Rushing to the altar?

Same-sex marriages when rights feel at risk

Mateus Maciel[1*], Sara Parente[2], and David Zuchowski[3]

[1]*Eberhard Karls University of Tübingen, RSIT, and GLO, Tübingen, Germany*

[2]*EBS Universität für Wirtschaft und Recht, Oestrich-Winkel, Germany*

[3]*Departament d'Anàlisi Econòmica, Universitat de València, Spain*

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Abstract

The literature on same-sex marriage has primarily focused on the effects of legal recognition, overlooking the factors that influence marriage decisions among same-sex couples. This study provides novel evidence on the role of political context by analyzing how the election of a homophobic leader affects these decisions. Using the case of Brazil, we examine the effect of revealed local support for the homophobic Jair Bolsonaro in the presidential elections on same-sex marriage dynamics. To estimate the effect, we apply a difference-in-differences approach with variable treatment intensity. The results show a significant increase in same-sex marriages in municipalities with higher support for Bolsonaro during the period between the election and the start of his mandate. These findings suggest that the perceived threat of rights restrictions can play a critical role in shaping personal decisions among minority groups, even in the absence of legal changes.

JEL Classification: D10, D72, J12

Keywords: same-sex marriage, homophobia, political threat, sexual minority, LGBT

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1 Introduction

Existing research on same-sex marriage has predominantly examined the effects of legal recognition of same-sex couples (Sansone, 2019; Aksoy *et al.*, 2020; Marcén and Morales, 2022; Badgett *et al.*, 2025), overlooking determinants that influence the same-sex marriage decision.[1] At the same time, a growing body of evidence shows that political leaders can influence real-world behavior even in the absence of formal policy changes (Bursztyn *et al.*, 2020; Ajzenman *et al.*, 2023). We bring together these two strands of literature.

This paper provides novel evidence that revealed local support for a homophobic political leader can influence the marriage decisions of same-sex couples. In particular, using the case of Brazil, we examine the impact of revealed preferences for the openly homophobic Jair Bolsonaro in the presidential elections on same-sex marriage dynamics. Importantly, the Brazilian context allows us to separate the effect of the election of an openly homophobic leader from the actual threat of legal changes related to same-sex marriage, as the power to revoke the right to legally formalize same-sex marriages does not lie within the president's competence in Brazil.

The election of a homophobic leader may influence the marriage decisions of same-sex couples by altering their perceptions of social acceptance and raising concerns about potential legal changes. However, it remains unclear whether such an election actually impacts marriage behavior, and if it does, in which direction the effect goes. On one hand, widespread support for a homophobic leader could signal low societal acceptance, potentially deterring couples from marrying due to fears of discrimination or hostility. On the other hand, same-sex couples might seek to formalize their relationships as a form of legal protection or insurance, particularly if, even in the absence of a real threat of policy changes, they fear that the right to legally formalize their union could be revoked, which might lead to an increase in same-sex marriages. Furthermore, the number of same-sex marriages could increase as a political backlash against Bolsonaro's homophobic rhetoric.

[1]The commonly used term *same-sex marriages* typically refers to same-sex relationships that are legally recognized as *civil unions*. In this paper, we use both terms interchangeably. Furthermore, to distinguish between marriages between two women and those between two men, we refer to the former as lesbian marriages and the latter as gay marriages.

To estimate the impact of revealed local support for the homophobic Jair Bolsonaro during the 2018 presidential elections in Brazil, we apply a difference-in-differences approach with variable treatment intensity. Specifically, we exploit the variation in revealed preferences for Bolsonaro, a presidential candidate "proud to be homophobic" (The New York Times, 2018), across Brazilian municipalities and examine the impact of revealed local preferences for a homophobic leader affects the dynamics of same-sex marriages at the municipal level.

