Are congresswomen more responsive to the public policy demands of female voters?[1]

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I.   **Abstract**

This study seeks to contribute to the literature by studying the impact of a legislator's sex on health and agriculture policies passed in the Brazilian Congress and whether such policies are aligned with voters preferences. Evidences have shown that women face stronger barriers to being elected (Lawless 2015; Speck and Mancuso 2014) and they face a complex and demanding electoral playing field when running for re-election (Palmer and Simon, 2010). My hypothesis is that female politicians newcomers need to establish their credibility by proposing public policies that appease both male and female voters. Once a congresswoman has political experience, she risks making policy more aligned with female voter preferences. Using data from a national survey, I analyze whether male and female Brazilian voters differ in the priority they assign to health and agriculture policies. Then, I examine the differences in the types of health and agriculture budget amendments sponsored by male and female legislators. Finally, I analyze the impact of a politician's sex conditional on prior political experience. With these results, I compare the preferences and priorities of male and female voters with the representatives' priorities and see if they match.

II.   **Introduction**

In the last thirty years, a growing literature has asked whether the women descriptive representation translates into substantive representation. As descriptive representation, the literature understands the degree to which politicians resemble those individuals that they represent.[2] On the other hand, substantive representation concerns whether politicians support the policy preferences of those citizens whom they were elected to represent. Therefore, the debate about whether descriptive representation leads instrumentally to substantive representation could be developed in other way: are female politician priorities aligned with female voter preferences for policy issues?

Despite the increasing number of studies about women in politics, we still know little about the impacts of women's leadership on policy decisions. A key question that has

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[2] See Hanna Pitkin, "The Concept of Representation" (1967).

emerged in the literature is about the relation between greater female representation and greater advocacy of female voter priorities. On the one hand, some studies have shown that female politicians have different political preferences and priorities than their male colleagues (Chattopadhyay and Duflo (2004); Clots-Figueras (2012)). On the other hand, it is not clear that there is a straightforward relationship between female politicians and their advocacy of female voters' interests.

In this work, I will test two hypotheses: (i) if women prefer more social public policy, and; (ii) if congresswomen are more responsive to the public policy demands of female voters. In addition, I will analyze the impact of political experience on political behavior. Evidences have shown that women face stronger barriers to being elected as compared to their male counterparts (Lawless 2015; Speck and Mancuso 2014) and they face a complex and demanding electoral playing field when running for re-election (Palmer and Simon, 2010). Once elected, women will attempt to produce policies that are aligned with the demands of both male and female voters in order to demonstrate their responsiveness to both groups (McDonagh 2009). My hypothesis is that newcomer female politicians need to establish their credibility by proposing public policies for both voters. Once a congresswoman has political experience, as a mayor, state deputy or another office, she risks making policy more aligned with female voter preferences.

My preliminary findings contrast with other studies that have found a strong impact of female politicians on social policy (McDonagh 2009). The results show that gender does not influence health and agriculture policy preferences in Brazilian Congress. Furthermore, my findings suggest that female deputies do not focus more on health policy than their male counterparts. Importantly, I introduce a new concept that mediates the relationship between voter preferences and politician priorities, which is the political experience or career of the elected representative. I find that the past political experience of a congressional politician is an important factor for understanding the behavior of legislators; female deputies that are professional politicians allocate less resource for health care (health) and cooperative (agriculture) policies than male professional deputies. However, the findings seem to show that female politicians are not more responsive to the public policy demands of female voters, even when they are professional politicians.

This paper seeks to contribute to the literature by studying the impact of a legislator's gender on health and agriculture policies passed in the Brazilian Congress and whether

such policies are aligned with voter preferences. Brazil is a good example to study for several reasons. First, it adopted a gender quota in 1997, but the increase in representation has proven to be less responsive than had been hoped. Second, in spite of the lower number of women holding congressional seats, they are an expressive part of the population and the Brazilian female electorate is larger than the male. Finally, most recently, Brazilian women have secured prominent political positions, such as Dilma Rousseff, who was reelected President in the 2014 elections and Marina da Silva, who was third most voted presidential candidate in this same competition.

The empirical strategy of this paper is as follows. First, I seek to examine if there are differences in public policy preferences between female and male voters using survey data. Specifically, I analyze if male and female Brazilian voters differ in the priority they assign to health and agriculture policies. This enables me to predict what effects gender representation should have on health and agriculture policy choices. Then, I examine the differences in the types of health and agriculture budget amendments sponsored by male and female legislators. Finally, I analyze the impact of a politician's gender conditional on experience in politics. With these results, I compare the preferences and priorities of male and female voters with the representatives' priorities and see if they correspond.

The remainder of this paper proceeds as follows. Section II presents a literature review about the impact of female politicians on public policy. Section III describes the theoretical framework that I am following based on the Citizen Candidate model of Osborne and Slivinski (1996) and Besley and Coate (1997). Section IV discusses the data collected for the empirical analyses and the research design. Section V explains the empirical strategy. Section VI presents the findings from the empirical tests undertaken in this paper. Finally, section VII draws conclusions and outlines an agenda for future research.

III.   **Literature Review**

There is an important body of research that has found that female politicians are more likely to support welfare policies, such as health and educational policies, as compared to their male counterparts (McDonagh, 2009). Analyzing the impact of women's

representation on policy in Swedish municipalities in 1980 and 1993, Svaleryd (2009) finds that increasing the representation of women in Swedish local councils increases spending on childcare and education controlling for demographical, socio-economic and political variables. Similar evidence about the priority of female politicians with respect to education policies is provided by Clots-Figueras (2012). Using data on Indian states, the author finds evidence that greater levels of female representation produces higher levels of education among voters in urban areas. The study is based on surveys and data from 29,686 Indian politicians who occupied seats in the 16 largest states from 1967 to 2001.

Studies have also shown that female politicians also have advanced policies related to children and family issues. Analyzing the impact of female legislators in the upper and lower houses of the US states, Besley and Case (2003) find that female politicians stand out in their support for family assistance and child support legislation (Besley and Case, 2003). Similarly, analyzing legislators' attitudes and bill initiation behavior in Argentina, Colombia and Costa Rica, Schwindt-Bayer (2006) finds that congresswomen propose more bills on children and family issues than male representatives. For this author, in spite of congresswomen initiating bills in some areas characterized as pertaining to the "women's domain", this is not a signal that female legislators in Latin America are *supermadres*[3], but the opposite. Such behavior among female legislators is a consequence of the "unfriendly legislative environment that pushes female politicians into these traditional roles" (Schwindt-Bayer, 2006). Neiva and Ogando (2012) provide evidence about how the legislative environment can be challenging and excluding especially for congresswomen. Analyzing data from legislative voting from 1991 to 2008 and the distribution of committee assignments in the Brazilian Congress, the authors find perplexing results. On the one hand, female legislators are more likely to be allocated to committees associated with the "feminine domain", such as committees about environment, family, human rights, health and education. On the other hand, the authors find that the most relevant factor to predict a representatives' voting behavior is the political party of the deputy, even on women's issues. According to the authors, this finding can be explained by the fact that there are two different groups among female

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[3] As *supermadres*, it is expected that the female legislators focus on "nurturant and affectational tasks related to their traditional roles" (Schwindt-Bayer, 2006).

legislators[4]: those deputies who come from social movements and those deputies that have relatives in politics and do not advocate the interests of women.

