Gender Differences in Local Executives: Public Policy and Intergovernmental Transfers in a Brazilian state

Diferencias de género en los ejecutivos locales: políticas públicas y transferencias intergubernamentales en un estado brasileño

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Abstract. Feminist theory has offered new institutionalism key contributions as to how gender relates to public policy. Feminist institutionalism has researched the many ways welfare policies have impacted women and the many ways women, as elected officials, have impacted those policies in turn. As substantive representation research turns its eye towards legislative representatives, women in executive offices and their actions have been overlooked.

As studies show, there are certain policy areas that face gender stereotypes: education, health, arts, family protection, and other welfare areas. Brazilian federalism and its execution of welfare policies is quite specific in its institutional design. Since the end of the last dictatorship, there have been efforts towards decentralisation. States have more control over their spending; however, municipalities face stricter rules regarding taxation and how to spend it. Municipalities are in charge of executing most of Brazilian public policy, but have little control in designing them. What they are allowed to design tends to be induced through programmes and resources. Those resources for the execution of programmes come from several kinds of transfers, from federal and state governments. In the state of Minas Gerais, in Brazil, the Robin Hood Law states that municipalities that create institutions and/or policies in certain welfare areas will have access to slightly more resources.

Research has shown that municipalities do invest in bettering themselves in this institutionalisation process, despite the small amount of funds that come with them. Therefore, our research asks: are female mayors more efficient in accessing specific resources from government transfers? Using regression analysis and other statistical tools, we hope to able to demonstrate how gender might play a role in the division of those funds.

Keywords: public policy, federalism; Brazil, women mayors, gender, institutionalism.

Resumen. La teoría feminista ha ofrecido contribuciones claves al nuevo institucionalismo sobre cómo el género se relaciona con las políticas públicas. El institucionalismo feminista ha investigado las muchas formas en que las políticas de bienestar han impactado en las mujeres y las muchas formas en que las mujeres, como personas electas, han impactado esas políticas a su vez. A medida que la investigación sustantiva de la representación vuelve su mirada hacia los representantes legislativos, las mujeres en las oficinas ejecutivas y sus acciones han sido mayoritariamente ignoradas.

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Como los estudios demuestran, existen ciertas áreas de la política que sufren estereotipos de género: educación, salud, las artes, seguridad familiar, y otras áreas de bienestar. El federalismo brasileño y su aplicación de las políticas de bienestar son específicas en su diseño institucional. Desde la última dictadura, se ha hablado de descentralización. Los estados tienen más control sobre sus gastos; sin embargo, las municipalidades están sujetas a reglas estrictas sobre cómo cobrar y usar impuestos. Los municipios están a cargo de ejecutar la mayor parte de la política pública brasileña, pero tienen poco control al diseñarla. Lo que se les permite diseñar tiende a ser inducido a través de programas y recursos. Esos recursos para la ejecución de programas provienen de varios tipos de transferencias, de gobiernos federales y estatales. En el estado de Minas Gerais, en Brasil, la Ley Robin Hood establece que los municipios que crean instituciones y/o políticas en ciertas áreas de bienestar tendrán acceso a un poco más de recursos.

Investigaciones han demostrado que los municipios sí invierten en mejorarse a sí mismos en este proceso de institucionalización, a pesar de la pequeña cantidad de fondos que vienen con ellos. Por lo tanto, nuestra investigación pregunta: ¿son las alcaldesas más eficientes en el acceso a recursos específicos de las transferencias del gobierno? Usando análisis de regresión y otras herramientas estadísticas, esperamos poder demostrar cómo el género podría desempeñar un papel en la división de esos fondos.

Palabras clave: políticas públicas, federalismo, Brasil, alcaldesas, género, institucionalismo.

Introduction: presenting our research question

That women are still under-represented in almost every level of government in almost every country in the world is something that has become common knowledge and the introduction to most papers on gender inequality in politics. Studies have focused mostly on legislative disparities, given the importance of that branch in representing the people and its focus on most gender equality policies such as quotas.

There also seems to be a general understanding that individuals in executive offices will govern for all and will not engage in substantive representation of any kind or present gendered differences in their representation. In addition, the national level usually takes the limelight as well. Not all countries have subnational levels, and the ones that do, do not always have the same quality of information at the subnational level as it does at the national level; subnational legislatures are also not as empowered as national ones; the comparative analysis between countries is of an importance that cannot be overlooked. Nonetheless, other branches and levels of government exist and are impacted by gender as well as affect the lives of men and women under its prerogatives. Because local governments offer fewer opportunities for comparisons and are subject of many contextual factors that are unknown to foreign readers, that unit of analysis tends to be overlooked.

The understanding of local government is usually somewhere in between discretionary and autonomous action or completely tied to the hierarchy of federalism, with the state and federal government ruling municipalities from on high. This article proposes that women have different socialisations, political trajectories, and skills than men, making it likely that they will behave differently when in office. This means that there is a chance that not only the legislative is a possible avenue for women’s substantive representative, but the executive may also present opportunities in that respect. Some studies have shown that this is true in some situations, mostly in the U.S. case. As the “other” large federalist nation, Brazil represents an untapped research case in this field.
We propose to verify if there are gender differences in the application of the Robin Hood Law, which adds funds to a municipality’s budget from state transfers if the municipality is able to fulfill certain conditions. Each state has its own law to transfer this part of the budget, but only the state of Minas Gerais has this many redistributive criteria, giving it the name Robin Hood. The specificities of this law make it an interesting case to look for gender differences in the local executive. The study looks at three periods which are terms of office: 2005-2008, 2009-2012, and 2013-2016.

Minas Gerais is one of the largest states in the country, in land mass and population, with 586,528 km² and nearly 21 million inhabitants. It has 853 municipalities, 15,31% of the total of Brazil’s cities. The largest one is the capital, Belo Horizonte, with 2,5 million inhabitants, half of the population of the metropolitan region it belongs to. The state’s economy relies on mining and agribusiness, mostly cattle. Over half of the cities have less than 10 thousand inhabitants. Only 32, or 3,75%, have populations over six digits.

The next sections will present the theoretical arguments, explain the particularities of the Brazilian tax system, the Robin Hood Law, describe the data and methods used, and demonstrate the results found. Finally, we discuss and conclude.

