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Mobility Prospects and Preferences for Redistribution in Latin America

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Abstract

This paper aims to provide evidence about the POUM hypothesis (prospects of upward mobility) in Latin America. It postulates that preferences for redistribution decrease with the prospects of upward mobility of individuals, given that in a possible economic improvement they would be harmed by redistribution. The case of Latin America is analyzed for the period 2009–2018, which has registered changes in inequality and intragenerational mobility in part, due to redistributive policies in the past decade. For this, data from Latinobarómetro and the Probit-Adapted OLS methodology are used. The results support the POUM hypothesis, unlike what the studies carried out for previous periods obtain, in another context of inequality and mobility in Latin America. In addition, suggestive results are obtained about the influence of intergenerational mobility, religiosity, ideology and institutional quality on preferences for redistribution. It should be noted that these results vary according to the country.

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1. Introduction

The role that the State assumes in the redistribution of resources differs substantially between countries and throughout history (Alesina et al., 2001; Alesina and Giuliano, 2011; Piketty et al., 2014; Piketty, 2014; Atkinson, 2014). Earlier literature that explores the link between inequality and the relevance of redistributive policies at the aggregate level find an apparent paradox. Countries with lower levels of inequality are also characterized by having States with a higher incidence of redistributive policies. By contrast, those that face historically higher income inequality are more likely to have States that devote less effort to redistribution. This paradox is also manifested at the individual level: people who would benefit from the application of redistributive policies do not support them. The role of redistributive policies and an individual's demand for redistribution are a key factor to understand the long term income inequality in Latin America, which is the most unequal region of the world. Although since the 2000s Latin America has, on average, experienced a significant decline in inequality, after 2010 there has been a slowdown in this trend (Cruces et al., 2013). The decline in inequality achieved in various Latin American countries in the aforementioned period was accompanied by sustained economic growth and by redistributive public policies like progressive tax designs and social transfers to reduce poverty which, in a context of high inequality, contributed to a reduction in income inequality (Cornia, 2014; Cornia et al., 2011; Milanovic and Amarante, 2016; Amarante and Brun, 2018; Tornarolli et al., 2018).

Various studies have made reference to the fact that intragenerational social mobility has increased in Latin America between the 1990s and the present, but those countries that presented a greater decline in inequality are those that experienced larger increases in intragenerational social mobility (Ferreira et al., 2013). Furthermore, intergenerational social mobility is growing on average in Latin America, which seems to be driven by upward mobility of persons born into families with a low educational levels (Neidhöfer, 2019). There is also a strong association between countries' income inequality and low intergenerational mobility (Neidhöfer et al., 2018). Economic growth, institutions and public education are relevant factors in explaining cross-country differences (Neidhöfer, 2019; Neidhöfer et al., 2018). In any case, the levels of intergenerational mobility continue to be low compared with developing countries (Daude and Robano, 2015).

The reduction of income inequality as a Latin American priority and the possibility of implementing redistributive public policies by governments depends largely on the support of its population. In this way, it is essential to understand the determinants of individuals' demands for redistribute policies, and thus, the role of the state and the efficiency in the allocation of resources. There are at least four reasons that make it interesting to study this issue for Latin America in the recent period. On the one hand, according to the predictions of the canonical models, the preferences for redistribution should respond to the degree of mobility experienced by the individuals, the economic growth and the reduction of inequality (Meltzer and Richard, 1983). Second, redistributive policies implemented during the period could affect demands for redistribution, depending on how the winners and losers are distributed and how effective the

policies (and the State) are perceived (Berens, 2015; Mares, 2005; Kuziemko et al., 2015; Holland, 2018). Third, the aforementioned changes in the region during the last decades in Latin America have had an impact on individual expectations of future mobility or welfare improvement. Finally, evidence on preferences for redistribution is particularly relevant for Latin American countries, where inequality and poverty are substantial and are higher than in the countries addressed in the previous paper, and where the labor market institutions, State capacity and the welfare system are very different.

For these reasons, this study examines the prospects of the upward mobility hypothesis—the POUM hypothesis—for Latin American countries for the 2009–2018 period. It postulates that when individuals have prospects for upward mobility and they are not too risk-averse, they will decrease their preferences for redistribution, since they expect to be better positioned in the future (Benabou and Ok, 2001). The underlying intuition is that these individuals expect to be richer than the mean in the future, therefore they are not expected to benefit from the policies and do not wish to pay taxes. The POUM hypothesis is one way to explain the mentioned paradox. It provides a hypothesis to explain why people with lower-than-average incomes do not support redistributive policies, arguing that due to their prospects of upward mobility they believe that either they or their descendants could move upward in the income distribution and therefore be harmed by those policies (Benabou and Ok, 2001).

Despite its long tradition and relevance, the study of POUM hypothesis for Latin American countries faces two main challenges that we try to address in this paper. First, it is unusual to have complete and comparable information on preferences for redistribution and individual's mobility expectations for several countries. Most of the previous evidence is for developing countries and provides evidence based on correlation.

Second, previous literature suggests that it is difficult to empirically test the POUM hypothesis since preferences depend on many factors. Different individual life experiences and a family's mobility history affect the individuals' risk aversion, their optimism about their future mobility, and their beliefs about the role of luck and merits (Piketty, 1995; Giuliano and Spilimbergo, 2013; Benabou and Tirole, 2006). Luttmer and Singhal (2011) argue that preferences for redistribution are more permanent characteristics. For the authors, values, social norms and customs are key determinants of preferences for redistribution. According to this explanation, preferences for redistribution comes from family traditions, cultural norms, and identity, in opposition to the hypothesis of preferences driven by self-interest. Previous papers emphasize the role of fairness in determining preferences for redistribution (Alesina and Angeletos, 2005b; Fong, 2001; Alesina and Giuliano, 2011).

Finally, recent scholarship in the field of economics and political science has highlighted the role of the State's capacity for understanding individual preferences for redistribution. These models argue that the individual may prefer not to support redistributive policies if they anticipate that the state is weak and will not be able to implement them (Kasara and Suryanarayan, 2020; Chen, 2018; Soifer, 2012). The institutional capacity of the State could be associated with the presence of corruption in the public sector, which in turn affects the functioning of public programs and the trust in the State (Alesina and Angeletos, 2005a; Hauk et al., 2017). However,

the Foellmi and Oechslin (2007) model predicts an ambiguous relationship between perceptions of corruption and preferences for redistribution. The sign of this relationship depends on the degree to which corruption deteriorates trust in the government and who the winners and losers of the distributional effects of corruption are (redistribution may act as compensation for the relative loss generated by corruption).

This review about the determinants of preferences for redistribution justifies the exploration of some secondary hypotheses. In this paper we address the role of intergenerational educational mobility (which is directly related to with the formation of beliefs), religious preferences, ideology (which is related with cultural norms and identity), and the individual's perceptions about the quality of institutions (which is related with social norms). These dimensions are of great relevance in Latin America since the continent has been characterized by significant levels of religiosity and corruption. According to the empirical literature, religious commitment has a substitution effect on preferences for redistribution, so that the higher the commitment, the lower the preferences for redistribution. On the other hand, Latin American countries are characterized by weak institutions with relatively low controls on corruption (Kaufmann et al., 2009).

The data source used is the Latinobarómetro corresponding to the period 2009–2018. Although no causal evidence is presented, the Probit-adapted OLS (POLS) methodology is used to approximate the determinants of preferences for redistribution through cross-country correlations. As a proxy of preferences for redistribution we use the perception of justice in the income distribution. To test the POUM hypothesis as proxy of expected mobility, we use the subjective perception of the future personal economic situation twelve months later. Our baseline specification includes a wide set of controls, a fixed effects by year and country. In addition, comparable estimates are presented for 18 countries in the region, which allows for comparative analysis.

The results support the POUM hypothesis for the period analyzed and they are robust to several checks. In addition, regarding secondary hypotheses, suggestive results are obtained about the influence of intergenerational mobility, religiosity, ideology and institutional quality on preferences for redistribution. Finally, it should be noted that these results vary according to the country.

