

Taxing Higher Incomes: What Makes the High-Income Earners Consent to More Progressive Taxation in Latin America?

Sarah Berens¹ · Armin von Schiller^{2,3}

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Abstract When do high-income earners get ‘on board’ with the fiscal contract and accept paying a larger share of the tax burden? Progressive taxes perform particularly poorly in developing countries. We argue that the common opposition of the affluent to more progressive taxation is not merely connected to administrative limitations to coercively enforce compliance, but also to the uncertainty that high-income earners associate with the returns to taxes. Because coercion is not an option, there is a need to convince high-income earners to ‘invest’ in the public system via taxes. Trust in institutions is decisive for the fiscal contract. Expecting that paid contributions will be used in a sensible manner, high-income earners will be more supportive of progressive income taxation. We study tax composition preferences of a cross-section of Latin American countries using public opinion data from LAPOP for 2012. Findings reveal that higher levels of trust in political institutions strongly mitigate the opposition of the affluent towards more progressive taxation.

Keywords Income tax preferences · Institutional trust · Progressive taxation · Latin America

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✉ Sarah Berens
sarah.berens@uni-koeln.de

Armin von Schiller
armin.schiller@die-gdi.de

- ¹ Cologne Center for Comparative Politics, University of Cologne, Herbert-Lewin-Str. 2, P.O. Box 411020, Cologne, Germany
- ² Deutsches Institut für Entwicklungspolitik/ German Development Institute, Tulpenfeld 6, 53113 Bonn, Germany
- ³ Hertie School of Governance, Friedrichstraße 180, 10117 Berlin, Germany

Introduction

Taxation is a fundamental task of the modern state. Without sustainable domestic public revenue, the modern state as we know it would not be possible (Pierson 2011). Nevertheless, the fact that taxation is perceived as being vital for modern politics does not shield it from being an ‘inherently conflictual’ issue (Acemoglu and Robinson 2006). One main discussion in this regard is the question of how the burden of taxation is distributed among citizens. Far from being a mere technical question, the decision about how—and especially whom—to tax is highly controversial. Drawing upon this debate, this paper focuses on understanding the conditions under which wealthy taxpayers in developing countries accept more progressive taxation. In particular, we explore the circumstances under which high-income earners get ‘on board’ with the fiscal contract and accept paying a larger share of the tax burden.

Augmenting tax collection is crucial for developing countries. Lower revenue levels have significant implications for the countries’ economic outlooks as well as the living conditions of many of its citizens (Fjeldstad 2014). Many observers highlight that to achieve a meaningful increase in tax collection, taxing the poor and lower middle classes will not be enough and that governments in developing countries have to go “where the money is” (Fairfield 2013) and exploit the widely under-tapped tax base that wealthy taxpayers represent (see Goñi et al. 2011). Interestingly, the remarkable gap in tax collection in developing countries is mainly attributable to particular taxes. Whereas regressive taxes—most prominently the valued-added tax (VAT)—are performing well, the more visible and politically sensible progressive taxes, as for instance the personal income tax, are lagging behind. Economic and administrative considerations partly explain and justify a stronger emphasis on regressive taxes in developing countries (Bird 2004). Increased capital mobility and more facilities to evade and avoid taxes put even more pressure on the already overstrained tax administrations. This hinders effective and efficient tax collection, especially for the administratively more demanding progressive taxes.¹ Nevertheless, the striking size of the performance gap of more progressive taxes evokes the intuition that, beyond technicalities, high-income earners are simply not contributing a fair share to the overall tax effort.

It is out of question that taxing higher income earners is not an easy task; technically and politically. Against this background, it seems obvious that the scope to increase tax pressure on the wealthy via coercion is limited. As a result, the ability of states to increase the amount of taxes that wealthy taxpayers contribute will not depend so much on their capacity to force wealthy taxpayers into taxation. Rather, the crucial factor is their capacity to lure wealthy taxpayers into consenting to progressive taxation.² The fiscal contractualism literature shows that a sustained

¹ The extensive literature on tax evasion underlines this point (see Schneider et al. 2010; Torgler 2005; Slemrod 2007).

² It is important to highlight that our argument does not refer to compliance to legislation but more generally to the acceptance of progressive taxes. To avoid confusion between our focus and the broader tax compliance debate, we restrict ourselves to the concept of consent and avoid the concept of compliance.

tax effort needs a certain level of consent from those being taxed. To achieve this consent, citizens and political actors need to agree on a fiscal contract that defines a feasible exchange of goods for services. When the state is better financed, it can increase public investment levels in the education and health care sectors, which is also beneficial for the entire society in the long run, and therefore incentive-compatible with the interests of the wealthy (Hossain and Moore 2002). We argue that, rather than a lack of potential benefits, it is the reliability of the supply side of the fiscal contract that limits the acceptance of more progressive taxation by high-income earners. Principal-agent and collective-action problems lie at the core of the problem of resistance to taxation. When the state is perceived as being unreliable in handling tax revenue in a purposeful and sensible way, high-income earners will be less likely to accept taxation in general, and comparatively higher tax contributions in particular. We hypothesise that confidence in political institutions strongly mitigates the opposition of high-income earners to progressive taxation. If political institutions can assure these individuals that the revenue will be used properly and that all citizens will contribute a fair share to the tax effort, the opposition to more progressive taxes should decline.

In this paper we concentrate on public opinion data, thereby adding a different perspective to the topic.³ Moreover, we investigate individual support for progressive income taxation in Latin America. Latin America is a particularly interesting region in which to study our research question, as tax schemes here are highly regressive, and specifically the wealthy are accused of contributing too little (Di John 2008). Additionally, after having experienced very positive economic developments in the last decade (OECD 2014), most countries in this region have a large tax potential that remains unexploited as well as economic structures that allow for engaging in more rigorous uses of the personal income tax (PIT). The Latin American Public Opinion Project (LAPOP) added a response category to the 2012 survey round that asks respondents about their preferences concerning tax progressivity (Americas Barometer 2012). This represents a unique opportunity, as most cross-country surveys mainly rely on asking about tax-level preferences and individual tax morale, which is not revealing how the tax burden should be distributed among the population.

We use logistic regression analysis with clustered standard errors and country fixed-effects to test the theoretical prediction that confidence in political institutions mitigates the opposition of high-income earners to progressive taxation. Our results support the hypothesis. The affluent do significantly oppose progressive taxation when confidence in political institutions is low. By contrast, at high levels of confidence, this opposition is no longer significant. The affluent do not become supportive of progressive income taxation at high levels of confidence in political institutions—which is not a very surprising finding—but it is only under these circumstances in which they do not express significantly stronger opposition. These findings are robust to different model specifications and operationalisations of institutional trust and levels of income and to further refinements of our theory by

³ From a methodological point of view, most of the increasing amount of literature on taxation in developing countries has been focussed on the macro level (e.g. Goñi et al. 2011).

considering how far the effect for the affluent varies by being a supporter or opponent of the political party in government.

We proceed in seven sections. Following this introduction, “[Tax Systems in Latin America](#)” describes the fiscal systems in Latin America and their distributive effects. In section “[Limits of Coercion and Benefits of Taxation](#)” we develop and specify our argument before we introduce the econometric approach. The section “[Results](#)” presents the main results, which are complemented by robustness tests in the section “[Robustness](#)” and a further refinement of our theory. The final section concludes.

Tax Systems in Latin America

Recent studies on the Latin American tax systems agree that the fiscal policies of the last decades have mostly led to regressive distributive incidence (Goñi et al. 2011). Heavy reliance on consumption tax, low corporate—and especially personal income—taxes, and massive levels of tax evasion have not contributed towards combating the severe income inequality in the region (Goñi et al. 2011; Gómez Sabaini and Jiménez 2012). The history of the tax system in Latin America is a history of increasing homogenisation. During the period of import-substitution industrialisation in the 1960s and 1970s, most Latin American regimes actually promoted very progressive tax schemes, but because of weak administrative capacity “[s]tatutory progressive systems did not translate into effectively progressive ones” (Sanchez 2006, p. 774).⁴ Already before, but especially after, the debt crisis in the 1980s, countries in Latin America were urged to reform their tax policies. The main goal was to simplify the tax system and to facilitate its management for the weak tax administration.⁵ As a result, the number and the level of marginal tax rates decreased; indirect taxes, most prominently the VAT, were significantly emphasised (see Sanchez 2006; Wibbels and Arce 2003). The newly emerging neoliberal discourse, increasing pressure from globalisation and, most notably, the influence of international finance institutions such as the International Monetary Fund led efficiency concerns to be prioritised over distributive concerns when evaluating tax reforms (Sanchez 2006).⁶ The regional average for income tax collection as a share of total tax revenue is 28% (61% for VAT), whereas it is 38% for income taxation and 41% for VAT in the OECD (Goñi et al. 2011).

