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POUR OBTENIR LE GRADE DE
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Par **M. Sébastien Carrère**

LES CLASSES VULNÉRABLES EN AMÉRIQUE LATINE : INSTABILITÉ, ATTENTES
REDISTRIBUTIVES, ET SÉCURISATION

Sous la direction de :
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Soutenue le 10 décembre 2024

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DOCTORAL DISSERTATION

The Vulnerable Classes in Latin America: Instability, Redistributive Expectations, and Securization

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Les classes vulnérables en Amérique Latine: instabilité, attentes redistributives, et sécurisation

Résumé : Malgré la baisse globale de la pauvreté et de l'expansion de la classe moyenne de revenu dans les pays en développement, une large partie de la population mondiale reste économiquement vulnérable, que cela provienne d'un emploi précaire, de revenus instables, ou d'un manque d'accès à des mécanismes de protection sociale. Cette thèse examine les classes économiquement vulnérables en Amérique latine, région emblématique de ces évolutions. Le premier chapitre s'intéresse à la classe moyenne Argentine sous la perspective des crises récentes ayant impacté le pays. L'analyse révèle que la classe moyenne est large mais fragmentée en termes d'emploi et d'éducation. Une partie substantielle de ses membres reste économiquement vulnérable, impactée par les crises successives. Ses membres critiquent principalement l'absence de soutien de l'État, la faible qualité des services publics, et l'injustice des politiques de redistribution. Partant de ce constat, le deuxième chapitre explore plus spécifiquement le rôle que joue l'ancrage territorial dans les demandes redistributives des citoyens en Amérique latine, où de fortes inégalités socio-économiques persistent. Les résultats montrent un clivage entre les citoyens des grands centres urbains et des zones périphériques, ces derniers réclamant plus de redistribution. Ce chapitre montre l'importance de considérer les disparités territoriales dans la formation des demandes redistributives, au delà des caractéristiques individuelles. Le troisième chapitre évalue l'efficacité d'un programme de transferts conditionnels de fonds à sécuriser les citoyens les plus vulnérables en Argentine. Les résultats révèlent l'efficacité globale du dispositif pour réduire l'instabilité des revenus et éviter les retours dans la pauvreté. Dans l'ensemble, cette thèse souligne la forte vulnérabilité économique d'une part importante de la population latino-américaine, et montre la nécessité de développer et renforcer les mécanismes de protection sociale pour non seulement sécuriser les plus vulnérables, mais répondre à la défiance des citoyens envers la politique et les institutions, exacerbée par les fractures spatiales.

Mots-clés : Vulnérabilité, instabilité, redistribution, inégalités, Amérique latine, Argentine

The vulnerable classes in Latin America: instability, redistributive expectations, and securization

Abstract: Despite the global decline in poverty and the expansion of the middle-income class in developing countries, a large proportion of the world's population remains economically vulnerable, whether due to precarious employment, unstable incomes, or lack of access to social protection mechanisms. This thesis examines the economically vulnerable classes in Latin America, a region that is emblematic of these trends. The first chapter looks at the Argentine middle class from the perspective of the recent crises that have impacted the country. The analysis reveals that the middle class is large but fragmented in terms of employment and education. A substantial proportion of its members remain economically vulnerable, impacted by successive crises. Its members are mainly critical of the lack of state support, the poor quality of public services, and the unfairness of redistribution policies. Building on this observation, the second chapter explores more specifically the role played by territorial anchorage in the redistributive demands of citizens in Latin America, where strong socio-economic inequalities persist. The results show a divide between citizens in major urban centers and those in peripheral areas, with the latter demanding greater redistribution. This chapter shows the importance of considering territorial disparities in the formation of redistributive demands beyond individual characteristics. The third chapter assesses the effectiveness of a conditional cash transfer program in securing the most vulnerable citizens in Argentina. The results reveal the overall effectiveness of the scheme in reducing income instability and preventing a return to poverty. Overall, this thesis highlights the high economic vulnerability of a significant proportion of the Latin American population, and shows the need to develop and strengthen social protection mechanisms not only to secure the most vulnerable, but also to respond to citizens' distrust of politics and institutions, exacerbated by spatial fractures.

Keywords: Vulnerability, instability, redistribution, inequalities, Latin America, Argentina

L'université n'entend ni approuver, ni désapprouver les opinions particulières émises dans cette thèse. Ces opinions sont considérées comme propres à l'auteur.

The University neither approves nor disapproves of the specific opinions expressed in this dissertation. These opinions are considered to be the author's own.

Ne pas railler, ne pas déplorer, ne pas maudire, mais comprendre.

- Baruch Spinoza, Traité politique (1677).

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GENERAL INTRODUCTION

The global decline in poverty and extreme poverty over the past few decades has raised the interest of international organizations and academics in the emergence of “*new middle classes*” and a “*global middle class*” (Kharas 2010; Birdsall 2010; Cárdenas et al. 2015). The U.S. National Intelligence Council (2012) even identified the rise of a global middle class as one of its top megatrends for 2030. This phenomenon is expected to have strong economic and political repercussions, stemming on the one hand from increased purchasing power and the ability to save (Kharas 2010; Birdsall 2015), and on the other from greater democratic and institutional stability (Acemoglu and Robinson 2005; Wiemann 2015).

Despite these optimistic projections, these trends and increases in living standards in recent years have been mainly confined to specific sub-regions, such as China, Eastern Europe and South America (Kochhar 2020). The latest World Bank report (2024) points out that only a small proportion of middle-income countries have climbed out of their situation and reached high-income status since the 1990s, evoking a middle-income trap. Similarly, the eradication of poverty by 2030, set as Target 1 of the United Nations’ Sustainable Development Goals (SDG), remains far from being achieved. Poverty reduction has been declining since 2015, and the recent events of the COVID-19 pandemic, ongoing armed conflicts around the world, and soaring inflation strongly impacted SDG progress with uneven recovery across countries (Sachs et al. 2024). Moreover, in both developing and developed countries, experiences or perceptions of downgrading of a part of the population, particularly in the “*places that don’t matter*”, have led to a resurgence of populism, fuelled by citizens’ discontent (Rodríguez-Pose 2018). Fearful of social decline, the middle classes might also favor populist or even authoritarian regimes (Suter et al. 2020), contrary to the predictions of modernization theory in political economy (Lipset 1959; Moore 1965).

A large proportion of the world's population remains economically insecure, with a high probability of falling back into poverty (Birdsall et al. 2014; Kochhar 2020). Several expressions refer to these individuals in literature, such as the "*new poor*", the "*strugglers*", or the "*floating class*" (Kapsos and Bourmpoula 2013; Birdsall et al. 2014; Wietzke and Sumner 2018). Although there is no consensus on either measurement or definition (as for the middle class), all these previous terms denote their vulnerability and sensitivity to macroeconomic changes and the occurrence of shocks affecting their standard of living.

Rooted in this literature, this present doctoral dissertation in applied microeconomics aims to shed light on these vulnerable classes. The use of the word "vulnerable" is deliberately broad, covering non-poor individuals with various trajectories of economic mobility (i.e. recently lifted out of poverty, or considered at the edge of the middle-income stratum), with heterogeneous socio-economic characteristics, and anchored in different geographical contexts. On the other hand, these vulnerable classes share a common economic instability, stemming from precarious employment, unstable incomes and a lack of social protection, making them sensitive to macroeconomic instability and shocks. Particularly, this dissertation focuses on the economic dimension of vulnerability, which is a major concern in our contemporary societies given social movements and political conflicts in both developed and developing countries. This choice in no way implies the superiority of this approach over the other dimensions of vulnerability (social, environmental), which are, in fact, highly interconnected. Lastly, this doctoral dissertation takes Latin America (LA) as its field of study, with a strong specialization on Argentina. A growing middle class, alongside persistent territorial disparities and widespread dissatisfaction among the population, make this region a relevant terrain for the study of economic vulnerability, and Argentina a striking illustration of a "middle-class nation" experiencing severe long-term impoverishment.

Beyond presenting the overall context of this thesis, this general introduction aims to show how the population of LA is facing increased economic vulnerability, and why it is crucial to address this issue through relevant policies. To this end, the following section traces the region's major recent macroeconomic developments from the latter part of the 20th century, through the unprecedented economic expansion cycle of the 2000s, to the return to a more troubled era from mid-2010. It concludes with a note on citizens' perceptions and attitudes about political shifts. Finally, the last section

outlines the contours of this dissertation, summarizing each of its three chapters.

Vulnerability in Latin America

A region plagued by macroeconomic instability

The LA region has undergone significant political and economic changes over the last four decades. From the 1980s onwards, authoritarian regimes gradually fell until the 1990s, when almost all countries had elected regimes (with the exception of Cuba), contributing to the “*Third Wave*” of democratization also spreading to Southern and Eastern Europe, as well as Southeast Asia (Huntington 1991). These democratically-elected regimes persisted in the region, despite wavering macroeconomic performance until the end of the century. While the 1970s marked a cycle of strong economic expansion resulting in a decline in poverty and inequality (Londoño and Székely 2000), the 1980s left a lasting mark on the region’s countries through severe macroeconomic instability. The increase of interest rates in the US to control inflation and a fall in commodity prices severely impacted LA economies, which had been heavily indebted since the 1970s (Ocampo and Ros 2012). This event led to an explosion in countries’ debt burdens, as well as several sovereign debt defaults, starting with Mexico in 1982. The structural adjustment plans imposed by international institutions for exiting the debt crisis from the mid-1980s onwards marked a drastic change in development models, abandoning import-substitution industrialization, privatizing key sectors, and making major budget cuts (Chiodi and Roman 2024). In this period – often referred to as the “*lost decade*” – levels of inequality and poverty rose sharply in almost every country in the region, particularly Chile, Argentina, Uruguay, Peru, and Venezuela (Altimir 2008; López-Calva and Lustig 2010). Despite renewed economic growth and controlled inflation in the 1990s, ongoing structural reforms failed to reduce inequality and poverty rates, which remained well above their pre-1980 levels until the beginning of the next century (Londoño and Székely 2000; Ocampo and Ros 2012).

The specific case of Argentina is indicative of the region’s declining economic trajectory. From the end of the 19th to the middle of the 20th century, Argentina experienced a fairly prosperous period, with GDP per capita surpassing even that of European countries such as France, Germany or Spain (Glaeser et al. 2018). A strong welfare state with broad redistribution policies and reinforced labor

rights, ensured the development of a middle class – and in particular a working middle class – until the end of the 1960s, notably with the Péron administration (Alvaredo et al. 2018).¹ Nevertheless, the country’s economic trajectory began to falter in the mid-1950s until the early 2000s, alternating short cycles of expansion and contraction, high inflation and political instability (with the 1976 coup d’état). Income inequality rose sharply in the latter part of the 20th century, with the Gini indicator rising from around 0.35 in 1974 to over 0.55 in the early 2000s, and poverty climbed, particularly following the two episodes of hyperinflation in 1989 and 1990, and the convertibility crisis in 2001-2002 (Alvaredo et al. 2018).² A strong sense of impoverishment emerged in Argentine society in the 1980s and 1990s, in particular among the middle class increasingly affected by repeated experiences of downgrading and loss of income. Throughout this period, the “*new poor*” developed not only in Argentina, but more globally in LA, sharing a hybrid status combining middle-class educational or cultural characteristics, with characteristics closer to the structural poor in terms of employment or income (Kessler and Di Virgilio 2010).

The economic boom of the 2000s

In stark contrast to the previous period, an unprecedented economic, social and political turnaround took place in the region from the 2000s to 2012-2013, often referred to as the “*Golden Decade*” (Kingstone 2018; Chiodi and Roman 2024). The boom in commodity prices (in food, energy, minerals and metals) on the global market, especially driven by China’s booming economy, enabled many LA countries relying on extractive activities to generate sustained economic growth (Ferreira et al. 2013). During this period, so-called “progressive” governments came to power in several countries in the region (such as Venezuela, Brazil, Argentina, Ecuador or Bolivia), implementing ambitious redistribution policies, notably through non-contributory social assistance programs. The combination of high growth rates and redistributive public policies has led to a significant reduction in poverty rates in the region. Based on data available from the World Bank’s Poverty and Inequality Platform for the

1. Although income concentration fell sharply during this period, with policies targeting the highest incomes, the level of inequality remained well above that of equivalent rich countries. Similarly, Argentina’s education and industrial development level was much lower than that of Western countries (Glaeser et al. 2018).

2. Following the financial crises of 1997 in South-East Asia, 1998 in Russia and 1999 in Brazil, Argentina experienced an economic recession and a major banking crisis. This well-documented episode resulted in a 17% reduction in Argentina’s GDP per capita between 2000 and 2002, and a rise in the poverty rate from 38% in October 2001 to 53% in May 2002 (López-Calva and Lustig 2010).

Latin America and the Caribbean region, the share of the population living below the \$6.85 poverty line (in PPP 2017) fell from around 53% to 33% between 2000 and 2013.³

Figure 1 below illustrates the average annual change in poverty rates in LA over this period (or for available years). The pace of poverty reduction was relatively sustained over the decade, particularly in Ecuador, Argentina, Bolivia and Chile. In Central America, the decline in poverty was less marked (except in Nicaragua), and barely perceptible in the Dominican Republic and Guatemala. Poverty has fallen drastically in the countries of the Southern Cone, reaching the lowest levels in the region in 2013, with 6.3% in Uruguay, 9.5% in Argentina and 12.5% in Chile. Despite significant improvements in Ecuador, Brazil, Peru and Mexico, around 30% of the population still lived in poverty at the end of this period.

Income inequality also fell significantly over the 2000s. Figure 2 shows the absolute change in the income Gini indicator over the same period for 18 countries, and its level for the final year. Overall, the income Gini indicator fell by an average of 6.1 points over the period. Despite this trend, inequality levels remained extremely high in 2013, as in Brazil and Colombia, where the Gini exceeds 0.5. Bolivia, Argentina and Ecuador were the most successful in lowering their inequality levels, while Mexico and Venezuela achieved smaller reductions (Costa Rica even saw a slight increase). According to studies carried out in the region, there are several reasons for this reduction in income inequality (Gasparini and Lustig 2011; Lustig et al. 2011). Among these, the greater demand for low-skilled workers and the expansion of wages for low-earning workers (notably through several increases in the minimum wage, as in Brazil) have contributed to its reduction. In addition, wider access to primary education in the region has also led to greater equalization of educational levels, reducing skill premium. Lastly, increased public spending on health, education and pension schemes, and the introduction of a large number of cash and in-kind transfer programs, have led to a reduction in extreme poverty, and consequently in glaring inequalities. Government investment in health and education, initiated in the 1990s, has been intensified and extended to the poorest in the 2000s, also resulting in a sharp drop in infant mortality and a general increase in life expectancy (Wagstaff et al. 2015), as well as almost universal access to primary education (Cruces et al. 2014).

3. The \$6.85 (PPP 2017) World Bank's poverty line is adapted to countries classified as upper-middle-income countries according to their GNI per capita, which includes the majority of countries in the region at the end of the period (except Bolivia, Paraguay, Nicaragua, Honduras and Guatemala).

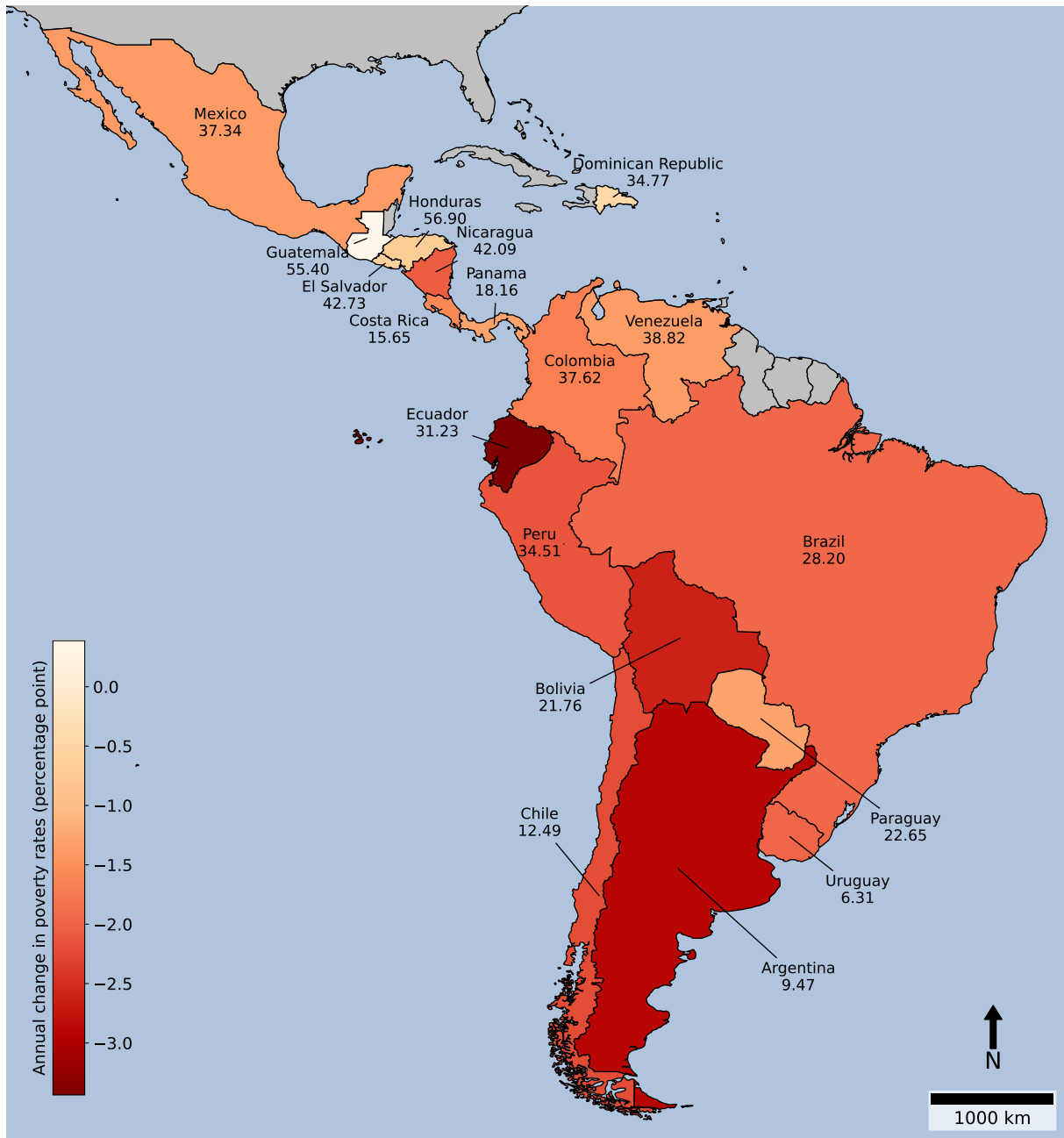


Figure 1: Poverty ratios and annual change in poverty rates in Latin America (2000-2013)

Source: Author's elaboration based on the World Bank Poverty and Inequality Platform database (2024).

Note: The indicator corresponds to the average annual change in poverty rates (in percentage points) for the period circa 2000-2013. The poverty line is set at \$6.85 per day (2017 PPP), which corresponds to the poverty line for upper-middle-income countries. The figure below the country name corresponds to the proportion of the population living below the poverty line in the last year of the period covered. The period covered may differ for some countries depending on data availability: Argentina (2002-2014), Brazil (1999-2012), Dominican Republic (2001-2014), Guatemala (2000-2014), Honduras (1999-2012), Mexico (1998-2012), Nicaragua (2001-2014), Paraguay (2001-2014), Uruguay (2006-2014), and Venezuela (1998-2006). PPP = Purchasing Power Parity.

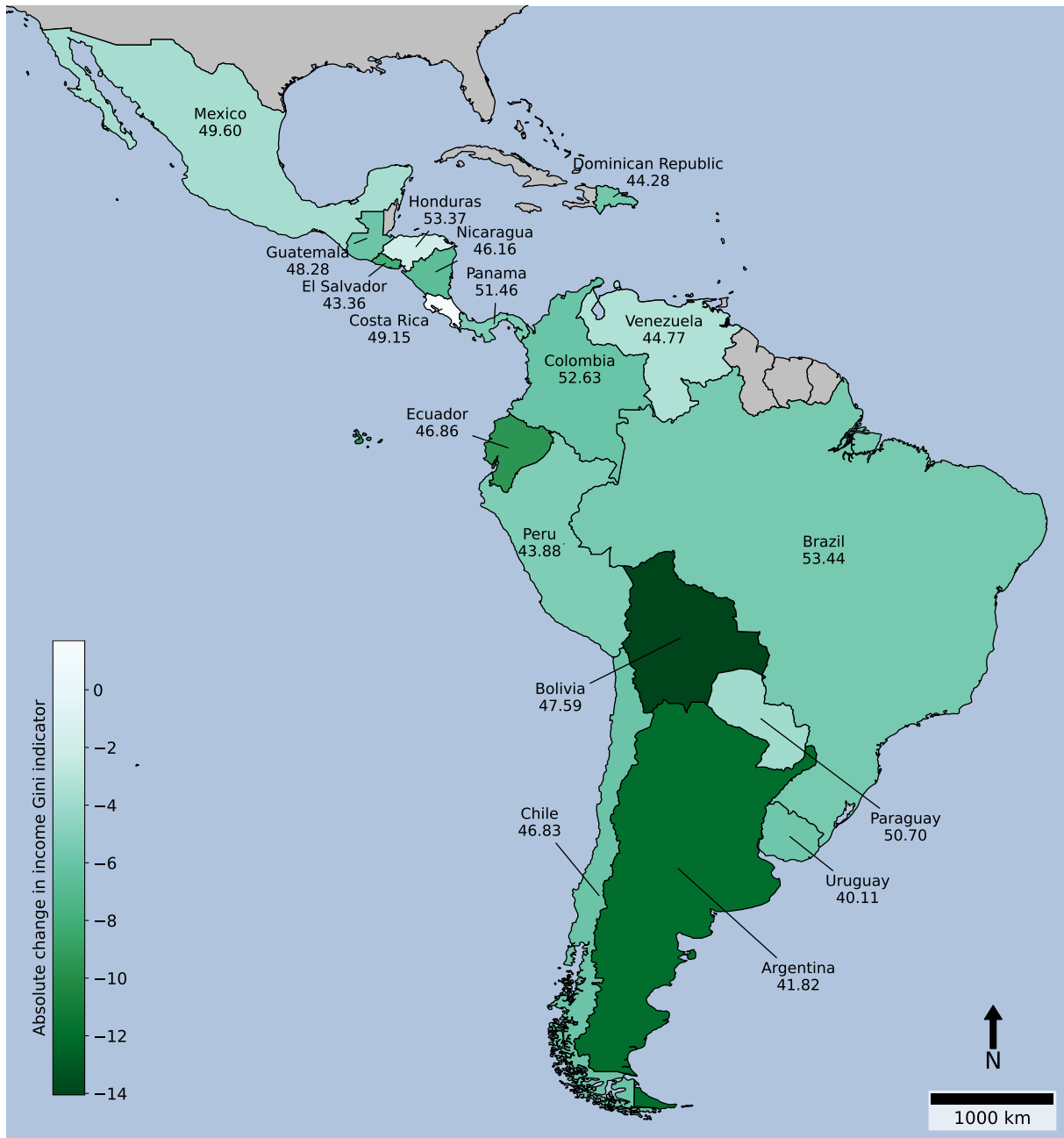


Figure 2: Evolution of the income Gini indicator in Latin America (2000-2013)

Source: Author's elaboration based on the World Bank Poverty and Inequality Platform database (2024).

Note: The indicator corresponds to the absolute change of the income Gini indicator (in percentage point) over the period circa 2000-2013. The figure below the country name corresponds to the value of the income Gini indicator for the last year of the period covered. The period covered may differ for some countries depending on data availability: Argentina (2002-2014, urban), Brazil (1999-2012), Dominican Republic (2001-2014), Guatemala (2000-2014), Honduras (1999-2012), Mexico (1998-2012), Nicaragua (2001-2014), Paraguay (2001-2014), Uruguay (2006-2014), and Venezuela (1998-2006).

Back to troubled times

Yet, the following decade did not live up to expectations. The structural slowdown in economic growth that began in the 2010s revealed the fragility of previous advances. The region experienced a sharp slowdown in inequality reduction between 2012 and 2018, with inequality stagnating in Argentina, Chile, Ecuador or Peru, and even rising in Brazil or Paraguay (Busso and Messina 2020). Despite the strong upward economic mobility of the past decade (Ferreira et al. 2013), a significant part of the LA population remains economically insecure, with a high probability of sliding back into poverty (Birdsall et al. 2014).

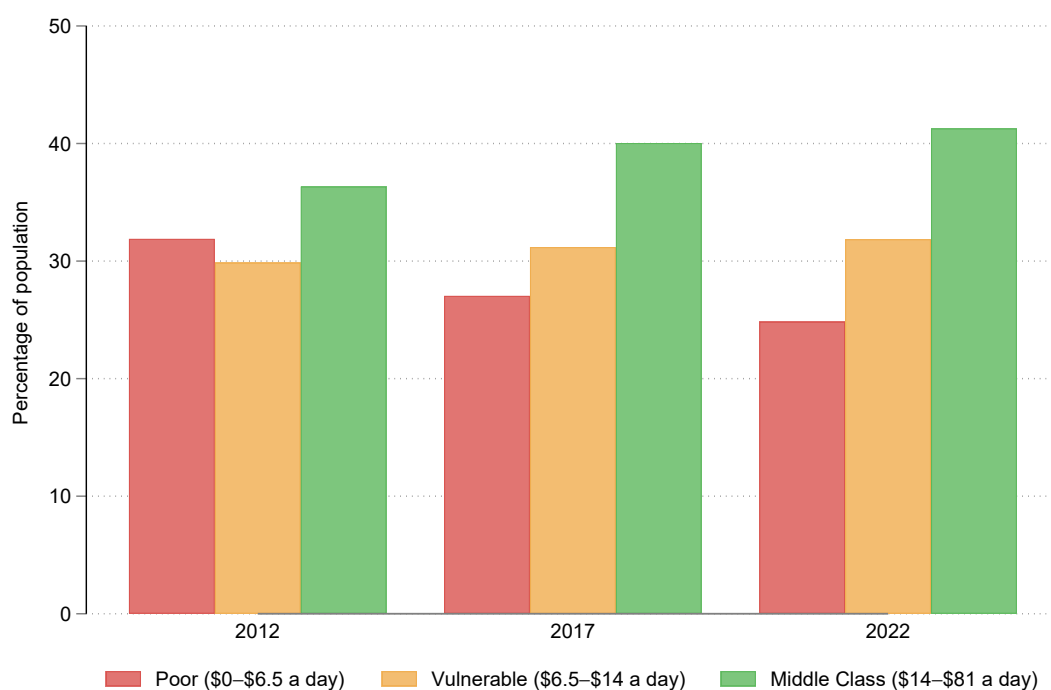


Figure 3: Poverty, vulnerability, and middle class trends in Latin America

Source: Author's elaboration based on the SEDLAC (Socio-Economic Database for Latin America and the Caribbean) database from the CEDLAS (Centro de Estudios Distributivos, Labores, y Sociales) and the World Bank. Covered countries include Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru and Uruguay, for the corresponding year or the most recent available.

Note: Incomes are expressed in 2017 US\$ PPP per day, PPP = Purchasing Power Parity.

A simple illustration of vulnerability in LA is depicted in Figure 3, representing trends in poor, vulnerable and middle class income groups for 17 LA countries, based on World Bank monetary definitions. In 2022, nearly three out of five people in LA remain economically insecure (poor and vulnerable), representing a substantial proportion of the regional population. While the share of the population

classified as middle class grew in the region, particularly during the 2000s, its evolution during the 2010 decade was rather modest, and even came to a halt in the most recent years. The share of the vulnerable, meanwhile, remains stable. Most of these people are engaged in precarious and informal employment, and are not covered by social protection mechanisms in a context where public services are often limited and/or of low quality (Birdsall et al. 2014; Busso et al. 2021).

While emergency assistance programs have proliferated in the region since the late 1990s⁴, the International Labor Organization estimates that over 40% of the LA population was not covered by any social protection benefit in 2023, with considerable heterogeneity between countries.⁵ Informal labor remains widespread in the region, representing roughly half of the workforce (Benza and Kessler 2020). While this phenomenon mainly concerns workers located in the two first quintiles of countries' income distribution, it also accounts for one-third of workers in the third and fourth quintiles (Busso et al. 2021). Thus, vulnerability also affects part of the LA middle class. Several studies provide empirical evidence of a lack of stability of the middle-class group in LA, far from the standards of developed countries, with a sizable proportion of its members remaining vulnerable to a return to poverty over time (Torche and López-Calva 2013; Castellani et al. 2014; Stampini et al. 2016). Torche and López-Calva (2013) find that around a third of the middle class in Chile and Mexico experiences class mobility over a period of three to five years in the 2000s, similarly divided between downward or upward trajectories.

Despite an increase in the number of middle-class people and a significant inter-generational mobility (Ferreira et al. 2013) in the region in the last decades, sociological studies have highlighted how the repetition of crisis increases the sense of vulnerability among the middle class in LA, and particularly in Argentina (Kessler and Di Virgilio 2010; Ozarow 2014). The recent COVID-19 pandemic, severely affected the region's economy through the overall drop in global demand, disproportionately impacting the most vulnerable with low-income or low-skilled jobs (Busso and Messina 2020). As highlighted by Bargain and Aminjonov (2021), the drop in mobility after lockdowns was significantly lower in regions with the highest poverty rates, such as Africa, but also in LA, notably due to a

4. Although there have been notable improvements, Lavinas (2015) points out that social protection systems remain incomplete in the region, with insufficient spending on health, education or infrastructure resulting in poor quality services.

5. The data can be accessed at the following link: <https://www.social-protection.org/>.

lack of monetary or in-kind measures. This has also contributed to the more rapid spread of COVID-19 in these regions.

Citizens' perceptions, attitudes and political change

While countries in the region took advantage of a period of economic expansion in the 2000s to extend social safety nets to the poorest, most of the governments in place did not move towards “hard” redistribution stages, such as broadening the tax base, developing unemployment insurance, or improving the quality of public services (Holland and Schneider 2017). Their economic structures also remain heavily dependent on the primary sector and fluctuations in international commodity prices, preventing the sustainability of their development model (Kingstone 2018). The return to a depressed macroeconomic environment, with a still highly segmented labor market and weakened political coalitions, has contributed to the exhaustion of part of the population, such as the middle and working classes in the formal sector (Holland and Schneider 2017), but also of the poorest, showing diminished expectations of the State’s ability to support them (Holland 2018). A strong feeling of mistrust towards political power and institutions has taken root, deepening the fracture in the social contract between citizens and the State (Busso et al. 2023). As the quality of public services is widely criticized in the region’s countries, private alternatives are increasingly used for children’s education by the wealthiest and middle-class citizens, as well as for healthcare – but to a limited extent for the middle class (De La O et al. 2023). Furthermore, the LA population is strongly dissatisfied with the redistribution of wealth (Busso et al. 2023). While there are significant differences in living standards between countries in the region, Chauvin and Messina (2020) show that socio-economic inequalities are even more marked at the sub-national level, where wide variations exist between and within neighborhoods in income or in the access and quality of public services and infrastructure.

Figure 4 unveils the perceptions of LA citizens across 16 countries regarding the most important problem in their respective countries over the period 2012-2018, based on the LAPOP (Latin American Public Opinion Project) opinion survey.⁶ While economic worries (i.e. crisis, inflation, poverty, unemployment) remain at the top of the list over the period (39%), it is clear that issues of security

6. Different categories were created to highlight the major issues raised by citizens.

(30%), as well as governance and corruption (12%) are major concerns in the region. On the one hand, the strong clientelist practices of political parties at the local level, as well as the regular disclosure of large-scale corruption scandals (Panama Papers, Odebrecht) as in Brazil, Argentina, Mexico or Colombia, are undermining citizens' confidence in institutions and democracy, and fuelling a feeling of impunity for an elite (Bohn 2012; Goldstein and Drybread 2018; Kingstone 2018). On the other hand, it is hard not to mention the extent of violence and crime facing the region, particularly in Central America and the Andean zone, where the drug economy plays a key role (Chiodi and Roman 2024).

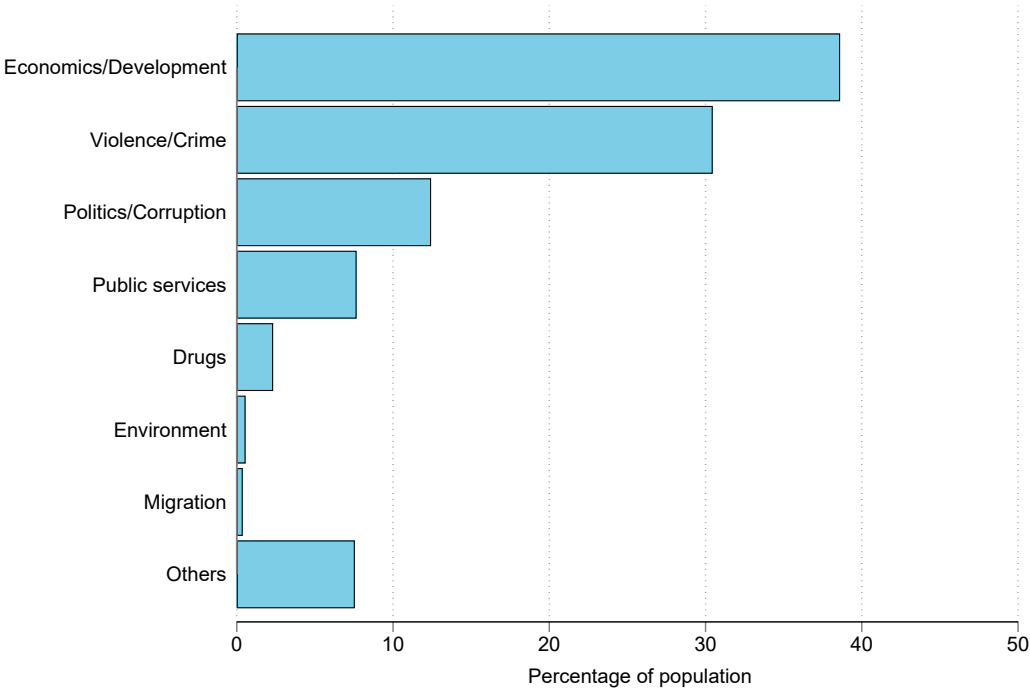


Figure 4: Citizens' perceptions of the country's main issues (Latin America, 2012-2018)

Source: Author's elaboration based on the LAPOP survey for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru and Uruguay) over the 2012-2018 period.

Note: The *Economy/development* category includes problems such as crisis, debt, inflation, poverty, unemployment, access to credit, inequality and malnutrition.) *Violence/Crime* includes violence (general and against women), crime and insecurity, kidnapping, gangs, guerrilla warfare, armed conflict, terrorism. *Politics/Corruption* problems of bad governance, politicians, corruption and impunity, human rights violations. For public services, problems of health, education, road conditions, electricity and water, transport, housing. For *Drugs*, it concerns drug trafficking and drug addiction. The *Environment* includes natural disasters and environmental problems in general. *Migration* includes migrants and overpopulation. Finally, *Others* includes land issues, demonstrations and protests, war on terrorism, discrimination, forced displacement and other issues.

All these concerns have led to a strong political shift since mid-2010, with the emergence of new right-wing populist figures and a rise in political radicalization in the region, as in Brazil and Argentina.

Numerous social movements have also erupted in several countries, such as Bolivia, Chile, Ecuador and Colombia, in response to corruption, electoral fraud and government inaction in the face of social problems (Kingstone 2018; Welp 2022). The risk of a weakening of democracy remains a major issue in LA, where cases of authoritarian drift are regularly reported, and autocratic regimes persist over time, as in Nicaragua, Venezuela and Cuba (Welp 2022). The political preferences, attitudes and mobilization of the middle class, but also the vulnerable strata weighing heavily in the region, will play a pivotal role in the future economic, social, democratic and environmental trajectory of the LA region.

Outline of the dissertation

Focusing on the LA context, this doctoral dissertation makes several global contributions to the literature. Firstly, this work aims to document and characterize the economic vulnerability of populations and its evolution in the context of developing countries. While a vast body of literature addresses the issues of poverty and extreme poverty, as well as the rise of the middle class across different regions of the world, it is only more recently that the question of the fragility of a growing share of the population has come to the fore (Birdsall et al., 2014; Stampini et al., 2016; Suter et al., 2020), especially in the wake of numerous crises (COVID-19, armed conflicts, inflation) and social or insurrectionary protest movements in developing and developed countries alike (as in France with the *Gilets Jaunes* movement from 2018, or in Chile between 2019 and 2021). Secondly, this doctoral dissertation proposes two complementary scales of analysis: regional and national. Although this work aims to address economic vulnerability in the LA region, a strong focus is placed on Argentina. This case study provides a concrete illustration of progressive economic decline, rising vulnerability and the introduction of ambitious public policies. Finally, one of the major contributions of this thesis lies in the diversity of methodological approaches mobilized, which also borrows from sociology and geographical economics. This thesis mobilizes quantitative material, through national household surveys and opinion polls, and qualitative material, based on semi-structured interviews, to examine economic vulnerability. A wide range of quantitative analysis tools are also used throughout this thesis, including descriptive and multidimensional statistics, econometric models and quasi-experimental techniques.

The present work is structured around three essays in development economics: an examination of the fragility of the middle class in the face of crises (which is co-written), an exploration of redistributive demands in the region between center and peripheral areas, and an evaluation of a redistributive policy aimed at securing vulnerable households.

The first chapter offers an analysis of the Argentine middle class in the light of the recent crises that have affected the country, through its vulnerability, behaviors, and expectations of the state. Argentina is frequently regarded as a typical middle-class country in LA since the 20th century. However, the country has experienced a singular economic and political trajectory, in which the feeling of impoverishment is particularly marked. In this study, we adopt an original two-step methodology combining both a quantitative analysis based on the *Encuesta Permanente de Hogares* (EPH) national household surveys between 2003 and 2021, and a qualitative survey conducted in the country in 2020.

Results from the quantitative analysis show that the middle-income class has grown strongly over the analysis period and accounts for a large proportion of the country's population. Despite its size, Argentina's middle class is largely dominated by its most economically vulnerable component – the lower middle class –, which grew the most relative to other strata during the 2010s. The cluster analysis reveals that the middle class is heterogeneous and fragmented, particularly in terms of education and employment. On the other hand, qualitative interviews with members of Argentina's middle class reveal relatively homogeneous lifestyle aspirations, including access to homeownership and diversified consumption. Its members prioritize the quality of education, access to the healthcare system, and the search for security, even if these aspirations remain constrained for the lower, majority stratum of the middle class. The qualitative analysis also points to the vulnerability of this lower stratum of the middle class, heavily impacted by recent crises (including COVID-19), pushing them to adopt various coping strategies such as restricting their consumption. Lastly, while members of the middle class share a common attachment to the role of the State, public services and redistribution for the poorest, they all strongly reject corruption and remain critical of the unfair redistribution system, calling for more effective public policies.

These results resonate with the findings of Birdsall et al. (2014) on the vulnerability of the middle

class in LA countries. In addition to assessing the middle class in Argentina over the recent period, this chapter provides empirical evidence of the aspirations and expectations of the middle classes in an unstable macroeconomic context. While Argentina is not representative of the entire LA region, these previous findings feed into other existing studies on the vulnerability of the middle class and those recently lifted out of poverty in LA (Torche and López-Calva 2013; Stampini et al. 2016).

The unanimous criticism of Argentina's tax and redistribution system, identified among the middle class, echoes the widespread dissatisfaction of citizens with social justice issues across LA. It also echoes, albeit in a different context, recent social movements in developed countries denouncing rising precariousness, alongside growing political abstention, nationalism and political extremes in Europe. Although individual characteristics, including wealth among other factors, explain the shaping of citizens' redistributive preferences, the LA region paradoxically displays little polarization between the poorest and richest citizens in their support for greater redistribution (Holland 2018). In a more global approach, Cagé and Piketty (2023) argue that citizens' behavior, particularly political behavior, is influenced not only by their affiliation to a social class, but also by their anchorage in a specific territory. Their extensive study of the French case shows that considering social classes in a multidimensional "*geo-social*" class perspective helps explain citizens' political attitudes and contemporary political cleavages.

In line with this vision, **the second chapter** explores the redistributive demands of citizens in LA, in a context of high socio-economic inequalities and where a large proportion of the population remains economically vulnerable. More specifically, the study aims to understand better the role of geographical disparities in shaping the redistributive preferences of citizens in LA. To this end, I rely on four waves of the nationally representative LAPOP opinion survey on 16 LA countries, and geolocate 1,108 respondents' cities. In order to differentiate dynamic, integrated areas from marginalized ones, I adopt a center-periphery approach, classifying places as urban centers (primary cities and nearby suburbs) or periphery (secondary cities and small cities or villages in remote areas). Remote sensing data on night-time luminosity are also used as a proxy for each city's level of development.

The results show that citizens located in peripheral areas are more likely to express strong support for redistribution compared their counterparts in urban centers, even when controlling for individual

socio-economic characteristics. The decomposition of peripheral areas according to city size shows that citizens' redistributive demands are higher for those living in small cities or villages in remote areas, and systematically stronger for citizens living in the richest peripheral areas (i.e. the 50% of cities with the highest level of development in each city group) compared to the least developed places. Looking more specifically at the citizens' level of wealth, results show that the redistributive divergences previously identified between urban centers and peripheral areas are mainly driven by the wealthiest citizens, in the second and third wealth terciles. On the other hand, the redistributive preferences of those in the first tercile are fairly similar across areas. Finally, the analysis highlights a downward trend in redistributive preferences in the region since 2012 (although still relatively strong), and a narrowing of the gap in redistributive preferences between territories since 2014, particularly striking for the smaller towns and villages in remote areas and the poorest citizens, but with country-specific differences.

These results contribute to the literature on the determinants of redistributive preferences in developing countries, and underline the importance of contextual elements, particularly geographical, in understanding the formation of citizens' demands, in addition to individual factors. It also adds further insights into the apparent paradox of redistributive preferences in developing countries.

Finally, **the third chapter** of this dissertation investigates the effectiveness of redistributive programs implemented to meet citizens' redistributive demands. To this end, I assess the impact of a conditional cash transfer program on its ability to stabilize vulnerable households economically. The case of the *Asignación Universal por Hijo* (AUH) is considered in this study, one of the largest redistributive programs in the LA region, implemented nationally in Argentina in 2009, still in operation to date. The program extends the existing family allowances system to workers in the informal sector, historically excluded from the contributory social protection system. Informal workers, particularly widespread in LA, are subject to high economic vulnerability due to unstable incomes and poor protection against shocks such as illness and job loss.

Using data from the *Encuesta Permanente de Hogares* national survey between 2004 to 2015, I compare the income stability of eligible and non-eligible households over periods of one and a half years, based on labor characteristics. The analysis relies on a difference-in-difference strategy to estimate

the program's causal effect on household financial stability. The main results confirm the stabilizing role of the AUH on the incomes of vulnerable households. I find that the program decreases the proportion of periods spent in poverty by 15% for eligible households compared to a situation without the program introduction. In addition, the coefficient of variation in income is lowered by 16% when households experience a loss of income during the period, demonstrating the program's capacity to smooth out income losses. The program also has heterogeneous effects depending on the family structure and is more effective among households with several children or with a young one. However, its impact is largely reduced for households less resilient to shocks, such as single mothers. Finally, the AUH also affects households' financial behavior, notably by reducing their reliance on in-kind or monetary charity, as well as informal loans.

These results contribute to the limited literature on income stability in developing countries, mainly due to the scarcity of longitudinal studies. They also demonstrate social safety nets' stabilizing and protective role against shocks for vulnerable households. This is particularly relevant in the context of developing countries, where a large proportion of the population depends on the informal sector for a living, and where investment in social protection and public services is often lacking or inadequate. Finally, this study provides new insights into the effectiveness of extending social protection to marginalized populations.

Before beginning the reading of this thesis, I conclude this general introduction with a final remark. Although this thesis does not place itself directly in the field of political science, obvious links are nevertheless present in the background of each of its chapters, due to the strong interactions existing between macroeconomic evolutions, citizens' perceptions and attitudes and political shifts. The analyses presented in this dissertation mainly cover the period from the 2000s to the COVID-19 pandemic, corresponding politically to the first wave of progressive left-wing governments, and to the period of alternating right-wing conservative governments, as in Brazil, Argentina, Chile and Ecuador. Thus, there will be limited discussion of the most recent political changes of recent years in the LA region (i.e., the more-than-mixed return of the political left) or of pivotal events worldwide. However, all these events point to the need to address the rising vulnerability of populations, beyond poverty, to meet people's expectations and demands. Given the world's armed conflicts and the militarization of nations, political radicalization on both the American and European continents,

and the consequences of ongoing climate change (water and energy crises, heat waves), profound transformations of economic and social protection systems will be crucial, paving the way for future research.

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A SOCIO-ECONOMIC EXPLORATION OF ARGENTINEAN MIDDLE CLASS: VULNERABILITY, BEHAVIOUR AND EXPECTATIONS IN HARD TIMES*

Co-authored with Matthieu Clément, François Combarrous, Gabriel Kessler, Éric Rougier, and Ariel Wilkis.

Abstract

Based on a mixed approach combining quantitative and qualitative materials, this article examines how the recent crises have affected middle-class' vulnerability, behavior and expectations in Argentina. We show that the middle-income group is large but fragmented in terms of educational and occupational characteristics. A substantial part of this group is vulnerable to poverty and has been adversely affected by the recent crises due to the absence of State support. Moreover, we shed light on shared aspirations regarding consumption, education, health, homeownership or security. However, the adoption of subsequent behavior in those domains remains constrained for the most vulnerable components of the middle class. Finally, people from the middle class point to the unfairness of redistribution policies and the low quality of public services.

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1.1 Introduction

Since the pioneering studies of Germani (1942, 1955), the vision of Argentina as the typical “middle-class country” in Latin America has been pervasive (De Riz 2009). Until the 1950s, Argentina was a fairly rich country (Sánchez 2016) that was characterized by a large and strong middle class. After the 1950s, however, the country gradually lost its influence in the world economy along with the succession of economic and political crises (Glaeser et al. 2018) which had severe consequences for the middle class. The succession of inflationary crises has contributed greatly to impoverishing the historical middle class (Kessler and Di Virgilio 2010; Galassi and González 2012), especially in the 1970s and 1980s following the neoliberal turn and in 2001-2002 with the severe public finance crisis that hurt Argentina. As in other Latin American countries, the 2000s combining large-scale social programs, sustained economic growth, increase in formal employment and rising real wages¹ brought about a significant reduction in poverty and a middle-class recovery (Franco et al. 2011; Dalle 2012; Ferreira et al. 2013). However, and mostly as a direct consequence of the public finance crisis that starts in 2015 and the COVID-19 pandemic, Argentina has again to face a severe economic downturn over the very recent period which adversely affected the living conditions of the middle class (World Bank 2021). Assuredly, what the Argentinean middle class looks like today, what it aspires to and what it expects from public policies has been partly conditioned by the swings of macroeconomic instability the national economy had to face and manage.

Some characteristics have been documented by the broad economic and sociological literature dedicated on the Argentinean middle class in the last decades. First, the latter has proven increasingly fragmented since the 1980s in terms of occupational status, notably in comparison with other Latin American countries (Kessler and Di Virgilio 2010). Recent studies focusing on stratification show that besides the historical group of civil servants, the administrative workers, service employees, professionals or small entrepreneurs and businessmen now account for substantial parts of the Argentinean middle class (Kessler and Di Virgilio 2010; Galassi and González 2012; Benza 2016). Also, the group heterogeneity sharply increased in the 2000s, as the favorable economic context did push

1. The *Asignación Universal por Hijo*, AUH is the most emblematic social benefit implemented during this period. It consists in a child-oriented conditional cash transfer that amounts about 0.6% of Argentina’s GDP and covers 3.9 million children according to UNICEF.

many households out of poverty and fed the expansion of the "*new middle class*" composed of households with occupational profiles and income levels that had not yet been associated with middle-class membership (Ferreira et al. 2013; Castellani et al. 2014; Benza and Kessler 2020).

Second, and related with the previous point, socio-economic vulnerability has increased during the 1990s and early 2000s, many middle-class households being faced with impoverishment (Kessler and Di Virgilio 2010) or social downgrading (Wortman 2010) as growth vanished and/or prices surged. For Kessler and Di Virgilio (2010), the "*new poor*" have formed a hybrid stratum of the middle class showing social and cultural characteristics, notably in terms of education and family composition, that stand close to those of the "core" middle class and economic characteristics, such as low income and unstable occupational status, that appear to be more akin to those characterizing the poor. Birdsall et al. (2014) have also documented the socio-economic characteristics of the 'strugglers', that is the large class of vulnerable people located between the poor and the middle class.

Third, the literature has also described some behavioral traits that are typical of middle-class identity in Argentina, most of them having been also described for other national contexts (Clément et al. 2022). Consumerism is one of the most visible markers of middle-class membership in Argentina (Sautu 2016). The post-2001-2002-crisis recovery has come with a broad democratization of consumption, both on intensive and extensive margins (Benza and Kessler 2020). On top of the absolute rise in consumption expenditure, middle class spending budgets have started diversifying towards new consumptions such as durable goods and ITC, cultural goods or leisure (Wortman 2010). Both changes have been sustained by an increased affordability of credit (Wortman 2010; Benza 2016; Sautu 2016). Another shared characteristic of the Argentinean middle class is its strong demand for education and health supported by the widespread view that education is the main channel of social upgrading (Sautu 2016). As in many other Latin American countries, the development of private schools at primary and secondary levels has counterbalanced the recent deterioration of public schools and enrolling children in such schools is now a clear marker of middle-class identity, even at the cost of indebtedness. The same logic applies for health, with an increasing trend of adhesion to private health insurance plans.

In brief, there is an extensive, albeit disparate, literature dealing with the middle class in Argentina.

The deleterious consequences of the 2001-2002 economic crisis on social stratification as well as the sustained enlargement of the Argentinean middle class during crisis recovery period have been especially well documented (e.g. León et al. 2010; Ferreira et al. 2013; Castellani et al. 2014; Stampini et al. 2016). However, empirical evidence over the recent period characterized by a less favorable macroeconomic context combined the COVID-19 pandemic remains very limited.² Also lacking is empirical evidence documenting middle-class' aspirations and expectations in terms of public policies.

This study proposes to fill these gaps by examining the recent trends of social stratification in the Argentinean middle class and by questioning the vulnerability, behavior, aspirations and public policies expectations of this heterogeneous group in the light of the recent crises. To do so, we adopt an original two-step research design inspired by Clément et al. (2022) combining quantitative investigations based on data from the Encuesta Permanente de Hogares over the 2013-2021 period and original qualitative materials. Our mixed approach allows to (i) identify the Argentinean middle class and describe its dynamics and socio-economic structure and (ii) examine the group's behavior, subjective perceptions and expectations in terms of public policies, especially in crises contexts.

Based on this original methodological approach, our empirical investigations provide interesting insights. First, we show that the middle class in Argentina is large but fragmented in terms of educational and occupational characteristics. Second, we emphasize that a substantial part of this group is vulnerable to poverty and has been severely affected by the recent crises, in a context of absent or declining state support. Third, our qualitative analysis sheds light on shared aspirations as to consumption diversification, access to home ownership, search for security and prioritization of education and health. While such aspirations may be viewed as typical components of middle-class identity, their realization appears heavily constrained for the most vulnerable (and increasingly large) components of the Argentinean middle class. Fourth, although people from the middle class are attached to State intervention, they unanimously point to the unfairness of redistribution policies and

2. The crisis of public finance that started in 2015 was exacerbated by the pandemic. For instance, according to World Bank data, Argentina's GDP dropped by 9.9% in 2020 while the annual inflation rate reached more than 42% for the same year. It may be hypothesized that this context of economic recession has reinforced the vulnerability of Argentina's middle class. For instance, no doubt that the lockdown policy, especially through its effects on labor market outcomes (ECLAC 2021), has aggravated the situation of a large portion of middle-class households which were left without welfare protection (World Bank 2021).

the low quality of public services and express their strong rejection of corruption.

