.060**	0.421		1.109*
	(0.703)	(0.420)	(0.447)		(0.614)
Share of ethnic Georgian	-3.445	-13.16	2.914		-19.61
	(11.86)	(10.24)	(14.56)		(21.39)
Share of Urban population	-20.41	-8.978	-19.91		-21.26
	(13.74)	(9.216)	(16.69)		(14.56)
Share of population with higher education	29.36	80.38**	48.70		110.8*
	(78.02)	(39.83)	(96.10)		(64.43)
Share of orthodox	10.33	3.518	-2.713		3.505
	(8.805)	(6.317)	(4.562)		(11.96)
Median altitude	0.0122**	0.00897*	0.0166***		0.00906
	(0.00551)	(0.00489)	(0.00573)		(0.00783)
Investments	0.0389	0.0422*	0.0233		0.0291
	(0.0280)	(0.0245)	(0.0298)		(0.0421)
Medical staff per capita	0.357	-0.467	0.566		-0.152
	(0.931)	(0.504)	(0.553)		(0.786)
Constant	5.990	9.290	2.899	11.16***	12.80
	(7.252)	(7.670)	(9.192)	(2.019)	(14.75)
Observations	62	62	62	62	62
R-squared	0.349				0.307

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 2012 Parliamentary Elections Regression Models

Table 29. Share of incumbent votes variable model, 2012 parliamentary elections

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Receivers of social package per capita	0.231** (0.113)	0.291** (0.119)	0.147 (0.0964)		0.231* (0.134)
Size of the population receiving subsistence allowances per capita	-29.21 (25.94)	-44.96* (26.82)	55.08*** (19.87)		-22.55 (25.95)
Share of ethnic Georgian	-30.67*** (7.528)	-28.66*** (6.426)	-49.81*** (7.809)		-34.29*** (9.285)
Share of Urban population	-10.62 (10.68)	-17.50* (9.185)	-24.69** (9.518)		-10.15 (12.54)
Share of population with higher education	-63.01 (44.99)	-83.89** (31.96)	203.3*** (61.52)		-101.9** (39.54)
Share of orthodox	4.197 (8.401)	8.374 (8.564)	-7.693 (4.815)		6.722 (8.618)
Median altitude	0.00174 (0.00375)	0.00263 (0.00457)	-0.00275 (0.00217)		4.67e-05 (0.00438)
Medical staff per capita	0.264 (0.903)	0.815 (0.623)	-2.172*** (0.668)		0.400 (0.718)
Constant	73.33*** (7.358)	70.31*** (8.642)	71.81*** (5.006)	9.928*** (2.209)	80.31*** (8.640)
Observations	62	62	62	62	62
R-squared	0.456				0.446

Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 30. Share of incumbent votes variable model, 2012 parliamentary elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Receivers of social package per capita	0.230**	0.290**	0.0974		0.226*
	(0.113)	(0.119)	(0.121)		(0.131)
Subsistence allowance monetary transfers per capita	-1.068	-1.670*	1.283		-0.786
	(0.960)	(0.977)	(0.870)		(0.992)
Share of ethnic Georgian	-30.58***	-28.49***	-39.92***		-33.80***
	(7.552)	(6.458)	(10.45)		(9.045)
Share of Urban population	-10.50	-17.49*	-16.71		-9.989
	(10.69)	(9.256)	(12.26)		(12.47)
Share of population with higher education	-63.37	-84.62***	112.0*		-101.8***
	(45.06)	(31.65)	(62.98)		(38.08)
Share of orthodox	4.117	8.330	-11.18		5.997
	(8.380)	(8.443)	(9.690)		(8.285)
Median altitude	0.00176	0.00271	-0.000626		-0.000116
	(0.00376)	(0.00451)	(0.00298)		(0.00429)
Medical staff per capita	0.264	0.835	-0.968		0.382
	(0.908)	(0.607)	(1.046)		(0.747)
Constant	73.31***	70.17***	72.89***	10.01***	80.73***
	(7.379)	(8.618)	(4.194)	(1.963)	(8.533)
Observations	62	62	62	62	62
R-squared	0.456				0.446