We find a significant increase in same-sex marriages in municipalities with higher support for Bolsonaro. This effect is stronger for lesbian than for gay marriages and is driven by a short-term surge in the period between the election and the beginning of Bolsonaro's mandate. Interestingly, we observe no decline in same-sex marriages after Bolsonaro officially took office. Instead, the elevated levels of same-sex marriages in municipalities with stronger support for Bolsonaro returned to their pre-treatment levels. This suggests that Bolsonaro's homophobic rhetoric, as reflected in revealed local preferences, triggered a short-term deviation from the long-term trend, without bringing forward marriages that would have occurred later. Since there were no changes in relevant legislation, we interpret our findings as a behavioral response to uncertainty caused by the revealed local support for a homophobic leader. Our results are robust to several sensitivity checks and placebo tests. Furthermore, we find no evidence of differential pre-treatment trends in same-sex marriages between municipalities with lower and higher support for Bolsonaro.

This article makes several contributions to the existing literature. First, we contribute to the growing body of research on LGBT issues. Most existing studies have focused on labor market outcomes, particularly discrimination and wage differentials affecting the LGBT community, and they primarily provide evidence from developed countries.[2] There is a scarce but growing body of literature providing evidence from developing countries

[2]For a comprehensive literature review, see Drydakis (2022a), which offers a meta-analysis of studies on LGBT earnings published between 2012 and 2020. Seminal and recent papers on LGBT issues from developed countries include Plug and Berkhout (2004), Black *et al.* (2007), Aksoy *et al.* (2018), Aksoy *et al.* (2019), Badgett *et al.* (2019), Sansone (2019), Aksoy *et al.* (2020), Drydakis (2022b), Marcén and Morales (2022), and Badgett *et al.* (2025).

on LGBTQ+ issues, with most studies focusing on labor market outcomes. For instance, Tampellini (2024) and Graves and Trond (2024) examine labor market outcomes for sexual minorities in Brazil. Similarly, most of the existing evidence from other developing countries also centers on labor market outcomes.[3] This paper adds to the literature by providing novel evidence from a developing country and examining the impact of the election of homophobic leaders on the behavior of sexual minorities.

Second, we contribute to the scarce literature on same-sex marriages. Previous studies have primarily focused on the effects of legal recognition of same-sex couples in developed countries.[4] Aksoy *et al.* (2020) find that the legal recognition of same-sex relationships improves public attitudes toward sexual minorities in European countries. In the context of the United States, Sansone (2019) find that the legalization of same-sex marriage led to an increased probability of employment for same-sex couples due to improved attitudes and reduced discrimination, and Marcén and Morales (2022) find that the legalization leads to a migratory inflow of gay men to those states. We contribute to this literature by providing the first evidence from a developing country setting and offering novel insights into the factors that influence the decision to formalize homosexual relationships.

Third, this paper contributes to the literature on the behavioral impact of populist rhetoric. Bursztyn *et al.* (2020) find that the rise of Donald Trump increased individuals' willingness to publicly express xenophobic views. We contribute to this literature, in particular, in the context of Brazil, a country where the populist Jair Bolsonaro has attracted global attention in recent years. For instance, Barros and Silva (2025) examine how differential exposure to labor market shocks by gender affected support for Bolsonaro. Taking a different perspective, Ajzenman *et al.* (2023) show that Bolsonaro's downplaying of the COVID-19 pandemic led to reduced social distancing behavior in pro-government localities. Our paper adds to this line of research by showing that revealed local preferences

[3]See, for example, Brown *et al.* (2019) for evidence from Chile and Uruguay; Gutierrez and Rubli (2024) from Mexico; Zanoni *et al.* (2024) from Ecuador; and Nettuno (2024) for further evidence from Chile. Moreover, Badgett *et al.* (2019) find a positive correlation between the social inclusion of the LGBTQ+ population and economic development in a cross-country study.

[4]Badgett *et al.* (2025) provides a recent review of the literature on the effects of legal access to same-sex marriage. The authors argue that the near-total lack of data on same-sex couples has hindered the analysis of same-sex marriage in developing countries.

for a populist leader influenced a deeply personal decision—the decision to marry—for homosexual couples.

Finally, we contribute to the literature by providing evidence on an under-researched topic with important policy implications. Our findings show that the perceived threat of rights restrictions, even in the absence of formal legal changes, can significantly influence personal decisions among minority groups.