This paper contributes new evidence about the recent trends in redistributive and economic preferences in most Latin American countries. Furthermore, it provides evidence about the determinants of preferences for redistribution under a unified empirical framework. For most of the countries under study, no research has been done on the POUM hypothesis for the analyzed decade. During the period there were changes in both preferences for redistribution and mobility prospects with respect to previous periods. It also provides evidence about preferences for redistribution at the country level, which is unusual in Latin America. Unlike the results obtained in studies carried out for previous periods, the POUM hypothesis is not rejected in this period. This difference could be associated with the economic growth experienced in Latin America, trends in income inequality and mobility, and the redistributive policies carried out in the period.

A second minor contribution of this paper is to explore the influence of variables not included in models previously analyzed for Latin America, such as religiosity, the perception of corruption, or the functioning of democracy in the country considered. Regarding State trust, using the same

data than Hauk et al. (2017) but alternative variables, we find evidence consistent with their results.

These contributions could be relevant to understand long term inequality persistence and the scope of redistributive policies in Latin America countries. Greater mobility may lead to a loss of support for redistributive policies and a reduction in the willingness to pay taxes to develop the capacities of the State to develop public policies. Therefore the State capacity suffers, redistributive polices are interrupted, and a reduction in mobility and inequality persistence is triggered.

This document is structured as follows: Section 2 and Section 3 present the theoretical framework and previous evidence respectively. Section 4 postulates the main and secondary hypotheses. In Section 5, the empirical strategy is exposed, with subsections for the discussion about the variables, methodology, and data source. Section 6 presents the descriptive and econometric results and Section 7 presents the conclusions.

2. Theoretical Models to Explain Preferences for Redistribution

A first group of models explain preferences for redistribution based on rational individuals and self-interest. In this sense, Meltzer and Richard (1983), suggest a static general equilibrium model in which it is assumed that (i) a government only collects taxes, (ii) the collected taxes are redistributed through spending; and (iii) voters have perfect information. This model postulates a negative relationship between an individual's income and inequality and support for redistributive policies of redistribution. Hirschman and Rothschild (1973) highlight the importance of perceived mobility to explain preferences for redistribution in a context of uncertainty. Unlike Meltzer and Richard (1983)'s model, Hirschman and Rothschild (1973) suggest that high-income individuals, who expect to be disadvantaged due to social mobility, will be favorable to redistribution. Contrary, the tunnel effect postulates that individuals with low income may tolerate income inequality, since the mobility of others similar is perceived as an indicator of future improvement of their income.

Benabou and Ok (2001) formalize these ideas in their model and postulate the prospects of the upward mobility (POUM) hypothesis. This hypothesis indicates that individuals who project a future social position better than their current one will therefore believe that redistribution will not be convenient and thus, their support for such measures will decline. This hypothesis is based on the assumption that present prospects and redistributive policies will hold in the future, that future income is a concave function of present income, and that individuals are not entirely risk-averse.

The model presented by these authors adopts a standard redistributive scheme based on a proportional taxation with lump sum transfers, without welfare losses as a result of redistribution (they also extend the analysis to cases of regressive and progressive taxation and the results are maintained). Therefore, individuals choose a tax rate τ_t that maximizes their expected future income. When income does not grow and individuals are not inequality adverse, the optimum for those with higher than mean incomes is no redistribution at all $\tau_t = 0$, and for those with lower

incomes the average is the total redistribution $\tau_t = 100$. When income is assumed to be stochastic, other elements such as time horizon, degree of risk aversion, and future income distribution must be taken into account to identify individuals' preferences. If risk-neutral individuals and deterministic transition functions are assumed, Benabou and Ok (2001) arrive at the following predictions:

i) The more concave the transition function, the smaller the proportion of the population with current incomes below the average that supports redistribution.

ii) The longer the period of validity of the chosen tax rate, the smaller the proportion of the population with current incomes below the average that supports redistribution.

In contrast to the POUM hypothesis, where expectations about the future are the most relevant determinant of preferences for the redistriution of individuals, Piketty (1995) models the role of experienced mobility to explain heterogeneous preferences for redistribution between families. Based on rational learning of beliefs, this model predicts that individuals who have experienced upward (downward) mobility believe that personal effort is rewarded (is not rewarded) and demand less (more) redistribution. Since political achievements depend on the beliefs of individuals, two types of equilibrium can be found. On the one hand, the "American" equilibrium, which is characterized by a dominance of the belief in a just world (and resistance to the evidence to the contrary), low redistribution, high level of effort, and social stigma attached to poverty. On the other hand, the "European" equilibrium, characterized by a realistic pessimism of the majorities, a more extensive welfare state, less effort and justification of poverty in luck and circumstances.[1] This model justifies the inclusion of intergenerational mobility in the present analysis.

Other models suggest that preferences are more permanent individual characteristics, standing in opposition to the hypothesis that preferences are only motivated by self-interest and the expected return of each policy. According to this explanation, preferences for redistribution is rooted in family traditions, values, social norms, and socio-cultural characteristics (see e.g., Luttmer and Singhal, 2011). Some papers emphasize in the role of fairness (Alesina and Angeletos, 2005b; Fong, 2001; Alesina and Giuliano, 2011), in the role of social norms (Alesina and Glaeser, 2005; Cruces et al., 2013; Alesina et al., 2018) and social identity (Cowell and Costa Font, 2014) to explain the preferences for redistribution. Corneo and Grüner (2002) postulate the existence of three effects in terms of support for redistribution policies. First, the homo economicus effect, which implies that to support a certain policy it must maximize personal income. Second, the public values effect, which suggests one prefers the policy that most benefits society as a whole. Third, the social rivalry effect, which states that preferences depend on personal interests in relation to the relative position of the individual in society.

In addition, the religiosity of a society may play an important role in the formation of preferences. Given the evidence for some advanced industrial democracies, it is known that measures of religiosity are better predictors of preferences for redistribution than income or class proxies (Dalton, 2013). Such is the case for Scheve and Stasavage (2006) who argue that religion

[1] Benabou and Tirole (2006) suggest an extension and arrive to similar predictions.

and redistribution are complementary mechanisms that ensure individuals against adverse life events. As a result, more religious individuals will prefer less redistribution than non-religious individuals. On the other hand, religious individuals may prefer small governments with little redistributive capacity since they see the government as a threat and a competition in education and charitable activities (Lee and Roemer, 2005).

Another of the channels present in the literature about the determinants of preferences for redistribution is related to perceptions about institutional quality. Some individuals may prefer less inequality because they consider it undesirable due to instrumental reasons (negative externalities in education or due to crime) (Alesina and Giuliano, 2011). However, they may not support redistributive policies if they perceive that the the public polices are inefficient (Kuziemko et al., 2015).

Institutional quality and a low State capacity can distort the demand and supply of redistribution via other mechanisms like vote-buying practices, low confidence in the government, and pressure from interest groups (Sánchez and Goda, 2018). Individual may prefer not to support redistributive policies if they anticipate that the State is weak, it has low fiscal capacity and will not be able to implement redistributive program in an effective way (Mares, 2005; Kasara and Suryanarayan, 2020; Chen, 2018; Soifer, 2012). In addition, the capacities developed by the State affect the formation of preferences (Berens, 2015; Holland, 2018). For example, Holland (2018) provides evidence for Latin American countries that supports the hypothesis that a truncated development of welfare systems explains that low-income sectors do not support redistribution since they perceive themselves outside the welfare system (and thus do not expect to receive benefits).

The institutional capacity of the State could be associated with the presence of corruption practices in the public sector. Alesina and Angeletos (2005b) argue that large governments are more likely to exhibit corruption, and in turn corruption increases the demand for redistribution to correct the inequality and injustice generated by corruption. However, the Foellmi and Oechslin (2007) and Hauk et al. (2017) models predict an ambiguous relationship between perceptions of corruption and preferences for redistribution. On the one hand, corruption could erode trust in the State by reducing preferences for redistribution. On the other hand, it could reduce (increase) the relative incomes of people located in the lower part of the distribution by increasing (decreasing) support for redistributive policies.

Some of the reviewed channels will not be addressed in the present analysis since there is no data for it, but the role of intergenerational mobility, religiosity and trust in government will be considered as control variables.

3. Previous Evidence

The empirical review is organized in three subsections. First we focus on international evidence regarding the POUM hypothesis. Second, we focus on evidence for Latin American countries. Finally, we briefly summarize the available evidence on the secondary hypotheses.

