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Policy drift in ideologically heterogeneous governments: tax policy in Latin America

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The relation between taxation and partisanship is a widely studied topic in Political Science. However, previous works have provided conflicting findings without clarifying which parties are most prone to progressive taxation. These studies also did not consider one distinctive feature of Latin American politics: coalition governments. Using the level of direct tax collection as a proxy for progressive taxation and panel data of Latin American countries since 1990, we investigate how progressive taxes vary across a scale of ideology observed in the executive branch along with the ideological heterogeneity of its coalition. The results show that ideologically heterogeneous governments present a policy drift, as the policies being enacted depart from parties' original preferences. Homogeneous left-wing governments collect more direct taxes than ideologically heterogeneous coalitions led by governments with the same ideology. The same dynamic is observed with homogeneous right-wing governments, which collect more indirect taxes in ideologically homogeneous coalitions. These results create new paths of research highlighting the need to include the government's composition in the analysis to understand policy design and the need to unravel the mechanism through which policy drift occurs in ideologically heterogeneous governments.
Keywords: taxation; partisanship; coalition governments; Latin America; inequality.

Policy Drift em governos ideologicamente heterogêneos: política tributária na América Latina

A relação entre tributação e partidarismo é amplamente estudada na Ciência Política. Entretanto, trabalhos anteriores não só apresentaram resultados contraditórios – sem esclarecer quais partidos são mais propensos a instituir tributos progressivos – como nenhum considerou um elemento particular da política latino-americana: os governos de coalizão. Usando o nível de arrecadação com tributos diretos como uma *proxy* para tributação progressiva e adotando um banco de dados em painel, investiga-se a receita com tributos progressivos considerando uma escala da ideologia da liderança executiva e a heterogeneidade ideológica da coalizão que forma o governo. Os resultados indicam que governos ideologicamente heterogêneos apresentam *policy drift*, já que as políticas sendo implementadas se distanciam das preferências originais da liderança executiva. Governos homogêneos de esquerda têm receitas maiores com tributos diretos do que governos formados a partir de coalizão ideologicamente heterogênea sob as mesmas lideranças. A mesma dinâmica ocorre com governos homogêneos de direita, que têm receitas maiores com tributos indiretos. Os resultados indicam novos caminhos para pesquisa, destacando a necessidade de se incorporar a composição de um governo à análise de políticas públicas, como a importância de se compreender o mecanismo pelo qual *policy drift* ocorre em governos ideologicamente heterogêneos.
Palavras-chave: tributação; partidarismo; governos de coalizão; América Latina; desigualdade.

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Policy drift en gobiernos ideológicamente heterogéneos: política tributaria en América Latina

La relación entre tributación y partidismo es un tema ampliamente estudiado en Ciencias Políticas. Sin embargo, trabajos previos han proporcionado hallazgos contradictorios sin aclarar qué partes son más propensas a la tributación progresiva. Estos estudios tampoco consideraron una característica distintiva de la política latinoamericana: los gobiernos de coalición. Utilizando el nivel de recaudación de impuestos directos como indicador de la tributación progresiva y datos de panel de los países de América Latina desde 1990, investigamos cómo varían los impuestos progresivos a lo largo de una escala de ideología observada en el poder ejecutivo junto con la heterogeneidad ideológica de su coalición. Los resultados muestran que los gobiernos ideológicamente heterogéneos presentan un *policy drift*, ya que las políticas que se promulgan se apartan de las preferencias originales de los partidos. Los gobiernos homogéneos de izquierda recaudan más impuestos directos que las coaliciones ideológicamente heterogéneas lideradas por gobiernos con la misma ideología. La misma dinámica se observa con gobiernos homogéneos de derecha, que recaudan más impuestos indirectos en coaliciones ideológicamente homogéneas. Estos resultados crean nuevos caminos de investigación que destacan la necesidad de incluir la composición del gobierno en el análisis para comprender el diseño de políticas y la necesidad de desentrañar el mecanismo a través del cual se produce *policy drift* de políticas en gobiernos ideológicamente heterogéneos.
Palabras clave: tributación; partidismo; gobiernos de coalición; América Latina; desigualdad.

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1. INTRODUCTION

The main goal of this article is to investigate the effects that coalition governments' ideology have on tax policy in Latin America for the last thirty years. The relevance of this question is twofold. In first place, although the relation between taxation and ideology is a crucial issue in Political Science, it has gathered conflicting results. On one hand, some findings highlight how left-wing parties are important for progressive taxation (Esping-Andersen, 1985; Stein & Caro, 2017). On the other, there are some works that point on the other direction, indicating incremental progressive changes happening under right-wing governments (Timmons, 2010).

In second place, none of the works on this topic, as far as our knowledge goes, has considered a distinctive feature of Latin American politics: coalition governments. Only a handful of Latin American governments were consistently ideologically homogeneous. If one is interested in grasping the effects ideology has on taxation in the region, it must consider the ideological heterogeneity there is among parties in government coalitions.

Therefore, this article employs the following methodological strategy to explore the relation between ideologically heterogeneous governments and tax policy. First, we use the level of direct taxes collection as a proxy for progressive taxation, as its incidence on income, profits, capital gains, and wealth can be customized according to the taxpayer's capacity. Alternatively, taxes on goods and services, so-called indirect, are taken as regressive. Secondly, using panel data for a wide range of Latin American countries across the 1990's and 2000's, we estimate the impact of ideological heterogeneity on tax policy, depending on the Executive's party ideology.

We show that ideologically homogeneous left-wing Executives are associated with higher levels of direct taxes, a progressive and redistributive tool available in tax policy. In fact, (right)left-wing Executives with heterogenous coalitions are associated with (higher)lower levels of direct taxes, and (lower)higher levels of indirect taxation. First of all, the results are important to highlight that left-wing parties seem to have some initiative in making tax policy more progressive in the region, as previous works have explored the preferences of these parties on redistributive policies in general (Esping-Andersen, 1985; Huber & Stephens, 2012a).

However, most importantly, not only the results corroborate the premise that ideologically divisive governments tend to have more conflicts to enact policy, but also points out that there is a policy drift when coalitions are ideologically heterogeneous. The results indicate that in those settings, parties departure from their original preferences, enacting policies that are somewhat different from what they would prefer.

Therefore, this work highlights that future analysis on policy design should consider a government's composition, since it could produce different results in terms of policy, but it also points out a promising line of inquiry, one that unravels the mechanism through which policy drift occurs in ideologically heterogeneous governments.

The next section lays the foundations of the debate, along with the opposing views of what would be the effect of ideology or partisanship on taxation, and the importance of coalitions in understanding policy design. Afterwards, we present the methodology applied in this project, along with our measure of ideological heterogeneity, and the datasets used in this research. Finally, we present our results that indicate the occurrence of policy drift in ideologically heterogeneous governments in Latin America, when it comes to tax policy. We then conclude with the final remarks.

