



Income inequality, distributive fairness and political trust in Latin America



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ABSTRACT

In the wake of rising levels of income inequality during the past two decades, widespread concerns emerged about the social and political consequences of the widening gap between the poor and the rich that can be observed in many established democracies. Several empirical studies substantiate the link between macro-level income inequality and political attitudes and behavior, pointing at its broad and negative implications for political equality. Accordingly, these implications are expected to be accentuated in contexts of high inequality, as is the case in Latin America. Despite these general concerns about the consequences of income inequality, few studies have accounted for the importance of individual perceptions of distributive fairness in regard to trust in political institutions. Even less is known about the extent to which distributive fairness perceptions co-vary with objective indicators of inequality. Moreover, the research in this area has traditionally focused on OECD countries, which have lower indexes of inequality than the rest of the world. This study aims at filling this gap by focusing on the relevance of distributive fairness perceptions and macro-level inequality for political trust and on how these two levels interact in Latin American countries. The analyses are based on the Latinobarometer survey 2011, which consists of 18 countries. Multilevel estimations suggest that both dimensions of inequality are negatively associated with political trust but that higher levels of macro-level inequality attenuate rather than increase the strength of the negative association between distributive fairness perceptions and political trust.

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1. Introduction

Income inequality and its far-reaching political, economic and social implications have increasingly been gaining importance on national and international political agendas alike (McCall and Percheski, 2010; OECD, 2008, 2012). While the causes of income inequality can be manifold as they mainly revolve around increasing gaps in market and capital income, weakening redistributive effectiveness of taxation policies and in-kind benefits, changing household structures or less effective employment protection legislation and processes of globalization, there is widespread agreement on income inequality's disturbing challenges to social cohesion and political stability (Nolan et al., 2013; Piketty, 2014; Stiglitz, 2012). Apart from its effects on social mobility, life expectancy or happiness (Delhey and Kohler, 2011; Wilkinson and Pickett, 2010), high levels of income inequality impact a broad range of values, attitudes and behavior that are related to social distrust, less solidarity,

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corruption, bad governance, or weakening political support (Anderson and Singer, 2008; Coburn, 2000; Cozzolino, 2011; Gustavsson and Jordahl, 2008; Hartner-Tiefenthaler et al., 2012; Horn, 2011; Karakoc, 2013; Lim and Sander, 2013; Newton and Zmerli, 2011; Oh, 2012; Park and Subramanian, 2012; Paskov and Dewilde, 2012; Pryor, 2012; Rothstein, 2011; Tyler et al., 1985; Uslaner, 2008, 2011). As an impediment to political equality, economic inequality may also weaken the very foundation of democratic societies (Oh, 2012).

Among the myriad of indicators presumably affected by economic inequality, political trust has recently attracted particular attention given its pivotal role in the stability and legitimacy of democratic regimes (Anderson and Singer, 2008; Newton and Zmerli, 2011; Uslaner, 2011). Generally, legitimacy for democratic systems and their leaders emanates from effective rule of law, separation of powers, and the pursuit of the common good, as well as from trustworthy, transparent, fair, accountable and responsive institutions and actors. Under these conditions, citizens are particularly willing to respect the law, adhere to norms of good citizenship, and become more interested in politics, more co-operative and more involved in civic affairs (Putnam, 1993). As a consequence and to the extent that political institutions and actors are indeed held accountable by the public for a fair distribution of resources in society, political trust may also be highly susceptible to large or increasing income gaps. Despite the alleged universality of its far-reaching implications, a broad range of recent comparative empirical research has either focused on advanced industrial societies where levels of inequality are rather modest or on transitional countries such as Central and Eastern European states that have been exposed to remarkably increasing levels of economic inequality over the past two decades (Lancee and van de Werfhorst, 2011, 2012; Solt, 2008; Uslaner, 2011; van de Werfhorst et al., 2012). While empirical evidence suggests consistent negative consequences of rapidly increasing levels of income inequality in countries of transition, comparative analyses of advanced industrial societies provide rather inconclusive results.

By contrast, individual perceptions and negative evaluations of income inequality, which have been shifting lately to the forefront of scientific trust research, appear to exert a strong and direct impact on political support and legitimacy irrespective of an individual's socioeconomic background (Jost and Major, 2001; Kluegel et al., 1995; Kluegel and Smith, 1986; Kumlin, 2004; Loveless and Whitefield, 2011; Tyler, 1997, 2006). Although it is increasingly becoming evident that individual perceptions of inequality fail to accurately reflect trends of income inequality at the country level (Aalberg, 2003; Malahy et al., 2009), tensions and conflicts within societies arise when inequalities are perceived as illegitimate, unfair or unjust (Noll and Roberts, 2003). Accordingly, the corroding influence of income inequality on democratic legitimacy unfolds itself through multiple layers.

To advance this evolving strand of research, the present study focuses on Latin America, the region with the enduringly highest inequality indicators worldwide and where the impact of inequality on political trust acquires an additional relevance given the antecedents of authoritarian and military regimes during the last century. Its objectives are thus twofold: on the one hand, to analyze the extent to which macro-level inequality is associated with political trust in Latin America, and on the other, to study whether and how socio-psychological processes related to individual perceptions of distributive fairness play a role in the association between income inequality and political trust. To this end, we pursue the following research questions: To what extent is macro-level income inequality associated with political trust in Latin American societies? Which roles do individual perceptions of distributive fairness play in analyzing trust in political institutions? Does the strength of the association between the perception of distributive fairness and political trust vary according to the countries' levels of income inequality? Finally, to what extent does individual social status moderate the association between distributive fairness perceptions and political trust?

This study draws on the Latinobarometer survey data from 2011 encompassing 18 Latin American countries and macro-level indicators of income inequality, quality of democracy and economic well-being. Embedded in a multilevel research design, the study investigates the complex interrelationships between objectively measurable income inequality and subjective perceptions of a fair societal income distribution and political trust.

