

ISABEL SEELAENDER COSTA ROSA

How does Gender Impact Economic Evaluations in Brazil?

A Multinomial Logistic Approach

(De que Maneira o Gênero Impacta as Avaliações Econômicas no Brasil? Uma abordagem com Modelos Logísticos Multinomiais)

Versão Corrigida

São Paulo

2023

Universidade de São Paulo

Faculdade de Filosofia, Letras e Ciências Humanas

Departamento de Ciência Política

ISABEL SEELAENDER COSTA ROSA

How does Gender Impact Economic Evaluations in Brazil?

A Multinomial Logistic Approach

(De que Maneira o Gênero Impacta as Avaliações Econômicas no Brasil? Uma abordagem com Modelos Logísticos Multinomiais)

Versão Corrigida

Dissertação apresentada ao Departamento de Ciência Política da Universidade de São Paulo para obtenção do título de Mestre em Ciência Política.

Área de Concentração: Ciência Política
Orientadora: Profa. Dra. Lorena Guadalupe Barberia.

São Paulo

2023

Autorizo a reprodução e divulgação total ou parcial deste trabalho, por qualquer meio convencional ou eletrônico, para fins de estudo e pesquisa, desde que citada a fonte.

Catálogo na Publicação
Serviço de Biblioteca e Documentação
Faculdade de Filosofia, Letras e Ciências Humanas da Universidade de São Paulo

S788h

Seelaender Costa Rosa, Isabel
How does Gender Impact Economic Evaluations in Brazil? A Multinomial Logistic Approach / Isabel Seelaende Costa Rosa; orientadora Lorena Barberia São Paulo, 2023.
67 f.

Dissertação (Mestrado)- Faculdade de Filosofia, Letras e Ciências Humanas da Universidade de São Paulo. Departamento de Ciência Política. Área de concentração: Ciência Política.

1. Desigualdade de Gênero. 2. Avaliações Econômicas. 3. Modelos Logísticos Multinomiais. 4. Latinobarometro. 5. Opinião Pública. I. Barberia, Lorena, orient. II. Título.

**ENTREGA DO EXEMPLAR CORRIGIDO DA
DISSERTAÇÃO/TESE**

Termo de Anuência do (a) orientador (a)

Nome do (a) aluno (a): Isabel Seelaender Costa Rosa

Data da defesa: **24/07/2023**

Nome do Prof. (a) orientador (a): **Lorena Guadalupe Barberia**

Nos termos da legislação vigente, declaro **ESTAR CIENTE** do conteúdo deste **EXEMPLAR CORRIGIDO** elaborado em atenção às sugestões dos membros da comissão Julgadora na sessão de defesa do trabalho, manifestando-me **plenamente favorável** ao seu encaminhamento ao Sistema Janus e publicação no **Portal Digital de Teses da USP**.

São Paulo, 28/07/2023



(Assinatura do (a) orientador (a))

Dedico este trabalho a todos que me apoiaram nesta jornada e principalmente a minha mãe, que foi desde cedo mãe e pai e me proporcionou a oportunidade de seguir meus sonhos. Dedico também a minha família, aos amigos, novos e antigos, que estiveram ao meu lado no decorrer desta trajetória e ao meu marido e maior companheiro.

Acknowledgements

I thank the guidance of my advisor Lorena G. Barbería, who has helped me immensely both professionally and personally, and who has set high standards for me as a researcher. I thank Professor Allyson Benton and Natália Moreira for their contributions during my qualification exam. I would also like to thank Maria Leticia C. de Faria Oliveira, Natália Moreira, Luiz Guilherme Roth Cantarelli, and Pedro Henrique Schmalz for the suggestions and help in writing this dissertation. I acknowledge funding from "Coordenação de Aperfeiçoamento de Pessoal de Nível Superior" (CAPES), which supported by dissertation studies and this project.

Resumo

Grande esforço tem sido dedicado ao estudo da *gender gap* na ciência política. A maior parte dos trabalhos atualmente disponíveis foca no uso do gênero como uma variável dicotômica, desconsiderando diferenças internas aos gêneros. Embora uma área consideravelmente menos desenvolvida, crescentes desenvolvimentos em pesquisas ajudam a teorizar sobre porque o conceito de *gender gap* pode variar entre grupos de mulheres e de que maneira, por sua vez, essas diferenças podem ser determinantes para os processos formuladores de comportamentos e preferências. Além disso, enquanto a maioria das pesquisas está concentrada em países desenvolvidos, muitos dos padrões observados nesses contextos podem não ser aplicáveis a cenários em desenvolvimento, onde desigualdades e vulnerabilidade são intensificadas. Eu contribuo para estes esforços utilizando dados do Latinobarometro para testar uma teoria sobre o impacto do gênero nas avaliações econômicas, considerando o efeito mediador de outras variáveis que determinam diferenças entre mulheres em contextos em desenvolvimento. Eu emprego modelos logísticos multinomiais com interações no esforço de compreender melhor o papel mediador de variáveis relacionadas ao mercado de trabalho sob efeitos comumente observados do gênero.

Palavras-chave: Gender gap, Avaliações Economicas, Desigualdades, Mercado de Trabalho, Países em desenvolvimento, Modelos Logísticos Multinomiais, Interações, Opinião Pública, Latinobarometro.

Abstract

Great effort has been devoted to the study of the gender gap in political science. Most of the presently available research has focused on gender as a dichotomous variable, disregarding within-gender differences. Although an area with considerably less development, burgeoning developments in research help to theorize about why the general concept of the gender gap might vary among different groups of women and how, in turn, these differences might be determinant for behavior and preference shaping processes. Moreover, while most research is concentrated in developed countries, many patterns observed in these contexts may not apply to developing scenarios, where inequalities and vulnerability are enhanced. I contribute to these efforts by employing Latinobarometer data to test a theory about the impact of gender on economic evaluations, considering the mediating effect of other relevant variables that determine differences among women in developing contexts. I employ multinomial logistic models with interactions in an effort to better understand the mediating role of labor market related variables on commonly observed gender effects.

Keywords: Gender gap, Economic Evaluations, Inequalities, Labor Market, Developing contexts, Multinomial Logistic Models, Interactions, Public Opinion, Latinobarometer

List of Figures

Figure 1 – Percentage of Employed Females and Males in the Formal and Informal Labor Markets.	25
Figure 2 – Social Markers of Labor Inequalities in Brazil by Economic Sector (2021).	26
Figure 3 – Real Average Monthly Income Levels for people 14 and over, by Gender and Economic Sector - Brazil (2021)	27
Figure 4 – Theoretical Expectations for the Effects of Explanatory Variables – Differences within Women	32
Figure 5 – Percentage of Negative Evaluations of the Economy, by Gender, for all Survey Years	34
Figure 6 – Retrospective Economic Evaluations, by Gender for all Sample Years.	40
Figure 7 – Average Marginal Effect of Female on the Probabilities of Retrospective Economic Evaluations (All years)	42
Figure 8 – Average Marginal Effect of Female on the Probabilities of Retrospective Economic Evaluations (2008, 2013, 2016, 2020)	43
Figure 9 – Employment Status, by Gender for all Years.	44
Figure 10 – Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Labor Market Insertion (All years)	46
Figure 11 – Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Labor Market Insertion (2010, 2011, 2017, 2020)	47
Figure 12 – Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Informality (All years)	49
Figure 13 – Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Informality (2009, 2013, 2015, 2017)	50
Figure 14 – Average Marginal Effect of Female on the Probabilities of Retrospective Economic Evaluations (2008, 2009, 2010, 2011, 2013, 2015, 2016, 2017, 2020, and pooled model)	60

Figure 15 – Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Labor Market Insertion (2010, 2011, 2013, 2015, 2016, 2017, 2020, and pooled model). 62

Figure 16 – Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Informality (2008, 2009, 2010, 2011, 2013, 2015, 2016, 2017, 2020, and pooled model) - Informal.64

Figure 17 – Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Informality (2008, 2009, 2010, 2011, 2013, 2015, 2016, 2017, 2020, and pooled model) – Self-employed. 66

List of Tables

Table 1 – Theoretical Expectations for the Effects of Explanatory Variables. 31

Contents

- I.** Introduction
- II.** Economic Evaluations and Gender Differences
- III.** Within Group Differences: Women and the Labor Market
- IV.** Brazilian Women: Labor Market Participation and Gender Inequalities
- V.** Hypotheses and Theoretical Expectations
- VI.** Data and Methods
 - i. Latinobarometer Data*
 - ii. Economic Evaluations*
 - iii. Labor Market Experience*
 - iv. Informality*
 - v. Methods*
- VII.** Results
- VIII.** Conclusions
- References

I. Introduction

Great effort has been dedicated to discussing the gender gap in political science. Differences between women and men have been systematically documented and shown to affect several aspects related to political behavior, including voting, presidential approval, preferences, and evaluations (BOX-STEFFENMEISTER et al., 2004; CHHIBBER, 2022; CLARKE et al., 2005; DASSONVILE, 2018; DOLAN, 2011; EDLUND, PANDE 2002; HIGGINS, KELLSTEDT, 2016; IVERSEN et al., 2020; IVERSEN, ROSENBLUTH, 2006; KITTILSON, 2016; and others).

Most of the presently available work, however, has focused primarily on the distinction between genders – as a dichotomous variable – while disregarding relevant differences within groups of men and women (BOX-STEFFENMEISTER et al., 2004; BURNS, 2010; CHANEY et al., 1998; CLARKE et al., 2005; EDLUND, PANDE 2002; KELLSTEDT et al., 2010; WELCH, HIBBINGS, 1992). Although an area with considerably less development, burgeoning developments in research help to theorize about why the general concept of the gender gap might vary among different groups of women and how, in turn, these differences might be determinant for behavior and preference shaping processes (GOTTLIEB et al. 2016; CHHIBBER 2022; FIELD et al., 2021; KITTILSON, 2016; SMOOTH, 2006).

Even though some researchers have emphasized the importance of considering heterogeneities within genders and hinted at possible directions for analyses targeting these issues, there is considerable room for translating these discussions into research designs and their empirical tests in quantitative political science. Following studies that characterize women as a diverse group and associate the degree to which women are inserted into the labor market with their economic status, I contribute to this lacuna by testing a theory about how different experiences in the labor market mediate the relationship between gender and retrospective economic evaluations in Brazil.

While there are numerous studies on gender differences have focused on industrialized developed democracies, such as the U.S. and European countries (BOX-STEFFENMEISTER et al., 2004; CLARKE et al., 2005; EDLUND, PANDE 2002; IVERSEN, ROSENBLUTH, 2006; IVERSEN, ROSENBLUTH, 2008; KELLSTEDT, HIGGINS, 2016; WELCH, HIBBINGS, 1992), there is considerably less research directed at understanding within gender dimensions in Latin America, Africa, and other developing regions. Since there are several

important differences in labor markets in these regions compared to developed economies, it also seems logical that there will be patterns that may be distinct from those found in the latter.

As research suggests (DESPOSATO, NORRANDER, 2006; GOTTLIEB, 2016; GOTTLIEB et al., 2016; KITTLSON, 2016), many patterns observed in developed contexts may not apply to developing scenarios, where the effects of entering the labor market are closely tied to other relevant variables such as informal work, female representation, and social vulnerability (DESPOSATO, NORRANDER, 2009; EDLUND, PANDE, 2002; FIELD et al., 2019; GOTTLIEB et al., 2016; PRILLAMAN et al. 2018).

Considering these aspects, this paper proposes to undertake an in-depth examination of the differences amongst women to better understand how distinctions in occupations and whether women participate in the labor force affect how they evaluate the economy, in a developing context. My analysis is centered on Brazil, the biggest country on the South American continent, comprising more than two-thirds of its population, the majority of which are women. Similarly to what is observed in other Latin American countries, the Brazilian labor market is characterized by structural inequalities that define an occupational structure where women “(...) are overrepresented in the sectors lagging farthest behind, in which there is greater precariousness and less contact with technology and innovation.” (ECLAC, 2016).

Additionally, these women have been shown (DESPOSATO, NORRANDER, 2018; PRILLAMAN, PHILLIPS, 2018; VAZ et al., 2019) to be affected unevenly by both poverty and informality, along with other determinants that are more pronounced in Latin America as a whole (DESPOSATO, NORRANDER, 2018). Consequently, a combination of aspects makes Brazil a fruitful case of study for the gender and politics literature focusing on developing democracies.

Building on the contributions of Desposato and Norrande (2018), Field et al. (2021) and Gottlieb et al. (2016) that have explored gender politics in developing countries, I argue that previous approaches that depart from a conceptualization of gender based on the idea of homogeneity within groups are insufficient, especially in developing contexts where inequalities are usually exacerbated and commonly observed relationships between gender and labor market insertion might not apply.

In turn, I propose an approach that considers the role played by gender in shaping opinions and evaluations, while also considering how differences related to other factors might also be

determinant for distinctions between women and men and, most importantly, amid the former. More specifically, I expect evaluations of the economy to be sensitive to changes in economic status. Consequently, the extent to which perceptions and preferences might be affected and the directions of the effects are bound to be determined not only by Brazil's economic situation and the specific positions attributed to women as partakers of the economy but also by their economic status. I then test this theory using data from the Latinobarometer Survey from 2008 to 2020.

The rest of this paper is divided into seven sections and a conclusion. In sections II and III, I analyze the literature encompassing research on the gender gap and on within gender differences in economic evaluations. Both sections aim to portray the current developments in the debate around the central topics discussed in this paper. Next, I focus on the case study I will use to test my theoretical expectations. I first provide an overview of women's political and economic contexts in Brazil in section IV, and then introduce the main hypotheses that will be tested and theoretical expectations in section V. Section VI introduces the data and research design that I will use in the empirical tests. Section VII reports the statistical results. In the conclusion, I outline future directions for research.

II. Economic Evaluations and Gender Differences

Research on how women and men differ regarding their opinions and political behavior has received growing attention, especially in recent decades. With few exceptions, however, as Barnett et al. (2022) underscore, gender-focused research publications remain secluded to specific journals, themes, and methodological approaches. Some important methodological challenges make it difficult to assess key aspects of gendered preferences and evaluations, especially in developing contexts. My analysis of gendered economic evaluations departs from the general conceptualization of gender differences to re-access the main arguments employed by researchers studying how distinct aspects affect men's and women's opinions mediate preference-building processes. Particularly, I mobilize explanations present in the gender literature that focus on the importance of economic aspects as conditional determinants for shaping gendered preferences and opinions.

When thinking about the differences between genders and their consequences on political behavior, explanations emphasize the varying influences exerted by different themes in the

formulation of women's and men's evaluations. Accordingly, women, for instance, are expected to be more sensitive to changes in policies and outcomes related to women's issues and public health, while men may be more focused on the economy or defense spending (CHANEY et al., 1998; CHHIBBER, 2002; DOLAN, 2011; GOTTLIEB, 2016). In other words, women may be less concerned about economic performance than men, as they might focus their concerns on other areas of interest. Other studies contend that while attention to similar themes might be shared by both genders, the intensity and direction of evaluations may vary amongst genders (CLARKE et al., 2005). In this sense, i.e., women might be expected to react to changes in public health spending differently from men. As postulated by Clarke et al. (2005), hypotheses that consider these types of nuances encompass the notion of both *process and level heterogeneity*. While the latter corresponds to differences in the magnitude of evaluations regarding the same theme by women and men, the former relates to differences in the nature of these concerns.

Another commonly observed aspect driving heterogeneity between men and women and the themes mobilized by both in their evaluations are differences in socialization for both genders. A broadly employed argument states that due to differences in socialization processes between women and men, one should expect to observe differences in both level and process when analyzing preferences and opinions. In this sense, women are usually expected to derive their preferences from the positions they socially occupy, such as caretakers, reproductive beings, etc., that are a direct consequence of stereotypes reinforced by traditional socialization experiences (CLARKE et al., 2005; DOLAN, 2011; CHIBBER, 2002; GOTTLIEB et al., 2016; EDLUND, PANDE, 2002). Consequently, women "(...) tend to place greater emphasis than men on policies that provide education and health care for others, particularly children, the elderly and disadvantaged groups, and to oppose the use of force as a means of conflict resolution." (CLARKE et al., 2005). In contrast, due to socialization processes that favor participation in the labor force and establish men's role as providers and protectors, male evaluations are expected to orbit around economic and defense-related themes.

These differences, in turn, are expected to be reflected in ideology and partisanship as women – especially in developed democracies such as the U.S. and Europe – are seen as more prone to favoring welfare and public health spending and, therefore, identifying with parties that prioritize these policies, such as the Democratic party (KELLSTEDT, HIGGINS, 2016; KITTILSON, 2016) and other liberal, or left-oriented parties. Conversely, men are generally

expected to support less spending in those areas and, consequently, to bear a stronger connection to conservative parties.

Turning to economic status and economic evaluations, a set of hypotheses that has received considerable attention is tied to expectations of women changing their preferences and reallocating attention to themes as they enter the labor market (CHHIBBER, 2002). Consequently, as more women become financially independent from men and start occupying relevant positions in the labor market – receiving higher salaries and getting decisive positions in companies – their preferences and the relevance attributed to different themes are likely to vary. As postulated by some authors (IVERSEN, ROSENBLUTH, 2006), once women enter the labor market and start occupying positions and roles previously held by men, both process and level heterogeneity are transformed, altering the dynamics of the gap.

Although widespread in the gender and political behavior literature, the argument associating changes in employment status with changes in women's preferences and opinions masks the different mechanisms through which female participation in the labor market might alter behavior. A commonly adopted thesis associates shifts in female preferences for a higher supply of public services to the rise of female economic independence (EDLUND, PANDE, 2006; IVERSEN, ROSENBLUTH, 2006). As explained by Iversen and Rosenbluth (2006), societal changes that either favor or impose greater risk of income loss by women, work as mechanisms for altering female preferences. Particularly, the authors pose that the combination between independence and necessity creates incentives for women to favor welfare measures, as they depend on assistance, especially in cases where labor markets reward specific sets of skills' acquisition and reward seniority (IVERSEN, ROSENBLUTH, 2006).

Among the different mechanisms that might play important roles in shaping women's political behavior through labor market participation, exposure to new types of information is a central one. In fact, formal and informal information networks in the labor market create new opportunities for women to organize and express preferences in individual and collective ways. Authors observe that working women are more likely to vote (IVERSEN, ROSENBLUTH, 2008), and to form organizations (IVERSEN et al. 2005) through which they share information and build preferences. Moreover, enhanced organization necessity and capacity is also associated – both directly and indirectly -- with the expansion of female representation. This is due not only to the fact that women gain capacity to get politically organized through their

participation in the labor market, but also to the fact that they have enhanced opportunities for developing and cultivating skill sets that will enable participation as politicians.

The effects of the diversification of roles and opportunities for women once they join the labor market will determine changes in female behavior that challenge some of the classic arguments employed by gender and politics scholars. For example, even though both sociotropic and national orientations are customarily attributed to women, and contrarily, egocentric and prospective thinking is usually attributed to men in the gender literature (CHANEY et al., 1998; CLARKE et al. 2005; WELCH, HIBBING, 1998), authors suggest that “(...) women’s increased access to higher education and non-domestic employment has heightened their sense of personal efficacy and independence (...)” (CLARKE et al., 2005). Consequently, these shifts are expected to encourage the adoption of an egocentric perspective among females. Conversely, Kam (2009) demonstrates how sociotropic evaluations are employed in similar degrees by both men and women, while pocketbook voting appears to be predominant among men in comparison to women.