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 31. Difference between the first and second-placed parties' variable model, 2012 parliamentary elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Receivers of social package per capita	0.220*	0.254**	0.402***		0.297
	(0.123)	(0.112)	(0.0874)		(0.217)
Size of the population receiving subsistence allowances per capita	-74.62**	-71.81***	-114.5***		-89.60***
	(28.65)	(21.90)	(26.58)		(29.57)
Share of ethnic Georgian	-12.77	-18.80	-23.78**		-17.73
	(12.00)	(11.60)	(10.00)		(15.31)
Share of Urban population	6.323	12.85	-6.554		2.563
	(12.86)	(9.081)	(14.09)		(12.36)
Share of population with higher education	-94.01	-110.4**	-47.53		-59.46
	(60.13)	(41.47)	(29.24)		(70.07)
Share of orthodox	0.920	-5.494	-10.22		-0.712
	(11.69)	(12.65)	(6.478)		(14.62)
Median altitude	0.0135***	0.00733	0.00460		0.0120
	(0.00487)	(0.00584)	(0.00586)		(0.00849)
Medical staff per capita	1.258	0.974	1.971***		0.908
	(1.216)	(0.662)	(0.615)		(1.229)
Constant	30.29**	41.80***	42.44***	11.66***	32.78*
	(11.97)	(12.47)	(10.58)	(2.181)	(17.02)
Observations	62	62	62	62	62
R-squared	0.418				0.401

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1



*Table 32. Difference between the first and second-placed parties' variable model, 2012 parliamentary elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Receivers of social package per capita	0.213*	0.253**	0.403***		0.307
	(0.124)	(0.113)	(0.0845)		(0.218)
Subsistence allowance monetary transfers per capita	-2.681**	-2.651***	-4.275***		-3.428***
	(1.085)	(0.805)	(0.976)		(1.097)
Share of ethnic Georgian	-12.64	-18.39	-23.33**		-17.83
	(12.07)	(11.52)	(10.08)		(15.25)
Share of Urban population	6.897	12.88	-6.885		1.850
	(12.95)	(9.192)	(13.25)		(12.38)
Share of population with higher education	-95.00	-111.4**	-46.35		-57.74
	(60.30)	(42.57)	(28.65)		(69.88)
Share of orthodox	0.531	-5.819	-10.33		-0.438
	(11.67)	(12.71)	(6.630)		(14.53)
Median altitude	0.0134***	0.00737	0.00488		0.0125
	(0.00488)	(0.00568)	(0.00607)		(0.00845)
Medical staff per capita	1.248	0.995	2.001***		0.964
	(1.226)	(0.660)	(0.611)		(1.227)
Constant	30.50**	41.74***	41.86***	11.56***	31.94*
	(11.98)	(12.28)	(11.13)	(2.205)	(16.97)
Observations	62	62	62	62	62
R-squared	0.417				0.399

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 2021 Local Elections Regression Models

Table 33. Share of incumbent votes variable model, 2021 local elections

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Size of the population receiving subsistence allowances per capita	-10.90	3.723	-4.618		-7.837
	(12.09)	(10.24)	(18.54)		(15.00)
Share of ethnic Georgian	-16.22**	-27.72***	-30.12***		-27.55***
	(7.562)	(8.569)	(6.275)		(7.368)
Share of Urban population	-15.79**	-12.08**	-17.94		-10.87
	(6.887)	(5.524)	(12.81)		(7.110)
Share of population with higher education	-4.486	40.20	64.30**		39.70
	(60.71)	(50.75)	(29.23)		(39.52)
Share of orthodox	5.120	3.604	8.519**		6.420
	(4.472)	(3.940)	(3.779)		(5.149)
Median altitude	0.00604**	0.00464	0.0101***		0.00620*
	(0.00260)	(0.00305)	(0.00291)		(0.00357)
Investments	0.0186	-0.00249	0.00745		-0.0104
	(0.0259)	(0.0196)	(0.0177)		(0.0265)
Medical staff per capita	0.0432	-0.319	-0.173		-0.269
	(0.412)	(0.283)	(0.387)		(0.315)
Constant	63.59***	67.67***	61.13***	6.857***	66.28***
	(5.300)	(4.698)	(2.893)	(1.487)	(6.206)
Observations	62	62	62	62	62
R-squared	0.447				0.415

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 34. Share of incumbent votes variable model, 2021 local elections