The rest of the document is structured as follows. Section 1.2 describes our methodological framework and the quantitative and qualitative data used in the study. Section 1.3 presents the results from the quantitative analysis while Section 1.4 does the same for the qualitative analysis. Section 1.5 discusses the main findings and concludes.

1.2 Methods and materials

1.2.1 Quantitative analysis

The quantitative analysis is based on the data from the EPH survey (*Encuesta Permanente de Hogares*) carried out by INDEC (*Instituto Nacional de Estadística y Censos*), which is known as the most comprehensive household survey in Argentina. It is a long-term household survey with information on dwelling attributes, family composition, education, occupational status and income. The EPH survey offers urban representativeness and covers 31 large urban areas (accounting for more than 60% of the total population) for which information is collected on a quarterly basis since 2003. Our study uses the waves from 2003 to 2021, yet it is worth noting that, due to methodological updates, the 2003–2015 waves are not directly comparable to the most recent ones (2016–2021). Based on EPH data, our quantitative analysis adopts a sequential approach inspired by Bonnefond et al. (2015). This approach is multidimensional and combines an economic (based on income) and a sociological definition (based on occupation and education) of the middle class.

The objective of the first step of the quantitative analysis is to circumscribe a middle-income group that is generally defined in the economic literature as households who fall within a specific income range in the middle of the national income distribution (e.g. Birdsall et al. 2000; Ravallion 2010). By using this approach, our immediate goal is not to identify the number and percentage of people in the middle class, mainly because there is a lack of consensus on the choice of the income range. Rather, we aim to isolate a group of households standing in the middle of the income distribution that is sufficiently large to be representative of the socio-economic heterogeneity of the so-called middle class. To select the most appropriate income interval, most of the intervals used in the lit-

erature were tested, compared and discussed. Based on the selected interval, we can examine the changes in the size of the middle-income group all along the 2003-2021 period, notably in relation to the evolution of macroeconomic context and the COVID-19 pandemic.

In the second step of the quantitative analysis, we propose to explore the socio-economic structure of the middle-income stratum identified in the previous step. To do so, we implement a cluster analysis on a set of variables describing occupational and educational characteristics for all the household heads comprised in the middle-income group.³ These characteristics are inspired by the sociological approach of social stratification (e.g. Goldthorpe et al. 1980; Erikson and Goldthorpe 1992). In order to refine the description of the groups identified by the cluster analysis, we will also use a large set of additional variables. Noteworthy, in order to avoid being affected by the obvious consequences of the COVID-19 pandemic on social stratification, the cluster analysis is implemented on the fourth quarter of the 2018 wave.

1.2.2 Qualitative analysis

One important objective of our study is to identify the specific behavior, aspirations, perceptions and policy expectations of the Argentinean middle class and of its different components as they were generated by the cluster analysis conducted on quantitative data. To collect this information, a qualitative survey has been carried out on a set of 40 households sampled to be characteristic of the different groups identified in the cluster analysis. This original sampling procedure allows assessing the extent to which the different groups making the Argentinean middle class do share common traits or not. To account for spatial heterogeneity, the 40 households have been surveyed in two Argentinean cities with distinct socio-economic characteristics, namely Buenos Aires and San Miguel de Tucumán. Furthermore, to take gender issues into account, half of these interviewees were women. Lastly, the qualitative survey is based on semi-structured interviews from which we were able to collect information on behavior and aspirations regarding various dimensions that are reported as making up of the middle-class identity in the sociological literature including mobility patterns, consumption, saving and debt, education, health and housing investment, and expectations as to public policies.

3. Note that household income is not used in the cluster analysis. Indeed, using information on income or consumption at this stage would lead to first differentiating middle class households with respect to their level of wealth and to downplay the role of non-monetary socio-economic characteristics in explaining heterogeneity within the middle class.

1.3 Identification, characterization and dynamics of the Argentinean middle class

1.3.1 The middle-income group: identification and dynamics

As pointed out above, there is absolutely no consensus on the income interval that should be used to identify the middle class. Three main types of income intervals have been used in the economic literature: absolute intervals (generally expressed in PPP \$), relative intervals (often constructed from percentiles of the income distribution), and mixed intervals (combining an absolute lower boundary and a relative upper boundary). In Table 1.1, we test and compare eight different income intervals that are both representative of these three approaches and largely used in the literature on Latin America's middle class.

Table 1.1: Comparison of different criteria for defining the middle-income class

Approach	Criterion	Monthly income range		Poor (%)	Middle income (%)	Rich (%)
		Monthly per capita ARS (2018 prices)	Monthly per capita USD (PPP 2011, 2018 prices)			
Absolute	[US\$2; US\$10]	[956\$; 4,779\$]	[US\$60; US\$300]	1.4	16.0	82.6
	[US\$10; US\$20]	[4,779\$; 9,558\$]	[US\$300; US\$600]	17.5	29.9	52.6
	[US\$10; US\$50]	[4,779\$; 23,895\$]	[US\$300; US\$1,500]	17.5	69.6	12.9
Relative	[US\$10; US\$100]	[4,779\$; 47,790\$]	[US\$300; US\$3,000]	17.5	80.3	2.2
	[75%-125% median]	[7,500\$; 12,500\$]	[US\$471; US\$785]	32.9	27.7	39.4
	[50%-150% median]	[5,000\$; 15,000\$]	[US\$314; US\$942]	18.2	50.5	31.3
Mixed	[US\$10; P90]	[4,779\$; 26,500\$]	[US\$300; US\$1,664]	17.5	72.5	10.0
	[US\$10; P95]	[4,779\$; 35,000\$]	[US\$300; US\$2,197]	17.5	77.5	5.0

Notes: PPP = purchasing power parity. The PPP factor conversion is 15.93 for the fourth quarter of 2018. It is calculated using the 2011 PPP factor conversion from the World Bank and consumer price indices. From INDEC and the Billion Price Project. Source: Authors' elaboration based on EPH data (fourth quarter, 2018).

As expected, the relative size of the middle-income group in the Argentinean urban population differs widely depending on the interval used as it ranges from 16% to 77.5%. As these intervals partially overlap, the issue of the choice of the most relevant interval is central. In the absence of any theoretical guideline, we follow influential studies of Latin America's middle classes (Birdsall 2010; Ferreira et al. 2013) by setting the lower boundary at US\$10 per day per capita, thereby excluding from the middle class the non-poor households that might be the most vulnerable to a return to poverty. In

line with Birdsall (2010) and Clément et al. (2022), the upper limit is set at the 95th percentile of the income distribution mainly as this allows excluding from the middle class “that portion of the population whose income is most likely to be from inherited wealth or based on prior or current economic rents (...) and thus less associated with productive and primarily labour-based activity than for the non-rich” (Birdsall 2010, p.7). Using this mixed interval, the Argentinean urban middle-income stratum accounted for 77.5% of the urban population in the 4th quarter of 2018.

To examine the changes in the size of the middle-income group, we replicated the same identification method used for 2018 on the whole time period. Figure 1.1 reports changes in the size of the “poor”, middle-income and rich groups. In Figure 1.2, the middle-income stratum is broken down into three groups based on income intervals of equal width: the low middle-class (LMC), the middle middle-class (MMC) and the high middle-class (HMC). Both figures provide very interesting results.

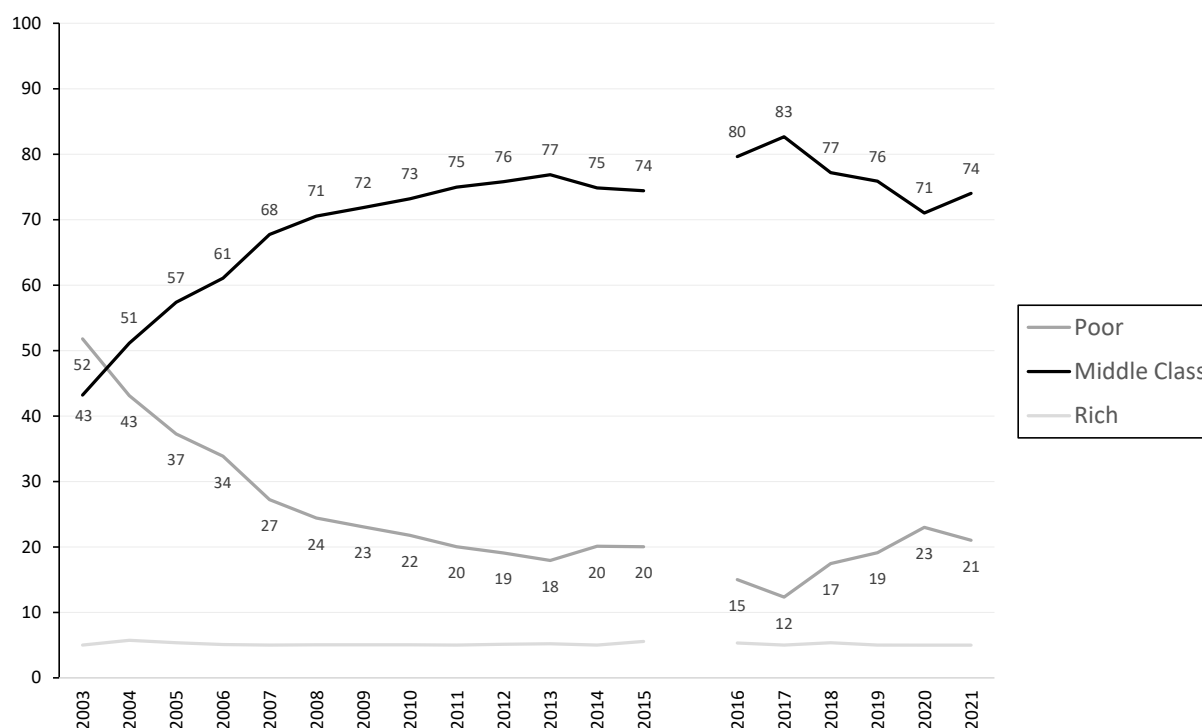


Figure 1.1: Evolution of income groups

Source: Authors' elaboration based on EPH data. Fourth quarter for each year with the exception of 2021 (second quarter).

First, our estimates confirm the significant expansion of middle-income group's size in urban Argentina during the 2000s, from 43% in 2003 to 77% in 2013. Moreover, Figure 1.2 indicates that this expansion was mainly driven by the increase in the share of the LMC (from 29% to more than 50%).

This result echoes previous studies showing that the increase in the size of the middle class in the early 21st century in Latin American countries was primarily triggered by the increase in the lower, more vulnerable components of the middle class (Ferreira et al. 2013; Benza and Kessler 2020).

Second, although not directly comparable with the previous one, the most recent period (2016-2021) provides clear evidence of the harmful consequences of the recent crises on middle classes. As indicated by Figure 1.1, the size of the middle-income group dropped from 83% in 2017 to 71% in 2020 while in the same time the size of the poor group increased from 12% to 23%, both as a direct consequence of the inflation and epidemic shocks. Likewise, strong patterns of downward mobility can be observed within the middle-income group over the 2017-2020 period, especially for the LMC whose share dropped from 56% to 48% between 2017 and 2020. While the size of the MMC also decreased, albeit to a lesser extent in absolute terms (from 21% to 17%), the share of the HMC has remained roughly constant over the period.

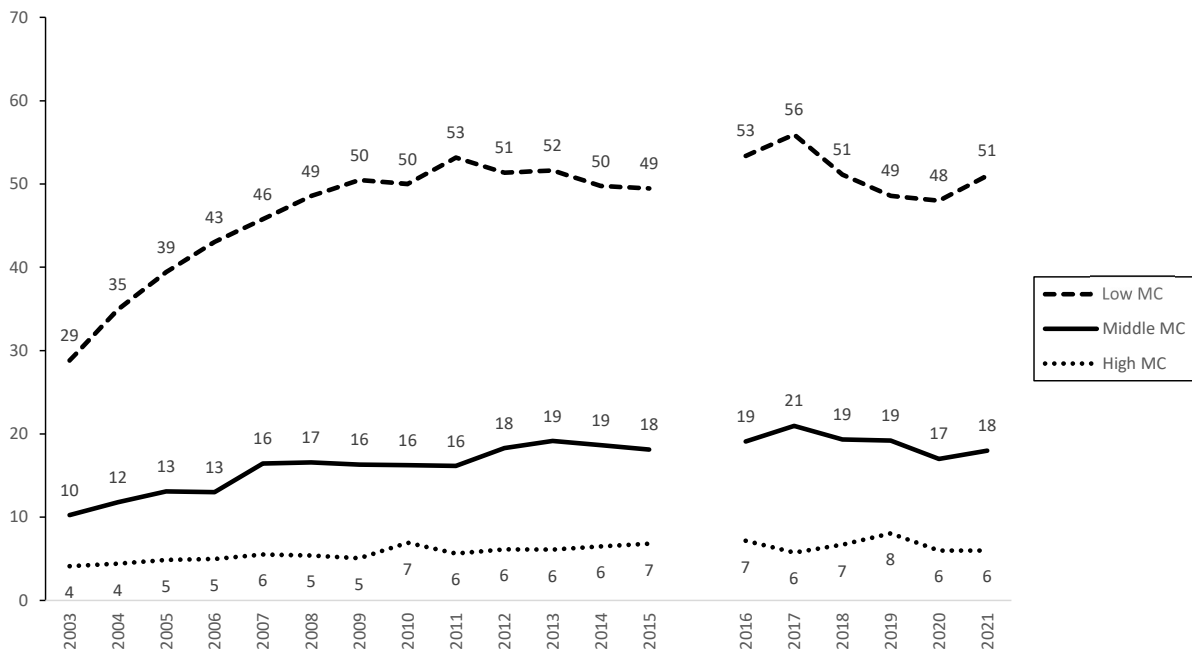


Figure 1.2: Evolution of the (decomposed) middle-income class

Source: Authors' elaboration based on EPH data. Fourth quarter for each year with the exception of 2021 (second quarter).

To sum up, the most recent evolutions plotted in Figures 1.1 and 1.2 seem to be confirmatory of the fact that the expansion of the middle-income group size that was observed in the 2003-2015 period is fragile, primarily because its most dynamic constituent, the LMC, is also the most vulnerable to

socio-economic shocks. This pleads for a very cautious use of the “middle class” term in this context and justifies that non-monetary characteristics are now mobilized to further describe this middle-income stratum in its socio-economic diversity.

1.3.2 A statistical exploration of the socio-economic structure of the middle-income stratum

The second stage of the quantitative analysis consists in exploring the internal structure of the middle-income stratum. To do so, we select five classification variables related to the education and employment of household heads in this group and used to conduct the cluster analysis: (i) highest level of education attained, (ii) occupation, (iii) employment status, (iv) type of employer or institutional sector and (v) multi-activity practices. Table 1.A.1 in the Appendix 1.A contrasts the distribution of these variables for households belonging to the middle-income group (defined as per our preferred \$10-P95 interval) against those from the “poor” and the “rich” groups for the fourth quarter of 2018. Based on these five variables, we carry out a mixed clustering analysis that combines non-hierarchical and hierarchical clustering methods, which is the relevant approach for large samples for which directly applying hierarchical clustering would impose intensive calculation requirements.⁴ The middle-income stratum is then clustered into five internally-homogeneous, yet clearly distinct groups. Lastly, we use the comparative distributions of the classification variables (Table 1.2) and of a set of additional variables (Table 1.A.2 in the Appendix 1.A) to label and further describe the different clusters.

The first cluster identified in the middle-income stratum is very specific as it includes retired pensioners, inactive and unpaid family workers. The household heads included in this group that we label “**retired and inactive**” middle class are characterized by a high average age, low educational attainment and a high rate of feminization. The average household’s per capita income in this group stands at the bottom of the income distribution of the middle-income stratum and comes from pensions and, to a lower extent, from private transfers and capital income. Although this group is primarily composed of retired household heads, it also includes young inactive students benefiting from family support and/or assistance mechanisms (e.g. study grants). This cluster amounts to 35% of

4. The selected partition (the number of groups retained within the middle-income class) results from the analysis of the dendrogram and the objectives of maximizing the ratio between the inter-group variance and the intra-group variance (Calinski-Harabasz index) and minimizing the similarity index between the groups (Davies-Bouldin index).

the middle-income stratum.

A second cluster can be described as the **“service sector employee” middle class**. Featuring relatively low levels of education, the vast majority of the household heads in this group work as employees in the private sector, especially in wholesale trade, transport and storage, accommodation and catering and domestic employment. Households in this group shall be viewed as vulnerable, especially because their per capita income clearly places them at the very bottom of the income distribution inside the middle-income class. Income drawn from primary jobs is often supplemented by income from secondary jobs and by non-labor income, particularly public transfers. However, it is worth noting that this group is somewhat heterogeneous in terms of institutional sector, with approximately 60% of the household heads being employed in the formal sector (private or public) and 40% remaining household heads being employed informally.⁵ Importantly, more than a quarter of the people in the group do not contribute to any social security system. The cluster accounts for 22% of all middle-income stratum.

The third cluster is referred to as the **“self-employed and workers” middle class** since it is predominantly composed of self-employed people (almost two-thirds) and also includes some employees/workers. The majority of household heads in this cluster are workers and craftsmen in the private formal manufacturing and construction sectors; a minority works in the private service sector (especially in wholesale trade and vehicle repair). The average income of this group stands relatively low in the whole stratum’s income distribution, still slightly higher than that of the service employee middle class. This self-employed and workers middle class shall also be viewed as vulnerable, not only because of the predominance of self-employed status and low incomes, but also because of limited access to formal social protection (27% of households in this group have no social security). This cluster represents 20% of the whole middle-income group.

The two remaining groups differ from the previous ones in that their socio-economic situation is much more favorable. The fourth group which can be described as the **“managers, professionals and employers” middle class** is clearly distinct in that the majority of household heads are highly educated and occupy either higher-end managerial and professional positions or are employers, this

5. For employees, we retain the fact of not having paid vacation, sick leave, contributions for retirement or payslip; for informal self-employed, the non-legal registration of the company and a size less than 10 employees.

group including all the employers of the middle-income segment. Two-thirds of those in the cluster are occupied in the private sector leaving one-third in the public sector. 90% are covered by a social security scheme. Their average household per capita income stands in the top of the income distribution of middle-income households. This group accounts for 10% of the middle-income stratum.

Table 1.2: Characteristics of clusters (classification variables) derived from the mixed clustering procedure

	Group 1 (35%)	Group 2 (22%)	Group 3 (20%)	Group 4 (10%)	Group 5 (13%)	Total
Education						
No school or incomplete primary education	14.47	5.03	5.26	0.92	0.77	7.68
Primary education	33.49	22.28	20.77	6.85	3.73	22.25
Incomplete secondary education	11.75	21.79	20.26	9.52	2.06	13.82
Secondary education	21.00	32.85	27.89	39.18	15.20	25.79
Incomplete Superior education	9.03	12.06	11.27	24.31	11.59	11.96
Superior education	10.27	5.99	14.55	19.21	66.65	18.50
Occupation						
No job (retirees, inactive, unemployed)	100.00	0.00	0.00	0.00	0.00	38.16
Higher managerial and professional occupation	0.00	1.49	3.28	100.00	19.96	13.79
Intermediate professions	0.00	0.97	5.51	0.00	71.99	10.72
Service employees	0.00	83.51	27.29	0.00	3.35	22.87
Workers and craftsmen	0.00	14.03	63.92	0.00	4.70	14.46
Employment status						
Retired / Pensioned	83.40	0.00	0.00	0.00	0.00	31.82
Other inactive / Unpaid family workers	16.60	0.32	0.00	0.17	0.00	6.42
Employees	0.00	93.73	35.88	71.18	98.65	46.49
Self-employed	0.00	5.95	64.12	0.00	1.35	12.32
Employers	0.00	0.00	0.00	28.65	0.00	2.94
Type of employer / Institutional sector						
No job (retirees, inactive, unemployed)	100.00	0.00	0.00	0.00	0.00	38.16
Private formal	0.00	47.61	95.15	66.25	21.70	35.97
Public formal	0.00	13.23	0.30	33.75	76.95	16.58
Informal employment	0.00	39.16	4.55	0.00	1.35	9.30
Household's head multi-activity						
No	0.00	92.00	95.00	97.49	72.70	55.40
Yes	0.00	8.00	5.00	2.51	27.30	6.44
No job (retiree, inactive, unemployed)	100.00	0.00	0.00	0.00	0.00	38.16

Notes: n=11,668. The shaded cells identify the modalities that are statistically (at the 5% level) more represented in the group considered than in the rest of the middle-income class.

Source: Authors' elaboration based on EPH data (4th quarter, 2018).

The last group can be described as the “**public employees**” middle class, since more than three quarters of household heads in this group work in intermediate professions within the public sector. They are over-represented in jobs in public administration, defense, education, health, social security and social services. Interestingly, this cluster is by far the most educated on average (two-thirds of them have reached higher education levels) and also records the highest percentage of multi-activity as more than 27% of household heads have at least one other income-generating activity in addition to

their main activity. The average per capita household income for this group stands also at the top of the income distribution within the middle class, and nearly all households contribute to some form of social security. This group constitutes 13% of all middle-income class households.

In addition to emphasizing the fragmentation of the Argentinean middle class, our cluster analysis also unveils its strong polarization. On the one hand, the managers, professionals and employers (Group 4) and the public employees (Group 5) appear relatively protected and well off. They may thus be viewed as being constitutive of the upper middle class accounting for 23% of the whole middle class. At the other end of the spectrum, the service employees (Group 2) and the self-employed and workers (Group 3) constitute the highly exposed and vulnerable middle class, due to their employment status (mostly informal or self-employed), their low level of education and income and only limited access to social security. The retired and inactive middle class (Group 1) is also characterized by poor socio-economic characteristics, even though the retirees may benefit from rather stable income through pensions. In a nutshell, it seems that there is no clear evidence of the existence of a 'middle-middle class'.

1.4 Behavioral and aspirational traits of the Argentinean middle classes

1.4.1 The design of the qualitative survey

As explained above, the sampling procedure of our qualitative field survey was based on the classification presented in the previous section. However, as two of the groups remained somewhat heterogeneous in terms of employment characteristics, we chose to refine our sampling by disaggregating them. The retired and inactive middle class (Group 1) was split into the two subgroups of "pensioners" and "other inactive", the latter sub-group being composed of young students. To account for the diversity of institutional sectors (formal vs informal), the middle class of service sector employees (Group 2) was also split into two subgroups: the "(formal) service sector employees" and the "informal workers". We thus identified seven profiles of households within the middle-income class that were used as a sampling frame (Table 1.3).

The qualitative survey was based on semi-structured interviews aiming to collect information on behavior, aspirations and expectations in terms of public policies regarding several dimensions of middle-class identity: living conditions, mobility patterns, consumption, housing, education, health, redistribution policies, etc. The interviews were conducted on-line between June and August 2020 which made it possible to also collect information on how the COVID-19 pandemic affects the middle class with regards to most of these dimensions.

Table 1.3: Sampling scheme of the household qualitative survey

Profile	Designation	Operational definition	Cases
1	Retirees	Retired pensioners	4
2	Service employees	Employees of all types of services in the private sector	8
3	Self-employed and workers	Self-employed (plumber, gas fitter, hairdresser), industrial clerical workers, skilled workers	8
4	Managers, professionals and employers	Professionals and business or small industry owners; managerial, assistant managerial and executive positions	8
5	Public employees	Employees in the public sector with a high level of education, e.g. teachers, managers and executives in the public administration	8
6	Other inactive	Students with family support	2
7	Informal workers	Foremen, workers, service employees (e.g. gardeners) in the informal sector	2

Source: Authors' elaboration.

1.4.2 Results of the qualitative survey

1.4.2.1 Life satisfaction and mobility patterns

Socio-economic profiles

Leaving aside the specific profiles of retirees and inactive people (profiles 1 and 6), analysis of the interviews suggests that education level is a key determinant of professional trajectories. We were able to identify four types of profiles among active respondents: (1) profiles with high educational levels, jobs related to professions in the private or public sector and medium-high income (profile 5 and part of profile 4); (2) profiles with medium educational levels, formal salaried or self-employed jobs and medium income (profile 2 and part of profile 4); (3) profiles with low educational levels, formal salaried or self-employed jobs and low income (profile 3); (4) profiles with low educational levels, informal and unstable jobs and low income (profile 7). Note that the households fitting to this latter profile generally benefit from social assistance mechanisms such as the AUH or the *Tarjeta*

Alimentar (Food Card) which provides funds to buy food.

This typology is consistent with the pattern of polarization of the Argentinean middle class that was previously emphasized by the cluster analysis, with a clear differentiation of the upper-middle class (profile 5 and part of profile 4) and the lower-middle class (profiles 3 and 7). In contrast to the quantitative analysis though, the qualitative survey sample includes a larger "middle-middle" class composed of interviewees from profile 2 and part of profile 4. Retired and inactive respondents from profiles 1 and 6 can also be included in this middle-middle class based on their education level, past job positions (profile 1) and living conditions.

Life satisfaction

As expected, respondents from profiles 4 and 5 declare that they are satisfied with their standard of living and some of them (especially those who are salaried) define themselves as "privileged". They also tend to value their work in terms of "professional ascension" and highlight the gratification and challenges involved in the tasks performed.

I work a lot and I am very happy. Sometimes I'd like doing more things, but I don't have the time and I also have three children and a family, so I have to balance everything. But in relation to my work performance, my professional goals and my income, I think I have a balance between what I want and what I need. (Romina, profile 4)⁶

Among those in profiles 1, 2 and 6, there is a desire to "live a little more comfortably" and "indulge themselves more". Finally, those in profile 3 and part of those from profile 7 are simply not satisfied with their standard of living and also express dissatisfaction with their job, either because informal and/or because providing fluctuating incomes. However, interviewees from profile 7 do not express full dissatisfaction. For Jacinta, for example, her "comfort" is that she can continue to care for her children.

Yes, I am satisfied. I like what I do. I think you have to take risks to get by. I am satisfied to be able to do it at home and with my children. I do not entrust them to anyone and my children are always under my care. It's a comfortable situation. (...) I can take care of my daughter, take her to school, to kindergarten. (Jacinta, profile 7)

6. All quotes from the qualitative surveys are authors' translations.

In the context of COVID-19, interviewees mention the loss of purchasing power as a consequence of inflation or the absence of bargaining agreements in the case of formal wage earners. Only among informal workers from profile 7 and those from profile 3 is there an explicit reference to the effects of COVID-19 on their work activity and income. This is because all the other profiles were able to benefit from aid to offset the effects of the health crisis. Small employers have received a specific benefit targeting small and medium-sized enterprises; formal self-employed and independent workers (either themselves or a family member) received the IFE (*Ingreso Familiar de Emergencia*); and those who are salaried in the private sector received ATP (*Asistencia de Emergencia al Trabajo y la Producción*) which is a public support program ensuring the payment of part of the wages of formal workers.

Self-perception of class

Interestingly, interviewees from the seven profiles identify with the middle class but express differences in the social group which is taken as a reference for comparison. Profiles 1, 3 and 7 compare themselves with the poorest group (that they associate with recipients of social benefits) and consider themselves as middle class, mainly because they do not lack food. However, given their difficulties in making ends meet, they refer to the lower middle class to characterize their social positioning.

Comfortable? No, I don't know if that's the word. I'm fine, I'm fine. I see that there are people who are very bad (...) Not at the top. We are not poor, we are not poor, because the truth is that there are people worse off. We survive: we can pay the electricity, we can pay for things. Without luxuries. (Dilma, profile 3)

Conversely, interviewees from profiles 4 and 5 and to a lesser extent from profiles 2 and 6 compare themselves with the upper social group, which they identify with the big businessmen and "the rich". They consider themselves as members of the middle class because they "do not live off rents, properties or investments" but depend on their work to subsist.

Intergenerational mobility

When comparing themselves with their parents, all interviewees refer to the educational level they have attained. Broadly speaking, they declare being better off, either because they completed secondary or higher education (profiles 4 and 5), or because their educational background allowed them

to access a more qualified and better-paid job (profiles 2, 3 and 7). Given that they come from families with a low socio-economic status, when they compare themselves with their parents, those from the latter profiles mainly consider the improvements in living conditions, in terms of housing and educational opportunities offered to their children. No interviewee report regression in their living conditions in comparison to those of their family of origin. The respondents also all declare that their parents value their socio-economic trajectories positively, even those from the lower components of the middle class (profiles 3 and 7) mostly because they were able to achieve economic independence.

1.4.2.2 Consumption and financial behavior

Consumption patterns

Broadly speaking and in a somewhat paradoxically way, the respondents define themselves as "anti-consumer" and "austere", but view consumption as essential. However, this shared opinion hides strong contrasts across profiles regarding consumption patterns and practices. Three types of consumption patterns may be highlighted.

(1) High-quality and diversified consumption are observed in the upper components of the middle class (profiles 4 and 5) and characterized by the consumption of top brands, gourmet and organic products, frequent trips (both domestic and abroad), eating-out practices, car (high-end, and/or frequently changed and/or more than one), private education or public education with extracurricular activities (English, sports, arts, etc.), and at least one domestic employee. Among interviewees from profile 5, cultural consumption also stands out. No restriction in consumption was observed in recent years (in relation to the economic crisis or the pandemic) with the exception of reduced expenditure on "social life" due to the lockdowns. In a nutshell, this type of consumption pattern orientated towards increased consumption of superior goods that is primarily observed among the upper segments of the middle class echoes the ideal-type of diversified consumption emphasized by the literature dealing with middle classes in rich countries.

(2) Moderately-diversified consumption observed in the middle components of the middle class (profiles 1, 2 and 6) and characterized by the consumption of second brands, sporadic eating out, domestic trips ("to the coast" or inland), car (standard), private education (low cost, 'parish' type) and extracurricular activities ("with effort"). Some interviewees also declare that they have a domestic em-

ployee. This type of consumption patterns could reflect a phenomenon of imitation of consumption styles observed among the upper middle class. However, interviewees from these intermediate segments of the middle class mention adjustments in their consumption patterns in the last two years that could reveal their (relative) vulnerability.

(3) Restricted consumption observed in the lower components of the middle class (profiles 3 and 7) and characterized by the consumption of second brands, prioritization of food consumption, low-cost public or private education, no extracurricular activities and no domestic employee. Interviewees from these lower segments of the middle class mention significant adjustments to their consumption in recent years and especially restrictions in their food consumption and prioritization of irreducible expenditure (gas, electricity, internet, etc.) in the COVID-19 context.

Well, at home we usually drink soda and that has been cut out totally. And well, food... the asado, obviously, was cancelled. The asado was the first to be cancelled. (...) Due to the fact that they were quite expensive and with the economic situation we are going through, that there were electricity increases, tax increases and many other things, we had to take drastic measures to try to make ends meet with the income we have. (Florencia, profile 7)

Financial behavior

Although valued by all interviewees, the practice of saving depends on household's income level. Those from the lower middle class (profiles 3 and 7) declare being unable to save, unlike those from the upper components of the middle class (profiles 4 and 5). Saving is also observed in profile 2, even though the current economic and health crisis has reduced their savings potential. In general, the practice of savings is linked to specific projects or objectives, such as going on vacation, remodeling the house, acquiring or changing a car, buying ITC goods or acquiring land. Interestingly, the main savings channel is the purchase of foreign currency and can be seen as a hyper-defensive investment strategy and outside the conventional channels.

Concerning borrowing and indebtedness, three types of loans can be observed across the different profiles. First, mortgage credits are long-term credits that have provided access to home ownership in profiles 2, 4 and 5. According to the interviewees concerned, such long-term loans are not perceived as indebtedness. Second, consumer credits are short-term credits taken out for two types of

motivation. As observed among those from profile 3, they are taken "out of necessity", either to pay for "day to day" or to pay off a debt (electricity, hypermarket card). Respondents concerned experience debt as "a burden".

I took one [a loan] last year, but from a private individual. (...) It was a person who lent money. (...) For me it was more of a burden than anything else. But I would not do it again. I prefer not to, if I have, I have. And if I don't have, I don't have. (...) Because the interest, like tremendous. Tremendous! (...) For me, for example, it suffocates me. It's like a weight that I feel I can't breathe when I have a debt. (Gabriela, profile 3)

These short-term loans can also be taken "by choice" to "fulfil dreams". In this case, they are used to refurbish the house or purchase/change the car. Such loans are observed among respondents with medium income levels (profile 2) who do not experience debt as a pressure. For instance, Patricio has several debts because he has taken out three loans from three different banks. In addition, his wife took out a fixed-rate loan to purchase a car. However, these debts do not represent a burden, as they are "planned debts". Third, loans from home appliance chains or from ANSES (*Administración Nacional de la Seguridad Social*) are primarily dedicated to members of the lower components of the middle class, especially those from profile 7.⁷

1.4.2.3 Housing, residential choices and security

Most interviewees live in their own homes (33 interviewees) while only four are tenants and three live in their home of origin. Among these two latter categories, young people (between 25 and 40 years old) are overrepresented. This sheds light on the difficulties faced by the youngest generations to access property in a context of scarcity of mortgage loans. As a result, homeowners are mainly between 40 and 60 years old and have benefited from better financial and real estate market conditions. They became homeowners through mortgage loans (5 respondents), family assistance (4), inheritance (2), and/or personal savings (3). Only one respondent from Tucumán in profile 2 accessed housing through the Housing Institute (*Instituto de la vivienda*).⁸ Even the interviewees from the lower

7. ANSES is the principal administrator of social security and other social benefits in Argentina, including pensions, family and childhood subsidies, and unemployment insurance. In 2017, ANSES launched a program aiming to provide discounted loans for pensioners and beneficiaries of social assistance programs.

8. The Housing Institute is a provincial organization that conducts housing policies dedicated to the lower and middle classes, either by construction or by granting loans at very low rates (sometimes zero rates).

components of the middle class (profiles 3 and 7) belonging to this age category have been able to access property through an alternative and sequential strategy consisting first in the acquisition of a land (sometimes with irregular tenure) and then in the progressive construction of the dwelling.

Except for those in profile 7, all respondents are satisfied with their housing, even if they would like to make improvements to gain in "comfort" and "convenience" (profiles 2 and 3). In particular, interviewees from Buenos Aires, who tend to live in apartments, declare that they would like to have a larger space. The respondents are also satisfied with their equipment, especially regarding ITC. All have access to computers, cell phones and internet (though with limitations for households in Tucumán due to a "lack of coverage"). Our interviews also reveal that housing and residential choices are closely connected to security issues. All interviewees declare that they feel "insecure" and consider that the problem of insecurity has worsened in recent years. This perception is especially marked among interviewees from Buenos Aires suburbs and Tucumán. In Tucumán, some respondents report armed robberies in their homes, in their cars and pilfering. Moreover, the interviews show that women feel more insecure and fearful in public spaces, especially at night. Some respondents also refer to the implementation of neighborhood strategies to deal privately with security issues.

My area is unsafe. We were just talking yesterday with a neighbor. Now there are two policemen, one on one corner and one on the other. (...) We have set up an alarm among all the neighbors. Each one of us has a device for when we are in danger, and we pay a man who is riding a motorcycle. (...) I have an automatic gate because otherwise you have to get off, open it and it is unsafe. A lot of insecurity, you go back home with fear when you have to come back late and so on. (Sandra, profile 2)

There are several interviewees who have considered or would like to move to a gated community for greater protection of their family. Alejandro (profile 1) is the only one who already lives in a gated community. He declares that he only feels safe in the gated community where he lives because it has private security: "but if you step outside you feel unsafe, because that is how Argentina is, unsafe".

1.4.2.4 Education and health

Education

Analysis of the interviews reveals that parents make the education of their children a priority, to

which they devote a significant part of their income. Among those who send their children to a public school, a distinction is made between those who do so “out of necessity” due to low-income levels (profiles 3 and 7), and those who do so “by choice”, who usually also pay for extracurricular activities (profile 5 and part of profile 1). Among those who send their children to a private school, a distinction is made according to the type of school: (1) dual schooling, characterized by English teaching and sports activities (profile 4); (2) “parish” type, which is found in profiles 2, 3 and part of profile 1.

Another salient result is the very positive view of extracurricular activities (language courses, sports and artistic activities) which is significant in all profiles. Nevertheless, and as expected, the access of children to these activities is conditional on the income level, as families from profiles 3 and 7 are not able to pay for such activities.

As in many Latin American countries, the evaluation of the Argentinean public education differs according to schooling levels. Almost all respondents express an overall negative evaluation of primary and secondary levels in opposition with a positive evaluation of the university level. The negative valuation of public primary and secondary schooling is especially marked among interviewees from profiles 2 and 3 who make great financial effort to send their children to privately managed schools (in general, parish).

I tried to send them here to school. (...) I tried. The teachers never came. (...) The public school here was very..., the children never had classes. So, the priority was to pay for the school. (...) So, I made a sacrifice to send them to a private school. (...) I made the sacrifice only because I wanted them to study. (Dilma, profile 3)

Despite criticisms of the quality of public education and demand for greater investment in this domain, all interviewees tend to express their attachment to the public education system that guarantees access to education to all citizens.

Health

As for health, our interviews show that middle-class households do not usually turn to the public health system. They choose to seek care through the social security system in the case of formal wage earners and their families (profiles 1, 2, 6 and most of those in profile 5), or through private coverage in the case of small employers and those with higher income levels (profile 4 and two interviewees

of profile 5). In fact, only informal workers and the self-employed (profiles 3 and 7) seek care in the public health system. Nevertheless, it should be noted that even those interviewees try to pay for private consultations due to their bad experiences in public hospitals.

As in the case of education, the interviewees have a positive view of the existence of a public health system to which everyone has access. However, although all respondents recognize the good academic training and effort of health professionals, they criticize the quality of public health care in terms of infrastructure, equipment and health worker pay. The lack of supplies, collapsed waiting rooms and deteriorated buildings emerge recurrently in the interviewees' testimonies, with such deficiencies being attributed to the lack of public investment. In this context, the inequalities between private and public health care stand out, especially in the COVID-19 context.

In other words, it seems to me that we have a good health system, with good professional teams and so on, but it seems to me that there is a great lack of investment and structural problems. (...) There is a clear difference between the private health system and the public health system. Because in the private health system you have the supplies. (Jorgelina, profile 4)

1.4.2.5 Redistribution policies

Social assistance

Many interviewees regret that the State does not have policies designed to meet the needs of the different segments of the middle class and concentrates social assistance on the lower classes. Some of them (in profiles 2, 3 and 4) even perceive themselves as "abandoned" by the State. In fact, except for the interviewees in profile 7 who benefit from State transfers, none of respondents refers to having received public assistance, even though we must point out that some of them have received the IFE in the context of COVID-19.

This does not mean that respondents advocate for lessening the transfers to the poorest. Regarding public assistance mechanisms, in particular the AUH, all the interviewees agree that they should be more focused on the "poorest", "the vulnerable", "those who do not have enough to eat". Beyond this wide support for anti-poverty redistribution policies, there are differences in the evaluations that can be summarized in two typical antagonistic messages. The first claims that anti-poverty public transfers are "excessive" and "out of control", they destroy the "work culture" because they discourage

the search for work and encourage "living on social benefits" and "serve corruption". People adopting this view argue that State transfers should be "temporary" until beneficiaries "get a job" and be given under "consideration". This view is strongly registered in profiles 1, 2 and 4, and, to a lesser extent, in profiles 3 and 7.

For me they already help a lot. (...) I think we should make an exhaustive control and see the people who really need it. (...) There are many people (...) who receive several benefits, and others who really lack them. (...) It would be necessary to make a census, to know things well to see what they lack. (...) I agree that they should be helped. (Dilma, profile 1)

The second view, registered in profiles 5 and 6, is strongly and unconditionally supportive of social transfers both for efficacy ("I am in favor because it (...) allows the economy to move from the bottom up"), and for equity purposes ("we must accompany the most vulnerable categories, those who need this to be able to live, to be well").

Tax system

Regarding the tax system, all the respondents agree that taxes are "excessive", "unfair", "unbalanced" and "inequitable". They all call for a greater degree of progressivity and support the idea of a "tax on large fortunes" (levied on "the upper classes and "multinational companies"). This point is particularly significant because it constitutes a meeting point between the interviewees of profiles 4 and 5 (i.e. from the upper middle class), who often tend to have antagonistic views.

Nevertheless, there are nuances that can be summarized in two typical views. The first view asserts that taxes are "abusive", "they take away" the fruit of effort and work, "discourage" work and "do not let you move forward" (profiles 2, 3 and 4). The distributive mechanisms are also perceived as unfair because the money collected goes only to social benefits. This discourse is especially radicalized among small employers and self-employed workers (profile 3).

I pay \$43,000 in contributions for my two employees; their basic salary is \$36,000. With what I pay in contributions I could be giving work to one more person and generate more work. (...) And I believe that there are a lot of companies in the same situation. (...) But tax collection is so high that it does not allow us, because the more employees you have, the more expenses increase. (Carlos, profile 3)

According to the second view, taxes are useful albeit unequal (profiles 5 and 6). Indeed, the problem is not taxes, which are necessary to finance the State, but their regressive nature.

It seems to me that more should be collected in non-productive, financial activities. Everything that is financial speculation, I think that the State should regulate it and should take resources from there so as not to encourage it, and that all that money could be used for productive activities (...) and for assisting the most vulnerable categories and the most vulnerable areas. (Horacio, profile 6)

1.4.2.6 Democracy and governance

While all interviewees express their attachment to public services and State intervention, they also point out failures in the functioning of democratic mechanisms. First and foremost, a very negative view of corruption emerges in the interviewees' accounts, regardless of gender, age, socio-economic category, city or political orientation. As citizens, interviewees tend to consider themselves "victims" of corruption and, importantly, corruption is not associated with a particular government but instead appears as a part of the Argentine political system and society.

I don't know if it was Cristina's government, Macri's or this one. There is always a bad bug there, sticking his hand where it does not belong. (...) All of them had a level of corruption. All of them. I don't think there is any one that has been spared. I don't know if it is the executive branch itself. (...) It is like that. (Silvia, profile 1)

In addition, all respondents declare that they distrust the police, the judiciary system or the press. The police is considered by the respondents to be an institution marked by corruption; however, some point out that corruption is concentrated in the highest ranks and identify the low wages of the police as a possible explanation of corruption. Shortcomings in police training is recurrent and those in profile 5 mention the lack of training in human rights and gender issues. All the interviewees also disapprove strongly the functioning of justice, but the criticisms do not necessarily refer to the same aspects. Some relate the poor functioning of justice to the impunity of "the politicians" (profiles 1, 2, 4 and 6); others to the impunity of the "upper classes", in reference to big businessmen (profile 5); and others to the impunity of young delinquents (profile 3). For informal workers (profile 7), the negative evaluation of justice is associated with its arbitrary and harmful nature for vulnerable cat-

egories of society, such as the poor or women. The lack of independence from government and the slowness of judicial processes are also criticized. Lastly, the message is fairly homogeneous among the interviewees as regards the press which "does what is convenient for it", "is a liar", "misinforms" instead of "informing" according to respondents. Therefore, in general, they all adopt a critical stance when reading the news in digital newspapers, social networks, radio or television.

1.5 Conclusion and discussion

The purpose of this study was to provide an in-depth analysis of the structure and dynamics of the Argentinean middle class, to reveal its potential vulnerability and to examine the group's behavior and aspirations in the context of recent crises. To do so, we adopted a two-step methodology combining quantitative and qualitative materials. Based on this innovative research design, our empirical investigations enrich the literature on middle classes in Argentina at several levels.

First, our quantitative analysis confirms that the middle-income group (defined as households with daily per capita income between US\$10 and the 95th percentile of the income distribution) is large in that it accounts for 77.5% of the urban population in 2018. In line with previous evidence (e.g. Boos 2020), our qualitative interviews also confirm strong self-identification with the middle class, which brings contrast with similar surveys conducted in other developing countries where self-identification to the middle class is feeble (Clément et al. 2022). However, looking beyond this apparent homogeneity, our cluster analysis based on education and labor market characteristics reveals the strong fragmentation of the Argentinean middle-class, with no less than five groups being identified. This fragmentation largely echoes prior evidence (e.g. Galassi and González 2012; Benza 2016) and may hide a form of polarization. As a matter of fact, we were able to distinguish a clear upper middle class composed of managers, professionals, employers and public employees, and characterized by the highest occupations, stable employment status and high education levels and income. This upper middle class is often viewed as the historical middle class in Argentina (particularly the category of public employees) and correlates with the managerial and professional class (*clase profesional y gerencial*) identified by the sociological literature (Sautu 2016; Boos 2020). At the extreme opposite, the service employees, self-employed and informal workers form the lower and vulnerable middle

class. They are characterized by relatively low levels of education and income, fragile (informal or self-employed) employment status and lack of access to social security.

Second, our study sheds light on the recent dynamics of the Argentinean middle class. The analysis of short-term income dynamics reveals that the increase of the middle-income group in the early 21st century was driven primarily by the expansion of the lower middle class as a result of sustained economic growth, formal employment growth, real wages increases and anti-poverty social policies (Dalle 2012; Ferreira et al. 2013). The predominance of the lower middle class within the middle-income group undoubtedly explains why a large part of the middle class remains vulnerable during crisis episodes, including the COVID-19 pandemic. Our qualitative results also highlight the fact that informal workers and the self-employed are especially impacted and suffer from the fact that they cannot benefit from the different support mechanisms. We also document how their vulnerability pushes them to adopt various coping strategies, such as restricting their consumption. This vulnerability of part of the middle class has been largely documented in the economic and sociological literature, especially in the specific context of the 2001-2002 crisis (Ozarow 2014; Galassi and González 2012). Our investigations, based on recent crises, confirm that macroeconomic instability and exposure to shocks are crucial determinants of the dynamics of the Argentinean middle class. It should be noted however that even for the vulnerable components of the middle class, there is a clear perception of upward intergenerational mobility.

Third, in line with existing evidence (Wortman 2010; Sautu 2016) our study emphasizes the persistence of important socio-economic aspirational and behavioral markers of middle-class membership in Argentina. Interviews could highlight number of shared aspirations regarding consumption diversification, access to homeownership, search for security or prioritization of education and health. The unanimous rejection of corruption also stands out as a shared value. Such commonalities tend to homogenize the middle class and may be viewed as part of its social identity. However, the adoption of subsequent behavior in those domains is heterogeneous and remains highly constrained for the lower segments of the middle class (informal workers, self-employed) but also for the youngest regarding access to homeownership, which may prompt some forms of frustration. The education domain is particularly illustrative of that. Due to their financial constraints, the lower components of the middle class are not able to enroll their children in better-quality private schools or to pay for ex-

tracurricular activities, and thus remain dependent on lower-quality public schools which offer less opportunities of social mobility.

Fourth, our study highlights that the relationship between the middle class and the State is characterized by loyalty and expectations. Although a clear divide between pro-State and pro-market middle-class segments could be identified, the majority of the interviewees expressed their strong attachment to the State, the importance of the provision of public goods as well as the necessity of ambitious redistributive policies. The Argentinean middle class, even the pro-market segment, thus appears to be moderately liberal. However, strong criticisms against the public policies that are effectively implemented are expressed. Redistributive policies are widely considered as unfair since they favor those at the bottom while enriching those at the top. More progressive taxes and more effective social policies (i.e. targeting the vulnerable components of the middle class) are expected by all middle-class segments. People in the middle class also point to the poor quality of public services, especially in the sectors of education and health. Moreover, our findings show that the lowest components of the middle class largely depend on such deteriorated public services. These results largely confirm those of Birdsall et al. (2014) on the strugglers, a notion that is put forward to describe the vulnerable middle class in Latin American countries. Birdsall et al. (2014) show that two phenomena reinforce the vulnerability of this group. First, within the redistributive system, strugglers are "net payers" like the upper middle class and the wealthiest and unlike the poorest. They benefit much less from public transfer programs than the poorest and are subject to high indirect taxation. In addition, lacking the income level of the upper middle class and the rich class, strugglers are more dependent on low quality public services, which could restrict their prospects for upward mobility.

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APPENDIX

1.A Appendix A: Supplementary tables

Table 1.A.1: Characteristics of poor, middle-income class and rich households' heads

	Poor (18%)	Middle-income class (77%)	Rich (5%)	Total
Education				
No school or incomplete primary education	11.50	6.76	1.08	7.29
Primary education	27.16	21.21	2.99	21.29
Incomplete secondary education	24.13	13.53	2.36	14.80
Secondary education	24.48	24.73	17.51	24.30
Incomplete Superior education	6.97	13.30	14.77	12.27
Superior education	5.76	20.47	61.29	20.05
Occupation				
No job (retirees, inactive, unemployed)	39.32	35.05	23.27	35.17
Higher managerial and professional occupation	3.49	13.78	36.52	13.18
Intermediate professions	3.20	11.15	21.14	10.28
Service employees	32.24	23.58	9.66	24.36
Workers and craftsmen	21.74	16.44	9.41	17.00
Employment status				
Retired / Pensioned	12.94	29.23	21.68	25.97
Other inactive / Unpaid family workers	26.41	5.86	2.08	9.28
Employees	40.03	48.70	57.67	47.65
Self-employed	19.24	13.53	9.47	14.31
Employers	1.39	2.68	9.08	2.79
Type of employer / Institutional sector				
No job (retirees, inactive, unemployed)	39.30	35.10	23.30	35.17
Private formal	31.42	41.71	49.69	40.33
Public formal	3.99	13.49	23.89	12.37
Informal employment	25.27	9.75	3.15	12.12
Multi-activity				
No	56.90	57.60	58.40	57.53
Yes	3.80	7.30	18.30	7.30
No job (retiree, inactive, unemployed)	39.30	35.10	23.30	35.17

Notes: n = 15,298. The middle class includes households with income between USD10 and the 95th percentile of the income distribution. Source: Authors' elaboration based on EPH data (fourth quarter, 2018).