Microfinance studies also give support to the hypothesis that women have different spending priorities as compared to men. Evidence from microfinance studies show that in general women spend family income differently than their husbands; women spend more of their income on their families. According to Deshpanda (2001), "women's success benefits more than one person. Several institutions confirmed the well-documented fact that women are more likely than men to spend their profits on household and family needs". Therefore, increasing women's income will provide greater benefits for their children in aspects related to the education and health care (Cheston and Kuhn, 2002). Analyzing the expansion of an old age pension program in South Africa, Duflo (2003) concludes that younger girls who live with a grandmother grew faster compared to those children who live with a grandfather or with none. These findings are especially true for economically disadvantaged women, which are the main target of social programs of development organizations.

In addition, female politicians are more likely to advocate on issues related to women's rights than their male colleagues (Schwindt-Bayer, 2006; Carroll, 2001). Analyzing bill sponsorship in 103rd and 104th Legislatures of the U.S. Congress, Swers (2002) highlights that congresswomen have exhibited greater interest in promoting legislation related to women's issues as compared to their male counterparts, particularly on feminist issues, such as reproductive rights and domestic violence. Examining data on bill initiation from the Honduras Congress from the 1990 to 1997, Taylor-Robinson and Health (2003) also find that female legislators dedicate a higher priority to women's rights issues. Similarly, Htun, Lacalle and Micozzi (2013) reinforce that congresswomen advocate more women's rights issues than their male colleagues. Using data on bills initiation from Argentine Congress from 1983 to 2007, the authors show that while the results confirm that women introduced more bills related to women's rights, on the other hand, the approval rates of these bills actually decline over time as female participation in Congress has increased. According to the authors, this evidence shows that women continue to be marginalized in the legislature and this affects their political efficacy.

In spite of the majority of literature about women in politics has presented evidence that male and female politicians have different policy priorities, there is evidences in the

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[4] Neiva and Ogando (2012) import this argument from Pinheiro (2007).

opposite sense. Examining whether female mayors are more likely to increase citizen participation, Funk (2015) finds that women's styles of leadership are not inherently more inclusive. The author examines the adoption of participatory budgeting and municipal participatory policy councils in Brazilian municipalities, and her conclusion is that the decision to promote citizen participation is largely a function of other factors than mayors' gender.[5] These findings could be understood as an attempt of female politicians to promote the view that they have the same ability on issues stereotyped as male domain, thus they are as good as male politicians. However, voters may expect that female politicians will make policies that differ from the ones made by males. According to McDonagh (2009), "women candidates are *hybrid candidates*, who go to great efforts to represent both male and female traits by establishing that they are both the same as and different from men."

However, it is important to highlight two criticisms of studies on the role of women in politics. First, few studies have examined female voter preferences. I argue that an accurate analysis about whether women's descriptive representation leads instrumentally to substantive representation should not only analyze the actions of female politicians, but also the preferences of female voters.

Second, few efforts have been employed to understand how a woman's past political experience may influence policy choices. Recent studies that examine women's numeric underrepresentation in US politics have shown that women are less interested in seeking elective office; such gender gap has remained steady over time and did not vary with political party, income, age, race profession, or region (Lawless, 2015). According to the Lawless (2015), the main reasons identified for the persistent gender gap are recruitment patterns (among potential candidates, women are 15% less likely to receive a suggestion to run for office from a party leader, elected official or others) and gender differences in self-perceptions (also among potential candidates, men are 60% more likely to assess themselves as qualified to run). However, the author highlights that in spite of women being less likely to emerge as candidates, once women run they win elections.

The evidence from *nascent* political ambition studies show that men and women are not equally interested in seeking elective office, but are female politicians as politically

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[5] Funk (2015) still highlights that the gender of the executive was relevant to explain the decision to increase participation in few thematic areas, which defy gender stereotypes: female mayors in sports and male mayors in feminine issues, such as children, health and women.

ambitious after running and winning an election? Analyzing elections to the U.S. House of Representatives from 1956 through 2006, Palmer and Simon (2010) conclude that "women who pursue careers in the House or run for the Senate have exhibited the same forms of ambition and behave in the same strategic manner as their male counterparts". Furthermore, the authors find that when female politicians run for reelection, their rates are slightly higher even though women face a more demanding and competitive environment in electoral playing field. According to the political ambition theory, before deciding to run for reelection or for another political office, a politician compares the benefit that he will receive from achieving that office and probability of election against the cost of an electoral campaign (Black, 1972). I argue that a politician's behavior is not only a response to his office goals (Schlesinger, 1996), but also a politician's behavior is shaped by her past political experience. Thus, the decisions that a politician makes today are based on her past political experience too. Therefore, to understand the impact of a politician's gender on public policy choice, it is relevant to examine the relationship between a politician's gender and her accumulated experience as a politician.

In summary, the main goal of this study is examining whether female politicians promote female voter interests. To address this question empirically, I first analyze the differences in preferences between male and female voters. I use these revelations of voter preferences to predict how gender may influence policy. I then examine whether these predictions are confirmed by analyzing legislature behavior.

IV.　　　**Theoretical Framework**

This study seeks to understand what determine a politician`s choice to emphasize certain types of public policies. In the classic Median Voter Model (Downs, 1957), politicians are bounded to credibly commit to their electoral platform and to implement it once in power. Given that politicians only care about winning elections, in order to maximize their popularity, they are led to announce convergent public policies. Thus, as a consequence of electoral competition, the platforms of those seeking office will converge to median voter preferences. In other words, the median voter policy choice will determine the type of public policy that will be enacted by politicians. In this theoretical model, a politician's characteristics, such as gender, do not matter for policy choice.

If the median voter's approach predicts that once elected politicians will implement their policy platform, the Citizen Candidate Model (Besley and Coate, 1997; Osborne and Slivinski, 1996) predicts that politicians can ignore their policy platform commitments and instead focus on proposing their most preferred policies once in office. Once elected, the only commitment of a politician is to follow their preferred policies. According to the Citizen Candidate Model (CCM), citizens have perfect information about the preferred policies of politicians, which makes it easy for voters to predict the policy choices of each candidate if elected. Thus, voters will support candidates whose ideal policies are similar to their own. In contrast to the framework proposed by the Downsian framework, this model implies that public policy is determined by the preferences of candidates.

In the CCM model, identity is a good predictor characteristic of the policy choice of a candidate. The public policy that will be implemented by a candidate can be predicted by knowing their identity. For example, a citizen that belongs to a certain ethnic group shares the similar policy preferences of a politician that also belongs to that group. In this sense, a politician's gender can be used as a predictor of her policy priorities if elected. If female voters and male voters present different policy preferences, then it is expected that the implemented policy by female politicians will be different from that implemented by male politicians.