Finally, as primary caretakers and more vulnerable to economic losses and crisis, women are usually associated with pessimistic views, especially regarding the economy (CLARKE et al., 2005; CHANEY et al., 1998; HIGGINS, KELLSTEDT, 2016; IVERSEN et al., 2020; KELLSTEDT et al., 2010). As explained by Clarke et al.,

(...) traditional socialization and negative workforce experiences may help to explain women’s greater economic pessimism, whereas early-life socialization, together with later-life child-rearing responsibilities may account for women’s future-oriented sociotropic focus when making economic judgements. (CLARKE et al., 2005).

On the other hand, some authors contend that gender differences in preferences “(...) do not appear to be the result of socioeconomic status variations between the two groups, nor are they a result of the employment status of men and women” (WELCH, HIBBING, 2016). Moreover, the specific ways economic participation impacts preferences and opinions through the distancing from traditional gender roles are expected to vary depending on contextual aspects. In the case of developing democracies (e.g., India, Latin America, Sub-Saharan Africa), the effects of entering the labor market are closely tied to other relevant variables such as informal work, female representation, social vulnerability, and religion (DESPOSATO, NORRANDER,

2009; EDLUND, PANDE, 2002; FIELD et al., 2019; GOTTLIEB et al., 2016; PRILLAMAN et al. 2018). As will be further discussed, I explain why these traditional divisions and characterizations of women's and men's behaviors are not necessarily observed and are likely associated with the instruments for information collection.

The literature about processes affecting gender differences further emphasizes the role played by time in processes of opinion and preference shaping for men and women. Different authors have argued in different directions regarding the effects of time on gendered perceptions and preferences. While some emphasize the invariant nature of gendered features, such as macroeconomic processes, e.g., economic, social, and political processes (BOX-STEFENMEISTER et al., 2004), others contend that time might play a key role in shaping opinions and preferences amongst genders (BOX-STEFENMEISTER et al., 2004; CLARKE et al., 2005; FIELD et al., 2021; GIGER, 2009; GOTTLIEB et al., 2016; KITTILSON, 2016). Analyses that include time components are based, at least in a general sense, on the reasoning that the gender gap exists outside electoral moments (BOX-STEFENMEISTER et al., 2004), as well as that the gap is affected by changes in positions and roles attributed to women by traditional and cultural norms, society and religion over time (EDLUND, PANDE, 2002).

The previously referred conceptualizations and approaches employed in the literature on gender and political behavior aim at analyzing differences between genders. Although considerable advances have been done in comprehending gender differences in developed contexts, gendered aspects of political behavior in other contexts have not received the same amount of attention. Moreover, analyses capturing differences in commonly observed effects for women in distinct contexts are still underdeveloped in the literature. The next section is devoted to further deepening the discussion targeting different groups of women, as well as the relevance of considering heterogeneities for comprehension of gendered opinions and preferences.

III. Within Group Differences: Women and the Labor Market

The burgeoning field of gender and politics research offers varied perspectives regarding the gender gap. While several studies have focused on the comprehension of the determinants driving the differences between genders, some important developments have been made in the direction of understanding within-gender variations, particularly concerning women. Recent

research “(...) suggests that political context affects different kinds of women in different ways (...)” (KITTLSON, 2016). Moreover, these distinctions are expected to determine important differences in opinion and preferences’ formulating processes, as well as in the outcomes observed in behavior and opinions.

Researchers in this subfield emphasize aspects such as different economic and cultural contexts, variations in the gender division of labor, economic status of different women, race, age, education, among other factors, and the manners in which these criteria define different consequences for different women (DESPOSATO, NORRANDER, 2006; FIELD et al. 2021; GOTTLIEB, 2016; GOTTLIEB et al., 2016). Consequently, common interpretations and correlations discussed in the previous section are readdressed in light of differences amongst women, rather than considering women as a compact group.

A central subject of debate among gender scholars are the divergent interpretations of gender differences in developed and developing democracies (DESPOSATO, NORRANDER, 2006; GOTTLIEB, 2016; GOTTLIEB et al., 2016). In this regard, Gottlieb (2016) underscores that “(...) theories developed to explain gender differences in participation in the developed world may not apply to understanding the same phenomenon in the developing world” (GOTTLIEB, 2016). For instance, the gender gap growth associated by scholars analyzing developed democracies to women’s empowerment and independency-building (IVERSEN, ROSENBLUTH, 2006) gains new meaning in developing contexts, where an increasing gap in women’s political leanings appears to be a sign of *women’s disempowerment* (GOTTLIEB, 2016). When analyzing the gender gap in Sub-Saharan countries, researchers report a positive correlation between the size of the gender gap in preferences and the existence of barriers in women’s participation and representation (GOTTLIEB et al., 2016). Furthermore, Desposato and Norrander (2006) reinforce the persistence of unanswered questions about the effects of income, religion, education, and other aspects commonly included in gender analysis for developed countries.

Another persistent topic of discussion in the gender and politics literature pertains to the nature of the determinants of opinions, evaluations, and preferences. Different authors identify a varying number of determinants. While some researchers develop their analysis of gendered positions considering one or few factors as determinant, others defend multivariate approaches that include not only combinations of different general themes (i.e., economy, public health, defense, etc.), but also demographic variables that allow for within-gender differentiation.

Importantly, authors that defend multivariate perspectives criticize approaches that portray men and women as *monolithic groups*, emphasizing the relevance of intersectionality for defining gendered positions (KITTLILSON, 2016). On this matter, Chaney et al. (1998) defend that the gender gap in elections, i.e., “(...) cannot be explained simply as the result of a single factor (...)” and explain that women and men vary “(...) in their preferences across a whole range of important political issues. “(CHANEY et al., 1998).

Through multivariate analysis, authors identify relevant within-gender distinctions that suggest that traditional definitions of gendered behavior, such as the attribution of sociotropic thinking to women as a group, might conceal differences that involve other variables and not only gender determinants. Kellstedt and Higgins (2016) were able to identify important similarities between men and women when it comes to their assessments of the economy in the case of presidential approval. In another paper, Field et al. (2021) show that women’s preferences change depending on their social class, and consequently, men and women of similar economic backgrounds might share more similarities than women themselves. In sum, considering the multitude of aspects that compose the different gender gaps (KITTLILSON, 2016) allows researchers to further investigate the complex dynamics of gender while expanding research to different countries and contexts.

When exploring the effects of macro-level phenomena on women’s political behavior, the authors point out that these effects are likely to vary according to other collective and individual characteristics. In their analysis of political participation in Latin American countries, Desposato and Norrander (2006) contend that the effects “(...) of employment might be less transformative for women in Latin America, where women are less likely to be in the workforce, and their work experiences are less likely to be politicizing.”. Furthermore, they also identify differences among Latin American women based on individual characteristics such as age, political socialization, and religion (DESPOSATO, NORRANDER, 2006).

In a similar manner, other researchers have also observed relevant differences at the microlevel: e.g., Gottlieb (2016) observes different effects of being female across Muslim and non-Muslim groups in several countries. The author, along with other colleagues (GOTTLIEB et al. 2016), further explores distinctions in female behavior regarding key political issues between women in Sub-Saharan African countries. Considering both individual- and country-level predictors, the authors observe differences not only in gendered behavior involving different political

fields such as poverty alleviation and water provision but similarly within different groups of women:

The predicted probabilities of prioritizing infrastructure by gender indeed show that employed females look more like employed males than unemployed females, even at low rates of female employment. (GOTTLIEB et al. 2006).

And consequently,

This is suggestive of gendered preferences for infrastructure representing a more functional gap, driven by individual-level preferences rather than expectations set by country-level characteristics. (GOTTLIEB et al. 2006)

Researchers also report heterogeneous results regarding participation and preferences for different groups of women in India. Chhibber (2002) reports different behavior patterns for women who can negotiate independence within the household. In this sense, women capable of building more independence within the household are more likely to participate in politics.

The previously discussed examples underline the importance of adopting intersectional approaches when considering gender and political behavior. Consequently, it becomes clear that any explanations aiming at understanding and capturing the complexity and variety of gendered preferences and women's political behavior should consider aspects other than gender as a means for capturing differences amongst women. Moreover, gender itself must be reassessed through the lens of plurality, as processes of group identification and the conversion of similar experiences by women to homogeneous behavior are, similarly, expected to bear significant variation across countries, income groups, age groups, etc.

Considering the aspects discussed here, the next section presents a brief overview of the Brazilian context as part of my effort to analyze differences in economic evaluations among women. I introduce important determinants that characterize the specific context, focusing on macro and micro level elements. Afterwards, I present and discuss the hypotheses guiding my analysis.

IV. Brazilian Women: Labor Market Participation and Gender Inequalities

This section provides a brief overview of female participation in the Brazilian labor market showing that there are significant variations in women's job status using data from the Brazilian Geography and Statistics Institute (IBGE) for different periods. Furthermore I also show that gender inequalities disproportionately affect women in the Brazilian context in the period ranging from 2012 to 2021. This effort is directed at my attempt to underscore contextual aspects that set Brazil and other Latin American countries apart from contexts observed in developed democracies, where most gender differences literature is concentrated.

Gender disparities are one of the most notable aspects of the division of labor, as a gender gap in most societies usually marks inequality in earnings. Moreover, these features appear to be accentuated in developing regions due to the persistence of traditional gender roles that reinforce women's role as main providers of unpaid work in the household. In contrast, men have higher incentives to enter the labor market (IVERSEN, ROSENBLUTH, 2006). Furthermore, for those women participating in the labor market, available positions are usually associated with "(...) lower job security, fewer prospects of advancement and less responsibility." (IVERSEN, ROSENBLUTH, 2006).

In Latin America, structural inequalities define an occupational structure where women "(...)" are overrepresented in the sectors lagging farthest behind, in which there is greater precariousness and less contact with technology and innovation." (ECLAC, 2016). In the case of Brazil, the most populous country in the region, these features determine the existence of a gap in the gender division of labor, characterized by the concentration of women in healthcare, education, and domestic services sectors, that, in turn, are usually associated with lower remuneration (IBGE). Concomitantly, women remain the primary providers of household unpaid work.

Women's insertion in the Brazilian labor market, similar to what is observed globally, has historically increased over the last decades. Whereas only 18.5% of women were formally employed in the country in the 1970s, this mark had gone up to 48.9% in 2010, (VAZ et al. 2019) and has continued to grow in the last decade. Furthermore, as Vaz et al. (2019) underscore, this increase was accompanied by a decrease in the educational gap between men

and women, during the 1980s,¹ with the latter surpassing the former in terms of average years of education² by 0.4 years in 2000. The gains in education have been argued to be decisive in explaining why women are conquering an ever-increasing share of the formal labor market.

Nevertheless, some studies of female labor employment trends emphasize that the gendered division of labor remains unchanged. Dynamics involving the supply of public services and goods that relieve the load of domestic work primarily performed by women are a decisive example. In 2014, 90% of Brazilian women declared that they performed at least some domestic work, while only 51% of men of the same age level participated somehow in domestic chores (VAZ et al., 2019). Women spent around 23.5 hours/ week in these activities, while men reported spending 10.9 hours/week.

Not only does the overload in domestic labor faced by women define how much time they can dedicate themselves to other activities, but also the quality of leisure time. In sum, women in Brazil are still heavily impacted by inequalities regarding opportunities for entry and development in the labor market. Moreover, these inequalities in occupational and wage distribution are also accentuated by aspects relating to race, age, education level, and family structure (LOVELL, 2000; VAZ et al., 2019).

Consequently, even though the gender division of labor in Brazil has been affected by the increase in average years of education, with more women being qualified to occupy higher prestige and income positions, other determinants ratify inequalities between women and men in terms of occupational opportunities and workload. Moreover, this is especially true for lower-income women, prevalent in the informal sector, who have limited reproductive rights and childcare raising responsibilities.

The gendered division of labor, therefore, remained a persistent phenomenon in the Brazilian labor market, as although employed, women continued to be secluded to specific occupations, receiving, on average, smaller payments than men, and burdened by heavy and disproportional

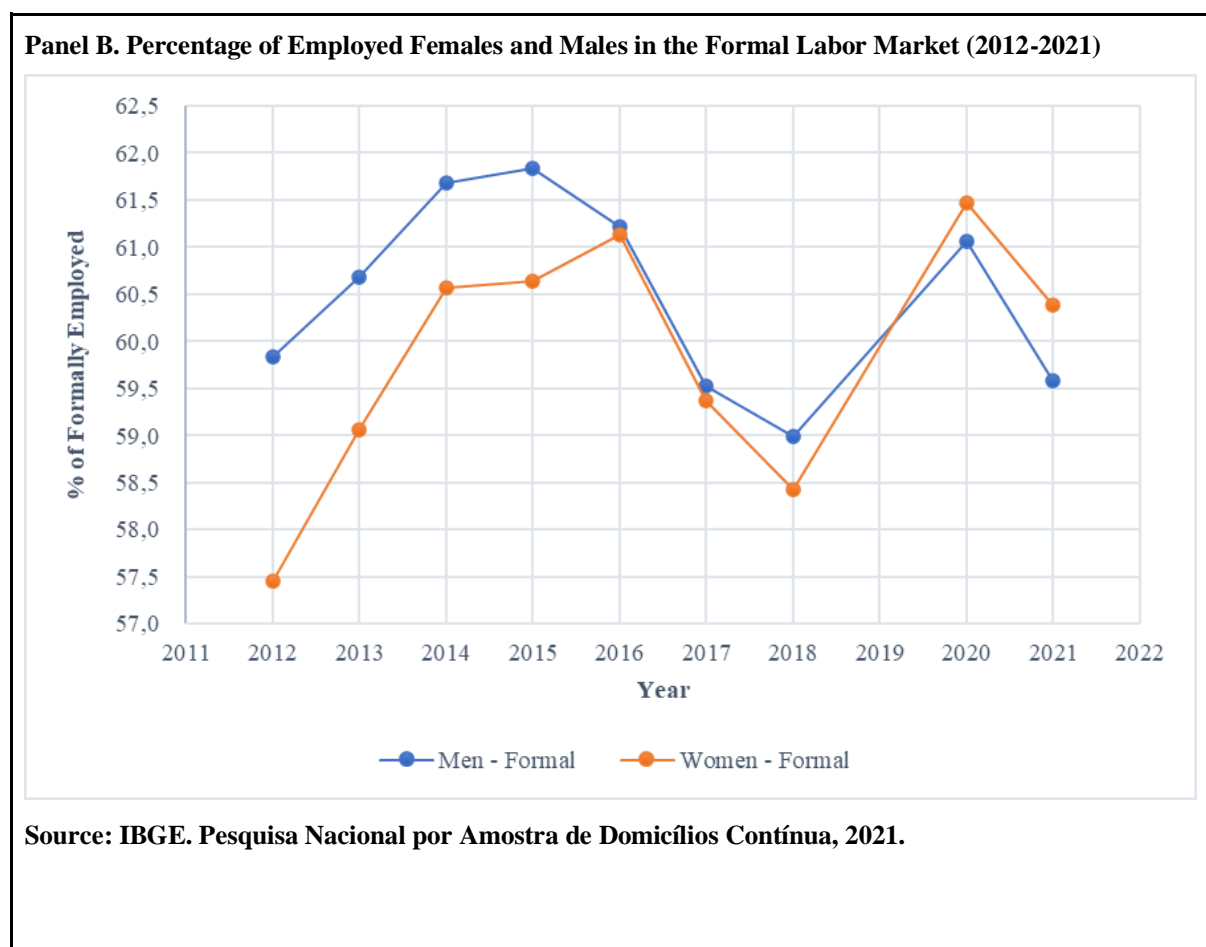
¹ According to Beltrão and Diniz (2009), in the 1980 census, the average years of education for men and women between 25 and 29 years old were 5.02 e 5.03, respectively.

² Aggregate data suggests that the gender gap in education years was reversed during the 1980s. In this regard, Beltrão and Diniz (2009) argue that although education has increased for both genders, women advanced at a quicker pace: If in “(...) 1960 the average years of education for men was 1,9 years and for women 1.7 years.” In 2000 these numbers amounted to 5.1 and 5.5, respectively. As a consequence, the initial difference of 0.2 years favorable to men, has been altered to 0.4 years favoring women in the 2000s.

loads of household unpaid work. Data from the IBGE reinforces these notions. Panel A of Figure 1 exhibits the evolution of formal employment, by gender, from 2012 to 2021 in Brazil.

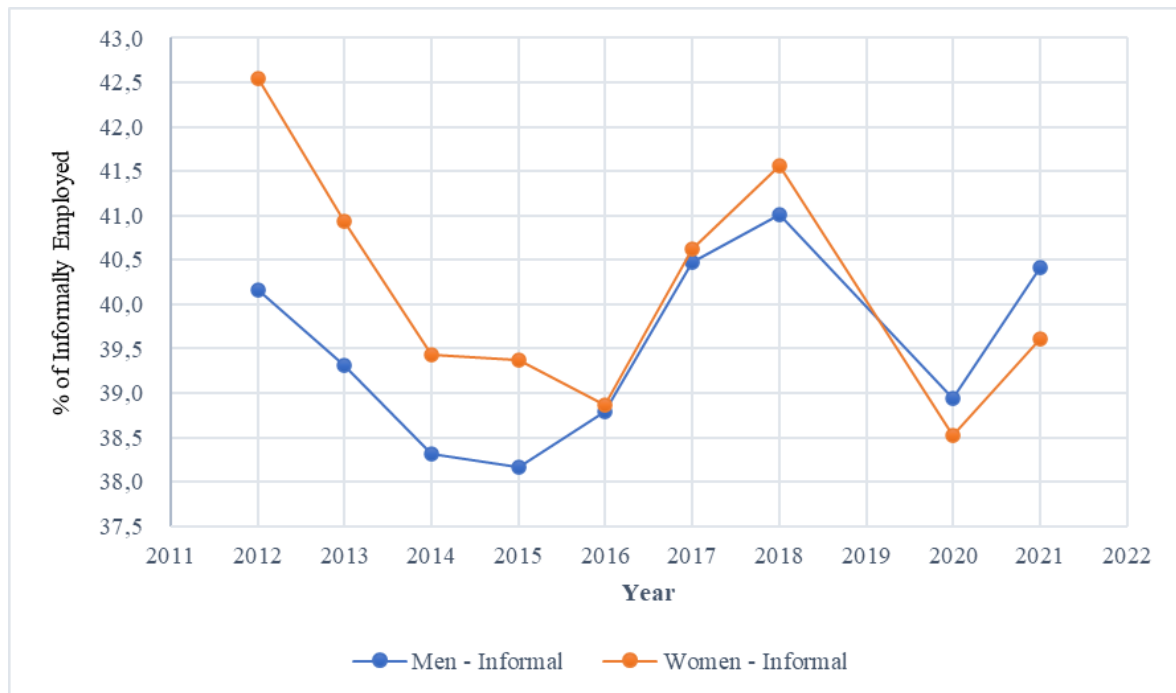
The period between 2012 and 2015 is characterized by higher percentages of men in the formal labor market³. It is possible to observe a convergence of the percentages of formally employed women and men (61,1% and 61,2%, respectively). From 2017 to 2018, however, the initial pattern, that is, higher percentages of men formally employed compared to women, is again reproduced. It is worth mentioning that an inflection is observed in mid-2019, with the percentage of formally employed women 2020 (61,5%) surpassing the percentage of formally employed men (61,1%). A similar pattern is observed for 2021.