2. PARTISANSHIP AND TAXATION

Since the work of Hibbs (1977), in which the author found an association between left-wing parties and a low-unemployment/high-inflation equilibrium in the United States and the United Kingdom, the effect of ideology or partisanship on different public policies has been a widely studied subject. In Boix (1998), for instance, one can find how left-wing parties would be prone to use the public sector to invest in capital and labor, then increasing productivity, whereas conservative parties would rely on the private sector to the same end instead.

Following this example, redistributive policies could also be associated with left-wing parties. Departing from the limitations the median voter theorem would have (Meltzer & Richard, 1981), since this model takes democracy as a sufficient condition for redistribution, Esping-Andersen (1985) highlights how important the cohesion of left-wing parties, alongside the fragmentation of conservative parties, and the power of unions were crucial to the enactment of a universal and social-democratic Welfare State in Sweden. Whilst a different scenario emerged in Germany, where the strength of right-wing parties contributed to the construction of a conservative Welfare State.

In the Latin American context, Huber and Stephens (2012a) developed what was called the power constellations theory. As in Europe, the presence and importance of left-wing parties in deliberative institutions were fundamental to the implementation of universal health services and conditional cash transfers in the region, significantly contributing to a recent reduction in inequality. The idea

behind these works is that left-wing parties and unions are the political actors interested and actually engaged in reducing the income gap between rich and poor, thus contributing to the implementation of all kinds of redistributive policies.

However, considering macroeconomic or redistributive policies alike, taxation was not primarily studied as a policy, in which parties from different ideologies would have sharp different preferences. On one hand, in the macroeconomic realm, taxation was understood as a side effect of preferences on expenditures, where the larger public sector under left-wing governments would ensue a larger pool of resources collected by taxes, compared to right-wing governments. On the other hand, from a redistributive perspective, despite being able to intervene in the economic distribution, by increasing the burden on the richest strata through direct taxation, tax policy was seen as a necessary way to finance the "true" redistributive policies preferred by left-wing parties regarding expenditures[1]. In this case, the only concern would be to collect more taxes, regardless of how that burden would be distributed across society. The scenario led to considerable uncertainty on whether left-wing partisanship would also be associated with redistributive tax policy.

The way a state collects taxes can have profound consequences on income inequality. Taxes incident on goods and services – indirect taxes – are regressive, which roughly means their burden decreases as one goes along the income distribution until the richest taxpayer. Since taxpayers have different incomes, and indirect taxes are uniformly incident across society, poorer taxpayers pay more taxes than rich ones, in relative terms, increasing income inequality. Alternatively, taxes incident on income, profits, and capital gains – direct taxes – can be progressive, since it can be regulated to increase its burden along the income distribution, customizing its rate according to the taxpayer's capacity (Comisión Económica Para América Latina y el Caribe [Cepal], 2017).

Hence, if a government is interested in tackling income inequality, it can use tax policy to do so, adjusting the trade-off between indirect and direct taxation, decreasing the burden on lower strata, whilst increasing it on richer ones. This is the main reason why, in this work, we are considering that a tax system becomes more progressive, as it increases its collection of direct taxes. Especially considering how, in Latin America, countries have low levels of tax revenue and historically even lower levels of direct taxation collection, leaving income inequality unharmed by taxation, in a striking contrast with OECD countries (Goñi, López, & Servén, 2011).

It could be argued that even high levels of revenue collected with income, profits, and capital gains could be associated with a regressive tax policy, since the steepness of this collection could be low. Ideally, from a comparative perspective, it would be interesting to investigate progressive tax systems by analyzing the effective tax rate on the richest households in a given society. However, since we are not aware of such data, to rely on (in)direct taxes as criteria to assess the progressiveness of tax policy is a useful proxy.

For one part of the field, left-wing parties would have a clear preference to levy more taxes, and to levy it progressively under certain conditions. Stein and Caro (2017) analyze tax revenue between 1990 and 2010 in Latin American countries and find that the leftist shift in the region was associated

[1] "The bulk of taxes must be collected among the largest income brackets, and that happens to be workers and middle-level white-collar employees" (Esping-Andersen, 1985, p. 35).

with larger tax collection in the period, along with a higher collection of taxes on income. Importantly, they found no association between the same left shift with indirect taxes or social contributions. In light of the criteria applied here, the results would position left-wing governments closer to more progressive tax systems.

In the same line, Castañeda (2017) develops a theory that departures from a divide between agenda-setters that could be considered taxers or non-taxers. Regarding tax policy, presidents and finance ministers in Latin America are key figures in the enactment of taxation regimes. If those have interests in increasing public revenue, they ought to be considered taxers. Alternatively, if there is no such interest, non-taxers. In general, there would be a high correlation between left-wing parties and taxers, mainly due to the importance the former gives to the public sector (Castañeda, 2017).

However, the possibility these parties have of enacting progressive tax regimes, that is, with higher levels of direct taxation, depends on two factors. The first would be partisan power. If taxers have strong partisan powers, which means a large share of seats at the lower house in the national assembly, the chances of approving these changes improve. The second constraining factor is the pattern of business coordination. Obviously, businesses are natural opponents of progressive tax changes, since they would be the net losers of this policy. Thus, if interest groups have well-organized and centralized organizations, integrating them into the policy-making process, the chances of a progressive tax change getting approved are slim[2]. The scenario creates a situation in which progressive tax changes will only be observed if agenda-setters are taxers (left-wing), with strong partisan powers, in a context which interest groups are decentralized and weak. If this is the case, one can expect a structural and progressive tax overhaul. Interestingly, if interest groups are strong, in the same context, larger tax revenue will come through indirect taxation, increasing the regressiveness of a tax system (Castañeda, 2017).

The scenario described as ideal by Castañeda (2017) is the one described in Uruguay in 2006 by Rius (2015). Tabaré Vázquez was elected president in 2004 from the left-wing *Frente Amplio*. Not only his party won the election for the presidency, but *Frente Amplio* won a majority of seats in the lower house, and in the senate, 52.9% and 54.8%, respectively, without any other party as partner in the government coalition. Therefore, the 2004 elections gave the presidency to an alleged taxer, with strong partisan powers.

Two years into his term, Tabaré Vázquez proposed a broad tax reform. It was composed by several progressive changes, such as the replacement of cedular income taxes for a global income tax[3], the matching of the maximum income rate for personal and corporate income taxes, reduction of VAT[4] rates, and the suppression of a sales tax, amongst others. To Rius (2015), beyond the effort

[2] Although not necessarily related to the integration of business groups into the policy-making process, the repeal of a tax raise on agricultural exports in Argentina, due to intense political mobilization of producers, highlights the importance of business engagement in the design of tax policy (Fairfield, 2011). Alternatively, despite several attempts of a major tax overhaul, Brazil has not seem any relevant modification of tax policy, in terms of its progressiveness (Oliveira & Biasoto, 2017).