**Gendered differences in representation: what can we expect from the mayor’s office?**

The questions of what is representation, what is representativeness, and how one becomes a representative of a given population has been of central importance to political science. Particularly, political theory. Pitkin’s *The Concept of Representation* ([1967] 1997) has been the central book in political science in order to discuss what political representation is and how can we go about specifying it in research. There are four facets of representation according to her: descriptive, substantive or “acting for”, symbolic, and authorization. Authorization is the typical notion of electoral democracy, as in representatives receive their authorization through votes. The other facets come into play in a more important way for this paper. Feminist political science looked to her explanation of “acting for” in order to describe the substantive representation of women, given the importance she gives to this facet of representation (Childs and Lovenduski, 2016). However, because she seems to equate descriptive representation or “standing for” with a “mirror representation” and little else, her views on this facet of representation have been either ignored or used to demonstrate that descriptive representation is unimportant or unnecessary.

Although it is not for us to judge which type of representation Pitkin deemed more relevant, it is clear that all were ideal types, and that representation, in politics anyway, will encompass all types of representation, in varying degrees. That being said, Pitkin argues that descriptive representation serves the purpose of supplying “information about something not actually present” which in turn allows one to “draw accurate conclusions about the represented, gather information about the represented, because it is in relevant ways like the represented” (Pitkin, [1967] 1997, p. 81, our emphasis). She goes on to argue about the relevant characteristics for “political reproduction”, reminding the reader...
not only that this is an important aspect of politics, but also that these are contextual and historical factors – the demands for representation change constantly and what is relevant for representation also changes (ibidem, p. 87). Later on, she also adds that “we cannot conceive that a political system could be truly responsive unless a number of minority or opposition viewpoints are officially active in its government” (ibidem, p. 235), meaning we cannot discount her view on descriptive representation just yet. Nevertheless, as Childs and Lovenduski (2016) explain, it is only with Phillips (1995) that descriptive representation becomes a central point of discussion in political science.

As the focus of what representation is and what descriptive representation means remains in the legislative, Pitkin explains that “standing for” in politics has three perspectives: mirror, in which the legislature is no more than a passive object; painter, in which the legislature is a “maker of representations” and represents by its activity; copy, in which a legislature acquires its legitimacy to act by being a perfect replica of its society. That it is its similarity to the people that gives a legislature the power to act on their behalf is no small feature. As these three are ideal types, and as we further our understanding of political representation, we come to see that it combines all those aspects and, arguably, some others (Rosanvallon, 2010; Saward, 2009; Urbinatti and Warren, 2008; Pitkin, 2006; Mansbridge, 1999; 2003; Manin, 1995).

The view may suggest that a legislature is like a map or mirror, essentially a passive object so put together that from it a spectator can gather information about the people - that it reflects or resembles the nation by its composition. It may, second, suggest that a representative legislature is like a painter or a 'maker of representations to someone else', representing by its activity rather than its composition, but an activity of a very special kind. Or, third, the suggestion may be that if the representative legislature is a sufficiently accurate copy, a perfect replica, then it may safely and justifiably be allowed to substitute for the whole people, to act in place of the nation. Here the purpose is action by the representative, but that activity is not itself representation. Representation is, rather, a matter of accurate resemblance or correspondence, and a precondition for justifying governmental action (Pitkin, [1967] 1997, pp. 81-82).

In the representation debate, the legislative has taken the limelight. When Pitkin describes how representation was born, as a simpler and more effective way for the English monarch to collect more taxes, and that it grew into an exchange between the labour offered by these “representatives” of shires and boroughs for policies and goods, it is clear why that is. While the “representative role” grew and changed over time, the “administrative role”, that is, the monarch, did not. At least, not as quickly. As representative democracy turned into electoral democracy, as unitary nations became federalist nations, and as suffrage became universal, the question of representation has expanded exponentially (Boix, 1999; Rosanvallon, 2010; Saward, 2008; 2009). Who represents the people? What people? By which process are representatives chosen? What institutions are responsible for carrying out the will of the people?
Another situation for “standing for”, Pitkin will argue, is symbolic representation, which can take many forms as well, when we think outside of the political sphere. In the political world, and in the discussion we are trying to bring here, where does the executive fit? For her, the executive takes on both the roles of symbol and agent, particularly in situations of presidencies. In fact, she warns that as presidents engage in “partisan” activities, they may endanger their roles as symbolic figures, representatives of a country. Pitkin reminds us that just because one person takes on both roles does not mean that those roles are the same. When, in this case, the president is mentioned, the role they are taking on must be specified, as the nation’s symbol or as its active leader. Symbolic representation, however, exists only “in the mind of the governed” and its representational status is determined insofar as the people accept it (Pitkin, [1967] 1997, p. 104). The executive, on the other hand, is a representative that is imbued with the legitimacy of authorisation through election as she herself, as well as others would argue (Rosanvallon, 2010; Saward, 2009; Urbinati and Warren, 2008; Mansbridge, 2003; Manin, 1995).

The importance of the head of government has not gone unnoticed, of course (Gains and Annesley, 2010; Rosanvallon, 2010; Figueiredo, 2008; Krause, 2002; Moe and Howell, 1999; Manin, 1995). As Manin (1995) states, even in parliamentary systems, the prime minister has become a more or less presidential figure, with the campaigns being centred around each party’s leader. In the United States, where neither registration nor voting are mandatory, presidential elections see the highest turnout, with 61.8% of potential voters voting in the 2012 elections and 55.4% in 2016. For congressional elections, turnout has not gone over 50% since 1982. In Brazil, where voting is mandatory and presidential and congressional elections are concurrent, in the 2014 elections, 27.2% of eligible voters chose to either not show up or void their vote for president, while 31.7% chose the same for their federal deputy vote. And while the executive might have been born as the executor of the laws and policies devised by the legislative, not only has that changed, but in Brazilian federalism and division of powers, the executive has retained many prerogatives (Cheibub et. al, 2014; Figueiredo and Limongi, 2001), which apply to the presidency, governorship, and mayorship in their varying degrees. In fact, all Brazilian executives have the prerogative to legislate and veto legislation from their respective legislatures (Brasil, [1988] 2016). In 2016, the federal executive branch sent 87 bills to the Chamber of Deputies for approval; the state of Minas Gerais sent 94 bills to the Legislative Assembly, including vetoes; the city of Belo Horizonte sent 49 bills to the Municipal Chamber. In addition, the executive also has broad prerogatives in appointing its cabinet members, although the Brazilian case is highly idiosyncratic given its coalition presidentialism (Abranches, 1988). Undoubtedly, the executive has a central role in shaping politics and, in Brazil, that role goes beyond the symbolic and the administrative, becoming representative. In fact, as the coup of 2016 became a reality, Michel Temer, who occupied the seat of President Dilma