In the subsequent sections, we will first lay out the conceptual framework of political trust and its empirical antecedents with a particular focus on the relevance of objectively measurable levels of income inequality and individual distributive fairness perceptions. We then describe the institutional causes of more recent trends of income inequality in Latin America and subsequently derive and discuss our hypotheses. The following empirical section investigates the macro–micro linkage between the two dimensions of income inequality and their influence on political trust. Concomitantly, we will also test whether the associations between inequality and political trust still hold when measures of democratic and economic performance as well as individual social status are taken into account. The concluding section offers a brief summary of the main empirical insights and discusses major implications.

2. Political trust and income inequality

2.1. Conceptual framework and empirical foundations of political trust

The notion of political trust and its legitimizing and stabilizing function are closely related to David Easton's concept of political and system support (1965). Considering nation-states as political systems, system support is defined as individual orientations toward the nation-state, its institutions and actors upon which its legitimacy ultimately rests. More generally, Easton distinguishes between three distinct layers of the political system: the nation, the state, and incumbent authorities

that can be endowed with deviating levels of positive support or acceptance (Easton, 1965; Norris, 2011, 23). As an extension of the original Eastonian concept of system support, Norris puts forward the concept of political support, which she conceives “as a multidimensional phenomenon ranging on a continuum from the most diffuse to the most specific levels” (2011, 24).

Following Easton’s and Norris’ general framework, the indicator of political support chosen for this study taps the most specific components, such as trust in incumbent officeholders and confidence in political institutions, which we define here as political trust. Political trust serves as a conceptual device that “has been designed as a middle-range indicator of support between the specific political actors in charge of every institution and the overarching principles of democracy in which specific institutions are embedded in a given polity” (Zmerli et al., 2007, 41).

Generally, the investigation of the origins of political trust mainly draws on two explanatory approaches. The first approach reflects a top-down perspective aiming at the relevance of institutional performance for the formation of political trust. According to this strand of arguments, the perceived trustworthiness of political institutions and actors is, by and large, a function of their ability to provide citizens with a political and economic environment that guarantees political rights and civil liberties; lives up to ethical, fair, just and transparent standards; and ensures economic prosperity for substantial parts of society (Mishler and Rose, 2005; Zmerli et al., 2007).

The nature of the second strand of arguments reveals a bottom-up approach, claiming that the erosion or even the complete absence of social capital or a lack of social cohesion leads to a severe downgrading of political trust (Mishler and Rose, 2005; Newton, 2006; Newton and Norris, 2000; Zmerli and Newton, 2008). In this sense, economic inequality represents a key element to take into account in regard to political trust.

2.2. Income inequality and political trust

Perceived from a broader perspective, however, matters of social cohesion and institutional performance are intrinsically related to the fabric of any given society. For instance, where distribution of resources is biased or, in other words, inequality prevails, social cohesion is assumed to be affected as well. According to Uslaner, income inequality entails a number of ramifications. It leads to lower social trust, “which in turn results in more corruption, and then to even more inequality” (Uslaner, 2008, 176, cited in Uslaner, 2011, 142). Most importantly, though, this vicious circle weakens political trust as well (Uslaner, 2008, 178). On the individual level, the underlying mechanisms are assumed to impinge on ordinary people’s sense of system fairness, autonomy and optimism for the future, which “undermine the moral dictates of treating your neighbors honestly (...)” (Uslaner, 2011, 143). Above all, inequality ultimately results in “distorting the key institutions of fairness in society (...)” (Uslaner, 2011, 143).

Rothstein describes similar interrelationships, culminating in his diagnosis of a *social trap*. As economic and social equality are required to build social trust and the latter is considered to be an important ingredient in a more egalitarian society, the prevalence of distrust results in more distrust. “In societies with high levels of economic inequality and with few (or inefficient) policies in place for increasing equality of opportunity, there is less concern for people of different backgrounds” (2011, 154; insertion in original). Social trust and equality, however, are key prerequisites of a trustworthy and high-quality government (2011, 153).

In fact, a number of comparative studies of this emerging field of research corroborate that high levels of income inequality negatively affect social trust, solidarity, co-operation, civic engagement, social mobility and cohesion, educational attainment, and people’s state of health, happiness and life expectancy (Bjørnskov, 2012; Coburn, 2000; Cozzolino, 2011; Fuller-Thomson and Gadalla, 2008; Gustavsson and Jordahl, 2008; Neville, 2012; Oishi et al., 2011; Oshio and Kobayashi, 2010; Park and Subramanian, 2012; Paskov and Dewilde, 2012; Pryor, 2012; Wilkinson and Pickett, 2010; but see also Fairbrother & Martin (2013) for deviating results based on a time-series analysis in the U.S.). Less empirical consistency exists, however, with regard to political outcomes. In particular, comparative studies based on European data and geared toward political attitudes and behavior provide ambiguous, at times even contradicting empirical evidence about the impact of macro-level inequality (Lancee and van de Werfhorst, 2012; Stockemer and Scruggs, 2012; van de Werfhorst et al., 2012; but see also Anderson and Singer, 2008; Hartner-Tiefenthaler et al., 2012; Horn, 2011; Oh, 2012; Schlozman et al., 2012).

To some extent, these inconsistent results presumably empirically reflect the rival theories of the political consequences of economic inequality. While the *resource theory* postulates an increasing division between the “haves” and the “have-nots”, which implies tendencies of segregation and a continuous relative material deprivation of the latter and results in depressed political involvement of the “have-nots”, *conflict theory* assumes that as income inequality increases, conflicts of interest gain in importance as well, which ultimately provides fertile ground for political articulation of different sorts (Karakoc, 2013, 200f.). In fact, empirical studies show that income inequality affects different societal strata in different ways depending on their level of risk aversion or socio-economic vulnerability (Fraile and Pardo-Prado, 2013). According to Anderson and Singer (2008), for example, citizens leaning toward the leftist side of the political spectrum are more sensitive to economic inequality and therefore tend to be more politically distrustful when issues of inequality dominate the political agenda. As for policy preferences, however, socio-economic status does not diminish stronger preferences for redistribution in more unequal countries, a pattern that is prevalent in European societies (Tóth and Keller, 2011, 46). In this regard, in general terms, the first hypothesis of this study is that income inequality is related to lower levels of political trust. However, the level of this association could vary with the extent to which inequality is perceived as unfair, as described next.