Figure 1. Percentage of Employed Females and Males in the Formal and Informal Labor Markets



³ In 2012, 59.8% of men were formally employed, while only 57.5% of women had the same status. This pattern is reproduced in the following years: in 2013, 60.7% of men were formally employed, whereas only 59.1% of women were formally employed. In 2014, 61.7% of men were employed in the formal labor market, while only 60.6% of women shared the same status. Finally, in 2015, the difference between genders amounted to 1.2 percentual points, in favor of men.

Panel B. Percentage of Employed Females and Males in the Informal Labor Market (2012-2021)



Source: IBGE. Pesquisa Nacional por Amostra de Domicílios Contínua, 2021.

Conversely, Panel B of Figure 1 portrays the evolution of the share of women and men who are informally employed in the same period. Despite the variation over time, it becomes clear that the percentage of informally employed individuals is higher amongst women than men, throughout the years. The inflection of this trend is similarly identifiable between 2019 and 2020.

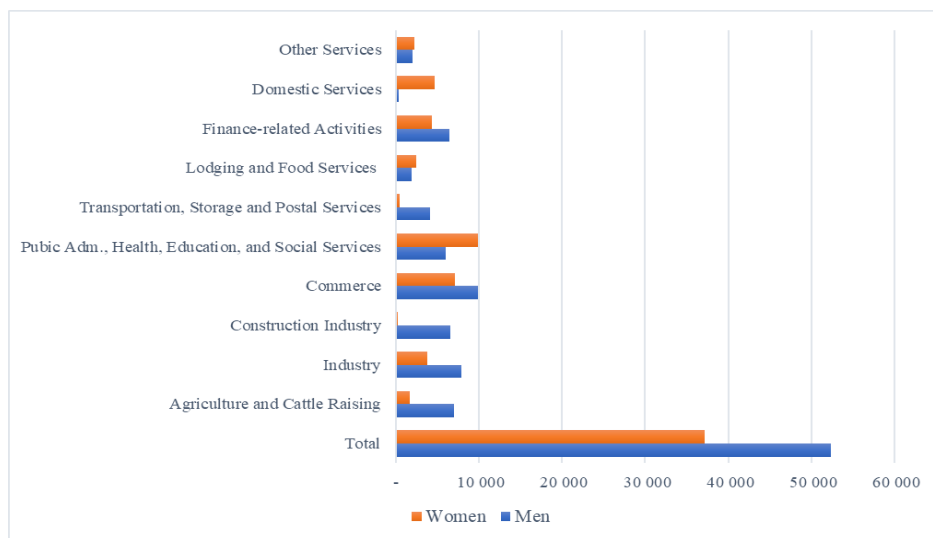
Overall, the data on formal and informal employment in Brazil suggests that female employment has been concentrated in the informal sector until mid-2019 when the percentage of formally employed women surpassed the percentage of formally employed men. These positions are likely to be associated with higher vulnerability regarding rights and guarantees.

Moreover, the rise in the percentage of women employed in formal jobs must be carefully assessed as, “(...) women’s earnings still lag those of men at every education level, even within the same majors (...)” (Carnevale et al, 2018). Consequently, the association between an increase in female employment in the formal sector and the expansion of job security, rights and guarantees, is by no means a simple matter.

National data from 2021 exemplifies the many prevalent gender inequalities that characterize the Brazilian context. Panel A of Figure 2 summarizes the gender division of labor in Brazil, by occupation sector in 2021. As suggested by the data, the female workforce remains concentrated in sectors that are usually characterized by lower wages, prestige, and limited growth opportunities. Men, on the other hand, represent the majority amongst sectors such as commerce, industry, and finances, usually associated with higher prestige and income opportunities.

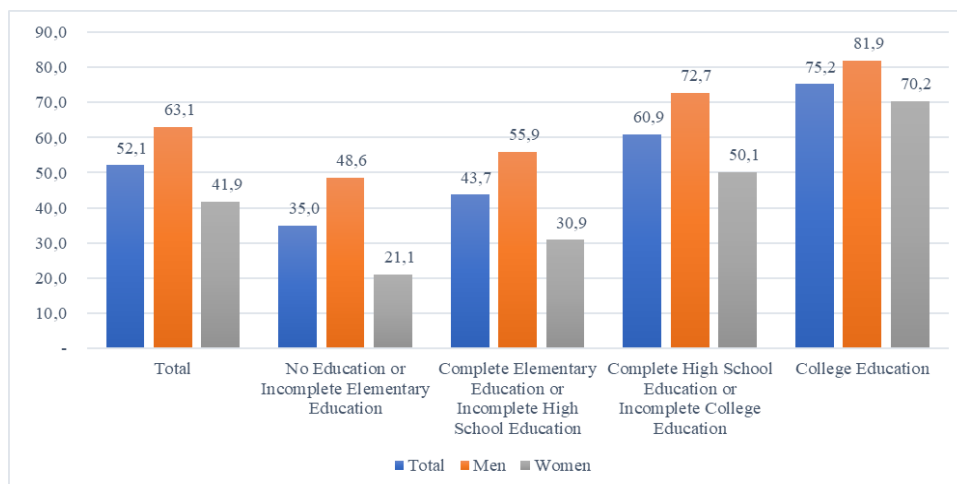
Figure 2. Labor Market Inequalities in Brazil by Economic Sector (2021)

Panel A. Occupied Female and Male Population 14 years old and older, by Sector (2021)



Source: IBGE. Pesquisa Nacional por Amostra de Domicílios Contínua, 2021.

Panel B. Employment Level for Women, Men and Overall, by Education Levels - Brazil (2021)

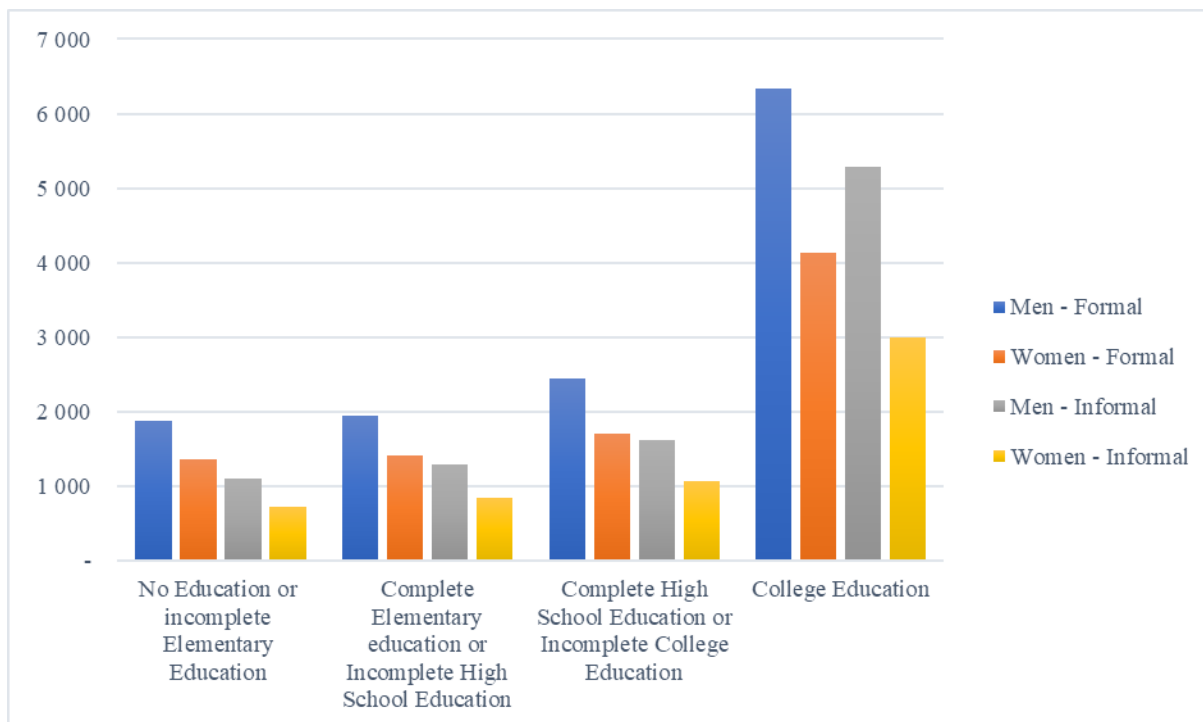


Source: IBGE. Pesquisa Nacional por Amostra de Domicílios Contínua, 2021.

Source: *Síntese de Indicadores Sociais uma Análise das Condições de Vida da População Brasileira*, IBGE, 2021.

Panel B exhibits evidence suggesting that, even though women might have surpassed men in terms of average years of education, male employment levels continue to consistently exceed female employment levels, regardless of their education level. Accordingly, Figure 3 portrays the different income levels for women and men in the formal and informal sectors. As expected, female income levels are consistently lower throughout both education levels and economic sectors.

Figure 3. Real Average Monthly Income Levels for individuals aged 14 and older, by Gender and Economic Sector - Brazil (2021)



Source: *Síntese de Indicadores Sociais uma Análise das Condições de Vida da População Brasileira*, IBGE, 2021.

It is worth mentioning that the observed inequalities might be further aggravated by national characteristics, such as regional disparities directly affecting access to education, jobs and income-generating social programs, such as the *Bolsa Família* and *Auxílio Emergencial*. These aspects might similarly be reinforced by the Covid-19 pandemic, which has knowingly affected vulnerable groups disproportionately (DANG, NGUYEN, 2021; NASSIF-PIRES et al., 2021.).

Based on the observed role women occupy in labor markets today in Brazil and the discussions about the gendered division of labor presented in the former sections, the next section will summarize the expectations and hypotheses that guide this work.

V. Hypotheses and Theoretical Expectations

The discussion presented in this study has centered around issues involving the gendered division of labor, the debate regarding women's participation in the labor market, and the effects of this insertion in shaping political preferences and opinions. The hypotheses guiding this investigation revolve around how female insertion in the labor market affects women's evaluations of the economy. Of the several testable hypotheses that emerge, I focus on three key hypotheses that aim to capture how differences between and within genders affect women's retrospective economic evaluations.

In order to identify if there are gender differences in retrospective economic evaluations, the first hypothesis explores whether men and women have distinct evaluations holding all other characteristics constant. In empirical terms, this hypothesis will be tested with an additive model that considers gender effects on the dependent variable as a constant marginal difference. Here, women and men are contrasted without considering within-gender differences that would arise if we allowed gender effects to vary according to other variables. This hypothesis is designed to mimic theoretical interpretations that deem the effects of gender on the dependent variable to be constant, therefore, rejecting the supposition that there is variation within each group.

H1: Retrospective economic evaluations vary according to gender, with women being more likely to evaluate the economy as 'much worse' and 'a little worse'.

Although the gender literature has vastly documented differences between genders in terms of opinions and preferences (BOX-STEFFENMEISTER et al., 2004; CHHIBBER, 2022; CLARKE et al., 2005; DASSONVILLE, 2018; DOLAN, 2011; EDLUND, PANDE 2002; HIGGINS, KELLSTEDT, 2016; IVERSEN et al., 2020; IVERSEN, ROSENBLUTH, 2006; KITTILSON, 2016; and others) it remains an open question whether these effects are constant or vary along other relevant aspects. According to the previously discussed studies (CHANEY et al., 1998; CHHIBBER, 2002; DOLAN, 2011; GOTTLIEB, 2016), I expect women in general, to be more pessimistic about the country's current economic situation when compared to men.

However, as previously underlined, female experiences vary greatly. Consequently, following our argumentation about within-gender differences, I expect the effects of gender to vary according to values assumed by other conditioning explanatory variables. Differences in employment status and labor market insertion, therefore, are expected to determine distinct experiences and, distinct consequences to gendered economic evaluations. Consequently, although women might be generally associated with pessimistic views, the levels of pessimism might vary among women, conditional on labor market experience.

Female labor market experiences are likely to be determined by their relatively recent arrival in the labor market, as well as by discrimination and inequalities that, in turn, “(...) may create a heightened sense of economic uncertainty and risk (...)” (CLARKE ET AL., 2005). These aspects should be translated into more pessimistic views about the economy. Following Clarke et al. (2005) argument about how negative workforce experiences, coupled with traditional socialization – persistent in developing contexts – might help to explain greater economic pessimism among women inserted in the labor market, we expect these women to be more pessimistic than those who are outside the labor market.

Contemplating the previously discussed aspects and their potential effect on female economic evaluations, hypotheses 2 and 3 focus on differences between women, considering aspects related to labor market insertion and informality that moderate differences in the effect of gender on economic evaluations. Based on the gender literature that supports the prevalence of pessimistic evaluations amongst women, we expect pessimism to be higher amongst employed women, when compared to unemployed women, mainly due to the nature of positions usually occupied by them and to the intrinsic vulnerability associated with being a woman in a labor market characterized by gender inequalities and discrimination (CLARKE et al., 2005).

H2: Levels of pessimism will vary among women, with those inserted in the labor market being more likely to evaluate the economy as ‘much worse’ and ‘a little worse’.

Notably, in the case of Brazil, where high levels of inequalities produce relevant heterogeneities amongst women and where the labor market comprises radically different occupations requiring different sets of skills and similarly providing women with different opportunities for development, organization, and participation, we further expect the effects of being female on economic evaluations to be mediated by specific employment situations. One mechanism that might be particularly instrumental to these differences are experiences in the

formal and informal labor markets which might alter and expand women’s possibilities and perspectives and therefore affect evaluations.

Differences in positions are, therefore, likely to be associated with distinct opportunities determined by the type of labor market insertion and degree of economic vulnerability. We expect evaluations of women employed in formal positions to be less pessimistic than those of informally employed females, as the latter are submitted to higher degrees of vulnerability and have fewer rights guaranteed.

H3: Women’s retrospective evaluations of the economic situation will differ based on their formal/informal job status, with women occupying informal job positions being more likely to evaluate the economy as ‘much worse’ and ‘a little worse’.

Considering the three hypotheses outlined, Table 1 summarizes my expectations for the direction and intensity of the effects of the explanatory variables, considering the additive model.

Table 1. Theoretical Expectations for the Effects of Explanatory Variables

Gender	Economic Evaluations	
	Women (-)	Men (+)
Labor Market Insertion	-	+
Informality	- -	-

Firstly, as previously discussed, gender is expected to exert a negative effect on economic evaluations, with women being more pessimistic than men. Insertion in the labor market is expected to affect women’s evaluations negatively, as they are exposed to negative workforce experiences, and to discriminatory environments that create and reproduce higher levels of economic uncertainty and risk. Male evaluations, on the other hand, are expected to vary positively once they start participating in the labor market, as common dynamics benefit men over women and create higher levels of security for the former.

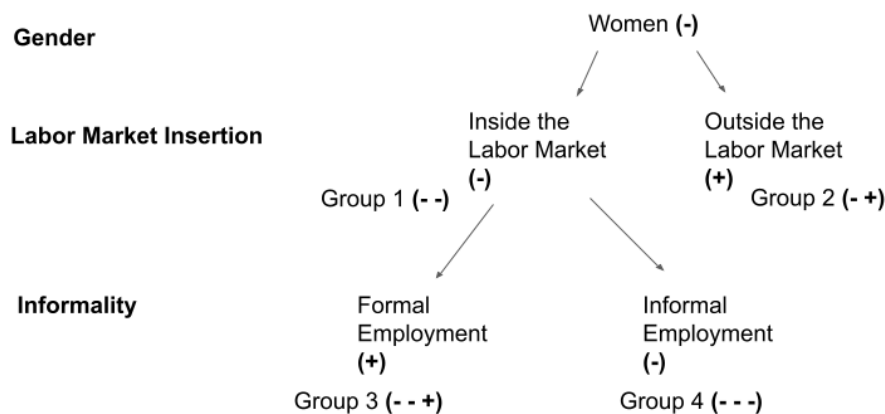
Informality, on the other hand, is expected to negatively affect economic evaluations for both women and men, as this condition is associated with lower employment security and higher levels of vulnerability for both genders. Furthermore, the negative effect of informality is

expected to be stronger among women as vulnerabilities arising from joining the labor market are overlaid by the vulnerability associated with informal employment situations.

Departing from the previously outline expectations for the constant effects of gender, labor market insertion and informality, Figure 4 summarizes expectations for the multiplicative models, that consider the moderating role of other aspects on the conditional effects of gender on economic evaluations.

In the figure, four groups are identified: the first one is composed of women inserted in the labor market; the second one of women outside the labor market; the third one of formally employed women; and the fourth one, composed by informally employed women. Expectations for the combined effect of gender and the moderating variables are represented along group numbers.

Figure 4. Theoretical Expectations for the Effects of Explanatory Variables – Differences within Women



Considering the previously stated arguments, the effect of being a women inserted in the labor market (group 1) is expected to negatively affect economic evaluations. Moreover, this negative impact on evaluations is expected to be strengthened by informal employment, as workers under this condition (group 4) are more vulnerable when compared to formally employed individuals (group 3). Nevertheless, the latter are still expected to be pessimistic in their evaluations, as they are still exposed to the effects of gender and labor market insertion. Finally, women outside the labor market are expected to be less pessimistic when compared to women inserted in the labor market.

As these hypotheses confirm, this study contributes to a theoretical framework that helps to understand why differences in labor market participation will affect women's evaluations of the economy in the context of a developing democracy marked by high rates of inequality. Furthermore, it highlights that dichotomous approaches to gender differences are not validated by theory. Consequently, the this study emphasizes the relevance of considering distinctions in the effects of gender on economic evaluations taking into consideration within-gender differences. The next section is devoted to the research design based on the analysis of survey data for Brazil and the methods employed for hypothesis testing. The following section presents results using the described data and methods.

VI. Data and Methods

Latinobarometer Data

To test the hypotheses about gender-relevant aspects of economic evaluations, we rely on survey data on a nationally representative sample of Brazilians collected by the Latinobarometer. The Latinobarometer is a public opinion survey poll, annually applied in over 18 Latin American countries. Our analysis is based on eight survey waves (2008, 2009, 2010, 2011, 2013, 2015, 2017, 2020) for Brazil.

The survey incorporates a series of questions that measure attitudes and opinions about a varied set of political and social themes. For the purpose of this analysis, we draw information about economic evaluations, employment status, employment sectors (formal, informal), and ideology. Moreover, we also use information about demographic characteristics such as gender, age, and education level. The pooled sample for all survey waves is composed of 10,738 individuals, of whom 5,179 (48.2%) are men and 5,559 (51.7%) are women.