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	-0.160	0.0309	-0.0482		-0.135
	(0.194)	(0.157)	(0.221)		(0.228)
Share of ethnic Georgian	-17.02**	-26.88***	-30.55***		-26.73***
	(6.933)	(7.885)	(5.113)		(6.955)
Share of Urban population	-15.79**	-12.25**	-18.24		-11.31
	(6.929)	(5.580)	(13.20)		(7.064)
Share of population with higher education	-4.640	38.92	65.92**		42.33
	(60.47)	(51.28)	(25.65)		(39.62)
Share of orthodox	5.889	3.391	8.532*		5.619
	(4.621)	(3.789)	(4.631)		(5.092)
Median altitude	0.00610**	0.00478	0.00986***		0.00681*
	(0.00263)	(0.00313)	(0.00253)		(0.00344)
Investments	0.0199	-0.00228	0.00672		-0.00960
	(0.0264)	(0.0195)	(0.0169)		(0.0264)
Medical staff per capita	0.0571	-0.315	-0.172		-0.258
	(0.417)	(0.282)	(0.437)		(0.313)
Constant	63.22***	67.63***	61.25***	6.864***	65.58***
	(5.455)	(4.801)	(3.082)	(1.429)	(6.242)
Observations	62	62	62	62	62
R-squared	0.448				0.418

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 35. Difference between the first and second-placed parties' variable model, 2021 local elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Size of the population receiving subsistence allowances per capita	2.923	37.83***	31.53***		35.64**
	(22.46)	(13.61)	(11.38)		(14.13)
Share of ethnic Georgian	-24.63	-50.42***	-55.18***		-48.07***
	(14.97)	(15.29)	(14.25)		(12.67)
Share of Urban population	-18.34	-9.770	-28.12***		-23.23**
	(11.29)	(9.248)	(7.042)		(11.12)
Share of population with higher education	11.73	86.23**	96.40***		91.76*
	(80.15)	(39.69)	(32.08)		(50.30)
Share of orthodox	10.43	11.21**	15.12		12.26**
	(8.169)	(5.394)	(15.03)		(5.970)
Median altitude	0.0132***	0.00985***	0.0160***		0.0100**
	(0.00423)	(0.00365)	(0.00441)		(0.00408)
Investments	0.00115	-0.0352	-0.0153		-0.0174
	(0.0446)	(0.0299)	(0.0186)		(0.0408)
Medical staff per capita	0.121	-0.573	0.228		-0.0330
	(0.653)	(0.410)	(0.365)		(0.559)
Constant	28.40***	36.28***	32.23***	11.59***	31.30***
	(9.076)	(9.613)	(5.390)	(2.604)	(9.749)
Observations	62	62	62	62	62
R-squared	0.404				0.376

Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 36. Difference between the first and second-placed parties' variable model, 2021 local elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	0.0150	0.480***	0.339**		0.508**
	(0.333)	(0.171)	(0.136)		(0.251)
Share of ethnic Georgian	-24.06*	-45.23***	-54.65***		-44.90***
	(13.75)	(15.13)	(10.94)		(13.65)
Share of Urban population	-18.60	-10.15	-27.62***		-22.81*
	(11.37)	(8.884)	(7.467)		(12.95)
Share of population with higher education	10.06	81.93**	84.55**		91.06
	(80.84)	(40.29)	(34.92)		(61.74)
Share of orthodox	10.37	8.573	18.33		10.19
	(8.486)	(5.963)	(13.73)		(6.573)
Median altitude	0.0133***	0.0101**	0.0181***		0.0117*
	(0.00430)	(0.00384)	(0.00486)		(0.00691)
Investments	0.00142	-0.0370	-0.0109		-0.0176
	(0.0457)	(0.0303)	(0.0194)		(0.0462)
Medical staff per capita	0.127	-0.592	0.254		-0.0593
	(0.669)	(0.398)	(0.470)		(0.639)
Constant	28.58***	36.59***	31.09***	11.89***	30.67***
	(9.169)	(10.13)	(5.419)	(2.775)	(10.69)
Observations	62	62	62	62	62
R-squared	0.404				0.377

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 2017 Local Elections Regression Models