2.3. Perceptions of distributive fairness and political trust

In contrast to the ambiguous evidence regarding macro-level inequality and political trust, strikingly consistent empirical support exists with regard to its negative association with *individual* perceptions and evaluations of income inequality, which parallels Uslaner's argument about the severe implications of an individually perceived distortion of key institutions of fairness in society (2011, 143). To the extent to which an individual perceives the societal distribution of income as unfair, her political involvement may be affected as well. In fact, individuals are then *less* inclined to develop political and social trust, to comply with rules and norms, or to become politically active. This relationship also holds when individuals' self-interests or material risk propensity are taken into account (Anderson and Singer, 2008; Bartels, 2008; Kaltenthaler et al., 2008; Kumlin, 2004; Loveless and Whitefield, 2011; Marien and Hooghe, 2011; Tverdova, 2012; Whitefield and Loveless, 2013). Although only a limited number of comparative studies make explicit reference, they basically empirically confirm Tom Tyler's encompassing theoretical work on the concept and meaning of distributive justice (Tyler, 1997, 2006; Tyler et al., 1985).¹ Investigating the causes for political discontent, he shifts the theoretical and empirical focus away from outcome-based arguments and replaces them with psychological reasoning. In line with his arguments, distributive fairness relates to perceptions of "violations in principles of fairness in the allocation of outcomes" (Tyler et al., 1985, 702) and is conceived as an expression of deservingness within the body of relative deprivation theory.

Whether subjective perceptions of inequality are indeed an *accurate* reflection of income distribution at the societal level, however, is still a contested matter of debate. By contrast, in a multi-faceted manner, individuals' perceptions of societal income distribution may loosely cohere socio-economically (Aalberg, 2003; Malahy et al., 2009; Osberg and Smeeding, 2006; Sachweh, 2012; Wegener, 1987). The latter assessment also lends itself to a psychological model that contends that values held by individuals influence how they cognitively perceive the world (Aalberg, 2003, 111; Hochschild, 2001). As stated by Headey: "what ought to be largely influences perceptions of what is, rather than vice versa. Perceptions of justice determine perceptions of fact" (Headey, 1991, 593; see also Loveless and Whitefield, 2011). Moreover, individual perceptions of how fair income is distributed on the macro level (macro-justice) are intimately related to a person's perception of the fairness of her own economic standing (micro-justice). According to Wegener (1987), perceptions of inequality (micro-justice) do systematically deviate from objective inequality for psychological reasons. For instance, "low status respondents inflate their own position and the positions above their own are lowered, thus decreasing the distance from those at the top – and the perceived level of inequality" (Aalberg, 2003, 90).

Sachweh and Olafsdottir (2012) corroborate empirically that not only do citizens' perceptions of levels of inequality differ systematically across countries but they also express differences in the extent of *preferred* levels of inequality. Generally, societies with *higher* levels of inequality are also more in favor of more unequal income distributions (2012: 160). In accordance with the *adjustment hypothesis*, which postulates that "the public will adjust their values in accordance with the development of society" (Aalberg, 2003, 12), these findings suggest that there is an accommodation effect with the levels of inequality one is used to (Aalberg, 2003). However, it is these adjusted perceptions that eventually trigger political involvement.

Generally, notions of distributive justice are based on three different principles: equity, equality and meeting the basic needs of everybody (Forsé, 2009, 100).² This complexity is also reflected within individuals as they largely do not hold consistent attitudes toward inequality but are "torn between different and partly conflicting values and principles (...)" (Sachweh, 2012, 424). While all three are legitimate and complimentary criteria, societies as well as individuals of different socio-economic backgrounds may vary according to the importance they assign to these three principles (Kulin and Svallfors, 2013; Mau and Wrobel, 2006, 384f; Noll and Roberts, 2003; Svallfors, 2007, 2012; van der Toorn et al., 2010). According to empirical evidence, social relations and polity, for example, are mostly based on egalitarian norms, while differentiating norms prevail in the economic realm (Sachweh, 2012, 424). By and large, however, people draw on a "shared normative repertoire" of perceptions and judgments of inequality instead of "class-specific moral economies of inequality" (Sachweh, 2012, 437). This assessment is further substantiated by Sachweh's and Olafsdottir's cross-country study, which suggests "that aspirations towards greater equality do not seem to be closely related to the patterns of privilege and disadvantage set up (or induced) by the welfare state" (2012: 161; parenthesis in original). Instead, it shows that higher socio-economic status can either be unrelated or even favorable to more demands for equality.

In sum, we are confronted with a strongly mixed empirical pattern: objective measures of income inequality depict rather inconsistent associations with political attitudes and behavior, while individual perceptions of unfair income distributions consistently involve negative associations. Furthermore, and in accordance with the adjustment hypothesis, higher objective levels of inequality could *diminish* rather than exacerbate the strength of relationship between subjective perceptions of inequality and political trust. Finally, the moderating influence of an individual's social status on the implications of perceptions of distributive fairness could be in contrast to common assumptions about the relevance of self-interest but needs to be further investigated.

¹ His contribution also extends to the notion of procedural justice, which is not the prime concern of our study.

² Some theoretical accounts distinguish a fourth dimension, i.e., utility or efficiency (Aalberg, 2003; Michelbach et al., 2003).

2.4. Income inequality in Latin America

Latin America holds the sad record of being the most unequal region in the world. Notwithstanding, in particular throughout the first half of the 20th century, several attempts were made to implement policies to counter these distributional imbalances. Sustained success, however, was rather limited. Because of the implications of the economic crises in the 1980s and structural adjustment programs, the 1980s and 1990s have been characterized by a *regressive bias* in policy making (Hoffman and Centeno, 2003). The combined effect of fiscal adjustment, wage cuts and unemployment necessarily led to the deterioration of public social institutions that were put under financial strain. The reforms were applied in key areas such as health, pensions and education, as proposed in the World Bank 1990 report on poverty in which social services and benefits are consequently defined as private goods that should obey market forces, which is believed to distribute resources efficiently (Laurell, 2000). As a result of these reforms that dismantled the redistributive role of the state in Latin American countries (Rudra, 2002) – starting in Chile in the early 1980s – inequality indicators such as the Gini index increased steadily in those countries that adopted neoliberal policies (Coburn, 2000; Kenworthy, 1999; Laurell, 2000), overall keeping Latin America as the region with the highest economic inequality worldwide, as illustrated in the following table.