3.1 Evidence about POUM Hypothesis for Developing Countries

The POUM hypothesis has been widely studied, with more studies carried out for countries in Europe and North America than for Latin America. This is due in part to the availability of data, since data sources for Latin American countries are scarce and most of the studies, like the present one, use data from Latinobarómetro. As shown below, the POUM hypothesis finds greater support in non-Latin American countries.

Starting with some antecedents for the case of non-Latin American countries, Ravallion and Lokshin (2000) show for Russia that the demand for redistribution decreases not only with present socio-economic status, but also with expectations of future improvements in economic welfare. Alesina and La Ferrara (2002) have studied the determinants of preferences for redistribution conditioned on the prospects for income mobility. They find that minorities, women and younger individuals support redistribution; they also find a positive effect of the proxy variables for risk aversion and altruism. At the same time, they find a negative impact on the demand for redistribution of present income and the prospects for upward mobility, both with subjective and objective measures. Checchi and Filippin (2004) offers other findings. They test the POUM hypothesis by means of a within subjects experiment where the concavity of the mobility process, the degree of social mobility, the knowledge of personal income and the degree of inequality are used as treatments. Other determinants of the demand for redistribution, such as risk aversion and inequality aversion are (partially) controlled for via either the experiment design or the information collected during the experiment. We find that the POUM hypothesis holds under alternative specifications, even when we control for individual fixed effects.

More recently, Rainer and Siedler (2008) analyze redistribution preferences in relation to occupational prospects. They find that prospects for upward occupational mobility decrease the demand for redistribution and downward occupational mobility increases it. Alesina and Giuliano (2011) analyze the determinants of preferences for redistribution, and find that personal characteristics such as age, gender, social class, are factors, as well as personal history, culture, historical experiences, religion, political ideology, macroeconomic volatility and perceptions of justice. Pfarr (2012) through a discrete choice experiment for Germany, obtained as a result a strong preference for redistribution that exceeds the effect of present income. The POUM hypothesis is rejected, this result is more in line with the learning model of Piketty (1995), so that economic factors only explain part of the preferences of individuals, concluding that behavioral economics can explain this result.

Engelhardt and Wagener (2014) carried out a study for several OECD countries between 1987 and 2009. They find that the POUM hypothesis is fulfilled for subjective measures but not for objective measures, which has implications for public politics. Cojocaru (2014) empirically investigates this hypothesis for a large number of countries using the Life in Transition Survey, which provides quality data on the expectations of future mobility and the degree of risk aversion of the respondents. According to this work, the hypothesis is verified for the cases of low aversion to risk in member countries of the European Union, but not for the rest of the countries. Lee (2016) carries out a study for South Korea based on social surveys where he finds that individuals with pessimistic income perspectives and a negative perception of equal opportunities demand

greater redistribution as factors such as current income and political ideology have no effect for South Korea. Finally, Alesina et al. (2018) investigate through surveys for the United States and several European countries, how beliefs about intergenerational mobility affect preferences for redistribution. The results show that although with political polarization, if intergenerational mobility decreases, support for redistribution increases.

3.2 Evidence about POUM Hypothesis for Latin American Countries

Regarding the literature for the case of Latin America, the work of Gaviria et al. (2007) stands out. The main findings, using data from Latinobarómetro for the years 1996, 2000, and 2001, show that in Latin America there are strong preferences for redistribution in the period considered, although it varies between social classes, with the differences between rich and poor greater than in other regions of the world. Those individuals with pessimistic views on social justice and equal opportunities tend to support redistribution and disagree with the market economy and privatizations.

Another precedent to highlight is the work of Daude and Melguizo (2010) who, through data from Latinobarómetro from 2007 and 2008, do not obtain evidence to support the POUM hypothesis. In addition, the work of Silva and Figueiredo (2013) using the same database for 2007, rejects the POUM hypothesis for the Latin American region, while highlighting the importance of past mobility, personal interest and perceptions of justice, and equal opportunities.

Finally, for the case of Bolivia, Ecuador and Venezuela, Encalada et al. (2016) use data from the Latinobarómetro survey for 2013 and find that the perception of upward mobility negatively affects support for redistributive policies.

3.3 Previous Evidence about Secondary Hypotheses

Regarding the literature about the quality of institutions, the study by Hauk et al. (2017) deserves mention. The authors study the relationship between people's beliefs about the quality of institutions, measured through the perceptions of corruption, and preferences for redistribution in Latin America. The authors find that the perception of corruption in the public sector in Latin America erodes trust in government but increases support for redistribution.

Moreover, on religiosity, Scheve and Stasavage (2006) provide evidence for the fact that more religious individual tend to be less prone to redistribution in France, Germany, Ireland, Japan, New Zeland, Norway, Sweden, UK and United States, with Canada as an exception.

4. Hypothesis

The present work seeks to empirically test the POUM hypothesis, which postulates that preferences for redistribution decrease when the expectations of upward mobility of individuals increase. The case of Latin America for the period 2009–2018 is analyzed using data from Latinobarómetro. Based on the literature presented and recent data on mobility and preferences, it is expected that the prospects for upward mobility have a negative impact on redistribution preferences.

To answer this main question our specification includes standard control variables. In addition, some secondary hypotheses can be formulated to test for individuals' determinants of preferences for redistribution:

a) In line with the Piketty (1995) model, individuals who experienced upward (downward) intergenerational mobility have lower (higher) preferences for redistribution, since past experience influences future expectations.

b) Individuals whose perceptions about the quality of institutions are low (high) have less (greater) preference for redistribution, since they do not (do) trust the government as a redistributor of resources.

c) Individuals with greater religiosity have fewer preferences for redistribution, since they consider that the State as an insurer for unfavorable events acts as a substitute for religion.

5. Empirical Strategy

5.1 Data Source

This work uses data from Latinobarómetro corresponding to the period 2009–2018. Latinobarómetro is a public opinion study that annually applies around 20,000 interviews in 18 Latin American countries representing more than 600 million inhabitants. The countries included are Argentina, Bolivia, Brazil, Colombia, Costa Rica, Chile, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela.

These are representative samples of the national population of each country, of 1,000 and 1,200 cases, with a margin of error of around 3 %, per country.[2] The number of observations per year and per country is shown in Table 1.

There was a relevant proportion of missing data in some of the variables analyzed, which implies special treatment. An alternative is to discard these observations and perform the analysis for the rest of the sample. However, in order not to generate a bias in the estimates, the resulting sample after eliminating these cases must be a random sample from the original population, which is usually called 'missing completely at random (MCAR)' (Cameron and Trivedi, 2005). To analyze the fulfillment of this assumption, the mean of the mentioned variables for all the people surveyed was compared with the mean that arises from the sample where the observations without information are removed. It was observed that there are no significant differences.

5.2 Variables

The variable of interest for the hypotheses to be studied is the demand for redistribution, but for the period considered there is no variable that allows it to be directly measured. Alesina and Giuliano (2011) and Gaviria et al. (2007) use the answer to the question about whether the government should intervene more in education, health or pensions as a proxy, but this question

[2]For more details, the technical data sheets of the survey by year and by country.

Table 1

Observations by country and by year.

Country of study / Year	2009	2010	2011	2013	2015	2016	2017	2018
Argentina	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Bolivia	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Brazil	1,204	1,204	1,204	1,204	1,250	1,204	1,200	1,204
Chile	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Colombia	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Costa Rica	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Dominican Rep.	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Ecuador	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
El Salvador	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Guatemala	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Honduras	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Mexico	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Nicaragua	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Panama	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Paraguay	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Peru	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Uruguay	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Venezuela	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Total	20,204	20,204	20,204	20,204	20,250	20,204	20,200	20,204

Source: own elaboration based on Latinobarómetro.

is not included in the survey for the period considered in this study. Gaviria et al. (2007) also use political positioning as a dependent variable, so that those who declare themselves on the left are presumed to support redistribution and those who declare themselves on the right do not support it. However, the author analyzes the answer to other questions such as the role of the market economy, the role of private enterprises, the effect of investment, the role of free competition and the role of the state, without finding any correspondence between these responses and political positioning, so its use as a proxy for the demand for redistribution is not recommended. That variable would function as a proxy if the ideological definition of an individual depended solely on political-economic premises and knowledge of them, and not on sympathy or antipathy for party referents, the influence of the media or other factors, therefore it is not used as a dependent variable in the present work. Cramer and Kaufman (2011), Silva and Figueiredo (2013) and Méndez and Waltenberg (2018) use justice perception in income distribution to measure preferences for redistribution.