[3] The main difference between the two is that cedular income taxes divide the due tax in different sources of income, such as work, capital, and profits, for instance. Whilst the global income tax totals all sources of income up, potentially increasing the progressiveness and the burden of the income tax, compared to a cedular arrangement.

[4] VAT stands for value-added taxes, incident on goods and services. Thus, it is a type of indirect tax.

the government made to clear out who would be the most affected by the reform, mitigating the opposition from the middle class, the weak organization of elites and interests groups in Uruguay was fundamental to the reform's approval. According to the Rius (2015), Uruguayan elites are organizationally and ideologically divided, with feeble connections with political parties. Hence, there would be no centralized and national confederation of enterprises in the country. It is not trivial that according to OECD statistics on tax collection in Uruguay, direct taxation corresponded to 2.4% of GDP in 2004 and soared to 5.4% in 2010.

Another example is Chile, although with stronger interest groups organizations. During Lagos' term between 2001 and 2006, the president from the *Partido Socialista*, the head of the left-wing coalition *Concertación*, was able to enact three incremental progressive changes in the Chilean tax system. In 2001, Lagos approved *i)* a restriction on tax benefits that favored tax avoidance, and *ii)* also increased the corporate income tax rate from 15% to 17%. If these changes were not incremental enough, the latter was followed by a decrease on the top marginal rate for personal income taxation, from 45% to 40%, and another cut for the second highest marginal rate, from 35% to 32%. Finally, in 2006, *iii)* it eliminated the *57 Bis* benefit, a subsidy for owners of new-issue stocks. As one can see, all these changes were incremental. As pointed out by Fairfield (2015), these changes were only approved because a left-wing government was able to garner support from the middle classes, at the same time with a fierce opposition from business groups, well connected with right-wing parties, such as the RN, but especially the UDI, considerably restricting the breadth of any progressive tax change.

However, a second part of the literature inverts the relation between ideology and taxation, where left-wing parties would not be associated with redistributive tax policy (Timmons, 2010). That would not necessarily be the case because taxation could not be considered as a policy, in which it is applied to coerce the political opponents of the left, but a policy, amongst others, that is part of a broader political bargaining between policymakers and interest groups (Timmons, 2010). From this perspective, right-wing governments would have a higher chance of approving progressive changes because it would be easier for them to strike deals with its allies – the net losers or progressive changes –, since every change would have to be followed by other policies favored policies by elites, or businesses.

In other words, since all progressive changes would come about with a political bargaining between policymakers and elites/business, the new cost imposed by a tax change needs to be followed by another policy demanded by these groups, and only right-wing parties are able to strike credible commitments with them. Alternatively, since left-wing governments are not as well connected with business groups, the chances that a bargaining between these parties and elites succeeds are smaller. As pointed out by Timmons (2010), it is easier to tax a party's own supporters, since it is easier to offer them plausible benefits. Although in a different perspective, this work resonates with Holland and Schneider (2017), in which taxes are part of a set of hard-redistribution policies, that to be approved, they would need to face mounting political opposition, with sustained, broad, and solid support coalitions.

This could provide a broader explanation for progressive changes observed in right-wing governments in Colombia, Mexico, and once again Chile[5]. Facing a mounting security crisis, followed

[5] It is important to highlight that there were two different reforms subject to case studies in Chile. The first would be the one described by Fairfield (2015), during Lagos' presidency, which would fit into the hypothesis left-wing parties are also associated with progressive tax policy. The second is the one enacted by Piñera's conservative government in 2011, described by Fairfield and Garay (2017).

by a fiscal one, Colombia approved a series of tax laws in 2002, 2003, 2006, and 2007, all of which during Álvaro Uribe's government, from the right-wing party *Primero Colombia*.

All of these changes were part of a stabilization plan to mitigate violence in the country, hence, all of them were named as *Impuesto de la Seguridad Democrática*. According to Flores-Macías (2014), all of it was possible because Colombia faced a serious security threat that could not be tackled by "conventional policy making" (Flores-Macías, 2014, p. 488). Business groups agreed to new taxes incident on high liquid assets because they anticipated the benefits that would flow from the security plan being proposed by Uribe, compensating its burden.

For Fairfield and Garay (2017), in Mexico and Chile, the incremental progressive reforms observed in these countries were mainly due to the electoral competition for unaligned and poor voters, putting pressure on fiscal policy, and requiring larger sums of revenue. However, it could be argued that in face of the mounting political threat imposed by left-wing movements in both countries, right-wing parties managed to strike deals with business, anticipating that these groups would have losses either way, but could diminish it by agreeing to higher taxes that leverage the position of right-wing parties electorally.

In Mexico's presidential race of 2006, the three main parties, PRI, PAN, and PRD, competed for large sections of the electorate, dependent on and willing for redistributive policies. The leftist candidate, Andre´s Manuel López Obrador (PRD), posed a credible electoral threat to right-wing parties, the PAN and the PRI. It should be noted that the PRD pressured in the previous conservative government for a new pension system, afterwards enacted and called *Oportunidades*, months before the national election. The then elected president, by a thin margin of 300,000 votes, Felipe Calderón (PAN), had to increase tax revenue, and, according to Fairfield and Garay (2017), the only feasible option was to finance the new pension system by creating a minimum corporate tax – *Impuesto Empresarial a Tasa Única* (IETU) – a direct, and progressive tax.

At the same time, in Chile, *Sebatián Piñera* was elected in 2009 for president from the right-wing *Coalición*. Taking office in 2010, he enacted a transfer program to indigent and poor families, the *Ingreso Ético Familiar*. At the same time, the country was hit by an earthquake that caused serious damages to Chilean infrastructure and households. Furthermore, in 2011, students protest pressured for free college education, facing the rising debt level of student loans. All those factors combined increased the need for tax revenues. Piñera responded by increasing the corporate tax from 17% to 20%, despite receiving critiques from his own base, mainly business groups. However, as pointed out above, as a strategy of restraint, a business informant said: "we [business groups] decided not to show our teeth... it was our government" (Fairfield & Garay, 2017, p. 23), indicating a negotiation between them and Piñera's right-wing government.

Obviously, partisanship is only one factor, amongst many, that may influence tax policy. One commonly cited is real GDP per capita. Roughly speaking, taxes are only incident in some expression of economic or purchase power. After all, taxes are collected on income, property, profits, consumption, etc. Therefore, if a given population is richer than another, the former has a larger potential of tax revenue, regardless of how progressive the taxes being raised are. In technical terms, as a country gets richer, the tax base increases, thus creating favorable conditions to the collection of taxes, progressive or regressive alike (Cepal, 2017; Goñi et al., 2011).