As depicted in Table 1, not only is the Latin American income distribution the most unequal in the world, but it has been that way at least since the 1960s (Berry, 1997; De Ferranti et al., 2003; Portes and Canak, 1981). What appears remarkable is that the high inequality has not reversed significantly during the economic recovery and democratic consolidation since 1990. Notwithstanding, a number of Latin American countries saw slightly diminishing albeit not consistent downward trends of inequality since the mid-1990s, which contrast with developments in most OECD countries, where income inequality has steadily been on the rise over the last 30 years (Castillo and Zmerli, 2012). The persistently high concentration of income in Latin America has been associated with a disintegration of public life, producing high crime rates in most Latin American cities, as well as the erosion of the middle class (Cornia, 2014; Hoffman, 2003; Lopez and Perry, 2008).

2.5. Model of analysis and hypotheses

Based on theoretical arguments and empirical evidence outlined above, our general hypothesis is that objective indicators of economic inequality and subjective perceptions and evaluations of income inequality are *negatively* associated with political trust. The subsequent hypotheses can be divided into two sub-sections. H1, H2 and H3 are informed by a large body of theoretical and empirical studies. By contrast, H4 and H5 are based on a more limited number of studies and are therefore rather explorative in nature.

A first specific hypothesis is that the high levels of income inequality as a contextual-level variable and characteristic of Latin American societies is associated with political trust in its own right, even when controlling for the effects of economic performance measures such as GDP per capita or system performance measures such as the quality of democracy as measured by the Freedom House and Polity IV indices (H1).

Second, subjective perceptions and evaluations of the fairness of income distribution are related to political trust: those who evaluate the income distribution as more unfair will exhibit *less* political trust (H2).

Third, satisfaction with the economy, as a proxy for individual performance satisfaction, and higher subjective social status will be positively associated with political trust (H3).

In explorative terms, we are interested in analyzing the interaction between objective and subjective inequality (i.e., perceptions of distributive fairness) with regard to political trust. In accordance with the adjustment hypothesis outlined above, we expect that in societies with higher levels of inequality, the evaluation of the income distribution as unfair will exhibit a weaker association with political trust than in societies with lower levels of inequality (H4).

Furthermore, we also pay attention to an interaction at the micro level, namely between perceptions of distributive fairness and subjective social status. In line with Sachweh's (2012) and Sachweh's and Olafsdottir's (2012) instructive empirical findings, we hypothesize that for those with a lower subjective social status, perceptions of the income distribution as unfair will be more weakly associated with political trust than for those of higher strata of social status (H5).

The hypotheses are summarized in Fig. 1, which represents our model of analysis:

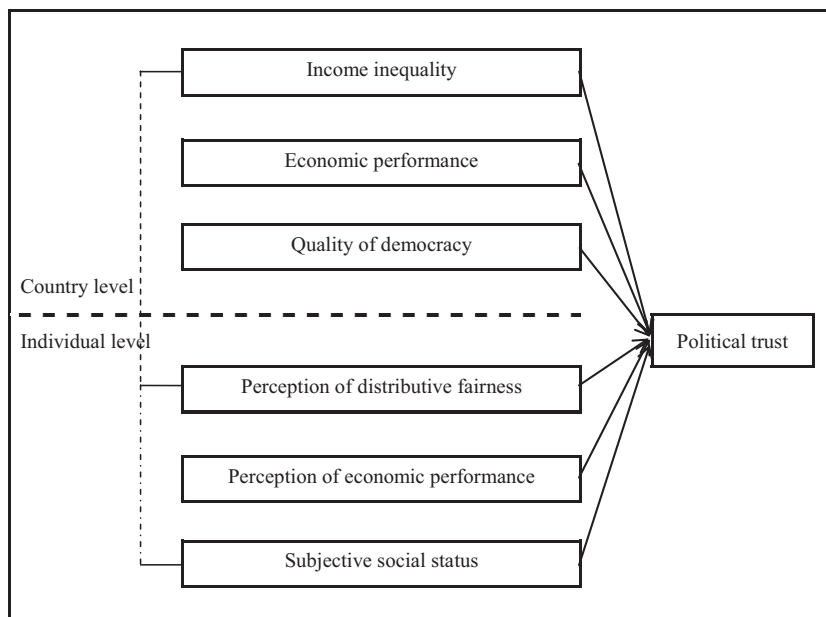
On the right-hand side of Fig. 1, political trust as the dependent variable is depicted. At the country level, our main interest is income inequality, where we contrast the association of this distributive measure with economic performance as GDP per capita and quality of democracy. At the individual level, we focus our attention on the perceived fairness of income distribution, which is compared with the potential role of other subjective measures such as the perception of economic performance and subjective social status. Moreover, on the individual level, we test if and to what extent the association between perceptions of distributive fairness and political trust varies with the perceived individual social status. Finally, we analyze the interaction between macro-level income inequality and the subjective evaluation of a fair income distribution. Both interactions are depicted as dotted lines. To avoid biased results due to omitted variables, we also control for social trust as a co-variate for which we expect a strong and positive association with political trust (not depicted in Fig. 1).

Table 1

Average Gini coefficients by regions and decades. Source: Deiningering and Squire (1996), for the 1960s to the 1990s. The 2000s decade is taken from Ortiz and Cummins (2011).

Region	Gini coefficients				
	1960s	1970s	1980s	1990s	2000s ^a
Latin America and the Caribbean	53.2	49.1	49.8	49.3	48.3
Sub-Saharan Africa	49.9	48.2	43.4	47.0	46.1
Middle East and North Africa	41.4	41.9	40.5	38.0	39.2
East Asia and the Pacific	37.4	39.9	38.7	38.1	40.0
South Asia	36.2	34.0	35.0	32.0	
Industrial countries	35.0	34.8	33.2	33.8	30.8
Eastern Europe	25.1	24.6	25.0	29.0	35.4

^a In this last column, some regions do not exactly match the previous categories of Deiningering and Squire (1996): East Asia and the Pacific together with South Asia correspond to Asia, and Eastern Europe includes Central Asia.