Thus, based on the geographic coverage and the quality of the variable, and taking into account the international literature, in the present work, a model with the perception of justice in the income distribution of the corresponding country as the dependent variable is proposed. It consists of a categorical variable that includes the following options: Very unfair, Unfair, Fair and Very fair. The usual problems of subjective variables arise, including difficulty making interpersonal comparisons since there is no natural scale to measure it and the possible discrepancy between what the respondent really thinks and what he claims to think. Also, as Silva and Figueiredo (2013) argue, there is the fact that it is possible to perceive injustice and not

demand redistribution. Such is the case of individuals with aversion to a potential increase in taxes or of individuals who consider inequality as an inherent characteristic of human society that should not be modified. Nevertheless, as Ahrens (2019) suggests, it can be argued that as redistribution is the mechanism that would compensate unfair results, the perception of injustice serves as the main explanation for postures in favor or against redistribution. Moreover, there is evidence for the fact that perceived inequality and not actual inequality is strongly associated with preferences for redistribution (Choi, 2019).

To test the POUM hypothesis, the variable of interest of the model refers to the perception of mobility. The survey has a question about subjective perception of the future personal economic situation (twelve months later), whose answer options are Same, Much worse, A little worse, Much better and A little better. This variable is similar to those used in the literature presented.

The remaining explanatory variables of the model correspond to sociodemographic variables that serve as controls such as sex, age, political ideology, past mobility, marital status, religiosity, educational level, subjective income,[3] satisfaction with democracy and perception of corruption. According to the empirical and theoretical literature, it is expected that women will exhibit a greater preference for redistribution, as will younger people, those with left-wing ideological leanings. Those who experienced upward mobility are expected to demand less redistribution. Other control variables correspond to the economic cycle (logarithm of the GDP per capita of the year and the country) and inequality (Gini index of the year and the corresponding country) in order to analyze the influence of the economic climate on preferences for redistribution through objective variables. Finally, fixed effects by year and country are included to eliminate biases corresponding to cultural differences, transitory events, etc.

An empirical limitation presented by the database corresponds to the absence of an income variable, which allows controlling preferences for redistribution according to income level. This variable is of great importance since preferences for redistribution depend to a large extent on income level, since those with high incomes are affected by redistribution and those with low incomes benefit. Therefore, subjective income, which is present in the base, in addition to the respondent's educational level, which is correlated with income, are included in the model as explanatory variables. It should be noted that the previous literature shows that subjective variables are even more important since individuals make decisions based on their biased perceptions that usually differ from objective variables (Engelhardt and Wagener, 2014).

Finally, a model that includes variables of perception of the quality of the institutions (perceptions of corruption and satisfaction with democracy) is presented. Thus, a pool of years and countries is constituted, and the estimates for each country separately can be requested.

5.3 Methodology

The variable of interest for the analysis is preferences for redistribution. It is a latent variable, that is, it cannot be directly observed in the population. As it is unobservable, the true

[3]There is no information on income, which is of utmost relevance in determining preferences for redistribution since individuals depend on it to be benefited or harmed by redistribution. The empirical treatment of this problem is explained later.

valuation of preferences for redistribution will be approximated by another observable variable that corresponds to the perception of justice in income distribution and increases as a function of the demand for redistribution. The question, 'how fair is income distribution?' can take the following answers:

1 = Very fair
2 = Fair
3 = Unfair
4 = Very unfair

Thus, the variable considered takes four values (Very fair, Fair, Unfair, Very unfair), implicitly assuming that individuals whose preferences for redistribution are below a certain threshold μ_1 will answer Very fair, those whose preferences are between that value and a value μ_2 greater than it will report Fair, those between μ_2 and a μ_3 even higher will declare Unfair and finally those with preferences above μ_3 will declare Very unfair. In this way, the following model is proposed:

$$Y_i^* = Z + \epsilon_i$$

where Y_i^* is the redistribution preferences, Z is a vector of independent variables, and ϵ_i is the error term. As Y_i^* is a latent variable, unobservable, that will be approximated by the observable variable already mentioned using the following model:

$$Y_i = \beta_i persp_i + \beta_i mov_i + \beta_i X_i + \beta_i vpais_i + \alpha_i + \epsilon_i$$

where Y_i approximates the preferences for redistribution, being the categorical variable of justice perception in income distribution, where it is assumed that those surveyed who consider the income distribution to be fair do not demand redistribution, and those who consider it unfair have greater preferences for redistribution. The different β_i correspond to the regression coefficients for each independent variable; $persp_i$ corresponds to the main variable of interest, that is, the mobility prospects; mov_i represents the intergenerational educational mobility experienced by the individual (it is well known that education moblity is highly correlated with income mobility); X is the matrix of other control variables (age, sex, etc.) mentioned above; $vpais_i$ corresponds to macroeconomic variables of GDP and Gini Index of the respondent's country; α_i represents the fixed effects by year and country and ϵ_i is the error term.

The dependent variables has discrete distributions, so the estimates by Ordinary Least Squares (OLS) would be biased. Therefore, we start from an ordered probit model that takes into account the ordinality of the dependent variable. It should be noted that the fixed effect by country is common to all households in the country and represents systematic differences between uncontrolled countries that can affect preferences.

According to Van Praag and Ferrer-i-Carbonell (2008), it is observed that even in an ordered probit model there is a certain cardinalization of the variable of interest. In this sense, they propose a Probit model adapted to Ordinary Least Squares (POLS), a method based on a transformation of the data that allows the discrete choice variables to be taken as continuous. The disadvantage is that it imposes some degree of cardinality on the responses, which is controversial since it assumes that the preferences are numerically comparable. The main advantage of

the POLS estimation is that it allows the application of more complex methods, and that the estimated coefficients represent the marginal effects of the independent variables. The results obtained in Van Praag and Ferrer-i-Carbonell (2008) suggest that the results of the estimates by POLS and by ordered probit are almost the same according to a multiplication factor. The results obtained for a POLS estimation are consistent with those obtained with an Ordered Probit.

The POLS estimates try to avoid the problems of the cardinality assumption so that the transformation consists first of calculating the relative frequencies of the different categories and then putting the frequencies in a standard normal distribution to obtain a dependent variable with a standard normal distribution, cardinal and unbiased scale.

The ordered response categories $k = 1, ..., K$ of y_{it} are interpreted as continuous values of the latent variable y_{it}. However, while assuming cardinality of the ordered responses may lead to biased estimates, numerous studies have shown evidence that the bias is moderate.

Therefore, following these authors, the regression will be estimated through the Probit-Adapted OLS (POLS) method. The POLS model is very similar to an Ordered Probit, but unlike it, it requires an additional assumption, which is the normal distribution of the error term. Thus, a linear model with fixed effects assumes cardinality and makes use of the entire variation in ordered responses of individuals, while taking into account non-random personality characteristics.

One of the main limitations of the model to be estimated are its endogeneity problems. When evaluating preferences for redistribution, a range of subjective variables may come into play, these may depend on different factors associated with the respondent's state of mind (his state on the day he was interviewed), or on unobservable factors related to personality. It could also happen that those who have experienced certain trajectories in terms of variation in income level, or have experienced social mobility, have certain preferences. This indicates that endogeneity may exist as a consequence of the correlation between regressors and the explained variable. Another endogeneity factor could be educational level: individuals with a higher education level may incorporate more information when forming their preferences.

There could also be relevant measurement errors. However, one advantage of the data used is that the survey was prepared in the native language of the respondents. In addition, other alternative questions that could approximate preferences, such as the degree of agreement with the increase in taxes, do not solve the problem: the individual may disagree with a certain tax design but still demand redistribution, public services, etc.

There could also be a correlation between the regressors and the error term in the presence of missing relevant variables, such as income. That is, in the case of omitted relevant variables, the estimators that emerge from the regression could be biased and inconsistent. Such is the case of risk aversion, which is why risk-neutral individuals are assumed, and the same occurs with inequality aversion. In the case of the income, an attempt is made to correct it by incorporating subjective income as a proxy.