Table 1.A.2: Characteristics of clusters (characterization variables) derived from the mixed clustering procedure

	Group 1	Group 2	Group 3	Group 4	Group 5	Total
	(35%)	(22%)	(20%)	(10%)	(13%)	
Region						
Gran Buenos Aires	14.24	16.04	17.43	14.20	15.33	15.31
NOA	18.76	19.78	18.19	22.22	24.79	20.04
NEA	9.91	8.97	8.39	10.36	10.95	9.63
Cuyo	10.44	10.17	11.57	8.19	9.40	10.21
Pampeana	32.39	31.60	29.56	29.74	24.92	30.48
Patagonica	14.26	13.43	14.86	15.29	14.62	14.34
Gender						
Male	42.59	64.05	79.64	64.16	56.66	57.53
Female	57.41	35.95	20.36	35.84	43.34	42.47
Social security						
No payment for social security	7.46	25.85	27.44	8.10	1.35	14.02
Pay for social security	92.54	74.15	72.56	91.90	98.65	85.98
Split middle-income class						
Low middle-income class	71.36	76.04	69.98	51.46	52.48	67.57
Middle-income class	22.84	19.42	23.50	34.59	32.52	24.72
High middle-income class	5.80	4.54	6.52	13.95	15.00	7.71
Activity						
Inactive/unemployed	100.00	0.00	0.00	0.00	0.00	38.16
Farming	0.00	0.76	1.21	1.17	0.19	0.51
Mining	0.00	0.48	2.48	1.17	0.26	0.68
Manufacturing industry	0.00	6.92	23.29	6.35	0.71	6.17
Electricity, gas, steam and air conditioning	0.00	0.24	1.26	1.67	0.13	0.45
Water, sanitation, sewer and waste sector	0.00	0.64	0.30	0.84	0.32	0.32
Construction	0.00	6.92	20.46	5.76	0.64	5.62
Wholesale trade, repair of motor vehicles	0.00	25.81	19.30	17.54	0.84	10.69
Transports and storage	0.00	10.53	5.81	3.51	0.58	3.67
Accommodation and catering	0.00	6.96	1.47	4.09	0.26	2.19
Information and communication	0.00	0.64	2.63	1.34	1.42	0.91
Financial and insurance activities	0.00	0.88	0.61	6.68	1.35	1.16
Real estate activities	0.00	0.92	0.45	0.58	0.13	0.35
Professional, scientific and technical activities	0.00	0.72	5.51	4.68	1.93	1.83
Administrative and support activities	0.00	3.78	2.83	2.09	3.35	1.95
Public administration, defense, social security	0.00	7.36	0.20	26.07	36.51	9.14
Teaching	0.00	3.50	1.16	3.68	34.00	5.85
Health and social services	0.00	2.21	2.12	6.35	14.94	3.47
Arts, entertainment and recreation	0.00	2.05	1.16	1.84	1.22	0.99
Other services activities	0.00	2.45	5.96	3.43	0.52	1.95
Household activity, domestic employment	0.00	14.88	0.45	0.00	0.13	3.27
Unknown	0.00	1.33	1.31	1.17	0.58	0.70
Mean of quantitative variables						
Age of household head	66.3	44.1	47.4	45.7	43.5	53.2
Household size	2.3	3.1	3.1	3.1	3.1	2.8
Household activity rate	0.17	0.63	0.59	0.63	0.62	0.45
Household income per capita	12,249	11,354	12,240	15,412	15,480	12,811
Share of household global income from :						
Main labor	0.209	0.850	0.840	0.909	0.866	0.612
Secondary labor	0.014	0.031	0.021	0.017	0.078	0.028
Non labor income	0.777	0.119	0.138	0.074	0.056	0.360
Retirement / Pension	0.687	0.076	0.100	0.042	0.029	0.304
Public aid	0.014	0.016	0.015	0.006	0.004	0.012
Private aid	0.056	0.021	0.015	0.020	0.019	0.033
Capital	0.016	0.004	0.006	0.006	0.003	0.009

Other sources	0.004	0.002	0.002	0.000	0.001	0.002
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Notes: n=11,668. The shaded cells identify the modalities that are statistically (at the 5% level) more represented in the group considered than in the rest of the middle-income class. For quantitative variables, shaded (italic) cells identify the means that are significantly higher (lower) than those of the whole middle-income class.

Source: Authors' elaboration based on EPH data (4th quarter, 2018).

REDISTRIBUTIVE PREFERENCES AND TERRITORIAL ANCHORAGE : THE CASE OF LATIN AMERICA

Abstract

Despite high socio-economic and territorial disparities, Latin America shows little polarization in redistributive demands between the richest and the poorest. This study relies on a center-periphery approach to explore the role of geography in shaping citizens' redistribution preferences in the Latin American region, using nationally representative LAPOP opinion survey data from 16 countries between 2012 and 2018. A classification of respondents' cities is carried out to identify urban centers and peripheral areas, as well as their level of development using remote sensing data. Findings reveal stronger demands for redistribution among citizens living outside urban centers, and particularly those living in small cities and villages in remote areas. Those living in the most developed areas on the periphery, and notably the better-off citizens, are calling for more action from public authorities to reduce inequality relative to their counterparts in urban centers. On the other hand, the least affluent citizens have declining redistributive demands that converge with those of urban centers. The analysis shows that while there has been a decline in strong redistributive demand since 2012, the gap in demand between the center and periphery has tended to narrow since 2016, but with heterogeneous country-specific results.

2.1 Introduction

The Meltzer and Richard's (1981) seminal theory of the size of government predicts that redistributive pressures should increase with the level of income inequality, and by extension, should be higher for the poorest (beneficiaries), and lower for the richest (contributors). In fact, as wealth increases in the hands of a minority, it is in the interest of the majority of the poorest to put pressure on governments to ensure a fairer distribution of the wealth created. Yet, the relationship between the level of inequality and support for redistribution is not so clear-cut. In her recent book, Cavaillé (2023) shows that rising inequalities in Western countries since the Great Recession did not lead to higher support for redistribution, especially among the worse-off. Support for redistribution has remained stable in most countries over the past few decades, despite rising inequality, recessions and mass unemployment.

This apparent paradox is even more pronounced in Latin America (LA), which is well-known for its high levels of income inequality, but also of access to quality education and healthcare (Busso and Messina 2020). A striking example comes from income inequality: in 2022, the poorest 50% held 7.5% of the national income before redistribution, while the top 10% captured almost 60% (instead of 18% and 40% respectively for Europe).⁹ Despite these high levels of inequality, redistribution policies in LA do little to reduce the gap between the richest and the poorest. A comparison of absolute redistribution levels—i.e. the difference between the pre-redistribution and post-redistribution Gini indicators—between OECD and LA countries provides a good illustration (Figure 2.1). For fairly similar levels of income inequality on the market, redistributive mechanisms in LA countries are mostly ineffective (and even regressive for Honduras, Ecuador, Bolivia, and El Salvador) compared with those in OECD countries.

At the same time, a large proportion of LA citizens are dissatisfied with the current income distribution, with around 8 out of 10 finding it unfair in their country.¹⁰ Busso et al. (2023) show that this high level of dissatisfaction for eight countries—whether in terms of income, quality of education or health, or justice—also materializes in a strong general demand for redistribution. Nevertheless, sev-

9. See the World Inequality Database for 2022: <https://wid.world/> (access in July 2024).

10. Average over the period 2001-2023 from the Latinobarómetro opinion survey: <https://www.latinobarometro.org> (last access in July 2024).

eral studies point that the poorest in the region are generally no more demanding of redistribution from their governments than the richest (Dion and Birchfield 2010; Blofield and Luna 2011; Holland 2018).

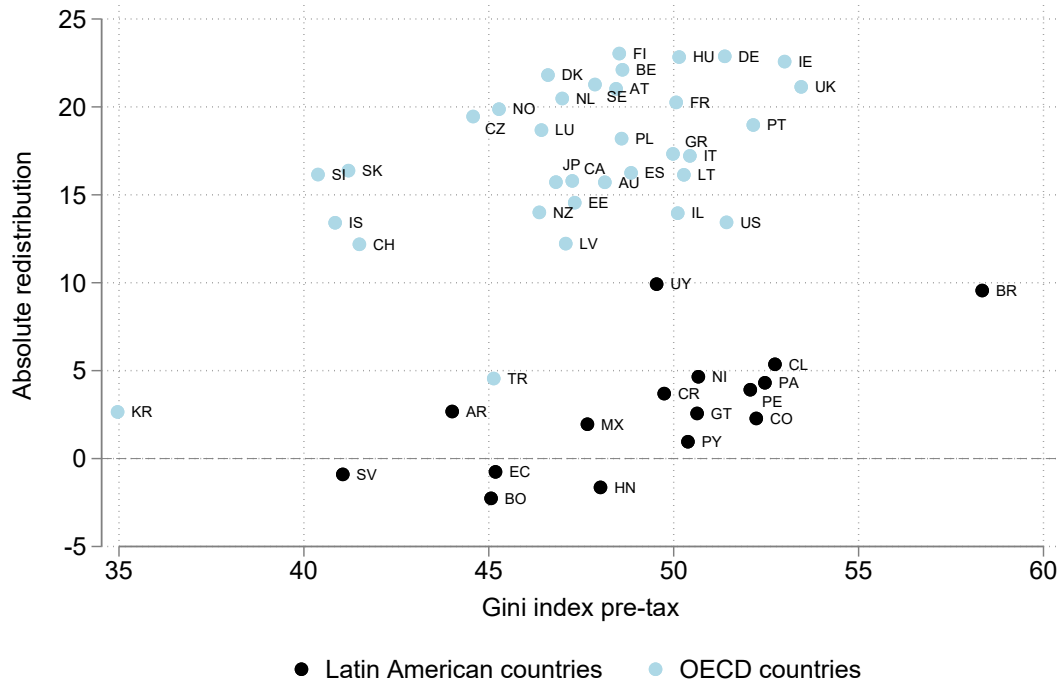


Figure 2.1: Redistribution in Latin America and OECD countries (2000-2020)

Source: Author's elaboration based on the Standardized World Income Inequality Database 5.1 (SWIID) for the period 2000 to 2020.

Note: Absolute redistribution refers to the difference between the pre and post Gini index. Chile, Colombia, Costa Rica and Mexico are also OECD countries.

A large body of literature explores the determinants of citizens' redistributive preferences (Guillaud 2013; Haggard et al. 2013), with most explanations of the underlying mechanisms based on the individual level. Some studies highlight a potential bias in citizens' knowledge of actual levels of inequality and their place in society and attempt to correct it (Kuziemko et al. 2015; Hoy and Mager 2021). Cavallé (2023) argues that a combination of fairness beliefs, self-interest, and the existing distribution level influences individuals' redistributive preferences. This process of fairness reasoning can sometimes lead to demands that are seen as paradoxical. Holland (2018) offers an explanation for this phenomenon on a more aggregated scale. The author claims that the historically truncated nature of welfare states in the developing world (through informal access barriers, exclusionary social protection designs, and flat or regressive benefits) explains citizens' lack of redistributive demands. In particular, the author emphasizes citizens' diminished expectations of the State's ability to im-

prove their conditions, especially among the poorest facing exclusion, explaining the low polarization of redistributive demands in society.

While citizens' redistributive demands (or lack thereof) are influenced by many individual factors depending on their level of wealth or life experiences, the geographical context in which individuals evolve also appears to matter. The notion of “*left behind*” places, depicting unequal territorial development, has become widely popular over the past decade as an explanation of citizens' political attitudes in a context of rising anti-system and extreme political parties (Rodríguez-Pose 2018; Fiorentino et al. 2024). In a historical analysis, Cagé and Piketty (2023) study the political attitudes and abstention of citizens in France. The authors stress that an explanation of political behaviors based solely on a class struggle explanation is not sufficient, and requires a multidimensional and spatial vision of social class. They introduce the concept of “*geo-social*” classes, which anchors individuals in their specific territory with uneven and evolving territorial development.¹¹ While previous studies have examined the relationship between redistributive demands and urban-rural affiliation or big-city residence (Haggard et al. 2013), little is known about the specific role of territory in shaping citizens' redistributive preferences, more specifically between central and marginalized areas.

This chapter aims to explore whether citizens' redistributive demands are influenced by their territorial anchorage, beyond individual characteristics. The analytical framework of this chapter has been largely motivated by the latest contributions of Cagé and Piketty (2023), which place the *geo-social* class at the heart of the debate. On a much more modest scale, this work aims to extend the analysis to the redistributive preferences of citizens in the (admittedly different) context of developing countries. Far from contradicting the relevance of analyses based on individual approaches, this present study proposes to complement them at a more aggregated level of analysis.

This chapter relies on four waves (2012, 2014, 2016, 2018) of nationally representative opinion surveys from the Latin American Public Opinion Project (LAPOP) on 16 LA countries, covering the vast majority of the region's inhabitants (excluding the Caribbean). Based on the geolocation of 1,108 respondent' city centers, a center-periphery approach is adopted to reflect their relative position

11. The notion of “*geo-social classes*” was initially developed by Latour (2021) and Latour and Schultz (2022), consisting in rethinking social classes as socio-ecological classes, taking into account their relationship and attachment to earthy living conditions. Cagé and Piketty (2023) take up this concept more broadly, emphasizing the geographical dimension, which also includes environmental issues and natural resources.

within the territory. Each town is categorized according to its administrative role, population, distance from a populated area of over 100,000 inhabitants, and surrounding urban density. Primary towns and their nearby suburbs are assigned as urban centers, while secondary cities and smaller towns in remote areas are assigned as peripheral areas. In addition, remote sensing nighttime lights data are mobilized to account for cities' level of development. The median brightness level in each group thus allows us to identify their relative development level, i.e. the 50% least developed cities.

The overall findings reveal that citizens located in peripheral areas are more likely to express strong support for redistribution than those residing in urban centers. These results remain stable even when controlling for socio-economic characteristics or individual perceptions (such as inter-personal trust, perceived insecurity, or corruption). While the redistributive preferences of residents of small cities and villages in remote areas are generally the highest, citizens' redistributive demands are systematically stronger for those living in the most developed peripheral areas (i.e. the brightest 50% of each city group). Household wealth, measured by an indicator of disposable assets, also plays a significant role on redistributive demands in peripheral areas. Most of the redistributive differences between peripheral areas and urban centers stem from individuals belonging to the second and last terciles of the wealth indicator. Redistributive preferences from those in the bottom tercile remain fairly similar across zones. These results suggest that differences in the redistributive demands of citizens in peripheral areas and urban centers do not seem to emanate from the poorest citizens, but from a consumer class relatively well-endowed in durables, who could be assimilated to the middle class.

Finally, the analysis reveals a noticeable evolution in the redistribution preferences of the region's citizens over the period studied. While strong support for redistribution declined from 2012 onwards, the center-periphery redistributive demand gap previously identified progressively narrowed after 2014. This reversal trend is particularly striking in the case of the least developed small cities and villages in remote areas, but also among the poorest citizens. As expected, results are highly heterogeneous when the analysis moves from the regional to the national scale, demonstrating the importance of the local and regional context in determining citizens' redistributive demands.

The results highlighted here do not claim to be causal, as many mechanisms are involved in shap-

ing the redistributive demands of individuals, which cannot be verified in this framework nor with the data used. However, these results contribute to the literature on the determinants of redistributive preferences in developing countries, and do shed light on the importance of geographical and territorial factors in explaining the paradox of redistributive preferences in LA, in addition to individual factors. The general decline in redistributive demand conceals two distinct trends. On the one hand, the demands of the poorest people in peripheral areas are diminishing and converging with those of urban dwellers. On the other, the redistributive demands of other wealthier citizens in peripheral areas remain higher than those of urban dwellers. These behaviors seem to explain at least part of the low polarization of redistributive demands in the region, suggesting a form of fatalism for the poorest. A growing literature on urban-rural linkages emphasizes the role of secondary cities within territories in enhancing economic growth and achieving poverty reduction (Berdegúe et al. 2015; Christiaensen and Kanbur 2017). Adopting public policies favoring small and medium sized towns outside the major urban centers could help meet citizens' redistributive expectations and rebuild citizens' trust in their political representatives, where much work remains to be done.

The rest of the paper is structured as follows. Section 2.2 briefly discusses the role of geography on citizens' attitudes, and more specifically on the formation of redistributive demands. Section 2.3 presents the data and the methodology adopted. Section 2.4 describes the estimation strategy. Section 2.5 presents the main results, and Section 2.6 concludes.

2.2 The role of geography in citizens' attitudes

The uneven development of territories has been widely discussed in geographic economics, at least since Lipton's (1977) pioneering work on the *urban bias* of the development process. It states that investment choices made by policymakers tend to prioritize urban and industrial areas at the expense of rural territories, with adverse consequences for economic growth and poverty reduction in these areas in developing countries (Bezemer and Headey 2008), or more specifically in LA (Berdegúe et al. 2011). Ferré et al. (2012) have extended the *urban bias* reasoning by showing a *metropolitan bias* in developing countries, favoring very large cities over smaller and medium ones, in which most urban poor reside. Their analysis, based on eight developing countries (including Brazil and Mexico), sug-

gests an inverse relationship between city size and poverty levels, where the largest cities have the greatest availability of services and infrastructure. A more recent study by Gómez-Lobo and Oviedo (2023) also confirms the extent of these spatial inequalities in the LA region compared to other regions of the world, notably between urban–rural areas, but also within small urban areas or on the outskirts, where poverty and informality are prevalent.

Uneven territorial development also affects for citizens' perceptions, trust and political attitudes. Córdova and Layton (2016) provide evidence that contextual factors shape citizens' trust in local representatives in El Salvador. They find that high neighborhood income inequality undermines local governance and increases distrust in local government among the poor. Their results, in line with the Fairness Heuristic Theory (Van den Bos 2001), reveal that individuals mainly draw on the most salient information from their local social context to judge the distributive fairness and performance of their elected representatives.¹² Bland et al. (2023) also show that geography influences the accountability of political representatives in the LA region. Citizens in remote areas are less likely to turn their dissatisfaction with public services into sanctions against nationally elected officials than their urban counterparts, despite a lower quality of public services in rural areas. A similar study carried out in the African context for 17 countries reveals analogous results (Brinkerhoff et al. 2018). Regarding redistributive demands, Haggard et al. (2013) find in a cross-country study of 41 developing countries that while income is a key factor in citizens' redistributive preferences, the latter also vary greatly according to other factors such as occupation, unionization, and the place of residence. In particular, job opportunities and urban cultural influence can explain the differences in redistributive preferences between large cities and rural areas. These results, suggesting an urban–rural divide in citizens' attitudes, are also well illustrated in the work of Gimpel et al. (2020) for the case of the US. These authors conclude that spatial location plays a key role in determining and structuring political opinions.

Other studies dealing with territorial disparities also add the notions of *center* and *periphery*, distinguishing attractive, dynamic territories (in economic, political, and cultural terms) from marginal or excluded areas. Treib (2021) argues that the (perceived) increase in spatial inequalities between

12. The Fairness Heuristic Theory posits that in cases where information is not fully available, people rely on simple heuristics or mental shortcuts to assess fairness (Van den Bos 2001).

core and periphery territories has consequences on people's political attitudes in Europe, and explains the rise of euroscepticism in several countries such as France, the UK, Italy or Poland. With different words, Rodríguez-Pose (2018) also shows that territories lagging behind or with “no future”, have been the main sources of popular revolts and contributing to the rise of political populism in Europe or the US. These territorial disparities also have repercussions on citizens' preferences in terms of public policy. Using a center-periphery approach, Arndt et al. (2023) identify a cleavage in support for environmental policies (taxation, energy transitions) in Western Europe, between citizens in metropolises and those in small towns or rural areas, the latter being the most reluctant to adopt them.

Thus, one explanation for the low polarization of redistributive demands between the richest and poorest citizens in Latin America could lie in the spatial or territorial factor, beyond the multitude of individual factors. While the link between redistributive preferences and urban-rural residence has been documented (Haggard et al. 2013), the differentiation between central and peripheral areas, where economic attractiveness, employment opportunities and productive structures differ, has not been studied in the region to the best of my knowledge. The definition and contours of the concept of periphery, originating from geographic economics, can be the subject of debate in the literature (Kühn 2015; Pugh and Dubois 2021).¹³ Although these are beyond the scope of this study, it is worth clarifying its meaning throughout this chapter. As the aim of this study is to explore the role of the center-periphery divide on citizens' redistributive preferences on a regional scale – including a large number of cities in different countries –, the categorization of territories will be mainly based on geographical or urban aspects (distance to large city, population, administrative role) for practical reasons and data availability (more details about the method in the next Section 2.3). Neither the historical or political dimensions of territories, nor their evolution, will be addressed here. Nevertheless, this approach makes it possible to consider territorial disparities more precisely than an urban-rural or city-size distinction.

Irrespective of individual characteristics, there are reasons to believe that territorial and spatial factors could influence citizens' redistributive demands. Based on the literature, two main hypotheses

13. For instance, between the terms periphery and peripheralization. Periphery refers mainly to a static geography notion such as distance from a center (large city), whereas peripheralization describes a dynamic process with social, economic or political relations that have spatial implications (Kühn 2015; Pugh and Dubois 2021).

can be postulated. The first hypothesis (*H1*) is that citizens' redistributive preferences in peripheral areas might be higher than those of those located in urban centers. The potential urban or metropolitan bias of investment decisions, particularly in terms of public services and infrastructure, should increase the feeling of unfairness among citizens, leading to higher redistributive demands.

H1: Citizens in peripheral areas, due to the urban bias in public investments, are more likely to have stronger redistributive demands than those in urban centers.

The second hypothesis (*H2*), related to the diminished expectations theory developed by (Holland 2018), could precisely produce the opposite results. In fact, strong spatial inequalities between territories could reduce redistributive demands of citizens outside urban centers, due to lower expectations of the State's ability to effectively redistribute resources.

H2: Citizens in peripheral areas have lower redistributive demands than their counterparts in urban centers due to lower expectations about the State.

Other factors interacting with the center-periphery divide could also generate alternative outcomes. Firstly, the diversity of contexts in which individuals evolve could affect citizens' perceptions and demands (Córdova and Layton 2016). Consequently, cities' size and development level should also influence citizens' redistributive preferences. Secondly, individual characteristics, particularly household wealth, could influence redistributive demands according to their center-periphery situation (Haggard et al. 2013). Thus, the effects of these potential interactions will be verified subsequently.

2.3 Data and methodology

2.3.1 Main data

Several database are used to examine the link between citizens' redistributive preferences and their urban-peripheral territorial anchorage. First, this study draws on four waves (2012, 2014, 2016, 2018) of the LAPOP survey, which has full regional coverage and is nationally representative. The survey measures democratic values and behaviors in the LA region by using national probability samples

of voting-age adults.¹⁴ Common questionnaires and standardized techniques allow for comparison across countries and over time. The sampling frame covers the entire eligible voting population in the main regions of the countries studied, and each person has an equal chance of being interviewed in its own country, regardless of ethnicity or geographical area.¹⁵ Data from 16 LA countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Paraguay and Uruguay) are used in the analysis, representing nearly all the main countries in the region in terms of demographics or economy, except for the Caribbean. Venezuela is not included in the analysis due to lack of data after 2014. All selected countries are surveyed in the four waves.

Due to the anonymization of data promised to participants, precise geolocation of respondents is not directly possible in the LAPOP survey. However, it is possible to obtain the *municipio* – the smallest administrative scale – to which the respondent belongs.¹⁶ Then, each respondent is geolocated from the center of the *municipio*'s main city, as declared in the survey. The GeoNames geographical database is used to locate towns and villages in the LA region. GeoNames is an open source and user-editable database freely available which contains over eleven million unique placenames worldwide.¹⁷ The database provides information about cities and populated places such as their geographical coordinates, population estimates, or their administrative role. Each respondent is geolocated according to the city center of the town declared in the survey. Figure 2.2 shows the geographical distribution of the LAPOP survey respondents (2012, 2014, 2016 and 2018). 1,108 cities are geolocated across 16 LA countries, with 86% of them present in all four waves. The countries where the survey covers the largest number of cities are Peru (157), Mexico (114) and Brazil (111), while those with the smallest are Nicaragua (46), Panama (30) and Costa Rica (29). While this method does not allow us to pinpoint exactly where the respondent lives (in the center of the main city, on the outskirts or in a small village), it does identify the geographical context in which the respondent lives, while maintaining a fairly good geographic dispersion within the countries studied.

14. The questionnaires for these four waves are very similar, ensuring strong comparability. The 2008 and 2010 waves are not used here due to differences in city coding. Wave 2021, very different due to the COVID-19 epidemic, is not included in the analysis, nor is wave 2023, due to the absence of important variables from the model.

15. More details in the LAPOP survey methodological notes (<https://www.vanderbilt.edu/lapop/survey-designs.php>).

16. However, this information can vary from country to country. In some cases, it is possible to obtain more precise information, such as the city of residence or the district relative to a large city.

17. Last access in May 2024 (<https://www.geonames.org/>).



Figure 2.2: Cities of LAPOP survey respondents

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016 2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 1,108. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

2.3.2 Center-periphery measurement

In LAPOP data, information on respondents' home town does not allow us to identify places located near or far from an urban center. Only two variables describe the city to which the respondent belongs, a binary urban-rural variable and a categorical variable defining the city size (national capital, large city, medium-sized city, small town, rural area). However, definitions of urban and rural places are not common across countries, nor are definitions of city size. Similarly, a town classified as "small" or "medium" in the suburbs of an urban center is not different from a town with similar size but located in a remote area. Yet, the distance from a major metropolitan area has a substantial influence on the economic, social and cultural context in which the respondent lives (Gimpel et al. 2020), which may also influence individuals' redistributive demands.

Based on previous geolocation of respondents' city centers, it is possible to identify towns and villages far from major urban centers, by constructing a first binary center-periphery indicator. First, in each country, primary cities, defined here as a country's most populous cities with a major administrative role (mainly regional or state capitals, and cities with more than 100.000 inhabitants), are considered as urban centers.¹⁸ Because of their size, population density and economic activity, metropolitan areas often have a higher bargaining power with the State than other territories, with a disproportionate allocation of resources (Ferré et al. 2012). Second, a multiple correspondence analysis (MCA) is performed in each country to help differentiate the other cities according to two criteria: the distance to a city greater than 100.000 inhabitants, and the average distance from the three neighbouring towns of more than 30.000 inhabitants. The first identifies whether the respondent's reference town is far from a densely populated place, and the second assesses the surrounding urban density (more details about the methodology in Appendix 2.A).¹⁹ Based on the score obtained from the MCA, a cluster analysis is performed to help form groups of homogeneous cities according to the criteria used. A manual check of the clusters is carried out to identify any classification errors or particular geographical contexts. Cities in the extended metropolitan area or in close geographical proximity are also included in the urban center category, as they are generally strongly economically

18. The City Population website is also used to complement population estimations. It uses the latest censuses or the most recent official population projections for the main cities of each country (see: <https://www.citypopulation.de>).

19. The Stata package *geonear* is used to calculate the geodesic distance between the respondents' city center and the nearest urban center. The GeoNames database identifies all places greater than 15.000 inhabitants for each country.

dependent on, or benefit directly from, the infrastructure and services of their associated metropolis. The other towns and villages are therefore considered to be peripheral or geographically remote.

Table 2.1: Distribution of LAPOP respondents by city category

City category	(a) Share of total number of cities (%)	(b) Share of total respondent population (%)
<i>Panel A: Binary center-periphery</i>		
Urban centers	39.0	50.7
<i>of which suburbs</i>	17.1	17.1
Periphery	61.0	49.3
<i>Panel B: Categorical center-periphery</i>		
Urban centers	39.0	50.7
<i>of which suburbs</i>	17.3	16.1
Secondary cities	18.8	17.1
Small cities or villages	42.2	32.2
Observations	1,108	103,098

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: Weights provided by LAPOP are used for cross-country comparisons in column (b).

A second indicator, decomposing the previous binary center-periphery indicator, is constructed to distinguish peripheral cities by size. Indeed, living in an isolated but medium-sized town could be different from living in a small, more remote village. Three groups are thus identified: urban centers and nearby suburbs, secondary cities, and smaller villages in remote areas.²⁰ Thus, cities categorized as secondary will generally have a population in excess of 30,000-40,000, up to 100,000-120,000 although this may vary according to country and geographical context.²¹ For an illustrative purpose, a city of 100,000 inhabitants directly connected to a larger regional capital will be considered as a suburb of a large urban center area, while a more isolated city with roughly the same population without primary administrative role will be considered as a secondary city. Table 2.1 shows the proportion of cities in the different categories, and the relative importance of each group in the total sample, while Figure 2.3 shows the distribution of urban-periphery cities for the LA region.²² As shown below, roughly half of the respondents are located in urban centers, the other half in peripheral areas. When decomposed by city type, around a third of respondents in urban centers are in the inner suburbs, and two-thirds of those classified as living in peripheral areas are in small towns and villages.

20. Additional results also test the exclusion of suburban cities from the group of urban centers, treating them as a fourth distinct group (Appendix 2.B Figures 2.B.1 to 2.B.4, and Table 2.C.3 in Appendix 2.C).

21. Given the small number of large cities in Panama or Uruguay, this limit may be lower than in Brazil or Mexico.

22. The proportion of respondents by city category for each country is available in Appendix 2.A Figure 2.A.1). Furthermore, all the country-level maps are available in Appendix 2.D.



Figure 2.3: Classification of cities in Latin America (LAPOP survey)

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 1,108. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

2.3.3 City development measurement

While individuals' redistributive preferences may be influenced by their peripheral location in relation to urban centers, the level of wealth or development in which they live may also be a determining factor, in particular according to the availability of infrastructures and public services in the area. However, obtaining information about wealth at the city level from official sources is not possible for most countries in the LA region, nor for the time period studied. Then, a proxy for city wealth is obtained with remote-sensing data. Global nighttime lights data collected by the NASA/NOAA Visible Infrared Imaging Radiometer Suite (VIIRS) provide satellites-based visualisation of brightness levels across the earth's surface.²³ The VIIRS V2.1 database provides annual time series (2013-2021) produced from monthly cloud-free average radiance from orbital segments with a 15-arc second resolution, corresponding roughly to 500m at the Equator (Elvidge et al. 2021).

The use of nighttime lights (NTL) data is widespread among researchers in social sciences, particularly economics. Light intensity can be used to approximate the level of economic activity as a proxy for the level of local development or wealth. In the absence of disaggregated data for most regions of the world, or for different years, several studies have shown that NTL data are positively associated with human development indicators (Bruederle and Hodler 2018), and are effective to track poverty-reduction efforts in specific areas (Andreano et al. 2021). In particular, Pérez-Sindín et al. (2021) compare several NTL data sources for the case of Colombia, and conclude that these data are a good proxy for municipal development level, with VIIRS data offering the best level of prediction.

Thus, the average radiance over a distance of 1km around each geolocated point, corresponding to a city center, is calculated to approximate the level of economic activity in the area, as proxy for the locality's level of development.²⁴ To take account of differences in size, cities of each country are thus differentiated according to the median brightness level for the category to which they belong, as urban centers (including primary cities and nearby suburbs) or periphery (secondary cities and smaller cities or villages in remote areas). The City's Relative Development (CRD) indicator takes the value 1 if the city belongs to the 50% least bright cities in its category, indicating relatively low

23. The VIIRS V2.1 database is available at the following address: https://developers.google.com/earth-engine/datasets/catalog/NOAA_VIIRS_DNB_ANNUAL_V21#bands.

24. The chosen distance of 1km, though arbitrary, allows us to calculate the luminosity of a city center over an area that is neither too large nor too small. Other thresholds are used in Appendix 2.C.4 for the main results.

economic activity, and 0 otherwise for cities with relatively high economic activity. To illustrate this, Figure 2.5 depicts the NTL data applied for the bay of Sao Paulo and Rio de Janeiro for the period 2012-2018, as well as the city classification of LAPOP survey respondents for this area.

2.3.4 Redistributive preference measurement

In LAPOP data, the measurement of redistributive preferences is based on the following statement: “The government should implement strong policies to reduce inequality between the rich and the poor”, where respondents are asked to give a score on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). Figure 2.4 shows the distribution of redistributive preferences for the LA region from 2012 to 2018. Support for redistribution is strong, especially before 2014, corresponding to the period of significant reduction in income inequality, i.e. during the 2000s.

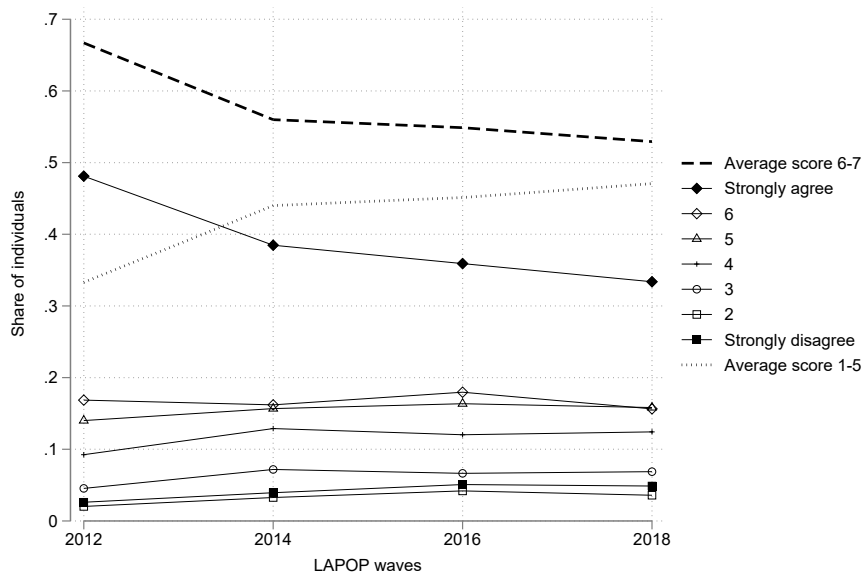


Figure 2.4: Support for redistribution in Latin America over time

Source: Author’s elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 99,490. The question asked is the following: “The government should implement strong policies to reduce inequality between the rich and the poor”. Weights provided by LAPOP are used for cross-country comparisons.

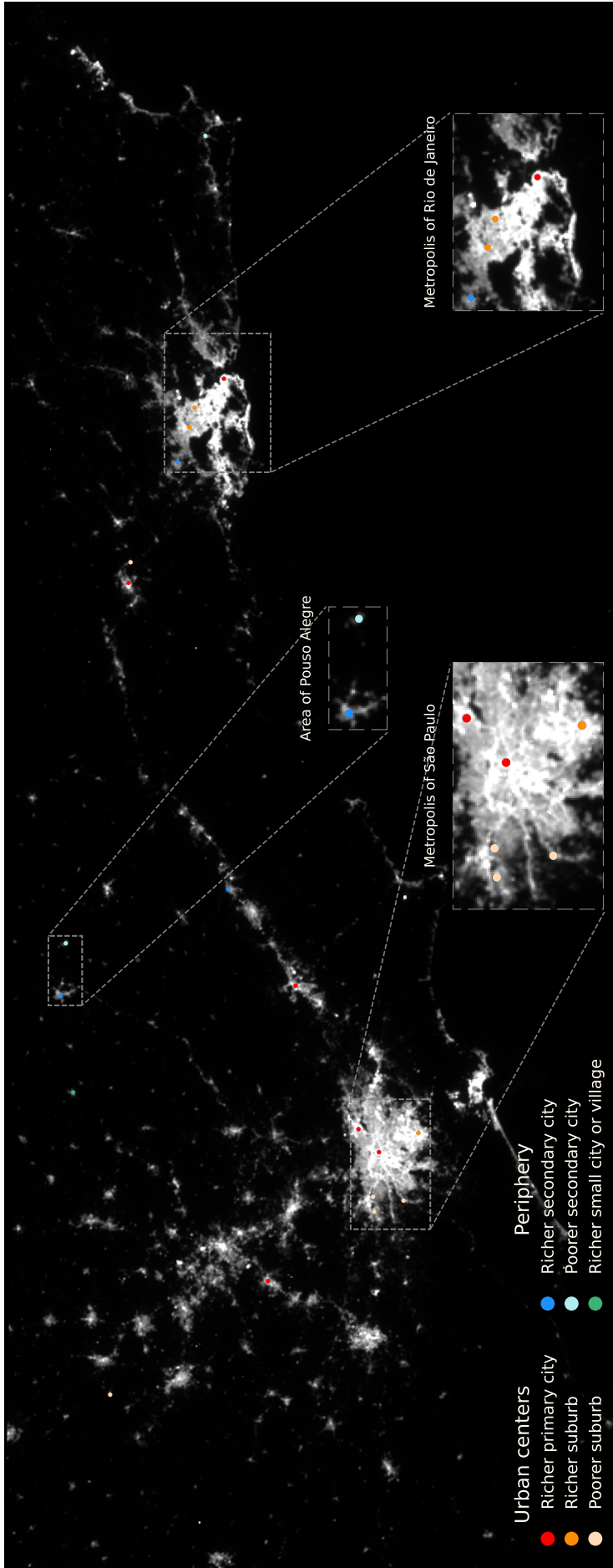


Figure 2.5: Nighttime lights for Sao Paulo Bay and Rio de Janeiro (Brazil, 2012-2018)

Source: Author's elaboration based on the VIIRS V2.1 database collected by the NASA/NOAA for the period 2012-2018.
 Note: Each point corresponds to a 1-km zone around the city center of LAPOP survey respondents. The classification of most or least developed cities is based on the median brightness of respondents' cities in the country studied. The most (least) developed cities are the 50% brightest (darkest) in their city category in their reference country (urban centers, secondary cities, small cities or villages in remote areas). Urban centers include suburbs when calculating median brightness, but represented as separated in the graph for greater clarity. The cities represented are: Belford Roxo, Carapicuíba, Duque de Caxias, Embu, Guarulhos, Indaiatuba, Ipeúna, Jandira, Ouro Fino, Pindamonhangaba, Pinheiral, Pouso Alegre, Queimados, Rio de Janeiro, Santa Rita do Sapucaí, São Bernardo do Campo, São José dos Campos, São Paulo, São Pedro da Aldeia, and Volta Redonda.

In 2012, almost one in two LA citizen strongly supports (score of 7) the need for governments to reduce inequalities between the richest and poorest, and almost 7 out of 10 when those answering a score of 6 are included.²⁵ While the share of individuals scoring 6 remains quite stable during the whole period, the maximum redistribution score began to fall in 2014, although it remains relatively high (around 36%). All other scores, indicating weaker support for reducing inequality, follow a similar trajectory and increase slightly after 2012. This recent downward trend in redistributive demands in the region has also been highlighted by Franetovic and Castillo (2022). While there may be several reasons for this, the exhaustion of social models in many of the region's countries over the previous decade, based on the implementation of “*easy*” social policies (targeted transfers, basic social protection) without entering into the “*hard*” stages of redistribution (quality of public services, unemployment insurance) may explain this weakening of redistributive demands, particularly among the middle and wealthier classes (Holland and Schneider 2017).

Given that the aim of this analysis is to differentiate individuals in favor of more redistributive policies, the original variable will be recoded in a binary form, taking 1 when respondents attribute a score of 6 or 7, and 0 otherwise. Both scores on a 7-point scale reflect a strong desire for change on inequality issues. It should be noted, however, that the question posed remains very general, and does not allow for a more precise understanding of the redistribution method that may be employed by policy-makers (pre- or post-redistribution). This is a recurring problem in research into redistributive preferences, ignoring the dimension of fairness which alter people's preferences (Cavaillé 2023). This drawback could overestimate the real proportion of individuals supporting redistribution. Busso et al. (2023) show in particular that when individuals are asked about more specific policies to be implemented to reduce inequality, support for redistribution weakens, although this largely depends on the national context.

When the analysis moves from the regional to the national level, there are clear disparities in citizens' levels of support for redistribution between countries (Figure 2.6), in line with the results of Busso et al. (2023). In half of the countries selected for 2012, 7 out of 10 citizens are strongly in favor of redistribution (6 and 7), with Uruguay, Nicaragua, and Paraguay leading the way. Conversely, Bolivia,

25. Citizens' redistribution demands for 2008 and 2010 are very similar to those for 2012. However, they are not presented here as they are not used in the analysis for the reasons given in Section 2.3.1.

Honduras and Guatemala show the lowest support (around 53%). The situation in 2018 is very different, with a drop in redistributive demands in all countries except Costa Rica, where support is rising significantly. The share of those strongly against more redistribution (1 and 2) increases in almost all countries, to around 10%.

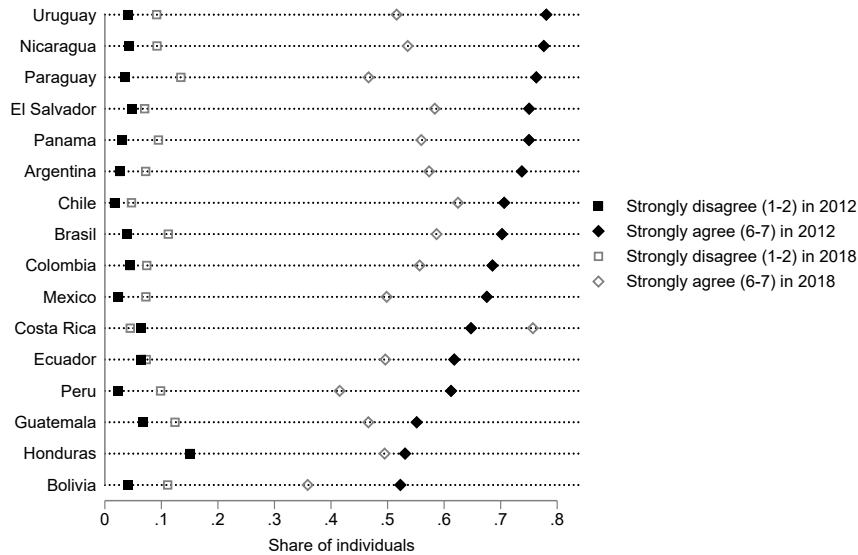


Figure 2.6: Support for redistribution by country in 2012 and 2018

Source: Author's elaboration based on the LAPOP database (2012 and 2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: The question asked is the following: "The government should implement strong policies to reduce inequality between the rich and the poor". Respondents who strongly agreed answered 6 or 7, and those who strongly disagreed answered 1 or 2. Weights provided by LAPOP are used for cross-country comparisons.

2.4 Estimation strategy

To investigate the relationship between geographical periphery and individuals' redistributive preferences and test the previously exposed hypotheses, a probit regression model is used to consider the binary form of the dependent variable, i.e. high support for redistribution. The associated specification is of the following form:

$$P(Y_i = 1) = \Phi(\beta_1 Periphery_i + \beta_2 CRD_i + \theta X_i' + \eta_i + \eta_t + \epsilon_i) \quad (2.1)$$

With $P(Y_i = 1)$ the probability that an individual strongly support inequality reduction between the rich and the poor (a 6 or 7 on the Likert scale), and Φ the cumulative distribution function of the

standard normal distribution. The *Periphery_i* variable corresponds to one of the indicators defined previously, either the binary indicator (1 if living in a place outside an urban center, 0 in a primary city or close suburb), or the categorical indicator (1 if living in a secondary city, 2 in a small town or village in a remote area, and 0 in a primary city or close suburb). The variable *CRD_i* corresponds to the City's Relative Development indicator that takes the value 1 if the city is among the 50% least developed cities in its category (i.e. below the group's brightness median), according to the periphery indicator used. A specification with an interaction between the periphery and CRD indicators will also be proposed later.

X'_i is a vector of control variables that influence individuals' redistribution preferences often suggested in the literature.²⁶ A first group of variable includes socioeconomic variables such as gender, age and its squared, employment status (working, unemployed, student, at home without job, retired and disabled), occupation (public employee, private employee, employer, self-employed, inactive), education level (from primary incomplete to post-secondary education), and whether household income has fallen over the past two years. A second group of control variables adds experience and perception variables such as having witnessed corruption by a public employee in the previous year, perceived safety and interpersonal trust in the neighborhood, whether participated in a demonstration during the year, perceived political knowledge of the individual, and participation in religious events. Furthermore, a Household Wealth Index (HWI) is constructed from a MCA of household durable goods, then divided into terciles corresponding to the poorest, middle and richest groups, as a proxy for income.²⁷ This indicator allows us to identify a goods-consuming class that can be likened to a middle class. On the other hand, it is difficult to differentiate the wealthiest citizens on the basis of the durable goods available in the survey, as we have no more precise information on luxury goods or real estate assets. Finally, country η_i and year η_t fixed effects are included, and the error term is clustered at city level to accounts for potential intra-city correlation between individuals.

26. The descriptive statistics table can be found in Appendix 2.C.1

27. The HWI is constructed for each country and each survey wave to take into account the national context and changes in the use of goods over time. The list of durable goods is as follows: refrigerator, conventional telephone, cell phone, number of vehicles (none, one, two and more), washing machine, microwave/oven, computer, internet in the home, indoor plumbing, indoor bathroom, television (none, television, flat screen), and a motorcycle. For 2012, only the internet item is not available.

2.5 Results

2.5.1 The center-periphery divide

Results of the relationship between individuals' territorial anchorage and redistributive preferences are shown in Table 2.2. All coefficients correspond to marginal effects and their respective standard deviations. Specification (1) tests the relationship between the binary urban-periphery indicator and strong support for redistribution, including socio-economic controls and year and country fixed effects. Specification (2) adds all experience and perception controls that may affect individuals' redistributive demands. Finally, specifications (3) and (4) decompose the periphery indicator, taking into account differences in city size in peripheral areas (secondary cities, small villages).²⁸

The results reveal a positive and significant relationship for all specifications between living outside a major urban center and strong support for reducing inequalities in LA, for the period 2012-2018. The coefficient associated with the binary peripheral variable of interest (column 1) is significantly different from zero at 1% level, and remains stable with the inclusion of additional control variables (column 2). However, the magnitude of the effect is relatively small. All other things being equal, citizens living in peripheral areas are 2 percentage points more likely to strongly support redistributive measures than those living in or near major urban centers. For the CRD indicator, a relatively lower level of urban development is also positively correlated (significant at 10% level) with stronger redistributive demands. Citizens living in the 50% least developed cities (with the lowest level of brightness) tend to ask for slightly more redistribution than those living in the most developed ones.

When the periphery indicator is decomposed according to city size (columns 3 and 4), results remain similar and show that citizens in both secondary cities or small villages are more likely to strongly support redistribution, although the coefficient is higher for the latter sub-group. The decomposition of the indicator according to city size renders the CRD indicator insignificant, suggesting that the previous relation was mainly linked to a city size effect. These initial results run counter to those of (Haggard et al. 2013), who found that citizens of big cities in 41 developing countries (including 9 in LA) are more supportive of redistribution than the rest. However, the definition of major urban

28. Additional results use the original coding of the dependent variable of redistribution preferences (scale from 1 to 7) using an ordered probit model. The results found are very similar (Appendix 2.C Table 2.C.2).

centers in this study only included cities with populations over 500,000, thus excluding major cities that may be regional economic, administrative and employment centers. These first results tend to confirm the H1 hypothesis, which postulates that individuals outside urban centers have stronger redistributive preferences than the rest.

Table 2.2: Periphery and strong support for redistribution (2012-2018) – Probit model

Variables	Strong support for redistribution			
	(1)	(2)	(3)	(4)
<i>City characteristics</i>				
Periphery (<i>ref: urban centers</i>)	0.0229*** (0.0065)	0.0194*** (0.0063)		
Secondary cities			0.0194*** (0.0075)	0.0168** (0.0074)
Small cities or villages			0.0267*** (0.0073)	0.0223*** (0.0070)
CRD (<i>ref: 50% richest</i>)	0.0125** (0.0065)	0.0114* (0.0062)	0.0056 (0.0064)	0.0051 (0.0062)
<i>Socio-economic controls</i>				
Female	-0.0006 (0.0035)	0.0100*** (0.0036)	-0.0007 (0.0035)	0.0100*** (0.0036)
Age (<i>ref: youngest</i>)	0.1000*** (0.0315)	0.0612* (0.0333)	0.0998*** (0.0315)	0.0609* (0.0333)
Age ²	-0.1117** (0.0456)	-0.0870* (0.0490)	-0.1119** (0.0457)	-0.0873* (0.0402)
HWI (<i>ref: 3rd tercile</i>)				
1st tercile	0.0161*** (0.0052)	0.0261*** (0.0054)	0.0166*** (0.0052)	0.0267*** (0.0054)
2nd tercile	0.0194*** (0.0043)	0.0250*** (0.0044)	0.0197*** (0.0043)	0.0253*** (0.0044)
Negative income shock	0.0064 (0.0043)	0.0105*** (0.0044)	0.0064 (0.0043)	0.0104** (0.0044)
Occupation (<i>ref: worker</i>)				
Unemployed	0.0280 (0.0205)	0.0286 (0.0212)	0.0279 (0.0205)	0.0285 (0.0212)
Student	0.0072 (0.0209)	0.0027 (0.0217)	0.0072 (0.0208)	0.0027 (0.0217)
At home	-0.0034 (0.0204)	-0.0013 (0.0209)	-0.0034 (0.0204)	-0.0013 (0.0209)
Retired/disabled	0.0095 (0.0212)	0.0065 (0.0220)	0.0095 (0.0212)	0.0064 (0.0220)
Employment status (<i>ref: public employee</i>)				
Private employee	-0.0262*** (0.0088)	-0.0201** (0.0088)	-0.0266*** (0.0088)	-0.0205** (0.0088)
Employer	-0.0665*** (0.0150)	-0.0602*** (0.0152)	-0.0667*** (0.0150)	-0.0604*** (0.0152)
Self-employed	-0.0280*** (0.0089)	-0.0230*** (0.0087)	-0.0282*** (0.0089)	-0.0232*** (0.0087)
Other inactives/Unpaid Worker	-0.0390* (0.0211)	-0.0320 (0.0219)	-0.0392* (0.0211)	-0.0322 (0.0219)

Education level (<i>ref: primary incomplete</i>)				
Primary complete	0.0250*** (0.0068)	0.0210*** (0.0068)	0.0249*** (0.0068)	0.0209*** (0.0068)
Secondary incomplete	0.0405*** (0.0062)	0.0287*** (0.0063)	0.0402*** (0.0062)	0.0284*** (0.0063)
Secondary complete	0.0357*** (0.0063)	0.0192*** (0.0065)	0.0355*** (0.0063)	0.0189*** (0.0065)
Post-secondary	0.0471*** (0.0075)	0.0151** (0.0077)	0.0467*** (0.0075)	0.0147* (0.0077)
<i>Experience and perception controls</i>				
Strong feeling of insecurity (<i>ref: weak</i>)		-0.0048 (0.0076)		-0.0051 (0.0076)
Low inter-personal trust (<i>ref: high</i>)		-0.0628*** (0.0062)		-0.06350** (0.0062)
Strong political knowledge (<i>ref: low</i>)		0.1777*** (0.0067)		0.1777*** (0.0067)
Participation in a protest		0.0464*** (0.0075)		0.0464*** (0.0075)
Witness to corruption		-0.0226*** (0.0083)		-0.0226*** (0.0083)
Attends religious ceremonies (<i>ref: none</i>)		0.0091** (0.0047)		0.0092** (0.0047)
Observations	95,782	90,791	95,782	90,791
Socio-economic controls	Yes	Yes	Yes	Yes
Experience and perception controls	No	Yes	No	Yes
Country and year FE	Yes	Yes	Yes	Yes

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: CRD = City Relative Development. HWI = Household Wealth Index. All reported coefficients are marginal effects from a probit model. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. Ref corresponds to omitted reference category. Country and year fixed effects are included but not reported. Values in bold correspond to coefficients significantly different from 0. Weights provided by LAPOP are used for cross-country comparisons. Clustered standard deviations are in brackets (by city). *** p<0.01, ** p<0.05, * p<0.1.

These overall results conceal a high degree of heterogeneity between countries. To make these results more concrete, if we take the case of a Bolivian woman living in a large urban center, her probability of strongly supporting redistributive demands will be 40%. This probability rises to around 47% if she lives in a small town or village in a remote area. Similar results are found in Ecuador (52% to 59%) and Panama (49% to 63%). On the other hand, in other Southern Cone countries (Uruguay, Argentina, Chile) or in Guatemala, there are no major differences. Thus, these initial results underline the importance of considering not only the size of towns, but also the geographical context in relation to urban centers.

Regarding control variables, most of the expected effects on redistributive demand are confirmed

here. Employees working in the public sector are more inclined to support redistribution policies than those in the private sector or the self-employed. Similarly, an intermediate or high level of schooling is associated with a greater demand for redistribution than individuals with no or low schooling. However, the effect disappears for the higher education group, probably reflecting an income or class effect (Haggard et al. 2013). For the HWI variable, the coefficients indicate that wealthier individuals have fewer redistributive demands than others. Those belonging to the two lower terciles have a relatively higher support for redistribution than the top tercile, especially those in the middle. Experience of downward mobility of household income over the two last years is likewise positively correlated with strong redistributive demand. Finally, perception and experience variables significantly influence redistributive preferences: a negative influence for those with low interpersonal trust or who have experienced corruption at the hands of a public employee, and a positive one for those with a strong understanding of the country's problems, or when mobilized at a demonstration.