Another relevant constraining factor for tax policy, especially in the case of Latin American countries, is trade openness and how integrated a country is into global markets. Consider taxes incidents on capital. If a country eases capital mobility across its borders, eventually becoming more dependent on foreign direct investment (FDI), it would have less incentives to raise taxes on capital, since an increase could lead to capital flight. In fact, although Latin America still has some degree of control over its tax policy, globalization is argued to be a constraining factor on how countries in the region decided to collect taxes on income and capital in the 1990's (Wibbles & Arce, 2003).

It should also be important to highlight that, although counterintuitive, social-democratic countries, such as Sweden, are associated with regressive taxation, given its collection on goods and services (Beramendi & Rueda, 2007). Social-democratic regimes built their Welfare States on the idea that its public policies, like health, must be universally available. Besides creating a significant pressure to collect revenue, given the political conditions in which those Welfare States were based upon, in a negotiation between State, capitalists, and unions, regressive taxation was the redistributive "cost" to be paid, if one is interested in universal health care, for instance. Thus, as it will be seen, our empirical analysis includes real GDP per capita, FDI, and the total public expenditure on health (as a proxy for a country's effort in resorting to universal policies), both in terms of GDP, in our set of control variables.

Hence, including in our analysis relevant control variables to understand tax policy, as we focus on its relation with partisanship, our contribution is to integrate one key feature of presidentialism in the region that has not been addressed so far: coalition governments. If one is interested in investigating the effect of ideology on taxation in the region, it is not enough to grasp the ideology of the Executive; it is fundamental to integrate the ideological heterogeneityof government coalitions and see how it articulates with the Executive's ideology[6].

The introduction of coalition governments in this analysis of public policy is due to a basic premise. Let us assume there is a coalition being composed by three parties, all of which hold similar policy positions and preferences. Once in government, one can assume that this coalition will have a greater chance of enacting policy changes, according to its interests. Alternatively, if another coalition holds office, but its members are considerably heterogeneous, conflict will rise in discussions on policies to be implemented in government, diminishing its chances of being successful. Especially in the case of redistributive policies, such as taxation, given its intense political conflict (Lowi, 1964).

To analyze policy design without taking into account how coalitions members are ideologically different among themselves, may overlook how a specific policy has drifted away from its members' original preferences. In other words, one must consider "a conceptual differentiation between partisan preferences and coalition positions" (Jungblut, 2017, p. 19).

[6] As Garay (2016) pointed out, the social policies proposed by left-wing governments in Chile, Lagos and Bachelet, were restricted because of the different approaches coalition's members had towards social policy. Whilst the PS and the PPD desired more broad and generous benefits, the DC would be more conservative, restricting and watering down the preferred proposals made by the former two.

Debus (2008) has shown, for instance, how the preference of a coalition's key party asserts its view more effectively, by analyzing coalition governments in Austria, Belgium, Germany, Ireland and The Netherlands. Although this key position in the coalition does not translate, necessarily, into more seats in the cabinet, it does mean a greater prevalence of its preferences onto policy.

It should also be mentioned that intra-coalition conflicts may be mitigated, depending on the Legislative institutions devoted to policing Legislative members (Martin & Vanberg, 2019). If there are institutions designed to increase the scrutiny of ministerial proposals in the Legislative, the chances of compromise between coalition partners increase, even if they are ideologically distant. Thus, the institutions in place will affect whose preferences are considered in the coalition, leading to 'ministerial drift', as it was called by the authors.

However, most importantly, there are two works that valid our basic premise. Jungblut (2017) shows how, as coalition partners have similar positions, coalition agreements over policy tends to be more encompassing. That was precisely the case of the North Rhine-Westphalia, a German state, and the two different coalitions in 2005 and 2010 that have introduced reforms in higher education. As the author shows, "ideological homogeneity should lead to a greater level of detail in the coalition agreement" (Jungblut, 2017, p. 5).

Finally, while addressing the question on why election promises of coalitions are often unfulfilled, Zuber and Klüver (2015) highlight how the divisiveness of coalitions in Poland led to delays on the fulfillment of those promises, if those were met at all. That result was understood as the consequence of conflicting policy positions. If this is the case, coalition partners will be more thorough and skeptic about another's member policy proposal, thus producing delays in policy enactment and the unfulfillment of electoral promises. In this scenario, the disregard of coalition governments – and the ideological heterogeneity within coalitions – seems to be a gap that must be addressed.

3. METHODOLOGY

There are four main sources of data this work relies on. The first one is the OECD Stat dataset on tax collection for Latin American countries. It gathers how much these countries levied on taxes incident on income, profit and capital gains, roughly since 1990, as well as how much it was levied with taxes on goods and services. The former will be called direct taxes, whereas the latter, indirect taxes. It should be noted that the revenue for both taxes is restricted to central government only, not including the revenue of subnational units. Thus, our two dependent variables are how much (in) direct taxes correspond to in total tax revenue for country i in year t[7].

The second one is the Parliamentary Elites in Latin America (PELA) project. Applied by the Universidad de Salamanca since 1994 in all Latin American countries, it is a survey of representatives, collecting their opinions in a varied range of issues, throughout multiple waves. Normally, the survey is applied on the second year of every legislature. Amongst all issues covered in the survey, there are

[7] If one is interested in analyzing the change in collection from one year to another, arguing that our dependent variables of choice are static and do not grasp actual policy change, in the appendix we present the same models, but modelling our dependent variables as the change in direct or indirect taxes from year t and year $t - 1$. The coefficients hold the same relation between tax policy and partisanship.

three different questions regarding ideology. The first one is a question on where a set of a maximum of six political parties stand ideologically, where 1 indicates extreme-left, and 10 extreme-right. The second one is the same scale but regarding the representative's own party position, whilst the third question regards the representative's own ideological position. These scales will give us the ideological positioning of parties, as it will be seen below.

However, it could be the case PELA's survey does not list a party that is part of a government coalition in the first question (Huber & Stephens, 2012b). Also, due to non-responses, some small parties that can be part of the government coalition do not have any representative being surveyed. Hence, in order to not lose country-year observations, since we would miss parties that were members of coalitions, we have estimated an average of ideological positions. The first step was to estimate an average, across survey's waves, of ideological positions pointed out by the representatives' own parties, by themselves, and the positioning given to the parties included in the questionnaire. Those averages were estimated separately.

Take *Partido dos Trabalhadores* in Brazil, the country's main left-wing party. Three averages of ideological positioning were estimated. One for the evaluation of all respondents of the party's positioning, another taken from its own representatives, and another from its representatives themselves. The average of these averages was taken, and that is the ideological positioning being used for analysis here. If, for instance, a party only had positioning for its own representatives, then this is the position that was used. Then, the scale was inverted so that 10 represents extreme-left. This number, for all parties that were once part of any coalition, along with its standard deviation, can be found in the appendix below, in table 4.