A useful tool to correct this problem is the Instrumental Variables (IV) method, to obtain consistent and efficient results. Finding an instrument that meets the necessary requirements is

not easy, but it can be done in future research. It should be noted, however, that most previous papers on this topic do not use IV in its estimates.

6. Main Results

This section presents the results obtained. It is divided into three sub-sections: first, a summary of descriptive statistics about the main variables used in the analysis and their variation by year and by country; secondly, the results of the econometric estimates and in the last sub-section a brief robustness analysis.

6.1 Descriptive Statistics

First, Table 2 shows the evolution of the variables of interest to test the POUM hypothesis by year. Regarding the sense of justice or injustice in regards to the distribution of income, an increase of perception that the distribution of income is very unfair is observed over the years; at the same time, the proportion of individuals who perceive that it is fair increases in the first years and in 2015 it starts decreasing. If one assumes that when individuals perceive injustice they will demand redistribution, this result is consistent with the previous drop in inequality and the more recent slowdown of it.

On the other hand, the mobility perspectives show an ambiguous evolution. The responses are polarized: over time the percentages of those who respond 'much worse' or 'much better' increase, while the responses of 'worse' or 'better' decrease. Finally, intergenerational educational mobility

Table 2
Interest variables per year.

	2009	2010	2011	2013	2015	2016	2017	2018
Fair distribution								
Very fair	2.6	2.5	2.3	3.4	2.2	2.6	2.2	1.9
Fair	19.3	19.4	18.2	23.7	22.6	18.9	16.9	14.6
Unfair	53.5	53.3	55.3	47.6	49.2	49.5	52.1	52.0
Very unfair	24.6	24.8	24.2	25.4	25.9	28.9	28.8	31.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mobile perspectives								
Much worse	4.9	3.5	3.7	2.6	3.5	6.2	6.0	8.0
Worse	11.9	9.6	10.2	8.0	8.9	12.2	9.9	10.3
Equal	35.2	38.9	40.4	34.8	33.5	37.5	35.3	33.6
Better	37.9	38.0	35.8	40.8	40.4	33.6	36.0	34.2
Much better	10.1	10.0	9.8	13.8	13.7	10.5	12.7	13.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Educational mobility								
Descending	5.4	5.5	5.5	5.6	5.7	5.3	6.4	5.5
Equal	57.2	57.8	57.5	54.3	52.6	53.2	51.2	54.2
Ascending	37.4	36.7	37.0	40.0	41.7	41.5	42.4	40.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: own elaboration based on Latinobarómetro.

remains fairly stable over time, with a slight decrease in those who maintain the educational level of their parents in favor of those who show upward mobility.

In summary, the evolution of the preferences for redistribution variable and mobility prospects seems to be consistent with the POUM hypothesis. There is a growing trend in the perspectives until 2015, coinciding with lower support for redistribution.

Table 3 presents the evolution by year of the main control variables. In the first place, political ideology presents variations from one year to another, but the percentages of right and left ideology tend to increase and those of the center and without ideology tend to decrease. Subjective income shows an increase in the proportion of middle and high income cases, which is also consistent with the hypothesis proposed and the trend in economic growth. Regarding the perception of corruption, it is observed that the proportion of people with a perception of moderate corruption falls and those with high perception of corruption increases. On the other

Table 3

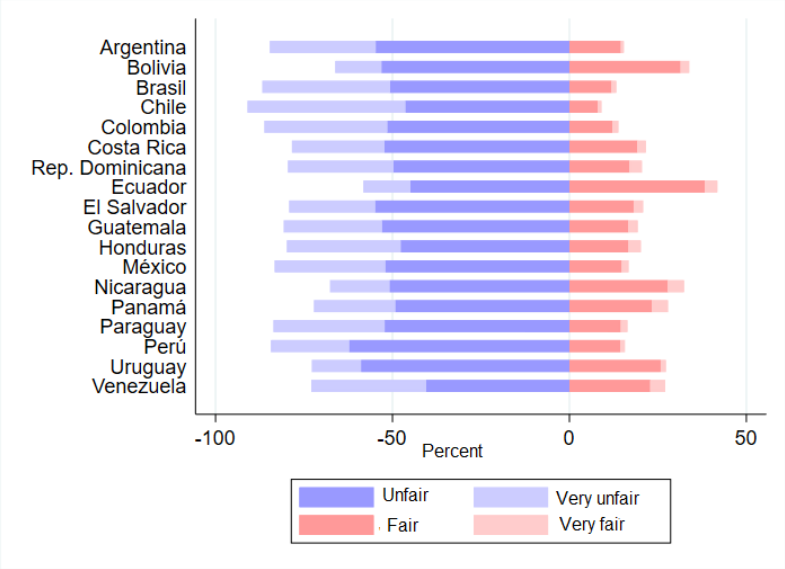
Control variables by year.

	2009	2010	2011	2013	2015	2016	2017	2018
Ideology								
Without ideology	14.0	12.5	13.0	11.2	12.3	9.6	8.8	11.3
Right	24.3	25.4	22.3	26.6	28.4	25.9	28.0	24.5
Center	42.3	44.0	46.0	39.5	37.8	40.9	41.1	40.3
Left	19.5	18.1	18.6	22.7	21.5	23.6	22.1	23.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Subjective income								
Very low	15.4	13.5	10.0	11.7	10.8	12.4	13.2	14.6
Low	39.6	38.6	34.8	33.0	33.4	34.5	32.1	32.5
Medium	37.7	40.0	46.0	45.6	44.3	41.8	42.7	40.7
High	7.3	7.9	9.2	9.7	11.4	11.3	12.1	12.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Perception of corruption								
Low	9.1	7.5	7.3	7.9	8.8	10.0	11.7	9.6
Average	31.7	30.4	29.8	27.9	25.8	26.0	24.5	23.8
High	59.2	62.1	62.9	64.2	65.4	63.9	63.9	66.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Satisfaction with democracy								
Not satisfied at all	14.3	15.3	15.3	17.3	20.0	23.4	25.9	28.5
Not very satisfied	39.2	38.9	44.3	42.3	39.4	41.3	42.4	45.8
Rather satisfied	33.1	35.2	32.0	27.7	30.0	25.3	22.6	18.6
Very satisfied	13.4	10.6	8.4	12.7	10.6	9.9	9.1	7.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Religiousness								
Atheist	11.6	12.4	14.1	12.5	13.1	18.6	19.3	18.4
Not religious	10.7	11.4	10.5	9.8	9.2	9.9	8.6	10.1
Not very religious	33.6	32.9	34.2	31.9	31.8	28.7	29.2	30.9
Religious	32.0	31.2	30.2	34.2	34.3	31.1	32.8	31.7
Very religious	12.0	12.1	11.1	11.6	11.5	11.8	10.2	9.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: own elaboration based on Latinobarómetro.

hand, in regards to the degree of satisfaction with democracy, a significant decline is observed year after year in the categories 'rather satisfied' and 'very satisfied', and an increase in the categories 'not very satisfied' and 'not satisfied at all'. Finally, religiosity remained relatively stable.

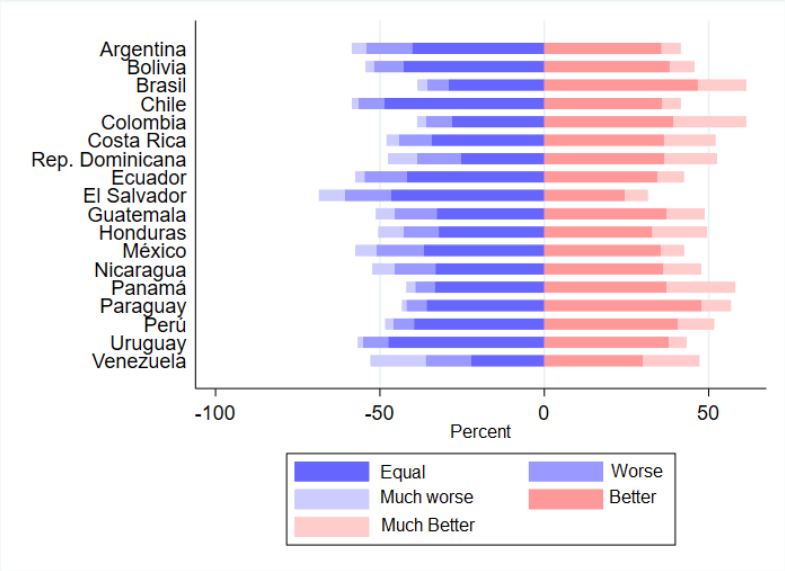
Descriptive graphics about the main variables used in the analysis are presented by country. Figure 1 shows the percentages of perceptions of justice in the income distribution by country. As already mentioned, this variable has been used in previous studies as an indirect measure of preferences for redistribution, under the assumption that if income distribution is perceived to be unfair, more redistribution will be demanded, and vice versa. In all countries, a wide difference can be seen in favor of perceptions of an unfair or very unfair distribution of income. The countries that show the highest perception of justice are Ecuador, followed by Bolivia. Chile has one of the highest perceptions of injustice in income distribution.