2.5.2 Periphery and city relative development

Next, we decompose the marginal effects into the different groups of cities according to their relative development level (Figures 2.7 to 2.10). The models used are based on the specifications with all the controls, plus an interaction between the periphery indicator and the CRD. The reference group here corresponds to the 50% richest or most developed urban centers. Figure 2.7 shows that all other city categories have a higher probability of strongly supporting redistribution compared to the most developed urban centers, even though the coefficient for those living in the 50% poorest urban centers just passes significance at 5%. The predicted values in Figure 2.8 clearly show a “staircase” trend, with an increasing likelihood of strongly supporting redistribution as compared to wealthier urban centers (around 2 or 3 percentage points).

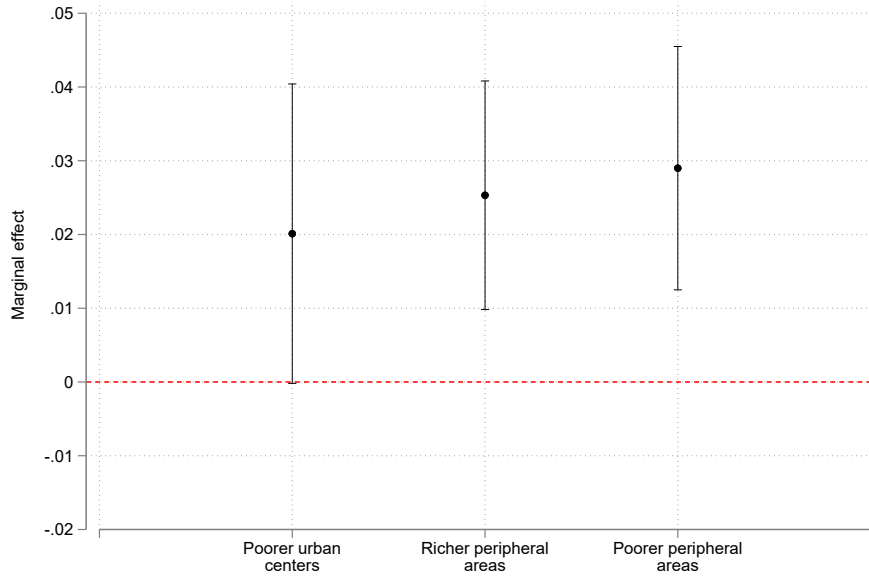


Figure 2.7: Marginal effect of periphery and CRD on strong support for redistribution

Source: Author’s elaboration based on the LAPOP database (2012–2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,791. CRD = City Relative Development. Coefficients shown are marginal effects from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

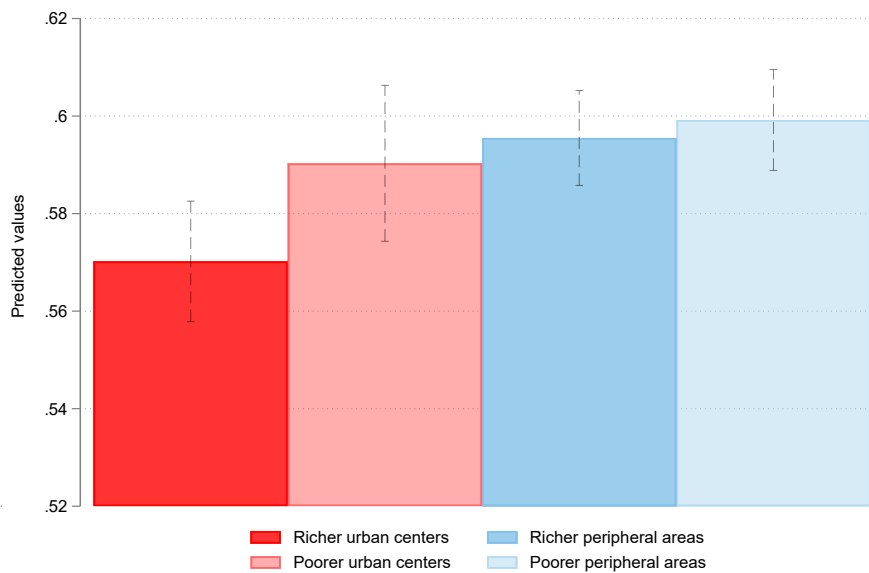


Figure 2.8: Predicted values of the probability of strongly supporting redistribution – Periphery and CRD

Source: Author’s elaboration based on the LAPOP database (2012–2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,791. CRD = City Relative Development. Predicted values are derived from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

When peripheral areas are differentiated by size, the picture is somewhat different. While all categories call for more redistribution to the citizens in the comparison group, the effect is systematically more pronounced for citizens living in the most developed peripheral areas (Figures 2.9 and 2.10). Those living in the least developed areas are relatively less likely to support redistribution than the most developed. When an OLS regression model is performed to test the interaction between the two variables of interest (periphery and RCD), it is mainly the richest peripheral areas that show greater support for redistribution than the most developed urban centers (Table 2.3). The coefficient associated with the interaction between the two variables is always negative for poorer secondary cities and small cities and villages (only weakly significant for the former at 10% level) reducing the probability of strongly supporting redistributive measures by around 3 percentage points.²⁹ These disaggregated results show that, while the *H1* hypothesis still holds overall, it is supported by the wealthiest areas. The *H2* hypothesis, indicating a lower demand for redistribution for citizens in peripheral areas, also seems to coexist for the least developed areas. Redistributive divergences between citizens of urban centers and peripheral areas seem to be lower when they live in the least economically developed areas.

These results resonate with Holland's (2018) explanation of the low polarization of redistribution demand between the richest and poorest individuals in the LA region, namely of diminished expectations of the poorest on the state's ability to effectively redistribute resources. These present findings show that in the least developed peripheral areas, the redistributive preferences of citizens tend to be similar to those living in the richest urban centers. This lower degree of polarization is consistent with lower expectations from the state in areas where access to infrastructure and public services may be more difficult. Additional results, with nearby suburbs treated as a separate group and excluded from urban centers, exhibit also similar conclusions. Citizens in the most developed suburbs, secondary cities and small cities or villages in remote areas have always higher support for redistribution than those in wealthier primary cities (Figures 2.B.1 to 2.B.4 in Appendix 2.B and Table 2.C.3 in Appendix 2.C).

29. Additional results in Appendix 2.C Table 2.C.4 test the sensitivity of the results to the 1km limit chosen for calculating the brightness of cities, a proxy for their level of development. While the signs of the coefficients remain stable, the significance of the interaction term is sensitive to the chosen definition, particularly as the limit increases (1500m and 2000m). Indeed, this limit seems poorly suited to the size of the smallest towns or remote villages, greatly reducing the average brightness over the area. The results for the 500m limit nevertheless show similar conclusions.

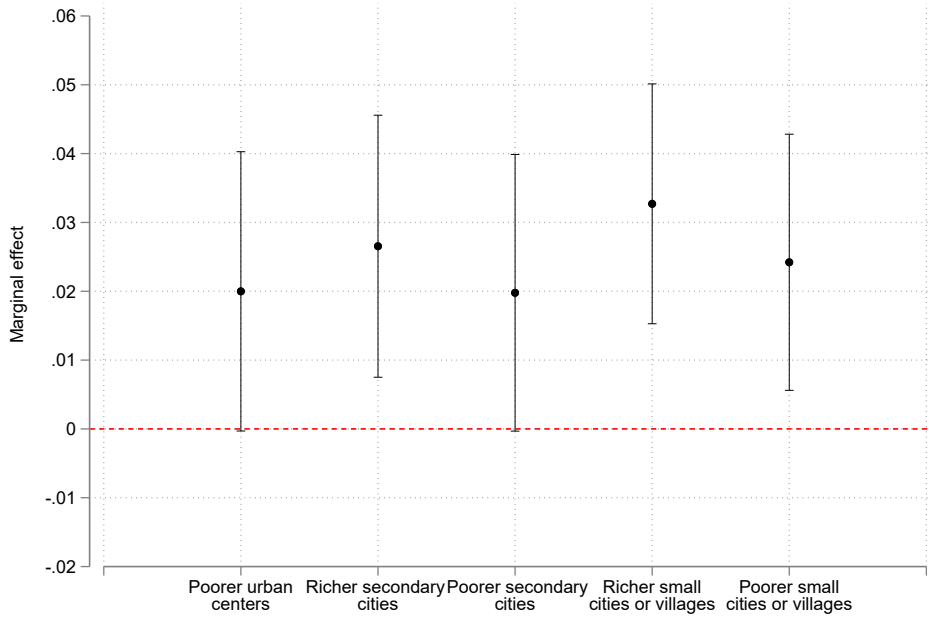


Figure 2.9: Marginal effect of decomposed periphery and CRD on strong support for redistribution

Source: Author’s elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Panama, Peru, Uruguay).

Note: N = 90,791. CRD = City Relative Development. Coefficients shown are marginal effects from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

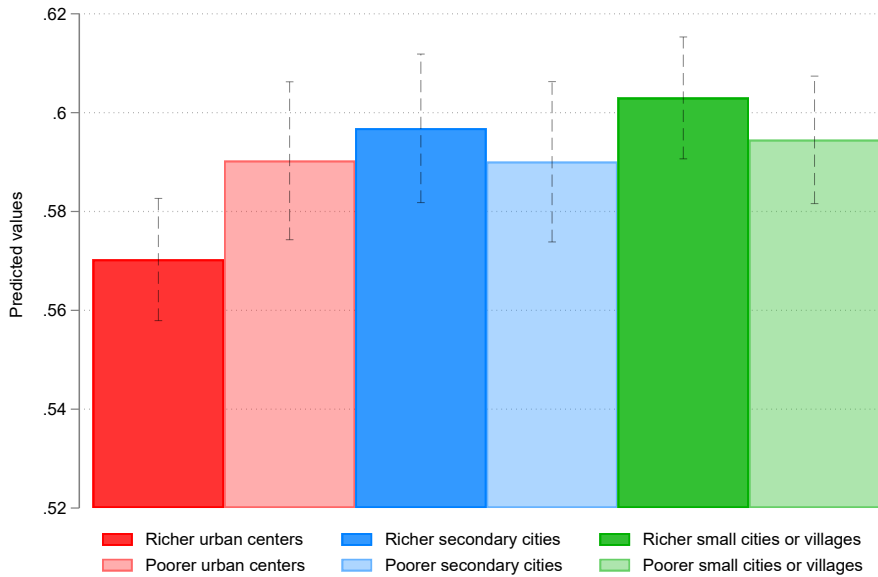


Figure 2.10: Predicted values of the probability of strongly supporting redistribution – Decomposed periphery and CRD

Source: Author’s elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,791. CRD = City Relative Development. Predicted values are derived from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

Table 2.3: Periphery and CRD on strong support for redistribution – OLS Model

Variables	Strong support for redistribution	
	(1)	(2)
<i>Panel A: Binary Peripheral</i>		
Periphery * CRD (ref: richest urban centers)	-0.0132 (0.0128)	-0.0165 (0.0123)
Periphery (ref: urban centers)	0.0280 *** (0.0083)	0.0257 *** (0.0080)
CRD (ref: 50% richest)	0.0195 * (0.0109)	0.0201 * (0.0103)
<i>Panel B: Categorical Peripheral</i>		
Secondary cities * CRD (ref: richest urban centers)	-0.0244 (0.0155)	-0.0268 * (0.0152)
Small cities or villages * CRD (ref: richest urban centers)	-0.0265 * (0.0140)	-0.0286 ** (0.0135)
Secondary cities (ref: urban centers)	0.0284 *** (0.0100)	0.0269 *** (0.0098)
Small cities or villages (ref: urban centers)	0.0366 *** (0.0094)	0.0332 *** (0.0090)
CRD (ref: 50% richest)	0.0194 * (0.0109)	0.0200 * (0.0103)
Observations	95,782	90,791
Socio-economic controls	Yes	Yes
Experience and perception controls	No	Yes
Country and year FE	Yes	Yes

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: CRD = City Relative Development. Estimated coefficients based on an OLS model. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. Ref corresponds to omitted reference category. Controls, country and year fixed effects are included but not reported. Values in bold correspond to coefficients significantly different from 0. Weights provided by LAPOP are used for cross-country comparisons. Clustered standard deviations are in brackets (by city). *** p<0.01, ** p<0.05, * p<0.1.

2.5.3 Periphery and household wealth

I now examine how the interaction between indicators of city periphery and household wealth – measured by household assets – affects citizens' redistributive preferences. In fact, the previously identified differences in redistributive demands between individuals in urban centers and peripheral areas may also differ according to their wealth level. Figures 2.11 and 2.12 show the marginal effects of the two periphery indicators by wealth tercile, on the probability of strongly supporting redistribution. The first graph shows that differences in citizens' redistributive demands between peripheral areas and urban centers stem mainly from the wealthiest citizens, located in terciles two and three of the HWI, in contrast to the most modest where preferences are broadly similar.

Decomposing the indicator once again according to city size (Figure 2.12), the results remain very similar, except for the poorest citizens located in small cities or villages in remote areas, who show a higher support for redistribution than their respective counterparts in urban centers (significant at 10% level). The redistribution demands of the poorest in secondary cities are fairly similar to those in urban centers. Adding the differentiation of cities according to their development levels again confirms the previous results (Figures 2.13 and 2.14). The previous redistributive demand gap, originating mainly from the wealthiest citizens, are again more striking in the most developed peripheral areas. The results also suggest a similar pattern for the better-off living in the poorest urban centers. To sum up, citizens' call for more redistribution outside urban centers seems to come mainly from what might be likened to the middle and wealthier classes.

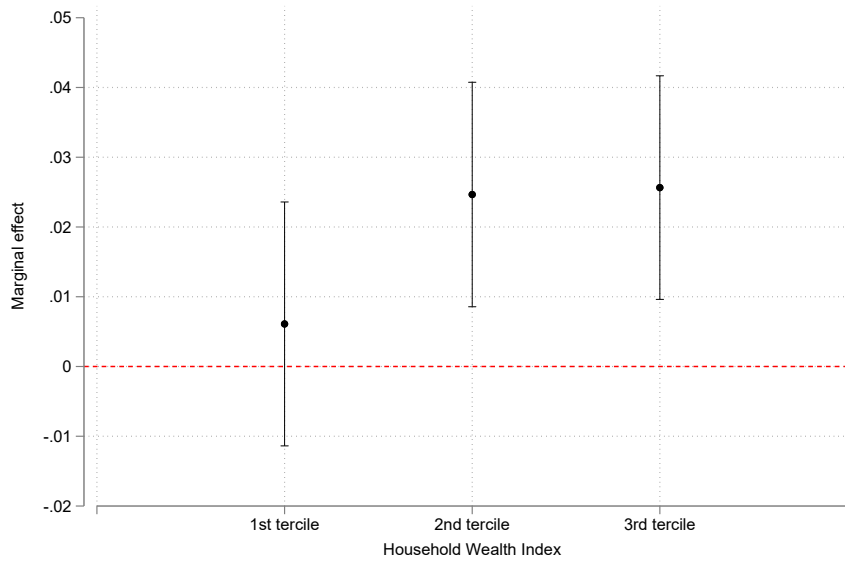


Figure 2.11: Marginal effect of periphery and HWI on strong support for redistribution

Source: Author’s elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,791. HWI = Household Wealth Index. Coefficients shown are marginal effects from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. The HWI is derived from a multiple correspondence analysis of household durables for each country and year, and divided into tertiles. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

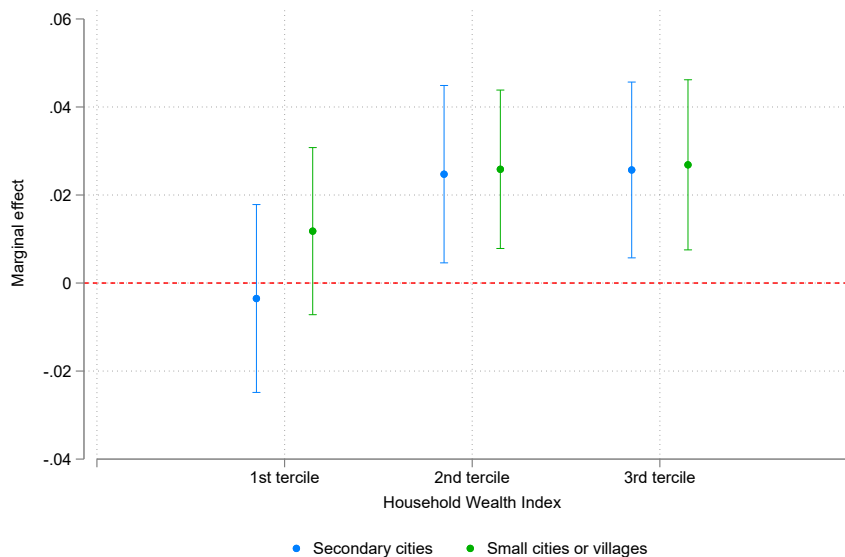


Figure 2.12: Marginal effect of decomposed periphery and HWI on strong support for redistribution

Source: Author’s elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,791. HWI = Household Wealth Index. Coefficients shown are marginal effects from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. The HWI is derived from a multiple correspondence analysis of household durables for each country and year, and divided into tertiles. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

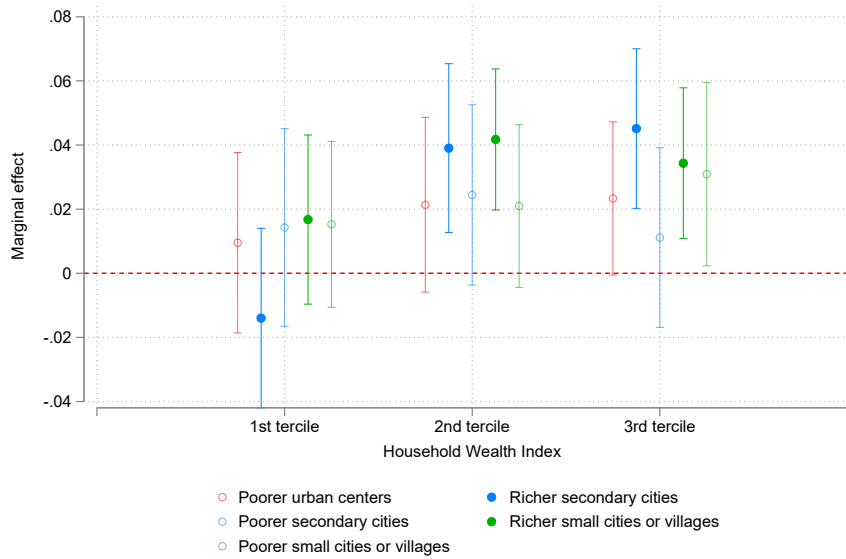


Figure 2.13: Marginal effect of decomposed periphery, CRD and HWI on strong support for redistribution

Source: Author’s elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,791. CRD = City Relative Development. HWI = Household Wealth Index. Coefficients shown are marginal effects from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. The HWI is derived from a multiple correspondence analysis of household durables for each country and year, and divided into tertiles. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

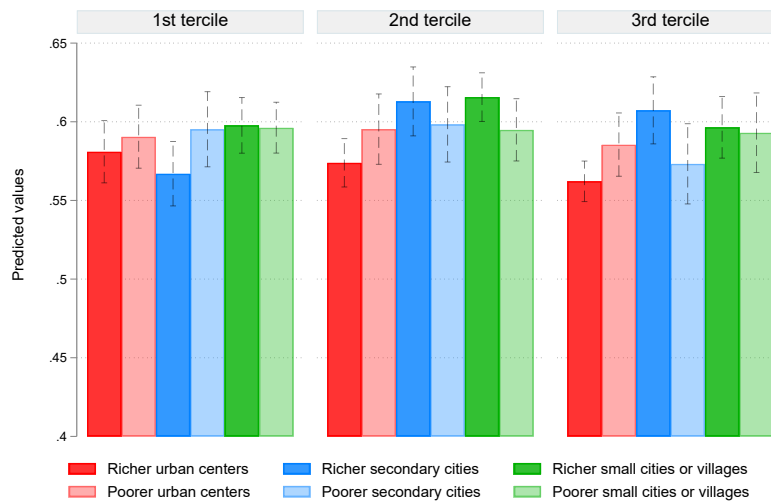


Figure 2.14: Predicted values of the probability of strongly supporting redistribution – Decomposed periphery, CRD, and HWI

Source: Author’s elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,791. CRD = City Relative Development. HWI = Household Wealth Index. Coefficients shown are marginal effects from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. The HWI is derived from a multiple correspondence analysis of household durables for each country and year, and divided into tertiles. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

2.5.4 Temporal and spatial heterogeneity

As previously mentioned, support for redistribution has fallen steadily since 2014 in the LA region, and strong disparities exist across countries. The global analysis carried out so far between the center-periphery divide and redistributive demands hides possible temporal heterogeneity, as well as specificities of the countries studied. Figure 2.15 illustrates the marked decline in strong support for redistribution over time, adding the division between urban centers and peripheral areas. From 2014 onwards, there has been a large drop in strong redistributive demands from citizens both in urban centers and peripheral areas. Although the gap between the two groups previously highlighted is clear for the years 2012 and 2014, representing roughly 3 to 5 percentage points, the picture is quite different for the following waves of 2016 and 2018. The gap has largely narrowed over the last two years, reflecting a convergence of redistributive preferences, a particularly striking fact for the group of small cities or villages in remote areas, which had the strongest support at the start of the period, and the weakest in 2018 (Figure 2.16).

A supplementary analysis examines in greater detail the results broken down by CRD and HWI (Appendix 2.B Figures 2.B.5 to 2.B.8). On the one hand, it is mainly citizens living in the 50% least developed small cities or villages in remote areas who have reduced their redistributive demands after 2014. On the other hand, the redistributive preferences of the poorest changed the most over the period. While the redistributive demands of the poorest individuals in the periphery were stronger compared to those in urban centers over the 2012-2014 period, these are similar from 2016 onwards. These results of a gradual decline in the redistributive demands of the poorest seem to indicate a kind of fatalism on the part of these citizens, particularly in the least developed peripheral areas, in line with the *H2* hypothesis. This trend also helps to explain the low magnitude of the results obtained from the global analysis.

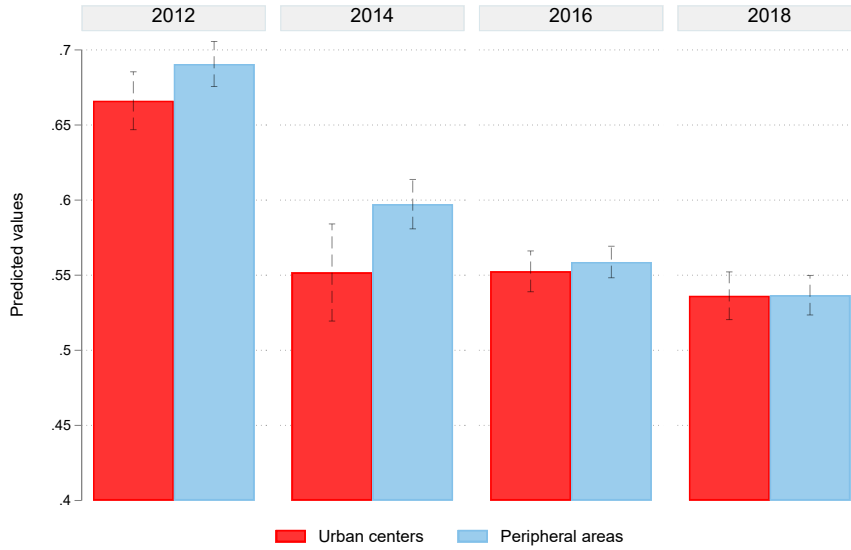


Figure 2.15: Predicted values of the probability of strongly supporting redistribution by periphery indicator over time

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,791. Predicted values are derived from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

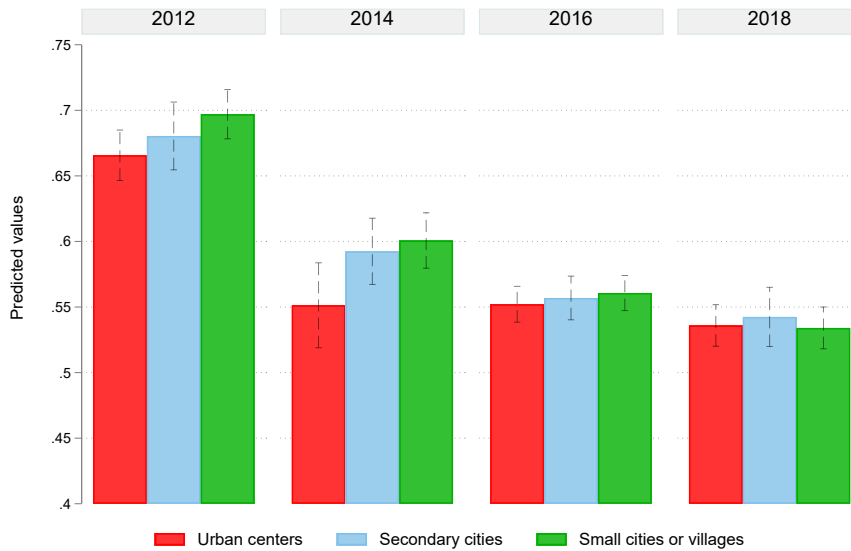


Figure 2.16: Predicted values of the probability of strongly supporting redistribution by decomposed periphery over time

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,791. Predicted values are derived from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

Finally, redistributive demands also vary significantly when moving from regional to national scales of analysis. Figure 2.17 shows the marginal effects of the city's periphery and relative development by country for periods before and after 2014. Models are based on the specification with full controls, also including regional fixed effects. The significance of the coefficients is reduced for most countries, as the analysis is carried out on a smaller number of observations and cities. Overall, citizens' redistributive preferences are highly country-specific, and are sometimes contradictory even within peripheral areas and between the most and least developed territories. Prior to 2016, half of all countries had at least one peripheral group with stronger redistributive preferences than richer urban centers (especially in small cities or villages). Citizens' redistributive demands within peripheral territories are sometimes contradictory between secondary cities and places in more remote areas. In some cases, redistributive differences also appear within urban centers between the most and least developed areas, as in Brazil, Ecuador, Nicaragua and Paraguay. For the period 2016-2018, the balance has reversed in many countries, where nine having one or more groups claiming significantly less redistribution than richer urban centers. Only Bolivia, Colombia and Costa Rica continue to ask more redistribution in peripheral areas. These results, which are mainly specific to the contexts of the countries studied, nonetheless show the profound divergences in redistributive preferences that can exist in the LA region, not only between different city sizes, but also between urban centers and peripheral areas. Moreover, they show the complexity of the interactions between individual determinants and territorial contexts.

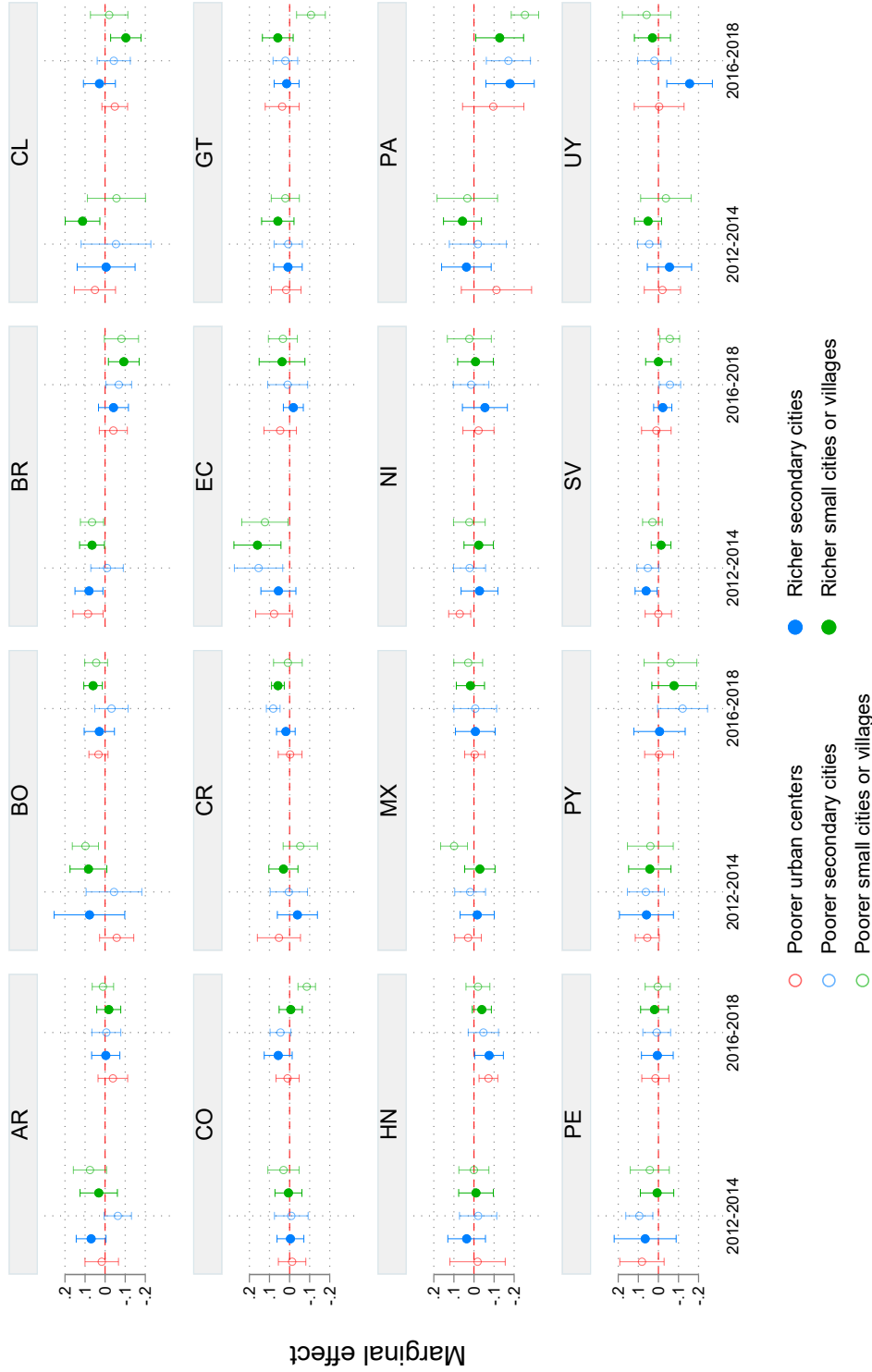


Figure 2.17: Marginal effect of decomposed periphery and city's relative wealth on strong support for redistribution by country and time periods

Source: N = 90,791. Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Uruguay).

Note: Coefficients shown are marginal effects from a probit model. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country, regional, and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

2.6 Summary and conclusion

This chapter investigates the relationship between citizens' redistributive demands and the role of territorial anchorage and geography. To do this, nationally representative data from LAPOP opinion survey are mobilized, covering 16 major countries of the LA region between 2012 and 2018. The role of the spatial factor on the redistributive preferences of citizens is assessed using a center-periphery approach by geolocating 1,108 survey respondents' cities and categorizing them into urban centers (primary cities and nearby suburbs) and peripheral areas (secondary cities and small cities or villages in remote areas) to identify their relative position in the territory. The level of development of cities is controlled by determining the median brightness level of city groups, based on remote sensing data. First, results show that despite a strong demand for redistribution across the region as a whole, there are divergences between the urban centers and the peripheries. Citizens outside urban centers are more likely to have strong demands for redistribution, controlling for socio-economic characteristics. This trend is particularly pronounced in the smallest cities or villages in remote areas, but also systematically higher in the most developed ones (with brightness levels above the median for each group).

Second, citizens' wealth also plays a part in these differences – measured by an index of household durables. The gap in redistributive demand in the periphery is greater between citizens in the second and last terciles of the household wealth index than their counterparts in urban centers. For those in the bottom tercile, however, they are fairly similar between areas. These results suggest that mainly middle class or better-off citizens in peripheral areas are most in demand for redistribution in LA, unlike those in urban centers. Nevertheless, these results remain to be confirmed, particularly with more complete information on the real wealth of individuals (income from work and capital, assets, etc.).

Third, the analysis confirms temporal and country-specific heterogeneity. While there has been a decline in strong redistributive demands in the region since 2012, center-periphery divergences have also shifted sharply since 2014, towards convergence. This is particularly the case for the least developed small cities and villages, but also for the poorest citizens, where the trend has reversed. It should be noted, however, that these conclusions vary greatly depending on the country and local

context. However, there are several limitations to this work. Further analysis is needed to consider the context and local specificities of the areas studied here. In particular, the definition of periphery used in this framework does not consider the social, historical and political relationships maintained by players within territories, as well as their evolution over time (Kühn 2015). A promising direction for future research would be to study potential redistributive divergences within the neighborhoods of these areas, where inequality levels are most pronounced (Chauvin and Messina 2020). In the absence of a more precise location of respondents, this study does not allow us to verify this. Similarly, support for redistribution can vary widely depending on the economic policy options to be implemented (Busso et al. 2023). A more detailed analysis of the diversity of citizens' redistribution preferences is needed to better understand the divergent demands of territories (Cavaillé 2023).

These present results highlight the importance of considering territorial and spatial factors, in addition to individual characteristics, when analyzing citizens' redistribution preferences. While citizens' demands for redistribution remain strong overall in the region, with high voter turnout, the demands of vulnerable populations are still lagging behind, with lower participation and interest in the democratic process (Vlaicu 2020). Similarly, the growing dissatisfaction of populations, symbolized by the rise of populism and the increase in social protest movements over the last decade, shows that the weakening of democracy remains a major concern in the LA region, particularly to ensure effective redistribution (Vlaicu 2020; Welp 2022). Efforts to reduce socio-spatial inequalities and the center-periphery gap in the LA region are needed to restore citizens' confidence in political power and institutions, particularly among the most vulnerable.

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APPENDIX

2.A Appendix A: Methodology

Classification of cities in the center-periphery indicator

The classification of respondents' cities is made in two steps. First, in each country, the biggest cities with a major administrative role are categorized into the urban center group. The population threshold is often set at around 120,000 inhabitants, although this can vary depending on the context. Second, a multiple correspondence analysis (MCA) is made to help classify other cities into homogeneous groups. Criteria used are based on the geodesic distance to the nearest city center greater than 100,000 (in kilometer), and to the average geodesic distance between the three nearest cities over 30,000 inhabitants (in kilometer). These two continuous distance variables are then categorized into three groups. For the first variable, cities less than 5km from the center of an urban center are classified as "close", those between 5km and 30km as "moderate", and those over 30km as "far". For the second variable, indicating the average distance of the three nearest neighboring towns, the categories are respectively less than 20km, between 20km and 50km, and more than 50km. For each country, the score obtained from the first two dimensions of the MCA is then used to group similar cities into clusters. The previously established boundaries are obviously arbitrary, and need to be checked in order to validate or invalidate the classification of cities as urban centers or peripheral zones. Cities considered close to or on the outskirts of primary cities are then included in the urban centers group, and the remaining towns, classified as peripheral areas.

Based on the previously created indicator, a second indicator is created, which categorizes more precisely the peripheral cities in relation to their size. Secondary cities generally have a population between 30,000 and 100,000. Other cities are then considered as smaller or more remote villages. The proportion of LAPOP respondents for each country is shown in Figure 2.A.1.

Classification of cities' relative development

The City Relative Development indicator is built from night-time light data collected by the NASA/NOAA Visible Infrared Imaging Radiometer Suite (VIIRS). The average luminosity within a 1km radius for each geolocated city center over the period 2012-2018 is used. The relative development indicator is calculated for each center-periphery indicator (binary and categorical). For the binary indicator, cities categorized as urban centers below the median brightness for the group are assigned a value of 1. The same applies to cities in peripheral areas (without taking size into account), i.e. the 50% least bright. For the categorical periphery indicator, the median brightness is calculated for each subgroup (urban center, secondary city, small cities or villages in remote areas). For large metropolises where several districts of the same city may be included, only the city center is used to calculate median brightness, to ensure equal weighting between cities.

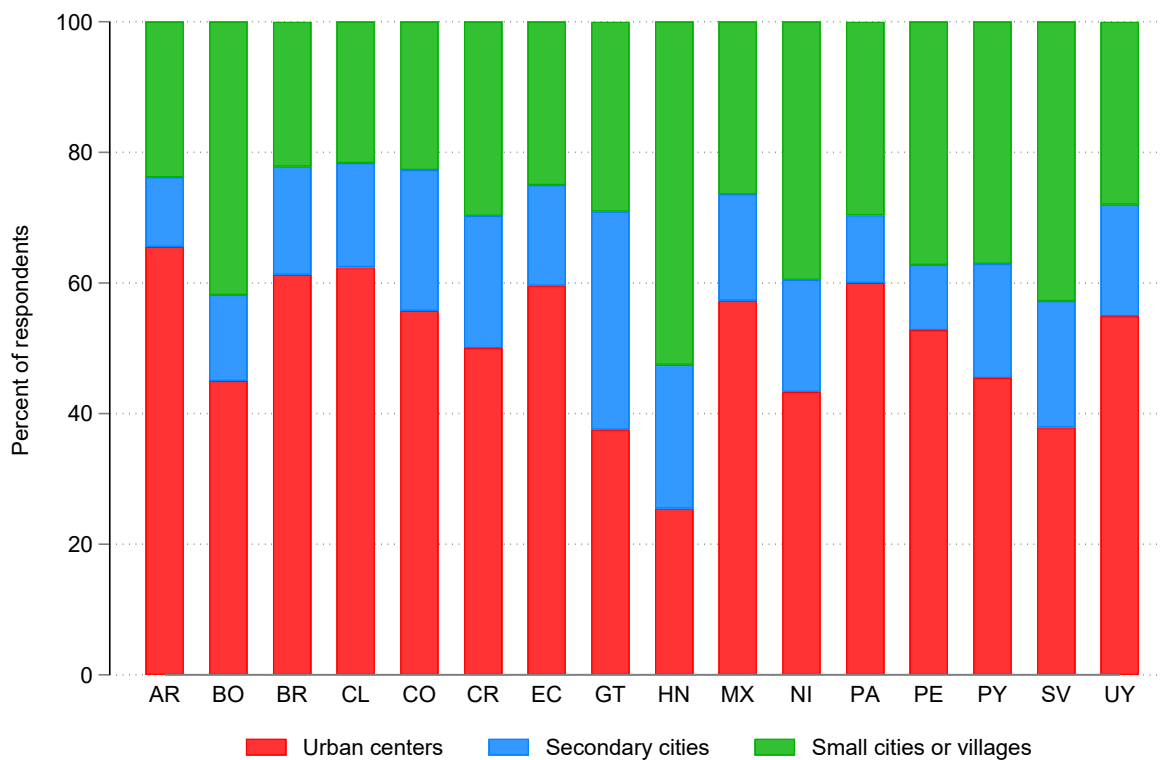


Figure 2.A.1: Distribution of LAPOP respondents by city category and country

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016 2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 103,098.

2.B Appendix B: Supplementary figures

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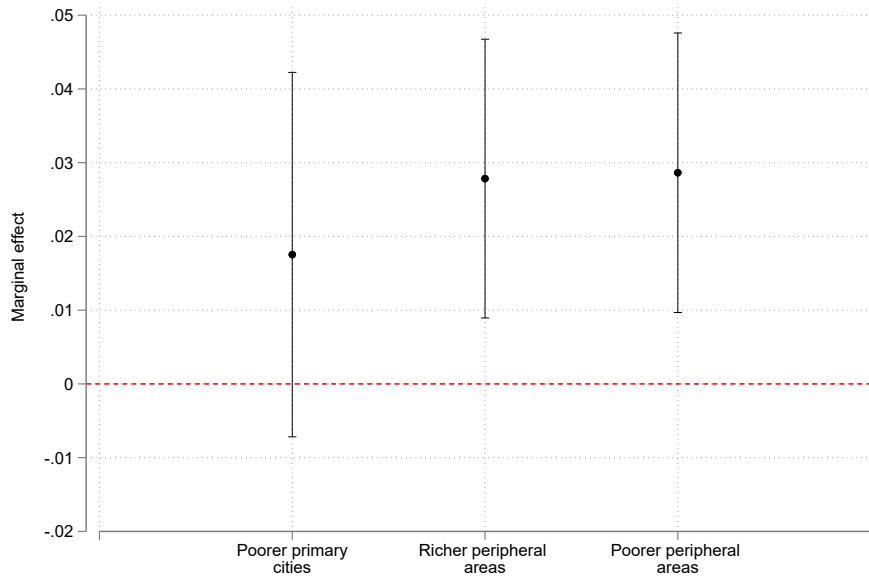


Figure 2.B.1: Marginal effect of periphery and CRD on strong support for redistribution – Suburbs excluded from urban centers

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,781. CRD = City Relative Development. Coefficients shown are marginal effects from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

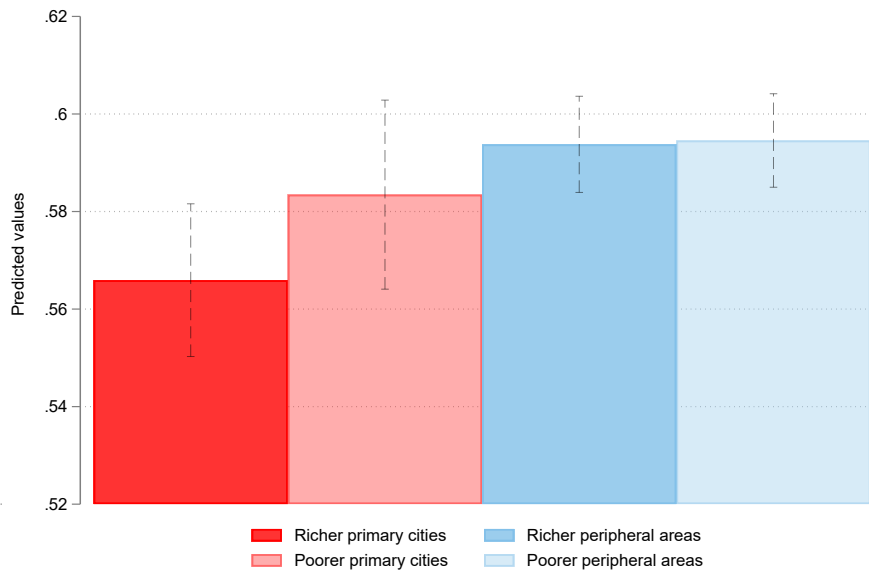


Figure 2.B.2: Predicted values of the probability of strongly supporting redistribution – Periphery and CRD – Suburbs excluded from urban centers

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,781. CRD = City Relative Development. Coefficients shown are marginal effects from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

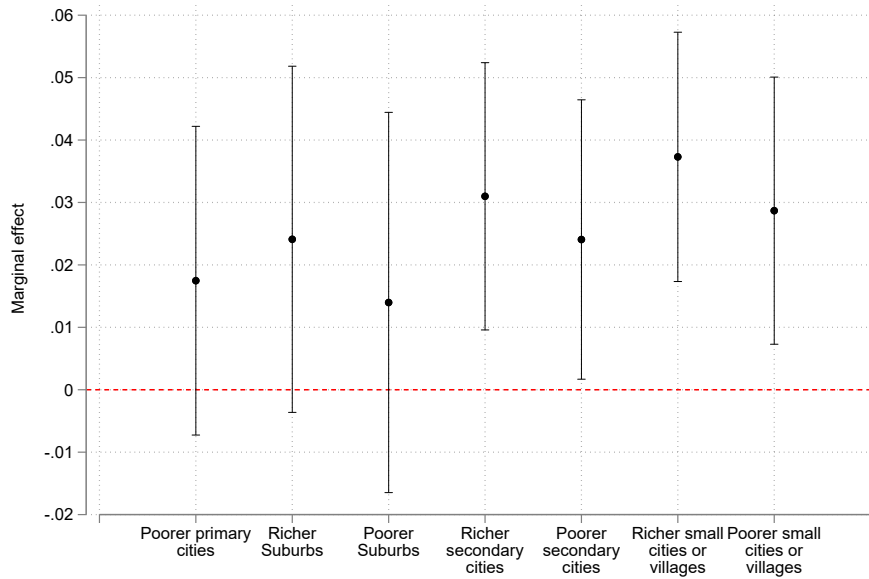


Figure 2.B.3: Marginal effect of periphery and CRD on strong support for redistribution – Suburbs excluded from urban centers

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,781. CRD = City Relative Development. Predicted values are derived from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

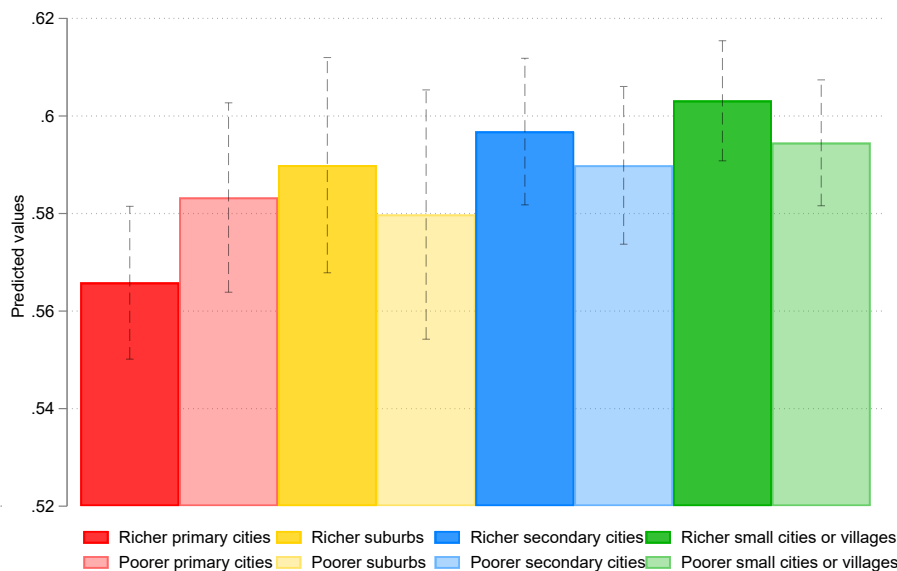


Figure 2.B.4: Predicted values of the probability of strongly supporting redistribution – Decomposed periphery and CRD – Suburbs excluded from urban centers

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,781. CRD = City Relative Development. Predicted values are derived from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.



Figure 2.B.5: Predicted values of the probability of strongly supporting redistribution over time – Periphery and CRD

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,781. CRD = City Relative Development. Predicted values are derived from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

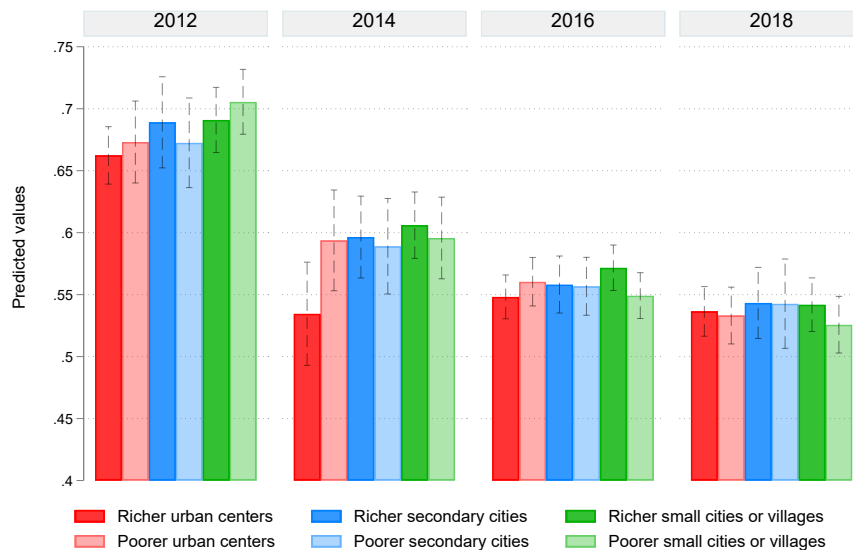


Figure 2.B.6: Predicted values of the probability of strongly supporting redistribution over time – Decomposed periphery and CRD

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,781. CRD = City Relative Development. Predicted values are derived from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

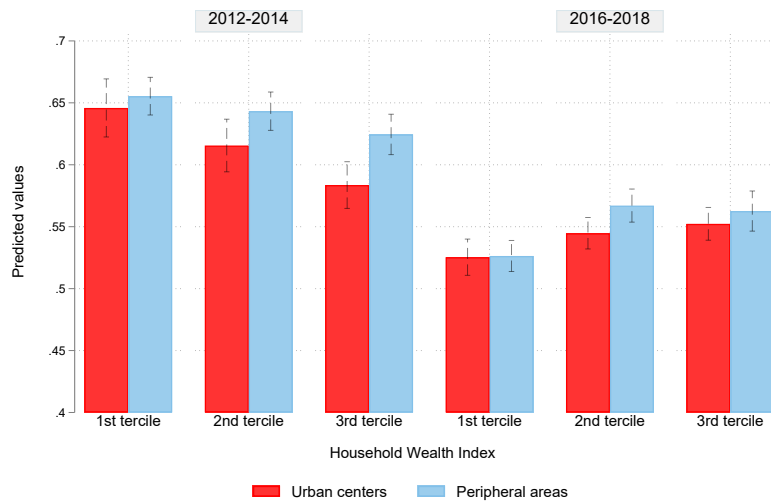


Figure 2.B.7: Predicted values of the probability of strongly supporting redistribution – Periphery and HWI before and after 2014

Source: Author’s elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,781. HWI = Household Wealth Index. Predicted values are derived from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. The HWI is derived from a multiple correspondence analysis of household durables for each country and year, and divided into tertiles. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.



Figure 2.B.8: Predicted values of the probability of strongly supporting redistribution – Decomposed periphery and HWI before and after 2014

Source: Author’s elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: N = 90,781. HWI = Household Wealth Index. Predicted values are derived from a probit model. The 95% confidence intervals are shown. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. The HWI is derived from a multiple correspondence analysis of household durables for each country and year, and divided into tertiles. All controls are included, as well as country and year fixed effects. Weights provided by LAPOP are used for cross-country comparisons. Standard deviations are clustered at city level.