⁴ Original emphasis.

⁵ A historical assessment of tax reforms in Latin America can be found in Tanzi (2013).

⁶ Most scholars would agree that, despite some exemptions on basic products (for a discussion see Tanzi 2000), VAT has a regressive incidence, since low-income earners consume a larger share of their income compared to the rich (Wibbels and Arce 2003, p. 115).

Limits of Coercion and Benefits of Taxation

Given these strikingly low numbers of PIT revenue in developing countries, under which circumstances do high-income earners accept progressive taxation? The general orthodoxy suggests that, in expectation of redistributive expenditure patterns, taxpayers with incomes above the median income should oppose taxation in general, and progressive taxation in particular (Meltzer and Richard 1981; Romer 1975). If this very simplified model captures the main impetus behind the decision to accept progressive taxes, this would have far-reaching implications for the implementation of progressive tax schemes in developing countries. Developing countries tend to have very limited administrative capacities to properly implement progressive tax schemes against the wills of high-income taxpayers. If they strongly resist taxation, little can be done. Apart from the costs to enforce compliance, also weak monitoring capacities make tax evasion in many countries too easy, and thereby too attractive (see Alm and Finlay 2013). A number of studies show that an increase in the marginal effective tax rate increases the likelihood of tax evasion, so that an increase in income amplifies the incentive to conceal income from the authorities (Pommerehne and Weck-Hannemann 1996). Coercive implementation of progressive taxes, thus, means taxing those who are best equipped to oppose and resist, making coercion doomed to failure. Given the administrative constraints of effectively and efficiently forcing high-income earners to pay progressive taxes, the ability to convince these taxpayers to voluntarily accept progressive taxation appears to be the only alternative to increasing revenue collection and to employing more progressive tax instruments.

The classical economic literature explains potential general desirability of low levels of personal income taxation with distortive effects of taxation and the subsequent retardation of economic growth (Alesina and Rodrik 1994). Also, in Latin America, the tax base for the PIT is small—this is a valid argument that raises concerns about the redistributive capacity of this tax in the context of this region (Goñi et al. 2011) and which could explain opposition to progressive taxation.⁷ Still, most observers agree that, rather than it being a technical debate, getting wealthy taxpayers to pay more taxes represents a political challenge. Even accepting the often claimed “efficiency loss” of progressive taxation (Stiglitz 1987), a higher performance level for progressive taxation can liberate resources and have both socially and economically desirable effects, such as allowing investments in transport and energy infrastructure, from which also the rich can benefit. Given the small size of the tax base, if the wealthy do not pay more, the revenue base will not allow for the generation of a robust state. As Levi (1989), Alm et al. (1992) and others have shown using historical accounts and laboratory experiments, the acceptance of progressive taxation will only arise if citizens can expect to receive valuable returns in exchange.⁸

⁷ In many developing countries, the tax base is small and highly concentrated. It is economically not recommendable—and politically very sensible—to increase contributions of this group (see, for instance Goñi et al. 2011).

⁸ (Levi 1989, p. 52ff) makes a major theoretical contribution to this field by introducing the idea of ‘quasi-voluntary compliance’. As Levi herself highlights, “[q]uasi-voluntary compliance will occur only

The question is: What can governments—or more generally states—offer high-income earners in exchange for accepting to pay comparatively higher taxes than other taxpayers? At the most basic level, scholars in the tradition of the democracy and redistribution literature, such as Acemoglu and Robinson (2006) and Boix (2003), suggest that taxation paid by the wealthy can be conceived as a concession by the elites to avoid social revolt. Other scholars closely connected to the literature on welfare states and the development of social systems have pointed to how high-income earners accept and support redistributive fiscal policies as long as they believe that they also benefit from the public goods provided (see most prominently Korpi and Palme, (1998); on developing countries for instance, see Hossain and Moore 2002). Also, Moene and Wallerstein (2001, p. 860) demonstrate that providing public insurance “against risks that private insurance markets fail to cover” is very much in the interest of wealthy actors. Also, the perception that the affluent pay their fair share of taxes can have positive effects on tax morale and thus, increase tax revenue (Doerrenberg and Peichl 2013). Hence, high-income earners can benefit from state action financed by taxes and, thus, rationally accept progressive taxation to make the realisation of these benefits possible.

The Argument

Given the costs of coercion, the size of the tax base and the positive effects of public goods provision, the challenge of convincing high-income earners to accept progressive taxation becomes rather a game of credible commitment (in the sense of North and Weingast 1989) than of coercion (Timmons 2010). We argue that opposition to progressive taxation is not primarily connected to an a priori lack of potential benefits of taxation, but rather to the low level of credibility that high-income earners tend to ascribe to political actors in developing countries in solving different concerns. When deciding whether to accept higher taxes, high-income earners have two main concerns: How will my money be used? And will others also contribute to the tax effort?⁹

The first concern can be conceptualised as a principal-agent problem. Taxpayers, as principals, do have a very limited capacity to control the actions of politicians. Consequently, the question of whether the governments can credibly commit to (implicit or explicit) agreements and goals over the short- and long term is crucial. Whereas the ability to make credible promises is an issue for all governments, on average in developing countries this ability can be expected to be even more challenging due to higher levels of political and policy instability (Lupu and Riedl 2013). The importance of credibility will also be exacerbated because the time

Footnote 8 continued

when taxpayers have confidence that (1) rulers will keep their bargains and (2) the other constituents will keep theirs” (Levi 1989, pp. 52–53). In this paper we focus on Levi’s first condition, which could be rewritten as expecting positive returns for taxes. The fear that other taxpayers could free-ride is not fully covered by the concept of ‘consent to taxation’ employed here. However, we acknowledge the relevance of this dimension. In fact, we consider that confidence in institutions can contribute to minimize this problem (see discussion in the section “The Argument”) but beyond that we control for that second dimension in our estimations by including variables such as social trust and enforcement capacity, that certainly do play a role in reducing the problem associated to Levi’s second condition.

⁹ Scartascini and Stein (2009, p. 2ff) refer to these problems in the discussion about fiscal outcomes in general (before them and without a focus on Latin America; von Hagen 2008).

horizon required to fulfil the process—from tax contributions through public policy design and implementation to the subsequent realisation of expected benefits—is always long (Ascher 1989, p. 419).

The second concern is a collective-action problem. Although all taxpayers would benefit from contributing to a common tax pool and enabling more robust state action, each individual taxpayer has an incentive to benefit from the outcomes without bearing the cost.¹⁰ Especially those high-income earners who are asked to contribute comparatively more should have even more fear of free-riding by other taxpayers. If they fear that the contributions of others do not correspond to what was expected, they will oppose the progressive tax. If high-income earners do not consider political administrators to be genuinely committed to addressing this concerns, they will always oppose higher taxes, no matter how attractive the offered services in exchange might be.

The key to minimising these concerns of high-income earners towards progressive taxation is trust in political institutions. If high-income earners trust political institutions, they will be better able to anticipate what they should expect in exchange for their higher tax contributions and agree on bargains involving long time horizons. On the one hand, trust in political institutions will mirror their expectations that the activities of government officials, which potentially deviate from the agreements, will be monitored, and that tax revenue will be used in a sensible manner more generally. On the other hand, trust in institutions will also imply that high-income earners can expect that attempts to free-ride will not be tolerated at the political level.¹¹ Only if there is trust in political institutions will the political apparatus be capable of making ‘credible commitments’ so that high-income earners accept progressive taxation.