Source: own elaboration based on Latinobarómetro.

Figure 1. Perception of fairness in income distribution.

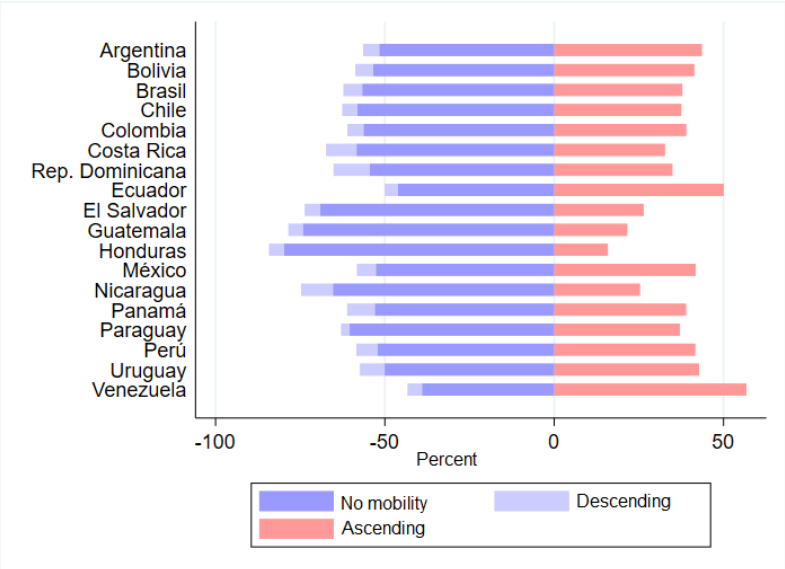
Figure 2 shows the percentages of mobility prospects by country, which is the main variable of interest in the analysis of the POUM hypothesis. At a general level, it is observed that the percentages of people who believe that their future economic situation will be 'better' or 'much better' than their current one are high. While in most countries there is a large percentage of individuals who believe that they will remain the same, in almost all cases the percentage of those who believe that they will be better or much better is higher. It should be noted that this is not the case in El Salvador, Chile, and Uruguay. In the case of Venezuela, it is observed that although the percentage of people who believe that they will be the same in the future is relatively low, that of those who believe that they will be worse or much worse is high. This does not imply that individuals in the country in question have a more or less optimistic personality, but rather that the answers depend on the context of the country.



Source: own elaboration based on Latinobarómetro.

Figure 2. Mobility perspectives.

Figure 3 shows intergenerational education mobility by country. Mobility, here is in absolute terms, that is, the total movement with respect to their parents in terms of education level, without taking into account mobility relative to the educational level of the rest of society, which has been increasing over time. A high percentage of upward education mobility is observed, and a low proportion of individuals who experienced downward mobility. This is a natural movement

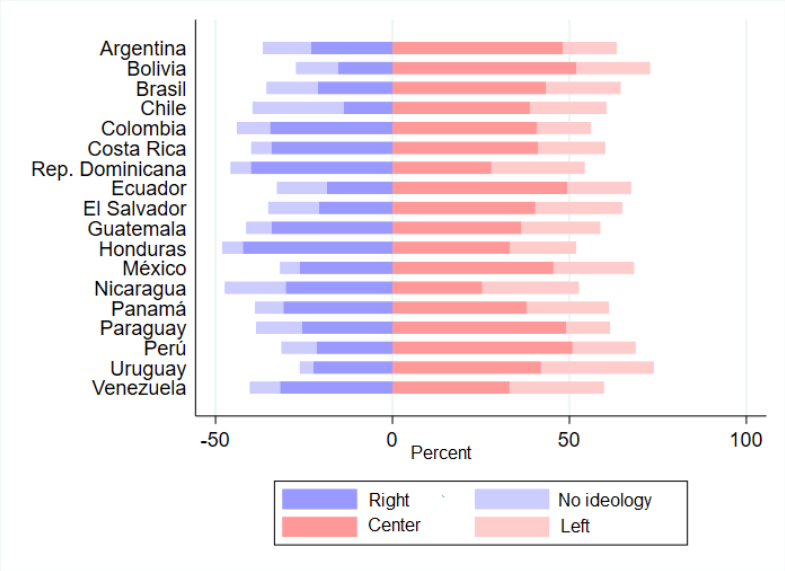


Source: own elaboration based on Latinobarómetro.

Figure 3. Intergenerational educational mobility.

due to the average increase in years of education, which is not necessarily true when it comes to educational mobility. In any case, in most cases it is found that the educational level has been maintained with respect to the previous generation. Venezuela and Ecuador stand out as the countries with the highest upward mobility, and Honduras has the most persistent educational levels.

Figure 4 shows that in most countries there is a predominance of the center ideology. In some cases, such as Bolivia, Chile and Uruguay, a higher percentage of the population declares themselves to be on the left than on the right, in the rest, the percentages of left and right are similar or the right is considerably higher than the left. It should be noted that in the case of Chile there is a high percentage of individuals who declare themselves as having no ideology.



Source: own elaboration based on Latinobarómetro.

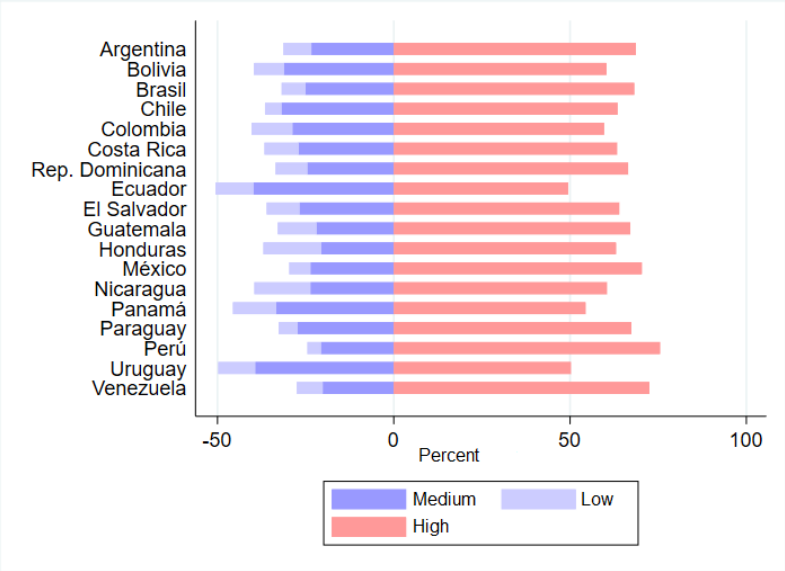
Figure 4. Political ideology.

Figure 5 indicates that a high perception of corruption predominates, with Mexico, Peru and Venezuela being places where the perception of corruption is highest. Ecuador and Uruguay show the lowest perceptions of corruption. Figure 6 shows that with the exception of Uruguay, in all cases the majority are more dissatisfied than satisfied with the functioning of democracy in their country.