*Table 37. Share of incumbent votes variable model, 2017 local elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Size of the population receiving subsistence allowances per capita	-0.885 (14.87)	10.23 (29.04)	30.58 (41.93)		6.986 (16.79)
Share of ethnic Georgian	-19.78*** (5.786)	-28.41 (36.65)	-40.40*** (6.594)		-25.04** (11.03)
Share of Urban population	-12.69** (5.982)	-8.908 (6.128)	-10.27 (24.27)		-11.21 (7.536)
Share of population with higher education	-41.72 (31.59)	-18.56 (34.59)	-0.0166 (20.43)		-8.969 (28.26)
Share of orthodox	3.923 (3.523)	1.182 (8.304)	1.541 (7.424)		0.755 (4.222)
Median altitude	-0.000103 (0.00210)	-0.00131 (0.00809)	-0.00441 (0.00405)		0.00117 (0.00428)
Investments	0.0126* (0.00642)	0.00674 (0.0255)	-0.00145 (0.00581)		0.00595 (0.0124)
Medical staff per capita	0.475 (0.325)	0.199 (0.386)	0.342 (0.980)		0.306 (0.372)
Constant	76.96*** (4.052)	83.49** (35.71)	89.11*** (2.688)	4.832*** (0.831)	78.64*** (11.38)
Observations	62	62	62	62	62
R-squared	0.514				0.478

Robust standard errors in parentheses  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1



Table 38. Share of incumbent votes variable model, 2017 local elections

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	-0.0641	0.176	0.541		0.0975
	(0.281)	(0.550)	(0.883)		(0.278)
Share of ethnic Georgian	-19.41***	-27.96	-38.84***		-25.42**
	(5.389)	(34.77)	(5.714)		(11.49)
Share of Urban population	-13.09**	-8.977	-9.154		-11.97*
	(6.213)	(5.801)	(19.00)		(7.123)
Share of population with higher education	-43.48	-18.93	0.659		-8.000
	(31.90)	(35.71)	(35.28)		(26.42)
Share of orthodox	4.228	0.635	-0.562		2.226
	(3.989)	(9.917)	(12.36)		(5.316)
Median altitude	0.000135	-0.00137	-0.00484		0.000999
	(0.00220)	(0.00858)	(0.00639)		(0.00446)
Investments	0.0127*	0.00634	-0.00273		0.00632
	(0.00647)	(0.0266)	(0.00802)		(0.0118)
Medical staff per capita	0.505	0.192	0.250		0.300
	(0.349)	(0.337)	(0.921)		(0.347)
Constant	76.78***	84.04**	90.75***	4.854***	78.35***
	(4.193)	(36.16)	(5.728)	(0.836)	(11.48)
Observations	62	62	62	62	62
R-squared	0.515				0.481

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 39. Difference between the first and second-placed parties' variable model, 2017 local elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Size of the population receiving subsistence allowances per capita	17.58	24.70	43.86***		17.79
	(24.55)	(16.54)	(13.62)		(21.72)
Share of ethnic Georgian	-31.04***	-38.47**	-55.64***		-37.12**
	(9.141)	(16.63)	(9.743)		(17.15)
Share of Urban population	-20.14*	-12.16	-21.02***		-12.34
	(11.45)	(9.681)	(6.636)		(15.07)
Share of population with higher education	-22.70	-5.370	9.736		-31.55
	(47.33)	(29.01)	(23.85)		(96.06)
Share of orthodox	8.250	6.313	6.657		3.730
	(5.706)	(5.097)	(6.504)		(7.664)
Median altitude	0.000743	0.00186	-0.00168		0.00203
	(0.00376)	(0.00410)	(0.00281)		(0.00474)
Investments	0.0177	0.0102	-0.00447		0.00120
	(0.0127)	(0.0118)	(0.00595)		(0.0179)
Medical staff per capita	0.436	0.0404	0.606**		0.384
	(0.529)	(0.332)	(0.230)		(0.445)
Constant	60.09***	65.09***	76.73***	7.788***	69.32***
	(6.739)	(15.60)	(4.585)	(1.694)	(12.33)
Observations	62	62	62	62	62
R-squared	0.399				0.372