Chattopadhyay and Duflo (2004) provide an empirical case that supports the Citizen Candidate Model. Using data from 265 Indian village councils in West Begal and Rajasthan, the authors document that the reservation of a council seat for a female politician influences the types of public goods provided in different localities. All else constant, female council leaders are more likely to support investment in drinking water and roads as compared to their male counterparts. According to the authors, the main reason that female politicians invest more in these goods is that they are directly relevant to the needs of their own gender. Together with Chattopadhyay and Duflo (2004), other studies provide empirical evidences that show that female politicians are more likely to support policies that benefit female voters (Clots-Figueras, 2012; Svaleryd, 2009).

According to Carroll (1990 *apud* Poggione 2004), "(…) regardless of whether the issue is foreign aid, the budget, or the environment, women are more likely than men to consider the possible impact of the policy on the lives of women and children." The sexual division of labor separates the social life between a public sphere, masculine, associated with politics and war, and a private sphere, feminine, related to the reproduction and children care. The relation between the sexual division of labor and the woman's role in

the reproductive process leads to understanding all other women roles as derivatives of her biological functions (Durham, 1983). Public policies that are aimed particularly at women focus on protective legislation and reproduction, such as provision of maternity leave (Afshar, 2005). In this sense, women and men have different policy agendas; women are more interested in issues related to family and the care of children and they are less likely to be engaged in issues of war. In fact, women take a more pacifist position in issues of war (Boneparth, 1988). Taking into account this discussion, my first hypothesis is the following:

H1: Women have a public policy agenda that privileges social issues.

Evidence has shown that women face stronger barriers to being elected as compared to their male counterparts (Lawless, 2015; Speck and Mancuso, 2014). Once elected, I expect that women will attempt to produce policies that are aligned with the demands of both male and female voters in order to demonstrate their responsiveness to both groups. McDonagh (2009) argues that what makes women suitable for public office is their individual equality in comparison to men, that is, their *sameness* with men. Given that female politicians face pressures to show that they are the *same* as men, my second hypothesis is the following:

H2: Female politicians who are in politics for the first time will need to establish their credibility by proposing public policies that appease both male and female voters. On the other hand, female political professionals will focus on issues that appease more female voters.

The elections to the House of Representatives in Brazil is based on an open-list proportional representation system. This institutional arrangement has been argued to create encourage candidates to build their careers by proposing policies that benefit a small minority of voters (Myerson, 1993). As newcomers to Congress, I do not expect that female politicians will focus on the demands of female voters. As I have presented throughout the text, women face a demanding and challenging scenario when they seek to be elected; the recruitment process tend directly and indirectly to favor male candidates, they perceive themselves as less qualified and face additional obstacles. Scholars have argued that the legislative environment can be challenging and excluding

especially for congresswomen. For this reason, female politicians have more incentives to show that they are as good as their male colleagues. During her initial entry into politics, a politician wants to demonstrate to her voters that they made the best choice. As she accumulates political capital over time, a female politician will promote public policies that are important to female voters.

A deputy in the Brazilian Congress with past political experience has at least two advantages. First, she knows how the political world works as she understands the bureaucracy and the challenges of the legislative process better than a first-timer. Second, she probably already has a network inside and outside the Chamber. These political connections can facilitate her job during the term. When the legislative term finishes, a politician has four options (Leoni, Pereira and Rennó, 2003): to seek reelection (static ambition), to run for another political office perceived as more attractive and prestigious (progressive ambition), to run for another political office evaluated as less prestigious (regressive ambition) and, finally, she could retire. For a politician to decide which path to follow in the next election, she considers a number of factors and each step in a career ladder change her evaluation about other next step (Black, 1972). According to Black (1972), "as a politician's investment in this career choice increases, his evaluation of political alternatives is likely to become more positive while his evaluation of nonpolitical alternatives is likely to remain about the same. The net effect is the development of higher levels of ambition in the politician." Palmer and Simon (2010) highlight that, according to the Schlesinger's theory, seeking a career in politics is a product of ambition, but also depends on the opportunity to enter and to gain higher office, and party competition.

Analyzing political ambition in Brazilian politics, Samuels (2003) finds that "Brazilian politicians do not develop long-term careers in the Chamber of Deputies, the Chamber serves as a middle-level rung on a career ladder that for most politicians has both its bottom and top rungs at the subnational levels of government." According to the author, when politicians hold a political office as deputy or other national office, they lose their political base and may even *endanger* their political career. While having an office in state or local government keeps them close to their voters and provides a better political return in terms of votes. However, Leoni, Pereira and Rennó (2003) reach a different conclusion about the political ambition of Brazilian deputies. The authors defend that those deputies who seek to be reelected are not the most vulnerable politically or the most unqualified. Instead, deputies that run for reelection are not so different from deputies

seek a higher office. In other words, a political career inside the Chamber is an attractive option for a politically career-oriented individual.

V. Research Design

This study aims to analyze whether female politicians priorities are aligned with female voters preferences. If female and male voters have different policy preferences, then I expect that female politicians will present different priorities as compared to their male colleagues. The literature (Neiva and Ogando, 2010; Miguel and Feitosa, 2009) has shown that congresswomen focus more on *soft issues*, like health, human rights and education, while congressmen present more policies to *hard issues*, such as agriculture and tax policies. In order to compare the preferences of male and female voters and politicians, I will analyze two different areas: health and agriculture. Given that other important differences can be observed in subareas, I will also employ an in-depth analysis inside the health and agriculture thematic areas.

i) Data

First, I analyze the preferences of male and female Brazilians voters using a national survey data from 2001[6]. Second, I will analyze the preferences of male and female deputies with respect to resource allocation for health and agriculture policies. For this purpose, I will use data from the Brazilian Congress.[7] I collected data about the deputies' characteristics and their policy choices based on the budget amendments proposed over the entire span of the four years in office. The data are from the 53rd Legislature, which corresponds to the representatives that were elected in the 2006 elections who served in office from 2007 to 2010. It should be noted that this legislature stands out because it had one of the highest rates of female representation to date; 8.77% of elected representatives

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[6] The survey is from *Vox Populi Company* and the data are available *Consórcio de Informações Sociais.* Last access in: March 2015. Quotas were used to stratify this sample and a total of 2,255 interviews were undertaken to obtain representativeness separately for the five major regions of the country. The results for the adult population were weighted based on 1,986 observations. The interviews were done personally and at home in 26 Brazilian states (including the Federal District, except Amapá) and distributed over 171 municipalities of all sizes, some randomly selected and others included necessarily, such as state capitals. Since voting is compulsory for the Brazilian adult population, I consider survey data as being a representative sample of the Brazilian electorate.