The remainder of this paper is organized as follows. Section 2 provides background on same-sex marriages in Brazil and discusses Bolsonaro's homophobic rhetoric, as well as the conceptual framework. Section 3 describes the underlying data and discusses the empirical strategy. Section 4 presents and analyzes the results, emphasizing their heterogeneity and robustness. Section 5 concludes.

2 Background and conceptual framework

2.1 Legal and political context of same-sex marriages in Brazil

The Brazilian Supreme Federal Court (*Supremo Tribunal Federal, STF*) declared the bill allowing same-sex civil unions constitutional by a majority vote in 2011. In 2013, the National Council of Justice (*Conselho Nacional de Justiça*, CNJ), which is responsible for supervising the judiciary system, issued Resolution 175, mandating that notaries could not refuse to recognize civil unions or to convert civil unions into marriages between people of the same sex (Conselho Nacional de Justiça, 2013).

However, same-sex civil unions are not included in the Civil Code, which is the primary source of law in Brazil. Instead, they are governed by common law, meaning that judicial decisions regarding these matters fall under the jurisdiction of the Supreme Federal Court. Therefore, for a bill such as same-sex marriage to be approved or revoked, it must be decided by a vote among the justices of the Supreme Federal Court. Since same-sex civil unions are not governed by civil law, their legal status is not fully guaranteed, as it can change based on decisions by the Supreme Court. Additionally, changes can occur through

legislative action, which is a more complex process.[5]

The STF is composed of 11 justices who hold lifetime positions and are responsible for interpreting common law. There were three changes in the Supreme Court's composition between the beginning of the same-sex common law in 2013 and the start of Bolsonaro's tenure. These changes in the composition of the Supreme Federal Court (STF) were made by Presidents Dilma Rousseff and Michel Temer. Neither of them is considered conservative, and the justices they appointed are likely to reflect their political orientations. During his tenure, President Bolsonaro directly appointed two new justices to the Supreme Court.[6]

Notably, one of the justices Bolsonaro pointed to was André Mendonça, who, despite his religious and political background, publicly expressed support for same-sex civil unions (BBC News Brasil, 2021). This, combined with the small number of newly appointed justices, meant that Bolsonaro would be unable to shift the STF majority to overturn its prior rulings on LGBT rights during his single term. However, had he been re-elected, he would have had the opportunity to appoint new justices/footnoteFrom the end of Bolsonaro's tenure until now, there have been two changes in the composition of the Supreme Court. Therefore, if Bolsonaro had been reelected, he would have nominated two additional justices., which could have increased his chances of revoking this bill. And even though it was not possible to infer the number of justices who would retire in these years, it would still be unlikely to revoke this bill, since it would be improbable to have a high number of retired justices in four years to achieve the majority of votes.

To revoke this bill by legislative action would be more difficult. First, a bill must pass through multiple committees, including those on Human Rights and on Constitution and Justice. Following that, it must be approved by a majority vote in both the Chamber of Deputies and the Senate. If approved, the bill would be sent to the President for

[5]There were attempts to formalize these rights in the Civil Code (*Código Civil*), but failed to pass through all required legislative stages and were either archived or left pending (Câmara dos Deputados, 2007; Senado Federal, 2011).

[6]Table A1 in the Appendix shows the changes in the composition of the Brazilian Supreme Federal Court from the introduction of same-sex common law to the present.

signature.[7] This multi-step process makes legislative reversal of same-sex marriage rights extremely unlikely, making it highly improbable for the same-sex civil union to be revoked.

2.2 Bolsonaro's homophobic rhetoric and same-sex marriages

"If a gay couple came to live in my building, my property will lose value.
If they walk around holding hands, kissing, it will lose value!
No one says that out of fear of being pinned as homophobic."

June 2011, Jair Bolsonaro (The New York Times, 2018)

Jair Bolsonaro has made several public statements expressing his homophobic views. Notably, he once declared himself "proud to be homophobic" and stated that he would "rather his son die in a car accident than be gay" (The New York Times, 2018), underscoring the extreme nature of his rhetoric. The election of a such a homophobic political leader may introduce substantial uncertainty for sexual minorities and alter their perception of social acceptance. This, in turn, may influence their decision-making. However, it remains unclear whether same-sex marriages are affected, and if they are, whether the impact is positive or negative.