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Rousseff was highly criticised in both national and international media for an entirely male and white cabinet, which was not representative of the Brazilian reality.\textsuperscript{5,6,7,8}

If the executive is an instance of representation, we should be able to evaluate its ability to both descriptively and substantively represent women. We are, of course, making a leap from the majority of studies into women’s descriptive and substantive representation. There are no percentages to be looked at and compared to the percentage of the population. And, while the executive is a place of power and possible change, it must have a “gendered disposition”, which means not only have feminist actors, but the institutional tools, both formal and informal, and the willingness to enact gender equality policies (Annesley and Gains, 2010). In addition, since we are not discussing cabinet appointments, there is only one office to discuss – the mayorship. Which means looking to only one woman as a descriptive representation and to all mayors, male and female, for the substantive representation of women. Beyond that, we are also not discussing substantive representation in the sense of “typical” women’s interests or issues (Childs and Lovenduski, 2016); we are considering differences in abilities, leadership styles, and other possible gendered differences in interests (Boles and Scheurer, 2007). Therefore, we begin by following Celis and Childs (2012) and posing the questions of who acts for women; under what conditions actors for women arise and succeed; where does substantive representation occur; why attempt it; and how is it expressed.

Representatives are bound to exist in a multitude of ways and representation is also done in various ways and with many justifications. Saward’s (2009) work demonstrates those possibilities, reminding us that representation is something that is constantly being worked and re-worked, that is always partial and demands constant justification. While he is discussing non-elected representatives, this may also apply to the single representative of an entire population as that population, no matter how large, will always demand to feel represented by the individual in the mayor’s office. In fact, Childs and Lovenduski (2016) discuss, albeit for the legislative branch, that the current representatives for women are men, and studies of women’s representation have expanded in order to understand how women are represented without a “critical” number of women in legislatures. Studies on critical actors and critical acts open up the possibilities for researchers to find the substantive representation of women being done.

A mayor will usually claim to represent the entire city, and that claim will be formulated into policies that show the electorate how the mayor views their position as their representative. We wanted to verify if female mayors in the state of Minas Gerais for the past three terms (2005-2008; 2009-2012; 2013-2016) were more successful in fulfilling the conditions set by the state’s executive in order to receive a share of the Robin Hood Law. In order to receive these additional funds, mayors have to institutionalise certain

\textsuperscript{5} http://www.bbc.com/portuguese/brasil/2016/05/160513_entrevista_professora_canada_if_cc
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\textsuperscript{8} https://www.theguardian.com/world/2016/may/13/michel-temer-brazil-president-rebuild-impeachment
regulations, enforce rules, create municipal organs (such as a councils or secretariats). Given the policy areas in which the Robin Hood Law focuses on (health, education, environment, historical heritage, inequality, sports and tourism), we find that it is possible that female mayors will give more attention to this possibility of acquiring added funds. In addition, given that women tend to be more highly qualified than men, it is possible that they are more successful in acquiring these funds not because of a stereotypical interest, but because of ability in reforming the municipality (Folke and Rickne, 2016; Murray, 2015; Anzia, 2011; Lawless and Fox, 2011).

There two possible reasons for no effect to be found. First, as Goulart (2016) found, the Brazilian taxation system is inflexible and the municipality is highly dependent on transfers from the state and federal governments. Any municipality will take the chance of getting more resources. Second, because we are dealing with very small cities in a place with large income and educational disparity, it is possible that women’s and men's abilities are either equal or to the disadvantage of women. The Brazilian political system is highly personalistic, with many parties, and very expensive campaigns. Women have been known to have an advantage in local offices, particularly in small towns, in poorer regions of the country, but no explanation for that has been found. They are, however, excluded from donor and alliances networks, which make them less likely to be picked as their party’s choice for the executive (Miguel, 2003; Miguel and Queiroz, 2006; Araújo, 2010; Gomes 2015; 2016).

Although these are somewhat untested waters, there have been some studies into the actions of female mayors and how they might differ from the men. Smith et. al (2012) found that in the United States women are more likely to be elected in urban settings, with large populations with college-degrees and high-income. Moreover, having more women as city councillors is a predictor for having female mayors. Ferreira and Gyourko (2014) found that, once women passed the initial hurdle of the first election, they were more likely to be re-elected than men were. As Murray (2010) has argued, women will enter into politics much later and without the same connections and networks as men, perpetuating their status as “outsiders”. Araújo (2010) discusses the difference of intent and socialisation, stating that women tend to see politics as a means to an end and men see it as an end in and of itself. This may point to women having different kinds of political ambition as well as different abilities and strategies in order to fulfil their political goals. Importantly, Ferreira and Gyourko (2014) did not find any gender differences when it came to policies, although they did not test for any possible “women’s interests”. They do, however, consider the inflexibility of local government as a possibility for the results.

One study that has been given particular attention is Chattopadhyay and Duflo's (2004) study of female Pradhans in India. Pradhans are heads of local councils and one-third of those positions are reserved for women. They have a lot of autonomy and discretionary spending. In addition, people have a lot of direct access to their Pradhans. The authors found that female Pradhans would tend more closely to the requests made by women, but discovered that they did so not because they were women – they did it because it aligned with their wishes as well. That is, it is possible if a man had requested more investments in drinking water, the result would have been the same.
Holman (2014) found that the mayor’s gender was a predictor for welfare spending in the United States. If the percentage of female city councillors reached 30%, there would also be an increase in spending, but female councillors were effective with a female mayor at any percentage. Funk (2015), studying if female mayors in Brazil use more participatory tools found no gender difference in the amount of use, but found that women would use participatory budgets for stereotypically male topics, such as sports, and men would use it for stereotypically female topics, such as women’s and children’s rights. Finally, Boles and Scheurer (2007) found that there are other issues that must be analysed beyond the sphere of “care”, as women in the U.S. will significantly support legislation for the arts more than men, a gender difference that exists only in the Republican Party and not in the Democratic Party.

Iris Young (2000), while arguing in favour of her “relational logic”, stated that “‘women’ is the name of a series in which some individuals find themselves positioned by virtue of norms of enforced heterosexuality and the sexual division of labour” (p. 100). Difference is structurally created, even though identity is individually defined. As we debate for a politics of presence, as we argue that the larger the descriptive representation of women, the more likely it is that they will be represented substantively (Phillips, 1995; Mackay, 2008), what we mean to say is “when women need drinking water and some women are in charge, they will find a way to get more drinking water”. Indeed, what was so groundbreaking about Chattopadhyay and Duflo’s (2004) paper, so much so that any paper on gender differences in mayorship will cite it, is that women’s interests are not necessarily the stereotypes we believe them to be and female leaders are not inherently more selfless or more attentive to anyone, even women. What they are is in tune with the needs of women, being women themselves and, to a degree, bound by the same structural differences. In this way, Young’s argument that social difference is a political resource is clearly demonstrated, as a policy that might not have happened was created due to the diversity of the local executive.