[7] Data from *Câmara dos Deputados do Brasil*.

were women. Based on the results from the first and second analyses, I will compare voter and deputy preferences of the same gender.

ii)   How the Brazilian budget process works

Brazil has a bicameral legislature with 513 deputies and 81 senators. Currently, Brazilian congresswomen occupy 9.94% of seats[8]. Federal deputies are elected at the same time for a four-year term in a proportional representation system. The district magnitude varies from 8 to 70 representatives by state. Despite being a multi-party system, an important literature has shown that the internal decision-making process of the Brazilian Congress is characterized by centralized organization and political party coordination (Figueiredo and Limongi, 2002).

In the budget process, the Executive Branch has exclusive prerogative to introduce budgetary issues. The budget process is composed of three successive steps each originating in a law. First, the Multiyear Plan (*Plano Plurianual* or "*PPA*") is valid for four years, next the Law of Budgetary Guidelines (*Lei de Diretrizes Orçamentárias* or "LDO") is valid for one year and, finally, the Annual Budget Law (*Lei Orçamentária Anual* or "LOA") that describes the government expenditures and revenues for the next year is passed. All of these laws are written by the Executive and approved by Congress. Importantly, although the budget process is fixed, the Executive is not obligated to execute all actions described in the LOA.[9] In general terms, there are two types of expenditure: discretionary and non-discretionary. In the discretionary budget share, representatives can submit amendments to different issues. Representatives can modify expenditures in three different ways: by committees, by electoral district delegations and individually; and I will focus on the third type. In spite of individual amendments have restrictions of amount and value; each deputy could present amendments to any thematic area.[10]

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[8] According to law no. 12034 enacted in 2009, females should comprise 30% of candidates in a party list. However, few political parties have filled this percentage. For more information about the inefficiency of the Brazilian gender quota, see Clara Araújo (2009) and Mala Htun (2001; 2002).

[9] In 2015, Congress approved a Constitutional Amendment, which establishes the Executive must implement all budget amendments proposed by the representatives.

[10] Between 2007 and 2010, each deputy could present annual budget amendments totaling R$ 10.75 million on average (2008 annual budget: R$8 million; 2009 annual budget: R$10 million; 2010 annual budget: R$12.5 million; and, 2011 annual budget: R$12.5 million). Importantly, unlike what happened until before

As a result, individual budget amendments are an especially good measure for capturing deputy preferences for policy issues, because deputies face few constraints to follow their own preferences. As I highlighted, deputies can present amendments for any thematic area according to their interests. As noted by Deputy Mara Gabrilli[11]:

"*As emendas que eu destino, o partido nunca interferiu. Uma coisa que pode acontecer é eu fazer emendas de bancada. (...) Ninguém no partido disse 'ah, você tem que botar uma emenda aqui'.*"

As the testimony of Deputy Telma de Souza[12] further highlights:

"*[The choice by the thematic area of amendments depends on] escolha de vida, do perfil, do gênero.*"

iii)   Health and Agriculture Amendments

Nearly all resources for health in the proposed budget amendments were allocated to one of three budget programs: Fundo Nacional de Saúde (FNS), Fundação Nacional de Saúde (FUNASA) and Fundação Oswaldo Cruz (FIOCRUZ). In the 53rd Legislature, the amendments destined to the FUNASA and FNS programs represented 97.76% of health amendments. Health amendments destined to FUNASA provide resources for public sanitation, focusing on the water supply, the sewage system, and the solid residues system. The FNS funds investments related to the physical infrastructure of the Brazilian public health system (SUS) by directing resources to specialized health care and emergency treatments and this represents 90.12% of all resources directed for health programs. Of this total, 59.48% of FNS amendments were for outpatient care and specialized hospital care programs and 20.63% for primary care programs.

While health amendments represent 14.6% of individual amendments, agriculture received only 8.9% of allocations in that specific Legislature. Amendments destined for agriculture or agrarian organization areas were coded as such if they refer to funding for programs that target agriculture. The main program related to agriculture is *Apoio ao Desenvolvimento do Setor Agropecuário* program that corresponds to 36.5% of

this legislature, deputies were not obliged to comply with a minimum value of amendments destined to the health area during the 53rd Legislature.

[11] This interview was carried out by the author and took place in São Paulo on October 11, 2013.

[12] This interview with the author took place in São Paulo in October 2013.

agriculture amendments. Among its goals, the *Apoio ao Desenvolvimento do Setor Agropecuário* program aims to give support to projects that seek to develop agriculture sector and also to give support to small and medium rural producer.

iv)   Variables

In the first stage, I seek to measure voter policy preferences and thus define the dependent variable as the preference for a specific type policy. The following question was used to measure health preferences: *"Which course of action is the best for improving health problems?"* and agriculture policy preference *"Which of the following actions do you think should receive support of federal government first?"*[13]. For health question, there were 6 different answers and the category "To hire more doctors and nurses to hospital and health centers" (*Contratar médicos e enfermeiros para hospitais e postos de saúde*) that corresponds to 43.2% of voter preferences was excluded because budget amendments cannot be destined for this issue. On the other hand, the questionnaire presented eight different answer options for the agriculture question. [14]

The key independent variable is the voters gender. The control variables are the social and economic characteristics of the voter: age, schooling, familiar income, state, living in urban area, and professional activities. I consider these characteristics as important to explain a voter's preferences for public policies.

In the second stage, the dependent variable is measured as the share of proposed budget amendments for a specific health or agriculture policy relative to the deputy's total amendment for such area.[15] I focus on submitted amendments, and not whether these budgets were financed, because I am particularly interested in the signaling, which representatives choose to employ. I explore whether policy allocation depends on a politicians' gender, coded 1 for female representatives, and 0 for male representatives. I

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[13] Translation provided by the author. In Portuguese, the first question (health): "*Qual das seguintes atitudes deveria ser tomada, em primeiro lugar, para melhorar os problemas que _____(citar nome do estado) enfrenta, na área da saúde pública?*" and second question (agriculture): "*Para promover melhorias na área da agricultura e pecuária aqui no seu estado, qual das seguintes ações você acha que deveria receber apoio do governo federal, em primeiro lugar?*".

[14] Categories: Prevention diseases; Land reform; Environmental protection; Cooperativism; Technical support & education; Irrigation system; Flow of production, and Funding.

[15] I tried to match the categories available in the survey question with the amendments types. In this sense, some categories of amendments were not included because they did not have correspondence with survey categories. In the agriculture analysis, I excluded the categories related to "research" and "management".

test whether the interaction between gender and past political experience helps to explain resource allocation behavior.

As control variables, I also control if the deputy has experience in the "health profession" and "agriculture profession" by coding as 1 those legislators who have past professional experience in these areas and 0 otherwise. I also use a variable to measure "political party affiliation" that indicates whether the representative belongs to a left, center or right spectrum of political parties in the Brazilian Congress.[16] I also control by the share of votes that each deputy received in 2006 elections. Finally, state dummies were included.