On the one hand, revealed local support for a homophobic leader could signal low acceptance of sexual minorities, potentially deterring same-sex couples from marrying due to fears of discrimination or hostility. On the other hand, such couples might choose to formalize their relationships as a form of legal protection or insurance against potential future legal changes. However, substantial legal changes prohibiting same-sex marriage in Brazil were highly unlikely. This would suggest that one might expect either no effect or a decrease in same-sex marriages.

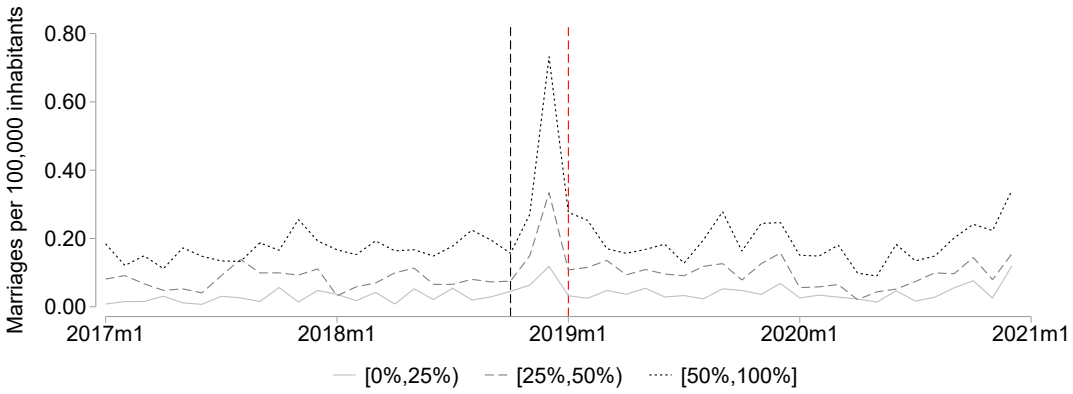
However, anecdotal evidence suggests a significant increase in the number of same-sex marriages in Brazil around the time of Bolsonaro's election, driven by heightened perceptions of a potential threat to the right to formalize such unions under his presidency

[7]The President can veto the bill, which is understandable since those who want to change the law may have divergent opinions from the President, a scenario that was not the case with Bolsonaro. Congress may override the veto with a two-thirds majority of the votes in the House and a two-thirds majority of the votes in the Senate.

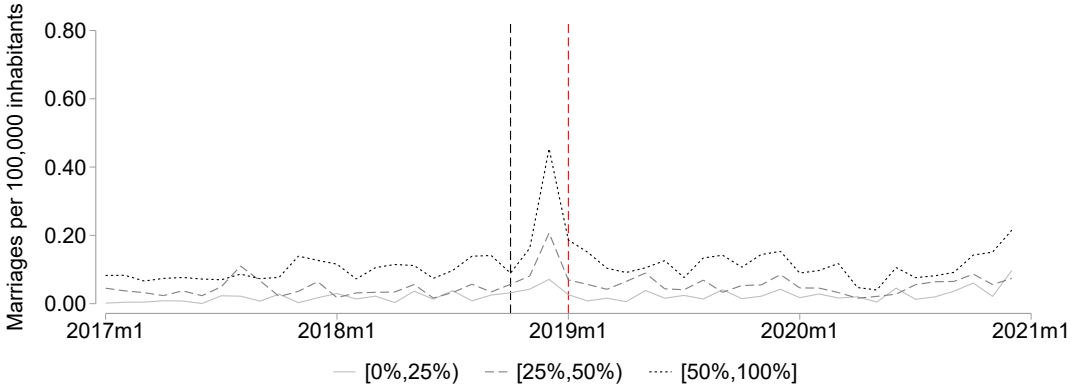
(Exame, 2019). In fact, in response to the perceived threat posed by the incoming president, group weddings for same-sex couples were organized and financially supported by NGOs (NBC News, 2018; Los Angeles Times, 2018). Furthermore, some same-sex couples chose to marry as an act of political resistance against the local support for Bolsonaro's homophobic rhetoric (El País, 2018).