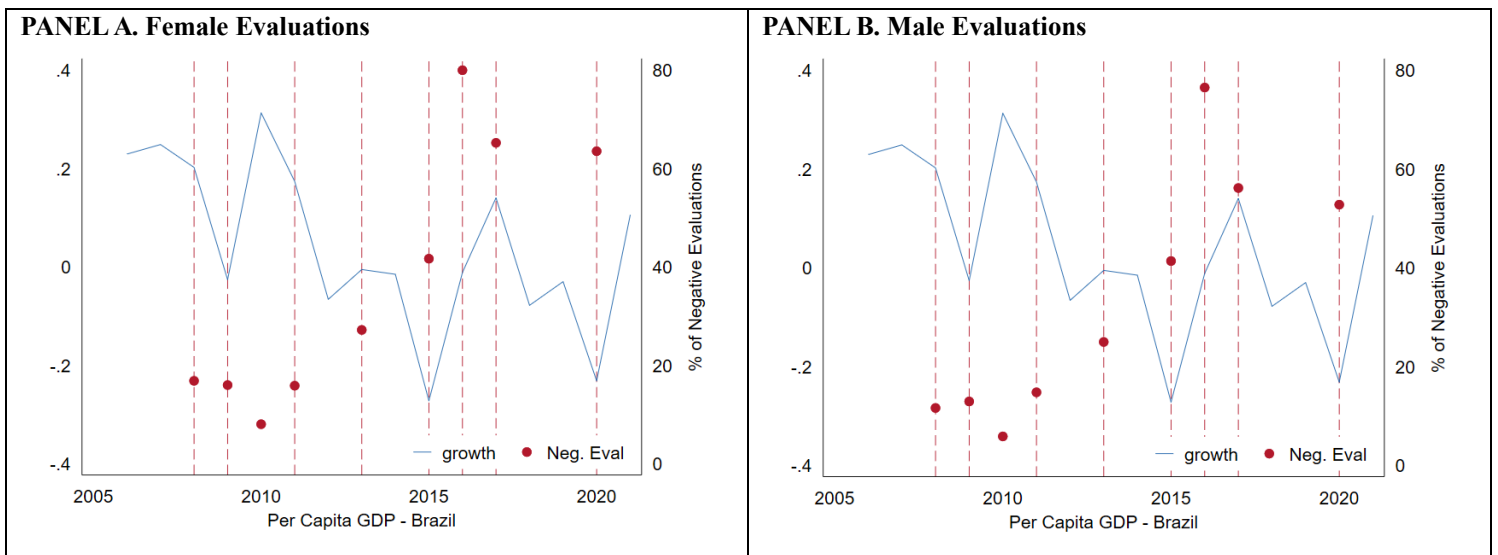
Economic Evaluations

The dependent variable, retrospective economic evaluations, is composed by six, including 'Much better', 'A little better', 'About the same', 'A little worse', 'Much worse', and 'Don't know'. While the number of categories allows for important differentiations pertaining to individuals' evaluation of the country's economic situation, differences between categories

might be a factor of confusion for respondents, as different degrees of agreement may have different substantive meanings for distinct respondents. Moreover, the category ‘About the same’ poses another obstacle to interpretation, as yearly reports do not include information about previous years’ evaluations. Consequently, this category might reflect both negative and positive evaluations, which we are unable to access based on the available information.

As the primary objective is to capture different levels of pessimism among women, we rely on categories ‘Much worse’ and ‘A little worse’ to capture negative evaluations. Positive evaluations, on the other hand, are associated with ‘Much better’ and ‘A little better’ categories. It is worth noticing that evidence suggests that female and male evaluations vary over the years and that they are responsive, although at different rates, to changes in macro-economic indicators such as GDP *per capita*. Figure 5 portrays the percentage of negative evaluations (‘Much worse’ and ‘A little better’) throughout the survey years, along with variations in the *per capita* GDP.

Figure 5. Percentage of Negative Evaluations of the Economy, by Gender, for all Survey Years



According to previously outlined expectations, data suggests that, although negative evaluations follow similar patterns for both genders, women remain more pessimistic than men throughout the year. Further analysis is devoted to understanding and describing these differences.

Labor Market Experience

Turning to the key moderating explanatory variable, there are additional challenges as the concept of labor market insertion may not be directly captured by the available survey data. For the purpose of this analysis, the original employment status variable is adopted as a proxy for labor market participation. The employment status variable divides individuals into eight categories: ‘Self-employed’; ‘Salaried employee in a state company’; ‘Salaried employee in a private company’; ‘Temporarily out of work, Retired/pensioner’; ‘Don’t work/responsible for shopping and housework’; ‘Student’; and ‘Not applicable’. For the purposes of this analysis, those in the first four categories are considered to be inserted in the labor market, as they are directly exposed to labor market dynamics. Those in the last three categories, on the other hand, are considered to be outside the labor market, as they are not directly involved with labor market. Consequently, the final labor market insertion measure separates individuals based on their participation (or the absence of) in the labor market.

This rescaling choice, however, might be problematic as distinct groups are combined in the same categories. Nevertheless, considering the general goal of differentiating individuals according to labor market insertion, the combination of categories allows for an effective measure that differentiates individuals according to their direct participation in labor market. Future analysis should focus on further exploring differences between specific categories.

Informality

Finally, measurements for job formality and informality, are derived from the original ‘employment type’ variable that differentiates respondents into two categories (Self-employed and Salaried employed) and nine subcategories. The self-employed category encompasses subcategories ‘Professional (doctor, lawyer, accountant, architect)’, ‘Business owner’, ‘Farmer/fisherman’, and ‘Self-employed, informal’. The salaried employed category, on the other hand, includes subcategories ‘Professional’, ‘Senior management’, ‘Middle management’, ‘Other’, and ‘Not applicable’.

Considering different definitions of informality, I employ two different specifications that consider, respectively, all categories under ‘self-employed’ as informal⁴ and only the category ‘Self-employed, informal’ as informal. Moreover, it is worth emphasizing possible issues pertaining to the subcategory ‘Other’. It remains unclear which occupations and individuals

⁴ Model results for this specification are available in Appendix A.

were included in this category. Therefore, specific informal occupations might be absorbed by this category erroneously.

Methods

Both additive and interaction multivariate models are employed in the context of this analysis to contrast explanations that consider gender effects on economic evaluations to be constant with explanations that allow gender effects to vary according to other aspects. For the three specifications, pooled sample models are accompanied by yearly tests as a robustness check.

Following the previously stated hypotheses, I expect interaction models to be theoretically more appropriate for capturing gender differences in evaluations, as female experiences, and therefore evaluations and perceptions, are likely to vary greatly, considering distinct positions in the labor market.

Hence, while additive models determine constant effects for dependent variables, which corresponds to constraining gender effects to differences between women and men as homogeneous groups, interaction models contend that these effects vary according to values assumed by conditioning variables. Consequently, the latter approach allows for the analysis of theoretically relevant aspects that determine differences not only between genders, but within genders.

In the case of the first hypothesis, the effect of gender on economic evaluations is assumed to be constant. Consequently, the additive model tests produce an effect of being female on evaluations that is constant between genders. The coefficient associated to gender, therefore, represents the estimated effect of being female or male on economic evaluations, on average, holding labor market insertion and informality constant.

In the case of the two additional hypotheses, on the other hand, the effect of being female on economic evaluations is expected to be moderated by labor market insertion and informality. These multiplicative models are more aligned with my theoretical expectations. Particularly, I expect female evaluations to differ based on whether they are active participants in the labor market and whether they are employed in vulnerable positions, measured through job formality. Following Brambor et. al (2006) recommendations, interaction models are employed to test our second and third hypotheses, given their conditional nature.

Firstly, I follow their recommendation for including all constitutive terms in our model specifications. According to the authors, researchers could omit constitutive terms in an interaction model only when at least two conditions are met. First, researchers must have strong theoretical expectations that the omitted variable has no effect on the dependent variable in the absence of other modifying variables. This assumption, however, might be affected by the scale chosen for particular variables and the practical meaning of a zero-valued variable.

In the case of models that compose this analysis, there are strong reasons to believe that constitutive terms gender, employment status and employment type (formal/ informal) all have effects on our dependent variable, economic evaluations, even in the absence of other modifying variables. While the central role of gender has been largely discussed in the previous sections, the relevance of employment status and formal/informal employment types are known to play a determining role in shaping economic evaluations.

The second condition states that, prior to suppressing constitutive terms, researchers need to empirically test whether the coefficient associated with a specific variable is in fact, zero. It is worth noticing, nevertheless, that even in cases where the effect of a single variable (Z) is assumed to be zero, on average, in the absence of other modifying variables (X), it might be that the coefficient associated with Z might differ from zero, as it indicates the effect of Z when X is zero, rather than the average effect of Z on independent variable Y . Failing to consider these aspects might lead to inferential errors.

Using the complete model specification with all constitutive terms will provide researchers with theoretically unbiased estimates. Observed effects, however, should not be interpreted as unconditional marginal effects as the coefficient on a given independent variable effectively captures the effect of that variable on the dependent variable only when the moderator variable is zero (BRAMBOR et al., 2006). As the main objective here is to comprehend how a third variable moderates the effect of an IV on a DV, that is to say, the conditional effect of an IV on a DV, when the moderator assumes different values, I employ conditional tests that correspond to the conditional hypothesis.

Finally, to adequately address the results of multiplicative interaction models, meaningful description of the marginal effects of the independent variable, along with the associated estimates of uncertainty are provided in the results section. Particularly, following Moreira's (2021) recommendations regarding meaningful ways to interpret multinomial logistic

regression models, I employ the average marginal effects (AME) approach to calculate marginal effects based on predicted probabilities.

Marginal effects summarize the effects of an independent variable in terms of a model's prediction (MIZE, 2019). That is, as explained by Mize (2019), marginal effects provide a summary measure of the independent variable's effect even when multiple linked coefficients compose a model. Furthermore, according to the author, as they are based on model's predictions, marginal effects can be expressed and interpreted in a distinct metric than regression coefficients, which in turn, facilitates interpretation of non-linear models with polychotomous dependent variables.

The average marginal effect (AME) approach portrays the effect of a change in the key explanatory variable on the DV, on average, across the sample. It does so by holding variables at their values in the dataset (MOREIRA, 2021). In the case of AMEs, each prediction is based on actual observed values in the data. It is relevant to consider the substantive meaning of the average case across different variables, as it might not make sense to consider the average case for some variables. Similarly, it is worth noticing that the AME approach is deemed by researchers as more resistant to model misspecification, as inferences are made about actual cases observed in the data and not about a – at times non-existing – average case. The employment of the AME approach is, furthermore, justified by the adoption of multinomial logistic regression models.

Considering the characteristics of our data and following the guidelines posed by Moreira (2020), I employ multinomial logistic regression models to analyze gender differences in economic evaluations. The aim is to capture whether there are differences in being a female for five different types of economic evaluations holding constant other aspects that drive economic assessments.

The option for MNLMs is based mainly on our theoretical assumption that a dichotomous approach (e.g., Approves vs. Disapproves) is insufficient to comprehend a more comprehensive set of variation in economic evaluations, as I expect the effects of the independent variables to differ for each outcome. Our DV is composed of five categories ('Much better', 'A little better', 'About the same', 'A little worse', 'Much worse', 'Don't know'). The inclusion of an inordinate category ('Don't know') determines a non-ordinal/ partially ordered configuration of our categories and, therefore, "(...) invalidates models for ordinal outcomes." (LONG,

FREESE, pp.171, 2014). On this matter, Long and Freese (2014) postulate that, should there be any concerns about the ordinality of the DV, the potential loss of efficiency arising from adopting models for nominal outcomes would be counterbalanced by avoiding potential bias resulting from the constraints imposed by ordinal models.

The discussion around developing meaningful ways to interpret the results of non-linear models with polychotomous dependent variables has been a central one among political scientists (KING, 1989; MOREIRA, 2021), and this study also seeks to leverage best practices to improve inferences. MNLMs have been vastly employed by scientists aiming to comprehend multivariate relationships as they estimate the probability of a specific outcome given the values of a set of regressors (MOREIRA, 2021). The next section is devoted to the presentation and discussion of the analysis' results.

VII. Results

This section is devoted to presenting and discussing the empirical results of the analysis considering the theory positing that there are important differences between and within genders with respect to economic evaluations. I begin by outlining a summary of the theoretical expectations presented in section V. Hypothesis one stated that on average, holding constant labor insertion variables, gender should have a negative impact on individuals' economic evaluations, with women being more likely to express negative evaluations ('Much worse' and 'A little worse') than men. In the case of hypotheses two and three, however, expectations refer to the effects of gender, considering varying values assumed by the two main explanatory variables, labor market insertion and informality. A summary of expectations is presented in Table 1.

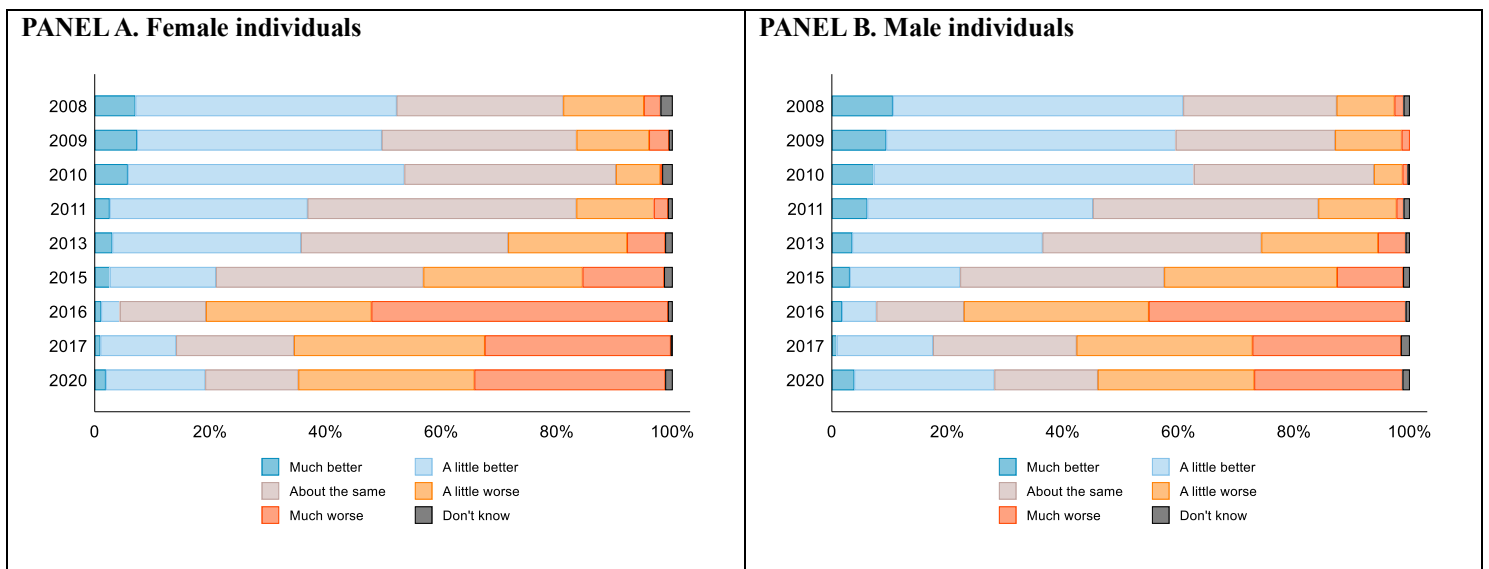
Table 1. Theoretical Expectations for the Effects of Explanatory Variables

	Economic Evaluations	
	Women (-)	Men (+)
Labor Market Insertion	-	+
Informality	- -	-

As represented in the table, insertion in the labor market is expected to affect women’s evaluations negatively, as they are exposed to negative workforce experiences, and to discriminatory environments that create and reproduce lower levels of job security. Male evaluations, on the other hand, are expected to vary positively once they start participating in the labor market, as common dynamics benefit men over women and create higher levels of security for the former. In turn, both female and male evaluations are expected to be negatively affected by informality, as this condition is associated with lower employment security and higher levels of vulnerability for both genders. The negative effect of informality is expected to be stronger among women as the effects of discrimination in the labor market are enhanced disproportionately to this category.

A quick look at the distribution of answers for female and male retrospective economic evaluations suggests the presence of relevant differences between genders. Figure 6 exhibits the frequency of answers for the dependent variable, *economic evaluations*, for all years in the sample, by gender. Although overall, we can observe common patterns of responses over the years for both genders, it becomes clear that the distribution of answers still varies according to respondents’ gender: while women are consistently more concentrated in negative answers ‘A little worse’ and ‘Much worse’, across sample years, men are consistently more positive when asked to evaluate the country’s economic situation.

Figure 6. Retrospective Economic Evaluations, by Gender for all Sample Years



Source: Latinobarometer.

Additionally, similar amounts of women and men are observed in the middle category ‘About the same’. Moreover, category ‘Don’t know’ appears to represent a very small portion of answers, and to be evenly distributed along genders, across sample years. Finally, the proportions of negative and positive answers for both genders vary across years with an inflexion in observed trends in 2016, when negative evaluations from both genders become more common than positive answers.

This initial piece of evidence suggests, according to our theoretical expectations, that gender differences might be reflected in economic evaluations, with women being generally more pessimistic than men. To further explore differences in answers between genders, I employ a multinomial logistic regression and analyze marginal effects. For the first hypothesis an additive model intended to capture gender differences in retrospective evaluations of the country’s economic situation was employed. The model can be stated as:

Retrospective Economic Evaluations

$$= f(\text{Female} + \text{Left} + \text{Labor Market Insertion} + \text{Informality} + \text{Age} + \text{Age}^2 + \text{Education} + \text{Years})$$

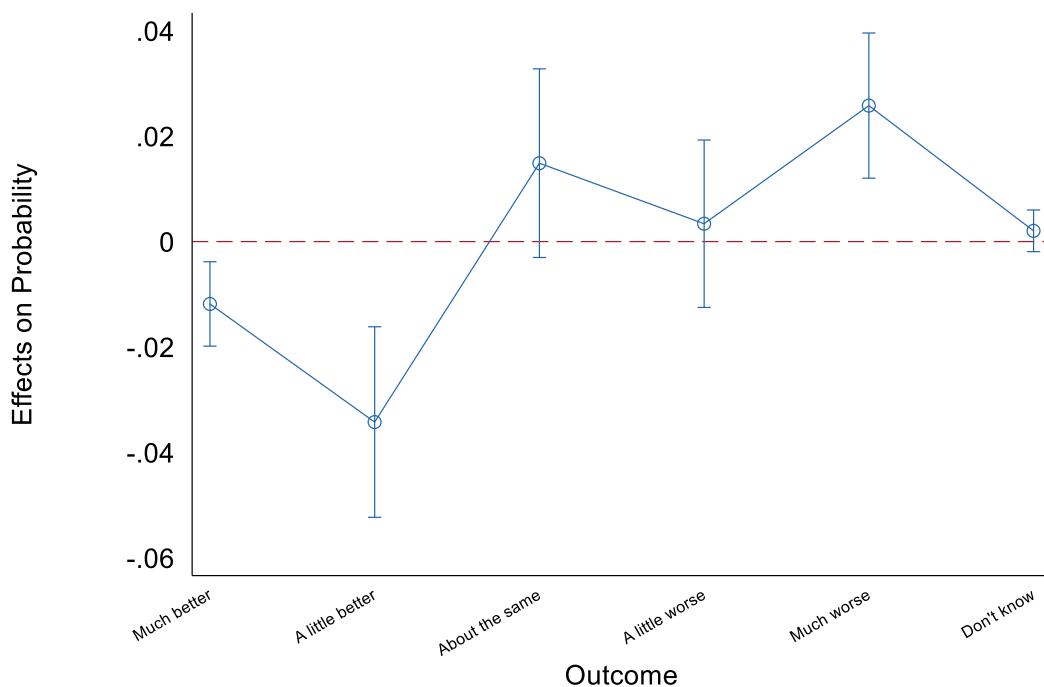
Where retrospective economic evaluations are a function of gender, ideology, age, level of education, employment status and the year of analysis. Retrospective economic evaluations are composed by the six original answer categories in the survey, including “Much better”, “A little better”, “About the same”, “A little worse”, “Much worse”, and “Don’t know”. All original categories were included considering the goal of capturing within-category nuances, as the analysis aims to differentiate groups of women and the reasoning behind different answers. The ‘Don’t know’ category, furthermore, was included due to the suspicion that differences in the concentration of answers in this category could be associated with gender characteristics such as smaller levels of labor market insertion.