VI.   **Empirical Strategy**

i)   First stage: Voter's preference

To analyze the relation between gender and policy preference, I employ a logistic regression model.

$$Y_i = \alpha + \beta_1 F_i + \beta_2 I_i + \beta_3 O_i + \beta_4 S_i + \beta_5 J_i + \beta_6 U_i + \beta_7 A_i + \varepsilon_i,$$

where the dependent variable is the preference for a specific health or agriculture policy (Y_i). According to the survey, voters can choose just one type of policy. In health policy, I estimate the whether a voter's gender matters for: i) Building new health centers; ii) Modernizing new health centers; iii) Medicines; iv) Prevention; or v) Home Care by estimating a logistic regression model for each health policy type. And in agriculture policy, I also employ a logistic regression model for each specific policy: i) Prevention; ii) Land reform; iii) Technical support and education; iv) Support to environmental issues; v) Support to family agriculture and Cooperativism; vi) Irrigation system; vii) Funding, and; viii) Flow of production and regional development.

The independent variables are the respondent`s gender (F_i), age (A_i), schooling (O_i), family income (I_i), state (S_i), have a job (J_i), and if the interviewee lives in an urban area (U_i). Unfortunately, in this survey there is no data for political party affiliation.

ii)   Second stage

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[16] This analysis was made according to Zucco and Lauderdale (2011)'s ideological classification and also according to the legislative voting of the parties in the Parliament. I classified the parties as left: PC do B, PDT, PMN, PPS, PSB, PSOL, PT, PV; center: PMDB, PRB, PRTB, PSDB, and; right: DEM, PT do B, PFL, PHS, PSC, PTB, PP, PR, PTC.

In order to study the relationship between a representative's gender and allocation for health and agriculture policy, I estimate linear regression models for each specific type of public policy on i) health; and ii) agriculture. The dependent variable is the percentage of budget amendments allocated to a specific policy compared to the total amount of resources allocated by each deputy for that area ($\frac{Y_i}{Yt_i}$).

$$\frac{Y_i}{Yt_i} = \alpha + \beta_1 F_i + \beta_2 C_i + \beta_3 F_i * C_i + \beta_4 H_i + \beta_5 P_i + \beta_6 D_i + \beta_7 V_i + \varepsilon_i,$$

where the independent variables are a representatives' gender (F_i), past political career experience (C_i), profession (H_i), political party affiliation (P_i), share of votes that the representative received in the 2006 elections (V_i), and dummies for each state (D_i). I also include an interaction term between gender and political career ($F_i * C_i$) to test whether past political experience mediates gender preferences.

VII.   **Results**

Health is the most important issue for both male and female interviewees. 36% of women and 35.5% of men stated that health issues should be the policy priority to government. The second most relevant issue is employment. 32.3% of female interviewees and 30.1% of males stated that government should encourage the generation of jobs. A brief analysis of descriptive statistics shows that men and women do not present different public policy preferences. However, I will employ a logistic regression model to analyze the impact of an interviewee's gender on policy preference controlling by other variables.

The results from regression seems to confirm that female voters do not prefer more health policy than male ones. In addition, a regression model was estimated with *soft politics*[17] as the dependent variable. Again, there is not significant differences between female and male interviewees.

[TABLE 1] [18]

Regarding the allocation of amendments, in average, 13.3% of amendments proposed by female deputies were destined to health area. Similar figure can be found among male deputies; 15% of total that they proposed were destined to health. In average, male and female representatives presented 8.8% and 8.4% of total amendments to agriculture, respectively. T-test results show

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[17] I use the same classification of Miguel and Feitosa (2009). In this sense, I classified as *soft politics* the preferences by health, education and housing.
[18] See the Table 1 in appendix section. All the following tables will be available in the appendix.

that we are not able to reject the null hypothesis that the means (of male and female deputies) are equal.

Using the share of amendments destined to health relative to the total of resources as the dependent variable, the results from linear regression model show that a politician's gender is not a significant variable to explain her/his preference by social policy, such as health.

[TABLE 2]

Based on the results reported above, I did not find evidences that women prefer more social policy. Female voters do not prefer more health policy than male ones. In the same way, congresswomen do not present more health policy than their male colleagues.

Since I did not find evidences that men and women present different policy priorities in relation to health and agriculture, I will analyze now the voters' and deputies' preference to different health and agriculture programs using data from specific policies.

Examining the distribution of voter preferences for health policy type, 43.02% of interviewees think that "Hiring doctors and nurses" is the most important action with respect to health policy. 17.61% believe that the main solution for health problems is to build new health centers or hospitals, and 15.3% believe that it is through the modernization of health centers. 11.4% have the opinion that the solution involves the procurement of medicines. More than 10% of those interviewed consider that the focus should be on home care programs or disease prevention programs. A preliminary analysis with a chi-squared test with 95% confidence suggests that there are statistically significant differences between female and male voters only with respect to health policy preference for prevention. In this sense, female voters prefer less prevention policies than males. In logistic regression models, controlling for additional differences among voters, the results confirm, with 95% confidence, that female voters prefer less prevention policies as compared to males.

Schooling is a relevant characteristic. Primary school or illiterate voters seem to prefer less modernization and prevention policies while favor drug procurement investments as compared to those with high school level schooling or university degrees. Voters with very limited family income (up to one minimum wage) also prefer "modernizing policy" less. A possible important policy to poor and less educated people was omitted in this analysis, which is to hire doctors and nurses. Budget amendments cannot destine resources to this type of policy, and given that we are trying figure out whether exist policy congruence between voters' preference and politicians' priority, we omitted this policy. The results seems to show that female voters prefer less prevention policies, but this results are just suggestive because I understand that there are important limitations to infer Brazilian voters' opinions based on only one survey.

[TABLE 3]

On the other hand, 26.30% of interviewees think that "Land reform" is the best action with respect to agriculture policy. In the second place, 24.1% of interviewees evaluate actions related to environment protection. A preliminary analysis with a chi-squared test with 95% confidence suggests that there are statistically significant differences between female and male voters only with respect to agriculture policy preference for "prevention" and "land reform". Female interviewees prefer less "land reform" policies than males; on the other hand, female interviewees prefer more "prevention". In logistic regression models, controlling for additional differences among voters, the results confirm, with 95% confidence, that women prefer less "land reform" policies and more "prevention" policies as compared to males.