The specificities of Brazilian fiscal federalism

In the words of Riker, federalism is a system that may be understood as “a political organization in which the activities of government are divided between regional governments and a central government in such a way that each kind of government has some activities on which it makes final decisions” (Riker apud Lijphart, 2012. p. 175). Several arrangements may exist within that definition, with different degrees of interaction, coordination, and control among federated entities.

In the Brazilian case, the federation arose from top to bottom, from a national unity that already existed in the moment the Republic was proclaimed. Consequently, the Union, became the main element in the construction of this federation, which distorted the Brazilian federative arrangement and contributed in the perpetuation of regional inequality, since there was not any symmetric correlation between the Union and the federated enti-
ties that compose it. Oliveira (2010) argues that the Republic was formed already weak and dominated by regional oligarchies, being named “a federation for few”. All arrangements and institutional designs that arose from there, including the tax system, which is the focus of this paper, were an “echo” of these interests and conflicts, preserving and amplifying the distortions over which the Republic was built upon.

Between the beginning of the Republic in Brazil in 1889, until 1930 (referred to as the Old Republic), municipalities faced a more decentralised federalist system, due to the power of the regional oligarchies and the so-called “colonels”.

In this period, external crises such as the First World War destroyed Brazilian revenues, since they mainly came from coffee exports, and forced small changes in the tax system, since the state was in constant deficit. In 1922, the Income Tax was created and what later would become the Tax on the Circulation of Goods and Services (ICMS), also the focus of this paper. Still, productive sectors and with high capacity for payment, such as the agribusiness sector, were exempt. That demonstrates the power local oligarchies had and shows how Brazilian federalism was formed around privileges and inequalities.

In 1930, Getúlio Vargas, a politician from the South, which had been left excluded from the central loci of power, orchestrated a coup to reduce the power of local oligarchies and the Constitution created had a centralising view and was strongly inspired by fascism. However, that centralising view did not apply to the tax system. That is, there was a political centralisation, but not a tax centralisation. It is important to emphasise that this is a very common phenomenon in Brazilian federalism. The tax base of each federated entity changed very little throughout the whole Republic; what changed was the freedom these entities had to use those resources in the policies of their choosing. Authors such as Arretche (1996; 2010) argue that only until 1930 in Brazil was there a case in which authority was not truly centralised in the Union and that all posterior arrangements kept planning and financing centralised in the federal government, varying the intensity of that centralisation.

Even in 1937, when Vargas decided not to leave office and started a dictatorship, beginning a period of even greater political centralisation in such a way that Cretella Junior (1991) would describe the state as a fief and Oliveira (2010) as a fiction, the tax arrangement did not go through any considerable alterations. Still the central government sought ways to limit the states’ autonomy in how to use the resources levied and created a form of controlled that is used until today, the earmarking of revenues. Even with the return to democracy in 1946, the central role taken by the Union of planning and financing was maintained, without any significant changes in the autonomy for subnational governments to legislate on their own taxes or on the distribution of these tax collection responsibilities. The main change made to the tax system in 1946 were the intergovernmental transfers between federated entities, with the goal to reduce regional inequality through the redistribution of part of the taxes collected from richer states to less developed ones. This arrangement is still in place in Brazil until today “...by which the rules relative to con-

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9 “Colonels”, in this case, are not linked to any military power, but were usually landowners who controlled most of the population in the surrounding area. Arguably, that figure still exists, in a more urban fashion and they may or may not be head of small un-programmatic parties.
institutional transfers imply that the Union operate as a replacement collector for states and municipalities, as well as states for their respective municipalities” (Arretche, 2005, p.79).

The civil-military dictatorship, which began in 1964, kept both of these mechanisms created previously, that is, earmarking of revenues and intergovernmental transfers. During this time, with political centralisation at its peak, the Union was consolidated as the main collector, withdrew local tax autonomy administration, reduced rates of intergovernmental transfers, and linked almost all to policies in their agenda. With the end of the dictatorship in 1988, the image of centralisation became linked with authoritarian government and decentralisation was the way out of that connection. According to Afonso and Araujo (2001) and Mendes (2012), the Brazilian decentralisation process was essentially a municipalisation process, conducted by states and municipalities facing a weakened Union. This helps to understand the dimension of budgetary autonomy these entities took on at this moment, with the municipalities even having the status of federated entity on equal footing.

The states received the authority over the Tax on the Circulation of Goods and Services, with the largest revenue in the country. The municipalities received the highest rates of intergovernmental transfers and practically no earmarking for them. This institutional design of resource division post-1988 created incentives for an uncontrolled proliferation of municipalities, increasing the Union’s deficit, which had its revenue cut and was overextended with responsibilities, further weakening the central power. Reforms have been conducted over the past 20 years with the objective of correcting the deficit and having the Union again in a central role, both for financing and planning public policies. Oliveira (2007, p.56), on these reforms, states that reducing the autonomy of subnational entities did not increase their capacity for financing and providing services which would have reinforced the decentralisation process and given them better chances in replacing the federal government. By only making small changes, the federal government changed the federative arrangement, weakening the subnational governments, states in particular. With subnational entities without autonomy, revenue, high debt, and inflexible budgets, the Brazilian federation does not follow through on the goals written in 1988.

The challenges faced by the Brazilian state when it comes to taxation, inequality reduction, and federative autonomy are not recent, but this new process of decentralisation and municipalisation, in large part, is responsible for the difficulties endured by municipalities today, since this decentralisation exacerbated structural problems of a federation built on huge socioeconomic inequalities, both inter and intra regionally. This is no surprise, since state capacity of each entity and, consequently, the public services it can offer, are not homogenous. Such structural problems are at the root of public spending inefficiency, worst public services or with less access. In the day-to-day of public administration, Affonso (1996) argues that these problems appear in the form of i) technical inability to execute functions that were passed on to them in the decentralisation process; ii) inexistence of continuity in policy; iii) absence of evaluation mechanisms and, lastly; ii) absence of effective coordination mechanisms and a pulverisation of public resources.
Intergovernmental transfers and Robin Hood Law

The Robin Hood Law, to the untrained eye, could be perceived as a pulverisation of public resources, since its transfer percentages for the criteria it seeks to incentivise are small. In order to understand the mechanism of this legislation, a few others must be understood beforehand.