For the main explanatory variable, gender, I employed a dummy variable that identifies female individuals. The variable for ideology originated from a 10-point scale where 0 indicates left and 10 indicates right. Answers were rescaled to identify left-leaning individuals (0-5) and right-leaning individuals (6-10). Informality is measured using a dummy variable that considers as informal workers only those who were categorized under the ‘Self-employed, informal’. Furthermore, two measures of age were included, one of them squared, and

education level is measured according to years studied/ level of education (e.g., Complete high school education, College education, etc.)⁵. Finally, dummy variables were included in year-specific models to control for different years in the model.⁶

Figure 7 presents the average marginal effects of being female on the probabilities of choosing different answers for the economic evaluations question, holding labor market insertion and informality constant, for all years in the sample. Results from the pooled model suggest that there are significant differences between the probabilities of answering ‘A little better’ (-.036%) and ‘Much worse’ (.029%) for females. We might consider, therefore, the presence of a pessimistic trend among women.

Figure 7. Average Marginal Effect of Female on the Probabilities of Retrospective Economic Evaluations (All years)



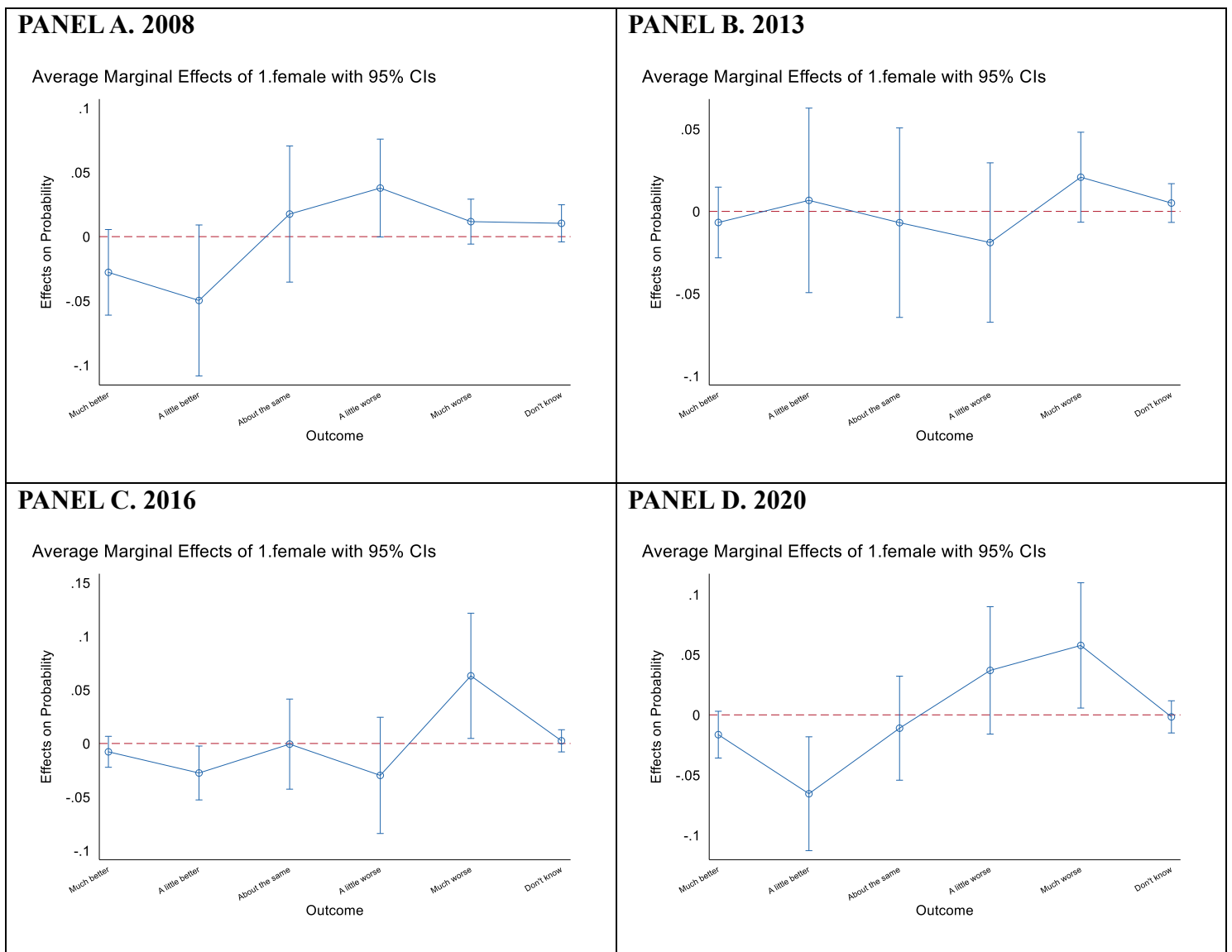
Source: Latinobarometer.

⁵ Based on evidence pertaining to the importance of changes involving the gender gap in education in Brazil, I further evaluated the average marginal effects of education on female economic evaluations. The results did not yield significant differences in probabilities of evaluating the economy in a certain way, along different education levels for women or men. Further work should be devoted to exploring the impacts of the closure of the educational gender gap on economic evaluations.

⁶ Even though the sample is fairly balanced for all years, we include year dummies in an attempt to control for year-specific aspects that might account for the differences in effects observed in each case.

Nevertheless, this trend is much less visible when we run the model for specific years. For most cases (2008, 2010, 2011, 2013, 2015) probabilities of answering positively or negatively are not statistically different from one another. Although slight differences between positive and negative evaluations are apparent in other years (2009, 2016, 2017, and 2020), effects are not as pronounced as in the pooled version of the model. Figure 8 presents varied results for a sample of the years included in our analysis.

Figure 8. Average Marginal Effect of Female on the Probabilities of Retrospective Economic Evaluations (2008, 2013, 2016, 2020)



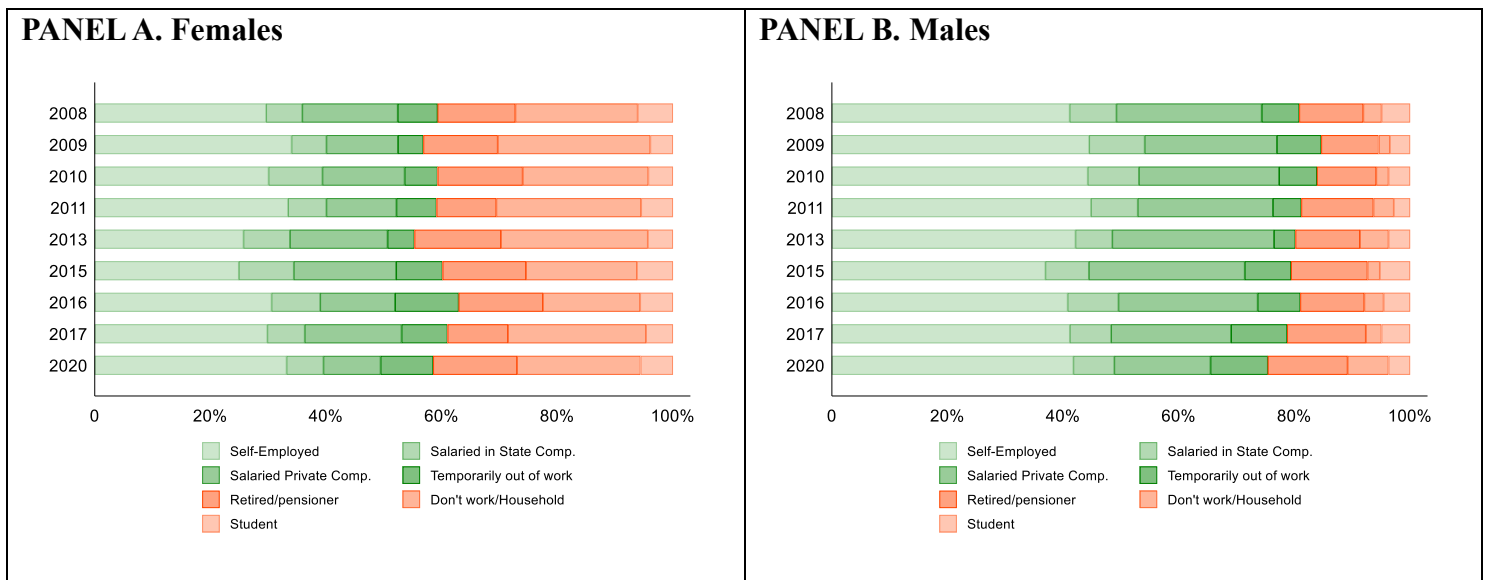
Note: Models for all years are available in Appendix A.
Source: Latinobarometer.

As previously stated, the AME of being female varies greatly between years, with some years indicating no significant differences among positive and negative evaluations. Nevertheless, differences between the first and the third groups are noticeable for several years, with women consistently exhibiting higher probabilities of retrospectively evaluating the country's economic situation as 'Much worse'. Concomitantly, we observe lower probabilities of answering 'A little better' among the same group.

It is relevant to notice that the additive model used to test this hypothesis estimates constant gender effects on the dependent variable, economic evaluations. Consequently, results from this model suggest that, compared to men, women as a group, on average, express more pessimistic views when asked to evaluate the country's economic situation. Nevertheless, as previously argued, there are reasons to believe that the effect of gender on economic evaluations might be mediated by other aspects that define different levels of insertion in the labor market. Therefore, the effects of gender on economic evaluations are expected to vary considering differences in labor market insertion.

For this reason, we employ multiplicative interaction models to test conditional hypotheses 2 and 3. The first interaction model introduces the interaction term between gender and labor market insertion. The moderating variable, labor market insertion, is composed of two categories that combine answers for the question: "What is your current employment situation?". Considering our general goal to measure labor market insertion, answers were combined to differentiate individuals that in some way are inserted in the labor market (e.g., self-employed, employee in State and private companies, temporarily unemployed) in the time of the survey, from individuals outside the labor market (e.g., retired, pensioner, responsible for housework, student). Figure 9 presents the distribution of individuals from both genders into the employment categories for different sampling years.

Figure 9. Employment Status, by Gender for all Years



Source: Latinobarometer.

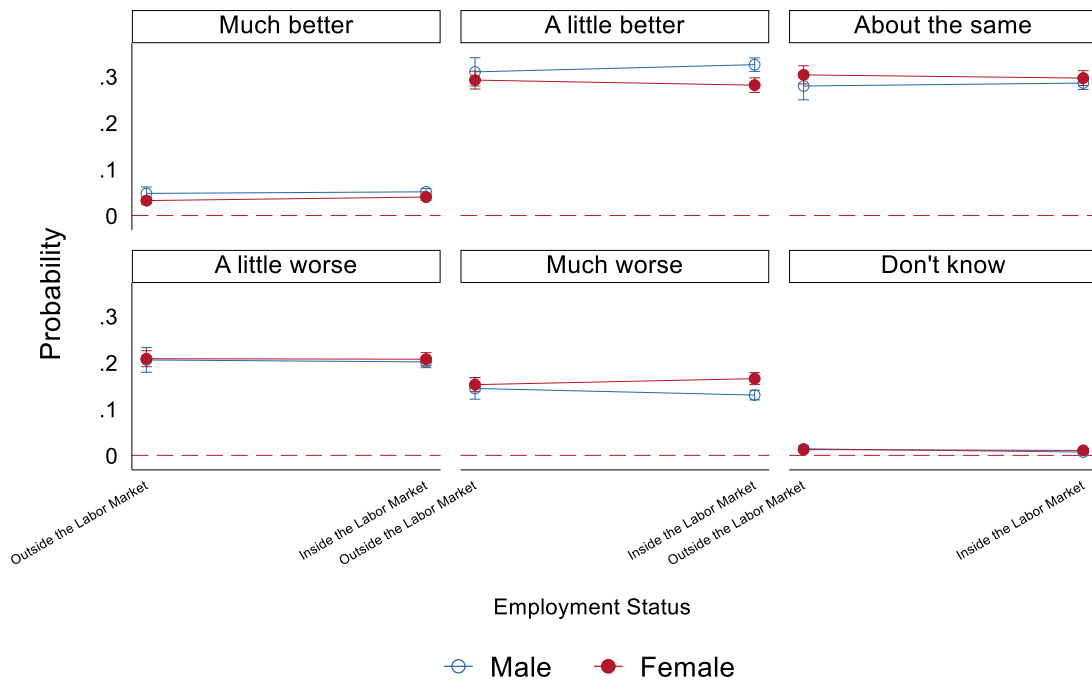
It is relevant to notice that women are a majority among the unemployed, particularly on the ‘Don’t work/household responsible’ category. Men, on the other hand, are concentrated along the ‘Salaried in Private Companies’ and ‘Salaried in State Companies’. For both genders we observe a relatively smaller concentration in our second category ‘Temporarily unemployed’. This distribution is consistent across sample years.

Following the hypotheses, I expect women inserted in the labor market to be more pessimistic in their evaluations of the economy when compared to both unemployed women and their male counterparts. The interaction model for testing this hypothesis can be stated as:

$$\begin{aligned}
 & \textit{Retrospective Economic Evaluations} \\
 & = f(\textit{Female} + \textit{Left} + \textit{Labor Market Insertion} + \textit{Age} + \textit{Age}^2 \\
 & + \textit{Education} + \textit{Years} + \textit{Labor Market Insertion} \times \textit{Female})
 \end{aligned}$$

Figure 10 exhibits the average marginal effect of gender on the probability of selecting different answer options for the explanatory variable, given specific values of the mediating variable, labor market insertion. Results suggest that the previously observed gender differences in evaluations are still perceptible along different categories of the dependent variable, with women being more concentrated in negative answer categories (‘Much worse’ and ‘A little worse’), and men being more concentrated in positive categories (‘Much better’ and ‘A little better’). Importantly, these differences are more prominent between men and women inserted in the labor market.

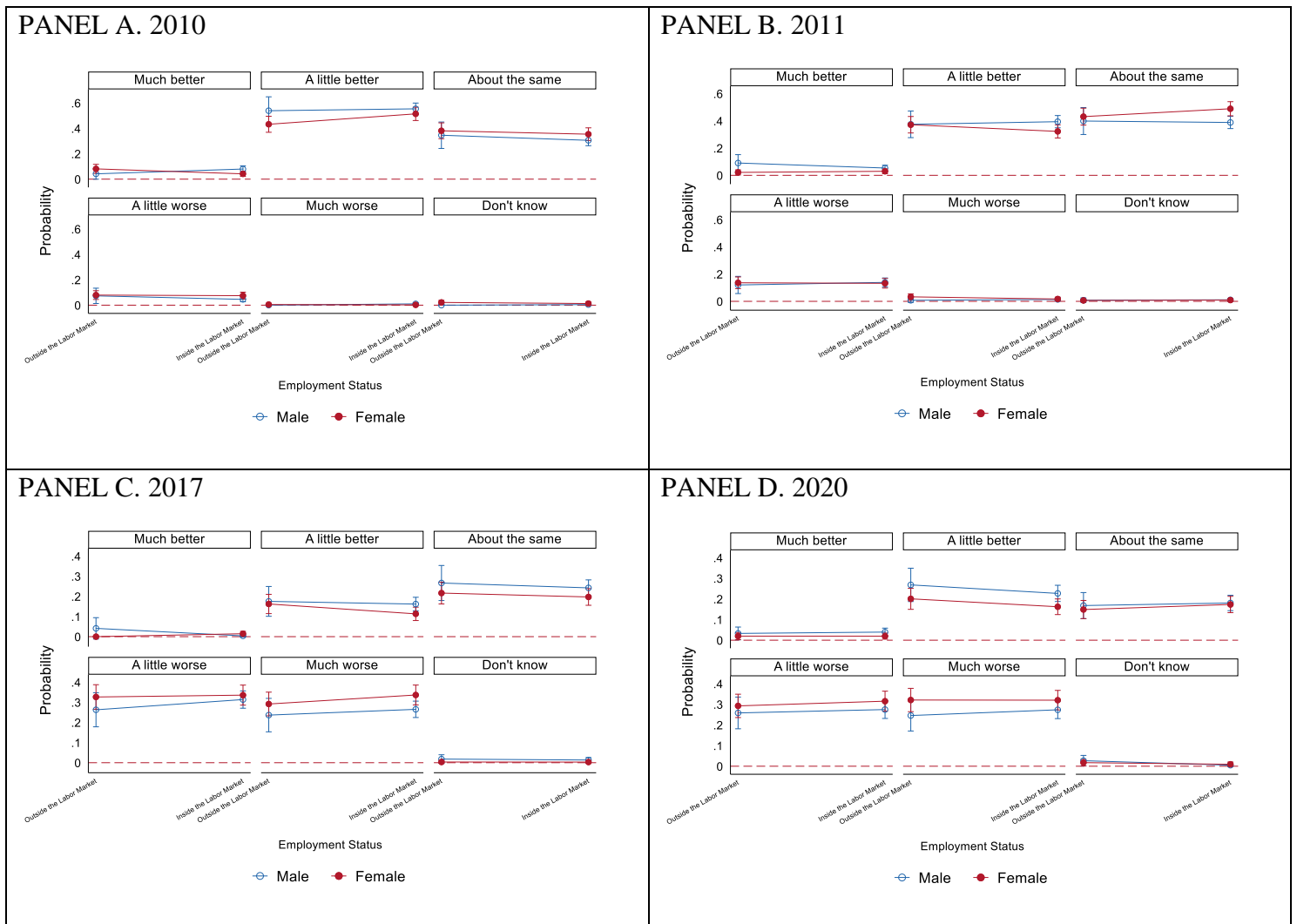
Figure 10. Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Labor Market Insertion (All years)



Source: Latinobarometer.

On the other hand, contrary to our expectations, results for the pooled model suggest that differences in evaluations observed for women inside and outside the labor market might not be statistically significant. In this sense, results for each category of the moderating variable yield similar results and overlapping confidence intervals.

Figure 11. Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Labor Market Insertion (2010, 2011, 2017, 2020).



Note: Models for all years are available in Appendix A.
Source: Latinobarometer.

Figure 11 presents results for different years in the sample. In general, trends observed in the pooled model are also reflected in different years, even though sample sizes affect statistical significance. Nevertheless, on earlier years like 2008, 2010, 2011 and 2013 the prevalence of women among those who evaluated the economy negatively disappears, as female and male negative evaluations overlap. For these years the number of negative evaluations is also much lower comparatively to latter years such as 2017 and 2020. Starting from 2011, and specially after 2016, the number of negative evaluations increased for both gender and differences between genders become more apparent.

Our second hypothesis stated that differences in labor market insertion should mediate the effects of gender on economic evaluations. Marginal effects estimates, however, suggest that

differences in evaluations between women inserted in the labor market and those outside the labor market might be insignificant. For some answer categories in specific years (2017, 2020), higher levels of negative evaluations might be observed among women in the labor market. For others, nonetheless, the concentration of evaluations from both groups are very similar.