6.2 Econometric Estimates

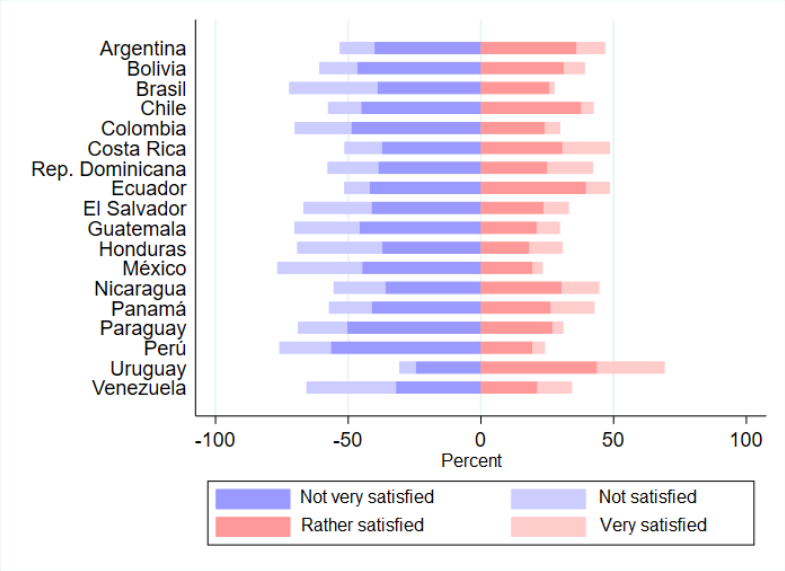
Table 4 shows the results of the estimates of the POLS model presented in section 5.3. Two models are presented, using the perception of justice in income distribution as a proxy of preferences for redistribution.[4] A model including quality variables of the institutions (perceptions

[4]Given the order of the categories, the higher the value of the variable, the higher the perceived injustice, and the higher the preferences for redistribution.



Source: own elaboration based on Latinobarómetro.

Figure 5. Corruption perception.



Source: own elaboration based on Latinobarómetro.

Figure 6. Degree of satisfaction with democracy.

of corruption and satisfaction with democracy) and another without them are presented. Both cases include dummies by country and by year.[5]

One relevant result is that variables associated with perception of mobility are statistically

[5]For variables with more than two categories, one of them is omitted. The omitted dummies are in order: very low mobility prospects, descending inter-generational educational mobility, low educational level, no religion, no ideology, very low subjective income, low perception of corruption, and not satisfied with democracy.

Table 4

OLS Probit-Adapted Estimates (POLS).

Variables	Fair distribution	Fair distribution
Low mobility prospects	-0.218***	-0.150***
	(0.0150)	(0.0149)
Medium mobility prospects	-0.415***	-0.275***
	(0.0135)	(0.0135)
High mobility prospects	-0.565***	-0.366***
	(0.0135)	(0.0137)
Very high mobility prospects	-0.709***	-0.466***
	(0.0155)	(0.0155)
No intergenerational education mobility	-0.0557***	-0.0458***
	(0.0125)	(0.0120)
Upward intergenerational education mobility	-0.0791***	-0.0670***
	(0.0135)	(0.0131)
Age	0.000722***	0.00111***
	(0.000205)	(0.000202)
Male	-0.0189***	-0.00787
	(0.00573)	(0.00558)
Average education level	0.0575***	0.0429***
	(0.00889)	(0.00870)
Higher education level	0.167***	0.142***
	(0.0107)	(0.0104)
Non Religious	0.0167	0.0163
	(0.0115)	(0.0114)
Not very Religious	-0.0421***	-0.0339***
	(0.00927)	(0.00913)
Religious	-0.0738***	-0.0552***
	(0.00988)	(0.00966)
Very Religious	-0.0574***	-0.0377***
	(0.0120)	(0.0118)
Married / union	0.0276***	0.0257***
	(0.00579)	(0.00567)
Ideology - right	-0.176***	-0.110***
	(0.0116)	(0.0117)
Ideology - center	-0.125***	-0.0825***
	(0.0110)	(0.0111)
Ideology - left	-0.200***	-0.127***
	(0.0120)	(0.0120)
Subjective income - low	-0.144***	-0.118***
	(0.00960)	(0.00968)
Subjective income - average	-0.273***	-0.214***
	(0.00981)	(0.00982)
Subjective income - high	-0.354***	-0.275***
	(0.0124)	(0.0123)
Gini	-0.00243	0.00507**
	(0.00219)	(0.00216)
Log. GDP per capita	-0.122***	-0.116***
	(0.0318)	(0.0307)
Corruption perception - average		0.0454***
		(0.0108)
Corruption perception - high		0.244***
		(0.0103)
Satisfaction with democracy - not very satisfied		-0.243***
		(0.00749)
Satisfaction with democracy - rather satisfied		-0.536***
		(0.00886)
Satisfaction with democracy - very satisfied		-0.708***
		(0.0118)
Constant	2.178***	1.756***
	(0.349)	(0.338)
Dummies year	Yes	Yes
Country Dummies	Yes	Yes
Observations	113,829	108,983
R-square	0.116	0.191

Note: *** p < 0.01, ** p < 0.05, * p < 0.1.

significant, with a negative sign, and that the coefficient associated with them is greater in absolute value as perceptions of mobility increase. This is consistent with the POUM hypothesis,

since in the face of greater prospects for economic improvement, there exists a increased perception that income distribution is fair and therefore there is less preference for redistribution. This implies a change with respect to previous studies of the POUM hypothesis that showed that it was true in Europe and the United States but not in Latin America.

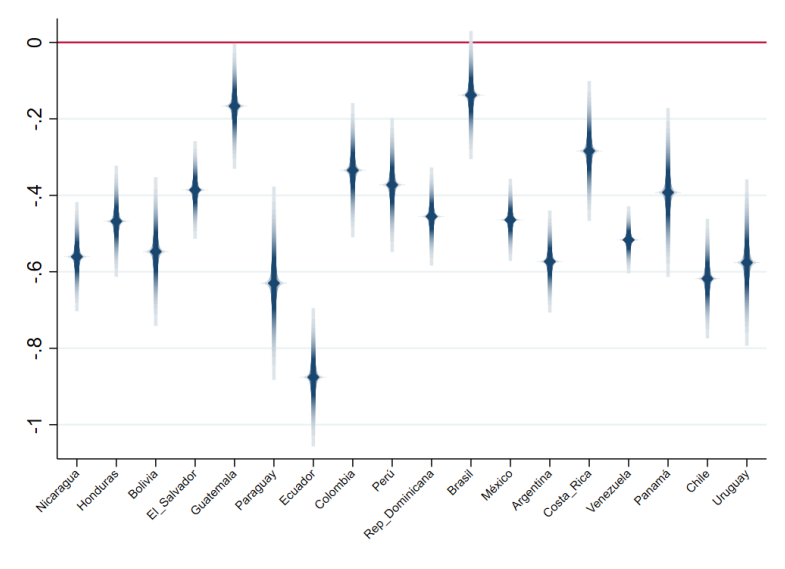
Regarding educational intergenerational mobility (secondary hypothesis a), we can observe that in this case it does have a significant effect. Its sign is negative, and it increases in absolute value in the case of upward mobility so that having experienced upward mobility increases the perception of justice in income distribution. Age shows a positive sign, so that the older the age, the greater the perception of injustice in the income distribution. On the other hand, being a man has a negative sign, meaning that men perceive income distribution to be more just than women do. The educational level presents a positive and higher sign in the case of higher education, so that despite the fact that education is associated with higher income, this is reflecting other effects of education on the perception of justice in the income distribution.

Religious commitment (secondary hypothesis b) positively affects the perception of a just income distribution. The married variable is significant and has a positive sign, so being married has a negative impact on the perception of justice, which could increase the demand for redistribution. The variables corresponding to ideology are significant and with negative sign, but there is no relationship between being from the left, right or center and the perception of justice. In the case of subjective income, the expected results are obtained: the higher the income, the greater the perception of justice in the distribution of income, and the lower the demand for redistribution. Finally, the Gini index is not significant, and the logarithm of GDP per capita has a negative sign, so that the higher GDP per capita, the greater the perception of justice in income distribution.

The second model is the same but incorporates the institutional quality variables, such as the perception of corruption and satisfaction with democracy (secondary hypothesis c). The results of the variables mentioned in the previous model are generally maintained when these variables are included, except for example the Gini index, which becomes significant and has a positive sign; that is, a rise in the Gini increases the perception of injustice in the distribution of income, which is in line with expectations. With regard to corruption perception, in line with Hauk et al. (2017), the greater the perception of corruption, the greater the perception of injustice in distribution. On the contrary, the greater the satisfaction with democracy, the greater the perception of justice in income distribution.

Summarizing, with the analysis of the POLS models we can see that expectations of mobility are positively correlated with the perception of justice in income distribution, with and without controls for variables related to the quality of the institutions. This result would imply less demand for redistribution and therefor, is consistent with the POUM hypothesis.