As mentioned previously, in Brazil, the Union kept itself as the replacement collector for states and municipalities and states as replacement collector for its municipalities. After those resources are levied, they return to the states and municipalities via intergovernmental transfers. The Tax on the Circulation of Goods and Services (ICMS), with the highest revenue in the country, became the responsibility of the states in the 1988 Constitution and it is on that tax that the Robin Hood Law is applied.

According to the national legislation, from the total collected with the ICMS, 25% must return to the municipalities as transfers, named quota-share. From the quota-share, another 25% must be returned according to legislation specific to each state. In the case of Minas Gerais, the law received the name Robin Hood because this share in the transfers that is decided by the states is entirely transferred without any link to its source, that is, the cities that receive these resources did not have the burden of collecting it, according to the graph below.

Graph 1: ICMS distribution according to the current legislation

Source: Federal Constitution, elaboration by the authors.

Tax systems and how they can perpetuate inequality is a discussion that this paper is not able to conduct properly. In the state of Minas Gerais, this redistributive perspective started in 1991, with only three criteria: the “added value” (a devolved tax on the difference on what is “imported” and what is “exported” by a city), mining towns, and compensation for municipality dismemberment. From 1995, new criteria were added working on the “Robin Hood” perspective of including indicators that take into account a municipality’s needs and its capacity to fulfill them and since 2009, the criteria that is used today.
There are 17 criteria for the division of these resources, with several indicators for each one and with information coming from different government offices. The Law has as its goal:

...to decentralise the distribution of the municipalities' ICMS quota-share, to decentralise income, and to transfer resources to the poorest regions; to incentivise the application of municipal resources in social areas; to induce municipalities to increase their revenue and use more efficiently the resources levied and, lastly, to create a partnership between state and municipalities, with the objective to improve the quality of life of the population in these regions (Minas Gerais, 1995 apud Carvalhais, 2010, p.65).

The current criteria can be grouped into five categories for analysis: geodemographic, collection, allocation, egalitarian, and restrictive. In the Geodemographic grouping, the following criteria is found: 1) population, receiving a percentage of 2,7%; 2) population of the 50 most populous cities, receiving a percentage of 2%; and 3) geographical area, with a percentage of 1%. This grouping is the recognition from the state that cities with large populations will receive greater pressures for public services, as a city with a large territory will have greater difficulty in promoting policies for citizens that are too spread apart.

In the Collection grouping, there is in fact only the redistributive criterion: 4) own income, receiving 1,9%. Here, the municipality receives in relation to its capacity or effort in getting their own income, something important in order to provide services in the interest of the population.

The Egalitarian grouping has the following criteria: 6) minimum-quota of 5,5%; compassionate ICMS, with the transfer of 4,14%, and 7) minimum per capita, with a transfer of 0,10%. All are based on the principle of equality among the municipality, with the last two having several indicators in order to try to map and add resources for the most vulnerable municipalities.

The Restrictive grouping is made up of criteria that do not fit all municipalities and looks to compensate them for some characteristics. In that is found: 8) mining municipalities, with a transfer of 0,01%; 9) municipalities with areas flooded for dams, with a transfer of 0,25%; and 10) municipalities that house penitentiaries, with a transfer of 0,10%.

Lastly, the focus of this study is the last grouping of criteria, which are the ones that are related to the capacity or effort from the municipality to allocate resources into services for the population. That is, unlike in the Collection grouping, where the focus is getting income in order to provide the service, in the Allocation grouping the focus is the service provided. The criteria are: 11) education, with a transfer of 2%; 12) health, also 2%; 13) food production, with a transfer of 1%; cultural heritage preservation, also 1%; 14) environment, with a transfer of 1,1%; 16) tourism, with a transfer of 0,1%; and 17) sports, also with 0,1%.

The allocation criteria seek to incentivise and develop these practices, but their transfer values may be considered low when the amount of indicators and criteria the municipalities must meet in order to have access to this resource. As the next section will show, there
is evidence that women are more inclined towards welfare policies. With that in mind, we ask: is there a gender difference in the application for these resources? Given the low transfer values, the amount of criteria, the size and institutional capacity of the municipalities in Minas Gerais, the rigidity and centralisation of Brazilian policies and politics, does the gender of the mayor matter for these transfers? Are female mayors more inclined to put in the effort or, as some studies have found, more capable to achieve the needed results? And, if they are, do they focus on certain areas, such as education and health, but neglect sports?

Data and methods

Data on the transfers was collected from the João Pinheiro Foundation website.\(^\text{10}\) Data on the municipalities, such as population, as well as the names and gender of the mayors and their vote shares, came from the Brazilian Institute of Geography and Statistics (IBGE).\(^\text{11}\) Any inconsistencies were double-checked on the Superior Electoral Court’s website.

Information of the mayors’ political experience was not readily available. Consequently, a narrow view of political experience had to be applied, and only the occupation of elected office – councilperson, vice-mayor, mayor, state or federal deputy, senator, and governor – was included. Initially, every name was checked on a website called Quadro Político.\(^\text{12}\) However, the provenance of their information could not be verified, so they were only used as a stepping-stone; after locating the last office held by an individual (if they ever held office), that name was double-checked on the Superior Electoral Court’s website, any local websites (official or news), and mainly with the Court of Accounts’ website (since mayors are the respondents on any cases on behalf of the municipality). This endeavour demonstrated how difficult it is to conduct research at the local level. Brazil is usually relatively easy when it comes to finding information at the state and federal levels. The Chamber of Deputies uses open code and most state Legislative Assemblies have easy to access websites. The IBGE website has every survey available, with tables and graphs at hand, as well as the data itself. But information on local office is not centralised, there is no official rule on how to collect and store it, and many municipalities do not even have a website, either for the mayor’s office or the chamber. Much less one that lists previous mayors and councilpersons.

We want to know if a mayor’s gender is a predictor of the amount received. Therefore, our main independent variable is the mayors’ gender. We control for the mayors’ political experience, the years (by using three different terms), the gross internal product (and the GDP per capita), and the Human Development Index. We did not use the variable

\(^{10}\) The João Pinheiro Foundation is a research institution run by the government of Minas Gerais. It houses several research centres that produce the data that is used by the executive to formulate policy. It is also a school of government, with an Bachelor’s and Master’s in public administration, and most of its students go straight into the government once they graduate.