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 40. Difference between the first and second-placed parties' variable model, 2017 local elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	0.213	0.395	0.649**		0.306
	(0.464)	(0.261)	(0.262)		(0.370)
Share of ethnic Georgian	-29.29***	-36.66**	-49.87*		-35.08**
	(8.668)	(14.21)	(27.94)		(16.76)
Share of Urban population	-20.95*	-12.14	-21.57		-10.66
	(11.78)	(9.256)	(12.93)		(15.27)
Share of population with higher education	-27.31	-7.295	3.134		-32.23
	(48.89)	(29.32)	(51.40)		(97.42)
Share of orthodox	8.110	5.203	1.571		1.754
	(6.647)	(5.564)	(32.80)		(8.402)
Median altitude	0.00115	0.00195	-0.00106		0.00196
	(0.00392)	(0.00385)	(0.00517)		(0.00497)
Investments	0.0173	0.00984	-0.00520		0.000484
	(0.0125)	(0.0115)	(0.00706)		(0.0184)
Medical staff per capita	0.474	0.0172	0.601**		0.300
	(0.577)	(0.325)	(0.283)		(0.469)
Constant	60.40***	65.80***	79.23***	8.112***	69.98***
	(7.011)	(14.23)	(7.532)	(1.745)	(13.22)
Observations	62	62	62	62	62
R-squared	0.396				0.363

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 2014 Local Elections Regression Models

*Table 41. Share of incumbent votes variable model, 2014 local elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Size of the population receiving subsistence allowances per capita	-10.93	1.765	12.26		-2.135
	(15.01)	(12.76)	(7.913)		(17.84)
Share of ethnic Georgian	-3.471	-4.813	-15.90***		-1.739
	(5.300)	(9.631)	(3.549)		(12.22)
Share of Urban population	-14.57**	-9.923***	-12.76***		-11.08*
	(5.797)	(3.710)	(2.408)		(6.182)
Share of population with higher education	-63.13*	-57.97**	-43.67***		-41.84
	(37.36)	(21.75)	(8.148)		(34.66)
Share of orthodox	5.080	-0.556	-0.389		-0.102
	(3.976)	(2.288)	(2.379)		(4.081)
Median altitude	0.00271	0.000869	0.00187		0.00247
	(0.00210)	(0.00194)	(0.00208)		(0.00369)
Investments	-0.0140	-0.00235	-0.00787		-0.00456
	(0.00945)	(0.00819)	(0.00612)		(0.0138)
Medical staff per capita	0.804	0.638*	0.976***		0.568
	(0.557)	(0.320)	(0.281)		(0.441)
Constant	61.07***	63.20***	68.56***	5.614***	58.34***
	(4.390)	(9.143)	(4.038)	(1.067)	(13.45)
Observations	62	62	62	62	62
R-squared	0.311				0.290

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 42. Share of incumbent votes variable model, 2014 local elections

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	-0.181	0.0432	0.223*		0.0584
	(0.269)	(0.240)	(0.127)		(0.322)
Share of ethnic Georgian	-3.737	-4.937	-15.82***		-2.578
	(5.215)	(9.820)	(3.348)		(11.81)
Share of Urban population	-14.46**	-9.843**	-12.66***		-11.65*
	(5.789)	(3.732)	(2.404)		(5.963)
Share of population with higher education	-62.48*	-57.85**	-44.06***		-38.92
	(37.12)	(21.74)	(8.190)		(33.83)
Share of orthodox	5.031	-0.622	-0.480		-0.103
	(3.995)	(2.326)	(2.369)		(3.941)
Median altitude	0.00264	0.000808	0.00183		0.00142
	(0.00210)	(0.00197)	(0.00207)		(0.00364)
Investments	-0.0137	-0.00210	-0.00780		-0.00178
	(0.00936)	(0.00834)	(0.00611)		(0.0156)
Medical staff per capita	0.797	0.634*	0.971***		0.502
	(0.559)	(0.323)	(0.272)		(0.569)
Constant	61.10***	63.28***	68.66***	5.596***	59.06***
	(4.411)	(9.347)	(4.011)	(1.068)	(13.42)
Observations	62	62	62	62	62
R-squared	0.310				0.284

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 43. Difference between the first and second-placed parties' variable model, 2014 local elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Size of the population receiving subsistence allowances per capita	5.039	36.83	71.36***		31.38
	(27.96)	(33.01)	(13.35)		(29.98)
Share of ethnic Georgian	-7.219	-15.89	-32.30***		-15.11
	(9.615)	(18.35)	(8.901)		(17.11)
Share of Urban population	-13.90	-4.774	13.32		-11.60
	(10.36)	(8.397)	(9.201)		(13.96)
Share of population with higher education	-46.42	-30.91	-230.4***		15.83
	(67.19)	(55.12)	(54.29)		(82.20)
Share of orthodox	3.481	-5.796	-0.774		-3.353
	(6.739)	(5.497)	(5.906)		(7.904)
Median altitude	0.00738*	0.00263	0.000512		0.00199
	(0.00417)	(0.00649)	(0.00319)		(0.00699)
Investments	-0.0131	0.00364	0.00130		-0.00533
	(0.0225)	(0.0131)	(0.0109)		(0.0279)
Medical staff per capita	0.529	0.212	2.114***		0.197
	(0.947)	(0.776)	(0.501)		(0.921)
Constant	38.17***	45.75**	62.82***	9.882***	40.73**
	(8.273)	(18.46)	(5.872)	(1.961)	(18.17)
Observations	62	62	62	62	62
R-squared	0.274				0.225