2.C Appendix C: Supplementary tables

Table 2.C.1: Descriptive statistics

Variables	N	Proportion (%)
Gender of respondent	103,085	
Female	50,698	49.2
Male	52,387	50.8
Age	103,098	
Less than 30 years old	33,509	32.5
Between 30 and less than 60 years old	54,050	52.4
60 years old and more	15,539	15.1
Education	102,019	
No education or primary incomplete	18,013	17.7
Primary complete	13,240	13.0
Secondary incomplete	24,940	24.4
Secondary complete	24,098	23.6
Post-secondary	21,728	21.3
Occupation	101,850	
Worker	53,462	52.5
Unemployed	8,269	8.1
Student	7,902	7.8
At home	24,957	24.5
Retired/disabled	7,260	7.1
Employment status	101,850	
Public employee	6,957	6.8
Private employee	17,811	17.5
Employer	1,781	1.7
Self-employed	26,038	25.6
Other inactives/unpaid worker	49,263	48.4
Income evolution (past 2 years)	101,378	
Negative	28,224	27.8
Same or positive	73,154	72.2
Redistributive preferences	99,490	
Strong (6-7)	57,450	57.7
Weak (1-5)	42,040	42.3
Perception of safety in the neighborhood	102,004	
Very safe	19,822	19.4
Somewhat safe	39,320	38.5
Somewhat unsafe	28,763	28.2
Very unsafe	14,099	13.8
Interpersonal trust in the neighborhood	100,970	
Very trustworthy	24,359	24.1
Somewhat trustworthy	38,839	38.5
Not very trustworthy	27,900	27.6
Untrustworthy	9,872	9.8
Feeling of political knowledge	100,510	
Strong (6-7)	20,495	20.4
Weak (1-5)	80,015	79.6
Participation in a demonstration (1 year)	102,633	
Yes	9,416	9.2
No	93,217	90.8

Bribery by a government employee (1 year)	102,649	
Yes	5,989	5.8
No	96,660	94.2
Religion attendance	102,413	
Once a week	30,608	29.9
Once or twice a month	16,883	16.5
Once of twice a year	9,888	9.6
Never	45,034	44.0

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay)

Table 2.C.2: Periphery and support for redistribution (2012-2018) – Ordered Probit model

Variables	Support for redistribution						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Binary Periphery</i>							
Periphery (ref: urban center)	-0.0032 ^{***} (0.0012)	-0.0019 ^{**} (0.0007)	-0.0029 ^{**} (0.0011)	-0.0037 ^{***} (0.0014)	-0.0025 ^{***} (0.0009)	0.0000 (0.0001)	0.0141 ^{***} (0.0054)
CRD (ref: 50% richest)	-0.0012 (0.0012)	-0.0007 (0.0007)	-0.0011 (0.0011)	-0.0014 (0.0014)	-0.0010 (0.0010)	0.0000 (0.0000)	0.0054 (0.0055)
<i>Panel B: Categorical Periphery</i>							
Periphery (ref: urban center)							
Secondary city	-0.0034 ^{**} (0.0014)	-0.0020 ^{**} (0.0009)	-0.0031 ^{**} (0.0013)	-0.0039 ^{**} (0.0017)	-0.0026 ^{**} (0.0011)	0.0000 (0.0001)	0.0150 ^{**} (0.0065)
Small cities or villages	-0.0032 ^{**} (0.0014)	-0.0019 ^{**} (0.0008)	-0.0029 ^{**} (0.0013)	-0.0037 ^{**} (0.0016)	-0.0025 ^{**} (0.0011)	0.0000 (0.0001)	0.0142 ^{**} (0.0061)
CRD (ref: 50% richest)	-0.0004 (0.0012)	-0.0002 (0.0007)	-0.0004 (0.0011)	-0.0005 (0.0014)	-0.0003 (0.0010)	0.0000 (0.0000)	0.0018 (0.0055)
Observations	90,791	90,791	90,791	90,791	90,791	90,791	90,192
Socio-economic controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Experience and perception controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country and year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: CRD = City Relative Development. All reported coefficients are marginal effects from an ordered probit model. The dependent variable measures citizens' demand for redistribution to reduce inequality ranging from 1 (minimum) to 7 (maximum). Ref corresponds to omitted reference category. Country and year fixed effects are included but not reported. Values in bold correspond to coefficients significantly different from 0. Weights provided by LAPOP are used for cross-country comparisons. Clustered standard deviations are in brackets (by city). *** p<0.01, ** p<0.05, * p<0.1.

Table 2.C.3: Periphery and CRD on strong support for redistribution – Suburbs excluded from urban centers

Variables	Strong support for redistribution	
	(1)	(2)
<i>Panel A: Binary Peripheral</i>		
Periphery * CRD (<i>ref: richest primary city</i>)	-0.0128 (0.0149)	-0.0167 (0.0142)
Periphery (<i>ref: primary city</i>)	0.0296 *** (0.0104)	0.0280 *** (0.0097)
CRD (<i>ref: 50% richest</i>)	0.0156 (0.0134)	0.0176 (0.0127)
<i>Panel B: Categorical Peripheral</i>		
Suburbs * CRD (<i>ref: richest primary city</i>)	-0.0270 (0.0217)	-0.0274 (0.0210)
Secondary cities * CRD (<i>ref: richest primary city</i>)	-0.0207 (0.0174)	-0.0245 (0.0169)
Small cities or villages * CRD (<i>ref: richest primary city</i>)	-0.0228 (0.0158)	-0.0262 * (0.0151)
Suburbs (<i>ref: primary city</i>)	0.0243 (0.0148)	0.0239 * (0.0141)
Secondary cities (<i>ref: primary city</i>)	0.0326 *** (0.0115)	0.0314 *** (0.0110)
Small cities or villages (<i>ref: primary city</i>)	0.0410 *** (0.0110)	0.0378 *** (0.0103)
CRD (<i>ref: 50% richest</i>)	0.0155 (0.0134)	0.0176 (0.0127)
Observations	95,782	90,791
Socio-economic controls	Yes	Yes
Experience and perception controls	No	Yes
Country and year FE	Yes	Yes

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: CRD = City Relative Development. Estimated coefficients based on an OLS model. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. Ref corresponds to omitted reference category. Controls, country and year fixed effects are included but not reported. Values in bold correspond to coefficients significantly different from 0. Weights provided by LAPOP are used for cross-country comparisons. Clustered standard deviations are in brackets (by city). *** p<0.01, ** p<0.05, * p<0.1.

Table 2.C.4: Periphery and CRD on strong support for redistribution – Alternative ranges for nighttime lights

CRD Indicator buffer range Variables	Strong support for redistribution			
	500m (1)	1000m (2)	1500m (3)	2000m (4)
Secondary city * CRD (<i>ref: richest urban centers</i>)	-0.0042 (0.0149)	-0.0268* (0.0152)	-0.0097 (0.0152)	-0.0020 (0.0152)
Small cities or villages * CRD (<i>ref: richest urban centers</i>)	-0.0247* (0.0132)	-0.0286** (0.0135)	-0.0085 (0.0137)	-0.0084 (0.0135)
Secondary cities (<i>ref: urban centers</i>)	0.0178* (0.0099)	0.0269*** (0.0098)	0.0208** (0.0095)	0.0166* (0.0099)
Small cities or villages (<i>ref: urban centers</i>)	0.0327*** (0.0091)	0.0332*** (0.0090)	0.0258*** (0.0092)	0.0252*** (0.0088)
CRD (<i>ref: 50% richest</i>)	0.0148 (0.0099)	0.0200* (0.0103)	0.0094 (0.0104)	0.0144 (0.0104)
Observations	90,791	90,791	90,791	90,791
Socio-economic controls	Yes	Yes	Yes	Yes
Experience and perception controls	Yes	Yes	Yes	Yes
Country and year FE	Yes	Yes	Yes	Yes

Source: Author's elaboration based on the LAPOP database (2012-2018) for 16 countries (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Note: CRD = City Relative Development. Estimated coefficients based on an OLS model. The dependent variable is a binary measure indicating a strong demand for redistribution from government to reduce inequality. Ref corresponds to omitted reference category. Controls, country and year fixed effects are included but not reported. Values in bold correspond to coefficients significantly different from 0. Weights provided by LAPOP are used for cross-country comparisons. Clustered standard deviations are in brackets (by city). *** p<0.01, ** p<0.05, * p<0.1.

2.D Appendix D: Country-level map

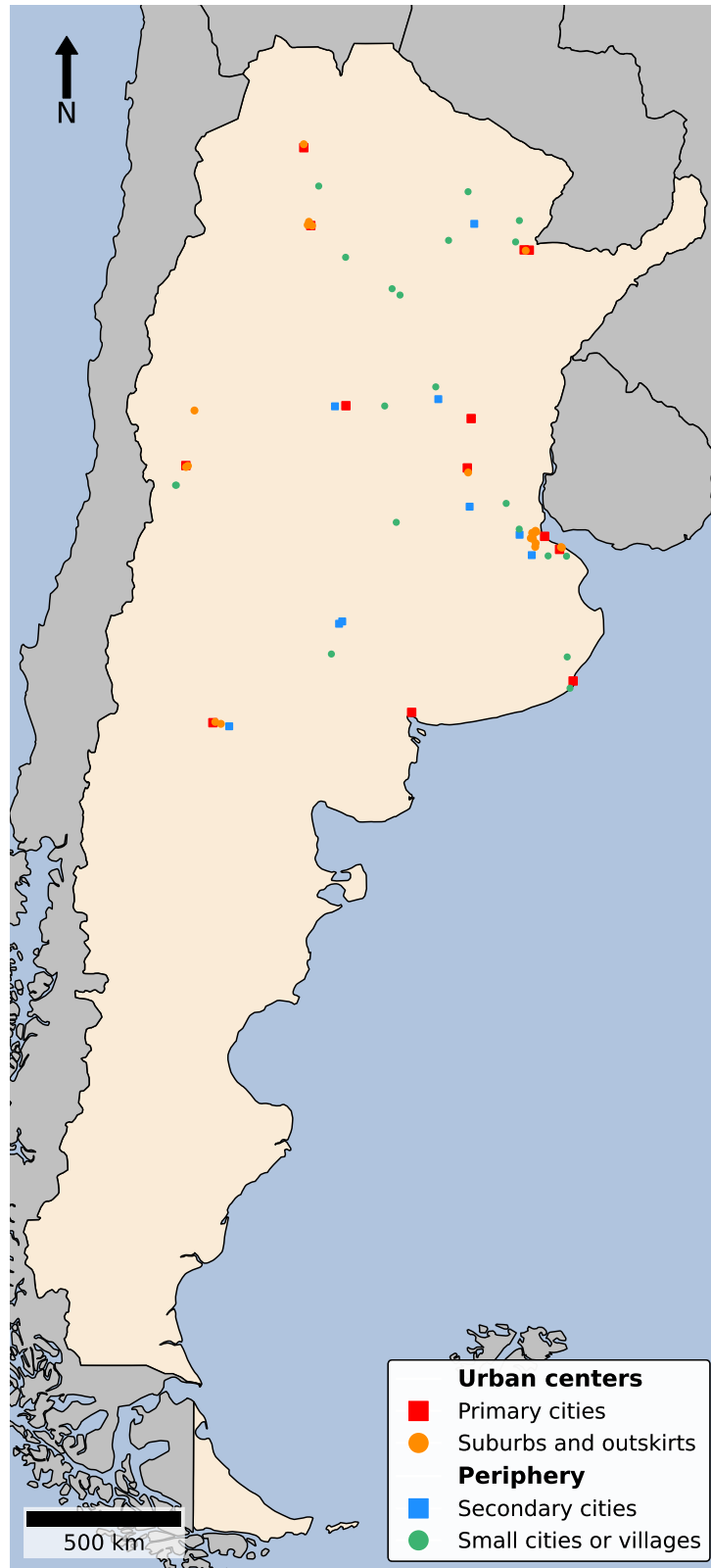


Figure 2.D.1: Classification of cities in Argentina

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016-2018) for Argentina.

Note: N = 73. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

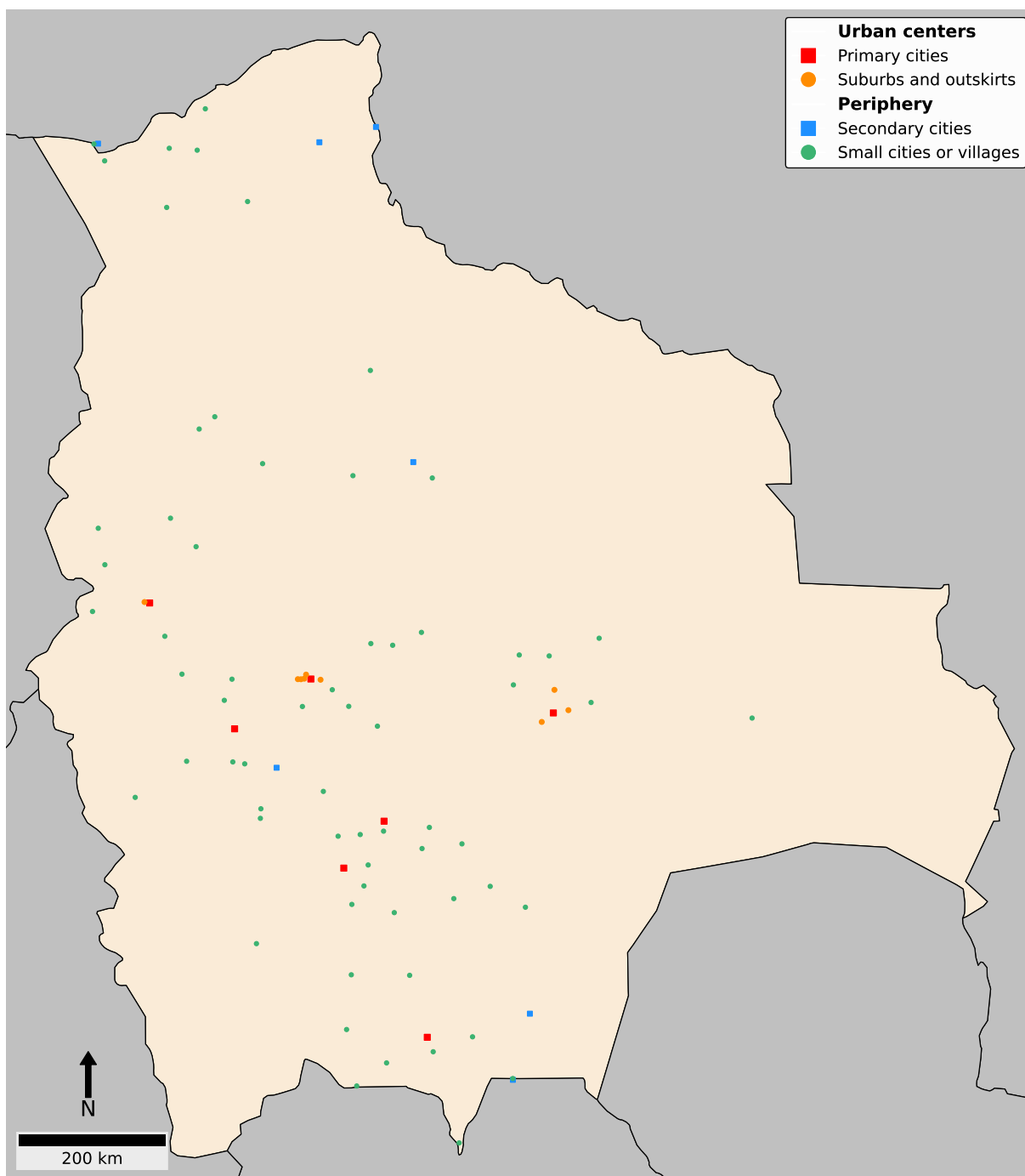


Figure 2.D.2: Classification of cities in Bolivia

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Bolivia.

Note: N = 88. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

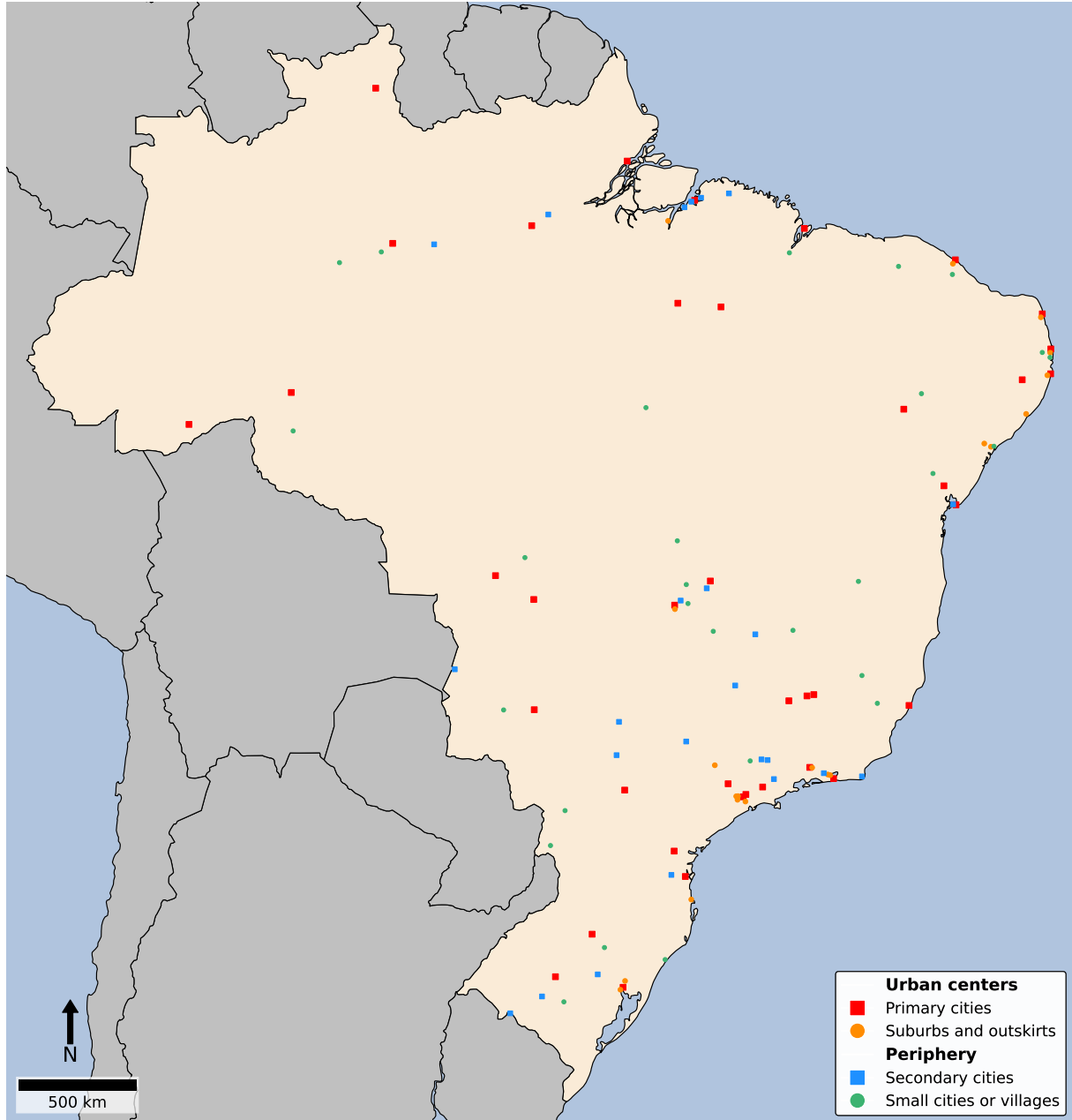


Figure 2.D.3: Classification of cities in Brazil

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Brazil.

Note: N = 111. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

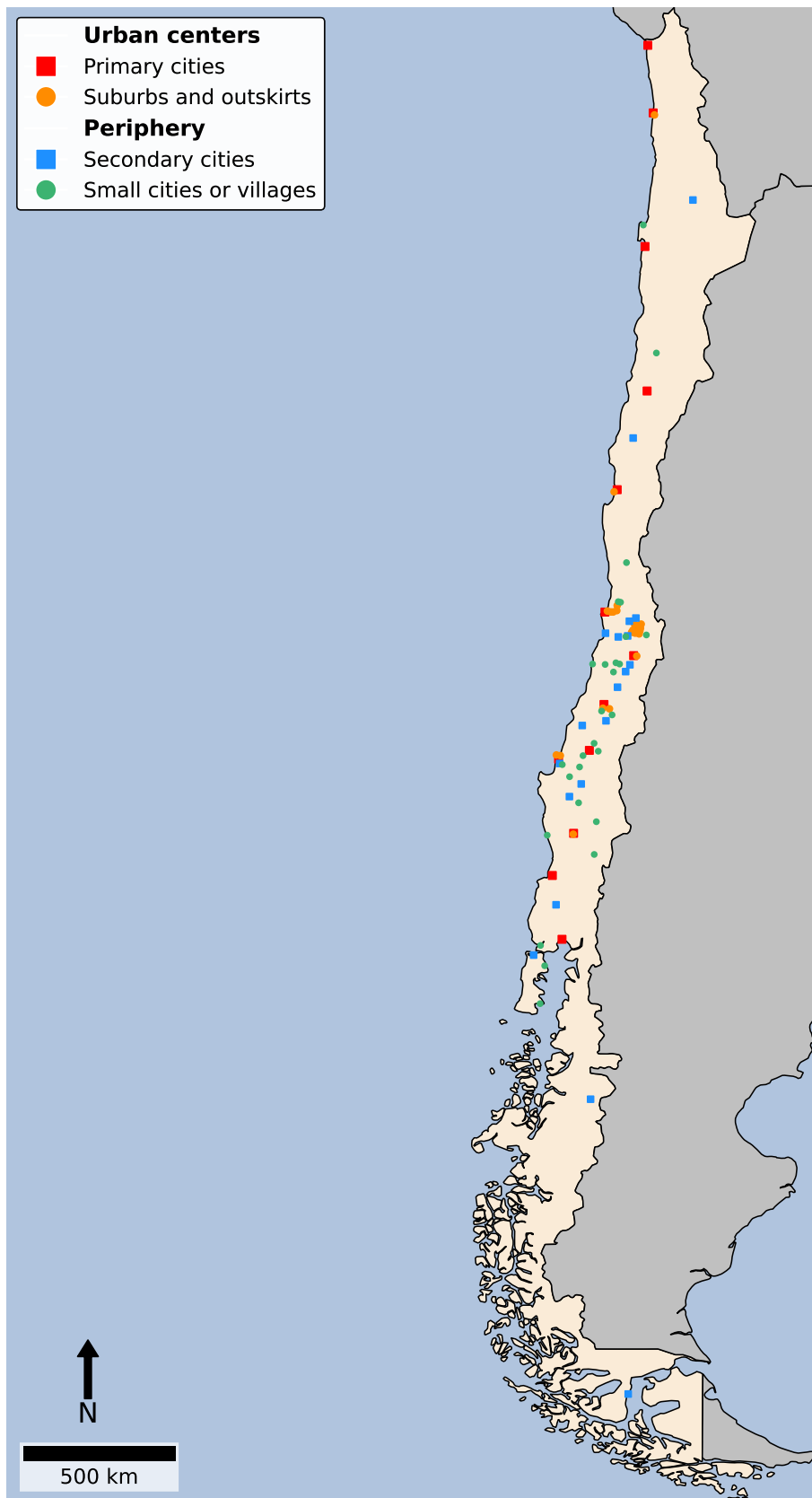


Figure 2.D.4: Classification of cities in Chile

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Chile.

Note: N = 99. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

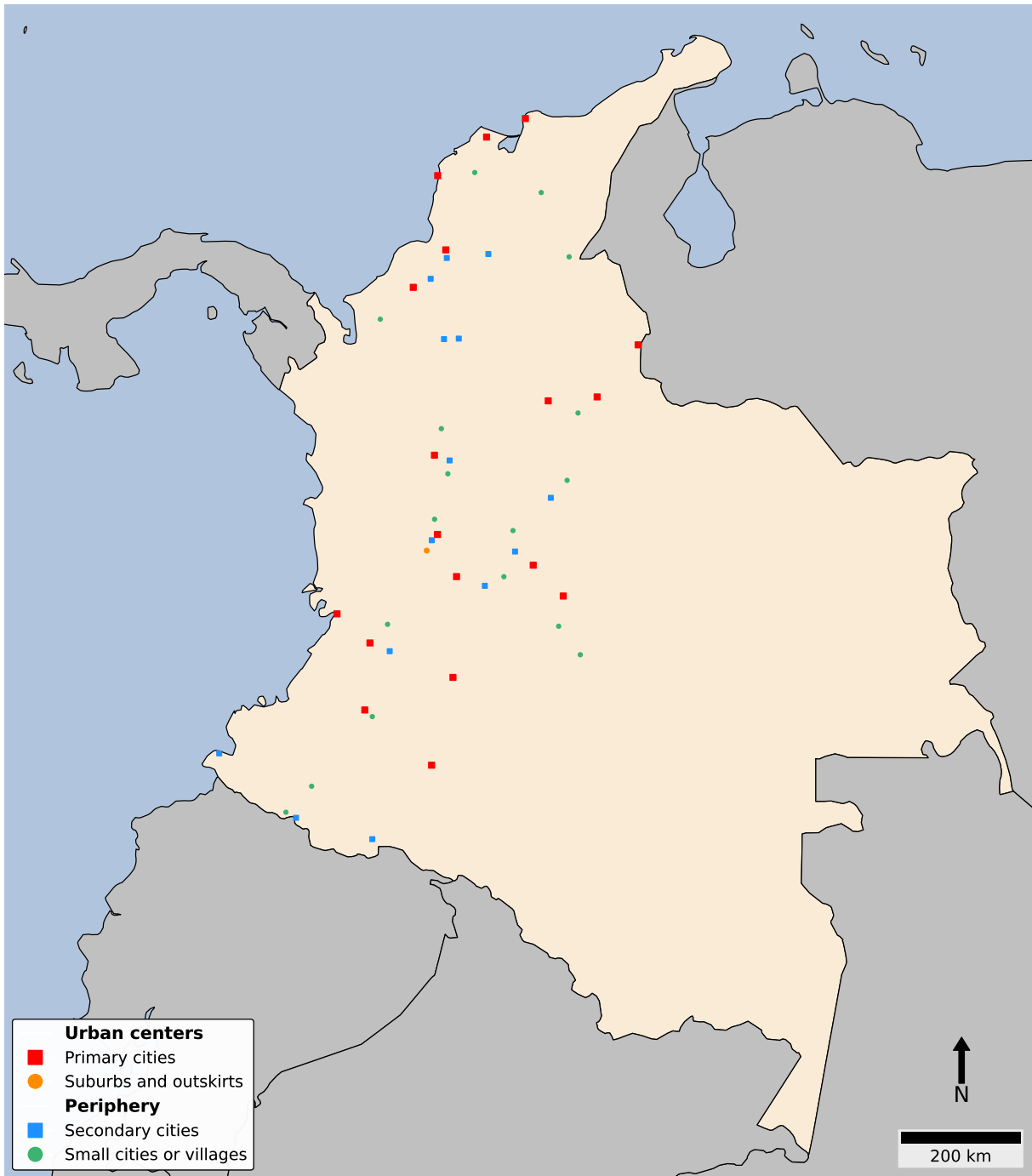


Figure 2.D.5: Classification of cities in Colombia

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Colombia.

Note: N = 50. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

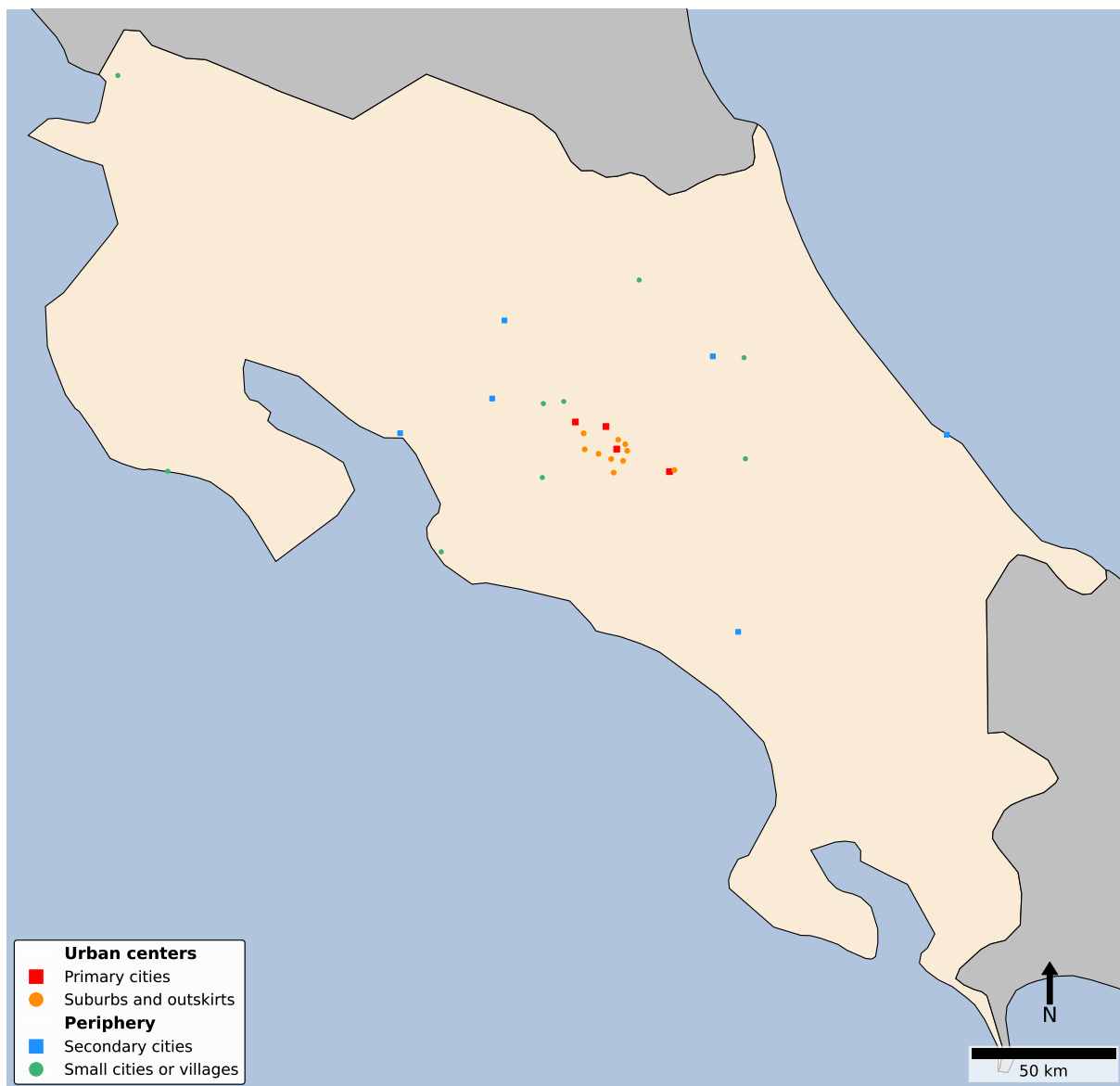


Figure 2.D.6: Classification of cities in Costa Rica

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Costa Rica.

Note: N = 29. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

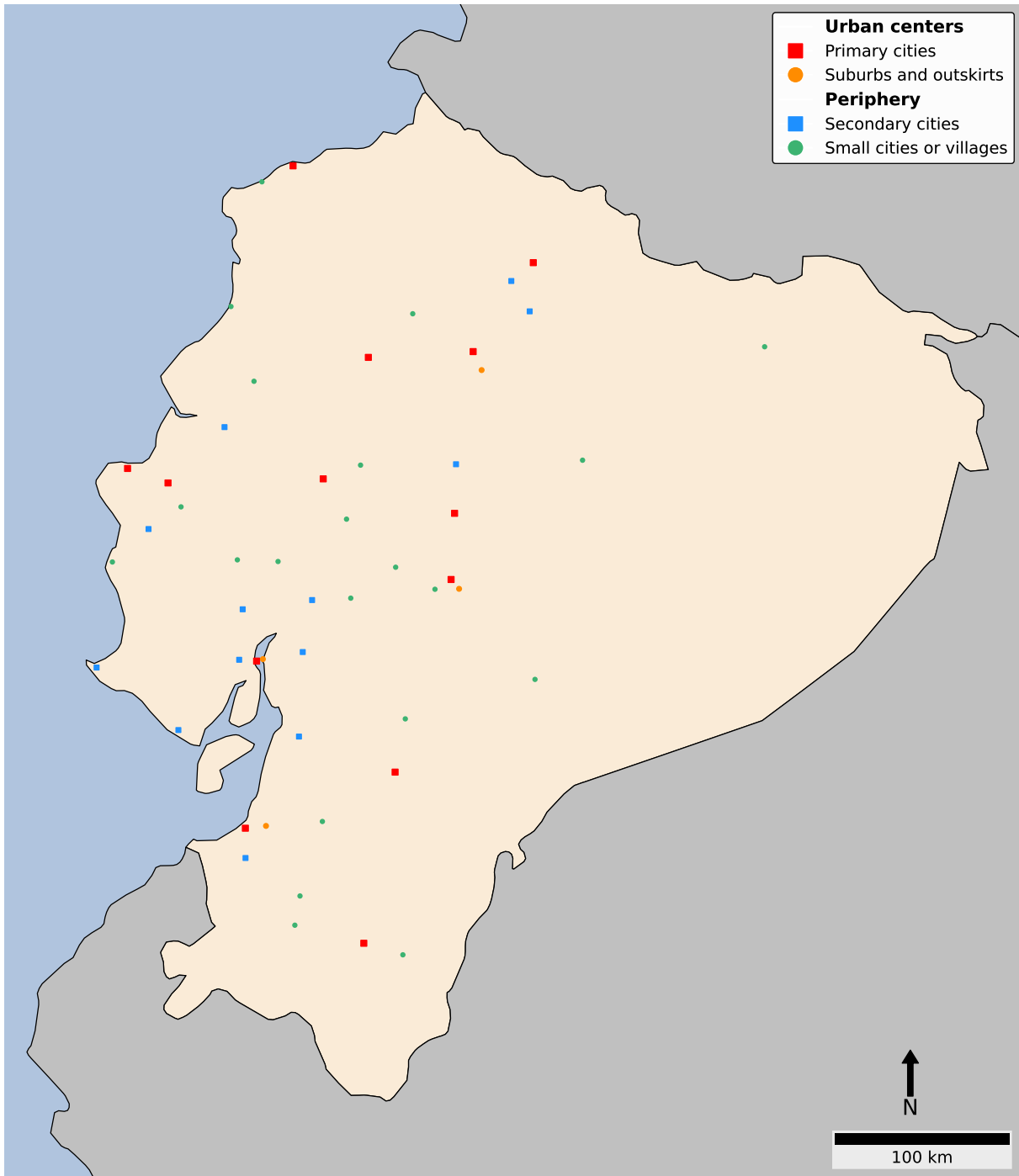


Figure 2.D.7: Classification of cities in Ecuador

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Ecuador.

Note: N = 51. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

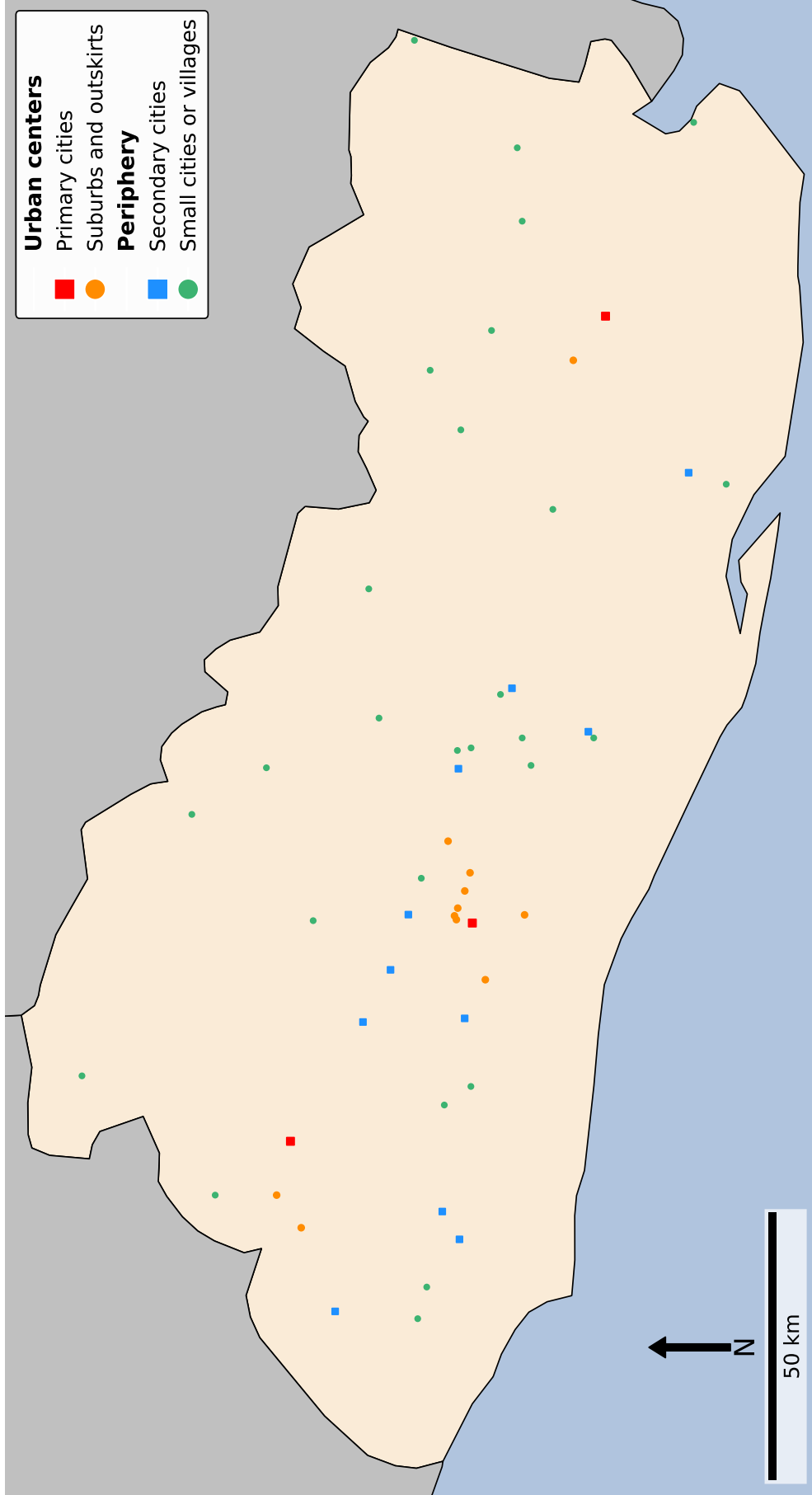


Figure 2.D.8: Classification of cities in El Salvador

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for El Salvador.

Note: N = 52. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

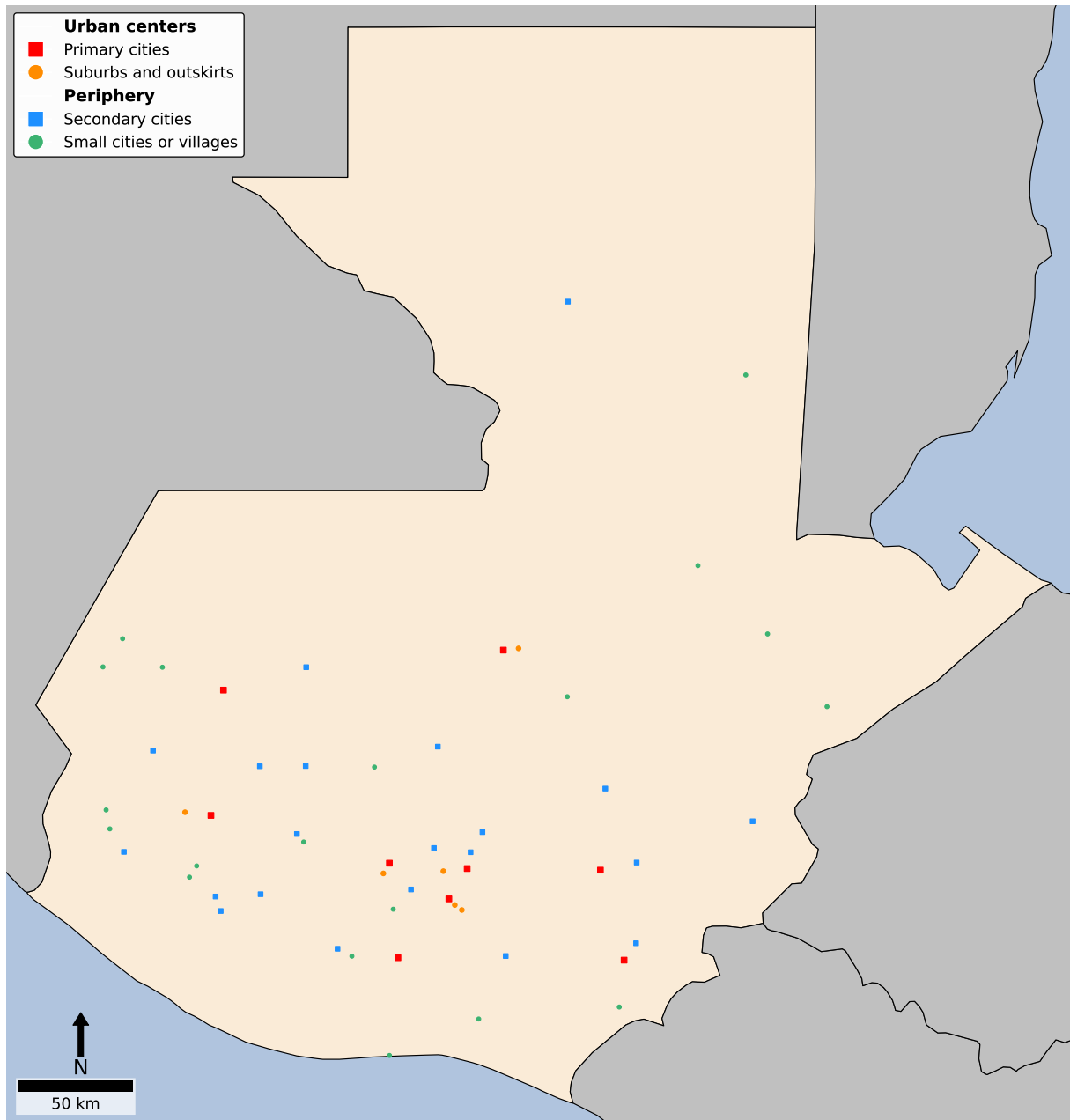


Figure 2.D.9: Classification of cities in Guatemala

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Guatemala.

Note: N = 55. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

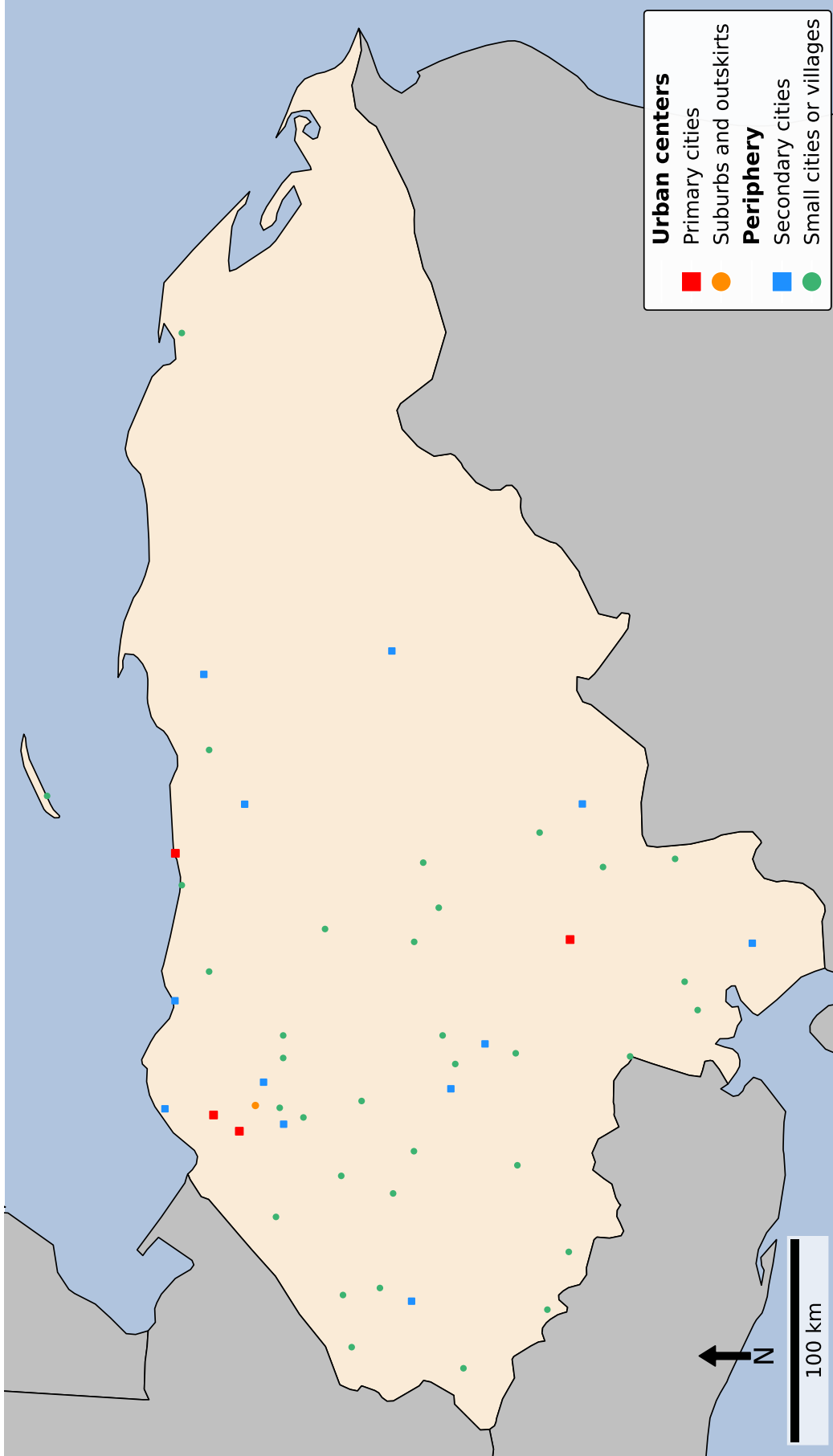


Figure 2.D.10: Classification of cities in Honduras

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Honduras.

Note: N = 51. Each red dot corresponds to the main city of the municipality to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

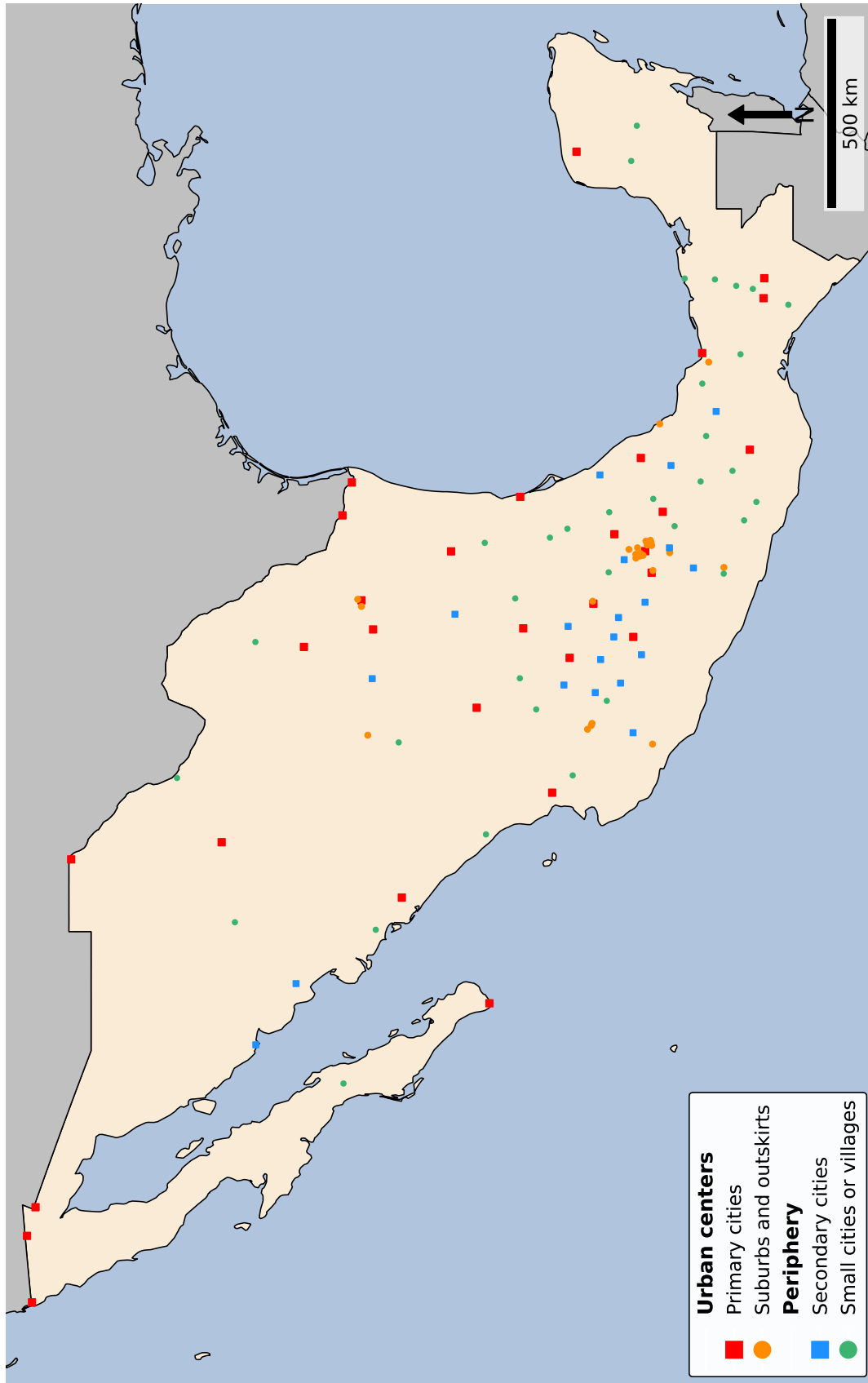


Figure 2.D.11: Classification of cities in Mexico

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Mexico.

Note: N = 114. Each red dot corresponds to the main city of the municipality to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

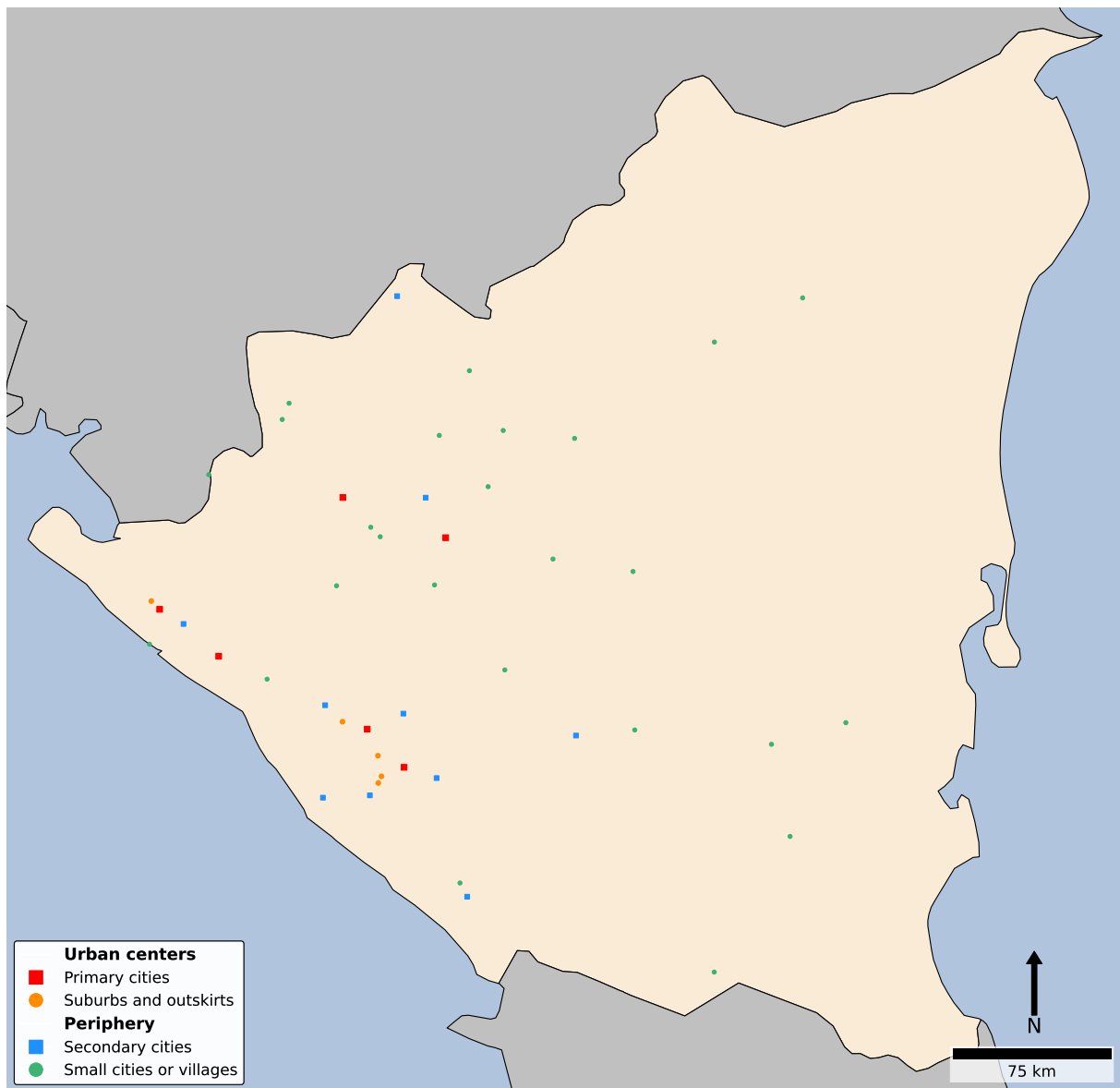


Figure 2.D.12: Classification of cities in Nicaragua

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Nicaragua.