In an effort to further capture the effect of higher vulnerability levels in the labor market, the third hypothesis discusses how informality affects women's economic evaluations. Women employed in informal positions are expected to be more pessimistic in their economic evaluations when compared to formally employed females. The interaction model for this hypothesis may be stated as⁷:

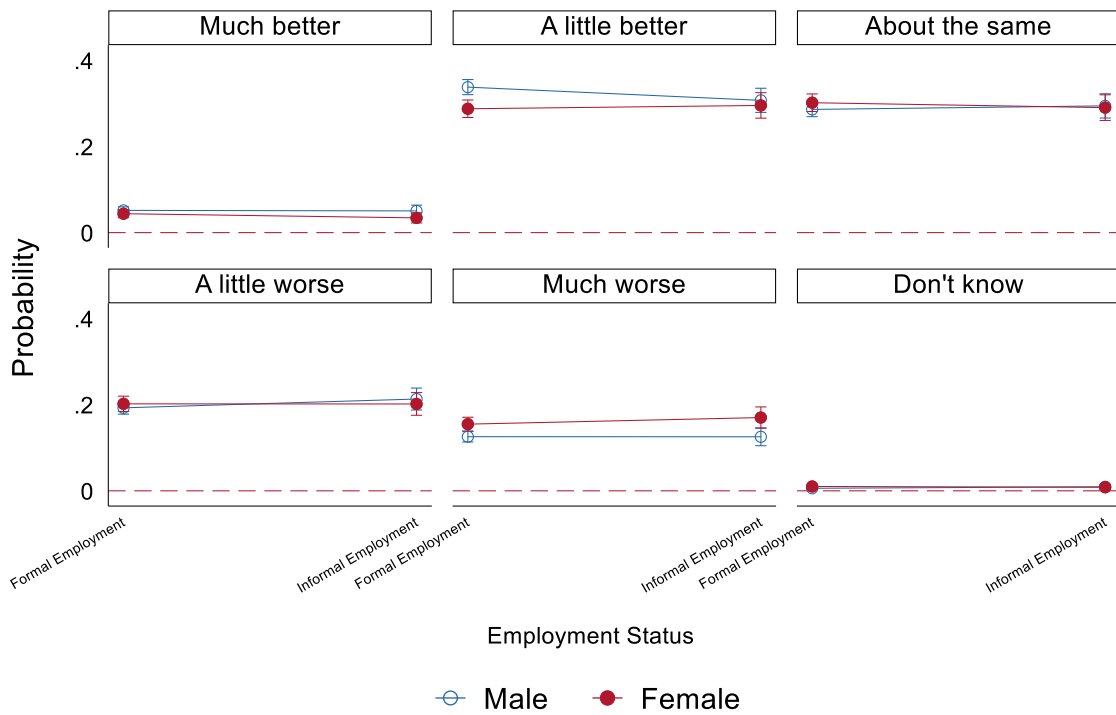
Retrospective Economic Evaluations

$$= f(\textit{Female} + \textit{Left} + \textit{Labor Market Insertion} + \textit{Informality} + \textit{Education} + \textit{Years} + \textit{Informality} \times \textit{Female})$$

Figure 12, exhibits results for the pooled model. Similarly, to what was observed in the case of hypothesis two, women are more concentrated in 'Much worse' category, while men are the majority among those who evaluated the economy as 'A little better'. Nevertheless, gender differences in category 'A little worse' become unnoticeable. As sample size decreases, it becomes harder to distinguish effects.

⁷ Due to reductions in the sample size arising from considering only employed individuals the multinomial logistic model specification adopted for this hypothesis is a reduced version of the original model and does not include the age variable.

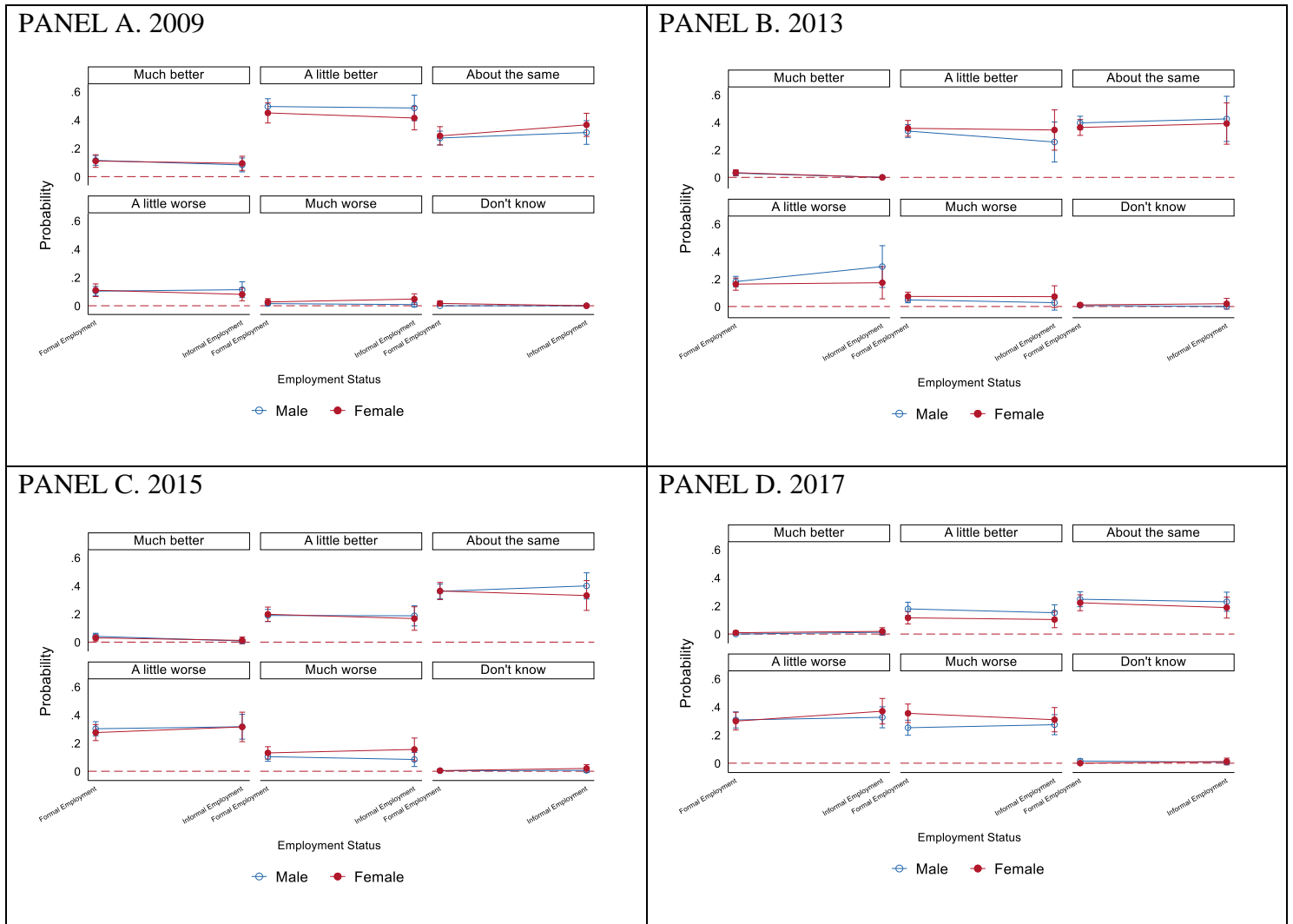
Figure 12. Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Informality (All years)



Source: Latinobarometer.

Turning to the issue of differences between formally and informally employed women, results do not suggest the presence of significant distinctions in evaluations. A more detailed look into different years, however, confirms the generally observed tendency of higher concentration of women among those evaluating the economy as ‘Much worse’. Regarding differences between women, evidence is insufficient to determine whether formally employed women differ in their evaluations from informally employed women.

Figure 13. Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Informality (2009, 2013, 2015, 2017).



Note: Models for all years are available in Appendix A.
Source: Latinobarometer.

VIII. Conclusion

The present analysis aimed to contribute to the burgeoning field of gender studies in political science. Specifically, it aimed at contributing to an important gap in the traditional literature, by analyzing within-gender differences in economic evaluations in developing countries. I theorize that multiplicative models are better fit for evaluating the effects of gender on economic evaluations, based on the assumption that there are important differences within groups of women, specially in developing contexts, that should affect their economic evaluations. I then test this assumption empirically by employing and comparing additive and

multiplicative models. Despite important limitations, analysis' results suggest that the effects of gender might be affected and altered by the presence of other explanatory variables that differentiate women among themselves.

The analysis departed from a conceptualization of differences in economic evaluations between genders. Initially, descriptive data on economic evaluations suggest that women are, on average, more likely than men to evaluate the economy negatively ('A little worse' and 'Much worse'), while men are comparatively more concentrated along positive answers ('A little better' and 'Much better'). This pattern is consistent across different years in the sample.

Conversely, another important finding pertains to the evidence of the presence of similarities in evaluation trends between genders. Particularly, when considering changes in evaluations across sample years, similar trends are observed between both genders. Consequently, although in different proportions, negative and positive evaluations from both women and men appear to vary in similar patterns, with common moments of rise and decrease of negative evaluations.

Moreover, evidence suggests that variations in economic evaluations accompany changes in macro-economic indicators such as *per capita* GDP growth. Even though model specifications did not include macro-economic indicators due to data limitations, future studies should focus on including and considering such aspects when analyzing economic evaluations.

Turning to the analysis of gender differences using multinomial logistic models, a first and more general finding refers to the existence of gender differences in economic evaluations, with women being, on average, more pessimistic in their evaluations than men. Additive model results are further reinforced by interaction models that also suggest that women are more likely than men to select negative categories ('Much worse' and 'A little worse') when manifesting their opinions about the country's economic situation, regardless of the values assumed by mediating variables. In opposition, men exhibit higher concentrations among those who evaluate the economy positively ('A little better') in both additive and multiplicative models.

Importantly, the observed effects of gender on evaluations are more apparent in the pooled version of different models. Estimates for different years, on the other hand, exhibit contrasting results, with differences between genders being observed only for specific years, while absent in others. These variations might be attributed to both decreasing sample sizes, and the existence of actual differences in effects across years.

Besides differences between genders, the analysis aimed at understanding within-gender variations in economic evaluations considering mediating variables. In the case of the second hypothesis, variations in the measure of labor market insertion were expected to impact the previously observed gender differences in evaluations. Results from the pooled model hint at the existence of differences between evaluations expressed by women inserted in the labor market and by those who were outside of the labor market at the time of the survey. In the case of year-specific models, however, confidence intervals for the estimates of the marginal effect of gender and labor market insertion overlap between the two categories for all cases.

Nonetheless, there are strong theoretical reasons to believe that economic evaluations will be affected by levels of labor market insertion. Consequently, the lack of evidence of differences between women inserted or outside the labor market in specific years might be attributed to either sample size or the construction of the measure of labor market insertion adopted here.

Similar conclusions might be derived from the model using labor informality as mediating variable. Although the existence of striking differences between formal and informal employment, especially in highly inequal contexts in developing countries, has been vastly documented, results observed in the pooled model become less visible in year-specific models, making it harder to identify any differences in evaluations between formally and informally employed individuals.

It is worth noticing, however, that sample size for the third hypothesis has drastically decreased as only employed individuals are considered in the model. This decrease might account for the absence of differences within genders, considering varying employment conditions. Finally, it is also relevant to mention that the concept of informality might be very difficult to capture because of varying definitions, what might in turn affect the results observed.

In summary, the present study has several limitations that should be considered when evaluating the results presented and addressed by future studies. First and foremost, the labor market insertion variable and the informality variable should be carefully evaluated, as they combine very different groups under the same definitions. Moreover, in the case of the latter, the difficulty of measuring the concept of informality might similarly be a relevant obstacle to analysis. Additional variables, such as income levels might be helpful in differentiating women and men in terms of different levels of labor market vulnerability, although unavailable in the survey data.

Moreover, sample issues such as sample sizes and the absence data for some years is likely to also pose important limitations to the analysis. Another important issue refers to the absence, in most cases, of information pertaining to the specific months in which data was collected for different years. All the limitations described above must be considered when evaluating the results and future work should contemplate these issues.

In conclusion, in spite of substantial limitations, important results have been observed throughout the analysis, with evidence reinforcing the existence of gender differences in the way women and men evaluate the country's economic situation. Moreover, hints of the existence of possible differences between women, according, to their level of insertion in the labor market and employment status (formal vs. informal) suggest that future research should consider the possibility of within-gender differences, with gender effects varying for different women. Moreover, these considerations are especially valuable for research focusing on developing regions, where high levels of inequalities determine fundamentally different conditions for different women.

References

- Allen, P. and Cutts, D. (2019), “Women are more likely than men to blame structural factors for women's political under-representation: Evidence from 27 countries.”. *European Journal of Political Research*, 58: 465-487. <https://doi.org/10.1111/1475-6765.12292>
- Ang, Z., Reeves, A., Rogowski, J.C. and Vishwanath, A. (2022), Partisanship, Economic Assessments, and Presidential Accountability. *American Journal of Political Science*, 66: 468-484. <https://doi.org/10.1111/ajps.12659>
- Barbosa Filho, F. de H.; Moura, R. L. de. (2015), Evolução recente da informalidade do emprego no Brasil: uma análise segundo as características da Oferta de trabalho e o setor. *Pesquisa e Planejamento Econômico*, Brasília, v.45, n.1, 2015.
- Barnett, C., FitzGerald, M., Krumbholz, K., & Lamba, M. (2022). Gender Research in Political Science Journals: A Dataset. *PS: Political Science & Politics*, 55(3), 511-518. doi:10.1017/S1049096522000385
- Beltrão, K. I., & Alves, J. E. D.. (2009). A reversão do hiato de gênero na educação brasileira no século XX. *Cadernos De Pesquisa*, 39(Cad. Pesqui., 2009 39(136)), 125–156. <https://doi.org/10.1590/S0100-15742009000100007>
- Burns, N. (2007). Gender in the Aggregate, Gender in the Individual, Gender and Political Action. *Politics & Gender*, 3(1), 104-124. doi:10.1017/S1743923X07221014
- Box-Steffensmeier, J. M., De Boef, S., & Lin, T. (2004). “The Dynamics of the Partisan Gender Gap”. *The American Political Science Review*, 98(3), 515–528. <http://www.jstor.org/stable/4145344>
- Carnevale, A. P.; Smith, N.; Artem, G. (2018). “Women Can’t Win: Despite Making Educational Gains and Pursuing High-Wage Majors, Women Still Earn Less than Men”, Georgetown University Center on Education and the Workforce. <https://cew.georgetown.edu/cew-reports/genderwagegap/>
- Chaney, C. K., Alvarez, R. M., & Nagler, J. (1998). “Explaining the Gender Gap in U. S. Presidential Elections, 1980-1992”. *Political Research Quarterly*, 51(2), 311–339. <https://doi.org/10.2307/449080>

Clarke, Harold D., Marianne C. Stewart, Mike Ault, and Euel Elliott. "Men, Women and the Dynamics of Presidential Approval." *British Journal of Political Science* 35, no. 1 (2005): 31–51. <http://www.jstor.org/stable/4092279>.

Chhibber P. (2002). "Why are Some Women Politically Active? The Household, Public Space, and Political Participation in India". *International Journal of Comparative Sociology*;43(3-5):409-429. doi:10.1177/002071520204300310

Dassonneville, R. (2021). "Change and continuity in the ideological gender gap a longitudinal analysis of left-right self-placement in OECD countries.". *European Journal of Political Research*, 60: 225-238. <https://doi.org/10.1111/1475-6765.12384>

Desposato, S., & Norrander, B. (2009). "The Gender Gap in Latin America: Contextual and Individual Influences on Gender and Political Participation.". *British Journal of Political Science*, 39(1), 141-162. doi:10.1017/S0007123408000458

Dolan, K. (2011). "Do Women and Men Know Different Things? Measuring Gender Differences in Political Knowledge". *The Journal of Politics*. 73. 97 - 107. 10.1017/S0022381610000897.

Economic Commission for Latin America and the Caribbean (ECLAC), Women's autonomy in changing economic scenarios (LC/CRM.14/3), Santiago, 2019.

Edlund, L., Rohini P., "Why Have Women Become Left-Wing? The Political Gender Gap and the Decline in Marriage", *The Quarterly Journal of Economics*, Volume 117, Issue 3, August 2002, Pages 917–961, <https://doi.org/10.1162/003355302760193922>

Field, E., Pande, R., Rigol N., Schaner, S. and Moore, C. T. 2021. "On Her Own Account: How Strengthening Women's Financial Control Impacts Labor Supply and Gender Norms." *American Economic Review*, 111 (7): 2342-75.DOI: 10.1257/aer.20200705

Gilens, M. (1988). "Gender and Support for Reagan: A Comprehensive Model of Presidential Approval". *American Journal of Political Science*, 32(1), 19–49. <https://doi.org/10.2307/2111308>

Gottlieb, J. (2016) Measuring and Interpreting the Gender Gap in Political Participation. *Comparative Politics Newsletter*, 27(1), 31-27. <https://www.comparativepoliticsnewsletter.org/>

Gottlieb, J., Grossman, G., & Robinson, A. (2018). “Do Men and Women Have Different Policy Preferences in Africa? Determinants and Implications of Gender Gaps in Policy Prioritization”. *British Journal of Political Science*, 48(3), 611-636. doi:10.1017/S0007123416000053

Hanmer, Michale J and Kerem Ozan Kalkan. 2013. “Behind the curve: Clarifying the best approach to calculating predicted probabilities and marginal effects from limited dependent variable models.” *American Journal of Political Science* 57(1):263-277. <https://doi.org/10.1111/j.1540-5907.2012.00602.x>

Higgins, A., Kellstedt, P. M. (2016). “Bankers or Bankers? Exploring Gender Differences in Approval Dynamics During the Obama Presidency”. *Working Paper*.

IBGE. Pesquisa Nacional por Amostra de Domicílios Contínua. Several Years. <https://www.ibge.gov.br/estatisticas/sociais/trabalho.html>.

IBGE (2020). “Principais destaques da evolução do mercado de trabalho no Brasil. Pesquisa Nacional por Amostra de Domicílios Contínua- PNAD Contínua.

IBGE (2021). “Síntese de Indicadores Sociais: Uma análise das condições de vida da população brasileira 2021”. *Estudos e Pesquisas Informação Demográfica e Socioeconômica*; 44(1). <https://www.ibge.gov.br/estatisticas/sociais/saude/9221-sintese-de-indicadores-sociais.html?=&t=resultados>

Iversen, T. and Rosenbluth, F. Soskice, D. (2005). “Divorce and the Gender Division of Labor in Comparative Perspective”. *Social Politics: International Studies in Gender, State & Society*; 12(2); 216–242, <https://doi.org/10.1093/sp/jxi012>

Iversen, T. and Rosenbluth, F. (2006), “The Political Economy of Gender: Explaining Cross-National Variation in the Gender Division of Labor and the Gender Voting Gap”. *American Journal of Political Science*, 50: 1-19. <https://doi.org/10.1111/j.1540-5907.2006.00166.x>

Iversen, T. and Rosenbluth, F. (2008). “Work and Power: The Connection Between Female Labor Force Participation and Female Political Representation”. *Annual Review of Political Science*. 11. 10.1146/annurev.polisci.11.053106.151342.

Iversen, T., Rosenbluth, F. M., Skorge, Ø. "The Dilemma of Gender Equality: How Labor Market Regulation Divides Women by Class". *Daedalus* 2020; 149 (1): 86–99. doi: https://doi.org/10.1162/daed_a_01775

Kam., C. D. (2009). “Gender and economic voting revisited”. *Electoral Studies*; 28(4); 615-624, ISSN 0261-3794, <https://doi.org/10.1016/j.electstud.2009.05.024>.

Kamas, L., Preston, A. “Can social preferences explain gender differences in economic behavior?”. *Journal of Economic Behavior & Organization*; 2015; 116(1): 525-539, ISSN 0167-2681, <https://doi.org/10.1016/j.jebo.2015.05.017>.

