Women and Government Expenditure:
Do Gender Quotas Increase a Country’s Social Spending?

By

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Patty Chang
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Abstract

Since the 1990s, countries have implemented gender-based electoral quotas for the purpose of increasing the percentage of women in their legislative bodies. While quotas have been successful in achieving this goal, there is little research on what impact quotas have had beyond the numbers. This thesis seeks to address this gap by looking at the relationship between quotas and government expenditure, specifically health and education spending. Research up until this point has relied on the assumption that women are more likely to support social spending such as this, an assumption challenged in this work. This thesis uses a quantitative study of government expenditure from 131 countries between 1980 and 2010, and qualitative case studies of Argentina, New Zealand and India. The results indicate that while higher percentages of women in legislative bodies are correlated with increased expenditure in health and education, the presence of a gender quota is negatively correlated with expenditure. This difference can be attributed to problems in how women elected through quotas represent the female public of their country and a lack of institutional support for women elected through quotas.
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1. Introduction

Last fall the United States came closer than ever to electing its first female president. This milestone was not achieved and it caused many Americans to question their biases and understandings of women in politics. This is a question the global community has been addressing for over 2 decades now, specifically in the realm of increasing the representation of women in government positions. One way countries have addressed the underrepresentation of women in their legislative bodies is by introducing a national electoral gender quota. These quotas differ from country to country but they all function to encourage the nomination and election of women to the legislature. Quotas have been successful in increasing the percentage of women elected in the countries where they have been instituted. The impact of the quota beyond this change, however, has been understudied.

This thesis seeks to expand on this limited research in hopes to provide more information on how quotas impact legislation. Since there is a consensus in the international community\(^1\) that women are more likely to prefer increased government spending on social issues, this study seeks to address the relationship between quotas and health and education expenditure. Do quotas increase government spending in health and education due to their increasing the number of women in legislative bodies? What is the relationship between quotas, expenditure and other related elements? These questions are important to answer as politicians and activists look to quotas to promote gender equality. Understanding the relationship between quotas and expenditure will not only help us predict a country’s spending patterns but it will allow us to look critically at how we view women in politics. This work aims to advance research in women’s political participation so we may better understand how quotas may impact government

\(^1\) Social scientists, anthropologists, historians, psychologists and other actors who are interested in gender
spending, but moreover challenge the existing discourse so that women are given complete opportunity and agency in elected office.

In order to answer these questions, this thesis utilized quantitative and qualitative methods. The research operates within an analytical framework using several theories of women’s participation, including the theory that women are more likely to support social spending and the theory of descriptive, symbolic and substantive representation (Bauer, 2013; Conover, 1988). These theories frame this work and provide grounds for understanding and criticism. This thesis performs a quantitative study using data on quotas and government expenditure from 131 countries from 1980 to 2010. The hypothesis is that there will be no significant correlation between quotas and social expenditure due to variations in women’s preferences. The work finds, however, that the presence of a quota is negatively correlated with expenditure in health and education. These results are then compared to a qualitative study of three country cases: Argentina, India and New Zealand. The thesis finds overall that the impact of quotas is heavily affected by socio-economic divisions in a country and how a country understands and treats the role of women. Gender quotas will not be successful in impacting legislation in countries where deep rooted patriarchic institutions limit how women participate in the legislative processes.

This thesis begins with a literature review which addresses existing theories around women in politics and quotas. It then discusses the research methods before producing the quantitative results and analysis. This is followed by the qualitative case studies. The work finishes with an analysis of the findings of both methods together before concluding.
2. Literature Review

This chapter will present the existing literature around women in politics and quota systems. The sections are organized by themes and they all serve to give a comprehensive background to why and how quotas are used today. This chapter will also discuss how the literature and methods have changed over time and where it has led us today.

2.1 The First Generation: Gender and Politics

The first generation of scholars on this topic focused on how women first engaged in political activity including voting, organizing and running for office. This work focuses on years before quotas were implemented (pre-1990s) and fits within the larger literature of gender studies. This generation of studies used psychology, survey data and existing theories on gender difference in its research method. The following sections will outline this type of literature.

2.1.1 Women as Political Actors

Before delving into the world of gender based electoral quotas, it is important to outline women’s political participation throughout history and how this has brought us to the modern quota system. Questions around women’s suffrage and overall equality have always existed but a significant increase in the study and discussion around gender in politics and education arose in the 1970s and 1980s (Githens et al., 1994). Githens et al. highlight 3 main areas of emphases: (1) political behavior, (2) social movements and (3) political theory. Political behavior refers to women’s participation in traditional political activity including voting and electoral patterns, general characteristics of those active in politics and patterns of recruitment. The overarching question is why women have been largely absent from political elites, if they participate politically in nontraditional ways, and if they differ behaviorally from men. Research in this area
has found that women do participate politically on a large scale and in many capacities but due to a lack of representation in traditional institutions have been portrayed as politically passive (Githens et al., 1994). This problem is related directly to the implementation of quotas and is thus important for this paper. The second area of study, social movements, focuses on how women’s movements and campaigns have interacted with the public arena. This area of study was able to consider many perspectives because the groups considered—activists, campaigns, women’s groups, etc.—held diverse views. Researchers looked beyond surveys and voting patterns and instead turned to varied methods to create a complex view of how social movements effected women and politics around the world (Githens et al., 1994). The final focus of political theory mainly deals with the “transforming paradigm” (Acklesberg and Diamond, 1987) which is the premise that existing theories did not acknowledge women’s societal position of subordination and defined women in terms of their oppression and as a deviation from the male norm. This encouraged research to not view women’s differences as deficiencies but instead to give women their own authentic voice and claimed that “women operate with a different set of assumptions that result in their having their own worldview, their own interaction patterns, and their own policy agendas,” (Githens et al., 1994, p. xii).

The idea that women have a distinct set of policy agendas is one heavily influenced by the feminist movement. The concept that “a women’s perspective” exists as guiding value system for women was first used to depict the inferiority of women but was then used by feminists to represent hope and pride (Conover, 1988). These theorists focused on the idea that distinct aspects of women’s lives and values are fostered by experience. But when conducting a study on feminism and policy, Conover found that it is not gender that indicates policy opinions but the degree to which men and women identify as feminists. Where gender did matter,
however, were not in specific policy opinions but in overall basic ethics of caring behavior where women as a whole expressed higher rates than men (Conover, 1988). These differences are can influence how women participate in traditional political systems, like elected office.

### 2.1.2 Political Recruitment

Why would quotas be necessary for women to enter the realm of elected office? Since the 1960s there has been a rise in women’s representation globally but in almost all cases percentages still fall significantly short of 50/50 equality and this progress has not been linear (Githens et al., 1994). Githens et al. describe a 3-step recruitment process that anyone seeking to be elected must follow: (1) the candidate must be willing and able to enter into the pool of the eligible, which relies on aspects of socialization and structural constraints specific to the place, (2) the candidate must gain support from gatekeepers to office including party leaders, interest groups, financial backers, the media, etc., and (3) the candidate must win the support of voters. Many factors play into how feasible this recruitment process is for women. Githens et al. describe how electoral systems matter significantly for this process: simple plurality first past the post systems seem to disadvantage women while they do much better under proportional party list systems. These findings and the claim that electoral system may have the most significant impact on women’s recruitment have been asserted by other researchers as well (see Norris, 1994; Tripp et al., 2008; Fréchette et al., 2008; Jones, 2008). Githens et al. and Fréchette also emphasized the importance of patterns of incumbency and turnover as a factor that influences women’s ability to get elected. That notwithstanding, multiple studies (Darcy et al., 1987 and Schwindt-Bayer, 2009) have found that the more women that run for office, the more women get elected. So what prevents women from running? Darcy et al. present some possible explanations: it is possible that women have a fear of losing, that there are patterns of socialization that prevent...
women from getting involved in the “man’s game” of politics, or that occupational segregation prevents women from entering fields that generally lead to politics like law and business and women are instead directed to childcare (which may explain why women’s representation is higher in local office due to the reduced time spent away from home). Of these explanations, Darcy et al. believe that the latter is the most likely. Janet Clark, however, provides evidence for the second explanation by discussing how sex-role socialization has influenced how women are trained and expected to act which impacts women in the process and men’s voting patterns (Clark, 1991).