\(^{11}\) The IBGE is a research institution run by the federal government. It is responsible for most population studies, including economic, health and mortality, and environmental indicators, including the census and the National Survey by Housing Sample (PNAD). It also has profiles on every city in the country.

\(^{12}\) quadropolitico.com.br
“size of the population” because our initial analyses demonstrated an elevated multicollinearity effect between that variable and the logarithm of the transfers at the beginning of the term. Our dependent variable is the amount of transfers received by the municipality in the respective years. In the regression analysis, each of the transfers is a variable of municipal performance in receiving Robin Hood Law resources, in other words, part of the quarter of the quota-share.

This reflects the yearly efforts by the municipality, but it also conditioned to its degree of socioeconomic development, its geographic extension, and its demographic characteristics. The values of the transfers were all deflated according to the General Price Index – Internal Availability. This deflator is a measure of inflation in all sectors and social extracts. This is also the measure used to readjust public tariffs, rental contracts and private health care, for example, so it gives us a real dimension of how much that transfer is worth and how much it can do.

With this data in hand, we looked for patterns, relationships between the variables and in order to make the analysis more robust, we used several regressions, to see if, for those three periods, we can see any gender differences in the budget transfers. We used the adjustment of two types of regressions. First, the adjustment, present as the logarithm, prevents very disparate data from altering the analysis. Then, the regressions. First we used a linear regression per term of office to see if, looking at all the transfers attached with social policy at Robin Hood Law, female mayors are more skilled at receiving resources from the quota-share. For the second regression, we used a dynamic analysis to see if there are gender differences in transfers by policy, for the same term. We wanted to see if men and women prioritise different policy categories. For this regression, we decided to use data from the last term only because all the seven types of policies are present in this category and it allowed us a more detailed analysis.

The regressions equations can be seen below:

**Regression 1**

\[
(Group_{i,\text{end of the term}}) = \beta_0 + \beta_1 \cdot \ln(Group_{i,\text{beginning of the term}}) + \beta_2 \cdot \ln(IDHM_{i,2010}) + \beta_3 \cdot \ln(PIB_{i,13}) + \beta_4 \cdot (gender_{\text{mayor}}) + \beta_5 \cdot (experience_{\text{mayor}}) + \beta_6 \cdot (education_{\text{mayor}}) + \epsilon_i
\]

**Regression 2**

\[
\ln(Policy_{A_{2016}} / Policy_{A_{2013}}) = \beta_0 + \beta_1 \cdot \ln(Policy_{A_{2013}}) + \beta_2 \cdot \ln(IDHM_{i,2010}) + \beta_3 \cdot \ln(PIB_{i,13}) + \beta_4 \cdot (gender_{\text{mayor}}) + \beta_5 \cdot (experience_{\text{mayor}}) + \beta_6 \cdot (education_{\text{mayor}}) + \epsilon_i
\]

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13 “General Price Index-Internal Availability. Calculated by the Getúlio Vargas Foundation (FGV). It is a weighted average of the Wholesale Price Index (IPA-DI, 60%), the Consumer Price Index (IPC-DI, 30%) and the National Index of Construction Cost (INCC-DI, 10%). IGP-DI is collected between the first and the last day of the reference month.” Source: Central Bank of Brazil [https://www.bcb.gov.br/glossary.asp?id=GLOSSARY&q=1718](https://www.bcb.gov.br/glossary.asp?id=GLOSSARY&q=1718)

14 We also attempted an interaction term using education and experience and found that it did not change the results.
And the variables could be understood as:

(Group 1. end of term and being of term) and (Policy A, 2013/2016) are the transfers per capita for each municipality \( i \). In the first regression, we add the transfers of all policies per term and in the case of the second regression we looked per policy;

\( \text{In(IDHM}_{1,2010} \) is the Brazilian acronym for Human Development Index, released by United Nations Development Program – UNDP, and 2010 is the last year available.

\( \text{In(PIB}_{1,13} \) is the Brazilian acronym for Gross Internal Product and is used here per capita and in the last year available.

\( \text{gender}_{\text{mayor}} \) and \( \text{experience}_{\text{mayor}} \) are both dichotomous variables and describe the main characteristics we are testing for.

Results

Descriptive results and associations

As mentioned previously, we considered all 853 municipalities over three terms: 2005-2008, 2009-2012, and 2013-2016. Respectively, each term had 49 (5,7%), 58 (6,8%), and 71 (8,3%) female mayors. Not an abnormally high increase, but enough to give cause to look for a trend in future research. For the first term studied, out of all mayors 222 (26%) had had previous elective experience, with 16 (7,2%) of those being women. For 2009-2012, 460 (53,9%) had had elective experience, with 29 (6,3%) of those being women. For the last term, 409 (74,9%) mayors had had elective experience, with female mayors being 26 (6,4%).

In recent years, reports such as the World Economic Forum have shown that women have more formal education than men do.\(^{15}\) That is also true for Brazil, although there is something to be said on the sexual division of labour and which fields women are more likely to be present. Nevertheless, we verified if the female mayors in our database were more likely to have a university degree. As we learn in intro to statistics, with a large enough database, results will cluster in the centre and a have a “normal” shape. This is what we see for the male mayors. For each term, respectively, there were 44,5%, 49,2%, and 49,5% male mayors with an incomplete university education or more. The women, on the other hand, had the following percentages: 59,2%, 65,5%, and 77,5%. We did find a strong association between gender and schooling, with a mid-sized effect, which is to be expected given the small number of female mayors. Table 1 shows the coefficients for each term.

Again, since we are only discussing three terms, we cannot make any grand statements, but there is enough to point to a possible pattern not only of female mayors having more years of education but also of the growing importance of that type of qualification.

\(^{15}\) Categories are: primary school, secondary school, bachelor’s, postgraduate (congruent with the British system). The first three categories are, in fact, split into six, for completed and incomplete education.
It is worth noting that, while more formal education seems to be demanded of women, more political experience is not since, respectively, the percentages of female mayors with previous elective experience is 32.7%, 50%, and 36.6%.

Table 1. Mayor’s gender compared with schooling

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<td>Chi-square</td>
<td>83,472</td>
<td>87,658</td>
<td>79,728</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: the authors

Women also seem to be more successful in small and mid-sized cities. Of course, this conclusion would demand an in-depth analysis, including candidacies and vote shares. Nonetheless, there are two important reasons to include this statement: it is another important avenue for research, especially since it goes against results from other countries that women do better in larger cities; the size of the town impacted our regression analysis. For the first term, 44 out of 49 female mayors (89.8%) were elected in town with less than 30 thousand inhabitants. Importantly, the percentage is not that different for men (87.1%). However, the qualitative difference is remarkable: not only are only five female mayors left in what are still relatively small towns, only one competed and won in a city with a run-off election.¹⁶

For the 2009-2012 term, 84.4% of the female mayors were concentrated in cities with less than 30 thousand inhabitants and three competed and won in cities with more than 200 thousand. For the 2013-2016 term, 88.7% of women won in small towns; again, three won in large cities, this time, all between 200 and 400 thousand inhabitants.