In support of this claim, other studies have substantiated the importance of institutional trust for preferences on redistribution. Individuals take into account the reliability of the state in their redistributive preferences, so that lower state capacity leads to more residualist welfare systems (Mares 2005). Moreover, Rothstein et al. (2011) emphasise that a reliable state is a prerequisite for working-class mobilisation that pushes for welfare-state expansion. Flores-Macías (2014) suggests similar relations when it comes specifically to taxing the wealthy. The author provides the first empirical evidence for our argument in his case study on the introduction of a new wealth tax in Colombia in 2012. It is the perception of the quality of public goods (security in this case) that is one of the central criteria for the economic elite’s consent to be taxed more heavily. Moreover, research by Paler (2013) indicates that, once public revenue is based on own tax contributions, the

¹⁰ This concern also relates to the concept of ‘conditional reciprocity’ (see Gintis et al. 2005) and the findings in behavioral economics (e. g. in ultimatum games) and other disciplines that individuals do not always act in a purely self-interested manner but cooperate with others following normative accounts of reciprocity. We take these seminal insights into consideration by controlling for the individual’s trust in others and her fairness considerations in the estimation model.

¹¹ It might be a problem of capacity to implement this will. This is why, in the robustness estimation of our model in the empirical section, we control for perceived rule of law (see Table S1 in the supplementary material).

demand to monitor how it is used increases.¹² This makes it even more demanding and important for administrators that they can offer high-income earners a reliable institutional environment in which they are willing to accept the deal. We therefore pose the following hypothesis:

H1 The higher the level of trust in political institutions, the lower the effect of higher income levels on the support for progressive taxation.

By contrast, there are few reasons to expect the poor not to support progressive taxation.¹³ The credibility and competence they ascribe to the political institutions might affect how much tax they are willing to pay. But this does not alter the fact that they would like to reduce their relative contribution level to the common tax pool and pass as much of the tax burden as possible on to the high-income earners. Hence, progressive taxation will always be attractive for low-income earners (see Barnes 2015).

Empirical Setup

The focus of our analysis is the individual's preference on progressive income taxation. The 2012 survey round of LAPOP added a survey item that puts us in the unique position to assess the individual's income tax composition preferences.¹⁴ The dependent variable (DV) is part of a particular battery of questions asked in 10 Latin American countries: Argentina, Brazil, Chile, Costa Rica, Colombia, Guatemala, Mexico, Peru, Uruguay and Venezuela. The case selection covers countries with similar levels of economic development in the range of middle- and upper-middle income countries. Moreover, all 10 countries have experience with (mostly continuous) democratic processes and structures.¹⁵

¹² However, when information about usage is provided, individuals care equally about both resources from tax revenue and windfalls.

¹³ One possible situation would be that poor citizens perceive states to be more corrupt than economic elites, and thereby prefer that even wealthy people do not pay. An even more radical view would be one in which poor taxpayers accept paying more than the wealthy in exchange for them holding their money in the country. It is however highly improbable that such an opinion would receive strong support in society. We assume that the bargain between the government and the high-income earners is independent of the bargains between other social groups, and that high-income earners will need to pay for the envisioned state action themselves.

¹⁴ Access to LAPOP data is unrestricted upon agreement to LAPOP's terms and conditions. The LAPOP 2012 dataset is publicly available at: <http://vanderbilt.edu/lapop/raw-data.php>. We thank the Latin American Public Opinion Project (LAPOP) and its major supporters (the United States Agency for International Development, the Inter-American Development Bank, and Vanderbilt University) for making the data available. Information how to access LAPOP and replication material is provided on Dataverse at <http://dx.doi.org/10.7910/DVN/5VJF4S>.

¹⁵ Venezuela became more authoritarian during the last decade. As sensitivity test we therefore analyse the model excluding Venezuela. The findings remain substantially the same. Estimation results are available on request.

Tax Composition Preferences

The DV is derived from the following survey item (soc1), which provides a hypothetical scenario for the respondent: “For every 100 [local currency] that a rich person earns and 100 [local currency] that a poor person earns, in your opinion, how much should each pay in taxes”? The answer categories propose 30–30, 40–30 and 50–20. The higher number reflects the rate the rich would be paying.¹⁶ The first answer category denotes a flat-tax rate, by which all individuals contribute the same share of their incomes in tax, regardless of their income bracket. The second and third answer categories refer to a progressive income taxation scheme, putting greater tax pressure on high-income earners, with the middle category offering a moderately progressive tax scheme and the third option offering a clearly progressive one.¹⁷ Based on the question’s framing, we assume that respondents do not differentiate between revenue from wage labour and capital when answering the question.

Figure 1 displays the distribution of the DV progressive income taxation preferences in the countries considered. A large share of individuals support a moderately or highly progressive income tax. The distribution is, thus, skewed to the left, especially in Chile and Colombia. In some countries, most prominently Venezuela, Brazil and Uruguay, we find a two-peaked distribution, with a larger share of individuals (scaling around 35% on average) supporting a flat-tax scheme. Even though the item is categorical in nature, the clustering at the two ends of the distribution speaks to a dichotomous solution. Consequently, we create a dummy variable that is coded as 1 if the individual supports one of the two progressive income tax schemes (30–40 and 50–20), and as 0 if the individual expresses a preference for a flat tax (30–30).

Independent Variables: Income and Trust in Institutions

First of all, we expect the level of income to affect individual preferences on the progressivity of the income tax. LAPOP asks the respondents to indicate an income bracket that reflects their individual income situation. These income brackets differ across countries, meaning that comparisons between countries are limited. Besides comparability issues, income questions usually suffer from non-response and misreporting. Instead of using these income brackets, we therefore rely on the respondents’ information on asset ownership.¹⁸ Using information on household

¹⁶ (1) “The rich person should pay 30 [...], and the poor person 30 [...]”; (2) “The rich person should pay 40 [...], and the poor person 30 [...]”; and (3) “The rich person should pay 50 [...], and the poor person 20 [...]”.

¹⁷ Please note that although the rate for the rich increases with each tax bracket, for poor individuals the tax rate decreases at the highest bracket (from 30 in categories 1 and 2, to 20 in category 3). As a result, it is difficult to disentangle whether the poor’s support for the 50–20 category is driven by making the rich pay more or by making themselves pay less. However, this does not concern our analysis, as we focus on the determinants under which the rich accept higher taxation.

¹⁸ For a robustness test, we also provide estimation results with the self-reported income measure. The findings depict a similar pattern as below (see Table S2 in the supplementary material). Moreover, arguably, an individual’s objective income or wealth situation does not always fully overlap with

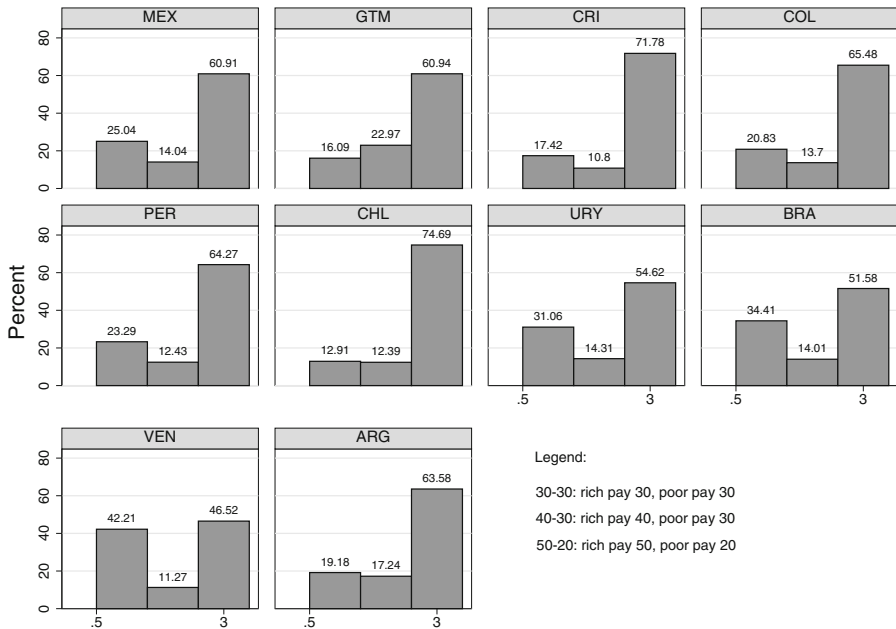


Fig. 1 DV: Tax composition preferences by country: original coding

assets in order to assess the individuals' income situations is a common procedure in household surveys conducted in low- and middle-income economies (see Filmer and Pritchett 2001). Individuals are asked to indicate if they possess items such as television, car, computer, cellphone or washing machine, for instance.¹⁹ We use multiple correspondence analysis (MCA) to create a wealth index based on asset-ownership. Owning the respective asset is coded as 1, and 0 for not possessing it.²⁰ The procedure allows for creating a relative wealth measure, which is based on the individual's long-term wealth, since assets can be accumulated over a longer time period (see Filmer and Pritchett 2001, p. 116).²¹ As we are interested in income tax progressivity preferences of high-income earners, we create three wealth groups based on the distribution of the wealth indicator, and subsequently refer to the poor,

Footnote 18 continued

subjective income perceptions (see Lora and Fajardo 2013), meaning that respondents that we identify as belonging to the richest 25% of the wealth distribution range do not consider themselves to be affluent. We therefore also take into account the individual's self-identification in social classes. The findings echo the results displayed below and are provided as supplementary material (Table S3).