Kellstedt, P. M., Peterson, D. A. M., & Ramirez, M. D. (2010). “The Macro Politics of a Gender Gap”. *The Public Opinion Quarterly*, 74(3), 477–498. <http://www.jstor.org/stable/40927727>

Kittilson, M. (2022). “Gender and Political Behavior”. *Oxford Research Encyclopedia of Politics*. <https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-71>.

Khan, S. (2016). “What Women Want: Gender Gaps in Political Preferences”. *Comparative Politics Newsletter*, 27(1), 42-48. <https://www.comparativepoliticsnewsletter.org/>

Long, J Scott and Jeremy Freese. 2014. *Regression Models for Categorical dependent Variables using Stata*. Third Edition. Stata Press.

Mize, Trenton D.; Long Doan and J Scott Long. 2019. “A general framework for comparing predictions and marginal effects across models.” *Sociological Methodology* 49(1):152-189. <https://doi.org/10.1177/0081175019852763>

Moreira, Natália P. “Três artigos sobre Eleições e Voto Econômico”. 2021. Tese (P.h.D. Political Science) Faculdade de Filosofia, Letras e Ciências Humanas, Universidade de São Paulo, São Paulo, 2021.

Prillaman, S.A., & Phillips, J. (2020). How the Labor Force is Mobilized: Patterns in Informality, Political Networks, and Political Linkages in Brazil. *The Political Economy of the BRICS Countries*, 157-191. https://doi.org/10.1142/9789811202315_0007

Reyes-Housholder, Catherine. "A Theory of Gender's Role on Presidential Approval Ratings in Corrupt Times." *Political Research Quarterly* 73, no. 3 (September 2020): 540–55. <https://doi.org/10.1177/1065912919838626>.

Smooth, W. (2006). Intersectionality in Electoral Politics: A Mess Worth Making. *Politics & Gender*, 2(3), 400-414. doi:10.1017/S1743923X06261087

Vaz, D. B., Santos, D. B., Leichsenring, A. R. (2019). "Employment Duration and Gender Inequality in Brazil: the Case of Low-Income Families". *Pesquisa e Planejamento Econômico*; 49(2), 66-96. <http://www.abep.org.br/publicacoes/index.php/anais/article/view/2995>

Verba, S., Burns, N., & Schlozman, K. L. (1997). "Knowing and Caring about Politics: Gender and Political Engagement". *The Journal of Politics*; 59(4), 1051–1072. <https://doi.org/10.2307/2998592>

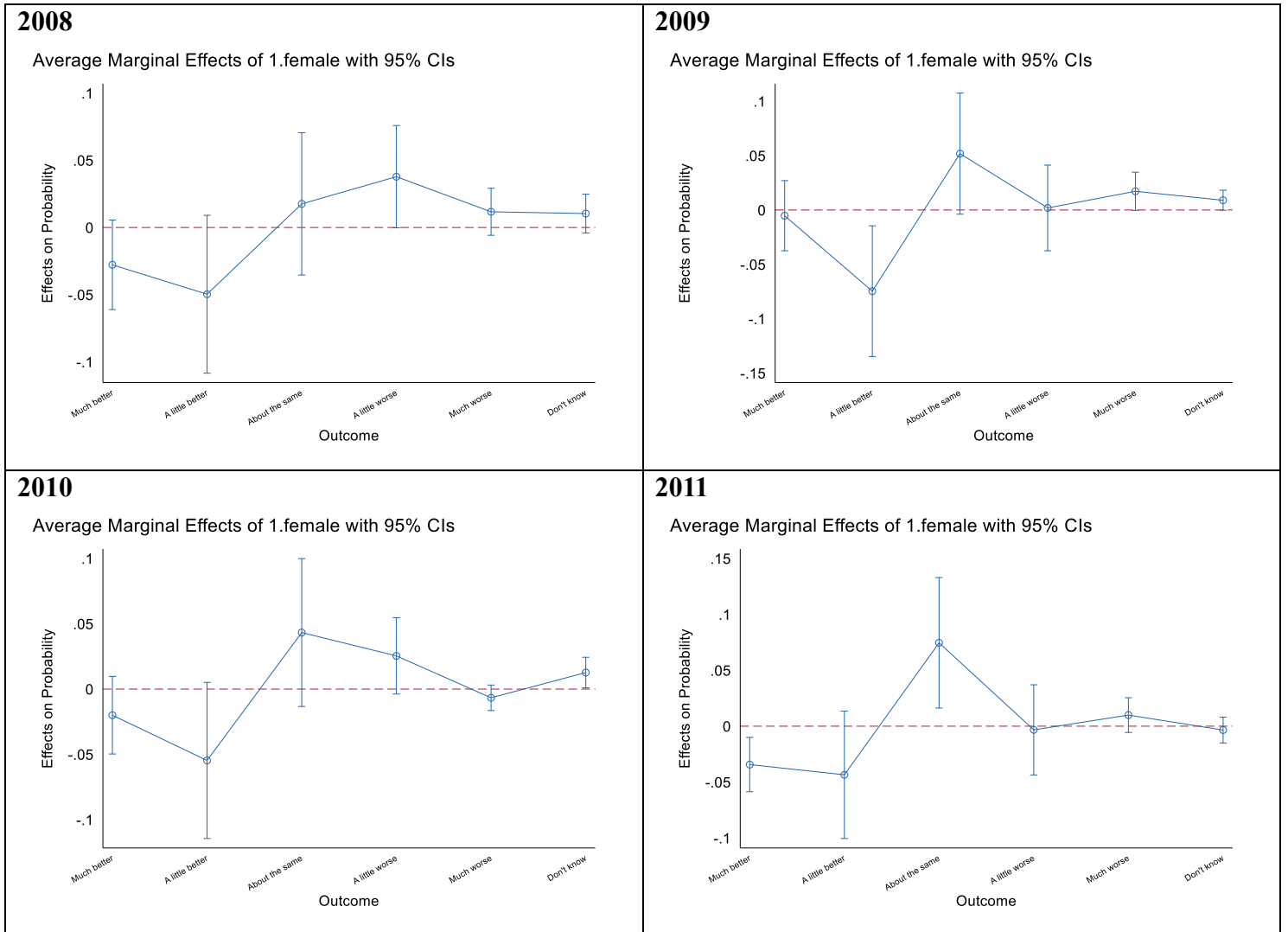
Welch, S., & Hibbing, J. (1992). "Financial Conditions, Gender, and Voting in American National Elections". *The Journal of Politics*, 54(1), 197–213. <https://doi.org/10.2307/2131650>

Wlezien, C. (1995). "The Public as Thermostat: Dynamics of Preferences for Spending". *American Journal of Political Science*, 39(4), 981–1000. <https://doi.org/10.2307/2111666>

Appendix

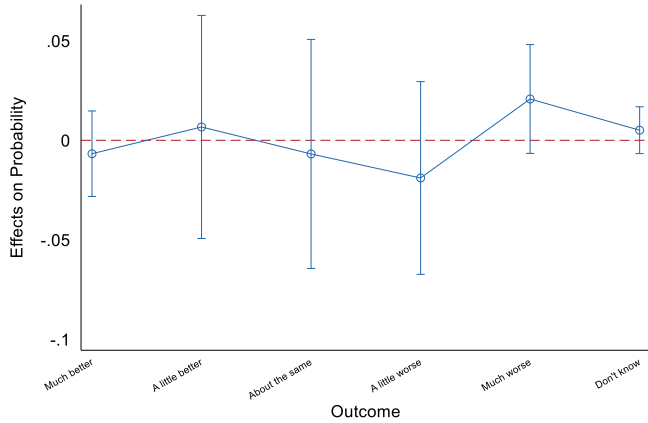
APPENDIX A – Supplementary Figures

Figure 14. Average Marginal Effect of Female on the Probabilities of Retrospective Economic Evaluations (2008, 2009, 2010, 2011, 2013, 2015, 2016, 2017, 2020, and pooled model)



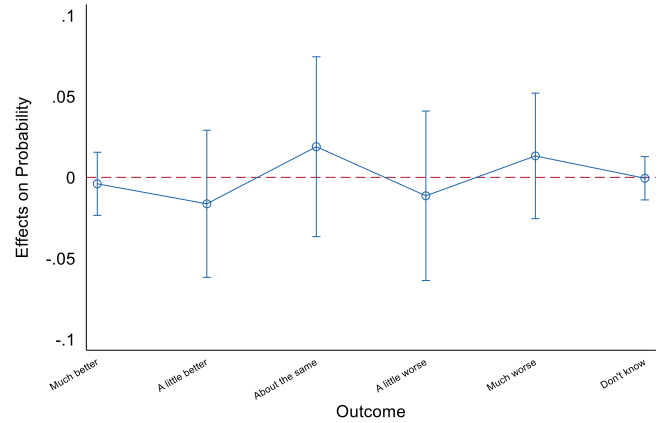
2013

Average Marginal Effects of 1.female with 95% CIs



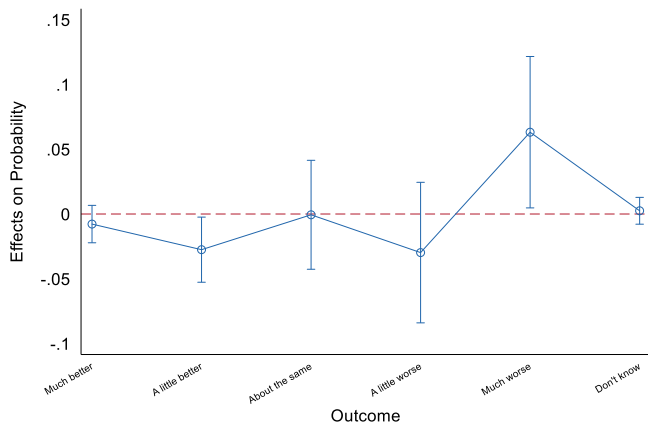
2015

Average Marginal Effects of 1.female with 95% CIs



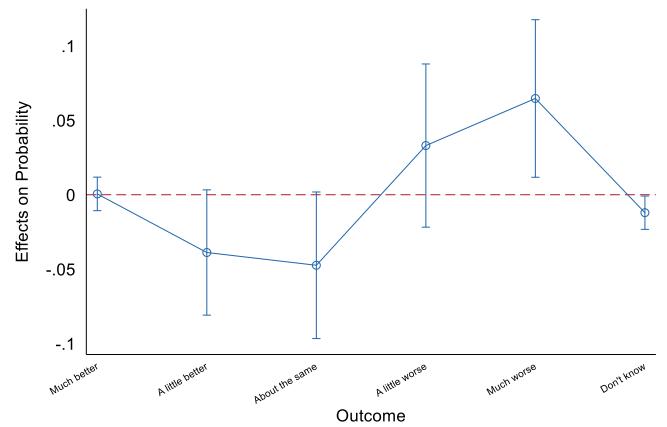
2016

Average Marginal Effects of 1.female with 95% CIs



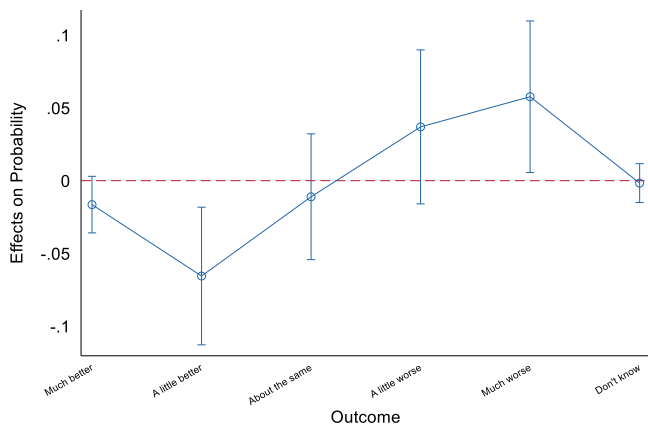
2017

Average Marginal Effects of 1.female with 95% CIs



2020

Average Marginal Effects of 1.female with 95% CIs



Pooled

Average Marginal Effects of 1.female with 95% CIs

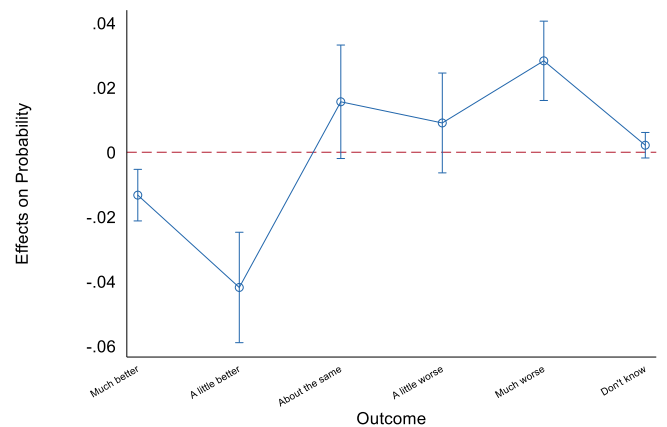
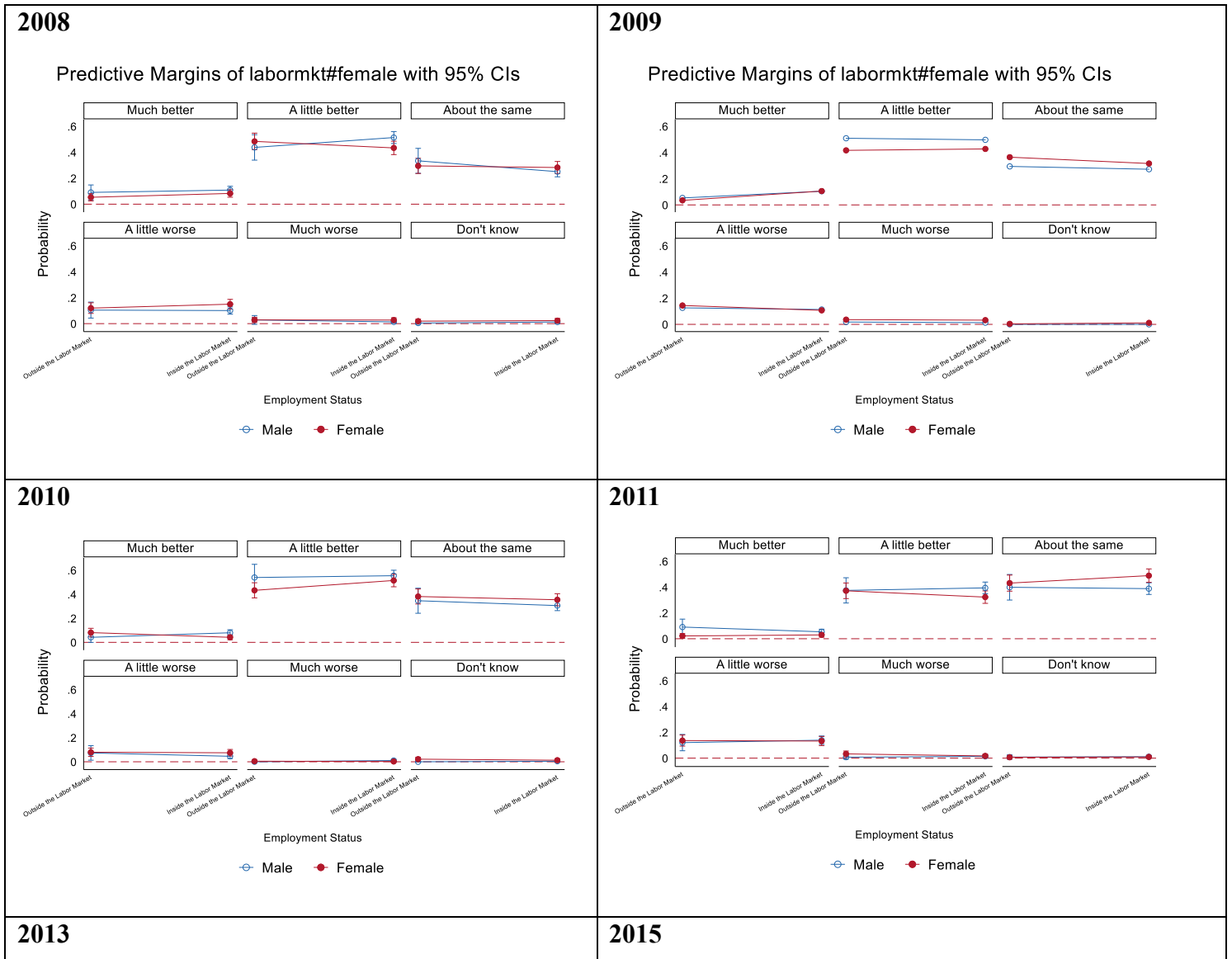
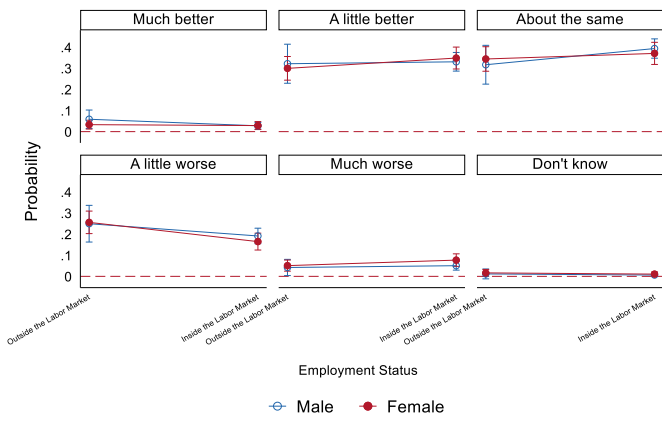


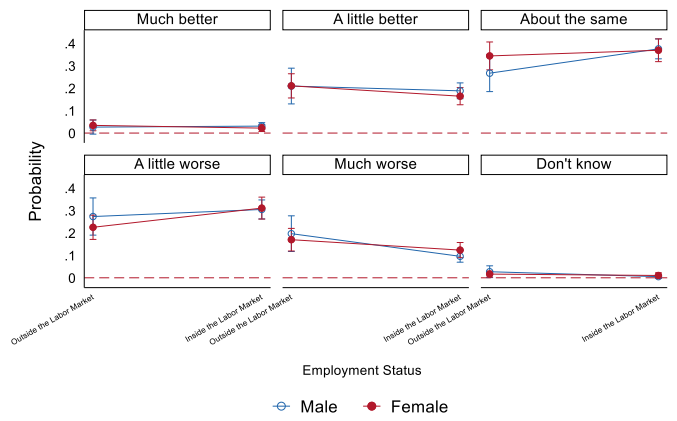
Figure 15. Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Labor Market Insertion (2010, 2011, 2013, 2015, 2016, 2017, 2020, and pooled model).