Additionally, it would be amiss to exclude the role race and class play in these processes. Minority, especially black, women have historically debated instances of “white feminism” in the United States and some European countries, and have diverged from feminist organizations because of this (Tang Nain, 1991). The role race plays in quota politics has been absent from the existing literature and is an area that merits future research. Moreover, the relationship between socio-economic status and quotas has been addressed more often and the thesis will highlight some of this research in the Arguments Against Quotas section of this chapter as well as in the case study analysis. Elite women (often white women in diverse countries) and women connected to powerful men have been found to be more likely to be included in the political recruitment process (Franceschet et al. 2012). Socio-economic conditions also play a role given that economic crises and poverty disproportionally impact women which present obstacles to women’s participation (Phillips, 1987; Shvedova, 2005).
2.2 The Second Generation: Quotas are Introduced

The second generation of scholars focuses on right before and following the implementation of quotas. They look at why and how quotas are introduced and their immediate effects. They differ from the first generation because they focus on large scale representation and participation beyond voting patterns and social movements. Researchers in this generation largely perform case study analysis. The following sections present key literature from this generation.

2.2.1 What are quotas?

Two fundamental assumptions underlay the implementation of quotas in general: people can be counted based on affiliation to a specific category and these categories have a fundamental right to be at least minimally represented (Groschl & Takagi, 2012, p. 1-2). Forces like the 1979 Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) and women’s movements have helped to normalize these assumptions in the case of women. As countries align themselves further with the goals of equality for women, the use of gender-based electoral quotas has been a method used to rapidly increase the percentage of women in legislative bodies for about three decades. Argentina became the first country to adopt a mandated quota in 1991 and other countries quickly followed. Each country’s quota is nuanced but fall into a few major categories. One way of categorizing quotas is how they are mandated: either by constitution or electoral law. Countries can either have the quota written into their constitution, mandated by their electoral law, or both. Within these mandated quotas fall two more categories of quotas: reserved seats and legal candidate quotas. Reserved seats quotas require that a certain number or percentage of women get elected, generally ranging from 20-30 percent. Legal candidate quotas mandate that a certain percentage of women must be on the list
of candidates. Outside of these mandated quotas there are voluntary party quotas which political parties implement willingly and treat as a candidate quota. Parties are most likely to adopt a quota when there are women in the high ranks of the party, when other parties within the system have adopted quotas or when the party has more leftist values (Caul, 2001). Figure 1 presents a map of countries that currently have some sort of quota implemented.

**Figure 1: Quotas Around the World**

2.2.2 The Implementation of Quotas

Women’s empowerment is considered a progressive goal and is thus often assumed to align with more progressive governments. Gretchen Bauer and Jennie E. Burnet explored this idea through a study comparing democratic Botswana and autocratic Rwanda and found that a democratic state is not necessarily more likely to adopt a quota system (Bauer et al., 2013).
Several other studies look at the influence of democracy on the implementation of quotas. A study by Kathleen M. Fallon, Liam Swiss and Jocelyn Viterna analyzes developing nations between 1975 and 2009 and argues that the effect of democratization is curvilinear: as a country becomes more democratic it initially sees less women represented but as it continues the number will increase again. They also argue that representation in nondemocratic states is merely for show and that women elected do not hold real political power (Fallon et al., 2012). This analysis questions the merits of substantive versus descriptive representation. A 2011 study by Daniel Stockemer focuses on the impact of democracy and corruption on gender quotas. Stockemer finds that more democratic countries are less likely to introduce quotas and the democratic process does not affect this rate. He also found that more corrupt countries are less likely to have gender quotas. This study introduces corruption as a potential factor leading to or preventing the implementation of quotas, but furthers the clear illustration that there is no consensus on the effect of democratization on women’s electoral quotas.

Several studies address the impact international factors have on the implementation of gendered electoral quotas. Sarah Sunn Bush’s 2014 study analyzes the introduction of gender based quotas in countries all over the world. Bush hypothesized that international pressure has the greatest influence on their implementation due to foreign aid and the need to appear more democratic. She finds a causal link between implementing quotas and aid, but asserts that this is due to the level of democracy in a country. This seems to contradict the finding that democracy does not play a role in the implementation of quotas and is thus worth expanding upon (Bauer et al., 2013). A study that focuses on the importance of international women’s movements pressure on governments to include more women further complicates the research around this topic. Hughes et al. in 2015 looked at 149 states from 1989 to 2008 and found that domestic ties to
international women’s movements actually undermined the quota adoption process. They claim that this inverse relationship may be because “global pressure to adopt quotas may be weakened by the diverse agendas of women’s activist organizations,” or because “perceived threats to male elites posed by women’s agitation, or both,” (Hughes et al. 2015).

A debate exists among the international community on how norms are spread among countries. There are four main theories that seek to explain this phenomenon: (1) international communities which define human rights; (2) powerful countries or organizations which threaten or promise aid; (3) competition among countries to attract investment; and (4) learning from a country’s own mistakes or the mistakes of its peers (Simmons et al. 2007). In the realm of women’s rights and representation, one could argue that any of these factors could be at play. Bruce Bueno de Mesquita and Alastair Smith study the second theory, coercion through aid, and find that countries receiving foreign aid may give policy concessions to the donors of aid (Bueno de Mesquita et al. 2007). Their theory focuses on several factors that influence the donation of aid including the nature of a political leader and their constituents. They find that countries with small winning coalitions—the number of people needed to keep the leader in power—are more likely to make policy concessions in exchange for aid, and countries with large winning coalitions are more likely to give aid in exchange for policy concessions. Therefore it is possible to assume that if countries giving aid are looking to encourage receiving countries to implement policies that empower women, implementing quotas would be one way to concede.

2.2.3 Arguments against Quotas

Quotas of all types are often met with opposition for various reasons. One argument is that quotas undermine systems of meritocracy which allow the best candidates to be elected. Maureen A. Scully highlights the paradox in meritocracy criticism in that in the United States
legislation around equal rights was implemented to promote meritocracy because white men were given preference above qualified women and people of color, while now meritocracy is used to argue for the inclusion of white men (Scully, 2012). Elena Doldor also discusses meritocracy and how men and women will argue against non-meritocratic systems and deny inequality overall (Doldor, 2012). Doldor also introduces reasons why women may fear backlash from supporting quotas: women may fear that being too vocal in criticizing the status quo may portray them as victims or agitators, women may fear tokenism and being judged in light of gender stereotypes, or women may fear the perception of being less competent if elected through a quota system.

Another criticism of quotas involves how they are introduced and implemented. Although many quotas are proposed by female leaders in each country, they are often sparked by international conversation, summits, United Nations referendums, etc. This means that there is an international force that may encourage the implementation of quotas. Bueno De Mesquita and Smith warn of the dangers of the influence of wealthy countries on developing countries (2007). Because western countries have declared that all nations, especially developing nations, must improve how women are treated, there is a risk of quotas functioning as a policy concession: a decision made to stay in a powerful countries favor, receive aid or prevent the loss of aid (Bueno De Mesquita and Smith, 2007). Many developing countries have adopted quotas and if this is due to policy concessions we may doubt their sincerity.

As mentioned previously, socio-economic factors play a role in women’s representation and quotas. Because quotas create abrupt spikes in women’s representation, there is not a lot of time for non-elite women to build the platform they would need to be elected. This creates a system where elite women are predominately elected and existing privileges are reinforced (Radjavi,
Moreover, women may not just be members of the elite class, but the majority may be relatives of male politicians in certain countries (Franceschet and Piscopo, 2012). This leads the general public and those who study quotas to question how qualified these women are for elected office. Aside from qualification, if elected women are far richer and members of an elite, political class, how well can they represent the female public? The next section describes how different types of representation through quotas may be beneficial or harmful.

2.2.4 Descriptive, Substantive and Symbolic Representation

The merits of gender-based electoral quotas have been heavily debated. One of the key arguments is whether these quotas affect the descriptive, substantive and symbolic representation of women in parliament. Descriptive representation “refers to the numbers and kinds of women elected” (Bauer, 2013). This is sometimes understood as the inclusion of women in parliament merely for the façade of equality. Some argue that quotas are merely descriptive representations and once these women get elected they do not serve meaningful positions that accomplish the goal of empowering women in that country. Additionally, descriptive representation encourages the election of women who are unqualified or those of an elite, privileged class that does not represent their constituency. Moreover, if this is the case, it could be true that quotas are actually harmful due to the false sense of equality that they create, and in some cases can reinforce existing privileges and stereotypes (Radjavi, 2012).

Substantive representation “represents the form and content of policy making” that quotas can influence (Bauer, 2013). This often manifests itself through the creation of laws around gender-based violence or family laws, which results in an overall “gendering” of how policy and governing are handled (Tripp, 2010). This type of representation is ideal for
supporters of quotas as it illustrates the benefits and impact of increasing the presence of women in parliament.