Note: N = 46. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

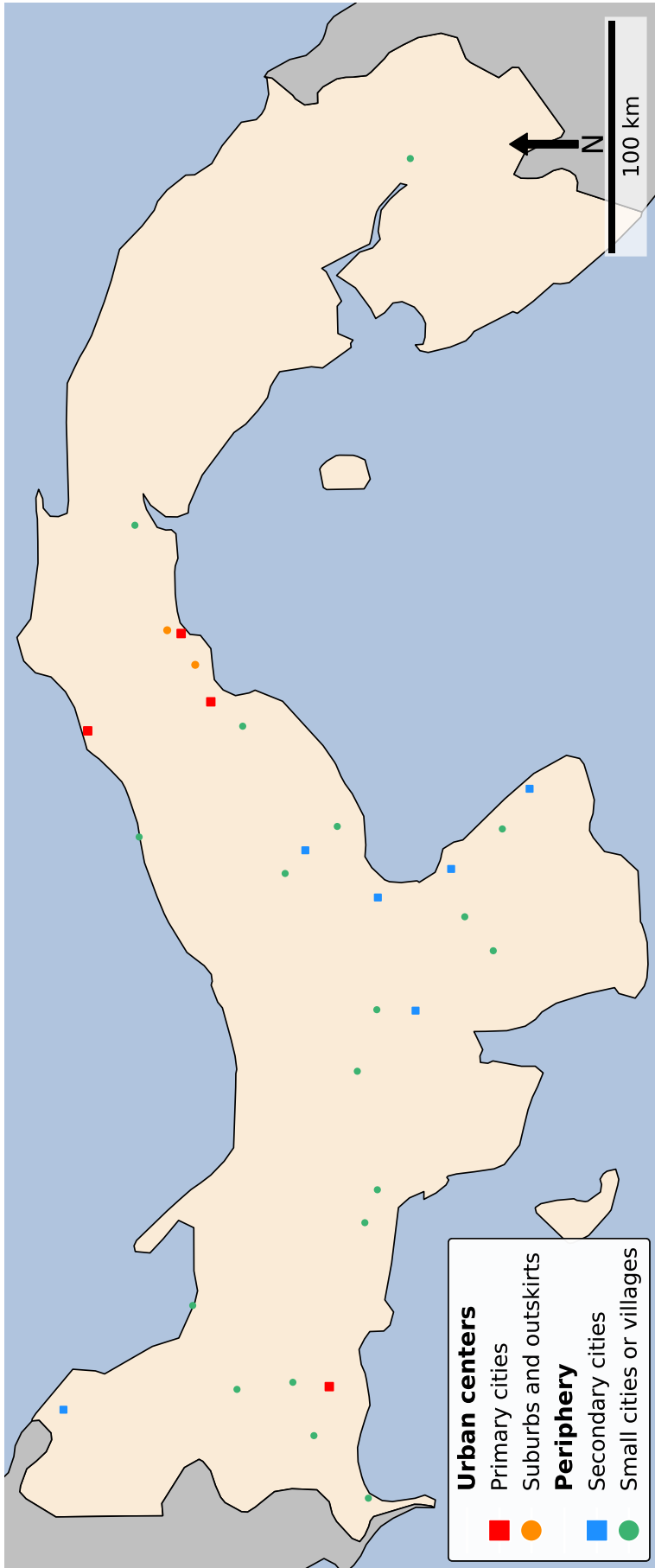


Figure 2.D.13: Classification of cities in Panama

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Panama.

Note: N = 30. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

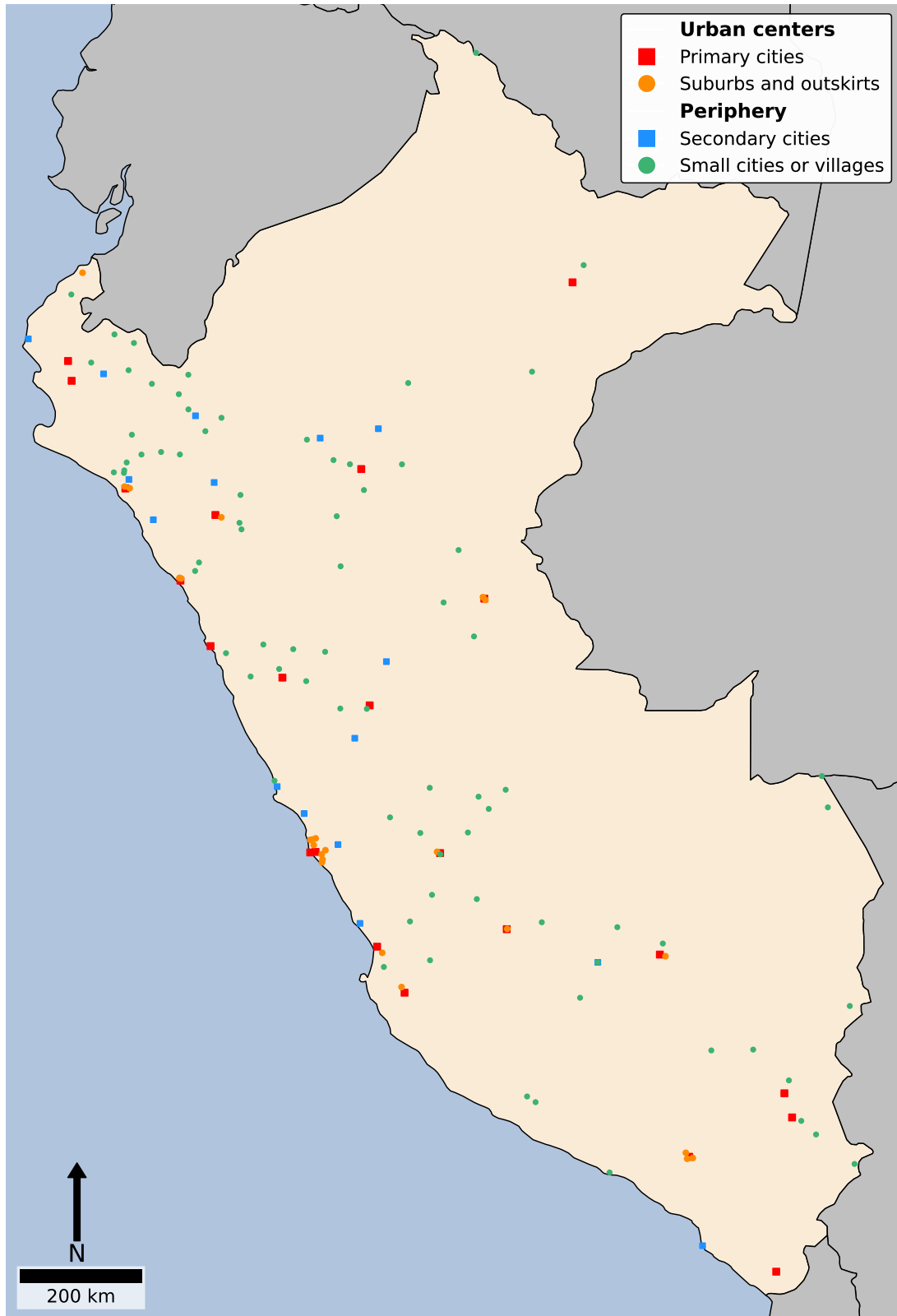


Figure 2.D.14: Classification of cities in Peru

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Peru.

Note: N = 157. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

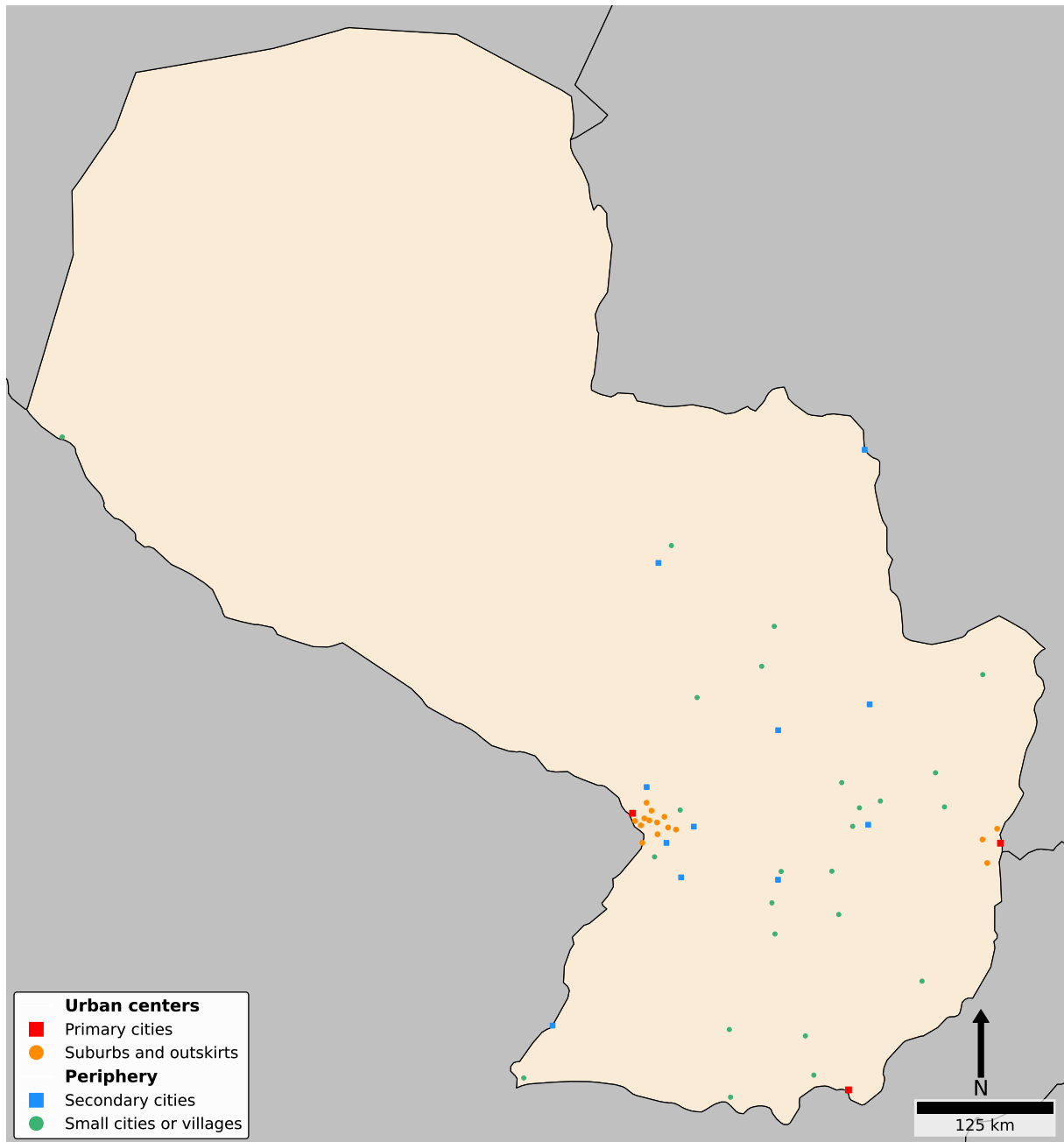


Figure 2.D.15: Classification of cities in Paraguay

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Paraguay.

Note: N = 54. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

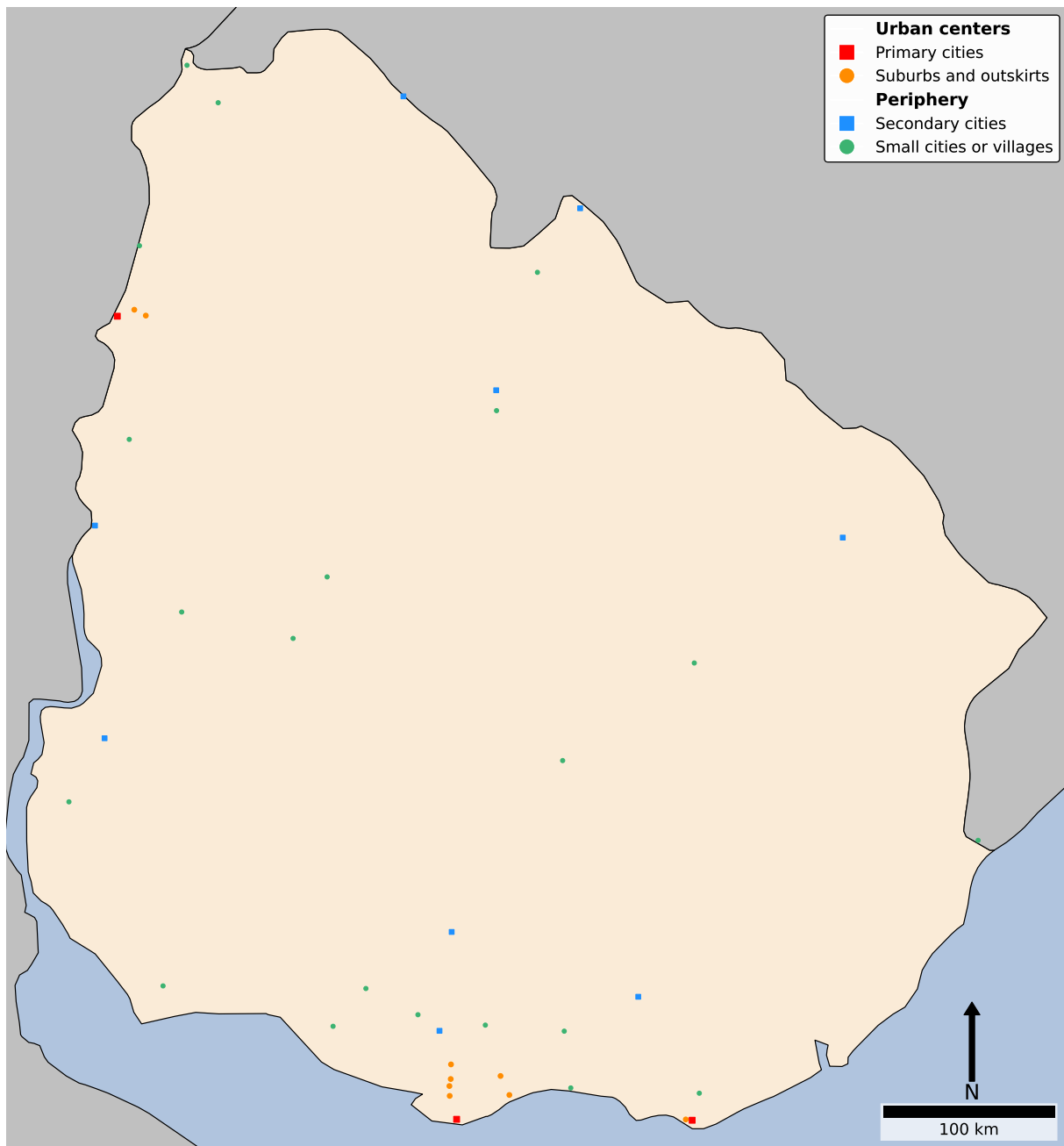


Figure 2.D.16: Classification of cities in Uruguay

Source: Author's elaboration based on the LAPOP database (2012, 2014, 2016, 2018) for Uruguay.

Note: N = 48. Each red dot corresponds to the main city of the municipio to which the LAPOP survey respondent belongs during the period covered. Countries shown in gray are not included.

HOW EFFECTIVE ARE CASH TRANSFER PROGRAMS IN MITIGATING INCOME INSTABILITY? EVIDENCE FROM THE AUH IN ARGENTINA*

Abstract

Income instability is a crucial determinant of household poverty, particularly in developing countries where precarious employment is widespread and social protection tools are limited. This paper examines the effectiveness of a nationally implemented cash transfer program – the Universal Child Allowance (AUH) – as a buffer against income instability among economically vulnerable households in Argentina. Using nationally representative household surveys from 2004 to 2015, it compares the income stability of eligible and non-eligible households for the program by measuring their coefficient of variation of income and transitions into poverty over one and a half years. The findings reveal that the AUH effectively mitigates income instability for eligible households, reducing the proportion of periods spent in poverty by 15% and income fluctuations up to 16% compared to a situation without the program introduction. This stabilizing effect is particularly stronger for households experiencing a loss of income during the period, smoothing out income losses. While the program's effect is higher for households with several children or a young child, it is largely reduced for households that are less resilient to shocks, such as single mothers. Lastly, the AUH also affects households' financial behavior by reducing their reliance on in-kind and monetary donations, as well as their use of informal loans.

*. The author would like to thank the participants of the AFSE 2024 conference held in Bordeaux (France) for their comments and advice, as well as those present at the WAPLAC 2024 conference in San José (Costa Rica). Finally, a special thanks to the comments of Quentin Stoeffler, who read an earlier version of this manuscript.

3.1 Introduction

While the 2030 Agenda for Sustainable Development from the United Nations makes access to social protection a priority worldwide (Target 1.3), the coverage is still limited notably in the Global South (UN 2015; UNICEF 2019a). As of 2020, less than one person in two was covered by social protection schemes, leaving more than 4 billion people unprotected (ILO 2021). Many people have been lifted out of poverty in the last decades but remain largely vulnerable, far from Western middle-class standards (Ravallion 2010). In particular, people with informal or precarious employment are often excluded from contributory social protection systems, but also from anti-poverty programs when their income temporarily or slightly exceeds eligibility limits (Busso et al. 2021). Uninsured shocks and lack of access to social protection mechanisms increase households' economic instability and the likelihood of falling or staying in poverty, reducing prospects for economic mobility (De Janvry et al. 2010; Birdsall et al. 2014).

A burgeoning literature has started addressing how economic instability profoundly impacts household well-being, both economically and cognitively (Morrissey et al. 2020). In a special issue dedicated to the causes and consequences of household economic instability, Hill et al. (2017) define economic instability “as repeated changes in employment, income, or financial well-being over time, particularly changes that are not intentional, predictable, or part of upward mobility”. Household economic instability can stem from various dimensions, such as employment (job transitions, hours worked, schedules), changes in family structure, or unstable sources of income (benefits). For low-income families, unexpected changes in these dimensions can lead to material (basic needs and services) or income instability (Hill et al. 2017).²⁹ Several studies find associations between income instability and various adversities such as material deprivation, deteriorating health, psychological distress, and diminished parenting quality (Gennetian et al. 2015; Shaefer et al. 2018; Monahan 2020). Income instability also has detrimental consequences on household's spending patterns and human capital investment, with potentially large negative impact on children's development (Hill et al. 2013). While anti-poverty policies have as their objectives to ease and foster economic mobility for vulnerable households, very few studies have tried to measure the impact of cash transfer (CT)

29. There is no consensus in the literature on how to refer to income instability. Thus, terms such as “income variability”, “income volatility” or “income fluctuations” will be used synonymously.

programs on recipients' income stability so far, which is crucial for effective policymaking (Wolf et al. 2014; Hill et al. 2017).

This paper fills this gap by investigating the impact of a CT program on income stability and poverty transitions within economically vulnerable households. The case of the Universal Child Allowance (AUH) is examined, Argentina's largest social program implemented nationally in late 2009 and one of the most generous non-contributory programs in Latin America (LA). Informal work is widespread in the LA region, particularly among workers in the two lowest income quintiles (Busso et al. 2021). The AUH program aims at extending social protection to children in poor and economically vulnerable households excluded from the contributory social protection system, such as informal workers, domestic workers, or unemployable individuals. Argentina provides a highly relevant setting for examining how a massive and nationally coordinated CT program affects household income stability.

The data used come from several waves of nationally representative household surveys from the *Encuesta Permanente de Hogares* (EPH) covering a broad period from 2004 to 2015. The survey's rotating panel structure allows to track each household's income throughout one and a half years through four observations. Household income stability is measured by looking at household poverty transitions, i.e. the proportion of periods spent in poverty during the observation period, and by computing the coefficient of variation (CV) of income.³⁰ The empirical strategy leverages Garganta and Gasparini's (2015) methodology to estimate the intention-to-treat effect by comparing potentially eligible and non-eligible households based on socioeconomic characteristics. A difference-in-difference (DD) strategy is applied to mitigate selection bias produced by the non-random allocation of the program among the population. To the best of my knowledge, this paper is the first to use a quasi-experimental method to assess the effect of a safety net program on income stability outcomes.

Overall, the results confirm the AUH's protective role in preventing households from income swings that lead to poverty and its stabilizing effect on household income flows. The direct income effect of the program reduces the proportion of periods classified as poor by 15% among eligible household compared to what would have happened without the AUH implementation. This constitutes a substantial positive effect aligned with the program's objective of alleviating child poverty. The

30. To consider that income fluctuations impact household welfare differently depending of the direction on income change, the CV is also analyzed separately according to household income's positive or negative evolution. Further details in section 3.3.1.

program also stabilizes recipients' income flows, notably for those having experienced a negative income change in income, with a 16% reduction in the CV compared to the counterfactual. These findings underscore the program's effectiveness in mitigating and smoothing income streams, particularly in the face of losses from insecure revenue sources. Several robustness checks confirm these results. The analysis also reveals that the program's estimated effect varies heterogeneously depending on the household's family structure. The effect on poverty reduction is higher in households with poorer initial economic conditions or facing significant expenses, such as larger families or households with a young child. However, the impact is considerably reduced in households headed by women or with single parents. Given that most women declared as heads of household are single mothers in the sample (76%), households' adaptation or resilience to shocks is likely to be more challenging than for households with both parents. Finally, an exploration of the program's effects on household financial behavior also reveals that eligible households reduce their reliance on in-kind and monetary donations and their need for taking out informal loans, in line with the previous results indicating higher household income stability.

These results contribute to the literature dealing with safety net programs and income stability. A large literature has extensively examined the impact of CT programs on various economic and human capital outcomes (Fiszbein and Schady 2009; Papadopoulos and Leyer 2016; Millán et al. 2019; Abramo et al. 2020) as well as their role in enhancing households' resilience to shocks and ability to manage risks (Haushofer and Shapiro 2016; Ralston et al. 2017; Premand and Stoeffler 2020; Macours et al. 2022).

By contrast, very few studies have assessed the effects of these programs on the income stability of the growing number of economically vulnerable households relying on informal activities and sources of revenues. While the receipt of regular financial aid is expected to affect households' welfare by protecting living standards, smoothing consumption, or mitigating material hardship (Shaefer et al. 2018), safety net policies might exacerbate income instability if households frequently enter and exit programs based on their design and conditionalities (Wolf et al. 2014; Morrissey et al. 2020). The findings of this present paper confirm prior findings of Micha and Trombetta (2020), also for the AUH case. Using a microsimulation strategy in the post-AUH period (2010-2014), they quantified the contribution of each income source to the total income fluctuations among eligible households and

came to a similar conclusion. These results are also in line with recent studies that show the stabilizing role of social safety net programs in the US, in a different program and context (Hardy 2017; Bitler et al. 2017).

Secondly, this article contributes to the limited literature on income stability in developing countries. Mainly due to the scarcity of longitudinal studies in these countries, existing studies dealing with income instability have historically focused on the United States or Western European countries (Dyner et al. 2012; Hardy 2017; Avram et al. 2022). In a recent illustrative study, Beccaria et al. (2021) underscore a high level of short-term income mobility in seven major countries of the LA region during the 2000s. Despite a general improvement in wages, they also find that around 40% of households experienced a loss of income over the period, highlighting a high degree of income insecurity, especially in countries with high levels of informal employment and lacking adequate social protection systems.

Thirdly, this article provides new evidence supporting the effectiveness of extending social protection to excluded or marginalized populations. Regular transfers ensure a “floor” income that helps vulnerable households to cope with the shocks that harm their disposable income and limits the risk of a loss in living standard, often involving an increase in out-of-pocket expenses, asset sales or indebtedness. These findings carry particular relevance for Argentina, a nation frequently exposed to macroeconomic fluctuations (debt crisis, financial market confidence issues, high inflation), but more generally for all developing countries characterized by widespread informal labor, inadequate investments in social protection and healthcare services, and where political turnover significantly impact access to program benefit (Abramo et al. 2020).

The rest of the paper is structured as follows. Section 3.2 briefly details social programs in Argentina and describes the data used. Section 3.3 presents the methodology adopted to measure income stability, and the identification and estimation strategies. Section 3.4 shows the results, the robustness tests performed, and the program’s heterogeneous effects. Section 3.5 concludes.

3.2 Background and data

3.2.1 Social programs in Argentina

Since the late 1990s, CT programs have become popular and relatively affordable public policy tools for alleviating poverty and inequality worldwide. Particularly, conditional CT programs have proliferated in the LA region, targeting specific groups within the population and requiring compliance with conditions often relating to health and schooling to foster human capital accumulation.³¹ However, mean-tested benefits often leave out many households at high risk of poverty, especially those whose members work in the informal sector (Busso et al. 2021). By 2021, 40% of the LA region's population was still not covered by a social protection scheme.³²

In Argentina, the country's main social programs were set up in response to the 2001 economic crisis, which had a devastating impact on the country, dramatically increasing unemployment and poverty rates (Galasso and Ravallion 2004).³³ The first large-scale emergency program was implemented in 2002 with the *Plan Jefes y Jefas de Hogares Desocupados* (PJJHD) to economically support households with children affected by the economic crisis. This program consisted of transferring 150 pesos (around \$50 US) to household where the head was unemployed. In 2005, because of improved labor market conditions, the *Plan Familias* program progressively absorbed a substantial part of the PJJHD beneficiaries, restricting access to unemployable individuals with low education levels with two or more children (Ceballos and Lautier 2013).

After several years of sustained economic growth during the mid-2000s, the Argentine government significantly reorganized its social protection system (Pautassi et al. 2013). In late 2009, the government extended the family allowance system to the informal sector with the non-contributory AUH program, replacing all other safety nets. Unlike previous social programs which depended on a specific ministry, the AUH was added as the second pillar of the existing family allowance system administered by the *Administración Nacional de la Seguridad Social* (ANSES), and its high degree of insti-

31. For more details about the transformation of social protection in the LA region, see Lavinas (2015).

32. Data from ILOSTAT (International Labour Organization) for 2020 or 2021, depending on the latest available period. More details on <https://ilostat.ilo.org/data/>.

33. The feeling of pauperization, described as the “new poor”, is well documented in the LA region and especially in Argentina (Kessler and Di Virgilio 2010).

tutionalization enables it to operate over the long term (Bertranou 2010; UNICEF et al. 2017).

The AUH aims to reduce the number of children living in households at high risk of poverty by extending social protection coverage to households with under-18 children whose parents are unregistered in the contributory system.³⁴ To be eligible for the program, parents must either work in the informal sector, be in domestic service, or be unemployed without pension (the AUH is incompatible with other social transfers). Eligibility for the AUH is automatically determined by government records and verified by the ANSES (Chudnovsky and Peeters 2022). Even if the AUH is not exclusively reserved for the poor, the program targets relatively low-income workers, officially earning less than the minimum wage with a self-declaration.

Although both parents must be eligible, nearly all the program transfers go directly to mothers (more than 90%). The initial transfer value per child was 180 monthly pesos (around 48 US\$ per child) and 720 pesos for one disabled member. For a typical eligible household with two children, the cash transfer accounts for roughly 30% of its monthly income. The transfer value is regularly adjusted for inflation and is one of the most generous programs in the LA region (Stampini and Tornarolli 2012). Like traditional conditional CT programs, the AUH requires compliance with regular health checks and immunization for children under age four and school attendance for children aged 5 through 18 (Garganta et al. 2017). Most of the transfer is paid monthly (80%), with the remainder paid at the end of the year when the required conditions are met. It is important to note that even though these conditions are standard for this type of program, compliance with them is a prerequisite for renewal the following year, which can be restrictive if certificates are not issued on time.

In 2019, the AUH covered around 4 million children, representing more than 30% of the child population in the country (UNICEF 2019b).³⁵ The take-up rate of the program in the country is relatively high, estimated at 82%, with roughly 350,000 eligible people not covered, mainly due to a lack of

34. Since its implementation, the government has made a few extensions. First, in 2011, the AUH widened for pregnant women from their 12th week of pregnancy until birth with the *Asignación por Embarazo*. In 2015, the transfer was adjusted according to the household's residence region to account for geographical disparities and living standards. It also provided supplementary transfers to finance school fees in the same year. In 2016, the program also extended the coverage for children from *monotributistas* parents (specific independent workers).

35. Yet, in 2016, around 16% of children were still not covered by any social protection scheme because of administrative barriers, such as the lack of identity documents or birth certificates, or for migrants who have been in the country for less than three years (Pautassi et al. 2013; UNICEF 2019b). Similarly, delays on the supply side (administration, health services) in receiving certificates of compliance with conditionalities can sometimes compromise program renewal for the following year, particularly for rural or geographically remote populations.

the necessary documents (Chudnovsky and Peeters 2022).

3.2.2 Data

This study uses nationally representative microdata from the EPH survey collected by the *Instituto Nacional de Estadística y Censos* (INDEC) from 2004 to 2015. The EPH is a widely used national household survey carried out quarterly which covers 31 large urban areas representing roughly 62% of the Argentine population. The EPH addresses work and income-related dimensions and provides various socioeconomic information on households and individuals (education, housing equipment, geographical information). Unfortunately, the EPH survey only covers populations living in urban areas, thereby excluding individuals living in rural areas who might benefit from the program. However, this drawback should be tempered by considering the high urbanization rate of the country, with more than 90% of Argentines living in urban areas since the early 2000s. The survey has a rotating panel structure that allows for tracking the households surveyed over multiple waves. Thus, in each wave, a part of the sample is replaced (see Figure 3.A.1 in Appendix 3.A). This structure allows the construction of several short-term panels between 2004 to 2015.³⁶ In each panel, households are interviewed a maximum of four times over one and a half years. A household with a complete follow-up is interviewed in two consecutive quarters of a year t when it enters the survey, exits the survey for the following two quarters, and is interviewed again in the same two quarters the following year in $t + 1$. In this case, a household has two pairs of observations between years t and $t + 1$.

However, for some households, the follow-up is not fully complete. Since the aim of this study is to measure the impact of the AUH program on household income stability, only households interviewed three or four times are considered in the analysis, accounting for around 56% of the total sample.³⁷ While measuring the income stability of households interviewed only once is not feasible, the majority of those interviewed twice are interviewed over only two consecutive quarters. This different temporality could bias their level of income stability relative to others. Yet, the inclusion of these households in robustness tests presented later does not affect the conclusions (Section 3.4.2.2).

Another important consideration is the non-reporting of individuals incomes. Approximately 30%

36. The EPH data includes only the first semester of the 2014-2015 panel.

37. Households with no follow-up account for 18%, and only two interviews for around 26% of the total sample.

of households have at least one member who does not report a source of income during its observation period, representing around 3% of all individuals. Given this relatively small proportion, these households are kept in the final sample. Although this could lead to a measurement bias in the variation of income at the household level, it should be noted that this phenomenon is more prevalent among the wealthiest households, i.e. those in the top deciles of the per capita income distribution (around 14% for deciles *D1* and *D2*, against 25% for *D9* and *D10*). Again, further tests check the results' robustness to the exclusion of these households (Section 3.4.2.2).

Finally, all income values are deflated to 2018 Argentine pesos and converted to 2011 purchasing power parity (PPP) dollars.³⁸ Given the consensus in the literature on the poor quality of INDEC's official data on consumer price index (CPI) over the 2007-2015 period, two different sources are used. From 2004 to 2007, the official CPI data is used. However, an alternative CPI source is preferred for the following years based on the Billion Prices Project, using numerous online prices available on the web that correct for bias coming from official sources (Cavallo and Rigobon 2016).

3.3 Methodology

3.3.1 Income stability measurement

Two indicators are used to measure household income instability: the poverty trends indicator and the CV of per capita income. The first one measures the proportion of periods spent in poverty during a household's observation period. It shows the extent to which income swings push a household below the poverty line, over the four interviews through one and a half years. The poverty line is set at \$5.5 per capita a day (2011 PPP), which corresponds to moderate poverty, and is commonly used for the LA region (Jolliffe and Prydz 2016; Lustig et al. 2020; Gasparini et al. 2023). The second indicator, the CV of per capita income, is calculated to quantify how much household income fluctuates over its observation period.³⁹ This indicator, allowing comparison of heterogeneous groups, has been used in the literature to examine household income variability in the US (Newman 2008; Gennetian et

38. The 2011 PPP factor conversion for Argentina in 2018 is 14.23 (World Bank, last access in November 2023).

39. Additional results are available using the CV indicator in equivalised household income (OECD equivalence scale) and an absolute variation indicator with the standard deviation of arc percentage change in income, which reduces the influence of large income changes (Hardy 2017). Similar conclusions are obtained. See Figures 3.A.4a and 3.A.5 in Appendix 3.A and Tables 3.B.2 and 3.B.3 in Appendix 3.B.

al. 2015; Monahan 2020) but also in LA (Beccaria and Groisman 2008; Micha and Trombetta 2020; Beccaria et al. 2021). The CV for a household i is computed as the ratio of the standard deviation of income measured over time to the mean income, written as Equation 3.1:

$$CV_i = \frac{\sqrt{\frac{1}{T} \sum_{t=1}^T (y_{i,t} - \bar{\mu}_i)^2}}{\bar{\mu}_i} \quad (3.1)$$

Where $y_{i,t}$ is the per capita income of household i observed at period t , and $\bar{\mu}_i$ the average income of household i over its entire observation period. However, the variation in household income measured by the CV does not consider the direction in which income evolves. Since an upward or downward change in income does not have the same impact on a household's welfare, the CV analysis will also be carried out on two sub-samples, taking into account the change in average household income \bar{y}_i between the first and final year of interview. Thus, the CV-up computes the CV for household experiencing an upward income mobility between year t and $t + 1$, i.e. when $\bar{y}_i^t < \bar{y}_i^{t+1}$. The CV-down, for those with a downward income mobility between t and $t + 1$, i.e. when $\bar{y}_i^t \geq \bar{y}_i^{t+1}$.

3.3.2 Empirical approach: groups identification

The rotating structure of the EPH allows the construction of eleven yearly panels covering 2004-2015. Since the AUH program appeared during the last quarter of 2009, the 2009-2010 panel is excluded from the analysis to delimit a clear cut-off between the pre- and post-implementation of the program.⁴⁰ Then, five-yearly panels are entirely located in the pre-intervention period (from 2004-2005 to 2008-2009), and the following five panels after the AUH implementation (from 2010-2011 to 2014-2015). However, the EPH survey does not include questions allowing us to identify AUH beneficiaries directly. The questionnaire asks only: "Did you receive any monetary transfers from the State, church, etc., in the past three months?" with the corresponding monetary amounts. There is no way to be sure that households are part of the AUH program and that the amount received does not come from other public institutions or alternative sources.

Therefore, the methodology Garganta and Gasparini (2015) adopted is followed to estimate the program's intention-to-treat. Households are assigned to treatment or control groups according to their

40. Similarly, households interviewed during the implementation of the AUH are not considered.

initial labor and socioeconomic characteristics, which mimic the program's official eligibility criteria. The treatment group includes households with children under 18 years old whose parents are either working in the informal sector, as domestic employees, inactive, unemployed, or retired without health coverage, in the first year of interview. Only households meeting these criteria in their first two interviews are considered eligible (i.e. the first year of entry into the survey) or non-eligible otherwise.⁴¹ The status of the declared head of household and the spouse are checked for program eligibility. In cases where one of the child's grandparents is declared head of household, only the status of the child's parents is considered.

For parents with employee status, the distinction between formal and informal is approximated by asking whether pension contributions are deducted from wages. Lack of contribution to the pension system through deductions from wages is the most commonly used proxy in the literature to determine informality in LA (Tornarolli et al. 2014). Self-employed are also considered eligible since social protection is poorly developed for them in Argentina (Gasparini et al. 2009). In this income bracket, most are unskilled self-employed (73% with less than a secondary degree) and have no healthcare coverage (77%). Unemployed are also included in this group given that less than 3% report receiving unemployment benefits. Finally, retired people are considered eligible if they have no healthcare coverage. On the other hand, the control group is made up of households with a similar family structure with minor children but with different labor characteristics since they are registered or are paying contributions to the social system (employers, formal employees, retired with health coverage), which is not compatible with the AUH eligibility criterion.

A final condition for access to the program is that household members must declare that they earn less than the national minimum wage. Measuring income from informal activities (non-declared income, reporting error, no or poorly developed accounting) remains difficult for the ANSES and this requirement is rarely met in practice (Garganta and Gasparini 2015). Given that the AUH program targets economically vulnerable households, only those in the first three deciles of the national per capita income distribution during the first year of interview are kept. Households in the upper deciles are therefore not considered, to avoid including wealthier households with a low probabilit-

41. Around 8% of households in the sample change category between the first two quarters of interview. In Section 3.4.2.2, some robustness tests introduce additional eligibility constraints to test the sensitivity of the results, such as eligibility for the whole period instead of the first year. Results remain mostly unchanged.

ity of benefiting from the program. To ensure that the AUH beneficiaries are properly identified in these income deciles, an alternative database allowing for direct identification of AUH beneficiaries is used. The *Encuesta Nacional de Gastos de los Hogares* (ENGHo) is a household expenditure survey only available for the year 2012 until March 2013 that is also nationally representative.⁴² For 2012, the ENGHo survey shows that 76% of AUH beneficiary households are located in the first three deciles of the national per capita income distribution, confirming that a large proportion of potential AUH beneficiaries are well identified in the EPH data. Robustness tests, presented later in Section 3.4.2.2, check the sensitivity of the results to the inclusion of households located in the upper deciles, and present similar conclusions.

3.3.3 Empirical approach: impact identification and assumptions

Since the AUH program was not randomly assigned to the population across the country, the analysis may suffer from a selection bias, bringing endogeneity concerns. The treatment and control groups have many observable and unobservable differences (consumption behavior, saving strategies, and budget allocation like health expenditures) that could prevent us from identifying the program's causal effect on household income stability. Table 3.1 presents some household characteristics of the treatment (eligible) and control (non-eligible) groups before the implementation of the AUH.

As expected, both groups differ in income stability and poverty levels. On average, households eligible (1) for the AUH have a 52% probability of being in poverty during their observation period, i.e. around two periods out of four, compared with 24% for non-eligible (2) households. Eligible households also have higher income fluctuations than non-eligible households, confirming that income from individuals working in the informal sector is more volatile. Although there are differences in family structure between the two groups, these remain relatively limited in terms of household size, number of children, or age of the head of household. More pronounced differences exist in terms of education, gender of the head of household, or the proportion of single parents (mainly single mothers). 74% of parents in AUH-eligible households have less than secondary education. Eligible households are also more likely to live with grandparents in the same household. While this may indicate a higher financial burden since most of them are inactive, grandparents can also offer an important

42. Descriptive statistics of the AUH beneficiaries from the ENGHo are available in Appendix 3.B Table 3.B.1).

alternative for childcare. Finally, there are no significant differences between the two groups regarding the proportion of individuals who do not report a source of income, before and after the AUH implementation. A comparison of the eligible (EPH) and beneficiaires (ENGHo) households shows that the characteristics of age, education, or household size are similar, reinforcing the confidence in the identification of beneficiaries (Appendix 3.B Table 3.B.1).

Table 3.1: Characteristics of eligible and non-eligible households before the AUH implementation

Variables	Pre-AUH			t
	Eligible (1)	Non-eligible (2)	Difference (2)-(1)	
Poverty trends (%)	51.8	24.0	-27.8	-45.18
CV	0.43	0.34	-0.09	-21.25
Daily per capita income (initial year)	5.19	7.45	2.26	45.57
Daily per capita income (final year)	7.36	10.16	2.80	25.27
Household size	5.24	5.52	0.28	7.67
Nb. of minor children	2.66	2.74	0.08	2.81
Nb. of major children	0.70	0.72	0.02	0.91
Age of the youngest child	5.71	6.00	0.29	3.24
Age of the head	42.7	43.22	0.55	2.41
Woman head	0.38	0.19	-0.19	-23.52
Single parent household	0.34	0.16	-0.19	-25.29
Parents' pluri-activity	0.11	0.06	-0.05	-9.74
Grandparents in the household	0.25	0.17	-0.08	-10.28
Parents' highest level of education				
Primary incomplete	0.13	0.08	-0.05	-9.20
Primary complete	0.36	0.28	-0.08	-9.88
Secondary incomplete	0.25	0.23	-0.02	-2.12
Secondary complete	0.17	0.24	0.07	9.81
University incomplete	0.05	0.08	0.03	6.23
University complete	0.03	0.08	0.05	10.57
Non-reporting of income	0.27	0.26	0.01	-0.90
Observations	8,791	4,288		

Source: Author's calculation based on the EPH microdata, 2004-2009.

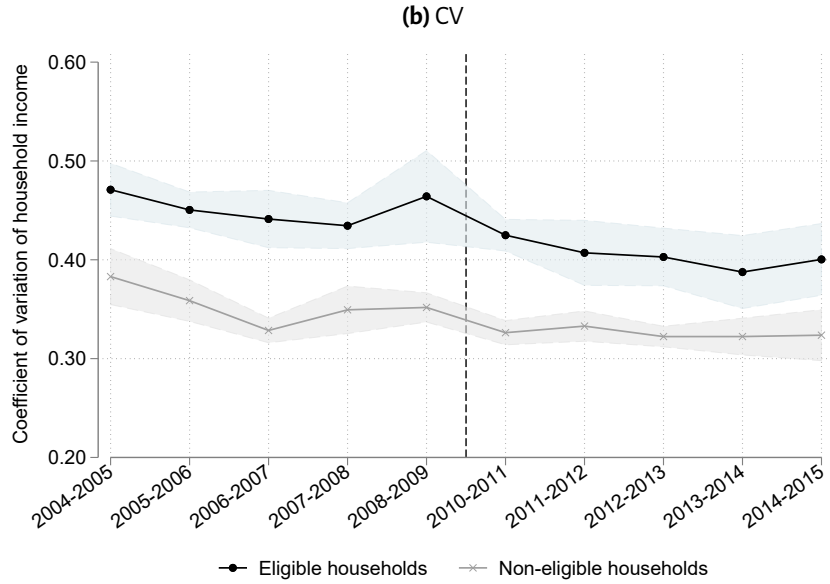
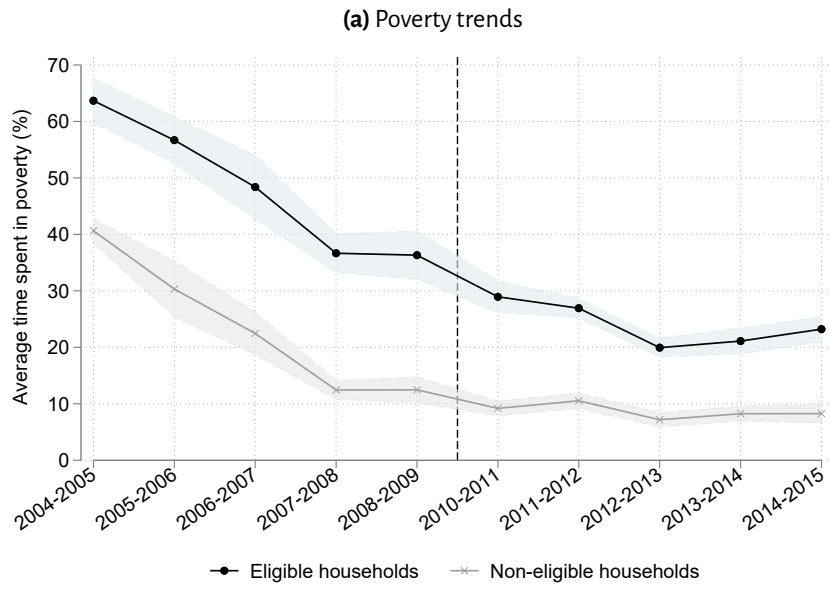
Note: The poverty trends indicator measures the proportion of periods classified as poor for a household over its observation period, i.e. income per capita below \$5.5/day (PPP 2011). The CV is the coefficient of variation of household income. CV-down and CV-up measure the CV of sub-samples of households with the same change in income between the first and second year of interview (negative or positive). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. A household is eligible if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of interview. Values in bold indicate significant differences between the two groups at 95% level.

Thus, a quasi-experimental DD strategy is applied to compare the outcomes of heterogeneous groups, controlling their stable characteristics over time. The strategy consists of comparing the dependent variables of the treatment and control groups before and after the AUH implementation.⁴³ One of the main identification assumptions of the DD strategy is that trends in the outcome variables should have evolved in the same way in the absence of the program. In other words, the evolution of household income stability and poverty should have followed a similar pattern without implementing the program. While this cannot be proven, looking at trends for the different outcome variables before the AUH implementation could help us gain confidence in its validity.

Figure 3.1 shows trends for each income stability outcome with a visual inspection of the unconditional mean for the eligible and non-eligible groups. As can be seen, the eligible and non-eligible groups followed very similar trends for each indicator before the introduction of the AUH in late 2009. Levels of poverty and income fluctuations among eligible households are consistently higher than those of non-eligible ones, which is to be expected since informal workers have higher income risks, less regular income sources, and generally lower incomes than those in the formal sector.⁴⁴ After 2009, the gap between the two groups decreases, coinciding with the implementation of the AUH. While poverty fell for both groups up to 2008 (Figure 3.1a), poverty keeps declining after 2010 for the eligible group, while the other remains constant at around 10%. Similarly, the gap in income fluctuations between the two groups narrowed after 2009 (Figure 3.1b), mainly due to the CV-down indicator, which restricts the sample to households experiencing a loss of income over the period (Figure 3.1c). On the other hand, the CV-up trend appears very similar for both groups (Figure 3.1d).

43. Other articles assess the impact of the AUH on other outcomes using the DD strategy, such as labor formalization (Garganta and Gasparini 2015), female labor participation (Garganta et al. 2017), or educational outcomes (Edo and Marchionni 2019).

44. Also, it has to be noted that the structure of household income for both groups evolved in a similar way before the AUH implementation (Figure 3.A.3 in Appendix 3.A).



(continued on the next page)

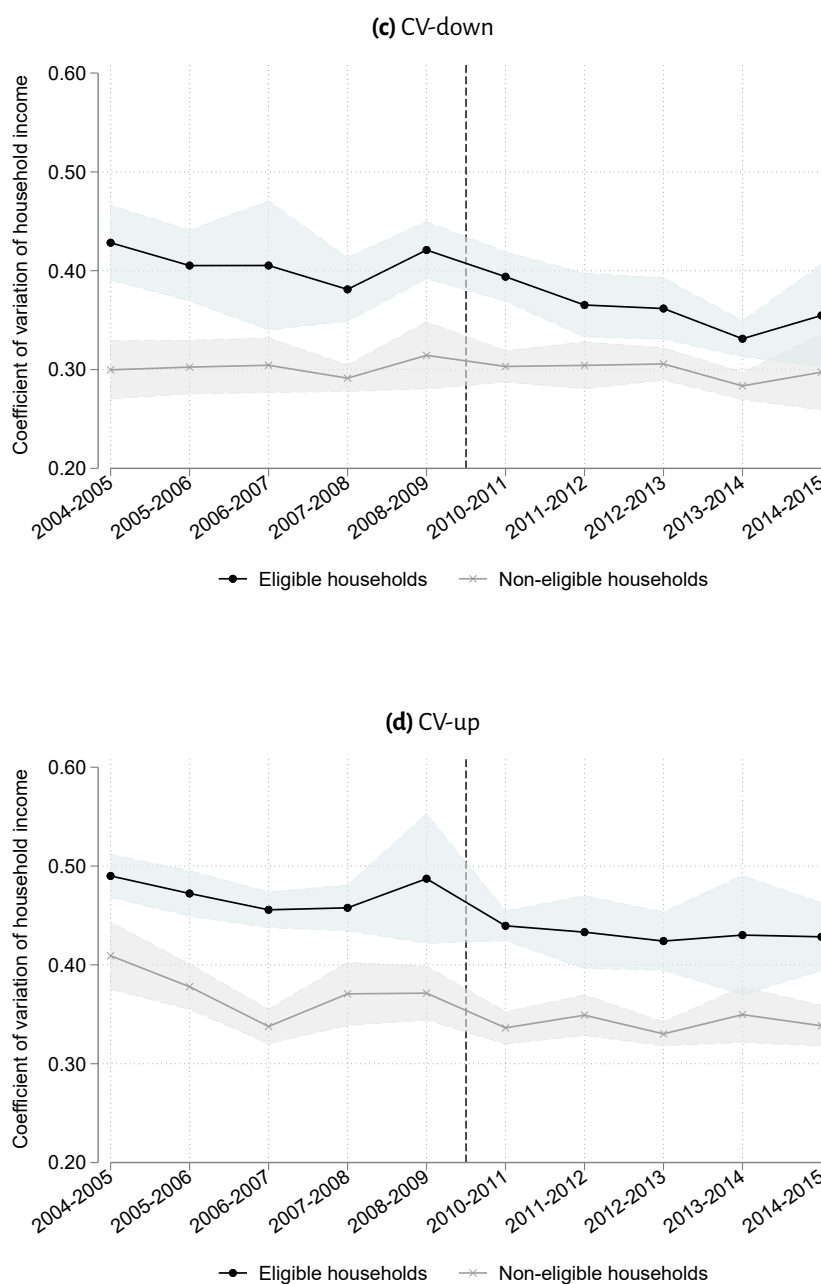


Figure 3.1: Income stability trends among eligible and non-eligible households

Source: Author's calculation based on the EPH microdata, 2004-2015.

Note: The coefficients shown correspond to the averages of the dependent variable over 2004 and 2015. Confidence intervals at 95% are shown. The poverty trends indicator measures the proportion of periods classified as poor for a household over its observation period, i.e. income per capita below \$5.5/day (PPP 2011). The CV is the coefficient of variation of household income. CV-down and CV-up measure the CV of sub-samples of households with the same change in income between the first and second year of interview (negative or positive). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. A household is eligible if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of interview. Clustered standard errors by large urban areas.

A second and essential assumption of the DD strategy is that no contemporary event other than the AUH should explain any differences in outcome trends for the two groups. On this point, the literature is unanimous in stating that the AUH was the only central public policy that was implemented in Argentina in 2009 and the following years (Bertranou 2010; Croisman et al. 2011; Garganta and Gasparini 2015). Furthermore, possible anticipation of the program implementation is very unlikely since the AUH was not expected in the country (Maurizio and Vázquez 2014). The AUH was notably rolled out immediately after its announcement, and covered over 3 million children in its first month. It was by far the largest program in the country regarding benefits and participants.⁴⁵ In the years following the AUH introduction, only the PROGESAR program was introduced in 2014, which aimed to provide additional monetary resources to households with children aged 18 to 24 enrolled in university and whose resources are below the national minimum wage. Since this financial contribution could bias estimates of the program's effect after 2014, further results exclude years after 2013, but results remain unchanged.