[TABLE 4]

In the second stage, I examine how elected representatives allocate their amendments to different health and agriculture programs. Overall, 72.27% were destined for infrastructure policies. As this type of policy is more visible to voters, it is understandable that deputies will prefer to focus on this policy. The other policies are distributed as follows: 10.3% of amendments for sanitation policy, 8.89% for medicines, and 7.89% for medical care. Training programs received less than 1% of health amendment allocations. A preliminary exercise with the Student's t test comparing the two proportions between female and male representatives, with a 95% confident interval, indicates that there are no statistically significant differences between female and male representatives with respect to allocation by health policy program type. Using a Student's t test for the difference between the mean share of budget amendments devoted to a specific health policy type, the results show that a female deputy presents amendments similarly to a male deputy. On the other hand, the regression results do not completely support this finding. Female politicians present more amendments to "health care" programs. However, congresswomen that have political experience present, in average, 20% less amendments for "health care" programs than congressmen that also have prior experience.[19]

[TABLE 5]

A preliminary exercise with the Student's t test comparing the two proportions between female and male representatives, with a 95% confident interval, indicates that there are no statistically

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[19] I calculated the difference between congresswomen and congressmen with political experience using the command *lincom* in *Stata*, after to run the regression models. Male deputies destined 19.77% more resources than females for "health care" programs, with a 95% confidence interval [6.8%; 32.7%].

significant differences between female and male representatives with respect to allocation by agriculture policy program type, except with respect to "cooperative" policies. The results indicate that a female deputy allocate more resources to "cooperative" policies. And, the regression results support this finding. Female politicians present, in average, 16% more resources to "cooperative" programs. In addition, they allocate more amendments to "environment" than their male counterparts do. However, congresswomen that have political experience allocate, in average, 10% less amendments for "cooperative" programs than congressmen that also have prior experience.[20]

[TABLE 6]

In summary, it is important to highlight that the categories of health and agriculture policy available from the survey data I collected for this study are not directly comparable to budget amendments. Compared to men, women voters give less importance to "prevention" policies (health) and to "land reform" policies (agriculture). Moreover, the results show that female deputies only outperform male deputies in health care (health), cooperative (agriculture) and environment (agriculture). On the other hand, female representatives that have political experience prior present different preferences than the newcomers.

VIII.   **Conclusion**

I have sought to examine if female voter preferences are aligned with congresswomen policy choices in this work. In the last decades, there is a growing literature discussing the importance of the descriptive representation of women in parliaments. One of the most common arguments used to advocate a bigger share of women in politics is that female politicians have a substantive impact on policy results. In this sense, studies have demonstrated that female politicians are less corrupt than their male counterparts (Dollar, Fisman and Gatti, 2001), they are also more effective (Anzia and Berry, 2011) and they produce more social policy (McDonagh, 2009).

The findings of this study do not completely support the results of this literature. First, there is not a substantial difference between the policy preference of male and female voters. Both prefer equally health and agriculture policies. Second, the results suggest that female deputies do not focus on health policy more than their male counterparts do.

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[20] I also calculated the difference between female and male deputies that have prior political experience using the command *lincom* in *Stata*. Congressmen destined 10.3% more for "cooperative" programs than congresswomen, with a 95% confidence interval [1.6%; 19%].

One explanation about why female and male deputies target health amendments is that health policy has shown a valence issue for Brazilian voters; in other words, it is relevant for both male and female voters. Besides that, a significant share of Brazilian budget is destined to health area, thus it is easier to present amendments in such area if there is a greater chance to get an amendments approved.

The results may be interpreted as evidence confirming that the challenge of representation is not an easy task for female legislatures in the Brazilian Congress and especially for female newcomers. The findings of this work show that there is an important difference between the political priorities of female newcomers compared to female politicians; and such difference deserves more in-depth studies.

There are several ways that future research on this issue can improve what we know about political behavior of female politicians. The first is by examining the political ambition of female politicians. Here, I only analyze a deputy's political experience, but it is important to examine which political office a deputy ran in the end of the term and if she had successes or just retired. Political ambition has been shown to be a promising research field especially for studies regarding female politicians. As we know, there is a significant gender gap in *nascent* political ambition (Lawless 2015), but once elected female politicians show the same political ambition as their male counterparts (Palmer and Simon 2010). In this sense, I argue that it is important to examine the impact of political experience and the political ambition on public policy choice. In order to get this, it is relevant to analyze the female and male politicians' behavior over time and not only one term as I have employed here.

In this study, I have also only focused on two policy areas – health and agriculture. Rather than focusing on salient issues, further research examining if there are differences between males and females on other issues (education, for example) are important to undertake to see if the findings here are robust to other social policy areas in particular. In order to do so, data will need to be collected at the voter and deputy-level. Unfortunately, there is very limited public opinion data in Brazil that includes information on public policy preferences. Nevertheless, this study has demonstrated that this is a promising area for which greater attention needs to be directed.

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Table 1. The determinants of policy priorities: Brazilian's voters

Variable	Voters' Preference by policy type	
	Health	***Soft politics***
Interviewee's Characteristics		
Women	0.047	0.017
	(0.096)	(0.092)
Urban	-0.075	-0.141
	(0.130)	(0.126)
Age	0.014***	0.011***
	(0.003)	(0.003)
Familiar Income		
Until one minimum wage	0.072	-0.071
	(0.197)	(0.187)
One to five minimum wages	0.146	-0.111
	(0.158)	(0.148)
Five to ten minimum wages	0.354**	0.106
	(0.166)	(0.158)
Schooling		
Until Primary school	0.100	-0.079
	(0.134)	(0.128)
Primary school fifth to eighth grade level	0.033	-0.036
	(0.128)	(0.121)
Professional Activity		
Employee	0.273	0.205
	(0.262)	(0.243)
Self-employed	0.170	0.105
	(0.265)	(0.246)
Persons who are not gainfully employed	0.175	0.053
	(0.268)	(0.248)
Constant	-1.575***	-0.252
	(0.337)	(0.315)

Log likelihood	-1.420.991	-15.123.951
LR chi2	98.19	88.32
N	2255	2255

Notes: Data from Vox Populi survey. Results of Logistic Regressions reported in *log-odds.*.
Beta coefficients and standard errors are reported. ***p<0.01, **p<0.05, *p<0.1. States dummies omitted.

    a. In *Schooling*, the omitted category is High School/University.
    b. In *Professional Activity*, the omitted category is *Employer*.
    c. In *Familiar Income*, the omitted category is *More than 20 minimum wages.*
    d. In *States*, the omitted category is *São Paulo.*

Table 2. The determinants of budget allocations by policy types:
Brazilian's deputies

Variable	Health	Agriculture
Deputie's Characteristics		
Female deputy	-0.009	-0.003
	(0.046)	(0.036)
Have any Political Experience	-0.008	0.005
	(0.017)	(0.013)
Female deputy*Political Experience	0.001	-0.013
	(0.051)	(0.039)
Professional	0.027*	0.007
	(0.015)	(0.011)
Votes	-0.000	-0.000
	(0.000)	(0.000)
Political Affiliation		
Center	0.024*	-0.009
	(0.013)	(0.010)
Right	0.024*	-0.004
	(0.012)	(0.010)
Constant	0.241***	0.032**
	(0.021)	(0.016)
Adj. R²	0.234	0.229
N	563	563

Notes: Results from Ordinary Least Squares
Regressions. Dummies for Brazilian states were
omitted.
Beta coefficients and standard errors are reported. ***p<0.01, **p<0.05, *p<0.1.