Symbolic representation “refers to public attitudes toward women in politics and trends in the political engagement of female constituents” (Bauer, 2013). Ideally, as more women are elected to parliament through the use of quotas, women all over the country will be more empowered and participatory in politics. This is also an ideal case for supporters of quotas as the women elected not only influence policy but also have a meaningful impact on how women are treated and viewed throughout the country. Indeed, Tiffany D. Barnes and Stephanie M. Burchard conducted a study relating women’s representation to political engagement through a series of four surveys of twenty African countries between 1999 and 2008 and found that as women’s representation increased, the gender gap between men and women in political engagement decreased (Barnes et al., 2012).

2.3 The Third Generation: Quotas’ Impact

The most recent generation of literature on gender quotas focuses on the impact quotas have made. This research has been produced in recent years because sufficient time has passed to allow scholars to assess changes caused by quotas aside from an increase in the percentage of women in parliament. This generation is fairly new and lacks a multitude of studies. Moreover, the methods utilized mirror the second generation in that they are predominately case studies. This section outlines what work has been done so far in this generation.

This study focuses on the impact quotas have had on legislation, thus substantive representation. Ballington and Karam point out that there is relatively little research and information available about the impact women and quotas have made, which may be because
quotas have only gained popularity in the last few decades and a lot of the literature on women in politics comes from the Unites States, where low levels of representation make studying impact difficult (2005). They define impact as “the ‘feminization’ or regendering of legislation and other policy outputs, that is the extent to which laws and policies have been altered or influenced in women’s favor. This includes both putting women’s issues on the agenda and ensuring that all legislation is woman-friendly and gender-sensitive,” (p. 191). It is thus important to distinguish between women’s issues and women’s perspective. Women’s issues are those which mainly affect women due to physical concerns like breast cancer screenings and reproductive rights or due to social concerns like gender equality and childcare policy. Women’s perspectives are women’s views on all political concerns (Ballington & Karam, 2005). While studies have found that women are more likely to legislate on health and education issues (see Schwindt-Baye, 2006 and Chen, 2010), it is important to keep in mind that women’s interests are diverse and sometimes conflicting. But when women do introduce legislation based on women’s issues or women’s perspectives they may be more likely to pass because men may not want to publicly oppose women (Ballington & Karam, 2005). And yet there may be reasons why women do not present this type of legislation. According to Franceschet et al. women may distance themselves from women’s issues to be considered “serious politicians” (2012). Miguel (2012) and Franceschet & Piscopo (2008) also find that in some cases quota reinforce stereotypes that undermine the legislative process. Zetterberg (2008), however, found that while women face institutional constraints in creating legislation, women elected through quota systems do not face these constraints more than women elected without quotas.

Most studies of this topic are case studies of specific countries. Case studies are limited in how they are able to analyze overarching trends, which is important to a thorough and useful
understanding of quotas on a global scale. One of the few quantitative and cross-country studies was conducted by Li-Ju Chen who uses changes in government spending on social welfare expenditures like healthcare and education to measure the influence of quotas and women’s representation (2010). This study relies on the assumption that women are more likely to influence areas of social welfare. In this way, the third generation of scholars has done little to move beyond the gender-based assumptions utilized by the first generation. Chen found that an increase in the share of female legislators does robustly increase spending in these areas. This thesis expands on this study by utilizing necessary control variables, including a case study component, and using data more recent than 2006 because recent events including a global recession and nationalist trends may influence the results. And as Drude Dahlerup, one of the leading minds in the field of gender quotas, said: “There is a need for further developing our concepts and methods when studying the impact of gender quotas and the effect of women's representation in general. Different results may derive not solely from different cases, but also from the use of disparate criteria for this evaluation,” (Dahlerup, 2008, p. 322). This work aims to contribute to the third generation of quota literature and hopefully redirect its common methods and assumptions.
3. **Research Methods**

This chapter will present the methods for the analysis of the data. Presented first are the hypotheses and then an outline as to how the relationship between quotas and expenditure will be measured through quantitative and qualitative methods.

### 3.1 Hypothesis

This study seeks to analyze the impact gender-based electoral quotas has on legislative choices. This will be measured through changes in government spending on social welfare issues. This work uses education and health spending as a proxy for social welfare issues. These measurements are used due to the consensus that women are more likely to support this type of legislation, as discussed in the previous chapter. This thesis hypothesizes, however, that the introduction of quotas will not have a significant impact on government spending in these areas due to faults in the assumption of women’s dedication to social issues and limits on how impactful women may be once elected.

Hypothesis 1: *The introduction of quotas will not significantly increase government spending on health.*

Hypothesis 2: *The introduction of quotas will not significantly increase government spending on education.*

### 3.2 Research Method

In order to conduct a comprehensive study of this topic, this work uses a mixed methods approach. Mixed methods research is defined as an approach which utilizes both qualitative and quantitative forms and involves using each method in tandem to strengthen the overall results.
(Creswell, 2009). This method is used because it will allow this thesis to analyze this data in more thoroughly than others have thus far. Other researchers of this topic have only used qualitative or quantitative methods and ignored the connection between the two. Strictly qualitative case studies, most common in this research topic, lack the ability to detect global trends that may be present. Strictly quantitative research may overlook nuance in specific country cases. Using both methods this thesis may be able to avoid some of these faults. This work will use a sequential explanatory design in which quantitative data are collected and analyzed first to find trends in global data, and then qualitative data are collected and analyzed second, using specific mechanisms for selected countries (Creswell, 2009). This allows this thesis to use qualitative findings to build upon the quantitative finding sand finally discuss the implications of the two methods in conjunction. The following section presents each method.
3.3 Quantitative Method

3.3.1 Data

Descriptive Statistics:

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<th>Std. Dev.</th>
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<th>Max</th>
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<td>32.50576</td>
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<td>Percentage of health in total GDP</td>
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<td>514.9091</td>
<td>0.0061098</td>
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<td>Percentage of health in total spending</td>
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<td>Education expenditure in 2005 USD</td>
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<td>Percentage of education in total GDP</td>
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<td>Women civil society participation</td>
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<td>.2286666</td>
<td>0.0178113</td>
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<td>Lower chamber electoral system</td>
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<td>.6992125</td>
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<td>Percent of women in lower chamber</td>
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<td>9.725937</td>
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<td>10</td>
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<td>49.68878</td>
<td>18.53913</td>
<td>14.62517</td>
<td>92.62864</td>
</tr>
</tbody>
</table>

**Dependent Variables**

The dependent variables will be government expenditure on education and healthcare.

This thesis uses data from the International Food Policy Research Institute’s (IFPRI) Statistics of Public Expenditure for Economic Development (SPEED) dataset. This dataset was chosen because it provides data for the date range in question. It also provides several measurements of expenditure which is useful for this work. Both types of expenditure use measurements of total amount spent in 2005 US Dollars (USD), amount spent as a percent of total Gross Domestic Product (GDP) and amount spent as a percent of total spending to understand how quotas may impact each of these measurements. For example, the amount a country spends on social...
spending may increase, but this increase may be due to an increase in GDP as a whole. The percent a country allocates toward social spending may, simultaneously, decrease. This thesis uses different measurements of spending in order to avoid overlooking these inconsistencies.

**Independent Variables**

The independent variable will be the existence of a gender quota in the country. This variable comes from the Varieties of Democracy v6 dataset. This thesis utilizes this dataset because it provides a comprehensive collection of variables that are important to this work. The dataset is very transparent in their methods and each variable is generally coded by 15 to 20 country experts. This dataset is clustered and could thus present issues regarding independence, but this thesis avoids this problem by utilizing variables from different clusters. The quota variable is broken down into two types: reserved seats quota and statutory quota. Reserved seats quotas reserve a determined percentage, usually around 20-30 percent, of the lower chamber seats for women. Statutory quotas mandate through law that political parties must nominate a determined percentage women. This thesis makes this distinction to examine if the different types of quotas impact expenditure differently.

**Control Variables**

In order to measure only changes in education spending that are the results of quotas being introduced this work will include several control variables. It includes a measurement of women’s civil society participation provided by the Varieties in Democracy dataset. This variable is an index that represents if women have the ability to express themselves and to form and participate in groups; “the index is formed by taking the point estimates from a Bayesian factor analysis model of the indicators for freedom of discussion for women (v2eldiscw), [civil society organizations] CSO women’s participation (v2csgender), and female journalists
(v2mefemjrn),” (Coppedge et al., 2016, p.62). This work includes this variable to account for differences in how countries may allow women to participate in politics publicly which may impact how women would participate in elected positions.

This thesis includes the electoral system of each country because research has concluded that differing electoral systems have a significant impact on the ability of women to influence legislation (Franceschet & Krook, 2008). This thesis uses data from the Varieties of Democracy dataset and use two variables—lower chamber electoral system and lower chamber electoral system (detailed)—to control for these differences. The first variable distinguishes between majoritarian, proportional and mixed system. The second variable is more detailed in that it includes 13 categories: first-past-the-post, two-round system in single-member constituencies, alternative vote in single-member districts, block vote in multi-member districts, party block vote in multi-member districts, parallel, mixed-member proportional, list proportional representation (PR) with small multi-member districts, list PR with large multi-member districts, single-transferable vote (STV) in multi-member districts, single non-transferable vote (SNTV) in multi-member districts, limited vote in multi-member districts, and Borda Count in single- or multi-member districts.