This analysis was also made for each country separately in addition to Latin America as a whole. It is observed that for some countries the POUM hypothesis is fulfilled and for others it is not. The regressions at the country level are available upon request. In Figure 7, we can see that there is no clear trend regarding the fulfillment of the POUM hypothesis and the country's GDP per capita.



Source: own elaboration based on Latinobarómetro.

Figure 7. Estimated coefficients of upward perspectives according to GDP per capita by country (2018) - perception of justice.

6.3 Robustness

Given the empirical limitations mentioned in the previous section, robustness tests were carried out in order to validate the results obtained. The fist model in Table 5 shows one of them, which consists on making the estimates eliminating all subjective variables. As we can see, the coefficient associated with the mobility prospect variables is negative and increases in absolute value as prospects increase. This is consistent with the POUM hypothesis.

Secondly, Table 5 presents the same model but with the following question used as an approximation to preferences for redistribution: *Degree of agreement with the market economy as the only system with which the country can become developed.* Response categories include: Strongly agree, Agree, Disagree and Strongly disagree. It is expected that the more an individual agrees with the market economy, the less she would demand redistribution. This variable is not used in the main analysis because the question leaves open the possibility that, for example, people who answer that they do not support the market economy are not actually in favor of redistribution, but rather that they demand the presence of the State in national security and defense or that they prefer redistributive actors besides the State, such as the church, NGOs, or charity. Nevertheless, some previous studies use beliefs in the market economy as a proxy for preferences for redistribution and there is a strong correlation with the perception of justice. The coefficients associated with mobility prospects are significant and decreasing with the more disagreement with the market economy as the best system, so it would be consistent with the POUM hypothesis.

Finally, the third model presented takes advantage of the fact that the 2011 survey includes a question about whether taxes are 'very high', 'high', 'correct', 'low' or 'very low'.[6] In principle,

[6]Once again, as the variable value increases, the lower the taxes are believed to be, and more likely it is that

Table 5
OLS Probit-Adapted Estimates (POLS).

Variables	(1) Fair distribution	(2) Market economy	(3) Taxes
Low mobility prospects	-0.245***	0.0203	0.0977
	(0.0139)	(0.0179)	(0.0624)
Average mobility prospects	-0.469***	-0.0395**	0.151**
	(0.0124)	(0.0161)	(0.0592)
High mobility prospects	-0.635***	-0.0927***	0.195***
	(0.0125)	(0.0160)	(0.0594)
Very high mobility prospects	-0.799***	-0.154***	0.240***
	(0.0145)	(0.0177)	(0.0631)
No intergenerational education mobility	-0.0392***	0.0112	-0.0328
	(0.0120)	(0.0142)	(0.0415)
Upward intergenerational education mobility	-0.0465***	0.000382	-0.0635
	(0.0130)	(0.0150)	(0.0419)
Age	0.000491***	-0.00182***	-0.000399
	(0.000188)	(0.000207)	(0.000530)
Male	-0.0265***	-0.0419***	0.0754***
	(0.00529)	(0.00594)	(0.0153)
Medium education level	0.0137	0.00802	0.0962***
	(0.00845)	(0.00949)	(0.0248)
Higher education level	0.0844***	0.0601***	0.151***
	(0.0100)	(0.0111)	(0.0294)
Married / union	0.0245***	-0.0165***	0.00726
	(0.00545)	(0.00614)	(0.0158)
Gini	-0.00277	0.00899***	-0.112***
	(0.00206)	(0.00246)	(0.0189)
Log. GDP per capita	-0.194***	0.164***	2.356***
	(0.0304)	(0.0345)	(0.356)
Constant	2.609***	-1.573***	-18.53***
	(0.334)	(0.365)	(3.137)
Dummies year	Yes	Yes	No
Country Dummies	Yes	Yes	Yes
Observations	129,076	104,573	16,344
R-squared	0.100	0.028	0.066

Notes: Robust standard errors in parentheses.
*** p < 0.01, ** p < 0.05, * p < 0.1.

it could be assumed that those who believe that taxes are too high are not in favor of redistribution and those who believe that they are low are in favor of redistribution. However, under this assumption, the evidence does not support the POUM hypothesis. This does not affect the robustness of the analysis, since there is no linear relationship between this question as a dependent variable and the true preferences for redistribution. For example, the respondent may believe that the taxes he pays are high, but that they are not redistributive and that the rich should pay more and thus redistribute. Besides, individuals with low income and low mobility prospects may think that taxes are too high for their income, while those with better economic performance are less pessimistic about taxes.

redistribution is demanded.

Another robustness test conducts this analysis at the country level. In several cases, statistically significant evidence of the fulfillment of the hypothesis is not obtained, which accounts for the heterogeneities between countries. However, in most cases the hypothesis is fulfilled. An exact relationship between economic growth and evidence favorable to the POUM hypothesis in the country or inequality and evidence favorable to the hypothesis is not observed. This accounts for cultural differences between countries regarding preferences for redistribution.

7. Conclusions

The results presented show the importance of mobility perspectives in the formation of preferences for redistribution in Latin American countries. Previous studies contribute favorable evidence about the POUM hypothesis for the United States and Europe; studies conducted on a previous period reject the hypothesis for Latin America. The present work, carried out for the period 2009–2018, shows evidence consistent with the POUM hypothesis for Latin America, since a negative correlation is observed between mobility perspectives and preferences for redistribution, controlling for multiple factors. Furthermore, the temporal evolution of both variables is also consistent with the hypothesis.

In general terms, Latin America had strong economic growth in the past decade accompanied by a drop in inequality, which is why these indicators more closely resemble those of the United States and Europe, for which the POUM hypothesis is fulfilled. Thus, a possible explanation for this change is that a country's income and inequality levels influence the fulfillment of the POUM hypothesis, that is, that after a certain threshold of development and social mobility, the prospects for mobility affect preferences for redistribution. Knowing the mechanisms that operate behind preferences for redistribution is particularly important in the Latin American context, which is characterized by a high level of inequality.

The results also show a low incidence of intergenerational educational mobility in preferences for redistribution, however this effect may be due to its consideration in absolute and not relative terms, and due to the immobility that is usually observed at the extremes according to previous studies for some of the countries analyzed. Alternatively, it may happen that the perceived experienced mobility differs from that which is actually experienced and this alters the relationship between intergenerational mobility and preferences. It is worth highlighting the importance of perceptions on corruption and the functioning of democracy in the variables studied, which is particularly important in the case of Latin America, since corruption and weak democracies have been characteristic problems of the region and differentiates it to some extent from the cases of Europe and the United States. Finally, a significant incidence of religiosity is observed in the formation of preferences for redistribution, which also has a particular weight in Latin America compared to other less religious regions. This is consistent with the idea that preferences for redistribution are more permanent individual characteristics and their formation are related to cultural norms and social identity.

However, given the limitations in terms of data availability and the methodology to interpret causality, some avenues of study remain open for future research. One of these is an analysis of

behavioral biases and risk aversion, which could modify the results obtained. Previous studies show that individuals have biased perceptions about their own position in the distribution, and if they believe that they are closer to the median than they are, they may have not have rational preferences for redistribution. However, the fulfillment of the POUM hypothesis indicates rational behavior. In addition, there is evidence for the importance of relative income, that is, of the position in relation to others in comparative terms, which may have an influence on mobility prospects and on the formation of preferences for redistribution.

Finally, for future research it is important to incorporate methodologies that allow a causal analysis and to obtain concluding results. Although Latinobarómetro is an excellent source of information, causal analysis would require data that includes other questions or experiments. Taking into account the recent evolution of inequality in Latin America, and in particular the maintenance or increase in the proportion of income appropriated by the highest income percentiles, it would be interesting to incorporate analysis on the influence of the media and the economic power groups in the formation of mobility prospects and other subjective perceptions that influence preferences for redistribution. The media could influence the alternation between redistributive and non-redistributive governments. It is plausible that the POUM hypothesis explains the recent change from left governments to right governments in many countries in the region: when individuals improved their economic performances due to the economic growth and inequality reduction, they felt vulnerable to the negative effects of redistribution. The data available in the database used on this topic is insufficient to incorporate them into the analysis, but other sources of information can be developed or other existing ones explored.

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