¹⁹ The full list contains the following assets: TV, refrigerator, telephone, cellphone, car, multiple cars (2, 3 or more), washing machine, microwave, motorcycle, indoor plumbing, indoor bath, computer, internet, flat TV, sewage system. Arguably, the value of some of these objects differ between a country's centre and periphery. We therefore add a control for living in urban areas in the estimation model.

²⁰ The reliability coefficient of the asset items is 0.758.

²¹ Alternatively, we also employ the number of cars an individual owns as proxy to distinguish wealthy from non-wealthy respondents. We thank an anonymous reviewer for this suggestion. Our findings are robust to this specification, see Table S2 in the supplementary material.

the middle and the affluent. Following Heinemann and Hennighausen (2015), we use quartiles.²² The lowest 25% of the wealth indicator reflect the poor. The middle wealth group covers the second and third quartiles (25–75% of the wealth indicator) whereas individuals who rise above 75% of the indicator are considered affluent.²³ Adding the wealth groups to the distribution of our DV shows that the poor have a stronger preference for progressive taxation compared to the affluent. Figure 2 illustrates the distribution for the dichotomised DV.

Besides individual self-interest, our theory predicts a greater level of consent for progressive taxation, conditional on the individual's confidence in the state to be a reliable actor in the provision of public goods. We operationalise the individual attitude towards public institutions with item B2, which asks the respondent about her respect for political institutions ["to what extent do you respect the political institutions of (country)"]. The categorical scale ranges from 1 to 7, with higher values meaning greater respect. The item covers a broader concept of the respondent's general attitude towards (or image of) the state. We assume that individuals have a vague understanding about the state and public institutions, which steadily evolves over time through multiple experiences and interactions with the 'state' (e.g. with public officials in bureaucracy, via media coverage about governmental actions, etc.). The term 'respect' adheres to the individual's assessment of the state's reliability and functioning, as one can hardly assume that an individual holds an institution that follows arbitrary and intransparent rules in high regard (e.g. when corruption and clientelism are present).²⁴

Besides the individual's institutional respect, we also consider a broader measure for the individual's institutional trust. Whereas our 'institutional respect' measure captures the individual's diffuse image of political institutions, we capture the individual's assessment of a set of institutions in our 'institutional trust' measure.²⁵ We calculate an 'institutional trust' index with the use of principal component

²² Estimation results with the continuous asset indicator are reported as supplementary material (Table S1). Opposition to progressive taxation decreases when wealth rises at higher levels of institutional trust.

²³ Studies on tax incidence in Latin America support that our proposed groups largely match the groups bearing the tax burden of the PIT in Latin America. For instance (Amarante and Jiménez 2015, p. 35–37) show how almost all of the PIT burden falls on the top two deciles (approximately our affluent group). They also find evidence that the contributions of the four lower deciles (approximately our poor group) is generally extremely low, if not absent. Nevertheless, as a robustness test we use other measures to identify the affluent including top 10% wealth instead of top 25%, number of cars, own reported household income and class identification (see Tables S1, S2 and S3 in the supplementary material). The results remain substantially the same as the ones presented in the main text. One major concern is the degree to which LAPOP, as public opinion surveys in general, is able to obtain information from the very rich. In this line, while using different operationalisations for wealth levels makes us confident that we are capturing high wealth correctly, we have to admit that the affluent, as analysed here, can be expected to represent the upper-middle class rather than the super-rich.

²⁴ However, one could argue that 'respect' can also resemble fear (e.g. a repressive state). We refute this claim, as the Spanish connotation of 'respeto' is positive. A high level of respect for the country's political institutions thus reflects a belief in institutional legitimacy, a belief that the performance of the political institutions is somewhat 'just'.

²⁵ We use the terms 'institutional trust' and 'institutional respect' only to differentiate between the two different measurements.

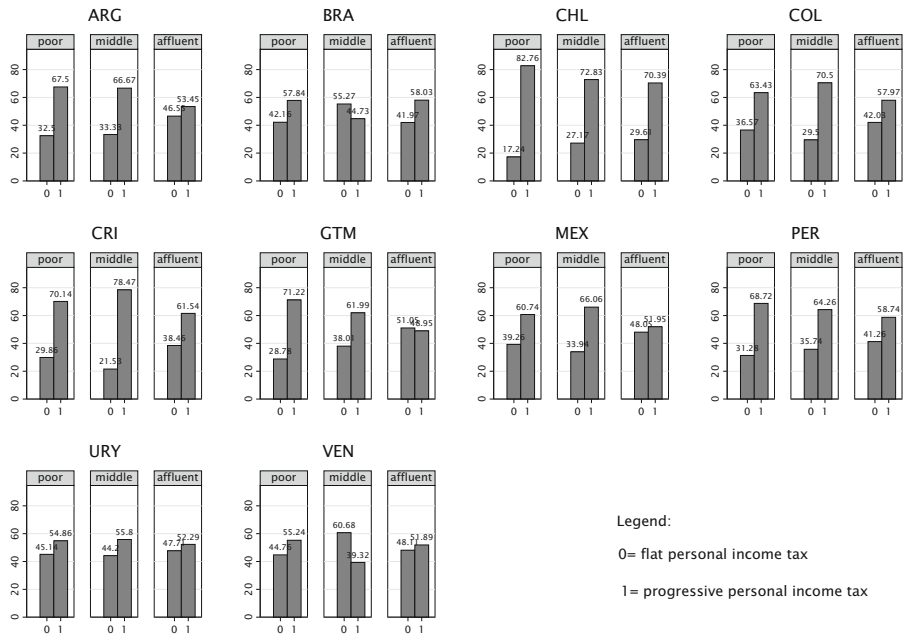


Fig. 2 Distribution of progressive income tax preferences by wealth group and country: Dichotomous coding of the DV

analysis (PCA) based on the underlying dimension of individual responses to all items that inquire about the respondents ‘trust’ towards public institutions (trust in: the justice system, political parties, the national legislature, national police, supreme court, political institutions, the likelihood of a fair trial in a judicial process and the likelihood that “citizen’s basic rights are well protected by the political system”).²⁶ The items reflect all parts of the public system, the executive, the legislature and the judiciary. We use the predicted values of the first dimension of the PCA. The ‘institutional trust’ measure, thus, offers more information, but the ‘institutional respect’ measure captures the general image of the state that the individual is aware of when commonly thinking about political institutions, so we consider both measures in our analysis.