This work also includes a variable which measures the percent of women in the lower chamber of the legislature from the Varieties in Democracy dataset. This measurement because this thesis is analyzing quotas which impact the lower chamber legislature and it is necessary to control for variance in the percentage of women elected in each country. If it is true that the amount of women in a legislature will impact government expenditure we must look at the relationship quotas have to this effect.
In order to account for how a country’s expenditure is influenced by the amount of money a country has this work includes gross domestic product (GDP) as a control. This is measured in current USD and is taken from the World Bank national accounts data. This dataset was used because it provided data for all years and country’s needed and the World Bank is a reputable source.

The level of democracy in a country may impact how a government functions and thus how elected officials are able to influence legislature. In order to take this into account this work includes a polity score as a control. The polity2 variable is a measure of how democratic a country is on a scale from -10 to 10. The Polity revised score from the Varieties in Democracy dataset is used because this is a modified version for use in time-series analyses by applying a simple treatment which converts “standardized authority scores (i.e., -66, -77, and -88)” into scores within the -10 to 10 range (Coppedge et al., 2016, p.356). Polity2 is the most popular measure of democracy among researchers although it has been criticized for its placeholder coding. This work avoids this issue by using the revised score which converts placeholders into usable scores.

Lastly, this thesis includes a variable which measures overall globalization from the KOF Index of Globalization. This index includes weighted measures of economic globalization, social globalization and political globalization. This thesis uses this dataset because it provides a measurement of globalization that is comprehensive and carefully weighted. Although some aspects of globalization measured may seem to not provide a truly inclusive understanding of connectedness (i.e. Number of McDonald’s Restaurants per capita and Number of Ikea per capita), these do not comprise a large percentage of the score and their validity has been
supported. This control is used to account for how countries’ connection with other countries may influence government expenditure due to policy concessions or other forms of interaction.

### 3.3.2 Empirical Strategy

To test the hypotheses in the quantitative study, this thesis performs an Ordinary Least Squares (OLS) regression to estimate the influence of quotas on government health and education spending. The unit of analysis is country year and the data are gathered from 1980 to 2010 years in 131 countries. This work uses robust standard errors to help account for minor problems that may exist regarding normality, heteroscedasticity, and more. The regressions can be expressed in the following multivariate equations:

\[
\begin{align*}
\text{HealthSpending}_{c,t} & = B_0 t \times \beta_1 \times \text{reservedseatsquota}_{c,t} + \beta z_{c,t} + \epsilon_{c,t} \\
\text{EducationSpending}_{c,t} & = B_0 t \times \beta_1 \times \text{statutoryquota}_{c,t} + \beta z_{c,t} + \epsilon_{c,t}
\end{align*}
\]

Where \( z_{c,t} \) represent a vector of all control variables listed previously.

### 3.4 Qualitative Method

For the qualitative aspect of this study process tracing methods are used to make inferences about how the outcomes found are produced. This thesis uses the theory-testing method of process tracing which utilized an existing theory presented in the literature and tests how the theory holds up in a given case. The theories to be analyzed are the inclination for women to support social welfare issues and the three theories of representation. This method is used to look at three country cases during the same years as the quantitative study (1980-2010):
one country with a quota and no significant increase in education and health spending, one with no quota and a significant increase in education and health spending and one with no quota and no significant increase in education and health spending. This work analyzes the following countries Argentina, New Zealand and India as they fit each of these criteria respectively, and it uses information on women and quotas, as well as data and theories around education and health spending from public records, government publications and scholars for each country. These findings are then compared to the quantitative findings to form a more complete analysis of the relationship between quotas and expenditure.
4. **Quantitative Results and Analysis**

This chapter presents the quantitative findings. Presented first are the results for health and education expenditure separately, including regression tables for each. The analyses of these findings are also presented after each section. This chapter concludes with an analysis of the overall quantitative results.

4.1 Health Expenditure Results

Table 1 and Table 2 present the outputs for several models of OLS regressions of health expenditure for both reserved seats quotas and statutory quotas, respectively. In Table 1 we find that reserved seats quotas only significantly impact health expenditure when measuring health expenditure in 2005 USD when using detailed electoral systems (model 2) and when measuring health expenditure as a percentage of total spending (models 5 and 6). In model 2 quotas are significant at the 0.05 level and negative. This indicates that health expenditure in 2005 USD is less when a reserved seats quota is in place. Also in this model, however, women’s civil society participation index is positive and significant at the 0.001 level. This indicates that the more women participate in politics and civil society the higher health expenditure will be. Models 5 and 6 are similar in that they both find that the reserved seats quota variable is negative and significant at the 0.001 level and that the women’s civil society participation index variable is positive and significant at the 0.001 level.
Table 2 presents the output for regressions using statutory quotas. The results here are somewhat different from those found when analyzing reserved seats quotas. In these models, statutory quotas are only significant when measuring health expenditure in 2005 USD (models 1 and 2) and when measuring health expenditure as a percentage of GDP (model 4). They are all significant at the 0.001 level and negative, indicating that when a statutory quota is present health expenditure is likely less. When women’s civil society participation is significant it is positive, reflecting the findings from table 1.
### Table 1

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health Expenditure 2005 USD</td>
<td>Health Expenditure 2005 USD</td>
<td>Percent Health in total GDP</td>
<td>Percent Health in total GDP</td>
<td>Percent Health in total Spending</td>
<td>Percent Health in total Spending</td>
</tr>
<tr>
<td>Reserved seat quota</td>
<td>0.520</td>
<td>-3.146*</td>
<td>-61.454</td>
<td>-0.321</td>
<td>-1.669***</td>
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<td>(0.300)</td>
<td>(0.417)</td>
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<td>Women civil society participation index</td>
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<td>13.145***</td>
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<td>(2.098)</td>
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<td>(0.605)</td>
<td>(0.832)</td>
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<tr>
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<td>(1.091)</td>
<td>(14.006)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Electoral system (detailed)</td>
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<td>(0.020)</td>
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<td>(0.040)</td>
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<td>Percentage of female legislators</td>
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<td>0.064***</td>
<td>0.079***</td>
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<td>(1.355)</td>
<td>(0.006)</td>
<td>(0.010)</td>
<td>(0.012)</td>
</tr>
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<td>0.000***</td>
<td>-0.000</td>
<td>-0.000***</td>
<td>-0.000***</td>
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<td>(0.000)</td>
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<td>(0.000)</td>
</tr>
<tr>
<td>Revised combined POLITY score</td>
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<td>-4.549</td>
<td>0.030*</td>
<td>0.056**</td>
<td>0.048</td>
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<td>(0.145)</td>
<td>(2.763)</td>
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<td>(0.019)</td>
<td>(0.041)</td>
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<td>Overall globalization index</td>
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<td>0.646</td>
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<td>(0.012)</td>
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Robust Standard Error in Parentheses

* p 0.05, ** p 0.01, *** p 0.001
## Table 2

<table>
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<tr>
<th></th>
<th>(1) Health Expenditure 2005 USD</th>
<th>(2) Health Expenditure 2005 USD</th>
<th>(3) Percent Health in total GDP</th>
<th>(4) Percent Health in total GDP</th>
<th>(5) Percent Health in total Spending</th>
<th>(6) Percent Health in total Spending</th>
</tr>
</thead>
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<td>Statutory quota</td>
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<td>-1.261***</td>
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<td>(5.214)</td>
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<td>(0.384)</td>
<td>(0.392)</td>
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<tr>
<td>Women civil society participation index</td>
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<td>13.070***</td>
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<td>-0.107</td>
<td>2.517***</td>
<td>4.363***</td>
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<td>(3.778)</td>
<td>(60.753)</td>
<td>(0.389)</td>
<td>(0.610)</td>
<td>(0.845)</td>
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<td>-0.598***</td>
<td>(0.137)</td>
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<td>(1.118)</td>
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<td>-1.762***</td>
<td>0.042*</td>
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<td>(0.294)</td>
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<td>Percentage of female legislators</td>
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<td>0.000***</td>
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<td>1571</td>
<td>2299</td>
<td>1558</td>
</tr>
</tbody>
</table>

Robust Standard Error in Parentheses
* p 0.05, ** p 0.01, *** p 0.001
4.2 Health Expenditure Analysis

It is immediately clear that Hypothesis 1 seems to be false because according to this quantitative analysis quotas do significantly impact health expenditure. When analyzing reserved seats and statutory quotas they both have a negative impact on health expenditure. Because in both tables women’s civil society participation has a positive impact on health expenditure, this suggests that perhaps the quotas are acting in a descriptive representation function. As discussed in the literature review, some researchers worry that quotas may be used by governments to create a false sense of equality. This idea may be supplemented by the fact that the percentage of women in the legislature has a positive (and in many models significant at the 0.001 level) on health expenditure. Or perhaps we are seeing what Franceschet et al. (2012), Miguel (2012) and Franceschet & Piscopo (2008) suggested in that women elected with the help of quotas may stray away from stereotypically “feminine” legislation to be taken seriously and combat these stereotypes. We can also confirm Franceschet & Krook’s (2008) findings that electoral system may impact women’s ability to influence legislature because in many models the variables measuring this are significant.