Table 3. The determinants of health priorities by policy types: Brazilian's voters

Variable	Voters' Preference by policy type				
	Build	**Modernize**	**Medicine**	**Prevention**	**Home Care**
Interviewee's Characteristics					
Women	-0.016	-0.005	-0.009	-0.492**	-0.153
	(0.121)	(0.127)	(0.145)	(0.217)	(0.181)
Urban	-0.173	-0.022	-0.050	0.346	0.273
	(0.163)	(0.187)	(0.196)	(0.374)	(0.289)
Age	-0.011***	0.002	0.012**	-0.009	0.011*
	(0.004)	(0.005)	(0.005)	(0.008)	(0.006)
Schooling^a					
Illiterate	-0.043	-0.641***	0.449**	-1.367***	-0.625**
	(0.168)	(0.178)	(0.211)	(0.300)	(0.252)
Primary school fifth to eighth grade level	-0.104	-0.287*	0.534***	-1.540***	-0.203
	(0.159)	(0.159)	(0.200)	(0.305)	(0.222)
Professional Activity ^{b}					
Employee	0.261	-0.328	0.716#	-0.730*	0.016
	(0.343)	(0.285)	(0.491)	(0.411)	(0.400)
Self-employed	0.159	-0.334	0.761#	-0.487	-0.164
	(0.349)	(0.291)	(0.494)	(0.425)	(0.412)
Persons who are not gainfully employed	0.218	-0.735**	0.734#	-0.535	-0.369
	(0.351)	(0.302)	(0.495)	(0.440)	(0.426)
Familiar Income^c					
Until one minimum wage	0.307	-0.575**	-0.200	0.071	-0.250
	(0.246)	(0.266)	(0.290)	(0.427)	(0.375)
One to five minimum wages	0.029	-0.283#	-0.126	-0.065	-0.125
	(0.202)	(0.188)	(0.232)	(0.291)	(0.265)
Five to ten minimum wages	0.243	-0.225	-0.289	-0.102	-0.056
	(0.211)	(0.197)	(0.256)	(0.302)	(0.275)
States^d					
Acre	-1.180	0.037	-0.107	0.246	0.000
	-1.042	(0.778)	(0.774)	-1.073	(.)
Alagoas	1.122***	0.195	-0.386	0.000	-0.018
	(0.398)	(0.565)	(0.629)	(.)	(0.761)
Amazonas	-1.706**	0.466	-0.603	-0.316	-1.374#
	(0.735)	(0.401)	(0.545)	(0.764)	-1.029
Bahia	0.500**	-0.380	-0.884**	-0.177	-0.087
	(0.230)	(0.340)	(0.364)	(0.477)	(0.395)
Ceará	0.573*	-0.011	-1.133**	-0.588	0.126
	(0.293)	(0.410)	(0.541)	(0.763)	(0.508)
Distrito Federal	-0.030	-0.074	-0.413	-0.536	-0.664
	(0.412)	(0.467)	(0.547)	(0.760)	(0.749)
Espírito Santo	-0.349	0.248	-0.786	0.063	0.904*
	(0.556)	(0.520)	(0.751)	(0.781)	(0.531)
Goiás	-1.359***	0.488*	0.413#	0.375	0.017
	(0.441)	(0.291)	(0.278)	(0.433)	(0.413)
Maranhão	-0.043	0.615#	0.099	0.633	-0.219
	(0.366)	(0.375)	(0.400)	(0.536)	(0.629)
Minas Gerais	-0.011	0.091	-0.200	-0.212	-0.028
	(0.219)	(0.245)	(0.257)	(0.379)	(0.320)
Mato Grosso do Sul	0.555#	0.417	0.174	-0.187	-0.546

	(1)	(2)	(3)	(4)	(5)
	(0.364)	(0.423)	(0.440)	(0.764)	(0.749)
Mato Grosso	-0.121	0.640*	-1.173*	0.000	-0.006
	(0.374)	(0.361)	(0.613)	(.)	(0.553)
Pará	-0.265	0.489*	-0.340	0.144	-0.610
	(0.296)	(0.296)	(0.338)	(0.488)	(0.549)
Paraíba	0.154	-1.004#	-1.278*	0.692	0.029
	(0.400)	(0.743)	(0.742)	(0.582)	(0.632)
Pernambuco	-0.325	0.550*	0.048	-0.601	0.142
	(0.331)	(0.314)	(0.331)	(0.636)	(0.442)
Piauí	-0.379	1.067**	-0.281	0.541	0.403
	(0.557)	(0.452)	(0.633)	(0.671)	(0.646)
Paraná	-0.631*	-0.231	-0.473#	-0.514	0.213
	(0.334)	(0.342)	(0.352)	(0.561)	(0.383)
Rio de Janeiro	0.224	0.388#	0.221	-0.177	-0.169
	(0.225)	(0.240)	(0.248)	(0.380)	(0.343)
Rio Grande do Norte	1.274***	-0.707	-1.475#	0.000	0.349
	(0.397)	(0.756)	-1.031	(.)	(0.647)
Rondônia	-1.235*	1.678***	-1.610#	0.000	-0.048
	(0.745)	(0.400)	-1.029	(.)	(0.759)
Roraima	-1.185	0.809#	0.000	-0.059	0.000
	-1.043	(0.609)	(.)	-1.081	(.)
Rio Grande do Sul	0.116	0.495*	0.071	-0.098	0.019
	(0.261)	(0.271)	(0.292)	(0.450)	(0.381)
Santa Catarina	-0.326	0.991***	-0.446	0.285	0.001
	(0.384)	(0.317)	(0.456)	(0.531)	(0.505)
Sergipe	0.000	0.245	-0.955	0.000	0.000
	(.)	(0.786)	-1.052	(.)	(.)
Tocantins	0.764*	-0.143	-0.852	0.000	-0.698
	(0.410)	(0.631)	(0.750)	(.)	-1.038
constant	-1.242***	-1.032**	-3.195***	-1.213*	-2.624***
	(0.435)	(0.407)	(0.583)	(0.651)	(0.582)
Log likelihood	-997.30481	-912.85296	-765.24162	-392.86817	-533.2219
LR chi2	97.92	103.97	65.48	78.06	34.98
N	2239	2255	2239	2255	2207

Notes: Data from Vox Populi survey. Results of Logistic Regressions.
Beta coefficients and standard errors are reported. ***p<0.01, **p<0.05, *p<0.1, #p<0.2.
   a. In *Schooling*, the omitted category was *High School/University*.
   b. In *Professional Activity*, the omitted category was *Employer*.
   c. In *Familiar Income*, the omitted category was *More than 20 minimum wages.*
   d. In *States*, the omitted category was *São Paulo.*

Table 4. The determinants of agriculture priorities by policy types: Brazilian's voters