This ideological positioning that allows us to estimate the ideological heterogeneity of every cabinet in our analysis. In other words, only having the ideological position of every party that it is a member of a government coalition one can estimate the ideological heterogeneity of a cabinet. In the equation below, x stands for the Executive's party ideology (head party of the coalition) subtracted by party x_i ideology (member of the coalition), in absolute terms, over the total number of parties in the coalition. This formula was taken from other articles that have analyzed the ideological composition of different Brazilian cabinets (Power & Zucco, 2009; Silva, 2017).

$$Ideological\ Heterogeneity_{i,t} = \sum_{n=1}^{n} \frac{|\ x - x_i\ |}{n}$$

Hence, consider Bolivia's coalition in 1997. It was the last year of Lozada's term, from the MNR, the head party, with an ideological score of 3.53. It had as partners in the coalition the MBL and the UCS, respectively, 6.00 and 3.98. Then, the ideological heterogeneity of this year's term would be given by the sum of the absolute difference between MNR and MBL's scores, divided by three, and the same procedure for the UCS, totaling 0.974. Finally, if a cabinet is made by only one party, then the ideological heterogeneity is equal to zero.

It should be noted that the cabinets for all countries were taken from Figueiredo, Canello, and Vieira (2012), a dataset developed by the Brazilian Center of Analysis and Planning (CEBRAP), our third main source of information for this work. Considering all information gathered, in table 1 one can find the average values of total tax burden, direct and indirect taxes collection in terms of total tax revenue, along with the average measure on ideological heterogeneity by country. Finally, it also presents the first and last year's observations in every country available for analysis.

TABLE 1 MEAN OF DIRECT TAXATION, INDIRECT TAXATION, IDEOLOGICAL HETEROGENEITY, AND FIRST AND LAST YEAR OBSERVATIONS

Country	Tax Burden (% of GDP)	Direct Taxes (% of Tax Revenue)	Indirect Taxes (% of Tax Revenue)	Ideological Heterogeneity	First Year	Last Year
Argentina	23.17	25.73	55.28	0.225	1995	2011
Bolivia	17.43	16.25	71.08	0.750	1994	2011
Brazil	32.95	27.85	43.38	1.167	2003	2011
Chile	19.55	36.26	57.38	0.807	1994	2011
Colombia	17.39	34.75	42.44	1.414	1998	2011
Dominican Republic	13.34	27.69	71.36	0.919	2004	2011
Ecuador	12.11	18.88	56.72	3.014	2003	2006
Paraguay	10.87	16.23	64.11	0.198	1993	2002
Peru	15.06	24.91	59.23	0.383	2001	2003
Uruguay	23.57	23.38	52.65	0.005	1998	2010

Source: Elaborated by the author based on Alcántara (2018).

Reflecting how the country has a high tax burden for the region (Ondetti, 2015), Brazil has the largest average of tax collection, considering total tax burden in terms of GDP, 33% approximately. In all countries analyzed, the collection of indirect taxes is more important than direct taxes, highlighting the known regressiveness of tax systems in the region (Cepal, 2017). It contributes to what Tanzi (2000) said about how Latin American countries would be allergic to direct taxation.

When it comes to ideological heterogeneity, Ecuador presents the highest index (3.014). This is mainly due to Alfredo Palacio's government, between 2005 and 2006. His coalition was made by his party, *Partido Sociedad Patriótica*, the *Pachakutik*, and the *Movimiento Popular Democrático*. Colombia has the second highest level of ideological heterogeneity (1.414). Mainly due to the ideological scores of *Partido de La Unidad Nacional*'s led government, by Uribe, who also formed a coalition with the PLC and the PC. Argentina and Uruguay have the lowest levels of ideological heterogeneity since most of its observations are made of single-party governments, such as Cristina Kirschner's governments (FPV-PJ), and *Frente Amplio* governments, respectively.

Since it is important to analyze this phenomenon with control variables, this work relies on the Social Policy in Latin America and the Caribbean Dataset, compiled by Huber and Stephens (2012b). From that dataset, we use the following variables as controls: real GDP per capita, FDI (% of GDP), heath expenditures (% of GDP), all of which could affect the levels of direct and indirect taxes, as discussed in the section above.

The first one could increase the levels of direct and indirect taxes alike, since as GDP per capita increases, there is a larger tax base to be taxed (Cepal, 2017). FDI, in terms of GDP, is important to include in the analysis since as it increases, there could be a negative incentive to tax capital, which is part of the base in which direct taxes apply (Wibbles & Arce, 2003). Whereas health expenditures, also in terms of GDP, are included since it could trigger the need to increase collection of indirect taxes, considering the apparent paradox between universal policies and regressive tax systems (Beramendi & Rueda, 2007). We also include a variable that measures the share of seats held by the government coalition. The idea is that every change will have to rely on government's majority to be enacted, justifying its inclusion in our models. Formally, our analysis will estimate the relation between partisanship and tax policy with the following equation, lagging in one year all our independent variables:

$$
\begin{aligned}
(In)Direct\ Taxes_{t,i} \\
&= Executive\ Ideology_{t-1,i} + Coalition\ Ideo.Heterogeneity_{t-1,i} \\
&+ Executive\ Ideology_{t-1,i} * Coalition\ Ideo.Heterogeneity_{t-1,i} \\
&+ Share\ of\ Seats_{t-1,i} + Real\ GDP\ per\ Capita_{t-1,i} + FDI_{t-1,i} \\
&+ Public\ Health\ Expenditures_{t-1,i}
\end{aligned}
$$

All specifications included country fixed effects. In the second specification, we include a dummy control indicating whether that country-year observation is a coalition government, or a single-party one, in light of the importance given to ideological heterogeneity in the government's coalition. Whilst in a third specification, we exclude governments formed by just one party. Our key independent variables of interest will be the Executive ideology (a continuous index that goes to ten, which would indicate extreme-left), the referred index for ideological heterogeneity, and an interaction term between the two.

Still regarding our model specification, we will estimate the collection of direct and indirect taxes in beta regressions, since our dependent variables are proportions bounded between 0 and 1. Typical OLS models could generate biased estimates, allowing for prediction results that do not respect the boundaries imposed by the data, thus providing illogical estimates for tax collection. Hence, beta regressions represent the appropriate technique to assess the proportions concerning this article. Such method was developed by Ferrari and Chibari-Neto (2004), and extended by Simas et al. (2010). In this case, parameters are estimated through maximum likelihood. Finally, considering the characteristics of our dependent variable, an identity link function was used.