4.3 Education Expenditure Results

Tables 3 and 4 present the OLS regression results for education expenditure. Table 1 illustrates several models to analyze the impact of reserved seats quotas. Here we find that there is a negative correlation significant at the 0.05 level when measuring education expenditure in 2005 USD using the detailed electoral systems, at the 0.05 level when measuring the percent of education expenditure in the total GDP using the non-detailed electoral systems, and at the 0.01 level when measuring the percent of education expenditure in the total GDP when using detailed
## Table 3

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<td>Education Expenditure in 2005 USD</td>
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<td>-0.621**</td>
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<td>0.043**</td>
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<td>(0.090)</td>
<td>(0.818)</td>
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<td>(1.130)</td>
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Robust Standard Error in Parentheses

* p 0.05, ** p 0.01, *** p 0.001
<table>
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<tbody>
<tr>
<td>Education Expenditure in 2005 USD</td>
<td></td>
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<tr>
<td>Statutory Quota</td>
<td>-2.659*</td>
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<td></td>
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<td>-35.324*</td>
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<td>Electoral system (detailed)</td>
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<tr>
<td>Percentage of female legislators</td>
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<td>0.005</td>
<td>0.612</td>
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<tr>
<td>Revised combined POLITY score</td>
<td>0.058</td>
<td>0.019</td>
<td>-1.866*</td>
<td>0.058***</td>
<td>-0.058</td>
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Robust Standard Error in Parentheses
* p 0.05, ** p 0.01, *** p 0.001
electoral systems. Women’s civil society participation is significant in almost every model and is negatively correlated with education spending. The percentage of female legislators, however, is positively correlated when significant.

Table 4 presents the results when measuring the presence of a statutory quota. The results in this table are similar to table 3 in that the presence of a quota is negatively and significantly correlated with education expenditure when measuring expenditure in 2005 USD and using simple electoral systems and when measuring the percent of education expenditure in total GDP using detailed electoral systems (at 0.05 and 0.001 levels respectively). Where this table diverges from table 3 is when expenditure is measured using the percent of education expenditure in total spending. When using both detailed and simple electoral systems we find that the presence of a statutory quota is positively correlated (at the 0.001 level) with education expenditure. But we do find similar results regarding women’s civil society participation with negative significant correlation and the percentage of female legislators with positive significant correlation.

**4.4 Education Expenditure Analysis**

We can easily determine that hypothesis 2 has also been disproven because there is a significant relationship between quotas and education expenditure; the nature of this correlation, however, is more complex than health expenditure. Like health expenditure, for most models a negative significant correlation is found between both types of quota and education expenditure. What differs is when measuring the impact of statutory quotas on the percent of education in total spending, where we find a positive significant correlation. This means that when a statutory quota is in place education expenditure may be less in raw numbers and may be less as a percentage of GDP, but may be more as a percentage in total spending.
Also interesting are the results from women’s civil society participation and percentage of female legislators. In both tables women’s civil society participation is negatively significantly correlated while the percent of female legislators is positively significantly correlated. It is consistent with the existing theory that countries with a higher percentage of women in their lower chamber would spend more on education because of the assumption that women are more likely to support higher spending on social issues. But what does it mean when countries where women enjoy more civil society participation spend less on education expenditure? Perhaps female legislators have different preferences than the female public and thus a more active female civil society is correlated with less education expenditure while a higher percentage of female legislators yields the opposite result. It is useful to look at these variables and others overall to better understand how they interact with quotas and expenditure.

### 4.5 Overall Expenditure Analysis

This section will present the results found for different models and variables across all 4 tables and address what the findings mean for this quantitative analysis.

#### 4.5.1 Type of Quota

These results signify that the type of quota implemented by a country may matter for its impact on expenditure. In both the health and education regressions, with all else held equal, the results were different when measuring reserved seats quotas or statutory quotas. Perhaps the differing types of quota have different political, and in some ways psychological, effects. A reserved seats quota is directly enforced on the legislative body and thus may feel more forced and against meritocratic values for female legislators and the public. Statutory quotas, on the
other hand, deal with political parties and are thus less directly connected to the legislative body itself. This distance may impact how comfortable female legislators are to impact expenditure and how the public views women in the legislature. These differences may influence what form of quota a country chooses to institute if it decides to do so.

4.5.2 How Expenditure is Measured

These results also demonstrate variances when measuring expenditure in different ways. Expenditure in 2005 USD, expenditure as a percentage of total GDP and expenditure as a percentage of total spending all yield different results when all else is held equal. This indicates that changes in expenditure are quite nuanced. In some cases, the amount spent on education may increase but the percent this spending occupies in total GDP or total spending may decrease or not change significantly. Where quota is significant, all measures of expenditure are negatively correlated except when measuring the impact of statutory quotas on education expenditure as a percentage of total spending. This suggests, as stated previously, differences in the impact of each type of quota. It also suggests that the overall trend is a negative correlation between quotas and social expenditure but once must pay attention to how expenditure is being measured.

4.5.3 Women’s Civil Society Participation

The overall results for women’s civil society participation are far more consistent than the two previous factors. For heath expenditure women’s civil society participation is always positive when significant and for education expenditure this relationship is always negative when significant. This result may cause us to question the connection between health and education
expenditure and their grouping under the “social spending” category. When measuring health expenditure the findings seem consistent with the theory that women’s political preferences are linked to increased social spending. But when education is measured this theory seems to fall apart. We must remember what this variable is measuring: the extent to which women are free to discuss, how involved women are in civil society organizations and how women are represented in the media. If the female public wanted increased spending on education and these women were highly involved in these aspects of civil society we would not expect to see the negative correlation we find here. So perhaps this variable’s results indicate a misrepresentation in the theory around women’s preferences and/or what social spending entails.

4.5.4 The Percentage of Female Legislators

Questions around women’s preferences are further complicated by the results from the variable measuring the percentage of female legislators in the lower chamber of the legislature. Here we find only positive significant correlation with expenditure in both health and education. We also find consistent significance at the 0.001 level for both health and education when measuring expenditure as a percent of GDP and total spending when using detailed electoral systems (models 4 and 5 in all tables). These findings may lead us to believe that perhaps the theory about women’s preferences including increased social spending may be true. It also suggests that these preferences include health and education spending, as opposed to the women’s civil society participation variable which provided opposing results for health and education spending. So perhaps the female public and the female legislature have differing preferences when it comes to education spending.
These findings also reinforce the differences that arise depending on how expenditure is measured. The percentage of female legislators was overall only significant when measuring expenditure as a percent of GDP or as a percent of total spending. This indicates that perhaps higher percentages of women in a legislature do not impact the raw amount of expenditure on social spending but may influence how government spending is allocated and direct a higher percentage of money towards social spending. Moreover, significance is overall only found when controlling for differences in the detailed electoral system variable to measure what electoral system is used by each country. This finding will be addressed in the next section.

4.5.5 Electoral System

We find that in many models the variables that measure electoral system effect expenditure. The variable electoral system only breaks countries down into one of three categories: majoritarian, proportional or mixed. The variable electoral system (detailed) has 13 different category options and thus provides a more nuanced depiction of how a country elects its leaders. This nuance may be important as this variable is more significant in the models when using the more detailed measurement. For example, when measuring expenditure using 2005 USD there is no significance for the simple electoral system variable when examining both health and education and either type of quota (model 1 in all tables). When using the detailed electoral system variable, however, we find significance at the 0.001 level in each of these iterations (model 2 in all tables). This suggests that there are important distinctions between how we measure electoral system and its impact on expenditure. Moreover, this points to the conclusion once again that the significance of the results in several cases depends on how expenditure is measured.
The results of this quantitative study are in total surprising and complicated. They simultaneously reinforce and call into question existing theories and findings. In order to gain a more holistic and nuanced understanding of the relationship between quotas and government expenditure, the next section is a qualitative study of 3 country cases.
5. **Qualitative Method: Case Studies**

This chapter describes and analyzes three country case studies to supplement the quantitative findings and attempt to come to some conclusions about the relationship between quotas and social spending. The cases are analyzed between 1980 and 2010 and include one country with a quota and no significant increase in education spending (Argentina), one with no quota and a significant increase in education spending (New Zealand) and one with no quota and no significant increase in education spending (India). These 3 categories are chosen because the existing theory was that an increased percentage of women in a legislature produced by quotas will lead to increased education and health spending. Since we found this theory not to be true it is useful to analyze the 3 types of country that do not fit this ideal. This thesis will use data and theories on women and quotas as well as government expenditure on health and education to process trace the results we see in each country.