**Fig. 1.** Model of analysis.

3. Data, variables and methods

3.1. Data

The hypotheses were addressed using the *Latinobarometer* database. Latinobarometer is a public opinion project that from 1995 onwards has collected data in most Latin American countries and Spain, with samples of approximately 1200 cases per country. Each year, the study collects approximately 19000 face-to-face interviews of the adult population, representing more than 400 million Latin American inhabitants (www.latinobarometro.org). Parts of the survey's questions are replicated each year, and parts of them appear only in some years. The estimated error bias of the survey in the participating countries is about 3% on average.

For the analysis, we used the Latinobarometer survey conducted in 2011. This dataset contains 20204 cases. We excluded Spain as a non-Latin American country from the analysis, for which the final number of countries reaches 18: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela.

3.2. Variables

Table 2 presents the operationalization of the dependent variable in this study. For political trust, we built a mean index based on four items measuring confidence in four institutions.

Table 2

Dependent variable. Source: Latinobarometer 2011, own calculations based on weighted data.

Variable	Description	Values	Mean	SD
Political trust index	<i>Please look at this card and tell me how much confidence you have in each of the following groups, institutions or persons mentioned on the list: a lot, some, a little or no confidence?</i>	1. No confidence at all 2. Little confidence 3. Some confidence 4. A lot of confidence (Coding reversed for analyses)	2.09	0.70
	Government National congress/parliament Judiciary Political parties	Cronbach's alpha = 0.80		

The independent variables consisted of the two levels under analytical scrutiny (Table 3). The individual level variables covered the individual evaluation of distributive fairness, perception of economic performance, subjective social status and social trust. These variables were centered on the grand mean for the multilevel analyses. It is important to note, however, that while we continue to refer to the term “distributive fairness”, higher values of this variable depict perceptions of more unfair income distributions. We also considered age, gender and educational level as control variables in the estimation.

The country-level predictors included the Gini index as a proxy of income inequality, based on the equivalized income as calculated by the Socio-Economic Database for Latin America and the Caribbean for 2011 – SEDLAC 2012. Two other macro variables were obtained from the Quality of Government Institute dataset (Teorell et al., 2013): per capita Gross Domestic Product weighted for PPP and the Freedom House/Polity IV democratic index. The construction of this index is detailed as follows: “[S]cale ranges from 0–10 where 0 is least democratic and 10 most democratic. Average of Freedom House (fh_pr and fh_cl) is transformed to a scale 0–10 and Polity (p_polity2) is transformed to a scale 0–10. These variables are averaged into fh_polity2. The imputed version has imputed values for countries where data on Polity is missing by regressing Polity on the average Freedom House measure. Hadenius and Teorell (2005) show that this average index performs better both in terms of validity and reliability than its constituent parts” (Teorell et al., 2011, p. 46; insertions and references in original).

3.3. Methods

Models were estimated in a multilevel framework, considering individuals nested in countries that constitute the second-level units. This type of model is appropriate when working with nested data structures, as in the case of data to be analyzed in which there are both individual and contextual variables (Hox and Roberts, 2011). The estimation therefore takes into account a new source of variability attributed to the country, which implies a more accurate estimation of the standard errors. The analyses were performed with the statistical packages xtmixed and multilevel tools of Stata 12 (Möhring and Schmidt, 2012).

4. Empirical findings

4.1. Descriptive and correlational evidence

The analysis in this section begins with some descriptive measures followed by the results of the multilevel estimation. At first, we inspect our indicator of political trust in Latin American societies.

As observed in Fig. 2, there is variability between countries regarding the mean levels of political trust, with Venezuela and Uruguay as the countries with the highest trust in institutions, whereas Guatemala, Peru, the Dominican Republic and Honduras display the lowest trust levels. Each of these 18 Latin American countries faces a state of political *mistrust*.

To what extent are these scores related to subjective and objective indicators of economic distribution? Figs. 2 and 3 depict the association of political trust with the Gini index and perceptions of distributive fairness, respectively. In both cases, the relationship shows a negative tendency: as objective inequality and the perception of an unfair income distribution increase, political trust decreases. It is also relevant to notice the Gini levels in Fig. 2, indicating that Latin American societies continue to be exposed to comparatively high levels of income inequality. While the Gini average of OECD countries attained a value of 0.31 in the late 2000s, Latin American countries range between 0.40 and 0.55 with only one exception of a less unequal income distribution in Venezuela.³ A final graph (Fig. 4) depicts the association between perceptions of distributive fairness and economic inequality. As expected, countries with higher inequality show on average a stronger evaluation of the distribution as unfair. Nevertheless, it is also relevant to notice that, as argued before, the link between objective and subjective inequality is far from being straightforward, and societies with large inequality are not always the ones with the higher perception of (un)fairness.

³ For the OECD average, see <http://www.oecd.org/>.

Table 3
Independent variables.^a

Variable	Description	Mean	SD
Level 1			
Perception of distributive fairness	<i>How fair do you think the income distribution is in [country]?</i> 1. Very fair 2. Fair 3. Unfair 4. Very unfair	3.02	0.72
Perception of economic performance	<i>In general, how would you describe the country's present economic situation?</i> 1. Very bad 2. Bad 3. Average 4. Good 5. Very good	2.75	0.92
Subjective social status	<i>Imagine a staircase with 10 steps, in which on the first step are located the poorest and on the 10th step, the richest. Where would you put yourself on this staircase?</i> 1 (poorest) to 10 (richest)	4.60	1.98
Social trust	<i>Generally speaking, would you say that you can trust most people, or that you can never be too careful when dealing with others?</i> 1. One can trust most people 0. One can never be too careful when dealing with others	0.23 (%)	–
Educational level	1. University level 0. Other (lower) educational level	0.10 (%)	
Sex	1. Female 0. Male	0.50 (%)	
Age	In years	40.04	16.43
Level 2			
Gini index	Estimate of Gini from the Socio-Economic Database for Latin America and the Caribbean – SEDLAC (income inequality index), where 0 = no inequality, 1 = extreme inequality (2011)	0.46	0.05
GDP per capita	World development indicators – Country GDP per capita weighted for PPP, in thousands (2011)	8511.73	3547.14
Freedom House/Imputed Polity IV	Quality of democracy. Scale ranges from 0 to 10 where 0 is least democratic and 10 most democratic.	7.52	1.72

^a Variables centered on their grand means for the multilevel analyses.