We also checked for the importance of political experience and formal education. As expected, it is more likely to find mayors without experience and with less school years in small towns. In the case for formal schooling, the results are slightly more scattered, but if we combine completed bachelor’s degrees and postgraduate degrees, in every term once we reach above 30 thousand inhabitants, those mayors are more than 50%.¹⁷ Political experience seems to have grown in importance over the years. For the first term, only in three population categories did a majority of mayors have previous elective experience.¹⁸ Not only that, but for other population categories, nearly 80% of mayors did not have any elective experience. For the next two terms, however, in small cities, mayors with and without experience were almost evenly split. For the 2009-2012 term, in all population categories, most mayors had held previous elected office (which may be re-election). For the 2013-2016 term, starting from 30 thousand inhabitants, the majority of mayors had had previous elective experience.

Given these results, we chose to run further statistical analyses. Table 2 shows the results of a chi-square analysis for the population size of each term with the mayor’s gen-

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¹⁶ In Brazil, cities with less than 200 thousand inhabitants do not have run-off elections for mayor.
¹⁷ One exception is for the category between 200 and 400 thousand for the 2009-2012 term, with 37.5% mayors with completed university degrees.
¹⁸ Between 60 thousand and 100 thousand (53.3%), 200 thousand and 400 thousand (55.6%), and above 400 thousand (100%).
der, experience, and schooling. Only experience for the first and third terms and schooling appear as strongly associated with the population size.

Table 2. Population size compared with mayor’s...

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chi-square</td>
<td></td>
<td>Chi-square</td>
<td></td>
<td>Chi-square</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
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<td>,562</td>
<td>15,742</td>
<td>.028</td>
<td>13,448</td>
<td>.062</td>
</tr>
<tr>
<td>Experience</td>
<td>29,297</td>
<td>,000</td>
<td>7,474</td>
<td>.381</td>
<td>21,387</td>
<td>.003</td>
</tr>
<tr>
<td>Schooling</td>
<td>114,309</td>
<td>,000</td>
<td>90,682</td>
<td>.000</td>
<td>71,167</td>
<td>.003</td>
</tr>
</tbody>
</table>

Source: the authors.

Regression analyses

Initially, we ran three regressions, one for each term included. Our first model showed an issue of multicollinearity with the size of the population. When conducting correlation tests, we found that the size of the population was highly correlated with the amount the municipality received and that the relationship has a negative direction, that is, the smaller the population, the larger the amount from the Robin Hood Law is received.\(^{19}\) That being the case, the population variable was excluded from the model. Because smaller municipalities have difficulties in raising their own revenue, the law has, arguably, been written in such a way that assists those towns, thus explaining the high correlation between these variables.\(^{20}\)

In the first model, we took the amount received by the municipalities in 2008 as the dependent variable. As independent variables, or predictors, we took: the logged amount received in 2005; the natural log of each town’s Human Development Index (2010); the natural log of each town’s GDP per capita (2013); the political experience of the mayors; the gender of the mayors; a binary variable that divided the mayors between having gone to university (including incomplete degrees) and not.\(^{21}\)

The most important predictor is, without a doubt, the amount received in 2005. Because these devolved values rely on institution building by the municipality, once it has met the standards set by the state government, it becomes easier to continue receiving the resources. The second most important variable was the HDI, which also presented a positive relationship. The third most important predictor was the mayor’s gender. Having

\(^{19}\) Pearson’s coefficient for each term, respectively and without sign: .800, .838, .895. All had a .000 significance.

\(^{20}\) Despite the high association between schooling and gender, no multicollinearity issues appeared.

\(^{21}\) Political parties in Brazil is an extremely complex subject and it may seem odd that party or party ideology is not one of the independent variables. With such a large amount of municipalities and a volatile national politics, local politics tends to go overlooked by political science. What we can point out is that the smaller the municipality, the less the party seems to matter in the sense that it does in national politics. In municipalities, excluding state capitols and other large cities, party ideology matters less than party machinery, meaning that it is the party that is best able to organize itself in the place which is important. Quite often we see odd coalitions with extreme right-wing and extreme left-wing parties collaborating in local politics. In addition, the resources a municipality has to spare are so scarce that regardless of party ideology, all mayors will apply for any resources possible. What matters to us is their degree of success and how an individual level characteristic might play a role in that. We thank the peer reviewer for pointing out the need to clarify this.
a female mayor during the 2005-2008 term meant an increase of approximately in 6.0% in resources received by the municipalities via the Robin Hood Law. Political experience had a small impact, increasing only in 1% the resources received. Having an university education had a negative relationship with receiving more resources, which was unexpected, albeit it was a small effect. However, if gender and schooling have a high association, but opposing relationships between these predictors and the resources received in '08 are found, it does suggest that what matters here is indeed the gender of the mayor, rather than their formal education.

In our second model, the amount received by the municipalities in 2012 was the dependent variable. The independent variables were the same as before, except for the logged amount received, which refers to the amount from 2009 and the characteristics of the mayors, which refers to the mayors in office from 2009 through 2012. In this model, gender was not a relevant predictor. In fact, only the amount received in '09 and the HDI were relevant at all, with the latter taking on a much larger value than in the first model.

The third model, which refers to the 2013-2016 term, had the amount received in 2016 as dependent variable and the same independent variables adjusted for this time period (logged amount received in 2013). For this term, gender was once again relevant, increasing the resources received in 9.7% if the mayor was female. Schooling had an even smaller coefficient and a negative relationship with the dependent variable again, indicating that there is no multicollinearity between being a female mayor and having more formal education with being able to bring more funds to a municipality.

After running the three models for total funds received in each term, since the Robin Hood Law specifies several policy areas, we decided to run individual regression per sector, this time focusing only on the 2013-2016 term. This was done because this term demonstrated to have a more pronounced gender difference as well as the fact that it had new policy areas. The policy areas are food, education, health, culture, tourism, sports, and environment. We expected female mayors to be more inclined to provide services geared towards food and education. We expected male mayors to be more inclined to provide services linked to sports. Culture, tourism, and environment are very specific policy areas and would be more linked to a municipality’s characteristics than the mayor’s gender. Minas Gerais is home to several historical and geographical landmarks, making certain towns more inclined to look for revenue in those areas. As mentioned previously, because of the public health system, which is run by the municipalities, we expected health to not be impacted by the mayor’s gender.