5.1 **Argentina**

Argentina is often referenced when discussing gender quotas because it was the first country in the world to adopt a national gender quota and the majority of Latin American countries have since followed suit (Franceschet & Piscopo, 2012). But being the first has not meant that Argentina has had a smooth transition into substantive representation. Results from the quantitative portion of this study find that Argentina did not have a significant increase in education or health spending between 1980 and 2010, despite instituting a quota and increasing the percentage of women in parliament more than ten times over. In this section, we will examine female legislators and social spending in Argentina to better understand why the theory of more women, more social spending did not hold.
5.1.1 Women

As previously states, Argentina was the first country in the world to institute a gender quota nationally. This innovation came about in the wake of democratic transition in the 1980s. Women in Argentina have had the right to vote and stand for election since 1947 but remained a small proportion of the legislative body until several women involved in politics in the late 1980s demanded change. In November of 1989 one of the few female legislators introduced a law that would mandate quotas and days later a bill was introduced by a cross-party coalition of women (Ballington & Karam, 2005). The bill was adopted with an overwhelming majority in November of 1991. The quota mandates that at least 30 percent of candidates on a list presented by political parties must be women and the quota has been successful in that today over 36 percent of legislators are women.

This success, however, has been met with many challenges for female legislators; Ballington and Karam state “despite the evident accomplishments, and given that the realm of politics has evolved historically based on a male model, the political culture today is profoundly gender-biased. Values and practices in the world of public affairs are particular to the male world,” (p.165). They claim that powerful men, ‘macho leadership’, work to ensure that docile and obedient women are nominated and elected so that they may maintain control (p.170). Franceschet and Piscopo also seek to answer questions about the women who are elected as a result of the quota (2012). They use data to analyze the validity of complaints that the quota was facilitating the election of inexperienced women, elite women and women who are merely proxies for men. They did find evidence that at the introduction of the quota men on party lists were replaced by female relatives of party leaders, which would suggest nepotism and lack of political experience. They also found, however that women were not likely to be less educated
than their male counterparts, although they were more likely to hold degrees in education. The women were less likely to be married than male legislators, less likely to have kids and less likely to have as many kids as the men. Real or perceived differences between male and female legislators have put elected women in a challenging position. Negative stereotypes of “quota women” impact all female Argentinean legislators even if the complaints do not apply to them because the quotas are applied to all women. Franceschet and Piscopo suggest that this dilemma creates a “double bind for female politicians, wherein being more like men—and thus more qualified for office—may also mean being less like voters and thus unrepresentative of their constituents,” (p.47). This merits a closer look at if elected Argentinean women are ideologically representative of their female constituents.

Ballington and Karam present seemingly contradictory ideas about how well Argentinean female legislators represent female citizens (2005). They claim, convincingly, that “the mere fact of belonging to the female sex does not per se guarantee a gender commitment or solidarity,” and go on to state that some women forget their gender grievances as they work to increase their own power (p.170). Yet they also claim that elected women are usually activists, defenders of the constitution, authors of most of the bills which address women’s rights, and are responsible for gains in women’s rights. Franceschet and Piscopo present a more in-depth analysis of legislation produced by these women in a 2008 study. They find that while there have been significant increases in the number of bills addressing women’s rights introduced in the Argentine Congress, the success of the bills depend heavily on the context; quotas do not change the institutional and biased features of the environment and thus do not significantly improve women’s ability to change policy. Using data from 1989 to 2007, Franceschet and Piscopo found that women introduced the majority of bill related to women’s issues: promoting gender quotas (79 percent),
abortion and contraception (80 percent), violence against women (69 percent), and sexual harassment (73 percent). Unfortunately, the majority of these bills did not pass, largely due to informal norms. Some of these norms include the vital meetings male legislators would hold to discuss bills which were held late at night and often in bars which hindered women from attending. These studies mentioned only focused on women’s issues directly related to women and did not include the social spending that women are theorized to encourage. If elected women are unlike the female public perhaps their preferences do not reflect the preferences of female citizens. Indeed, one study found no link between quotas and female citizens trust of politicians or political parties (Zetterberg, 2009). In order to better understand why quotas in Argentina did not increase government spending in health and education, we will now examine expenditure in these areas.

5.1.2 Expenditure

As figure 2 and figure 3 illustrate, Argentina has not experienced a steady increase in education or health spending since the implementation of the quota, nor did it experience a spike in spending when the quotas were implemented. Instead, the early 1990s are marked by lower education spending than previous years, suggesting that perhaps the quota had a negative impact on spending.

During the period included in this study, Argentina went through several political and economic transitions which may have impacted government expenditure on social programs. Generally transitional regimes include populist ideologies which encourage redistribution (Snyder & Yackovlev, 2000). For Argentina, however, this was not the case. Transitions had little impact on redistribution and overall Argentina has not increased spending in health and
education between 1980 and 2010. Economic changes did not increase spending as well because economic downturns caused large decreases in government social spending but economic success caused minimal increases in social spending. This may be partly due to trends in a poor-rich divide and privatization.

**Figure 2: Education Expenditure in Argentina**
Education is a responsibility shared in Argentina by the national government, provincial governments, federal district government, and private institutions (Lustig & Pessino, 2013). The majority of students attend public schools but education spending has not significantly increased overall. Increased spending was allocated, however, to free university education. This increase mainly benefited wealthy families and drained money from primary and secondary public schools, as did subsidies to private schools (McGuire, 2010). This illustrates how class differences are reflected in education policy. Moreover, cuts in teachers’ salaries have occurred in the last few decades—teachers in the 1990s earned less than half as much as they did in 1983—which lead to strikes and disrupted schooling (McGuire, 2010). This is somewhat surprising given that elected women tend to hold degrees in education (Franceschet and Piscopo, 2012). This may point to the problem that elected women do not represent women with similar education backgrounds let alone all women. Or perhaps elected women are unable to influence the male dominated legislature in order to support teachers and education funding.
Along with education spending, health spending did not significantly increase in this 30 year period as well. There exists a divide among the poor and the rich in this sector as well. While heath care spending disproportionately goes to the poorest Argentineans, this is mainly because those who are middle or upper class rely on private health care providers (McGuire, 2010). Because women in the legislature are more likely to be members of the elite, perhaps they do not represent the healthcare needs of the majority of women. Furthermore, the health sector is increasingly decentralized which gives the Ministry of Health a limited role in health policy (Cavagnero et al., 2006). So even if elected women did attempt to influence health spending, they may be impeded by institutional norms as well as limits in government control.

When these features of Argentinean quotas and expenditure are analyzed it may be less surprising that quotas did not lead to an increase in government social spending. Elected women may not be representative of female citizens or “women’s interests” and/or may be prevented from achieving their goals due to male dominated norms in the legislature. Additionally, increasingly pro-rich and privatized health and education spending may limit increases in overall social spending by the legislature at all. These factors may help us understand the relationship between expenditure and quotas in Argentina. The thesis now turns to two countries without quotas and analyzes how they may have achieved opposite results in health and education spending.

5.2 New Zealand

New Zealand has long led global trends to achieve equality for women and other marginalized groups. Although national quotas are not methods that have been instituted, they have used others, including “soft quotas”, in an attempt to create a more even playing field.
Moreover, New Zealand has increased spending in health and education despite lacking quotas. In this section we will analyze how women have been represented in New Zealand legislature and the social spending system to better understand these results.

5.2.1 Women

New Zealand was the first country in the world to concede to women’s suffrage movements and grant women the right to vote in 1893 and 1919 women could run for elected office. Since then New Zealand has attempted and achieved to continue this trend in encouraging women in leadership positions. Legislation has been created to achieve equality for women in education and paid employment but no gender based electoral quotas have been implemented. This hesitation may be because politics in New Zealand has historically been entrenched in a liberal philosophy that is strongly committed to individualism in self-help (Hurd & Dyer, 2012). This type of meritocratic thinking has prevented the implementation of quotas in many countries, including the United States.