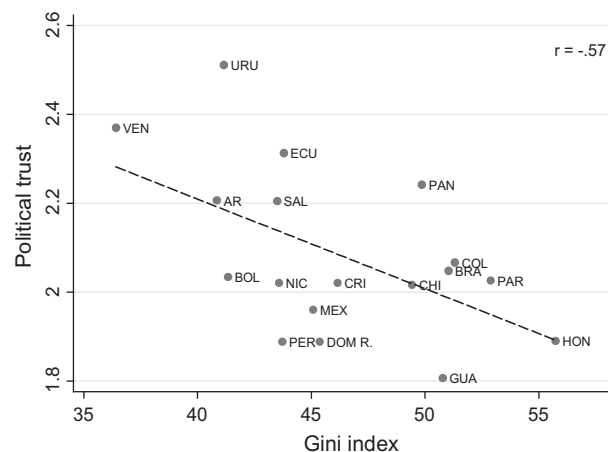


Fig. 2. Income inequality (Gini index) and political trust in Latin American countries.

4.2. Multilevel models

Table 4 presents the results of the multilevel estimations. The intraclass correlation for the null model (without predictors and not presented here) is 0.07, which corresponds to the amount of variance of political trust that can be attributed to the level 2 unit, meaning that 7% of the variance is determined by country-specific characteristics. Model 1 includes perceptions of distributive fairness that, in accordance with H2, reveal that those who evaluate the income distribution as more unfair

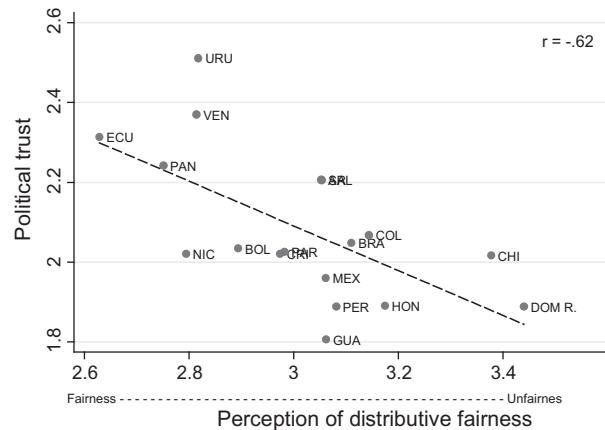


Fig. 3. Perceptions of distributive fairness and political trust in Latin American countries.

tend to distrust political institutions. We also analyzed this variable as a categorical predictor to test for non-linear effects, but these results also suggested a negative association as levels of distributive fairness increased (“very fair” = reference category; “fair” $b = -0.08$, $p = 0.29$; “unfair” $b = -.45$, $p < 0.01$; “very unfair” $b = -.64$, $p < 0.01$). The continuous version of the variable was kept for the following models as this makes interactions more parsimonious. Model 2 adds the other individual level predictors. In accordance with H3, this model shows that those with a more positive perception of the economic performance, with a higher subjective social status and more social trust display higher scores of political trust. The results of post-estimation contrasts show that distributive fairness is more strongly associated with political trust when compared to subjective social status ($\chi^2_{(1, N = 18,419)} = 100.48$, $p < .01$) and to social trust ($\chi^2_{(1, N = 18,419)} = 90.5$, $p < .01$), whereas no significant differences exist with the association between perceptions of economic performance and political trust ($\chi^2_{(1, N = 18,419)} = 2.29$, $p = .13$). Therefore, distributive fairness and perception of economic performance are both strongly associated with political trust. Assessing the strength of the relationships between education, age and gender and political trust, however, reveals no noteworthy result. Country-level variables are included in Model 3, where the only significant association is displayed by the Gini index in the expected direction according to H1: individuals from countries with larger income inequality tend to show, on average, lower levels of political trust. Surprisingly, objective economic performance and quality of democracy do not concomitantly exhibit significant associations with political trust. Models 4, 5 and 6 test for the relevance of interactions. In Model 4, the interaction tested is at the individual level between distributive fairness and subjective social status and confirms H5. The negative sign of the coefficient means that the association between distributive fairness and political trust is stronger (i.e., more negative) in individuals with *higher* subjective social status, as also observed in the analysis of the predictive marginal effects in Fig. 5. This means that fairness perceptions seem to matter more for those with higher subjective status in assessing the trustworthiness of political institutions, while overall, individuals who evaluate the income distribution as unfair tend to trust less irrespectively of their subjective status. We tested this interaction in Model 5 with the variables centered on their group means, to assess whether this effect is also significant when attending to how contexts affect individual attitudes by removing the

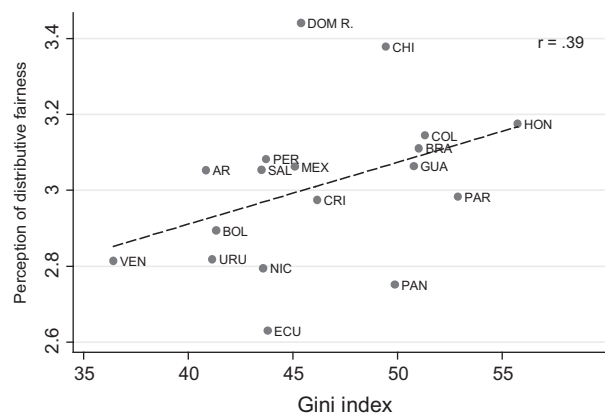


Fig. 4. Perceptions of distributive fairness and income inequality (Gini index) in Latin American countries.

Table 4

Multilevel models of political trust.