Predictive Margins of labormkt#female with 95% CIs

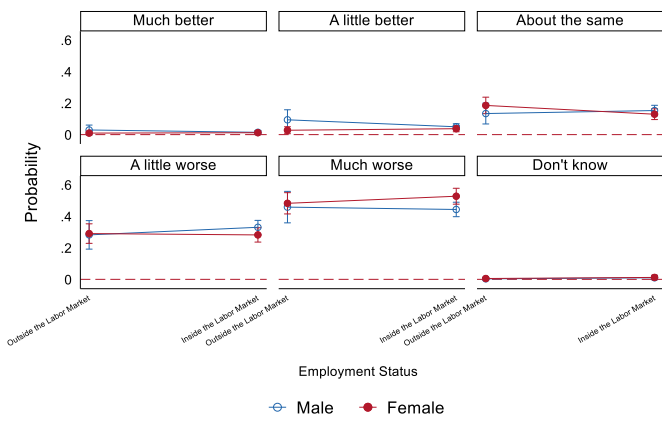


Predictive Margins of labormkt#female with 95% CIs

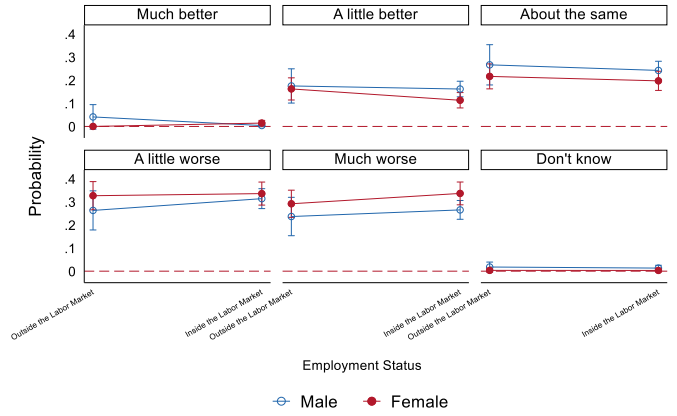


2016

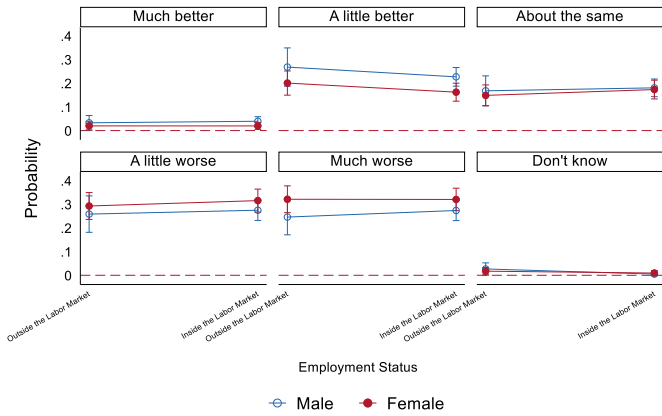
Predictive Margins of labormkt#female with 95% CIs



2017



2020



Pooled

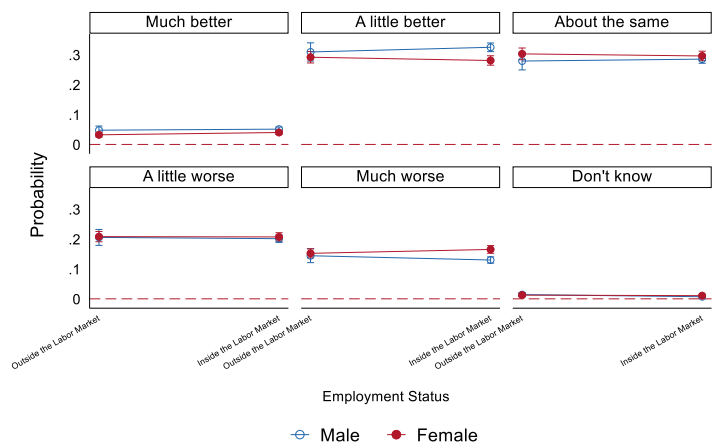
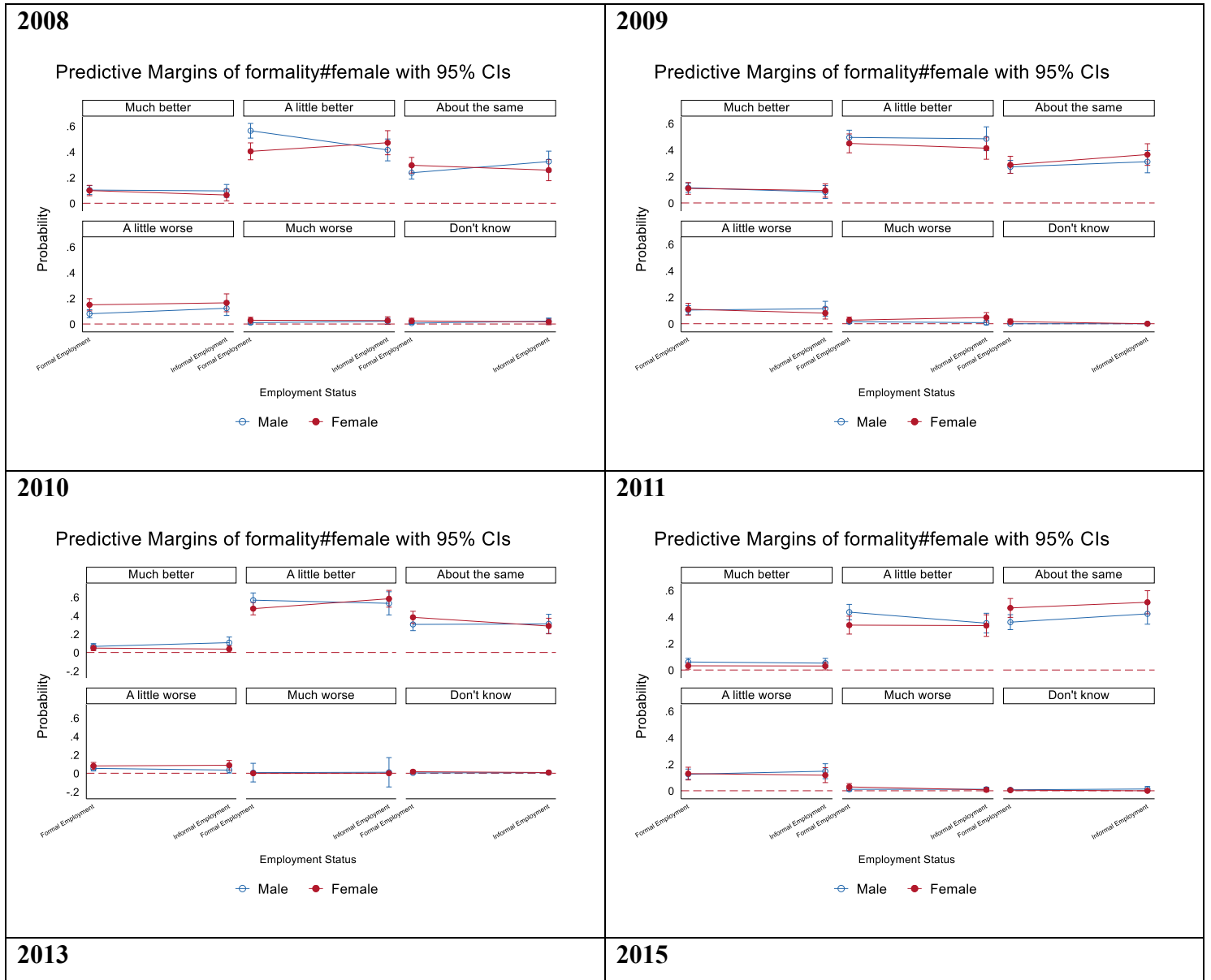
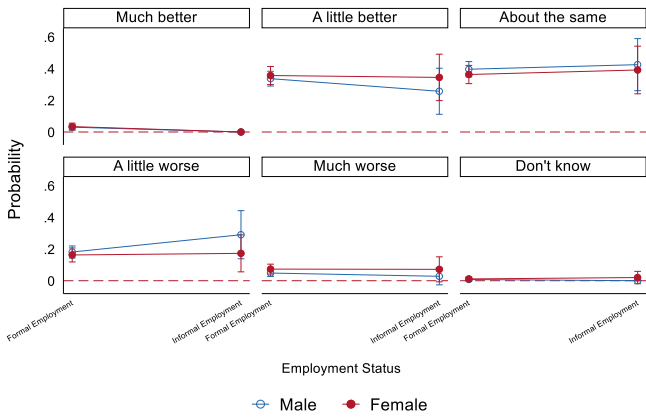


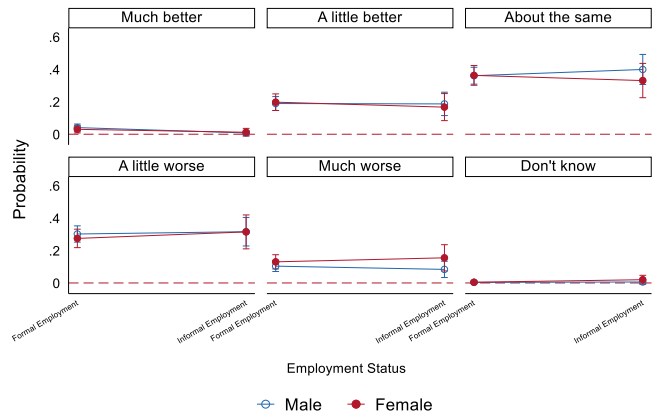
Figure 16. Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Informality (2009, 2008, 2010, 2013, 2015, 2016, 2017, 2020, and pooled model) – Informal.



Predictive Margins of formality#female with 95% CIs

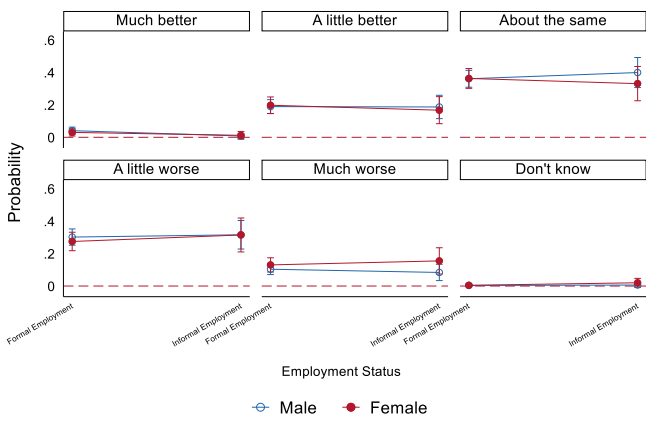


Predictive Margins of formality#female with 95% CIs



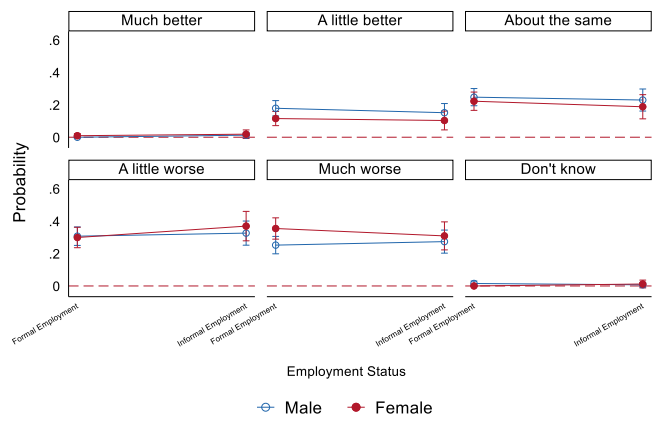
2016

Predictive Margins of formality#female with 95% CIs



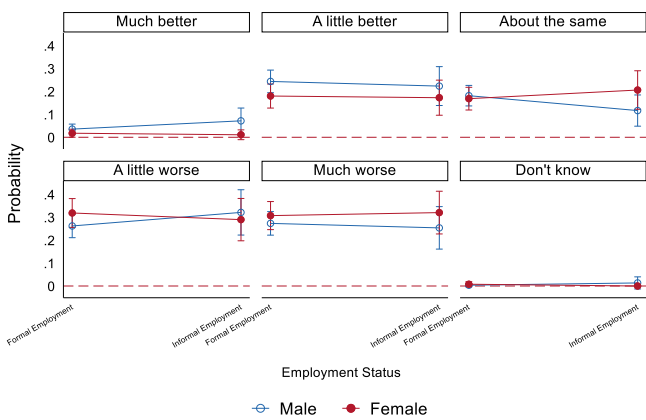
2017

Predictive Margins of formality#female with 95% CIs



2020

Predictive Margins of formality#female with 95% CIs



Pooled

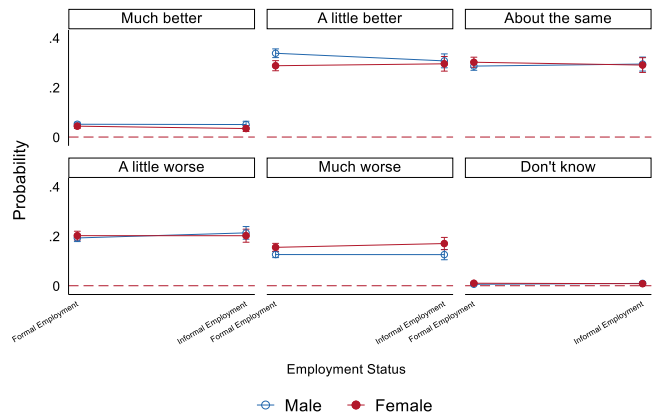
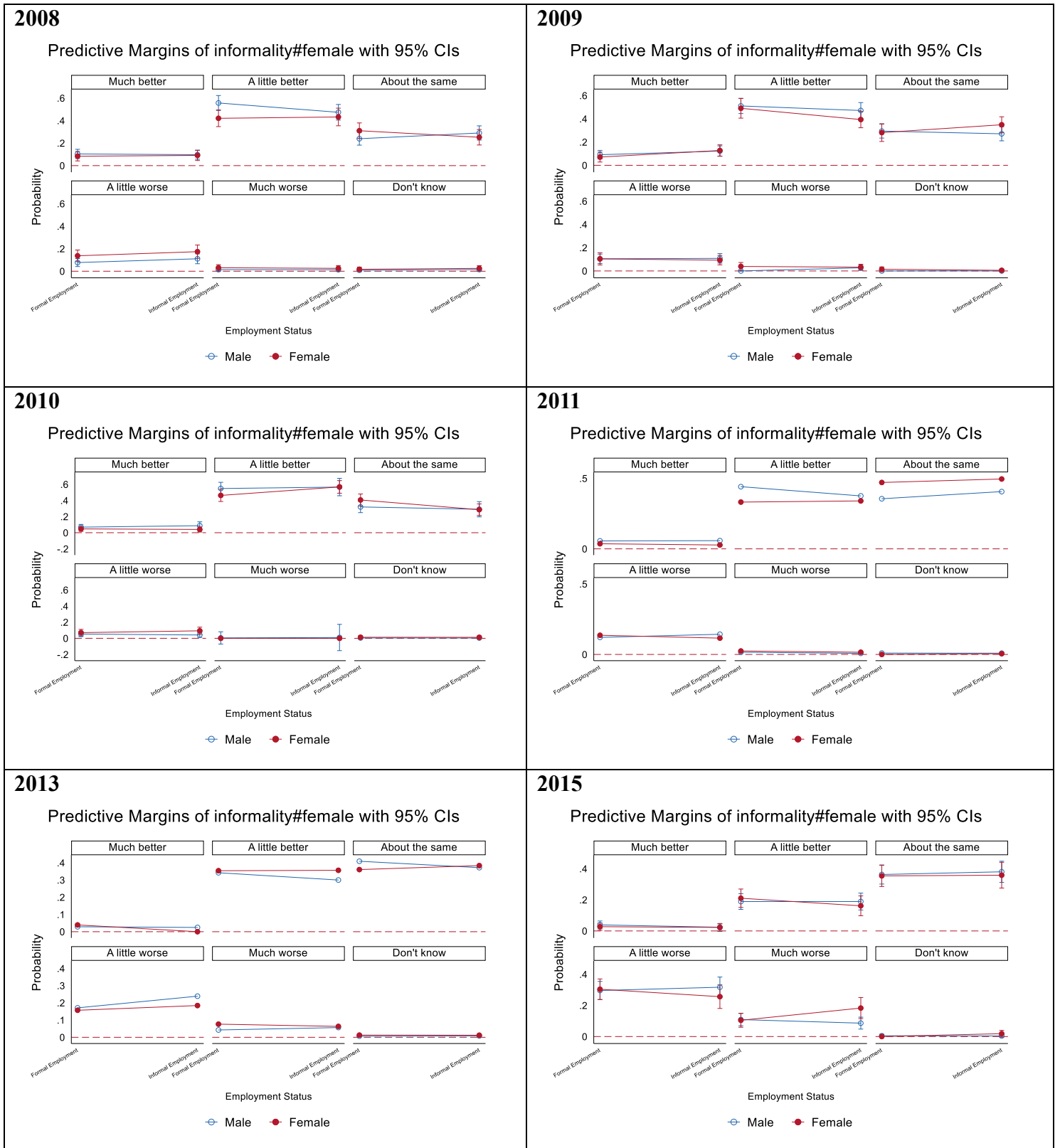
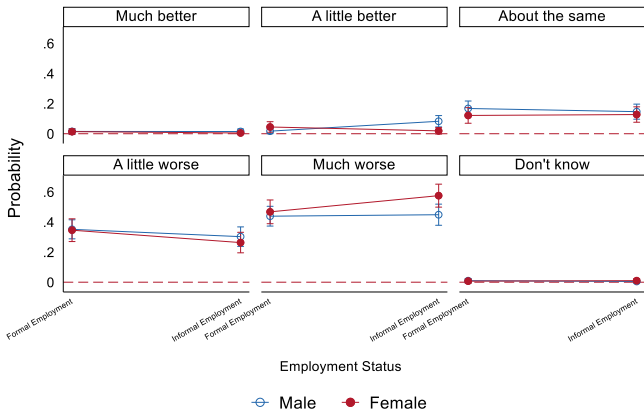


Figure 17. Average Marginal Effect of Gender on the Probabilities of Retrospective Economic Evaluations, according to Informality (2009, 2008, 2010, 2013, 2015, 2016, 2017, 2020, and pooled model) – Self-employed



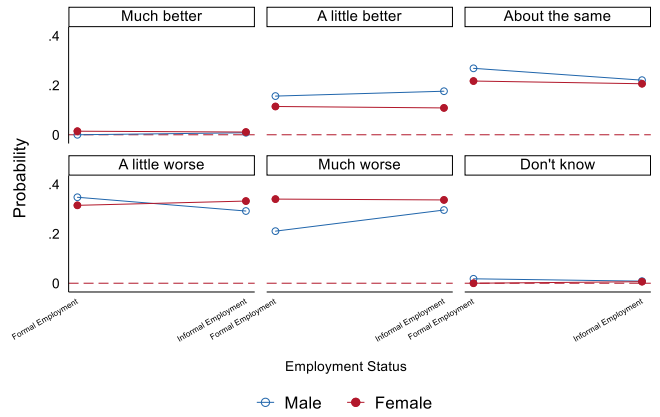
2016

Predictive Margins of informality#female with 95% CIs



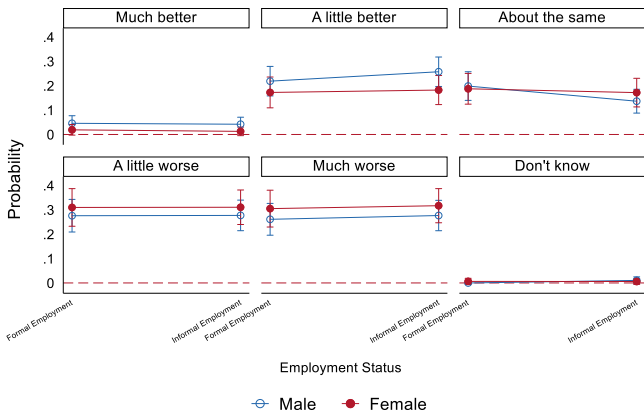
2017

Predictive Margins of informality#female with 95% CIs



2020

Predictive Margins of informality#female with 95% CIs



Pooled

Predictive Margins of informality#female with 95% CIs