Variable	Prevention	Land Reform	Environment	Cooperative	Technical support	Irrigation project	Flow production	Funding
Interviewee's Characteristics								
Women	0.303**	-0.271**	0.021	-0.155	0.137	-0.142	-0.057	0.188
	(0.129)	(0.106)	(0.107)	(0.163)	(0.196)	(0.165)	(0.253)	(0.188)
Urban	0.155	-0.128	0.339**	-0.347#	0.808**	-0.183	-0.629**	-0.348#
	(0.173)	(0.146)	(0.149)	(0.223)	(0.335)	(0.213)	(0.317)	(0.249)
Age	-0.002	-0.003	-0.002	0.013**	-0.010#	0.003	-0.004	-0.002
	(0.004)	(0.004)	(0.004)	(0.006)	(0.007)	(0.005)	(0.009)	(0.007)
Familiar Income								
Until one minimum wage	0.341#	-0.270#	0.338#	-0.267	-0.558#	0.302	0.378	-0.773**
	(0.264)	(0.208)	(0.221)	(0.366)	(0.413)	(0.363)	(0.492)	(0.383)
One to five minimum wages	0.055	-0.303*	0.291#	0.215	-0.219	0.426#	0.249	-0.431#
	(0.224)	(0.162)	(0.179)	(0.265)	(0.289)	(0.305)	(0.393)	(0.274)
Five to ten minimum wages	0.312#	-0.216	0.194	0.346	-0.177	0.505#	-0.748#	-0.696**
	(0.233)	(0.172)	(0.190)	(0.273)	(0.308)	(0.318)	(0.494)	(0.308)
Schooling								
Until Primary school	0.355*	0.009	0.082	-0.457**	-0.235	0.100	-0.449#	-0.208
	(0.183)	(0.144)	(0.150)	(0.230)	(0.270)	(0.230)	(0.347)	(0.261)
Primary school fifth to eighth grade level	0.322*	-0.162	0.194#	-0.045	-0.272	0.100	-0.452#	-0.251
	(0.173)	(0.138)	(0.140)	(0.205)	(0.248)	(0.224)	(0.335)	(0.247)
Professional Activity								
Employee	0.420	-0.201	-0.160	0.370	1.237*	-0.545#	-1.142**	0.602
	(0.403)	(0.264)	(0.286)	(0.434)	(0.750)	(0.410)	(0.513)	(0.558)
Self-employed	0.352	-0.195	-0.132	0.037	1.162#	-0.337	-0.929*	0.884#
	(0.408)	(0.269)	(0.289)	(0.442)	(0.758)	(0.412)	(0.518)	(0.562)
Persons who are not gainfully employed	0.417	0.068	-0.176	-0.174	1.024#	-0.386	-1.214**	0.360
	(0.409)	(0.270)	(0.293)	(0.452)	(0.765)	(0.418)	(0.545)	(0.575)
Constant	-2.772***	-0.011	-1.597***	-2.820***	-4.293***	-2.503***	-1.412*	-2.355***
	(0.494)	(0.347)	(0.371)	(0.577)	(0.893)	(0.551)	(0.723)	(0.682)
Log likelihood	-920.17	-1253.61	-1211.37	-616.02	-461.27	-623.34	-303.69	-499
LR chi2	89.33	91.17	66.76	65.17	51.35	57.78	47.08	44.75
N	2.255	2.255	2.255	2.193	2.255	2.207	2.024	2.131

Notes: Data from Vox Populi survey. Results of Logistic Regressions.
Beta coefficients and standard errors are reported. ***p<0.01, **p<0.05, *p<0.1, #p<0.2. State
dummies were omitted.

Table 5. The determinants of health priorities by policy types: Brazilian's deputies

Variable	Infrastructure	Sanitation	Medicine	Home Care	Qualification
Deputie's Characteristics					
Female deputy	-0.041	-0.070	-0.039	0.159***	-0.010
	(0.096)	(0.076)	(0.050)	(0.053)	(0.020)
Have any Political Experience	0.027	0.023	-0.052***	0.003	-0.003
	(0.034)	(0.027)	(0.018)	(0.019)	(0.007)
Female deputy*Political Experience	0.145	0.020	0.005	-0.195***	0.013
	(0.105)	(0.083)	(0.055)	(0.058)	(0.021)
Professional	0.057*	-0.052**	-0.005	-0.001	-0.002
	(0.031)	(0.024)	(0.016)	(0.017)	(0.006)
Votes	0.000	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Political Affiliation					
Center	-0.063**	0.045**	0.011	0.012	0.006
	(0.027)	(0.021)	(0.014)	(0.015)	(0.006)
Right	-0.005	0.009	0.017	-0.008	0.000
	(0.026)	(0.020)	(0.014)	(0.014)	(0.005)
Constant	0.903***	0.010	0.080***	-0.000	0.002
	(0.043)	(0.034)	(0.023)	(0.024)	(0.009)
Adj. R²	0.259	0.210	0.270	0.234	0.040
N	563	563	563	563	563

Notes: Results from Ordinary Least Squares Regressions. Dummies for Brazilian states were omitted. Beta coefficients and standard errors are reported. ***p<0.01, **p<0.05, *p<0.1.

Table 6. The determinants of agriculture priorities by policy types: Brazilian's deputies

Variable	Prevention	Technical support	Environment	Cooperative	Irrigation project	Funding	Flow production
Deputie's Characteristics							
Female deputy	-0.000	-0.001	0.169*	0.160***	-0.009	0.000	-0.118
	(0.003)	(0.008)	(0.095)	(0.035)	(0.016)	(0.001)	(0.144)
Have any Political Experience	0.001	0.002	0.014	-0.002	0.002	0.000	-0.007
	(0.001)	(0.003)	(0.034)	(0.013)	(0.006)	(0.000)	(0.052)
Female deputy*Political Experience	0.000	-0.001	-0.212**	-0.105***	0.004	-0.000	0.100
	(0.003)	(0.009)	(0.104)	(0.039)	(0.017)	(0.001)	(0.158)
Professional	-0.000	-0.000	-0.033	0.001	-0.007	0.001***	0.090*
	(0.001)	(0.003)	(0.034)	(0.013)	(0.006)	(0.000)	(0.051)
Votes	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Political Affiliation							
Center	-0.001	-0.003	-0.153***	-0.025**	-0.004	-0.000	0.204***
	(0.001)	(0.002)	(0.027)	(0.010)	(0.004)	(0.000)	(0.041)
Right	-0.000	-0.003	-0.147***	-0.019**	-0.005	0.000	0.173***
	(0.001)	(0.002)	(0.026)	(0.010)	(0.004)	(0.000)	(0.039)
Constant	-0.000	0.000	0.108**	0.013	0.002	-0.000	0.481***
	(0.001)	(0.003)	(0.042)	(0.016)	(0.007)	(0.000)	(0.064)
Adj. R²	0.024	0.028	0.190	0.123	0.135	0.126	0.224
N	563	563	563	563	563	563	563

Notes: Results from Ordinary Least Squares Regressions. Dummies for Brazilian states were omitted.
Beta coefficients and standard errors are reported. ***p<0.01, **p<0.05, *p<0.1. The category "Land Reform" was excluded because there is no observations.