Since the 1980s, New Zealand made commitments to achieve gender equality in government by 2010 but has still not fully realized this goal. Krook et al. emphasize that although neither legislated quotas nor party quotas were enacted, New Zealand has utilized “soft quotas” to encourage the election of women. Soft quotas are not rules but commitments made by parties to nominate more women (Krook et al., 2009). The New Zealand Labour Party (NZLP) has taken such steps since the 1970s. The NZLP was attempting to regain popularity and women took advantage of this opportunity. This “soft quota” never manifested into a formal legislated quota, even though New Zealand has always used a reserved seats quota for the Māori indigenous peoples. The question of gender quotas sparked again in 1993 when the country
switched from first-past-the-post to mixed-member proportional representation electoral system. While this change was taking place the NZLP leadership proposed party quotas but the party instead opted for a procedure change which included a ‘gender balance’ principle in candidate selection (Krook et al., 2009). The New Zealand Green Party also instituted a similar principle but has also refrained from establishing a quota, in contrast to Green parties elsewhere, and the National Party has done the same. Overall New Zealand quota discussions have revolved around their liberal and individualist model which encourages informal rules and inhibits legislated quotas. Nonetheless, New Zealand has maintained a high percentage of women in their national legislature.

5.2.2 Expenditure

Despite not having legislated quotas, New Zealand’s health and education expenditure has increased since 1980, as demonstrated by figure 4 and figure 5. This is likely due to New Zealand’s large welfare state, transparency and a commitment to addressing issues for their most vulnerable populations. The Open Budget Index is measured by the International Budget Partnership for the purpose of scoring countries on the transparency of their budget processes. In 2008, New Zealand was one of the only 6 countries to score above 80 on the 100 point scale with a score of 86 (Griffin et al., 2010). For comparison, Argentina scored 56 and India scored 60. This transparency may be related to New Zealand’s continued assistance toward poor and marginalized communities; as previously stated, the New Zealand legislature has a reserved seat quota for Māori peoples. Regarding health expenditure, New Zealand has led OECD countries in health spending. In 2005, 78 percent of health care in New Zealand is financed through public
expenditure; health spending has consistently benefited the poor and middle class members of New Zealand society and has only increased over time (Ashtona et al, 2005).

**Figure 4: Education Expenditure in New Zealand**

![Figure 4](image)

**Figure 5: Health Expenditure in New Zealand**

![Figure 5](image)
New Zealand has also increased its education spending since the 1980s. The Ministry of Education website outlines New Zealand’s commitments and improvements in education expenditure. For example, every child who attends a public school during early childhood is subsidized by the government. Education expenditure tripled between 2004 and 2010. The Ministry has been increasing spending as more children are attending public schools at younger ages. A lot of this spending is targeted towards communities with large Māori or lower socio-economic status populations. Many of these increases will also translate into higher pay for teachers whose involvements in unions have put pressure on the government. Union involvement, transparency and a large welfare state that targets marginalized communities have influenced the increased expenditure in New Zealand social spending.

New Zealand has refrained from instituting a national quota for women in the legislature due to its belief in liberal individualism and self-help. This ideology is in contrast to its consistent assistance towards marginalized communities and existing quota for Māori peoples. Perhaps this commitment combined with a long history of including women has allowed women to achieve high levels of electoral success in New Zealand. Perhaps these trends have also lead to increases in New Zealand’s social spending. New Zealand has high levels of transparency and is heavily influenced by union groups which lead to increased expenditure. This leads us to believe that there are factors that more directly influence social expenditure than a quota. In the last section we turn to India, the last country of our qualitative study, to understand how this country too had no quota but experienced no increase in social spending.
5.3 India

Without a national gender quota and without an increase in education or health spending, India is the last country in this study. Like Argentina, policy in India often benefits wealthier families and does not encourage women’s leadership at a national level. In this section we will examine women in India, especially regarding the gender quota that exists at the provincial level, as well as the nature of social spending.

5.3.1 Women

Although there is no national gender quota in India, the country has not always shied away from quota systems. When the country gained its independence in 1947 it instituted a caste-based reserved seats quota to be upheld for 50 years, then extended the quota another 40 years in 1989 (Rai, 2005). This quota did not address women at any level of government. Then in 1972 the First Commission on the Status of Women in India was established and it recommended statutory all-women village councils but this recommendation was not implemented by most provincial governments. The National Perspective Plan for Women, active between 1988 and 2000, then recommended a reservation of 30 percent for women in local government institutions. This quota was established and has been overseen by the Women’s National Commission since 1995. A global debate on the status of women, especially the Fourth World Conference on Women in Beijing 1995, led to debate in India on expanding a gender quota to the national parliament (Rai, 2005). A bill was introduced in 1996 but has been sitting in the legislative bureaucracy since.

The provincial level quota has seen some success since its implementation. The quota states that no less than 33 percent of a provincial legislature must be women. Elected women have successfully implemented micro-credit programs, literacy campaigns and other socially
minded programs (Rai, 2005). These accomplishments have disproportionally benefited women as well. That is especially impressive given that local leaders of either gender are usually from the higher class (Rai, 2005). Nonetheless, Mukherji finds that women in India remain in stereotyped professions like “teaching, nursing, personal service and social work,” (2012, p.100). Without national quotas women have remained a small fraction of the national legislature. Additionally, successes in leadership in the provincial governments should not overshadow struggles elected women face. In this emphatic paragraph Buch highlights the difficulties in consolidation provincially elected women face (1999, p.24):

There is lack of understanding of the potential for alliance between different women’s collectives. These women need and deserve state support, solidarity and networking with other women’s organizations. Support must be given to women’s local organizations and alliances between all different collectives of women and training programmes incorporating skills, knowledge, issues and concerns of women, how to address them, how to organize, cooperate, participate, manage and build alliances, how to network with other women’s collectives, social practices adversely affecting women and how to deal with them, how information and knowledge is to be sought, stored and retrieved and how to maximise strengths and overcome vulnerabilities.

Because provincial governments do not have significant influence over government expenditure, the gender quota implemented there does not impact health and education spending. If the Indian women elected to the national legislature prefer increased expenditure in these areas their low representation has prevented them from enacting this change. In the next section this thesis will address the nature of social expenditure in India to better understand this lack of change.
5.3.2 Expenditure

Health spending in India did not significantly increase between 1980 and 2010, as figure 6 and figure 7 illustrate. Education and health spending in India during these years seem to rise and fall in irregular ways and do not follow a clear increasing trend.

Figure 6: Education Expenditure in India

![Figure 6: Education Expenditure in India](image)

Figure 7: Health Expenditure in India

![Figure 7: Health Expenditure in India](image)
There are many factors that could have impacted this lack of consistent increase. Economic liberalization has led to the erosion of the welfare state in India as a whole. Like Argentina, health in India has been increasingly privatized. At its independence the private health sector provided a maximum of 10 percent of patient care, while today it accounts for up to 82 percent. Indian governments have encouraged this privatization and have not made health spending a priority (Sengupta & Nundy, 2005). Indeed when India has faced economic crises it prioritizes economic growth and not social spending (Yip & Mahal, 2008). Another factor that may influence India’s expenditure practices is a pro-rich bias. Wagstaff et al. found that India has significant pro-rich leanings in its health policy and credits this to resource-allocation decisions that cater to the better off (i.e. urban hospitals) and even when resources are allocated to the poor there is enough fund leakage that resources do not significantly help the intended beneficiaries (Wagstaff et al., 2008). Given that the majority of legislators in India are from the upper-class, this pro-rich distribution may be understandable. Furthermore, even if we were to assume that women in the legislature preferred increased health spending, Berman and Ahuja find that these addressing these desires were not possible within the given legislative framework when posed by either gender (2007). And if women do not support increases health spending maybe it is because they are aware that in India these increases may not benefit women and girls. Bhalotra found that while technological and financial improvements would be expected to benefit girls at higher degree because they are more vulnerable, the opposite is true. Households adjust their increased access to healthcare in ways that are consistent with social norms and benefit their sons disproportionally (2007). These factors may reflect why health expenditure in India has not significantly increased.
In education spending we again see how class differences may impact government policy and expenditure. Education spending did not significantly increase between 1980 and 2010 and in the last 3 years has been falling (Varma, 2017). This may be because India has increasingly been funneling more of its expenditure towards tertiary spending. India, along with many developing countries, spends proportionally more on tertiary education than on primary education (Rudra & Haggard, 2005). The issues caused by a tertiary-primary divide are supplemented by a rural-urban divide. A strong urban bias in the legislature has caused funds to funnel to urban schools and rural schools suffer more from stagnating or declining investment, and privatization may be at the root of this problem (Fana et al., 2008). An article in the Times of India criticized India’s education system in stating: “As it is, the India's education system is creaking at the seams, family spending on education is rising, quality is speedily deteriorating, and a quarter of students are dependent on private tuitions for getting through,” (Varma, 2017).