Controls

Taking into account the literature on redistributive preferences and recent contributions on tax preferences (Barnes 2015; Heinemann and Hennighausen 2015), we add a set of socio-demographic control variables: age, gender (female),

²⁶ We run a PCA analysis on the following LAPOP items: B1, B2, B3, B10a, B13, B18, B21 and B31. We deliberately exclude items that ask the respondent to indicate trust in the current government (e.g. trust in the president), elections and media, as we are interested in the long-term perception of public institutions. All items range from 1 to 7—higher values meaning greater level of trust. Different criteria support the one component solution.

years of education, and employment situation [public employee, unemployed, non-employed (students, housekeeping), retired; ‘employed’ serves as a reference category]. Similar to income, higher education should lower preferences for a more progressive tax system, as education influences the chances of higher earnings. However, individuals who received higher education from the state might have an intrinsic motivation to return this investment via taxation (see Barnes 2015) or be aware of the consequences of high disparities (see Rueda and Stegmueller 2016), so that the more educated are more willing to support tax progressivity. If this thought works for the low- and middle-income country context as well is still open for investigation. Especially tertiary education is mostly only available for the social elites in Latin America, reinforcing the hierarchical social structure. It is therefore possible that the well educated rather prefer to keep the system closed as it is. A negative effect is, thus, not unlikely. We also consider the respondent’s household size, as the number of dependents should influence the individual’s tax composition preferences. As Barnes (2015) emphasises, there are horizontal differences in one income group when marital status and the number of children are considered. Sharing a household with a low-income earner might spur support for progressive taxation, similar to large household size. Unfortunately, LAPOP does not gather further information about household composition. However, this is a minor concern in our analysis, given our construction of the wealth indicators, which rely on household wealth rather than individual wealth. We add a control for living in either urban or rural areas, as the experience with public institutions might vary between living in the centre and on the periphery, leading to unequal access to state institutions (see Harbers 2015).

Furthermore, we add attitudinal variables such as political ideology, social trust and fairness perceptions about deservingness of public goods in order to hold constant the individual’s belief system (see Heinemann and Hennighausen 2015). Left-wing voters are much more likely to support income tax progression. But because of the large number of non-responses to this item, we use a proxy for political orientation. LAPOP elicits privatisation preferences of the respondents (coded 1–7), asking if the state (=1)—rather than private companies (=7)—should own the “most important enterprises and industries” of the country. The private–public cleavage is strongly attached to left/right political orientations (see Wiesehomeier and Doyle 2012), meaning that we use privatisation preferences as a proxy for a liberal political ideology. As discussed above, we need to take into account social reciprocity and the individual’s take on cooperative behavior of others (Gintis et al. 2005), so that we also include a measure for social trust. Respondents are asked to indicate how much they think that people in their “community are trustworthy” or not (on a scale from 1- untrustworthy to 4- trustworthy). Moreover, we consider the individual’s belief of distributive justice when it comes to welfare benefits. The item CCT3 asks the respondent to indicate how much she agrees or disagrees with the statement that “people who get help from government social assistance programs are lazy”. The item CCT3 (labelled fairness perception), refers to the more conservative justice principle based on “equity” (higher values reflect greater agreement with the statement). The equity justice principle claims that the level of welfare benefits an individual receives

should correspond to the level of contributions made by the individual (see Reeskens and van Oorschot 2013, p. 3). Furthermore, we maintain the individual's social mobility experience. An expectation of becoming rich in the future can dampen preferences for progressive income taxation (Benabou and Ok 2001). Our item captures the individual's experience with social mobility by asking the respondent about her economic situation 12 months ago (decreased—labelled downward mobility, stayed the same—labelled status quo, or increased, labelled upward mobility experience).²⁷

Finally, the status quo of a tax system can affect individual tax preferences in the sense that a context of high tax progressivity is unlikely to induce support for even more tax progression at the individual level. But Barnes (2015) finds that neither the tax structure nor the welfare regime significantly influence tax preferences in the OECD. Additionally, one could consider objective measures of institutional quality next to the individual's perception, to study how far objective and subjective measures of institutional reliability differ. But since our data set covers 10 countries, we are unable to test macro-level effects, such as the tax system status quo, institutional capacity or the type of welfare regime, with hierarchical modelling techniques. Country characteristics enter the empirical model by considering countries as fixed effects. An overview of descriptive statistics and a correlation matrix that addresses multi-collinearity concerns are provided in the Appendix (Tables 3 and 4).

Model

The left-hand side of the equation presents progressive income taxation preferences. As Fig. 1 indicates, the distribution of observations is skewed to the left, meaning that already the descriptive investigation promotes the use of a dichotomous variable (1 = progressive, 0 = flat tax). Thus, a logistic regression is applied. We add country fixed-effects η_j for j countries (Argentina serves as reference category). For the logistic regression, we use the following specification:

$$\begin{aligned} \Pr(y_i = 1) = \text{logit}^{-1} & (\alpha_i + \beta_1 \text{wealthgroup}_i + \beta_2 \text{institutionaltrust}_i \\ & + \beta_3 \text{wealthgroup}_i \times \text{institutionaltrust}_i \\ & + \beta_i X_i + \eta_j + \varepsilon_i) \end{aligned}$$

Results

We display the results of our estimations as logistic coefficients in Table 1. We start with a simplified model, which only contains basic socio-economic information and the constitutive terms of the interaction term without the interaction term itself (M1

²⁷ To address the concern that the impact of having greater institutional respect on progressive tax preferences only captures the individual's perception that the state has greater enforcement capacity—and will thus detect any tax evasion—we add a proxy for enforcement capacity (B1 on trust in the justice system, ranging from 1 = low to 7 = high). Estimation results are reported in the supplementary material Table S1. Enforcement capacity has no significant impact; the results remain substantially unchanged.

Table 1 Logistic regression: progressive income tax preferences. *Source* LAPOP 2012

Progressive taxation preference	(M1)	(M2)	(M3)	(M4)	(M5)	(M6)
<i>Wealth group</i>						
Middle (Ref. category: poor)	-0.059 (0.144)	-0.066 (0.146)	-0.511*** (0.155)	-0.069 (0.144)	-0.481** (0.156)	-0.048 (0.139)
Affluent	-0.134 ⁺ (0.070)	-0.137* (0.069)	-0.692* (0.275)	-0.136 ⁺ (0.070)	-0.626* (0.275)	-0.088 (0.074)
<i>Respect in pol. insti.</i>	-0.035*** (0.011)		-0.113*** (0.029)		-0.116*** (0.027)	
<i>Trust in institutions</i>		-0.024* (0.010)		-0.057* (0.027)		-0.063** (0.023)
<i>Interaction terms</i>						
Middle × respect in pol. insti.			0.097* (0.042)		0.095* (0.041)	
Affluent × respect in pol. insti.			0.121* (0.048)		0.117* (0.047)	
Middle × trust in insti.				0.023 (0.040)		0.021 (0.040)
Affluent × trust in insti.				0.084 ⁺ (0.047)		0.080 ⁺ (0.045)
<i>Controls</i>						
Female	-0.011 (0.048)	0.003 (0.052)	-0.010 (0.049)	0.005 (0.051)	-0.012 (0.061)	0.007 (0.065)
Age	0.006* (0.003)	0.006* (0.003)	0.006* (0.003)	0.006* (0.003)	0.004 (0.003)	0.005 (0.003)
Years of education	-0.024* (0.011)	-0.024* (0.012)	-0.024* (0.011)	-0.024* (0.012)	-0.023 ⁺ (0.012)	-0.024 ⁺ (0.012)
Household size	-0.009 (0.015)	-0.015 (0.014)	-0.009 (0.014)	-0.015 (0.014)	-0.009 (0.014)	-0.015 (0.014)
Urban	-0.288** (0.097)	-0.280** (0.104)	-0.293** (0.097)	-0.286** (0.103)	-0.287** (0.099)	-0.283** (0.108)
<i>Employment situation</i>						
Public employee (ref: employed)					0.221*** (0.062)	0.204** (0.067)
Unemployed					0.043 (0.146)	0.031 (0.159)
Non-employed					-0.002 (0.084)	-0.013 (0.092)
Retired					0.173 (0.161)	0.157 (0.153)

Table 1 continued

Progressive taxation preference	(M1)	(M2)	(M3)	(M4)	(M5)	(M6)
<i>Mobility experience</i>						
Status quo (ref: downward mobility)					-0.069 (0.086)	-0.044 (0.091)
Upward mobility					-0.179 ⁺ (0.104)	-0.147 (0.098)
Married					-0.022 (0.047)	-0.047 (0.053)
Fairness perception					-0.054* (0.022)	-0.056* (0.022)
Privatization pref.					-0.048 (0.030)	-0.050 (0.033)
Social trust					-0.001 (0.023)	-0.009 (0.029)
Constant	1.085*** (0.287)	0.928*** (0.280)	1.447*** (0.335)	0.939*** (0.277)	1.979*** (0.316)	1.469*** (0.289)
Fixed effects	yes	yes	yes	yes	yes	yes
Observations	5991	5757	5991	5757	5991	5757
BIC	7851.7	7557.9	7851.0	7561.5	7810.1	7522.1

Coefficients for country fixed effects are not displayed

⁺ $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

and M2). The average probability of supporting income tax progressivity based on the average observation²⁸ is 60%. As expected, being affluent has a significant negative effect on support for progressive taxation. Based on Model 1 and holding all covariates on average poor individuals have a predicted probability of 61.6% of supporting progressive taxation while this probability decreases to 58.4% for the affluent.