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Level 1</i>						
Perception of distributive fairness	–0.26** (10.34)	–0.17** (10.44)	–0.17** (10.48)	–0.17** (11.56)	–0.17** (10.30)	–0.17** (12.36)
Perception of economic performance		0.19** (12.43)	0.19** (12.44)	0.19** (12.61)	0.19** (12.49)	0.19** (12.70)
Subjective social status		0.02** (4.12)	0.02** (4.11)	0.02** (4.01)	0.02** (4.00)	0.02** (4.05)
Social trust		0.16** (5.66)	0.16** (5.67)	0.16** (5.56)	0.16** (5.58)	0.15** (5.56)
Education (university)		0.01 (0.25)	0.01 (0.23)	0.01 (0.25)	0.01 (0.24)	0.01 (0.26)
Sex		0.00 (0.03)	0.00 (0.03)	0.00 (0.02)	0.00 (0.03)	0.00 (0.02)
Age		0.00 (0.24)	0.00 (0.23)	0.00 (0.12)	0.00 (0.16)	0.00 (0.06)
Distributive fairness × Subjective social status				–0.02** (3.29)	–0.01 (1.81)	
<i>Level 2</i>						
Gini index			–0.01* (2.42)	–0.01* (2.43)	–0.02* (2.43)	–0.02* (2.46)
GDP per capita			0.00 (0.79)	0.00 (0.83)	0.00 (1.06)	0.00 (0.83)
Freedom House/Polity IV			–0.00 (0.05)	–0.00 (0.04)	0.00 (0.16)	0.01 (0.24)
Distributive fairness × Gini index						0.01** (2.71)
Constant	2.09** (56.10)	2.05** (68.23)	2.06** (17.63)	2.06** (17.73)	2.05** (11.72)	2.04** (12.15)
Between level variance	0.02** (10.37)	0.01** (11.93)	0.01** (12.51)	0.01** (12.36)	0.02** (14.77)	0.00** (15.79)
Individual level variance	0.42** (27.20)	0.38** (31.91)	0.38** (31.91)	0.38** (31.97)	0.38** (31.96)	0.38** (31.92)
Random slopes variance						0.02** (14.67)
Deviance	–18121.41	–17302.84	–17299.57	–17277.76	–17300.33	–17252.55
df	1.0	7.0	10.0	11.0	11.0	11.0

Restricted maximum likelihood estimation, unstandardized coefficients. Z-values in parenthesis. Variables centered on their grand means. Distributive fairness centered on its group mean in Models 5 and 6 (cross-level interaction model). Listwise deletion, $N = 18,419$.

* $p < 0.05$.

** $p < 0.01$.

between-cluster variation from the predictor variables (Paccagnella, 2006; Enders and Tofghi, 2007). As we observe, the interaction is no longer significant at the 95% level, although when relaxing this standard, it is at the 90% level of significance. However, more important than arguing about the significance level, what we observe here is that part of the significant interaction of the grand-mean-centered variables (Model 4) is related to country differences. We tested this assumption by removing macro-level predictors from Model 4, and actually, when excluding the Gini index, the interaction based on the group-mean-centered variables is significant again ($b = -.12$, $Z = -3.19$, $p < 0.01$). Therefore, the interaction is mostly related to the between-level variance, meaning that in countries with a lower average of subjective social status, the average perception of distributive fairness is less strongly associated with political trust. Nevertheless, these findings must be taken with caution given the small number of level-two cases. Turning now to Model 6, the interaction between objective and subjective income distribution aims at testing the micro–macro associations between inequality and political trust. In this interaction, the individual level variables are still centered on their group means to remove the between-level variance from them. The positive coefficient of the interaction term tells us that the association between the perceived unfair income distribution and political trust tends to be less negative in countries with higher inequality. The predictive marginal effects plot substantiates this assumption and supports H4 (Fig. 6). As a result, the negative relationship between distributive fairness perceptions and political trust is stronger in societies with lower levels of income inequality. In short, perceptions of an unfair distribution of income are accompanied by lower levels of political trust as inequality decreases.

To obtain information about the level-two outliers, we used the Stata package Multilevel tools (Möhring and Schmidt, 2012). We obtained an estimate for Cooks' D for every country, which describes the influence that the exclusion of a single level-two unit has on the estimated model parameters. The country with the largest outlier indicator was Venezuela (Cooks' $D = 2.66$). Nevertheless, the decision to exclude a country is not trivial in this context, mostly because there are few level-two

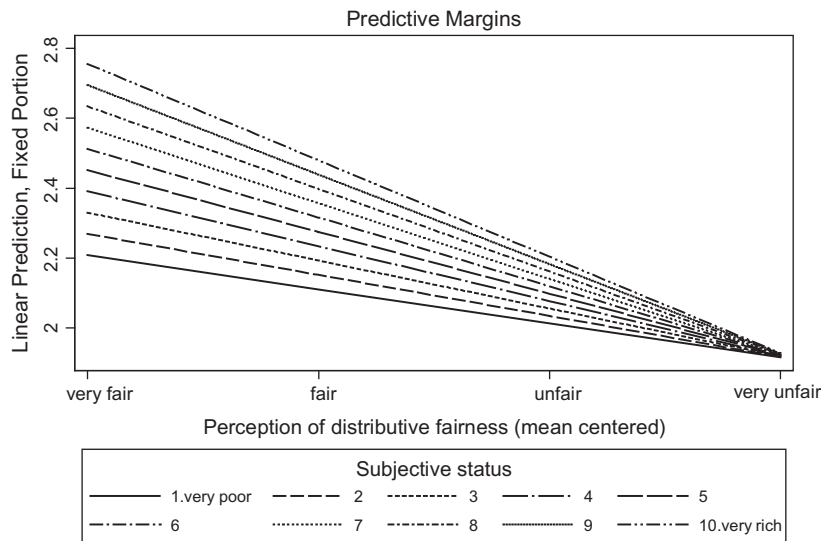


Fig. 5. Predictive margins of the interaction between distributive fairness and subjective social status on political trust.