4. RESULTS

We begin by showing the results of our models regarding direct taxation in table 2. In all specifications and isolated, a left-wing Executive is positively associated with direct taxation. This positive association increases as we go from model 1 to 3, excluding from the analysis governments made only by one single party. Real GDP per capita has the expected signs, being statistically significant, whereas FDI and health expenditure do not seem to affect levels of direct taxation. Albeit we will focus on the predicted combined effects of ideology and heterogeneity below, these models already give us an indication that left-wing Executives are positively associated with tax systems that could be considered more progressive in a comparative perspective.

TABLE 2 BETA REGRESSIONS ON DIRECT TAXATION (% OF TOTAL TAX REVENUE)

	Model 1	Model 2	Model 3
Constant	-8.295***	-8.533***	-10.246***
	(0.745)	(0.706)	(0.934)
Lagged Executive Ideology (Left = 10)	0.089***	0.099***	0.275***
	(0.033)	(0.031)	(0.084)
Lagged Ideological Heterogeneity	0.594***	0.558***	1.128***
	(0.139)	(0.132)	(0.248)
Lagged Share of Government Coalition	-0.001	-0.004*	-0.001
	(0.002)	(0.002)	(0.002)
Lagged Real GDP Per Capita (2005 US$)	0.781***	0.783***	0.894***
	(0.082)	(0.078)	(0.116)
Lagged FDI (% of GDP)	-0.001	0.006	-0.002
	(0.012)	(0.012)	(0.013)
Lagged Health Expenditure (% of GDP)	-0.03	-0.016	0.017
	(0.029)	(0.028)	(0.029)
Lagged Continuous Ideology*Heterogeneity	-0.104***	-0.111***	-0.235***
	(0.03)	(0.028)	(0.057)
Lagged Coalition (Yes = 1)		0.312***	
		(0.091)	
Precision Phi	66.343***	75.133***	83.896***
	-9.675	-10.964	-14.651
Country Fixed Effects	Yes	Yes	Yes
Observations	93	93	65
Log Likelihood	142.3	147.9	106.3
Pseudo R2	0.6155	0.6438	0.7436
Number of Iterations BFGS + Fisher Score	20+3	21+2	20+2

Note: * Stands for a statistical significance of 0,10; ** for 0,05, and *** for 0,01.

Source: Elaborated by the author based on Alcántara (2018) and Figueiredo et al. (2012).

When one analyses the relation between partisanship and indirect taxation, the invert scenario appears. In other words, if left-wing Executives are associated with higher levels of direct taxes, regarding indirect taxation, Executives with this ideology are negatively associated. The results indicate that left-wing Executive have some initiative in turning tax policy more progressive, as the power constellation theory expects (Huber & Stephens, 2012a).

Regarding the control variables included in the analysis of indirect taxation, real GDP per capita has a negative association, as it is the case with public health expenditure. Although further analysis is necessary on the matter, it seems that as real GDP per capita increases, the tax base for income, profits, and capital gains soars as well, allowing for a lower burden on consumption. When it comes to public health expenditure, there is no indication that the apparent paradox between regressive tax systems and universal policies holds in Latin America (Beramendi & Rueda, 2007). Finally, FDI is positively associated with regressive taxation, indicating the need to investigate more thoroughly the relation between regressive taxation and globalization (Wibbles & Arce, 2003).

TABLE 3 BETA REGRESSIONS ON INDIRECT TAXATION (% OF TOTAL TAX REVENUE)

	Model 4	Model 5	Model 6
Constant	4.569***	4.554***	4.021***
	(0.648)	(0.647)	(0.915)
Lagged Executive Ideology (Left = 10)	-0.067**	-0.068**	-0.306***
	(0.029)	(0.029)	(0.091)
Lagged Ideological Heterogeneity	-0.393***	-0.406***	-0.991***
	(0.126)	(0.128)	(0.268)
Lagged Share of Government Coalition	0	0	0.002
	(0.002)	(0.002)	(0.002)
Lagged Real GDP Per Capita (2005 US$)	-0.391***	-0.391***	-0.226*
	(0.072)	(0.072)	(0.117)
Lagged FDI (% of GDP)	0.056***	0.057***	0.079***
	(0.011)	(0.011)	(0.014)
Lagged Health Expenditure (% of GDP)	-0.174***	-0.172***	-0.203
	(0.027)	(0.027)	(0.031)
Lagged Continuous Ideology*Heterogeneity	0.039	0.039	0.189***
	(0.027)	(0.027)	(0.062)
Lagged Coalition (Yes = 1)		0.044	
		(0.084)	
Precision Phi	64.27***	64.449***	62.266***
	-9.355	-9.381	-10.839

Continue

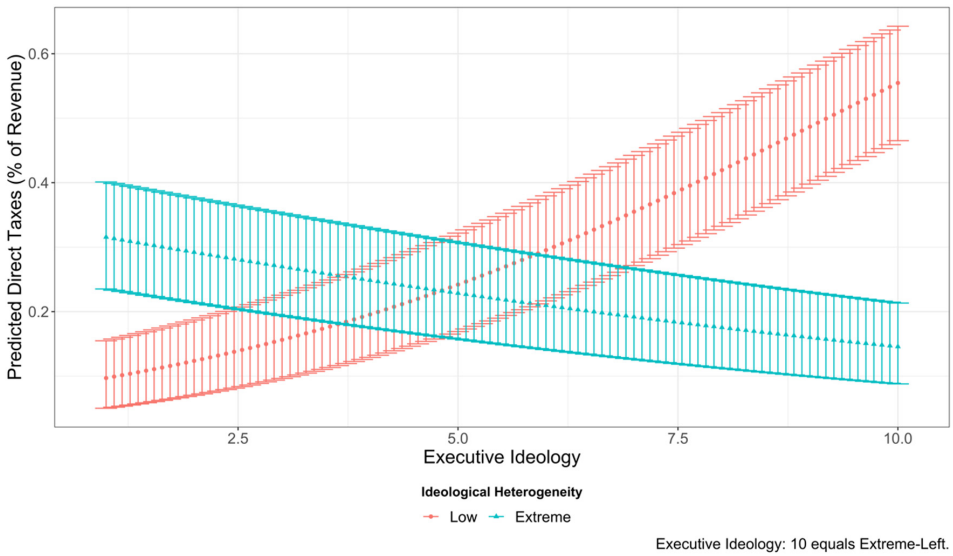
	Model 4	Model 5	Model 6
Country Fixed Effects	Yes	Yes	Yes
Observations	93	93	65
Log Likelihood	129.1	129.2	89.48
Pseudo R2	0.6413	0.6427	0.7054
Number of Iterations BFGS + Fisher Score	19+2	20+2	19+2

Note: * Stands for a statistical significance of 0,10; ** for 0,05, and *** for 0,01.
Source: Elaborated by the author based on Alcántara (2018) and Figueiredo et al. (2012).