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1



*Table 44. Difference between the first and second-placed parties' variable model, 2014 local elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	0.115	0.689	1.266***		0.580
	(0.496)	(0.616)	(0.191)		(0.538)
Share of ethnic Georgian	-7.487	-16.19	-32.01***		-14.79
	(9.405)	(19.16)	(8.218)		(17.01)
Share of Urban population	-13.72	-4.584	13.81		-11.58
	(10.33)	(8.513)	(8.983)		(14.28)
Share of population with higher education	-46.03	-32.32	-234.0***		15.70
	(66.72)	(58.29)	(51.82)		(81.82)
Share of orthodox	3.333	-6.096	-1.014		-3.676
	(6.781)	(5.694)	(5.354)		(7.993)
Median altitude	0.00725*	0.00237	0.000625		0.00192
	(0.00416)	(0.00681)	(0.00278)		(0.00741)
Investments	-0.0126	0.00394	0.000489		-0.00516
	(0.0223)	(0.0128)	(0.00989)		(0.0280)
Medical staff per capita	0.516	0.215	2.112***		0.193
	(0.950)	(0.821)	(0.486)		(0.938)
Constant	38.35***	46.43**	63.47***	9.759***	40.79**
	(8.327)	(19.71)	(5.405)	(2.010)	(18.45)
Observations	62	62	62	62	62
R-squared	0.274				0.226

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 2010 Local Elections Regression Models

*Table 45. Share of incumbent votes variable model, 2010 local elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance mon- etary transfers per capita	0.143 (0.444)	-0.182 (0.876)	-1.039** (0.419)		-0.182 (0.847)
Share of ethnic Georgian	-10.61** (5.105)	-7.174 (8.126)	3.134 (12.64)		-7.200 (8.831)
Share of Urban population	-7.345 (5.347)	-9.137 (6.569)	-13.63* (7.683)		-7.482 (8.091)
Share of population with higher education	11.01 (20.09)	11.91 (19.74)	17.20 (20.15)		9.625 (33.12)
Share of orthodox	2.291 (2.757)	3.122 (3.153)	4.128 (4.565)		2.223 (4.601)
Median altitude	0.00229 (0.00273)	0.00446 (0.00394)	0.00782*** (0.00214)		0.00403 (0.00379)
Constant	75.83*** (4.604)	72.92*** (6.219)	66.05*** (12.92)	7.093*** (1.022)	73.81*** (6.241)
Observations	62	62	62	62	62
R-squared	0.194				0.181

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Table 46. Difference between the first and second-placed parties' variable model, 2010 local elections*

VARIABLES	(1)	(2)	(3)	(4)	(5)
	OLS	Robust regression (MM)	Robust regression (S)	Robust regression (scale)	Quantile regression at 0.5
Subsistence allowance monetary transfers per capita	0.148	-0.227	-0.114		-0.122
	(0.574)	(0.762)	(0.624)		(0.699)
Share of ethnic Georgian	-17.38**	-11.70	-6.401		-12.60
	(6.711)	(9.180)	(10.96)		(10.92)
Share of Urban population	-11.82	-14.50*	-12.59		-13.82
	(7.553)	(7.962)	(15.58)		(10.81)
Share of population with higher education	13.41	11.34	-12.65		3.052
	(28.65)	(27.36)	(54.17)		(46.72)
Share of orthodox	4.318	6.402	12.86		6.035
	(3.980)	(4.989)	(8.345)		(7.197)
Median altitude	0.00276	0.00627	0.00880**		0.00609
	(0.00369)	(0.00471)	(0.00375)		(0.00489)
Constant	68.07***	62.55***	54.89***	10.00***	64.01***
	(6.375)	(9.252)	(12.66)	(1.551)	(11.06)
Observations	62	62	62	62	62
R-squared	0.218				0.204