We cannot completely know how national gender quotas would affect health or education spending in India. We can, however, look to how another national quota has impacted education spending. National scheduled caste and scheduled tribe quotas are established in India to combat the exclusion of marginalized castes and tribes. Because the tribes and castes included through quotas have higher levels of illiteracy we would expect that these quotas would lead to increased education spending. Pande finds, conversely, that these quotas are in fact negatively correlated with education spending (2003). So if education spending would too benefit girls in India, maybe a gender quota would not increase education spending either. With the given situation in India we find that provincial inclusion has not lead to increased national representation. Thus women are unable to influence national expenditure, which they may not desire to. Increases in social expenditure are also inhibited by privatization and socio-economic biases.
This chapter analyzed three country cases to better understand the relationship between quotas and social spending. Overall we find that socio-economic biases and how we (and each country) understand women as a group may cause the results we find. Elected women in Argentina may not be representative of female citizens or “women’s interests” and/or may be prevented from achieving their goals due to male dominated norms in the legislature. New Zealand has refrained from instituting a national quota for women in the legislature due to its belief in liberal individualism and self-help but its commitment to minority representation combined with a long history of including women has allowed women to achieve high levels of electoral success in New Zealand. New Zealand’s high level of transparency and powerful unions groups have led to increased expenditure. India’s commitment to gender inclusion at the provincial level has not spread to inclusion at the national level and women are thus heavily underrepresented in the national legislature. This exclusion may lead to stagnant social spending, but it certainly doesn’t tell the whole story.

What is common in all three cases is how each country addresses the most vulnerable people of society and how it views privatization. Both India and Argentina experienced no increase in health and education expenditure and both have seen increased privatization in these sectors. Privatization and other policies disproportionally benefit citizens in urban areas and of a higher socio-economic class, and it disproportionally harms rural families, the poor and women. New Zealand maintains a large and growing welfare state and takes care to ensure that vulnerable populations are targeted with assistance. New Zealand’s individualistic and self-help oriented mindset may prevent a gender quota from being established but it ensures that women elected are understood and capable and deserving. Women in India and Argentina are stigmatized and stereotyped and the introduction of a quota in Argentina has done little to quell
these issues. Understanding how quotas (or lack thereof) interact with government expenditure in these three countries gives us insight into how other countries may also behave. In the next chapter this thesis will discuss these qualitative finding in conjunction with the quantitative findings to reach a more global and nuanced conclusion.
6. Quantitative and Qualitative Analysis

Analyzing the relationship between quotas and social spending using both qualitative and quantitative methods has allowed us to establish a well-rounded understanding of the relationship between quotas and expenditure. This chapter will break down how these findings interact with each other and what larger conclusions we are able to draw from them. This chapter is divided into three sections addressing education and health spending, women’s descriptive representation and women in society.

6.1 Health and Education Spending

The quantitative and qualitative aspects of this study addressed the relationship between national gender quotas and social spending in the realms of health and education. In the quantitative section we found that the presence a gender quota of either type is negatively correlated with both education and health spending. In the qualitative study we analyzed why Argentina has increased neither health nor education expenditure and found that the quotas function in a patriarchic and privatized society. This leads us to believe that in the case of Argentina quotas may be producing a merely descriptive representation. Because the quota has been unable to change underlying assumptions and institutional norms that disadvantage women we do not see elected women impacting legislation that would increase expenditure. This problem of strictly descriptive representation may be why we see no increase in spending from countries with quotas overall. But then why do we see a negative correlation between quotas and spending in these areas? The Argentinian example also showed us that when elected women face the stereotypes that quotas can produce they may try to act in ways that subvert them. So if women are stereotyped to disproportionately care about health and education, which the existing
theory does, women may intentionally support legislation against these areas in order to establish themselves as “serious politicians”.

It is also important to discuss the grouping of these two issues, health and education, under the umbrella of social spending. Although they are often discussed as a unit and are substantial parts of the welfare state, the two do not always coincide. The quantitative section illustrated that the two areas had opposing correlations with the rate of women’s civil society participation: health spending was positively correlated with civil society participation while education spending was negatively correlated. This difference may be due to how each sector interacts with socio-economic factors, unions other societal factors. In the qualitative section we attempted to address each sector individually even though cases were chosen where the two moved in tandem. Future studies should address differences in health and education spending and what factors would cause opposing changes.

6.2 The Female Public

As mentioned above, women’s civil society participation is significantly correlated with education and health spending. This variable calls into question women in society, or the female public. An essential question in the study of gender quotas is do elected women represent female citizens in their country. The opposing results found in the quantitative study for this variable suggest that the answer to this question may not be clear. In the case of Argentina elected women tend to be of elite classes and may even be the family members of existing party members. But it is easy to imagine that elected officials from the majority of countries, if not all, are from the elite class. This propensity towards the elite is indeed due to access and privilege but is also related to ideas around preparedness and meritocracy. Moreover, India and New Zealand are
clearly interested in using quotas to nationally represent marginalized populations—minority castes and tribes in India and indigenous peoples in New Zealand—but perhaps they are correct in leaving women out of this method.

6.3 Percentage of Women in Parliament

The most direct goal of quotas is to increase the percentage of women in a legislature. Many studies have found that quotas are successful in achieving this goal. But what happens next has still not yet been completely addressed. According to theories about women’s preferences we may expect to see increases in health and education expenditure, but in this quantitative study we do not. What we do find in the quantitative study is that the percentage of women in parliament is positively correlated with health and education spending. So, what is the difference between “quota women” and women elected without a quota? Looking at Argentina and New Zealand in the qualitative study may help answer this question. Elected women in Argentina may embody descriptive representation because they have limited legislative power and have not disrupted the patriarchic institutions. Elected women in New Zealand may embody substantive representation because they were elected based on merit and New Zealand has increased its education and health spending.

Considering these two aforementioned variables, women’s civil society participation and the percentage of women in parliament, it is important to address the accuracy of the theory central to this study: women are likely to prefer increased spending in social programs like health and education. While this study has found that countries with higher rates of women in parliament have significantly higher health and education expenditures, the literature should be weary of utilizing and reinforcing these stereotypes. It is obvious that fiscally conservative
women exist in every culture and these women should not be ignored. Additionally, because we find that women may intentionally act against stereotypes we should be wary about putting women in a box. If women are to support increased or decreased spending in any area it should be assumed that this is due to preferences for themselves or their constituents and not as a result of some “womanly nature”. Quotas are about progressing toward a more equitable world and this world should include women’s freedom of preference and freedom from assumption.
7. Conclusion

As we approach the 30th anniversary of the first national gender quota instituted in the world, it is important to study the impact of these quotas. Quotas have been instituted to increase the percent of women in legislative bodies, and in this goal they have been successful. They are also implemented, however, to improve women’s substantive representation, and the results of this goal are yet to be completely determined. This thesis sought to work toward answering this question and challenge the assumption that women are more likely to support social spending. This study used a quantitative and a qualitative method to address some of the questions about the relationship between quotas and government expenditure. The results indicate that the existence of a national quota (either statutory or reserved seats) is negatively correlated with public spending in health and education. The case studies of Argentina, India and New Zealand suggest that this relationship may be due in part to socio-economic differences, but how women are viewed and treated seems to heavily influence variance in results.

Because this thesis finds that higher levels of women in parliament are positively correlated with health and education, where do quotas go wrong? Perhaps quotas introduce women to the legislature who do not represent female citizens, who are unable to influence legislation due to patriarchic norm, or who act against existing stereotypes about women’s preferences. These stereotypes are dangerous not only because they may skew legislative action, but because they perpetuate views of women that quotas are introduced to prevent. The existing literature operates within a framework that, while not intentionally reinforcing stereotypes, presents a theory of how women as whole act. The findings of this thesis suggest that perhaps further research should move away from this assumption because it may be outdated and less
applicable today, but also because this type of thinking may have unintended effects on elected women.

Quotas may have a place in the world today but they are not the best fit everywhere. Mainstream research has pointed to the potential benefits and harm quotas may induce in specific countries, but few have looked at the impact on a global scale. This thesis responded to this gap and found that in countries where misogyny is deeply entrenched in society and government institutions, quotas may simply reinforce existing problems. For that reason, this work suggests that quotas should not be adopted haphazardly and countries that have already implemented them should continue to consider the real impact they have. Future research should utilize methods beyond the commonly used method of case studies such as this thesis did. Additionally, quota impact should be given greater attention, not only in the areas of social spending but in other areas of expenditure, demographic differences, women’s rights and women’s perception as well. Comprehensive research in this area must continue if we are to realize our ultimate goal: a world where quotas and other tools are no longer needed to achieve representative and equitable societies.
References