In figure 1, we present the predicted collection of taxes incident on income, profits, and capital gains in terms of total tax revenue. Holding the control variables in its average values, and the share of the government's coalition at 55%, in the third model presented in table 2, we present the predicted outcome for direct taxes along our ideological scale of the Executive, splitting the results into two different groups of ideological heterogeneity. In other words, we estimated the predicted outcomes in cases in which ideological heterogeneity is hypothetically equal to the value observed in the 30th percentile of our heterogeneity distribution – "low" levels of ideological heterogeneity – and another prediction to cases in which ideological heterogeneity is equal to this index's value at the 90th percentile – "extreme" levels of heterogeneity.

On one hand, at the 30th percentile of our distribution in ideological heterogeneity, the index is equal to 0.0127, similar to the cabinet seen in Uruguay in 2001 and 2002 (*Partido Colorado* and *Partido Nacional*). On the other hand, the index reaches 1.644 at the 90th percentile, close to the value observed in Bolivia between 1998 and 1999 (cabinet composed by ADN, MIR, CONDEPA, UCS, and NFR), for instance.

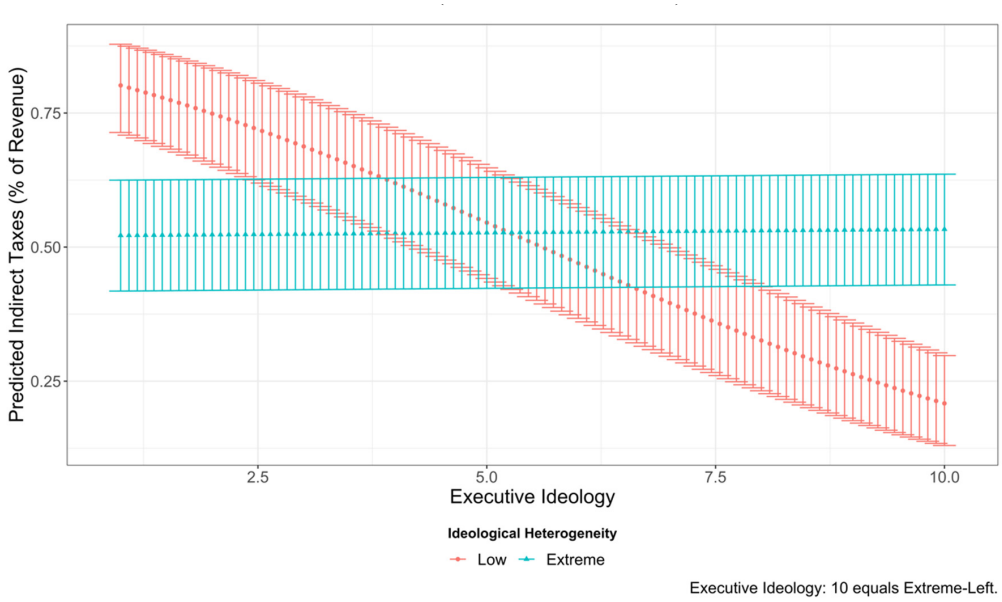
FIGURE 1 DIRECT TAXATION FIT (% OF TOTAL TAX REVENUE), MODEL 3



Source: Elaborated by the author based on Alcántara (2018) and Figueiredo et al. (2012).

As can be seen from figure 1, consistently left-wing Executives are associated with higher levels of direct taxation, a progressive tool in tax policy. In the horizontal axis, a left-wing Executive at the 7.5 mark, close to the ideological positioning of the Bolivian party *Movimiento al Socialismo*, yields 40% of direct taxes in total tax revenue. This means approximately 5 percentage points more progressive taxation than Chile, the Latin American country with the highest average of direct taxes collection. Comparatively, a right-wing Executive at the 2 points mark, like the UDI in Chile, is predicted to have 15% of its total taxes levied from direct taxes, equivalent to Peru's collection in this type of taxation. Therefore, the coalition component is crucial to investigate the relation between partisanship and taxation.

FIGURE 2 INDIRECT TAXATION FIT (% OF TOTAL TAX REVENUE), MODEL 6



Elaborated by the author based on Alcántara (2018) and Figueiredo et al. (2012).

A completely different scenario emerges when one investigates Figure 2, which shows the predicted levels of indirect taxes collection. Homogeneous (right)left-wing Executives are systematically associated with (higher)lower levels in collection of taxes on goods and services.

When it comes to ideologically heterogeneous governments, the results in terms of public policy seem to be different than the original preferences of the party on the Executive. Regardless of the type of taxation, left-wing Executives with extreme ideological heterogeneity have higher levels of indirect taxes and lower levels of direct taxes. The same being said to governments that are led by right-wing Executives, that is, higher levels of direct taxation and lower levels of indirect taxation are predominant in heterogeneous right-wing governments, when compared to homogeneous governments with the same ideology.

As previously pointed out, governments that are ideologically heterogeneous will have more conflicts in enacting policy change, given the distinct preferences that the coalition holds. Coalitions that are ideologically homogeneous tend to forge a more encompassing policy agenda (Jungblut, 2016), whereas ideological divergence within the coalition leads to the departure of a party's original preference, producing policy stalemate or suboptimal policy change (Zuber & Klüver, 2013).

However, most importantly, as the interaction between the Executive's ideology and the heterogeneity of its coalition highlights, it seems to have a policy drift, when cabinets are ideologically different. Martin and Vanberg (2019), for instance, show that there is a ministerial drift whether there are Legislative institutions that allow for the scrutiny on ministerial propositions, leading to changes in the original proposal sent by a member of the cabinet. The Latin American case shows how this drift can also happen, in different institutional settings, in a redistributive policy, such as taxation.

5. CONCLUSIONS

This work began questioning what the effect of partisanship on tax policy in Latin America was, from a redistributive perspective. The uncertainty around the preference on tax policy from different ideologies required a comparative analysis, building on what was already produced in qualitative studies. At the same time, no work on this subject has incorporated a key feature of Latin American politics: coalitions. The main goal was to address this question, considering an overlooked characteristic of Latin American politics.

The importance to discuss the coalitional component is due to a basic premise, in which as a coalition gets heterogeneous in terms of preferences, conflicts may arise, producing policies that are different from its members original preferences. Previous studies (Debus, 2008; Jungblut, 2016; Martin & Vanberg, 2019; Zuber & Klüver, 2013) have explored how this feature have contributed to policy drift, stalemate, and the unfulfillment of electoral promises.