Equation 3.2 below presents a standard linear specification of the DD model corresponding to the main specification.

$$Y_i = \beta_1 D_t + \beta_2 T_i + \beta_3 (T_i * D_t) + \eta_i + \eta_t + \theta X_i' + u_i \quad (3.2)$$

The variable Y_i corresponds to the dependent variable, corresponding to one of the indicators of income stability for a household i . The dummy variable D_t takes the value one for the post-intervention period 2010-2015 or zero otherwise (2004-2009). T_i is the treatment variable that takes the value one if a household i is eligible to the AUH during its first year of interview. Region η_i and time η_t fixed effect are included. The set of control variables is the X_i vector measured during the first interview of household i . They include the age of the head of household and its square, its gender, the number of under-18 and over-18 children and its square, the household size, the age of the youngest child, the parents' highest level of education, dummy indicating if grandparents live in the household, if the head is a single parent, and if the parents have multiple jobs. A final covariate identifies whether the household benefited from the PJJHD social program, as well as its interaction with the treatment

45. See Figure 3.A.2 in Appendix 3.A to see the evolution of beneficiary households for the main social programs in Argentina from 2003 to 2013.

variable since it targeted unemployed heads of household. Lastly, the error term u_i is clustered at the large urban areas level. The DD strategy computes the changes in outcome between the control and treatment groups over time, as in Equation 3.3.

$$\beta_3 = (\bar{Y}_1^T - \bar{Y}_0^T) - (\bar{Y}_1^C - \bar{Y}_0^C) \quad (3.3)$$

With T and C being respectively the treatment and control groups, before (0) and after (1) the AUH introduction. The treatment effect is estimated by the coefficient β_3 associated with the interaction term ($T_i * D_t$). Then, the DD provides a consistent estimator of the impact of the AUH program on income stability. An event study regression, including leads and lags into the model as in Equation 3.4, is also proposed to examine the dynamic treatment effect.

$$Y_i = \eta_i + \eta_t + \sum_{\tau=-q}^{-1} \gamma_\tau T_{i,\tau} + \sum_{\tau=0}^m \delta_\tau T_{i,\tau} + \theta X_i' + u_i \quad (3.4)$$

Where the AUH implementation occurs in year 0, with q leads (anticipatory effects), and m lags (post-treatment effects). Year -1 is removed to avoid perfect multicollinearity and is therefore taken as the reference point.

3.4 Results

3.4.1 Main results

Table 3.2 presents the results of the AUH program's effect on each income stability outcome based on Equation 3.2. For each dependent variable, the first column (i) reports the coefficients of the baseline specification without controls, while the second column (ii) includes all controls, time and regional dummies. The interaction term corresponds to the estimated impact of the AUH on the dependent variable. In all cases, the coefficient associated with the interaction term is always negative and strongly statistically different from zero, except for the last indicator only significant at 10%. The inclusion of controls, time and regional dummies does not alter the significance of the results.

Table 3.2: Difference-in-difference model - Effect of the AUH on income stability

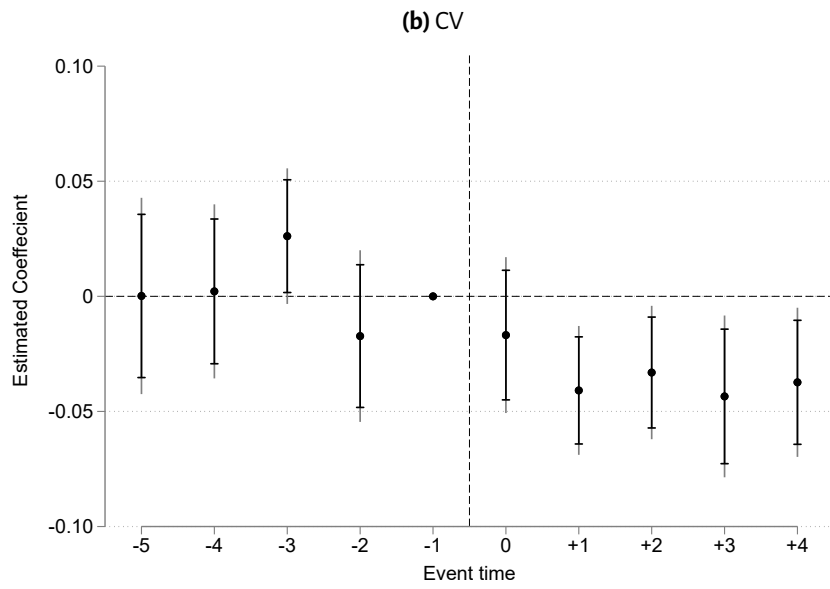
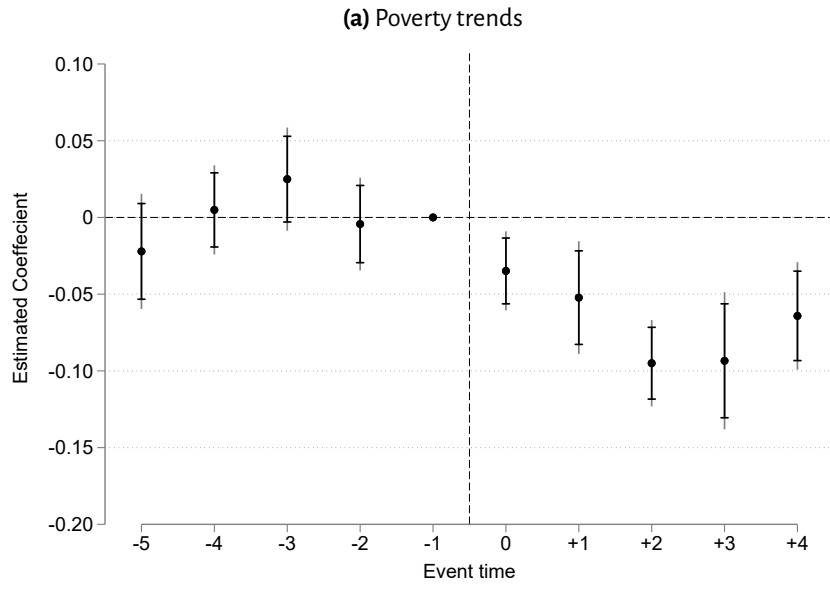
Dependent variables	(1) Poverty trends		(2) CV		(3) CV-down		(4) CV-up	
	(i)	(ii)	(i)	(ii)	(i)	(ii)	(i)	(ii)
After*Eligible	-0.1191 ^{***} (0.0047)	-0.0663 ^{***} (0.0132)	-0.0181 ^{**} (0.0068)	-0.0333 ^{***} (0.0055)	-0.0429 ^{***} (0.0060)	-0.0667 ^{***} (0.0123)	-0.0076 (0.0105)	-0.0196 [*] (0.0099)
Eligible	0.2761 ^{***} (0.0060)	0.2049 ^{***} (0.0132)	0.0988 ^{***} (0.0075)	0.1120 ^{***} (0.0097)	0.1064 ^{***} (0.0117)	0.1238 ^{***} (0.0208)	0.0994 ^{***} (0.0065)	0.1114 ^{***} (0.0066)
After	-0.1391 ^{***} (0.0125)	0.0038 (0.0083)	-0.0271 ^{***} (0.0067)	-0.0118 (0.0123)	-0.0016 (0.0071)	0.0230 (0.0166)	-0.0327 ^{***} (0.0082)	-0.0269 (0.0218)
Controls, time and regional dummies	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	0.2149	0.3809	0.0394	0.0658	0.0349	0.0647	0.0427	0.0734
Observations	25,808	25,808	25,808	25,808	8,532	8,532	17,276	17,276
Average	0.227		0.353		0.301		0.373	

Source: Author's calculation based on the EPH microdata, 2004-2015. Note: Difference-in-difference estimates. Column (1) measures the effect of the program on the probability of a household falling below the poverty line during its observation period. i.e. income per capita below \$5.5/day (PPP 2011). Column (2) measures the effect on the coefficient of variation of household income. Columns (3) and (4) on the sub-samples of households with the same change in income between the first and second year of observation (negative or positive). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. Eligible variable takes the value 1 if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of observation. After variable takes the value 1 for the periods after the AUH implementation (2010-2015), otherwise 0 (2004-2009). Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors are in brackets (by large urban areas). *** p<0.01, ** p<0.05, * p<0.1. The value in the last row corresponds to the average of the dependent variable for the control group before the AUH implementation.

Results show that households eligible for the AUH experienced a 6.6 percentage points reduction in the poverty trend indicator after the introduction of the program (1). This corresponds to an average decrease of 15% in the proportion of periods in poverty for eligible households, compared to what would have happened without the AUH implementation. For the CV indicators, results also show a reducing impact of the AUH on household income fluctuations. After the introduction of the program, eligible households have a 3.3 percentage points reduction in the overall CV indicator (2), i.e. an average drop of 7.2% in income fluctuations. The estimated impact of the program is more pronounced when the direction of income variation is considered (columns 3 and 4). Households eligible for the AUH whose incomes fell experienced a 6.7 percentage point drop in the CV after the introduction of the program, i.e. a 16% reduction in income fluctuations compared to the counterfactual (3). By contrast, the estimated effect is only 4% for those whose income increased (4). Additional results test alternative indicators of income variability using the CV indicator in equalised per capita income (Appendix 3.A Figure 3.A.4 and Appendix 3.B Table 3.B.2) and the standard deviation of the arc percentage change (Appendix 3.A Figure 3.A.5 and Appendix 3.B Table 3.B.3), and show very similar conclusions.

These first results show a stabilizing effect of the AUH on household incomes, particularly by reducing income fluctuations when households experience income losses. Assuming an estimated take-up rate of 82%, the program reduces the proportion of periods spent in poverty by around 18%, and the CV by almost 20% for households with a loss of income during the period.

Instead of looking at the AUH's overall effect on the pre- and post-period, Figure 3.2 shows the dynamics of the program's effect for each dependent variable (interaction term between the treatment variable and a time dummy). The plotted coefficients represent the pre-treatment (leads) and post-treatment (lags) effects based on Equation 3.4 with full controls., with the -1 period as reference. The results here confirm the similar evolution of the two groups prior to AUH implementation, with non-significant coefficients in each period prior to 2010.



(continued on the next page)

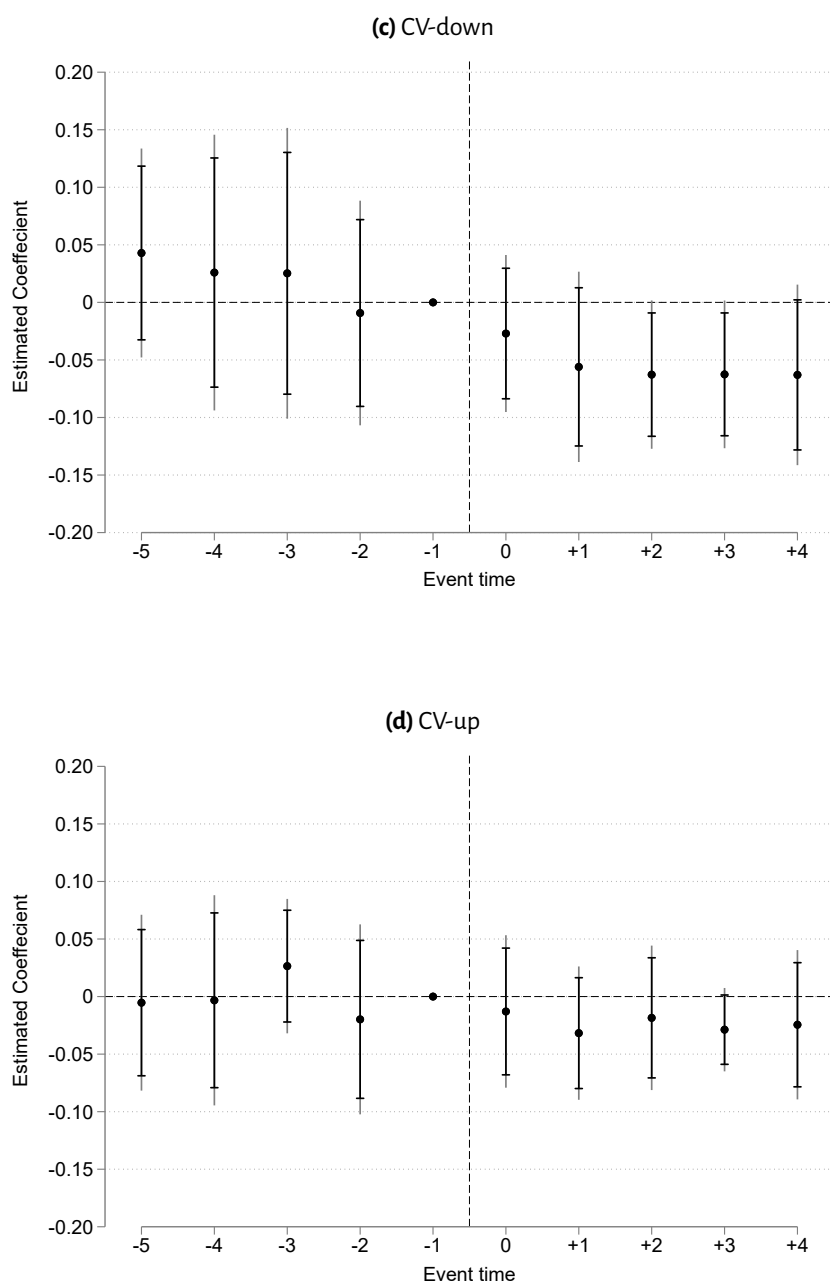


Figure 3.2: Income stability trends among eligible and non-eligible households

Source: Author's calculation based on the EPH microdata, 2004-2015.

Note: The coefficients shown correspond to the interaction terms between the treatment variable and a time dummy based on equation (4). Confidence intervals at 90% and 95% are shown. The poverty trends indicator measures the time spent in poverty by a household during its observation period. i.e. income per capita below \$5.5/day (PPP 2011). The CV is the coefficient of variation of household income. CV-down and CV-up measure the CV of sub-samples of households with the same change in income between the first and second year of interview (negative or positive). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. A household is eligible if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of interview. Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors by large urban areas.

After the program's implementation, the gap between the two groups widens steadily, and seems to persist for each indicator. In line with the previous results, only the CV-up indicator shows coefficients that are mostly equal to zero for each period. Households eligible for the AUH have a lower proportion of periods in poverty during their observation period, ranging from -3 to -9 percentage points (Figure 3.2a). Interestingly, the estimated impact of the program is higher two periods after its introduction. One reason for this may lie in extending the program to pregnant women from their 12th week of pregnancy until birth in 2011. However, this hypothesis cannot be accurately verified in the data since the EPH survey does not identify whether a woman is pregnant at the time of the survey. As shown in the table above, the program also reduces the CV of household income, and this effect appears stable over time (Figure 3.2b). The effect is stronger among households with a negative trend in income over the period (Figure 3.2c) compared to those with a positive trend (Figure 3.2d).

These findings confirm that the AUH significantly reduces poverty transitions among economically vulnerable households working in the informal sector. They also confirm that the AUH stabilizes household income flows with a persistent effect over time. These results echo those of (Micha and Trombetta 2020) for the same AUH case, and are consistent with the literature showing the buffering effect of social safety net programs against income instability in the US (Hardy 2017), even if a direct comparison between different programs and contexts remains difficult

3.4.2 Robustness checks

3.4.2.1 False interventions

Several exercises are presented to test the robustness of the results found above. A first exercise verifies the parallel trends assumption by implementing false interventions before the AUH implementation. Table 3.3 below presents the estimated coefficients for each dependent variable for years in which a false program introduction is tested based on Equation 3.2.

Table 3.3: Robustness - Effect of false interventions on income stability

<i>Panel A</i>						
Dependent variables	(1) Poverty trends			(2) CV		
	2006 (i)	2007 (ii)	2008 (iii)	2006 (i)	2007 (ii)	2008 (iii)
After*Eligible	0.0091 (0.0116)	-0.0092 (0.0100)	-0.0017 (0.0143)	0.0005 (0.0108)	-0.0204** (0.0075)	-0.0011 (0.0152)
Eligible	0.2022*** (0.0179)	0.2120*** (0.0146)	0.2082*** (0.0138)	0.1144*** (0.0073)	0.1239*** (0.0106)	0.1149*** (0.0084)
After	-0.1632*** (0.0148)	-0.2493*** (0.0158)	0.0000 (0.0000)	-0.0153* (0.0081)	-0.0232*** (0.0073)	0.0000 (0.0000)
Controls, time and regional dummies	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.3537	0.3537	0.3537	0.0637	0.0640	0.0637
Observations	13,079	13,079	13,079	13,079	13,079	13,079
Average	0.348	0.306	0.244	0.369	0.355	0.353
<i>Panel B</i>						
Dependent variables	(3) CV-down			(4) CV-up		
	2006 (i)	2007 (ii)	2008 (iii)	2006 (i)	2007 (ii)	2008 (iii)
After*Eligible	-0.0319* (0.0164)	-0.0388 (0.0300)	-0.0176 (0.0520)	0.0049 (0.0156)	-0.0185 (0.0111)	0.0034 (0.0367)
Eligible	0.1501*** (0.0300)	0.1476*** (0.0367)	0.1321*** (0.0316)	0.1102*** (0.0087)	0.1212*** (0.0064)	0.1127*** (0.0049)
After	0.0203 (0.0191)	0.0376 (0.0271)	0.0000 (0.0000)	-0.0172 (0.0105)	0.0256** (0.0112)	0.0127 (0.0111)
Controls, time and regional dummies	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.0782	0.0785	0.0776	0.0697	0.0699	0.0697
Observations	4,015	4,015	4,015	9,064	9,064	9,064
Average	0.301	0.302	0.298	0.392	0.374	0.373

Source: Author's calculation based on the EPH microdata, 2004-2009.

Note: Difference-in-difference estimates. Column (1) measures the effect of the program on the probability of a household falling below the poverty line during its observation period. i.e. income per capita below \$5.5/day (PPP 2011). Column (2) measures the effect on the coefficient of variation of household income. Columns (3) and (4) on the sub-samples of households with the same change in income between the first and second year of observation (negative or positive). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. Eligible variable takes the value 1 if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of observation. After variable takes the value 1 after the false program implementation, otherwise 0. Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors are in brackets (by large urban areas). *** p<0.01, ** p<0.05, * p<0.1. The value in the last row corresponds to the average of the dependent variable for the control group before the AUH implementation.

Most coefficients of the interaction term are not significant, or indicate a slight divergence that does not persist over time. In the early 2000s, several other social programs such as the PJJHD (2002) and *Plan Familias* (2005) were in place to reduce the high unemployment and poverty rates after the

country's 2001 economic crisis, affecting households similarly targeted by the AUH (unemployed or non-employable people). The number of PJJHD beneficiaries gradually declined as well as its effectiveness since its value was not adjusted for inflation (Figure 3.A.2 in Appendix 3.A). While the EPH provides information on whether households have benefited from the PJJHD program, this is not the case for the *Plan Familias* program, which may explain slight divergences in trends between the two groups in the early period of analysis.

3.4.2.2 Sample size

The second exercise checks the sensitivity of the results at different sample sizes. Figure 3.3 summarizes the results for each dependent variable by plotting the coefficients of the program's effect.⁴⁶ All estimations are based on Equation 3.2 with full controls and exhibit the 90% and 95% confidence intervals. The first part 3.3a presents the results when the sample size is restricted to lower deciles (Model 1) or extended to higher deciles (Models 3 and 4) of the national distribution of per capita income. The estimated impact remains quite stable across the specifications compared to the main results (Model 2). The program's impact on the CV declines as more affluent households are included in the sample, which is to be expected as the AUH weighs relatively less in household budgets.

In the second part 3.3b, several alternative models are tested and compared to the baseline model (Model 1). Model 2 extends the sample to households interviewed only twice, instead of three or four times. Model 3 proposes a stricter definition of program eligibility, restricting the sample to eligible and non eligible households over the entire period, instead of the first year of observation. Model 4 restricts the analysis period to the years before 2014 to avoid potential bias from the PROGRESAR program implementation. Finally, Model 5 only keeps households that have declared all their income, and drops those where at least one household member has a non-declared source of income over the period. For each alternative model, the conclusions remain similar, with estimates of the program's effect very close to those of the baseline specification (Model 1). The inclusion of households with a shorter follow-up period does not change the results and tends to increase the program's estimated effects, particularly for the CV-up indicator. The other alternative specifications have only minor effects on the coefficients found, confirming the stability of these results.

46. Tables with all coefficients are available in Appendix 3.B (Tables 3.B.4 and 3.B.5).

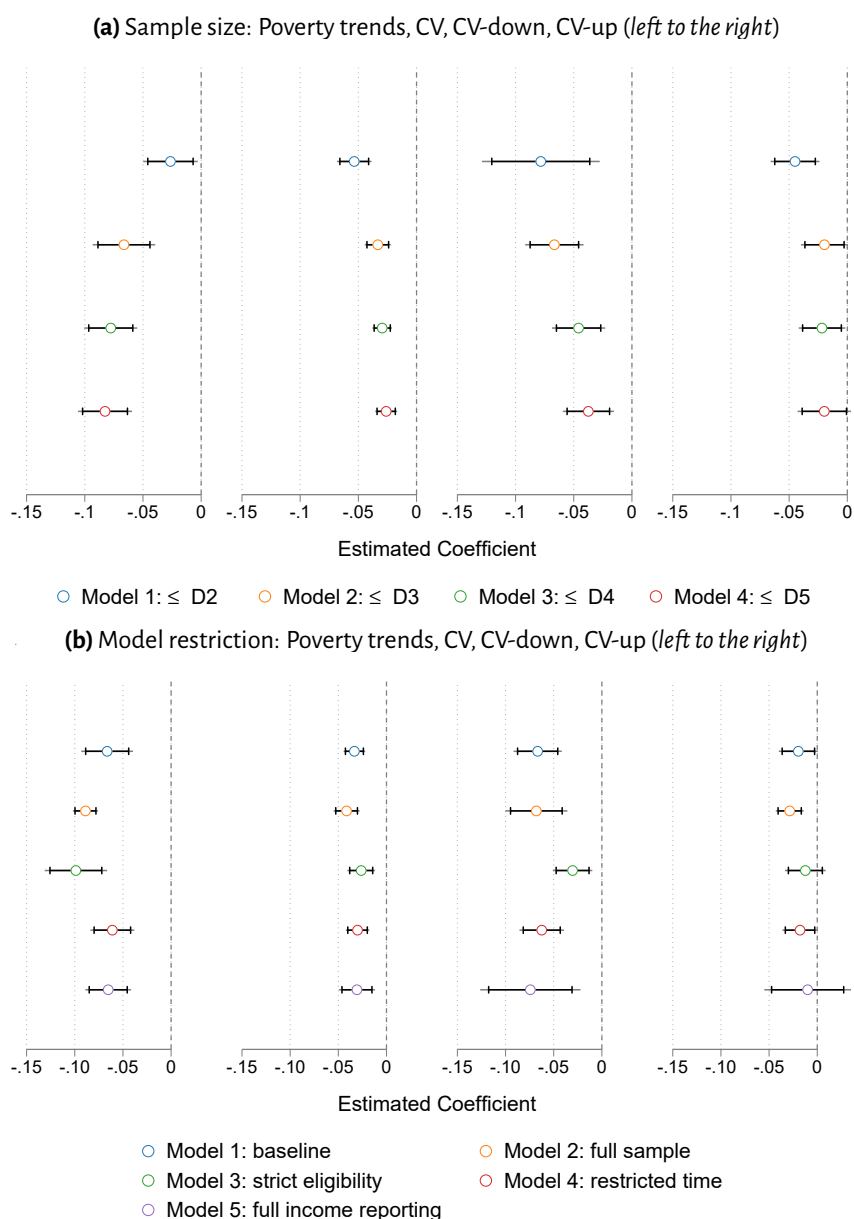


Figure 3.3: Robustness - Effect of the AUH on income stability at alternative sample sizes

Source: Author's calculation based on the EPH microdata, 2004-2015.

Note: The coefficients shown correspond to the interaction term of difference-in-difference estimates based on equation (2). Confidence intervals at 90% and 95% are shown. The poverty trends indicator (a) measures the time spent in poverty by a household during its observation period, i.e. income per capita below \$5.5/day (PPP 2011). The CV (b) is the coefficient of variation of household income. The CV-down and CV-up indicators (c and d) are calculated for households with a drop and increase in income respectively between the first and second year of observation. For subgraph (a): the sample is composed of households with at least one minor child and belonging to the corresponding poorest deciles (D2 to D5) of the household per capita income distribution in the first year of appearance in the survey. For subgraph (b): the sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. Model 1 is the baseline main model, where a household is eligible if the child's parents are either informal workers, domestic employees, unemployed or inactive, or retired without health coverage over its first observation year. In Model 2, the sample also includes households with two interviews over time, instead of three or more. In Model 3, only eligible and non-eligible households over the entire observation period are kept, instead of the first year. In Model 4, the analysis period is restricted to 2004-2013 instead of 2004-2015. Finally, Model 5 drops households in which a member has not reported income over the observation period. Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors by large urban areas.

3.4.2.3 Matching

The third exercise combines the DD strategy with a kernel-based matching adapted for repeated cross-section data (Heckman et al. 1998; Blundell and Dias 2009).⁴⁷ As the sample of households changes over the survey years due to the data's rotating structure, the DD framework with repeated cross-section data may suffer from compositional change for the control and treated groups over time. The combination of matching and DD methods can control for differences in the composition of the two groups before and after the treatment (Fernández and Villar 2017). The matching procedure uses the same control variables as the DD framework. More details on the matching process and quality are provided in Appendix 3.C (Figures 3.C.1 to 3.C.3).

Table 3.4 shows the results of the benchmark exercise. Again, similar results are found for each dependent variables, with and without controls. The magnitude of the impact on the different dependent variables is very similar to the DD model without matching, except for the CV-up indicator for which the estimated effect is stronger and roughly equal to that found for the CV-down. All these results point in the same direction and demonstrate the program's reducing impact on income instability.

47. The `-diff-` Stata package is used to implement the kernel-based matching estimator (Villa 2016), as well as the `-psmatch2-` package to create the matching quality graphs (Leuven and Sianesi 2018).

Table 3.4: Robustness Matched DD - Effect of the AUH on income stability

Dependent variables	(1) Poverty trends		(2) CV		(3) CV-down		(4) CV-up	
	(i)	(ii)	(i)	(ii)	(i)	(ii)	(i)	(ii)
After ³ Eligible	-0.1071 ^{***} (0.0099)	-0.0608 ^{***} (0.0104)	-0.0237 ^{***} (0.0080)	-0.0338 ^{***} (0.0078)	-0.0242 ^{**} (0.0113)	-0.0368 ^{***} (0.0115)	-0.0238 ^{**} (0.0098)	-0.0329 ^{***} (0.0093)
Eligible	0.2614 ^{***} (0.0094)	0.2129 ^{***} (0.0114)	0.0869 ^{***} (0.0081)	0.0957 ^{***} (0.0081)	0.0753 ^{***} (0.0108)	0.0839 ^{***} (0.0122)	0.0937 ^{***} (0.0088)	0.1034 ^{***} (0.0084)
After	-0.1555 ^{***} (0.0109)	-0.0132 (0.0118)	-0.0191 ^{***} (0.0066)	-0.0049 (0.0089)	-0.0099 (0.0097)	-0.0088 (0.0101)	-0.0194 ^{**} (0.0079)	-0.0037 (0.0121)
Controls, time and regional dummies	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	0.1954	0.3686	0.0315	0.0539	0.0236	0.0490	0.0357	0.0615
Observations	25,735	25,735	25,735	25,735	8,500	8,500	17,235	17,235
Average		0.256		0.345		0.308		0.361

Source: Author's calculation based on the EPH microdata, 2004-2015.

Note: Matched difference-in-difference estimates. Column (1) measures the effect of the program on the probability of a household falling below the poverty line during its observation period. i.e. income per capita below \$5.5/day (PPP 2011). Column (2) measures the effect on the coefficient of variation of household income. Columns (3) and (4) on the sub-samples of households with the same change in income between the first and second year of observation (negative or positive). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. Eligible variable takes the value 1 if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of observation. After variable takes the value one for the periods after the AUH implementation (2010-2015), otherwise zero (2004-2009). Variables used for the matching include household head age, gender, whether single parent, number of children under and over 18, household size, parents' highest level of education, whether parents have multiple jobs. Control variables are the same as those used for the matching plus an interaction term between the treatment variable and the PJJHD variable, as well as time and region fixed effects. Clustered standard errors are in brackets (by large urban areas). *** p<0.01, ** p<0.05, * p<0.1. The value in the last row corresponds to the average of the dependent variable for the control group before the AUH implementation.

3.4.3 Heterogeneous effects

This section explores the potential heterogeneous effects of the AUH program on income stability according to household composition and structure. Table 3.5 reports the triple and double interaction term coefficients for each indicator. Globally, the addition of triple interaction does not significantly alter the overall effect of the program (double interaction term) which remains significant and stable according to the different specifications. Two main results stand out.

First, the reducing effect of the AUH on the proportion of periods in poverty during the observation period is stronger among households with three or more children (1.c), and those with a young child under 6 (1.d). In both cases, the program reduces the proportion of periods in poverty by around 24% compared to the counterfactual, instead of 13% for the others. Also, the impact on the CV-down indicator is roughly three times more efficient in households with a young child (3.d) compared to those with older children (-22% vs -7.3%). Given that these households are poorer on average in the sample, the AUH represents a proportionally higher share of their total income. Similarly, as households with young children have high expenses (nursery, specific food, and products for infants), this additional source of income helps mitigate the impact of adverse income shocks on household income.

Second, there is a significant gap in the program's effectiveness between men and women heads of household (1.a). The estimated impact for an eligible household headed by a woman is four times less than for a man-headed household (-5.5% vs -21%) for the poverty trends, and around two times lower for the CV-down (-9% vs -19%). While this result may be surprising, the family structure of women-headed household differs significantly from that of men, since most of these women are single (76%). Similarly, the effect is roughly the same when specifically looking single heads of household (1.b). These results suggests that the program's effectiveness in stabilizing incomes is more limited in households that are the least resilient to shocks, such as those with low flexibility in work or time use.

Table 3.5: Heterogeneity Triple DD model - Effect of the AUH on income stability

Dependent variables	(1) Poverty trends	(2) CV	(3) CV-down	(4) CV-up
<i>(a) Woman head of household</i>				
After*Treated*Woman	0.0687*** (0.0142)	0.0177* (0.0099)	0.0488*** (0.0116)	0.0116 (0.0144)
After*Treated	-0.0924*** (0.0141)	-0.0421*** (0.0045)	-0.0835*** (0.0148)	-0.0268*** (0.0077)
<i>(b) Single parent household</i>				
After*Treated*Single	0.0512*** (0.0164)	-0.0152 (0.0124)	0.0001 (0.0148)	-0.0088 (0.0173)
After*Treated	-0.0847*** (0.0115)	-0.0360*** (0.0052)	-0.0748*** (0.0149)	-0.0226** (0.0097)
<i>(c) Three or more children</i>				
After*Treated*Children	-0.0400*** (0.0113)	-0.0146* (0.0072)	0.0191 (0.0211)	-0.0303*** (0.0094)
After*Treated	-0.0490*** (0.0159)	-0.0271*** (0.0067)	-0.0780*** (0.0211)	-0.0072 (0.0124)
<i>(d) Young child in the household (≤ 5 y.o)</i>				
After*Treated*Young	-0.0462*** (0.0145)	-0.0651** (0.0292)	-0.0694** (0.0273)	-0.0604* (0.0322)
After*Treated	-0.0416** (0.0169)	0.0022 (0.0185)	-0.0270** (0.0099)	0.0128 (0.0245)
<i>(e) Grand-parents in the household</i>				
After*Treated*Grandparents	0.0147 (0.0181)	-0.0310* (0.0170)	-0.0086 (0.0158)	-0.0379 (0.0261)
After*Treated	-0.0669*** (0.0142)	-0.0283*** (0.0064)	-0.0655*** (0.0140)	-0.0131 (0.0133)
Controls, time and regional dummies	Yes	Yes	Yes	Yes
Observations	25,808	25,808	8,532	17,276

Source: Author's calculation based on the EPH microdata, 2004-2015.

Note: Estimation of a triple difference-in-difference model. Column (1) measures the effect of the program on the probability of a household falling below the poverty line during its observation period. i.e. income per capita below \$5.5/day (PPP 2011). Column (2) measures the effect on the coefficient of variation of household income. Columns (3) and (4) on the sub-samples of households with the same change in income between the first and second year of observation (negative or positive). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. Eligible variable takes the value 1 if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of observation. After variable takes the value one for the periods after the AUH implementation (2010-2015), otherwise zero (2004-2009). Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors are in brackets (by large urban areas). *** p<0.01, ** p<0.05, * p<0.1.

3.4.4 Effects on household financial behavior

This final section explores other potential effects of the AUH program on households' financial behavior, i.e. on the strategies for coping with income risk. When a household is affected by a shock, various strategies can be adopted to maintain their consumption or well-being. Households may resort to internal strategies (sale of assets, dissaving) or external strategies (charity from associations or the community, taking loans) to help overcome a temporary shock. However, these can also alter the standard of living or the financial pressure exerted on a household (informal loans with high interest rates). Receiving an additional and stable source of income should modify households' financial behavior, particularly with regard to last-resort strategies to avoid poverty.

Table 3.6 shows the results of the AUH's effect on the probability of using one of the financial strategies during the observation period.⁴⁸ After the implementation of the program, the proportion of eligible households that rely on monetary or in-kind donations fell by 20.6% and 13.7% respectively (Columns 1 to 3). Similarly, households eligible for the AUH are also 10% less likely to take out an informal loan from to cover expenses (Column 5), while the proportion taking out a formal loan is on the rise, but remains marginal (Column 7). This last point should be taken with caution, however, in view of the low proportion of households reporting the use of this strategy. These results corroborate those of Vera-Cossio et al. (2023), showing that the expansion of a cash transfer program in Colombia to vulnerable households reduces their likelihood of getting into debt, particularly on predatory loans, while increasing their use of formal loans and bank account ownership.

Overall, the stabilization of household income induced by the AUH also seems to be modifying household financial behavior. In line with previous results, households eligible for the program are less likely to resort to monetary and in-kind donations from the public or private sectors to cope with financial difficulties. They are also less inclined to take out informal loans, which can significantly increase the risks of over-indebtedness and financial pressure on the household.

48. The question asked in the survey for each strategy is: "In the last three months, have the members of this household lived from...".

Table 3.6: Difference-in-difference model - Effect of the AUH on household financial behavior

Dependent variables	(1) In-kind donations (church, state, association)	(2) In-kind donations (family, friends, neighbors)	(3) Monetary donations (friends, neighbors)	(4) Drawing on savings	(5) Informal loans	(6) Sales of assets	(7) Formal loans	(8) Credit card, deferred payment
After*Eligible	-0.0397 ^{***} (0.0085)	-0.0159 ^{**} (0.0069)	-0.0140 ^{**} (0.0052)	-0.0081 (0.0062)	-0.0171 ^{***} (0.0040)	0.0015 (0.0054)	0.0223 ^{***} (0.0058)	-0.0207 (0.0199)
Eligible	0.0675 ^{***} (0.0079)	0.0459 ^{***} (0.0038)	0.0522 ^{***} (0.0026)	-0.0029 (0.0057)	0.0355 ^{***} (0.0049)	0.0210 ^{***} (0.0043)	-0.0761 ^{***} (0.0068)	-0.1254 ^{***} (0.0187)
After	-0.0255 ^{**} (0.0096)	0.0017 (0.0139)	-0.0045 (0.0073)	-0.0521 ^{**} (0.0254)	-0.0216 ^{**} (0.0083)	-0.0187 ^{***} (0.0060)	-0.0333 ^{**} (0.0140)	-0.0176 (0.0108)
Controls, time and regional dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.1947	0.1020	0.2171	0.0716	0.0638	0.0323	0.0757	0.1433
Observations	25,808	25,808	25,808	25,808	25,808	25,808	25,808	25,808
Average	0.151	0.071	0.050	0.188	0.150	0.071	0.113	0.383

Source: Author's calculation based on the EPH microdata, 2004-2015.

Note: Difference-in-difference estimates. Each dependent variable represents the probability that a household uses the financial strategy during its observation period. Columns (1) and (2) respectively measure the effect of the program on the probability of relying on in-kind donations from the public and private sectors. Column (3) measures monetary donations from family and community (remittances); Column (4) measures the probability of drawing on savings; Column (5) measures taking out an informal loan (from a third party); Column (6) measures the probability of selling assets; Column (7) measures taking out a formal loan (from a banking institution); and Column (8) measures the use of credit cards and installment payments. The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. Eligible variable takes the value 1 if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of interview. After variable takes the value one for the periods after the AUH implementation (2010-2015), otherwise zero (2004-2009). Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors are in brackets (by large urban areas). *** p<0.01, ** p<0.05, * p<0.1. The value in the last row corresponds to the average of the dependent variable for the control group before the AUH implementation.

3.5 Summary and concluding remarks

This paper evaluates the impact of the AUH – the largest Argentina’s non-contributory program – on income stability within vulnerable households over the 2004-2015 period. The AUH aims to extend social protection system to children living in economically vulnerable households whose parents work in the informal sector. Household income stability is evaluated by looking at poverty transitions, i.e. the proportion of periods spent in poverty by a household during its observation period, and the coefficient of variation in income. A quasi-experimental DD method is employed to assess the intention-to-treat by comparing households eligible and non-eligible for the program. Fourth main results stand out.

First, results show that the AUH significantly reduces the proportion of periods in poverty for eligible households by 15% compared to the situation without the program implementation. This protective effect, stemming from a direct income boost, enables eligible and low-income households to avoid slipping back into poverty and reduce income swings that would lead to a return to poverty. Second, the program effectively stabilizes household income streams, particularly among those whose income declined over the period, with an average 16% reduction in the CV for eligible households compared to the counterfactual. It confirms the program’s role in mitigating income losses through a predictable and consistent income source throughout the year.

Third, the program affects eligible households heterogeneously depending on their family structure. The program’s effect on poverty is higher for households with a young child and larger family sizes (more than two children), potentially stemming from their relatively poorer economic conditions in the sample. Conversely, the reducing effects on poverty and income-stabilizing effects are considerably reduced in women-headed households, the latter being overwhelmingly single mothers. Those results suggest that the program may be not sufficient to stabilize these households’ economic situation, whose adaptation to a shock is more challenging because of a lack of flexibility in work or a higher economic burden. These results warrant further investigation.

Fourth, the exploration of the program’s effect on household financial behavior reveals that eligible households rely less on in-kind and monetary donations, and take out fewer informal loans after the

introduction of the program. These findings further support the stabilizing role of the AUH for vulnerable households, reducing the need to adopt last-resort strategies against poverty. However, several limitations warrant consideration. While the results show that the AUH helps reduce household income fluctuations, comparing eligible and non-eligible households fails to elucidate the duration of a household's program benefit. Antipoverty policies can inadvertently increase income instability, particularly for households teetering on the edge of eligibility or household members intermittently engaged in the formal sector (Wolf et al. 2014). Although the AUH has been promoted as universal, many households are still excluded from the program because of administrative barriers, geographical remoteness, lack of documentation, or processing of files (Pautassi et al. 2013). Also, the low frequency of household interviews per year (two interviews at most) makes it difficult to assess the program's impact on intra-year household income fluctuation. Finally, the EPH survey does not allow the examination of the underlying mechanisms driving the decline or increase in income and the specific shocks experienced by the household. Exploring potential changes in consumption or saving habits among program beneficiaries could offer valuable insights.

In conclusion, I believe the results found in this paper are relevant from a public policy perspective and show the benefits of extending access to social protection for households that are not only poor, but at high risk of poverty, whether due to family situations or precarious employment status. The proliferation of non-contributory CT programs alongside formal contributory systems in LA may exacerbate the divide between the two systems, diverging from the universal ambit of family policies. It is needed to design more cohesive, unified, and sustainable social protection systems that cover risks common to all citizens, aligning with a universal social protection system.

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APPENDIX

3.A Appendix A: Supplementary figures

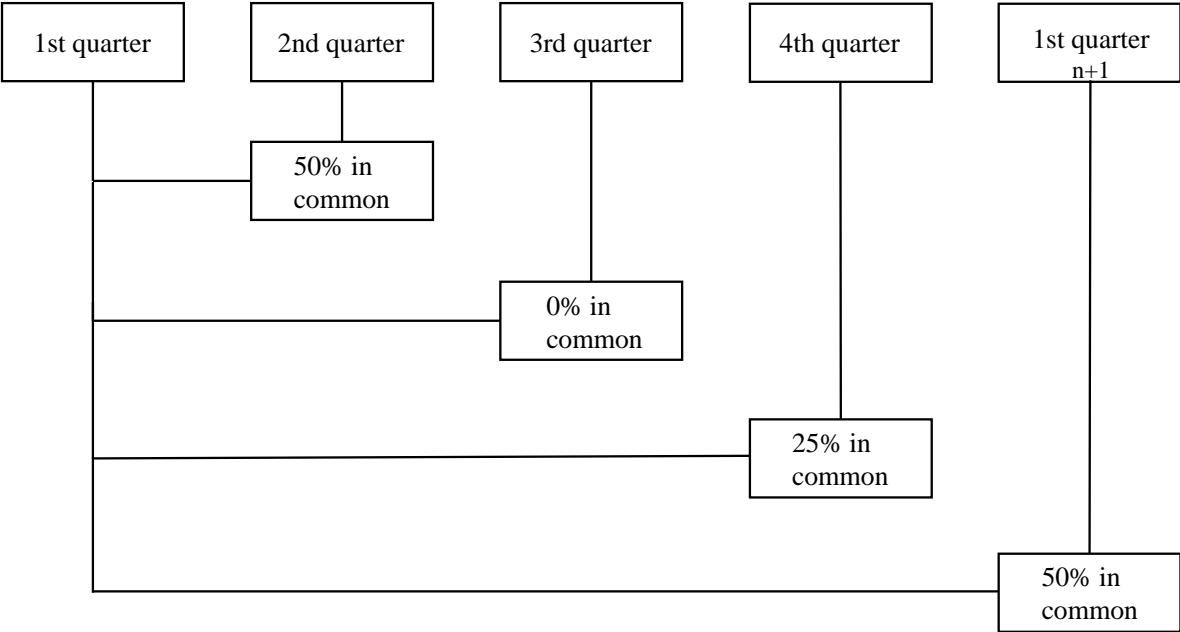


Figure 3.A.1: Structure of the EPH survey
Source: Author's adaptation of the EPH methodology (INDEC, 2003).

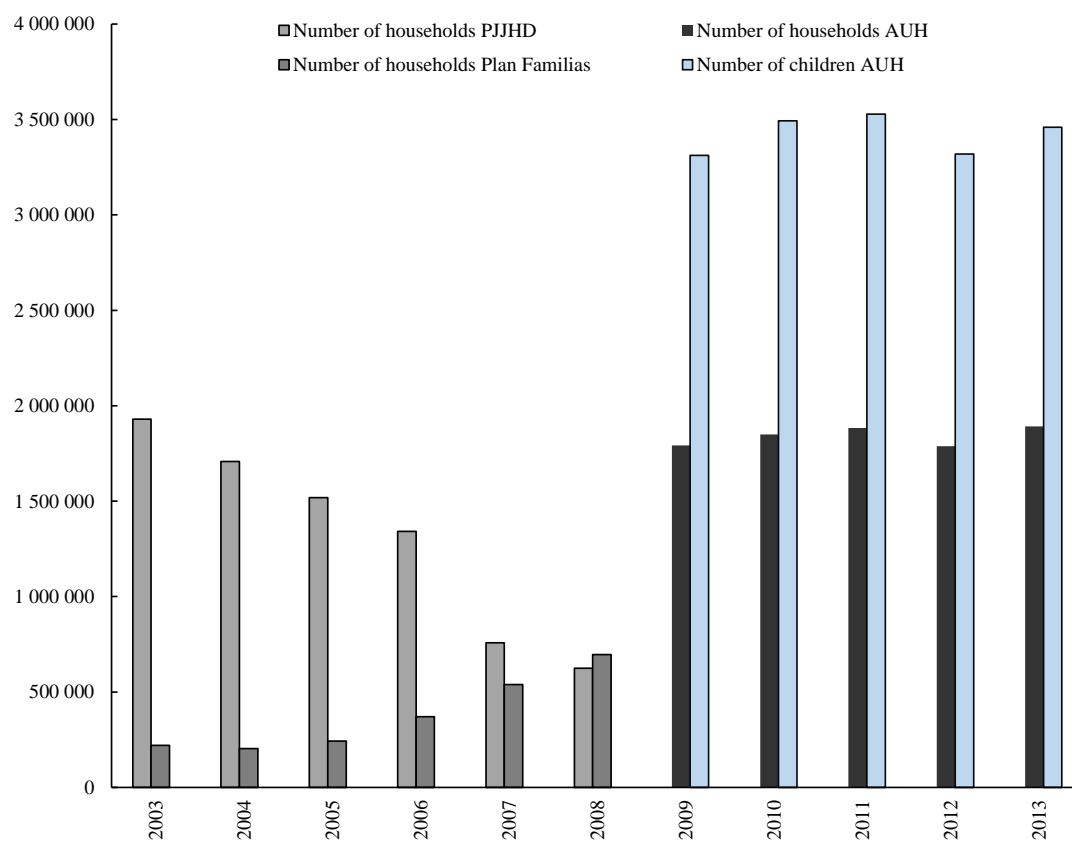
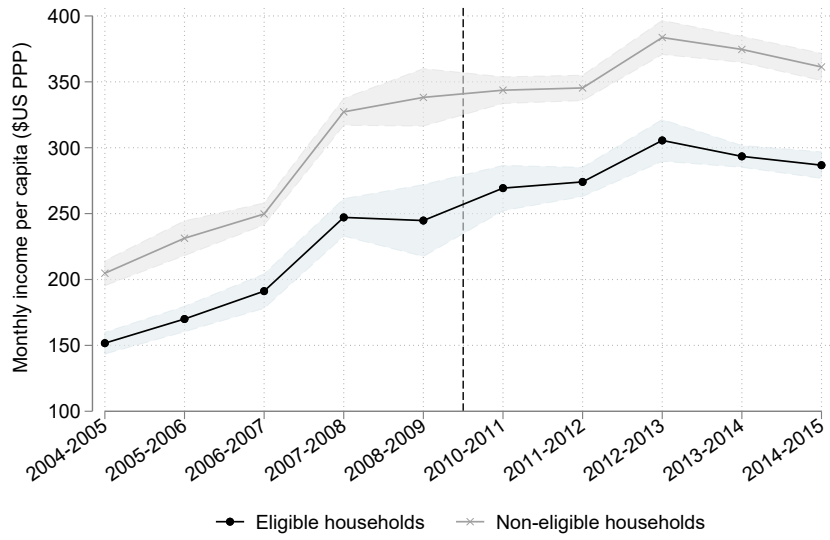


Figure 3.A.2: Evolution of the main social programs in Argentina (2003-2013)

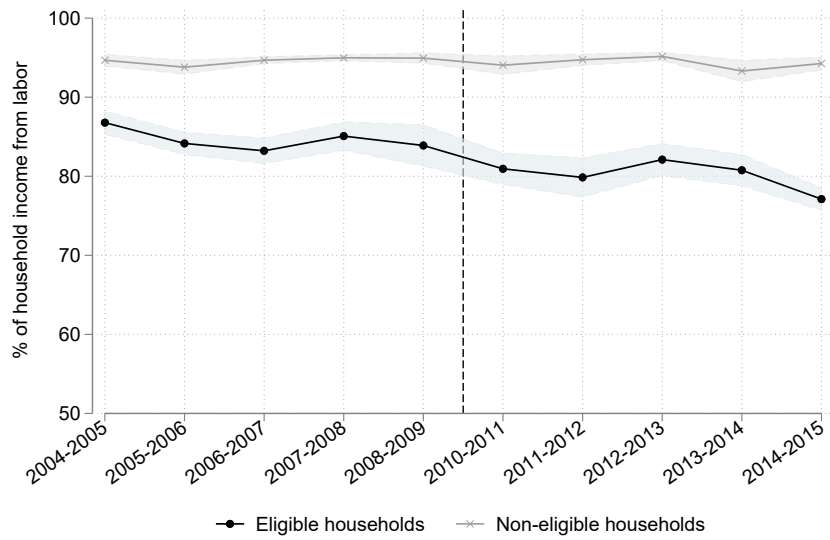
Source: Data come from the Abiertos Asignaciones Universales (ANSES) for the AUH and from (Fenwick 2013) for the PF (Plan Familias)/PJJHD programs.

Note: PJJHD = Plan Jefes y Jefas de Hogares Desocupados ; AUH = Asignacion Universal por Hijo. The AUH was implemented in November 2009.

(a) Average monthly per capita income over time



(b) Share of labor over time



(continued on the next page)

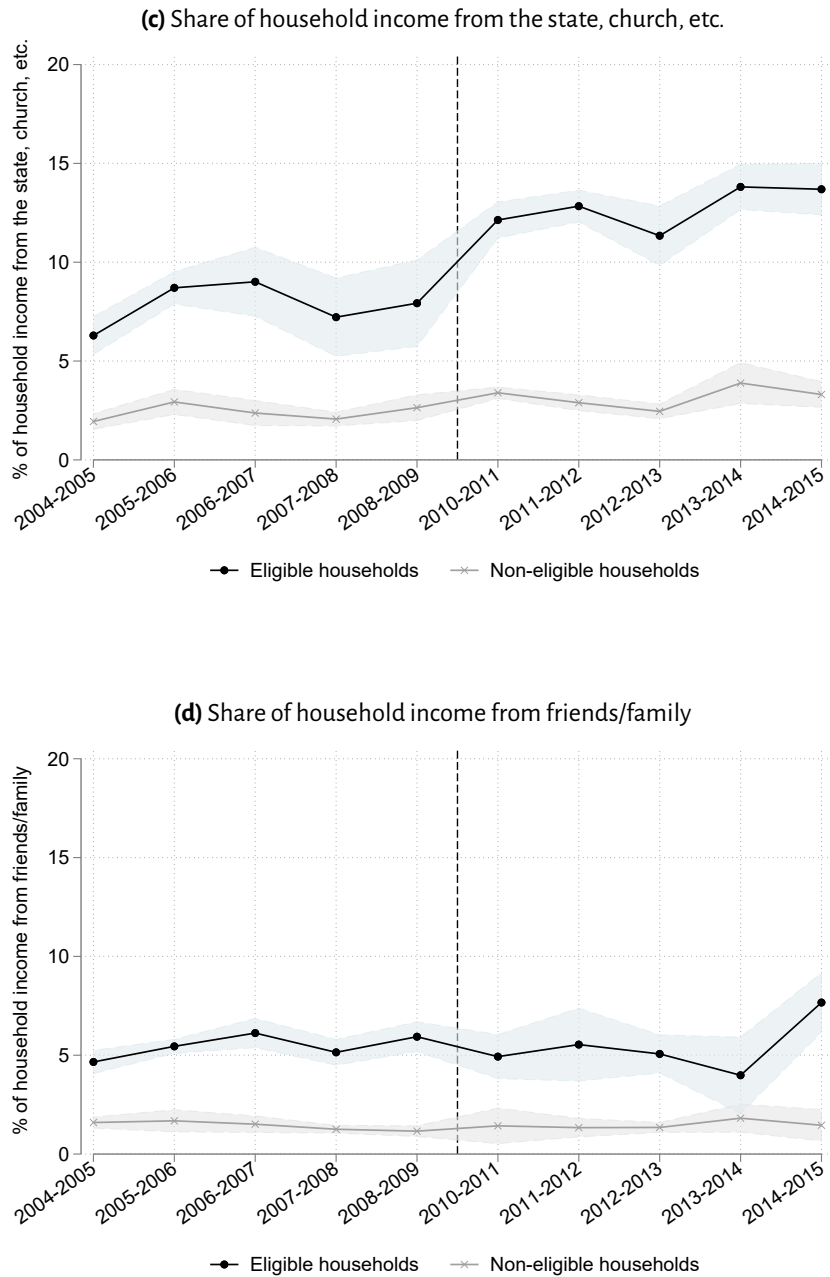


Figure 3.A.3: Evolution in the structure of household income among eligible and non-eligible households

Source: Author’s calculation based on the EPH microdata, 2004-2015.