Adding the interaction terms (M3–M6) allows us to test whether trust in institutions moderates the effect of wealth. The fact that the interaction terms are positive and predominantly significant suggests that, in accordance with our hypothesis, the opposition to progressive income taxation associated to higher levels of income declines with increasing levels of trust in political institutions.

In order to facilitate the interpretation and implications of the estimation results, we illustrate the interaction terms using average marginal-effects plots separately for each wealth group (Fig. 3) with 90% confidence intervals and histograms for the wealth-group-specific distribution of the independent variable ‘respect for political

²⁸ This corresponds to an individual characterised by being male and urban (modes for the two dummy variables in the model). All other variables are hold at their means.

institutions’.²⁹ We plot the effects for M5 and M6 which show a lower BIC value and, thus, a better model fit.³⁰ Figure 3 illustrates that the affluent individuals significantly oppose progressive income taxation in cases where there are low levels of institutional respect, whereas their antagonism towards income tax progression declines at higher levels. At the highest levels of institutional respect, the wealthy even support progressive income taxation.³¹ In this specification, the effect is very similar for the middle wealth group. However, as will be shown, the result for the middle-wealth group is not robust to alternative specifications, whereas the effect for the affluent is. One could argue that it is not confidence in the state which is needed to reduce the opposition of the affluent, but rather general social trust (i.e. trust that others pay their tax duties) foremost, and that not including social trust in the specification might bias our result. However, adding social trust leads to an insignificant effect for social trust (M5 and M6), while the coefficients of our main variables of interest are substantially unaffected.

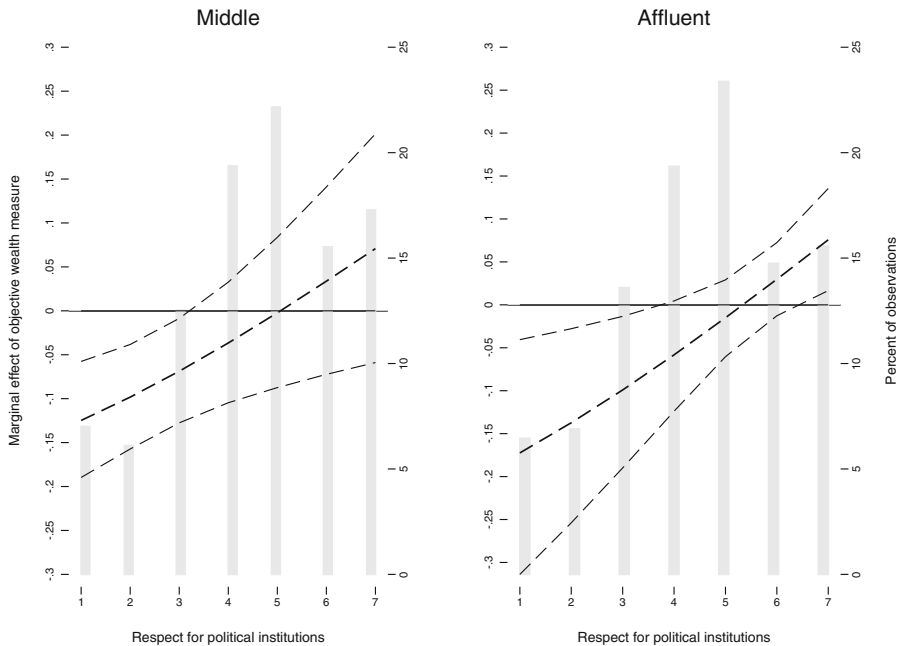
For the broader ‘institutional trust’ variable, estimation results are shown in Model 4 and in Fig. 4. The middle wealth group is unresponsive to institutional trust in this specification, whereas the effect for the affluent wealth group remains substantially the same as in Model 3. Again, the affluent become indifferent towards progressive income taxation only when there are higher levels of general institutional trust. The findings, thus, echo our previous results. Considering the magnitude of the effects, they are less decisive compared to the change in probabilities when moving from rural to urban dweller, which leads to a 6.7% point decrease in support for progressive taxation. For the affluent, the probability to support tax progressivity is 59% when respect in institutions is high and 57.7% when respect is low (M3). The magnitude of the effect is limited, but already small changes can make a difference when decisions, e.g. among undecided voters, are close.

Surprisingly, we also detect strong evidence for a negative effect of institutional trust for the poor. Regardless of whether we employ institutional respect or the broader measure of institutional trust as a mitigating variable, in all estimations, higher institutional trust has a negative effect on the support of the poor for progressive income taxation. It might be that although the tax brackets are straightforward and increase with regard to what the affluent should pay in each scenario (either 30, 40 or 50%), the implications are much less clear for the poor: either 30% in the categories ‘30–30’ and ‘30–40’ or 20% in the progressive category ‘20–50’. In fact, it might be the case that the poor are willing to pay more when institutional trust is high, which is, however, expressed in the preference for the flat-tax response category (30–30). In this sense, a limitation of our DV measure is that we cannot identify whether the poor choose the category according to how much they would be paying or how much the more affluent should be paying.

²⁹ A comprehensive discussion on interaction terms and instructions how to create the displayed graphs illustrating interaction terms can be found in Brambor et al. (2006).

³⁰ Average marginal effects plots for the interaction terms of M3 and M4 are provided as supplementary material.

³¹ That the affluent significantly support progressive taxation is, however, not robust as the results of the reduced models in M3 and M4 show (Figs. S1, S2).

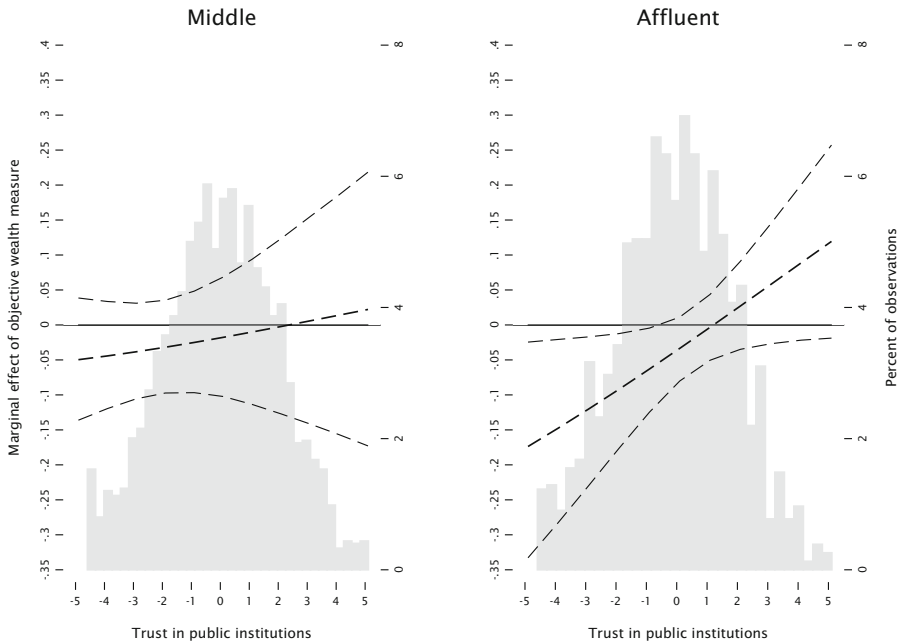


Bold dotted lines correspond to the point predictions. Dotted lines delimit the 90% confidence interval. Estimation for male, employed, married, urban individuals (corresponds to modes). All other variables at means (rounded)

Fig. 3 Average marginal effect of wealth group on the probability to support progressive taxation at different levels of respect for political institutions (M5)

But assuming that the poor do indeed become less supportive of progressive income taxation the higher their confidence in institutions, several explanations seem possible. First, low levels of trust in political institutions might be associated with the poor perceiving the state as being captured by elites. In this line, at low level of trust, higher support of taxation might indicate a general disagreement with the whole institutional setup and the accusation that privileged individuals are not contributing their fair share to the common good. At higher levels of trust, this perception of ‘state capture’ decreases. If the institutional setup is perceived as being fair, progressive taxation is less salient for the poor as it is decoupled from a general demand towards an improvement of the system. Second, the poor might oppose progressive taxation because they hold stronger social mobility expectations (see Benabou and Ok 2001), which are perceived to be more likely to realize in a context of proper institutions. As a result, the higher the trust in institutions, the higher the expectation to improve their economic situation over time by own merits.³² Third, it could also be the case that trust in institutions among the poor reflects their satisfaction with what they already receive. Although the welfare state is far from generous in many Latin American countries already a small

³² We control for past mobility experience, but lack information on future mobility expectations to test this claim.