However, not even partisanship has a consensual impact on tax policy, the main focus of this article. Two hypotheses emerge on this relation, according to the literature. The first one would reproduce the preference of left-wing governments with all redistributive policies in general, in which these governments would engage in progressive tax policy (Castañeda, 2017; Esping-Andersen, 1985; Huber & Stephens, 2012a; Stein & Caro, 2017). Whereas another theory saw tax policy as part of a political bargain, rather than a tool to coerce political opponents (Timmons, 2010). Hence, in this case, right-wing governments would have a better chance of enacting progressive changes, because they could bargain with elites and business groups a progressive tax reform, compensating it in another policy. A credible commitment not available to left-wing parties

Analyzing how different types of taxes varied across Latin America, in terms of its collection levels or annual differences in revenue (see Appendix), two important findings were observed. First, taking direct taxes – incident on income, profits, capital gains, and wealth – as a proxy for progressive taxation, whereas taxes on goods and services (indirect taxes) as regressive, left-wing Executives were associated with higher levels on the former, and lower levels on the latter. Initially, this indicates how governments from this ideology have some initiative in making its tax policy more progressive.

Second, introducing the coalition component into the analysis, one could see that ideologically heterogeneous governments show a policy drift, departing from its original preferences. In the case

of heterogenous governments, led by left-wing Executives, we predicted (higher) lower levels of (indirect) direct taxes than governments with the same ideology, but homogenous in terms of its coalition's ideology. As the opposite could be said about right-wing governments.

Regarding tax policy, the results show how important is to consider the composition of a government's coalition, since it introduces policy drift, as it appears to change the policy design originally preferred by parties. Future works should include the government's composition into the analysis of policy design, and unravel the mechanism through which this drift occurs, a promising field of research.

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APPENDIX

TABLE 4 IDEOLOGY OF LATIN AMERICAN PARTIES

Party	Country	Ideology	SD Ideology
FREPASO	Argentina	6.497	0.035
ARI	Argentina	6.120	0.236
UCR	Argentina	4.941	0.397
PJ	Argentina	4.581	0.729
MAS	Bolivia	7.743	0.222
MBL	Bolivia	6.000	0.000
CONDEPA	Bolivia	5.474	0.279
MIR	Bolivia	4.780	0.562
UCS	Bolivia	3.976	0.721
NFR	Bolivia	3.889	0.000
MNR	Bolivia	3.527	0.717
ADN	Bolivia	2.474	0.507
PCDOB	Brazil	8.444	0.513
PPS	Brazil	6.328	0.362
PSB	Brazil	5.869	0.147
PT	Brazil	5.835	1.146
PDT	Brazil	5.485	0.469
PRB	Brazil	5.417	1.693
PV	Brazil	4.792	0.488
PMDB	Brazil	4.331	0.147
PL	Brazil	4.250	0.000
PP	Brazil	4.021	1.219
PR	Brazil	3.931	0.163
PTB	Brazil	3.876	0.739
PS	Chile	7.410	0.178
PPD	Chile	6.144	0.227
PRSD	Chile	6.038	0.151
PDC	Chile	5.126	0.275
RN	Chile	3.055	0.208

Continue

Party	Country	Ideology	SD Ideology
UDI	Chile	1.990	0.418
PLC	Colombia	5.443	0.701
PL	Colombia	4.849	0.000
PC	Colombia	2.528	0.106
PDELAU	Colombia	1.515	0.000
PLD	Dominican Republic	3.918	0.509
PRSC	Dominican Republic	2.081	0.877
MPD	Ecuador	7.927	0.091
MUPP-NP	Ecuador	6.956	0.115
MPAIS	Ecuador	6.926	0.153
PACHA	Ecuador	6.382	0.000
ID	Ecuador	5.927	0.389
MMIN	Ecuador	5.170	0.000
PRE	Ecuador	5.002	0.143
PSP	Ecuador	4.704	0.996
DP	Ecuador	2.516	0.000
PSC	Ecuador	2.157	0.373
PEN	Paraguay	5.013	0.326
ANR	Paraguay	3.530	0.187
FIM	Peru	4.611	0.000
PPOS	Peru	3.750	0.000
FA	Uruguay	7.109	0.190
PC	Uruguay	3.836	0.334
PN	Uruguay	3.811	0.297

Source: Elaborated by the author based on Alcántara (2018).

TABLE 5 PANEL REGRESSION ON THE DIFFERENCE OF DIRECT TAXES COLLECTION

	Model 1	Model 2	Model 3
Lagged Executive Ideology (Left = 10)	0.225	0.157	2.482*
	(0.402)	(0.425)	(-1.363)
Lagged Ideological Heterogeneity	-0.753	-0.7	4.424
	(-2.407)	(-2.396)	(-3.715)
Lagged Share of Government Coalition	-0.012	-0.003	-0.007
	(0.019)	(0.026)	(0.038)
Real GDP Per Capita (2005 US$)	-4.62	-4.28	-5.643
	(-3.364)	(-3.443)	(-4.311)
FDI (% of GDP)	0.046	-0.009	-0.155
	(0.145)	(0.186)	(0.336)
Health Expenditure (% of GDP)	-0.052	-0.023	-0.208
	(0.522)	(0.511)	(0.58)
Lagged Continuous Ideology*Heterogeneity	-0.052	-0.053	-1.249
	(0.56)	(0.557)	(0.893)
Coalition (Yes = 1)		-0.73	
		(-1.039)	
Country Fixed Effects	Yes	Yes	Yes
Observations	93	93	65
Multiple R2	0.1323	0.1359	0.1847
F-statistic	1.489	1.716	1.224

Note: * Stands for a statistical significance of 0,10; ** for 0,05, and *** for 0,01.
Source: Elaborated by the author based on Alcántara (2018) and Figueiredo et al. (2012).

TABLE 6 PANEL REGRESSIONS ON THE DIFFERENCE OF INDIRECT TAXES COLLECTION

	Model 4	Model 5	Model 6
Lagged Executive Ideology (Left = 10)	-0.046	0.001	-2.832*
	(0.481)	(0.495)	(1.51)
Lagged Ideological Heterogeneity	0.029	-0.008	-7.642*
	(-2.883)	(-2.878)	(-4.036)
Lagged Share of Government Coalition	0.049	0.043	0.006
	(0.043)	(0.044)	(0.057)
Real GDP Per Capita (2005 US$)	-1.899	-2.138	1.678
	(3.81)	(-3.803)	(-4.601)
FDI (% of GDP)	-0.187	-0.148	0.194
	(0.209)	(0.223)	(0.313)
Health Expenditure (% of GDP)	0.307	0.287	0.458
	(0.592)	(0.605)	(0.607)
Lagged Continuous Ideology*Heterogeneity	0.125	0.126	1.763*
	(0.617)	(0.615)	(0.922)
Coalition (Yes = 1)		0.514	
		(-1.341)	
Country Fixed Effects	Yes	Yes	Yes
Observations	93	93	65
Multiple R2	0.1036	0.1049	0.1918
F-statistic	0.6818	0.6193	1.001

Note: * Stands for a statistical significance of 0,10; ** for 0,05, and *** for 0,01.

Source: Elaborated by the author based on Alcántara (2018) and Figueiredo et al. (2012).