Note: The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. A household is eligible for the program if a child has parents who are either working in the informal sector, domestic employees, unemployed or inactive, or retired without health coverage for the first observation year. Income from labor includes retirement pensions. Confidence intervals at 95% are shown.

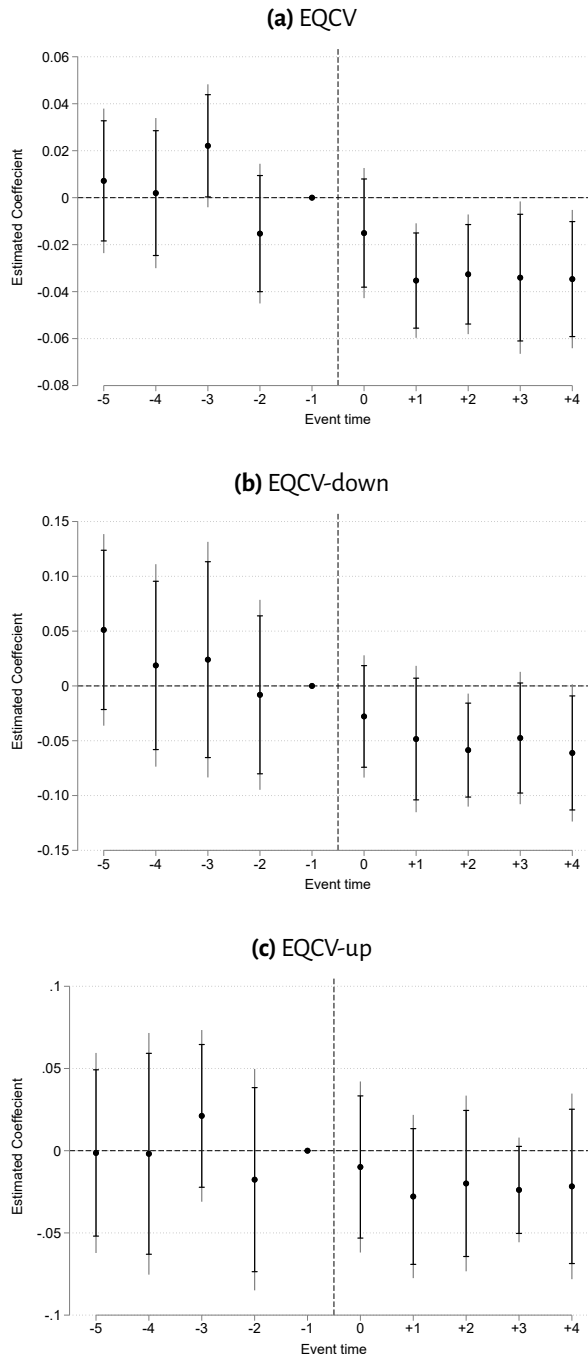


Figure 3.A.4: Estimated effect of the AUH on the CV indicator in equivalised household income

Source: Author's calculation based on the EPH microdata, 2004-2015.

Note: The coefficients shown correspond to the interaction terms between the treatment variable and a time dummy based on equation (4). Confidence intervals at 90% and 95% are shown. The EQCV is the coefficient of variation of equivalised household income. EQCV-Down and EQCV-Up are the EQCV on the sub-samples of households with the same change in income between the first and second year of observation (negative or positive). The OECD equivalence scale is used (1 for the first adult, 0.5 for each additional member older than 14, and 0.3 for children under 14). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. A household is eligible if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of interview. Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors by large urban areas.

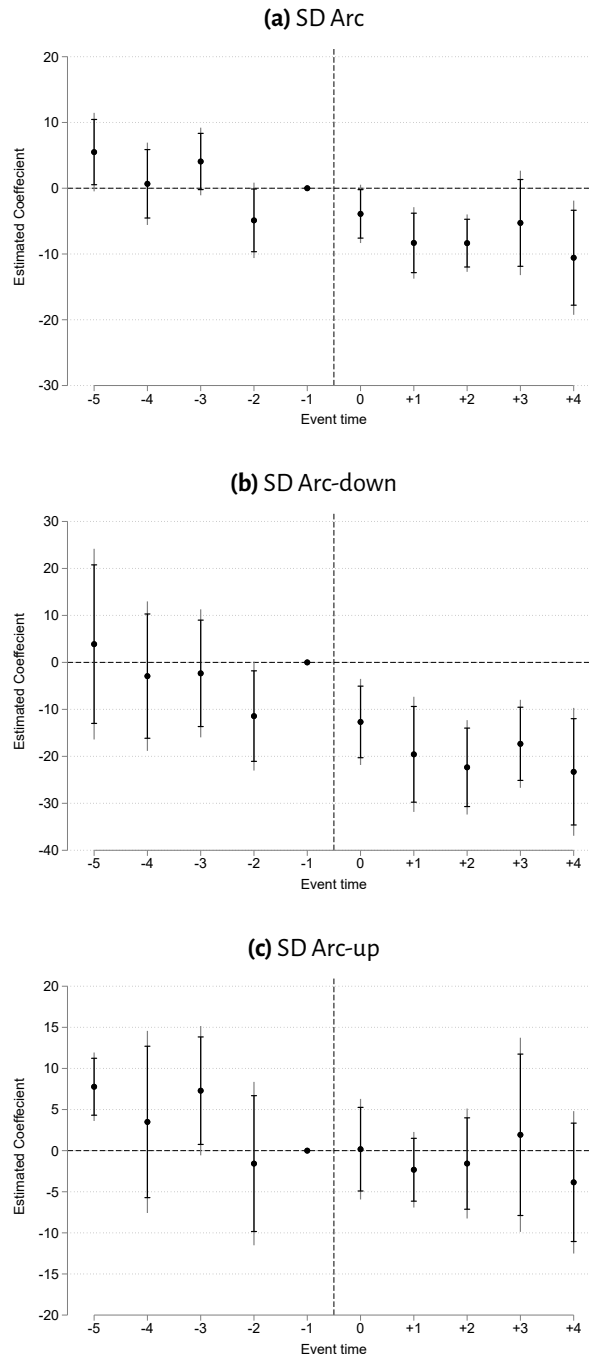
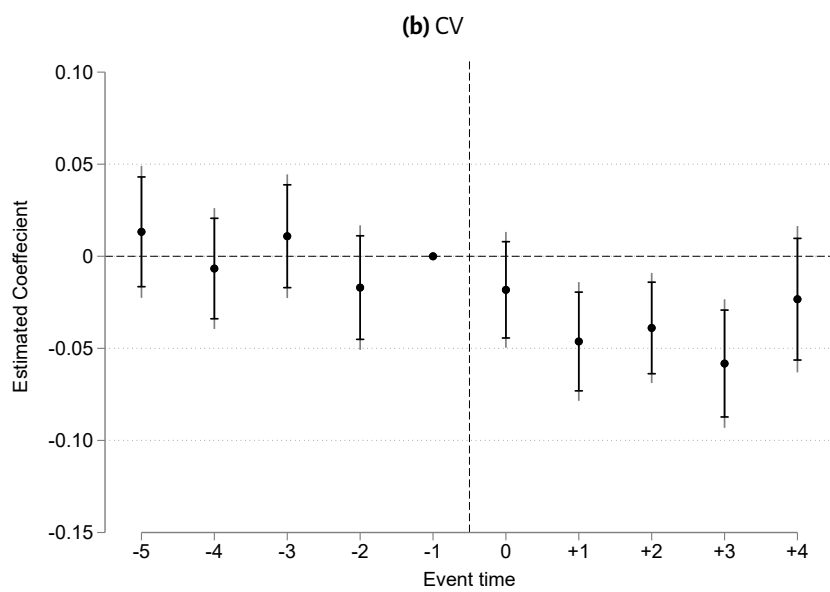
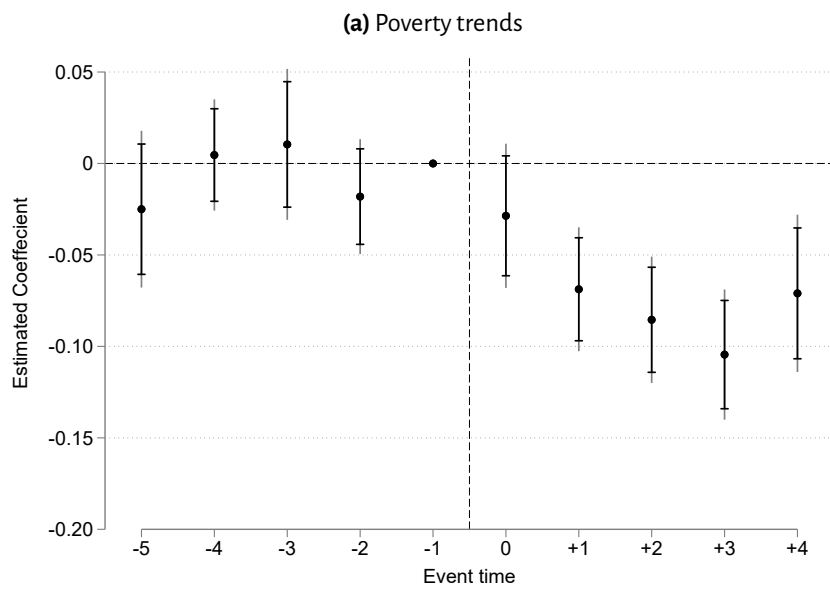


Figure 3.A.5: Estimated effect of the AUH on the standard deviation of arc percentage change indicator

Source: Author’s calculation based on the EPH microdata, 2004-2015.

Note: The coefficients shown correspond to the interaction terms between the treatment variable and a time dummy based on equation (4). Confidence intervals at 90% and 95% are shown. The SD Arc is the standard deviation of arc percentage change in household income. SD Arc-down and SD Arc-up measure the SD arc percentage change on the sub-samples of households with the same change in income between the first and second year of interview (negative or positive). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. A household is eligible if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of interview. Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents’ highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors by large urban areas.



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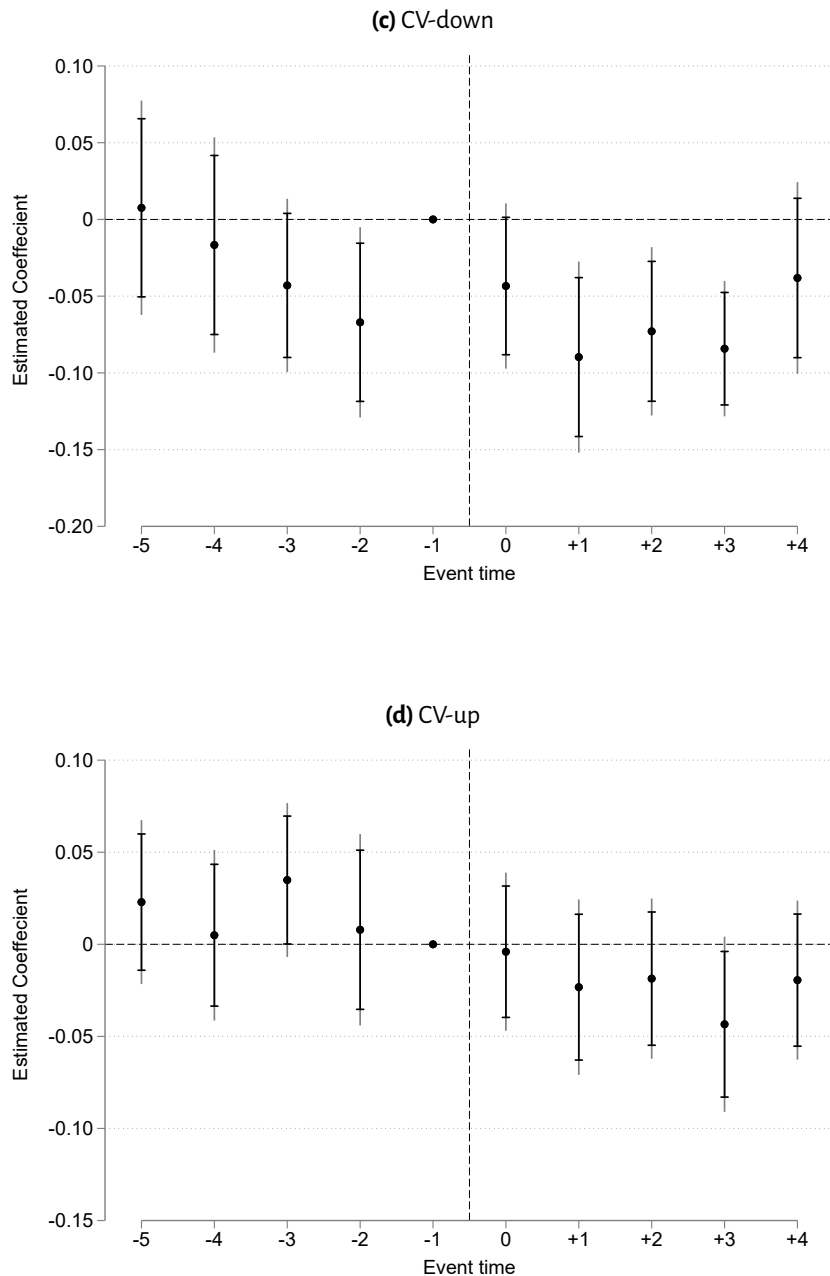


Figure 3.A.6: Matched DD - Effect of the AUH on income stability over time.

Source: Author’s calculation based on the EPH microdata, 2004-2015.

Note: Matched difference-in-difference estimates. The coefficients shown correspond to the interaction terms between the treatment variable and a time dummy based on equation (4). Confidence intervals at 90% and 95% are shown. The poverty trends indicator measures the time spent in poverty by a household during its observation period. i.e. income per capita below \$5.5/day (PPP 2011). The CV is the coefficient of variation of household income. CV-down and CV-up measure the CV of sub-samples of households with the same change in income between the first and second year of interview (negative or positive). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. A household is eligible if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of interview. Variables used for the matching include household head age, gender, whether single parent, number of children under and over 18, household size, parents’ highest level of education, whether parents have multiple jobs. Control variables are the same as those used for the matching plus an interaction term between the treatment variable and the PJJHD variable, as well as time and region fixed effects. Clustered standard errors are in brackets (by large urban areas).

3.B Appendix B: Supplementary tables

Table 3.B.1: Characteristics of the AUH beneficiaries (ENGHo, 2012)

Household level			
Household size		4.94	
Income per capita (\$US PPP 2011)		\$10.97/day	
Parents level		Head of household (%)	Spouse (%)
<i>Sex</i>			
	Men	65.7	15.5
	Women	34.3	84.5
Age (years)		41.2	36.6
<i>Age composition</i>			
	<19	0.0	1.0
	19-25	7.2	13.6
	26-34	27.3	34.2
	35-64	60.3	49.1
	>64	5.2	2.1
<i>Education</i>			
	Primary incomplete	18.1	15.3
	Primary complete	29.9	32.1
	Secondary incomplete	25.2	24.9
	Secondary complete	19.8	21.0
	University incomplete	3.6	4.7
	University complete	2.2	1.9
	Others	1.2	0.2
<i>Labor status</i>			
	Employee	54.6	30.7
	Self-employed	21.9	12.7
	Employer	1.7	0.3
	Family worker	0.0	0.2
	Inactive/unemployed	21.7	56.1
Observations		2806	1970

Source: Author's elaboration based on ENGHo (2012).

Note: Income values are deflated in 2018 pesos and converted in \$US (PPP 2011) adapted for 2018. The factor conversion from the World Bank is 14.23.

Table 3.B.2: Effect of the AUH on the CV indicator in equivalised per capita income

Dependent variables	(1) EQCV		(2) EQCV-down		(3) EQCV-up	
	(i)	(ii)	(i)	(ii)	(i)	(ii)
	After*Eligible	-0.0183*** (0.0050)	-0.0307*** (0.0041)	-0.0418*** (0.0063)	-0.0628*** (0.0119)	-0.0081 (0.0087)
Eligible	0.0882*** (0.0070)	0.0983*** (0.0084)	0.0971*** (0.0110)	0.1113*** (0.0179)	0.0878*** (0.0061)	0.0962*** (0.0056)
After	-0.0209*** (0.0054)	-0.0087 (0.0095)	0.0032 (0.0056)	0.0154 (0.0118)	-0.0267*** (0.0071)	-0.0197 (0.0169)
Controls, time and regional dummies	No	Yes	No	Yes	No	Yes
R-squared	0.0399	0.0697	0.0374	0.0705	0.0425	0.0765
Observations	25,808	25,808	8,773	8,773	17,035	17,035
Average	0.303		0.256		0.321	

Source: Author's calculation based on the EPH microdata, 2004-2015.

Note: Difference-in-difference estimates. Column (1) measures the effect on the coefficient of variation of equivalised household income. Columns (2) and (3) on the sub-samples of households with the same change in income between the first and second year of observation (negative or positive). The OECD equivalence scale is used (1 for the first adult, 0.5 for each additional member older than 14, and 0.3 for children under 14). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. Eligible variable takes the value 1 if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of observation. After variable takes the value 1 for the periods after the AUH implementation (2010-2015), otherwise 0 (2004-2009). Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors are in brackets (by large urban areas). *** p<0.01, ** p<0.05, * p<0.1. The value in the last row corresponds to the average of the dependent variable for the control group before the AUH implementation.

Table 3.B.3: Effect of the AUH on the standard deviation of arc percentage change in income

Dependent variables	(1) SD Arc		(2) SD Arc-down		(3) SD Arc-up	
	(i)	(ii)	(i)	(ii)	(i)	(ii)
After*Eligible	-3.7622*** (1.1093)	-7.5063*** (0.8398)	-8.2934*** (1.8058)	-15.1354*** (4.2705)	-1.4584 (1.9183)	-4.0924** (1.7481)
Eligible	14.7949*** (0.7235)	18.0895*** (1.3316)	15.9946*** (1.5694)	21.5001*** (3.9179)	14.3954*** (0.8217)	16.8441*** (0.8710)
After	-1.6963** (0.7744)	3.5474* (1.9999)	0.3755 (1.4472)	11.9980 (8.8328)	-2.5074* (1.2643)	-0.0414 (1.4356)
Controls, time and regional dummies	No	Yes	No	Yes	No	Yes
R-squared	0.0224	0.0417	0.0186	0.0523	0.0253	0.0439
Observations	25,808	25,808	8,532	8,532	17,276	17,276
Average	50.57		48.72		51.27	

Source: Author's calculation based on the EPH microdata, 2004-2015.

Note: Difference-in-difference estimates. Column (1) measures the effect on the standard deviation of arc percentage change in household income. Columns (2) and (3) on the sub-samples of households with the same change in income between the first and second year of observation (negative or positive). The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. Eligible variable takes the value 1 if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of observation. After variable takes the value 1 for the periods after the AUH implementation (2010-2015), otherwise 0 (2004-2009). Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors are in brackets (by large urban areas). *** p<0.01, ** p<0.05, * p<0.1. The value in the last row corresponds to the average of the dependent variable for the control group before the AUH implementation.

Table 3.B.4: Effect of the AUH on income stability using alternative sample size

Dependent variables Sample restriction	(1) Poverty trends					(2) CV						
	D2 (i)	D3 (ii)	D4 (iii)	D5 (iv)	D2 (i)	D3 (ii)	D4 (iii)	D5 (iv)	D2 (i)	D3 (ii)	D4 (iii)	D5 (iv)
After*Eligible	-0.0264** (0.0115)	-0.0663*** (0.0132)	-0.0777*** (0.0112)	-0.0826*** (0.0114)	-0.0535*** (0.0073)	-0.0333*** (0.0055)	-0.0295*** (0.0041)	-0.0261*** (0.0046)				
Eligible	0.1844*** (0.0088)	0.2049*** (0.0132)	0.2030*** (0.0126)	0.1995*** (0.0135)	0.1226*** (0.0182)	0.1120*** (0.0097)	0.1078*** (0.0065)	0.1077*** (0.0048)				
After	-0.0427*** (0.0112)	0.0038 (0.0083)	0.0135** (0.0061)	0.0185*** (0.0051)	0.0025 (0.0166)	-0.0118 (0.0123)	-0.0100 (0.0125)	-0.0089 (0.0118)				
Controls, time and regional dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
R-squared	0.4071	0.3809	0.3707	0.3732	0.0841	0.0658	0.0582	0.0569				
Observations	17,392	25,808	32,891	38,757	17,392	25,808	32,891	38,757				
Average	0.350	0.227	0.165	0.130	0.373	0.353	0.342	0.332				
Dependent variables Sample restriction	(3) CV-down					(4) CV-up						
	D2 (i)	D3 (ii)	D4 (iii)	D5 (iv)	D2 (i)	D3 (ii)	D4 (iii)	D5 (iv)	D2 (i)	D3 (ii)	D4 (iii)	D5 (iv)
After*Eligible	-0.0783*** (0.0248)	-0.0667*** (0.0123)	-0.0459*** (0.0112)	-0.0375*** (0.0108)	-0.0449*** (0.0103)	-0.0196* (0.0099)	-0.0218** (0.0098)	-0.0198* (0.0112)				
Eligible	0.1455*** (0.0412)	0.1238*** (0.0208)	0.1045*** (0.0167)	0.1034*** (0.0132)	0.1187*** (0.0114)	0.1114*** (0.0066)	0.1126*** (0.0046)	0.1119*** (0.0044)				
After	0.0120 (0.0180)	0.0230 (0.0166)	0.0093 (0.0112)	-0.0070 (0.0062)	0.0000 (0.0283)	-0.0269 (0.0218)	-0.0199 (0.0212)	-0.0097 (0.0175)				
Controls, time and regional dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
R-squared	0.0798	0.0647	0.0559	0.0559	0.0936	0.0734	0.0674	0.0644				
Observations	5,144	8,532	11,685	14,456	12,248	17,276	21,206	24,301				

Average	0.313	0.301	0.304	0.303	0.392	0.373	0.358	0.346
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Source: Author's calculation based on the EPH microdata, 2004-2015.

Notes: Difference-in-difference estimates. The poverty trends indicator (1) measures the time spent in poverty by a household during its observation period, i.e. income per capita below \$5.5/day. The CV (2) is the coefficient of variation of household income. The CV-down and CV-up indicators (3 and 4) are calculated for households with a drop and increase in income respectively between the first and second year of observation. The sample is composed of households with at least one minor child and belonging to the corresponding poorest deciles (D2 to D5) of the household per capita income distribution in the first year of appearance in the survey. Eligible variable takes the value 1 if the parents work in the informal sector, are domestic employees, are inactive, unemployed, or retired without health coverage, during their first year of interview. After variable takes the value one for the periods after the AUH implementation (2010-2015), otherwise zero (2004-2009). Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors are in brackets (by large urban areas). *** p<0.01, ** p<0.05, * p<0.1. The value in the last row corresponds to the average of the dependent variable for the control group before the AUH implementation.

Table 3.B.5: Effect of the AUH on income stability using alternative restrictions on the sample size

Dependent variables Sample restriction	(1) Poverty trends					(2) CV			
	Model 2 (i)	Model 3 (ii)	Model 4 (iii)	Model 5 (iv)	Model 2 (i)	Model 3 (ii)	Model 4 (iii)	Model 5 (iv)	
After*Eligible	-0.0889 ^{***} (0.0064)	-0.0989 ^{***} (0.0159)	-0.0610 ^{***} (0.0112)	-0.0653 ^{***} (0.0116)	-0.0414 ^{***} (0.0066)	-0.0262 ^{***} (0.0070)	-0.0300 ^{***} (0.0060)	-0.0307 ^{***} (0.0092)	
Eligible	0.2249 ^{***} (0.0090)	0.2729 ^{***} (0.0149)	0.2056 ^{***} (0.0127)	0.2108 ^{***} (0.0147)	0.1185 ^{***} (0.0125)	0.1156 ^{***} (0.0128)	0.1120 ^{***} (0.0098)	0.1068 ^{***} (0.0101)	
After	0.0183 ^{**} (0.0072)	0.0212 ^{***} (0.0068)	0.0006 (0.0088)	-0.0119 (0.0092)	0.0199 ^{***} (0.0064)	-0.0133 (0.0110)	-0.0139 (0.0123)	0.0014 (0.0080)	
Controls, time and regional dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
R-squared	0.3632	0.4250	0.3806	0.3931	0.0583	0.0765	0.0659	0.0652	
Observations	39,475	19,849	22,489	17,593	39,475	19,849	22,489	17,593	
Average	0.221	0.189	0.227	0.242	0.340	0.337	0.353	0.326	
Dependent variables Sample restriction	(3) CV-down				(4) CV-up				
	Model 2 (i)	Model 3 (ii)	Model 4 (iii)	Model 5 (iv)	Model 2 (i)	Model 3 (ii)	Model 4 (iii)	Model 5 (iv)	
After*Eligible	-0.0680 ^{***} (0.0158)	-0.0859 ^{***} (0.0240)	-0.0624 ^{***} (0.0113)	-0.0742 ^{***} (0.0255)	-0.0286 ^{***} (0.0071)	-0.0124 (0.0104)	-0.0179 [*] (0.0090)	-0.0100 (0.0221)	
Eligible	0.1259 ^{***} (0.0197)	0.1875 ^{***} (0.0317)	0.1251 ^{***} (0.0217)	0.1220 ^{***} (0.0268)	0.1200 ^{***} (0.0094)	0.1011 ^{***} (0.0077)	0.1109 ^{***} (0.0066)	0.1029 ^{***} (0.0071)	
After	0.0433 ^{**} (0.0190)	0.0480 [*] (0.0272)	0.0203 (0.0155)	0.0300 (0.0322)	0.0089 (0.0130)	-0.0312 (0.0211)	-0.0282 (0.0209)	-0.0129 (0.0236)	
Controls, time and regional dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
R-squared	0.0425	0.1037	0.0683	0.0801	0.0729	0.0765	0.0735	0.0701	
Observations	14,043	6,831	7,246	6,060	25,432	13,018	15,243	11,533	

Average	0.280	0.239	0.301	0.292	0.366	0.366	0.373	0.340
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Source: Author's calculation based on the EPH microdata, 2004-2015.

Note: Difference-in-difference estimates. The poverty trends indicator (1) measures the time spent in poverty by a household during its observation period, i.e. income per capita below \$5.5/day. The CV (2) is the coefficient of variation of household income. The CV-down and CV-up indicators (3 and 4) are calculated for households with a drop and increase in income respectively between the first and second year of observation. The sample comprises households with at least one minor child, and belonging to the first three deciles of the national per capita income distribution in the first year of observation. In Model 2, the sample also includes households with two interviews over time, instead of three or more. In Model 3, only eligible and non-eligible households over the entire observation period are kept, instead of the first year. In Model 4, the analysis period is restricted to 2004-2013 instead of 2004-2015. Finally, Model 5 drops households in which a member has not reported income over the observation period. Control variables include household head age and squared, gender, whether single parent, number of children under and over 18 and squared, household size, parents' highest level of education, whether parents have multiple jobs, whether the household benefited from the PJJHD program during the period and its interaction with the treatment variable, and time and region fixed effects. Clustered standard errors are in brackets (by large urban areas). *** p<0.01, ** p<0.05, * p<0.1. The value in the last row corresponds to the average of the dependent variable for the control group before the AUH implementation.

3.C Appendix C: Matching

Matching procedure and quality

Since households in treated and control groups cannot be followed over the pre- and post-periods, three sets of weights are calculated independently according to the calculated propensity score (two sets of weights in the pre- and post-periods for the control group and one in the pre- period for the treated group). The variables used for the matching are the number of under-18 and over-18 children and its square, the household size, age of the youngest child, the parents' highest level of education, dummy indicating if grandparents live in the household, if a woman heads the households, if a single parent heads the household, if the parents have multiple jobs, the region, and the age and age squared of the head.

Figures A6 to A8 illustrate the quality of matching. Figure A6 and A7 show the distribution of the propensity score before and after matching, as well as the propensity score distribution by group between the post-treated group and the three other control groups (pre-treated, pre-control and post-control) to visually check the overlap of the region of common support. In each case, there is a wide common support the two groups with similar propensity score distributions. Figure A8 demonstrates that the matching clearly reduces standardized bias across covariates compared to the unmatched situation. Eligible and non-eligible households are more similar in terms of observable characteristics than in the unmatched model (apart from the age of the head of household, which differs slightly).

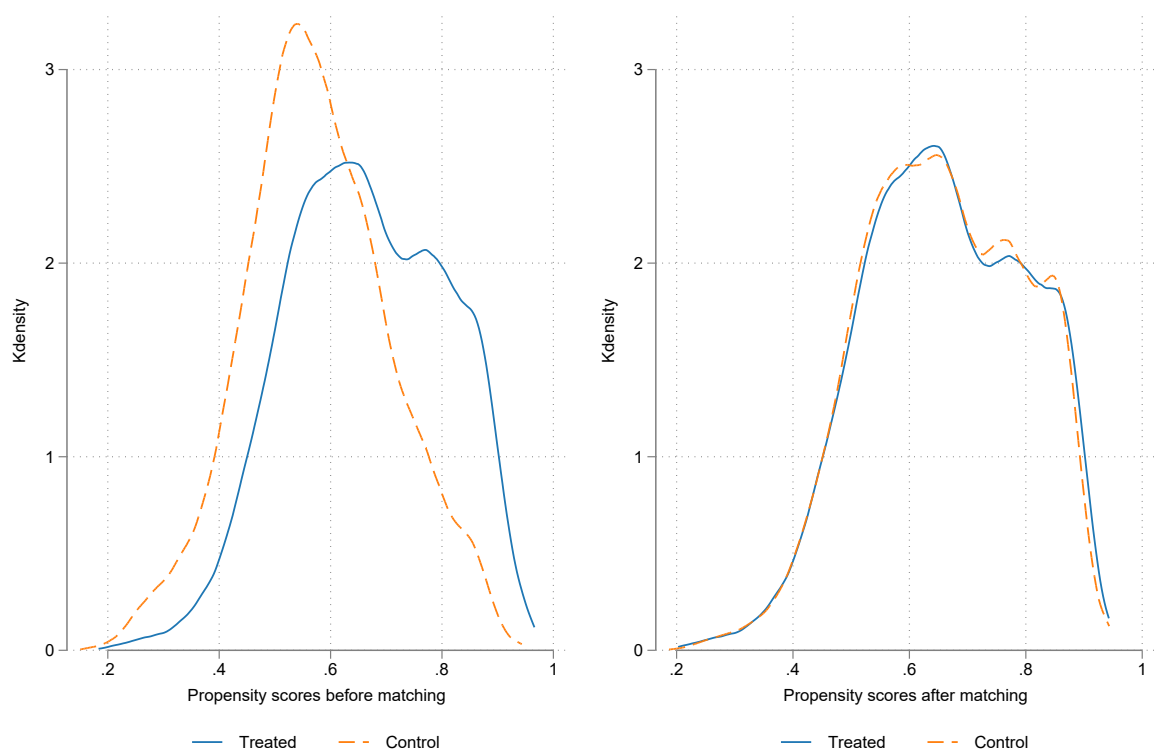


Figure 3.C.1: Propensity score before and after matching
 Source: Author's calculation based on the EPH microdata, 2004-2015.

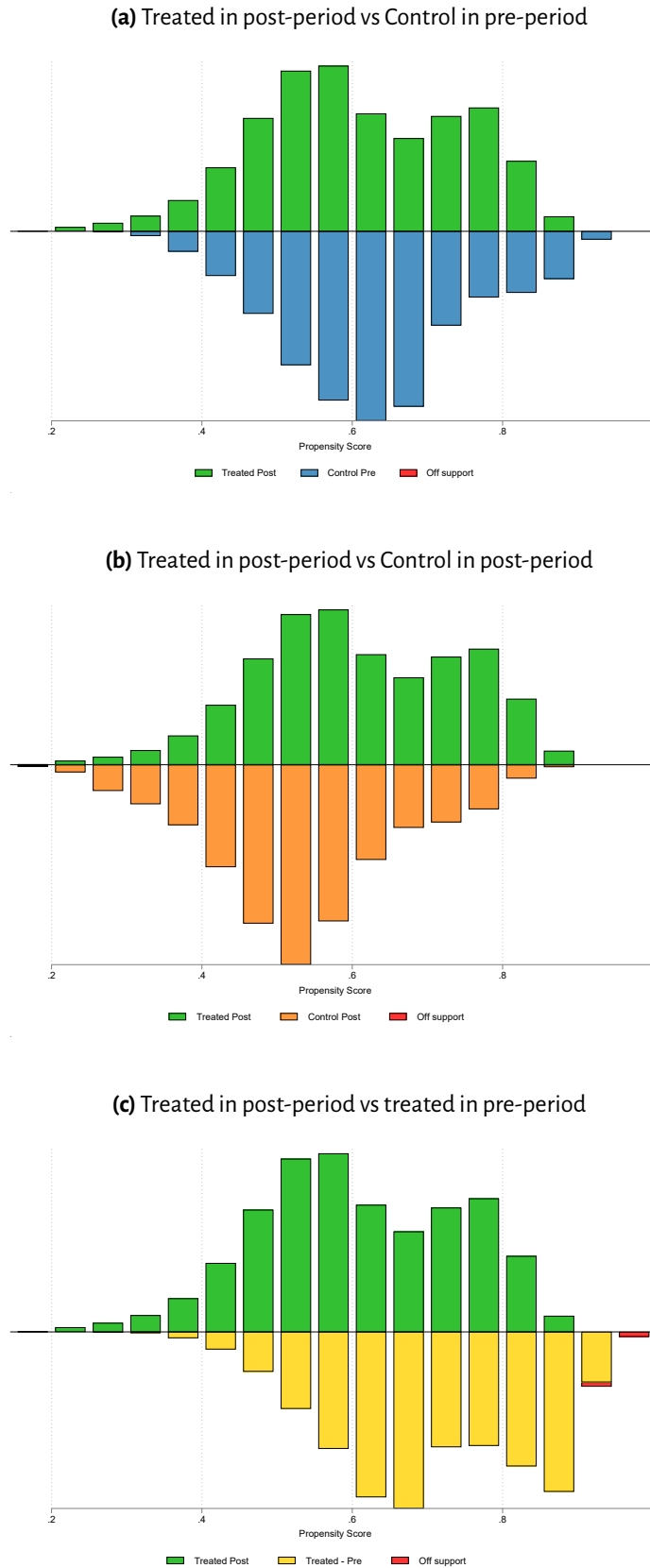


Figure 3.C.2: Propensity score by group and common support

Source: Author's calculation based on the EPH microdata, 2004-2015.

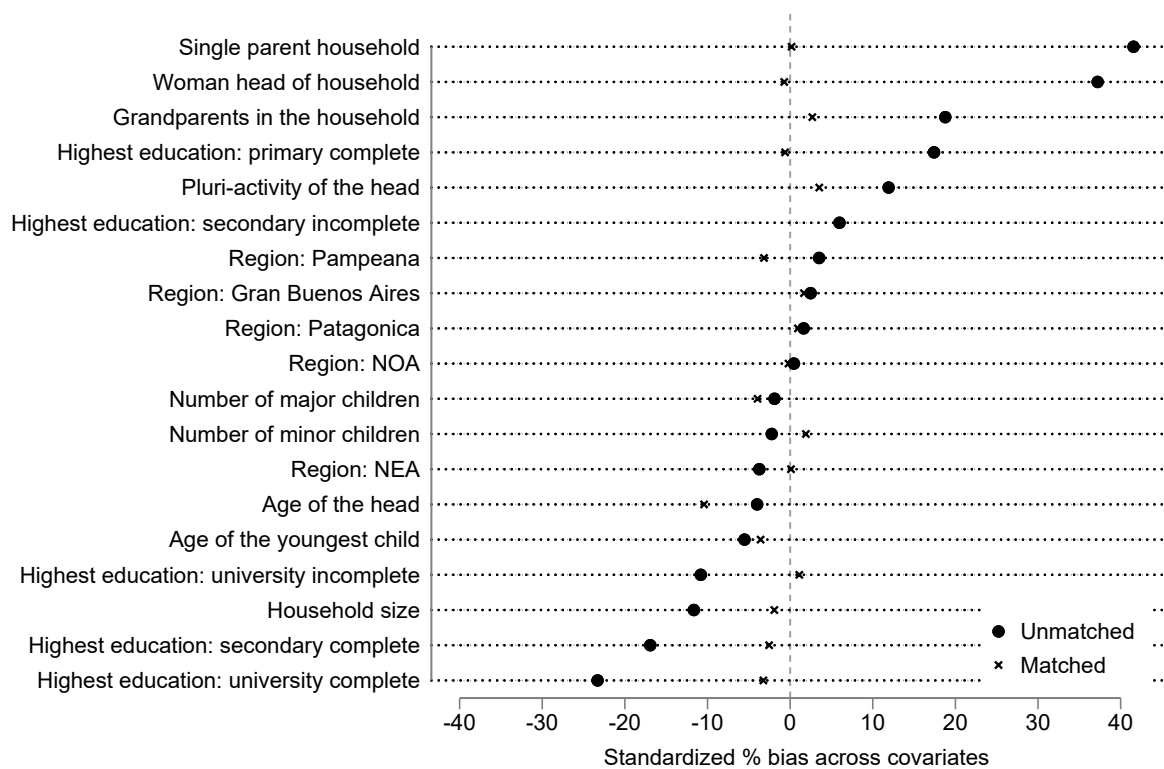


Figure 3.C.3: Standardized bias before and after the matching

Source: Author's calculation based on the EPH microdata, 2004-2015.

GENERAL CONCLUSION

While the economic literature has extensively examined the fall in poverty and extreme poverty worldwide, and the development of the middle class in different parts of the world (Kharas 2010; Ferreira et al. 2013), more recent studies have, however, tempered these trends by highlighting the fragility of a substantial proportion of the population, including part of the middle class (Birdsall et al. 2014; Stampini et al. 2016; Kochhar 2020). This present doctoral dissertation in applied microeconomics, structured around three essays on development economics, aims to provide new insights into the economic vulnerability of populations through the case of Latin America (LA), with a particular focus on Argentina. For this purpose, this thesis relies on various methodological approaches based on quantitative and qualitative materials, and mobilizes multiple tools ranging from descriptive statistics to quasi-experimental techniques.

The first chapter of this thesis examines the vulnerability of the middle class through the case of Argentina, a nation repeatedly affected by economic crises. Adopting an original approach combining quantitative and qualitative analysis, this chapter reveals several salient points. Firstly, the quantitative analysis based on the *Encuesta Permanente de Hogares* (EPH) national household surveys shows that the middle-income class grew significantly between 2003 and 2021, and is made up of heterogeneous profiles in terms of education or employment. Secondly, a substantial part of this group remains vulnerable to poverty due to crises and declining government support. Thirdly, the qualitative interviews conducted with members of the middle class show homogeneity in aspirations for consumption, access to property, security, and the priority given to education and health. Finally, all strongly reject corruption and show a high degree of dissatisfaction with the country's redistribution system, despite their attachment to state intervention.

The second chapter of this thesis builds on this unanimous criticism of Argentina's redistribution sys-

tem to explore more specifically the redistributive preferences of citizens in LA. Notorious for its high levels of socio-economic inequality, the region is also characterized by strong territorial disparities, which impact the development and effects of the public policies implemented (Berdegué et al. 2011; Ferré et al. 2012; Berdegué et al. 2015). At the same time, Holland (2018), among other studies, shows a weak polarization of redistributive demands in the region between the poorest and richest citizens. From this perspective, this chapter aims to shed light on the relationship between citizens' redistributive preferences and their territorial anchorage. Using four waves of the nationally-representative LAPOP (Latin American Public Opinion Project) opinion survey between 2012 and 2018, geolocation of 1,108 cities across 16 countries of survey respondents is carried out, enabling their classification between major urban centers and marginalized areas, via a center-periphery approach. Remote sensing data on night-time luminosity are also used as a proxy for each city's level of development. Results show that citizens in peripheral areas are more likely to express strong support for redistribution than their counterparts in urban centers, even when controlling for individual socio-economic characteristics. More specifically, citizens' redistributive demands are generally higher those living in small cities or villages in remote areas, and for those living in the richest peripheral areas compared to the least developed places. These previous results are mainly driven by the most affluent citizens of these areas, who may be assimilated to a consumer middle class. Finally, the analysis highlights a downward trend in redistributive preferences in the region since 2012, and a narrowing of the gap in redistributive demands between territories since 2014, with country-specific differences.

Finally, the third chapter of this dissertation investigates the effectiveness of redistributive programs implemented to meet citizens' redistributive demands, by assessing the impact of a conditional cash transfer program on its capacity to stabilize vulnerable households economically. The case of Argentina's *Asignación Universal por Hijo* (AUH) is considered, one of the largest redistributive programs in the LA region. Implemented nationally in 2009, the program aims to extend the existing system of family allowances to workers in the informal sector, who are subject to high economic vulnerability due to unstable incomes and poor protection against shocks such as illness and job loss. Using data from the *Encuesta Permanente de Hogares* national survey between 2004 to 2015, the analysis relies on a difference-in-difference strategy to estimate the causal effect of the program on household financial stability, by comparing the income stability of eligible and non-eligible households

over periods of one and a half years. The main results confirm the program's effectiveness in stabilizing the incomes of vulnerable households. The program lowers the proportion of periods spent in poverty by 15% for eligible households compared to a situation without the program introduction. The coefficient of variation of income is also reduced by 16% when households experience a loss of income during the period, demonstrating the program's capacity to smooth out income losses. The program's effect is heterogeneous depending on the family structure. It is more effective among households with several children or a young one, but its impact is largely reduced in households less resilient to shocks, such as single mothers. Lastly, the program also seems to modify households' financial behavior, notably by reducing their reliance on in-kind donations and private transfers, as well as informal loans.

More generally, through various methodological approaches, this thesis contributes to documenting the extent of the economic vulnerability in LA. Despite an increase in the number of people in the middle-income brackets in the region at the beginning of the century, and more modestly in the last decade, a substantial part of the regional population remains economically insecure. The strong segmentation of the labor market in the region's countries, the lack of social protection mechanisms, and the low efficiency of redistribution systems, call for strong economic transformations in the region, where, once again, considerable disparities prevail.

Nevertheless, some levers seem possible to reduce the economic vulnerability of populations. Several studies show the pivotal role of small and intermediate towns in peri-urban or peripheral territories, particularly in their economic, social and cultural relationships with rural areas (Escobal et al. 2015). Christiaensen and Todo (2014), in a long run analysis, find that countries with dispersed urbanization patterns made of several intermediate towns yield more inclusive growth patterns — i.e. a rise in average income per capita with a reduction of poverty and income inequality — than countries with only one of few large metropolises. Berdegué et al. (2015) also show that these smaller urban centers in rural-urban territories are associated with more economic growth and greater poverty reduction in Chile, Colombia, and to a lesser extent in Mexico, with country- and territory-specific underlying mechanisms. Redirecting public investment decisions to these territories, where the majority of the poorest people live (Ferré et al. 2012; Gómez-Lobo and Oviedo 2023), could boost local economic activity and job creation, leading to more inclusive economic growth and helping to lower

socio-spatial inequalities, which remain very high in LA (Christiaensen and Kanbur 2017).

Another lever is through public policy design. The presence of numerous “*truncated welfare states*” in the region, characterized by flat or regressive redistributive systems and exclusionary benefits, maintains a significant proportion of citizens in a state of high economic vulnerability without access to social protection (Holland 2018). The introduction of more universal social and health policies, as seen in the third chapter with the AUH in Argentina, or for instance with the primary health provision in Brazil (*Estratégia Saúde da Família*), provides vulnerable populations access to basic income and services, while reducing the quality gap between public and private systems (Niedzwiecki 2018). Rather than amplifying the division between the two systems, reforms aimed specifically at reducing the strong segmentation of the labor market between insiders and outsiders of the formal sector are also necessary to establish a “*hard*” and economically sustainable redistribution (Holland and Schneider 2017). All these policies must also be accompanied by investments in territorial infrastructures, which are crucial to effectively implementing measures at sub-national levels and ensuring the quality of public services (Niedzwiecki 2018). Furthermore, this would (at least partially) meet the strong demand for redistribution emanating from marginalized territories, as shown in the second chapter, while rebuilding a bond of trust between public authorities, institutions, and citizens.

However, the weakening of democracy in the region and the rise of political extremes and populism could hamper these developments. The social divide between the wealthiest citizens and part of the middle class towards the public sector tends to widen in the region. On the one hand, those citizens who are increasingly opting out of the public sector by using private alternatives in education, and to a lesser extent in healthcare, are evaluating public services more severely and demanding less public spending and redistribution than those who remain in it, fueling a social distancing (De La O et al. 2023). On the other hand, the most vulnerable citizens’ lack of expectation of public authorities’ ability to change the situation also reduces the pressure on governments to make drastic changes (Holland 2018). The economic and democratic exhaustion of citizens in both developed and developing countries makes it necessary to carry out research to consider and respond to their demands and needs (Rodríguez-Pose 2018). Given their considerable electoral potential, middle-class citizens, but especially the poorer and more vulnerable classes, will play a key role in future political and societal issues.

As we come to the conclusion of this doctoral dissertation, several extensions can be considered for each of the chapters. Concerning Chapter 2, more in-depth research is required to investigate the types of redistributive measures favored according to centre-periphery territories. Cavaillé (2023) stresses the importance of considering people's mix of justice beliefs to better identify their redistributive demands, notably by distinguishing between measures that *redistribute from* (before redistribution and taxation policies) and those that *redistribute to* (social policies and safety nets). As shown by Busso et al. (2023), there are significant differences in redistribution preferences between countries in terms of the policies to be adopted. Finally, this would help to better understand the mechanisms underlying the evolution of redistributive preferences, especially for the poorest populations, who seem less inclined to support redistribution in the region.

For Chapter 3, a deeper analysis of economic instability at the household member level could shed light on the potential reallocation of bargaining power between household members. The literature on cash transfer programs shows that most of them are not gender-neutral, with often harmful effects on women's participation in the labor market and the reinforcement of patriarchal stereotypes (Garganta et al. 2017; Berniell et al. 2020).

Regarding results from Chapters 1 and 3, further research into the indebtedness of vulnerable populations is needed, particularly among the lower stratum of the middle class. Indebtedness, whether it stems from short-term strategies for everyday purchases or to maintain a standard of living, but also to ensure quality education for children, can turn into a major burden, sharply increasing the financial vulnerability of households, particularly in times of crisis.

Finally, from a broader perspective, the findings of this thesis call for a broader focus on the economic vulnerability of populations in other countries in the region. In Brazil, for example, existing studies tend to demonstrate the vulnerability of a large part of the "new" middle class, characterized by precarious employment and dependence on poor-quality public services (Berrou et al. 2020; Clément et al. 2022). Similarly, a recent study by Prieto (2024) shows that vulnerability to poverty is largely underestimated in Chile, with a significant part of the middle class defined by the World Bank as economically insecure, confirming the results of the study by Stampini et al. (2016) on 12 LA countries. More research into the experiences of the vulnerability of structurally non-poor groups and the mid-

middle class would thus help orient political decision-makers towards a broadening of social policies mostly restricted to the poorest population groups.

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Les classes vulnérables en Amérique Latine: instabilité, attentes redistributives, et sécurisation

Résumé : Malgré la baisse globale de la pauvreté et de l'expansion de la classe moyenne de revenu dans les pays en développement, une large partie de la population mondiale reste économiquement vulnérable, que cela provienne d'un emploi précaire, de revenus instables, ou d'un manque d'accès à des mécanismes de protection sociale. Cette thèse examine les classes économiquement vulnérables en Amérique latine, région emblématique de ces évolutions. Le premier chapitre s'intéresse à la classe moyenne Argentine sous la perspective des crises récentes ayant impacté le pays. L'analyse révèle que la classe moyenne est large mais fragmentée en termes d'emploi et d'éducation. Une partie substantielle de ses membres reste économiquement vulnérable, impactée par les crises successives. Ses membres critiquent principalement l'absence de soutien de l'État, la faible qualité des services publics, et l'injustice des politiques de redistribution. Partant de ce constat, le deuxième chapitre explore plus spécifiquement le rôle que joue l'ancrage territorial dans les demandes redistributives des citoyens en Amérique latine, où de fortes inégalités socio-économiques persistent. Les résultats montrent un clivage entre les citoyens des grands centres urbains et des zones périphériques, ces derniers réclamant plus de redistribution. Ce chapitre montre l'importance de considérer les disparités territoriales dans la formation des demandes redistributives, au delà des caractéristiques individuelles. Le troisième chapitre évalue l'efficacité d'un programme de transferts conditionnels de fonds à sécuriser les citoyens les plus vulnérables en Argentine. Les résultats révèlent l'efficacité globale du dispositif pour réduire l'instabilité des revenus et éviter les retours dans la pauvreté. Dans l'ensemble, cette thèse souligne la forte vulnérabilité économique d'une part importante de la population latino-américaine, et montre la nécessité de développer et renforcer les mécanismes de protection sociale pour non seulement sécuriser les plus vulnérables, mais répondre à la défiance des citoyens envers la politique et les institutions, exacerbée par les fractures spatiales.

Mots-clés : Vulnérabilité, instabilité, redistribution, inégalités, Amérique latine, Argentine

The vulnerable classes in Latin America: instability, redistributive expectations, and securization

Abstract: Despite the global decline in poverty and the expansion of the middle-income class in developing countries, a large proportion of the world's population remains economically vulnerable, whether due to precarious employment, unstable incomes, or lack of access to social protection mechanisms. This thesis examines the economically vulnerable classes in Latin America, a region that is emblematic of these trends. The first chapter looks at the Argentine middle class from the perspective of the recent crises that have impacted the country. The analysis reveals that the middle class is large but fragmented in terms of employment and education. A substantial proportion of its members remain economically vulnerable, impacted by successive crises. Its members are mainly critical of the lack of state support, the poor quality of public services, and the unfairness of redistribution policies. Building on this observation, the second chapter explores more specifically the role played by territorial anchorage in the redistributive demands of citizens in Latin America, where strong socio-economic inequalities persist. The results show a divide between citizens in major urban centers and those in peripheral areas, with the latter demanding greater redistribution. This chapter shows the importance of considering territorial disparities in the formation of redistributive demands beyond individual characteristics. The third chapter assesses the effectiveness of a conditional cash transfer program in securing the most vulnerable citizens in Argentina. The results reveal the overall effectiveness of the scheme in reducing income instability and preventing a return to poverty. Overall, this thesis highlights the high economic vulnerability of a significant proportion of the Latin American population, and shows the need to develop and strengthen social protection mechanisms not only to secure the most vulnerable, but also to respond to citizens' distrust of politics and institutions, exacerbated by spatial fractures.

Keywords: Vulnerability, instability, redistribution, inequalities, Latin America, Argentina