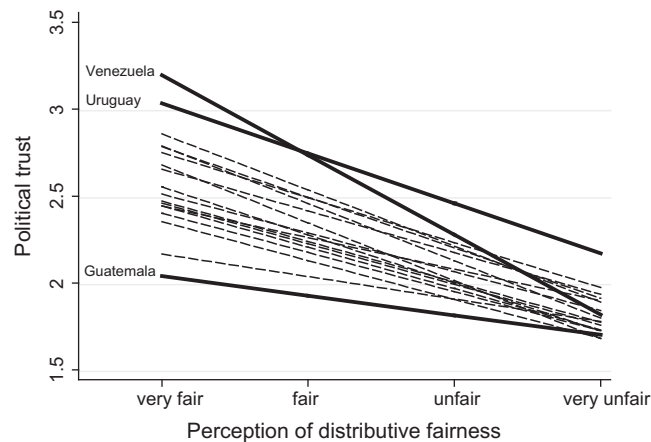


Fig. 7. Country-predicted random effects of distributive fairness on political trust.

units. Still, we re-estimated the models excluding Venezuela and the parameter estimates did not change considerably at level 1, although at level 2, the coefficient of the Gini index was smaller ($b = -0.01$, $t = -1.81$, $p = 0.07$).

Another aspect to take into account is whether the association between distributive fairness and political trust holds across countries. To test this, we made a prediction of the random effects based on the multilevel estimation, which allows calculating intercepts and slopes by country. The result of this estimation is presented in Fig. 7. As observed, for all countries, the association is negative, although there are some variations represented in the figure by the two extreme cases: Venezuela, where distributive fairness is most strongly related to political trust (according to the country slopes), and Guatemala with the weaker but still significant coefficient ($t = -3.34$, $p < 0.01$). As these countries respectively have the highest and lowest averages of political trust (Fig. 2), it is possible to note that the perception of distributive fairness covaries more strongly with political trust in societies with lower levels of inequality and higher aggregate levels of political trust.

5. Conclusion

In light of increasing empirical evidence about the wide-ranging political, societal and individual implications of income inequality and Latin America as the region with the highest levels of inequality worldwide, this study aimed at unraveling whether macro-level inequality or subjective perceptions of distributive fairness matter more for political support and

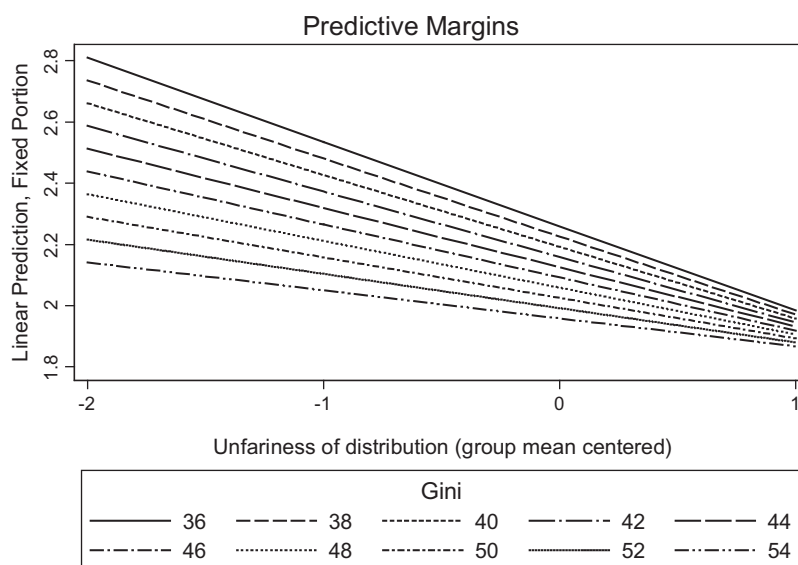


Fig. 6. Predictive margins of the interaction between distributive fairness and income inequality on political trust.

whether the association between perceptions of fairness and political trust is conditioned by the extent of country-specific objective inequality. In two respects, this study provided remarkable findings. However, first and in accordance with previous results, we found that income inequality matters for democratic legitimacy, as it is negatively related to citizens' willingness to trust political institutions and actors. Basically, income inequality comes into effect via two different pathways: the objectively measured and subjectively perceived dimensions of inequality. Clearly, high levels of income inequality at the country level are associated with political *mistrust*. Moreover, individual perceptions of distributive fairness in society exhibit a strong association with political trust. As a consequence, we infer that democratic regimes are held accountable by their citizens for the prevailing extent of inequality in a country. As the first innovative contribution, this study suggests, however, that *higher* levels of macro-level inequality weaken this apparent link of accountability. At this point, we can only speculate about the underlying mechanisms. Whether people adjust to high levels of inequality or whether these findings result from low status respondents who inflate their own position at the expense of higher positions could provide valuable cues. Another explanation points to the relevance of the loosening of the bond between citizens and the state under conditions of high income inequality. Economic inequality is commonly interrelated not only with corruption and bad government but also with culturally entrenched and shared norms of free trade, liberalization, unrestricted markets and the principle of equity. It is thus conceivable that citizens blame themselves rather than any other institution for their disadvantaged position in the societal hierarchy.

Moreover, subjective social status matters as well. When citizens' self-ratings on the income ladder are high, political trust is enhanced. As a second major finding, however, we provide evidence that when the interaction effect with distributive fairness is taken into account, higher subjective social status even strengthens the negative association between political trust and perceptions of *unfair* income distributions. Apparently, regime legitimacy is broadly based on the perceived distributive fairness in society irrespective of the individual fulfillment of material needs. Quite the contrary: those who believe that they are better off are even more affected by their sociotropic perceptions. Once again, this finding suggests that the "have-nots" might tend to blame themselves for their disadvantaged societal position rather than to hold political institutions accountable.

In sum, the extent to which a state allows the income gap to widen in society is directly associated with its legitimacy. Particularly in times of economic crises, austerity measures and cuts in social spending may further accentuate increasing levels of income inequality and thus destabilize political processes. Although the direct linkage between the objective income distribution and political trust seems to be rather modest, our identified micro-macro linkage suggests that much of its association is moderated through individual perceptions of distributive fairness, particularly in societies with *lower* levels of inequality. These findings certainly do not support assumptions based on the conflict theory outlined above. However, ultimately, income inequality continues to be of major importance for citizens' political belief systems, even or rather in particular, in times of narrowing income gaps, as Latin American societies tell us. Whether this micro-macro linkage also holds for less unequal democratic societies or societies experiencing increasing income gaps in the wake of democratic transitions will need to be addressed in future research. However, the empirical evidence suggests that perceptions of distributive fairness might be even more strongly associated with one's support of the political system.

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