Bold dotted lines correspond to the point predictions. Dotted lines delimit the 90% confidence interval. Estimation for male, employed, married, urban individuals (corresponds to modes). All other variables at means (rounded)

Fig. 4 Average marginal effect of wealth group on the probability to support progressive taxation at different levels of trust in political institutions (M6)

improvement due to state action could be perceived as a great enhancement. If the expectations to get something are low, even small benefits will satisfy the demand and explain the lack of further pressure on redistributing wealth. This argument is in line with research on welfare preferences in the OECD. Van Oorschot and Meuleman (2012) show how perceived performance of the welfare system has a negative effect on welfare support.

Before we move on to the robustness tests, some effects displayed above in M5 and M6 deserve mentioning. Public employment strongly increases progressive income taxation preferences. The finding is in line with empirical findings for the high-income country context (Heinemann and Hennighausen 2015; Barnes 2015). Believing that benefits should be based on merit decreases preferences for progressive income taxation, as the coefficient for fairness perception shows. Moreover, progressive income tax preferences decline with increasing levels of education. Having benefited from the public educational system, one would expect these individuals to become more supportive to return this investment (see Barnes 2015). However, we find an opposing effect. In Latin America, the more educated seem to be less in favor of tax progression—a finding that speaks for the need of further research. Next, having experienced upward mobility in the past also exerts a strong, negative impact on income tax preferences. This can be explained by the expectations of further upward mobility, discounting future benefits. Finally, also

urban dwellers are less supportive of progressive income taxation, which might be explained by proximity to the sources of public goods provision (see Harbers 2015).

Robustness

General or Particular Institutional Trust?

We contend that when individuals judge whether public institutions are reliable partners in the public goods game, the key is not their trust in a particular institution, but their general trust in the public system. The public apparatus is complex and contains many channels and loopholes where tax revenue can be directed. Hence, so our argument, trusting one entity might not be sufficient because fiscal revenues might be subject to malfeasance in another part of the system. To tease out if trust in a particular institution is able to individually mitigate the opposition of the affluent to income tax progressivity, we analyse the mitigating effect of trust in the three branches of state power: the executive, the legislative and the judiciary.

Many people would argue that trust in the executive is the key factor since voters attribute much budget influence and power to the executive. Figure 5 illustrates that this hypothesis is wrong.³³ Although the tendency is similar to the main result, trust in the executive has no clear mitigating effect on the effect of wealth group. The same counts for the judiciary. Surprisingly, only trust in the legislature has a clear mitigating effect. Especially for Latin America this result might appear as unexpected because countries in this region are widely considered to have notoriously weak horizontal accountability (Kenney 2003). In fact, legislatures in Latin America are known to play a less significant role in the budget process than legislatures in other regions (Hallerberg et al. 2009, p. 299ff). Considering that individuals might have far more problems attributing responsibilities and actions to the legislature than to the judiciary or executive branches, the perception of the legislature mirrors a more general attitude towards the political system and its capacity to control state action. In this sense, these results support the main argument of this paper, which states that a general notion of institutional trust is more decisive for mitigating the opposition of the affluent to income tax progression than trust in specific public institutions.

The Role of Partisan Attachment

In our estimations we control for political ideology, but it could be argued that rather than political ideology, the key question is whether the party favoured by the respondent is in power. According to an increasingly supported argument, partisanship distorts the evaluation of policies and performances rather than the other way around. Retrospective perceptions as well as expectations about the future will be more positive when the favoured party is in power and more negative when

³³ For presentation purposes, we only display the graph illustrating the interaction terms. The regression table is available on request.

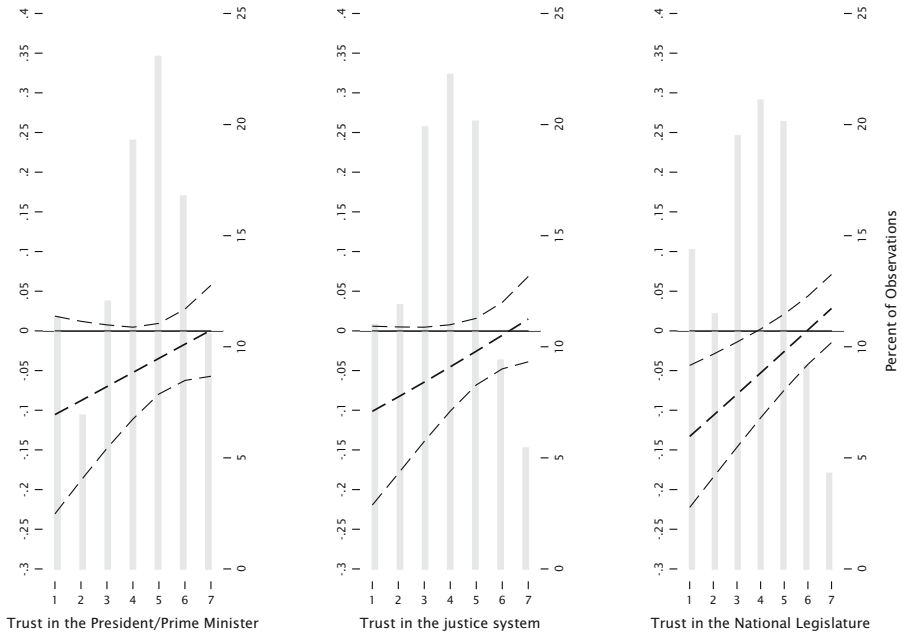


Fig. 5 Average marginal effect for the affluent at different levels of trust in specific branches of government

it is not (see Bartels 2002; Tilley and Hobolt 2011). Also clientelistic linkages with the party in power might influence acceptance of public policies imposed by the favoured incumbent. If the party in government matches the respective voter’s preferences, the voter will overestimate its responsiveness and underestimate the risk of the misuse of tax revenue. Adding trust in public institutions to the consideration, it should have less of an effect on the acceptance of progressive taxation by wealthy supporters of the government because, as their party holds power, they should not be worried about institutional reliability. This is different for wealthy taxpayers who do not support the incumbent government. The mitigating effect of trust in public institutions should be particularly strong in this case. If wealthy taxpayers do not favour the government—and, in addition, they distrust public institutions—their opposition to progressive taxation should be the highest. By contrast, their opposition to progressive taxation should decrease if they trust public institutions because, even though they may dislike the incumbent government, they will expect that the use of their tax contributions will be properly monitored and controlled.