The dependent variable is the natural logarithm of the progression of the resource received in 2013-2016 per capita per sector. The predictors are: the mayors’ characteristics, the natural logarithm of the GPD per capita (2013), the natural logarithm of the HDI (2010), natural logarithm of the population (2010, this time, no multicollinearity was found), and the natural logarithm of the deflated resource received in 2013 per sector per capita.

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22 In order to conserve space, regression results can be found in Appendix 1.
23 Full results available upon request.
Health policy in Brazil is both federalised and localised: the public health system comes from the federal government, but healthcare is provided by the municipality, that is, facilities and employees are contracted and paid by the city. As expected, this regression returned no results. This sector is the only one in which all municipalities are involved in, so there really is not much to differentiate them from each other.

Another policy sector that faces the same context is food production. Almost all towns in Minas Gerais meet the criteria for food production and receive the resources allotted by the Robin Hood Law. Notably, the capitol Belo Horizonte does not receive any of those resources, given its high degree of urbanisation.

Most other policy sectors presented regressions with low explanatory power, small F tests, small coefficients, and/or bizarre graphs. The system designed by the Robin Hood Law is quite rigid and most cities take years to meet the necessary criteria. Other cities might not even try, if they have enough revenue from other areas. Our regression analyses simply was not able to capture the detail of this complex arrangement.

The only policy sector worth describing is education. In this case, although the coefficients were still small, our model was able to explain 81.7% of the transfers, with an F test of 144,770. The coefficients also presented interesting directions, showing that municipalities with female mayors, low GDP per capita, low HDI, small populations, and that received smaller amounts of resources in 2013 were more able to progress during the 2013-2016 term and meet the Robin Hood Law criteria for education.

**Discussion and conclusions: gender matters, but how much?**

This study had three goals: to demonstrate some of the specificities of Brazilian federalism and its tax system, to argue that representativeness should be applied to the executive branch, and to demonstrate both by analysing possible gender differences in the ability of mayors in the state of Minas Gerais to successfully receive intergovernmental transfers.

Brazilian federalism is definitely a special case. Having grown out of colonisation and faced several authoritarian periods, it has been centralised and decentralised many times. This has left us with political and tax systems that are highly complex beyond the common variables of population and geographical size, electoral system, and cultural aspects. It means that there are situations that may not even make much sense yet, because of twist and turns that have not been completely figured out.

For instance, the fact that women have more electoral success in small municipalities is something that goes against common sense and research from other countries. Moreover, it something that Brazilian political science has not yet explained. However, some suggestions can be attempted. As we mentioned earlier, more than half of the municipalities are really small and only a handful go beyond six digits. Even then, they are usually under half a million inhabitants. Only cities with more than 200 thousand inhabitants will have run-off elections. With over 35 official parties, elections in Brazil are extremely competitive and it may be the case that women have an easier time in smaller municipalities due
to the level of competition. Cities such as Belo Horizonte, as well as the other large cities in Minas Gerais, are usually stepping-stones for senatorial or gubernatorial races; mayors in those cities usually have been federal and state deputies before being elected mayor.

We found that, despite the rigidity within the tax system and, particularly, within the system created by the Robin Hood Law, gender differences can be found in receiving the transfers from the law. Since we were only able to study three terms and we only found supporting evidence in two, more research needs to be conducted. There seems to be, however, a trend of more female mayors being elected. More is also demanded of these women, since their formal education has grown for the past three terms while the men's remained the same. However, their ability to meet the criteria demanded by the Robin Hood Law in order to receive the transfers does not seem to be connected to their education – it is in fact the women's own interest in building their municipality's capacity in order to receive those funds.

In 2015, prime-minister of Canada Justin Trudeau made waves after appointing a cabinet that was 50% female and representative of other political minorities, stating in not so many words that representativeness matters. When Phillips (1995) explored why presence was so important in politics, why not only ideas were enough, the focus was on the legislative. That was the house of the people. But, as the executive becomes more and more the central place of power in information-gathering, institution-building, and concentration of resources, its composition, including its leadership, becomes more and more relevant to the representation of the people. This is true for a prime-minister and for the smallest city in Minas Gerais, with 815 inhabitants. Social difference is a political resource because it brings with it important information that can improve people's lives.

As Araújo (2010) argues, women enter into politics as a means to an end, that is, they see political office not as the ultimate goal but as tool in order to achieve something. Since we found no multicollinearity issues with education, experience (albeit a limited variable), or municipal characteristics, we are left to interpret that the female mayors in the terms studied, specifically, the first and third, were more attuned to the needs of the population and had no other obstacles that we were not able to perceive. In that sense, they were more successful in representing the population who elected them. Despite not demonstrating any multicollinearity, since there are so many large cities and not that many women running them, the question of representation of large populations remains a debate that political science and politicians will not end any time soon.

This study focused on a very small part of political life in the Brazilian municipalities of Minas Gerais. Had it found gender to be completely irrelevant in the effectiveness of mayors of receiving Robin Hood resources, it would not say much about possible gender differences in mayoral leadership. As it stands, however, it can be added to the body research presented in the beginning of the paper that shows that those differences do exist and possibly to the benefit of the population. One important detail is that there is no discussion here on the impact of the Robin Hood Law on women's lives or gender inequality. This was a test of effectiveness in acquiring resources, with no discussion on how those resources were spent. We made no claim on how these female mayors present themselves
as representatives of women, but only that they do seem to focus more of their attention on this social and redistributive policy, supporting the hypotheses that women do use their socialisation as a political resource.

Bibliographical references


Appendix 1

Model 1

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<th>Model</th>
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<th>Sig.</th>
<th>Collinearity Statistics</th>
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<td>Standard Error</td>
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* Dependent variable: REPASSES2008_per_capita.

Graphs for model 1
Model 2

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Variável Dependente: REPASSES2012_percapita.

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<th>Sig.</th>
<th>Collinearity Statistics</th>
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*Dependent variable: REPASSES2012_percapita.
Graphs for model 2
Model 3

### Model Summary

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*b* Variável Dependente: REPASSES2016_percapita.

### Coefficients

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<th>Standardized coefficients</th>
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*a* Dependent variable: REPASSES2016_percapita.

### Graphs for model 3

[Graphs showing model output]