Figure 6 gives initial evidence supporting our claims. It illustrates the interaction effect as presented in the main result for one subsample including only supporters of the government, and one alternative sample including only respondents who do not support the government (estimation results are provided as supplementary material Table S4). The results indicate that the moderating effect of respect for institutions

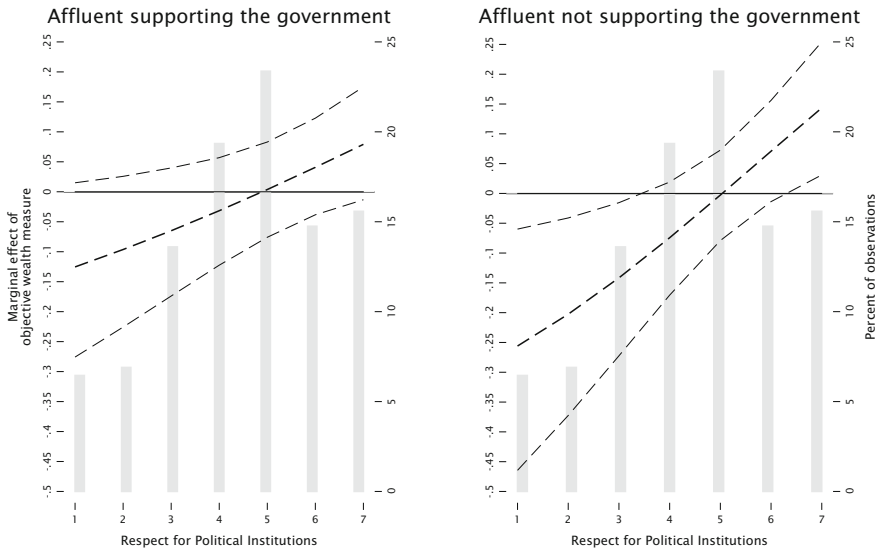


Fig. 6 Average marginal effect for affluent respondents supporting and affluent respondents not supporting the incumbent and respect for political institutions

on the effect of wealth is similar in terms of slope for both government supporters and non-supporters, but it is only significant for the latter. For the non-supporters we find that at low levels of institutional trust, they significantly oppose progressive taxes, whereas at high levels of respect for institutions, wealthy taxpayers who do not support the government even significantly support progressive taxation. The steepness of the slope is similar for the supporters, but the confidence intervals cross the zero line at all levels of institutional respect. This indicates that rather than magnitude, what we can say is that certainty about a significant relationship is higher when referred to the non-supporters. The results represent first evidence indicating that confidence in the system is especially relevant for convincing opponents of the government to support higher taxation. However, it is important to highlight that the effects for both groups do not significantly differ from each other at any level of trust. Also, although most of the specifications support the suggested claims, the results are not as robust to different specifications as the ones presented in the previous sections. Given the size of the samples, the findings are however worth noting.

Conclusion

The story of PIT in Latin America is not one of unlimited success but rather the opposite. Personal income taxes make up a much smaller share of general tax revenue when compared to other parts of the world. This is closely linked to weak tax administration, abundant tax loopholes and massive tax evasion. All these aspects explain the governments' emphasis on VAT, as, despite regressive

distributive effects, it allows for levying at least a certain amount of much-needed fiscal revenue. In this paper we have argued that the prospects of escaping the low performance levels of the PIT in particular, and more progressive taxes in general, is connected to the lack of consent for taxation by those who would mostly pay them: the affluent. As Ardanaz and Scartascini (2013) illustrate, the success of progressive income taxation is very much left to the ‘mercy’ of the high-income earners, considering the limits of coercion. As a result, the key to increasing a country’s tax revenue in a fair and meaningful way is increasing the consent for taxation by affluent taxpayers. We therefore asked in this paper: How can the opposition of the affluent towards progressive taxation be mitigated?

We have defended that rather than being a problem of a general lack of benefits, it is a problem of trust in public institutions. If higher tax contributions are used reasonably and effectively, they allow the state to invest in sectors that can generate remarkable benefits for high-income earners. However, if high-income earners fear that their tax contributions will not have positive returns, they will oppose income tax progressivity. Making use of the public opinion data of LAPOP for 10 Latin American countries, we found support for our hypothesis. The more the affluent trust political institutions, the less they oppose the idea of progressive income taxation. Their willingness to accept comparatively higher taxes on them hinges on their level of trust in public institutions, and it is not particular institutions that need to be reliable but it concerns the general state apparatus. Moreover, the mitigating effect of institutional trust is most relevant for high-income earners who are not politically aligned to the current government.

Individuals in the middle of the wealth distribution range do not associate their tax composition preferences so clearly with institutional trust, which is not surprising, as it is likely not their money that might be possibly ‘mis-invested’. The findings for the poor are surprising, as they seem to prefer less-progressive income taxation the more confidence they have in public institutions. However, the limitations of our data make it difficult to isolate the driving force of this later result, and further research is needed to draw firm conclusions on this relationship.

More generally, our analysis is bound to the limits of survey data. Also, the analysis can only be conducted for a cross-section of 10 Latin American countries, since the item was part of a special LAPOP battery of questions not included in further survey rounds. This also limited our means to study context effects, which certainly deserve further scrutiny. Furthermore, to rule out time-related impacts on our DV, we would need to observe the proposed link between institutional trust and income tax progressivity preferences over time.

The findings have relevant implications for tax reform endeavours in the region. Against the commonly held assumption, affluent individuals do not a priori oppose progressive taxation; rather, their opposition is conditional on low trust in public institutions. The results show that there is scope to increase progressive taxation in the region with the support of the wealthy, and that for this endeavour increasing the transparency and reliability of public institutions is key. Furthermore, on a more pessimistic note, the analysis also suggests that the opposition of the wealthy—at least as it is understood here—appears not to be the main factor blocking reforms towards more progressive taxation. The variance in support for progressive taxation is high, but tax performance data show that tax systems in the regions are quite similar. Moreover,

declared support for income tax progressivity is much higher across all income groups than what might be expected. Further research should look at why the apparent support for more progressive taxation is not being translated into policy changes.

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Appendix

See appendix Tables 2, 3, and 4.

Table 2 Descriptive statistics. *Source* LAPOP 2012

Variable	Observations	Mean	SD	Min	Max
DV					
Prog. income tax pref.	5991	0.608	0.488	0	1
Independent variables					
Wealth group					
Poor	5991	0.260	0.439	0	1
Middle	5991	0.478	0.500	0	1
Affluent	5991	0.261	0.439	0	1
Respect in pol. institutions	5991	4.592	1.757	1	7
Trust in institutions	5757	0.016	1.956	−4.590	5.113
Control variables					
Female	5991	0.478	0.500	0	1
Age	5991	40.439	15.882	17	91
Years of education	5991	9.603	4.125	0	18
Employment status					
Employed	5991	0.514	0.500	0	1
Public employee	5991	0.081	0.274	0	1
Unemployed	5991	0.053	0.224	0	1
Non-employed	5991	0.256	0.437	0	1
Retired	5991	0.096	0.294	0	1
Mobility experience					
Downward mobility	5991	0.197	0.398	0	1
Status quo	5991	0.515	0.500	0	1
Upward mobility	5991	0.288	0.453	0	1
Household size	5991	4.188	1.919	0	17

Table 2 continued

Variable	Observations	Mean	SD	Min	Max
Married	5991	0.602	0.490	0	1
Urban	5991	0.803	0.398	0	1
Fairness perception	5991	3.952	2.025	1	7
Enforcement capacity	5991	3.853	1.616	1	7
Social trust	5991	2.842	0.868	1	4
Privatization	5991	3.772	2.067	1	7
Trust in the judiciary	5964	3.831	1.705	1	7
Trust in executive	5991	3.144	1.689	1	7
Trust in the legislature	5904	3.726	1.748	1	7

Table 3 Correlation matrix for income measures. *Source* LAPOP 2012

	Self-rep. income	Wealth	More than one car
Self-rep. income	1.000		
Wealth Index	0.571***	1.000	
More than one car	0.227***	0.236***	1.000

+ p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001

Table 4 Pairwise correlation matrix for DV and attitudinal variables. *Source* LAPOP 2012

	Prog. inc. tax	Wealth group	Respect in pol. insti.	Trust in insti.	Fairness perception	Social trust	Privatization
Prog. inc. tax	1.000						
Wealth group	-0.059***	1.000					
Respect in pol. insti.	-0.015	-0.026*	1.000				
Trust in insti.	-0.014	-0.035**	0.638***	1.000			
Fairness perception	-0.047***	0.057***	-0.016	-0.025*	1.000		
Social trust	0.014	0.052***	0.137***	0.180***	-0.020	1.000	
Privatization	-0.061***	0.080***	-0.064***	-0.136***	0.015	-0.035**	1.000

+ p < 0.10; * p < 0.05; ** p < 0.01; *** p < 0.001

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