The descriptive evidence presented in Figure 1 aligns with anecdotal reports and shows a sharp increase in same-sex marriages in the period between Bolsonaro's election in October 2018 and when he assumed office in January 2019.[8] Interestingly, we observe a sharper increase in lesbian marriages than in gay marriages. Most importantly, the higher the local share of votes for Bolsonaro, the greater the increase in same-sex marriages across municipalities. This pattern is consistent with same-sex couples marrying as an act of political resistance against the revealed local support for Bolsonaro, rather than out of fear of legal changes, as the latter would have affected the entire country. Furthermore, this relationship between the increase in same-sex marriages across municipalities and the intensity of local support for Bolsonaro underlines our empirical strategy described in the next section.

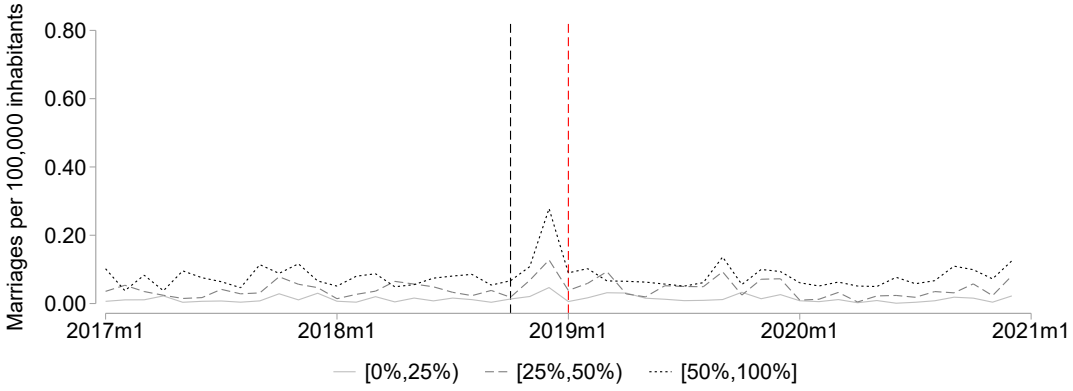
[8]While heterosexual marriages are more volatile, as indicated in Figure A1, there is no evidence of a similar jump in marriages among heterosexual couples.



(a) Same-sex



(b) Lesbian



(c) Gay

Figure 1: Number of same-sex marriages in Brazil over time

Notes: This figure shows the number of monthly marriages per 100,000 inhabitants between 2012 and 2021, by the share of votes for Bolsonaro in the first round of the 2018 presidential election. The vertical black dashed line indicates when Bolsonaro was elected president, and the red line marks the start of his mandate.

3 Methods and data

3.1 Empirical framework

We examine the impact of revealed local preferences for the homophobic Jair Bolsonaro as president of Brazil on same-sex marriages by estimating the following equation:

$$Y_{mt} = \alpha + \beta(Post_t \times B_m) + \gamma_m + \tau_t + \varepsilon_{mt}. \tag{1}$$

The outcome variable, Y_{mt}, is the number of same-sex marriages per 100,000 inhabitants occurring in municipality m, in month-year t. $Post_t$ is a binary indicator equal to 1 after the election of Bolsonaro and B_m is the share of votes for Bolsonaro in the first round of the 2018 elections.[9] γ_m and τ_t represent municipality and month-year fixed effects, respectively. ε_{mt} is the error term. In the baseline specification, we exploit revealed local preferences for the homophobic leader by using vote shares for Bolsonaro from the first round. Furthermore, we restrict our analysis to the 12 months before and after Bolsonaro's election.

By estimating equation 1, we apply a difference-in-differences approach with variable treatment intensity. Our identification relies on the assumption that, in the absence of treatment, municipalities with low and high shares of votes for Bolsonaro would have followed parallel trends in the number of same-sex marriages per 100,000 inhabitants. To assess the validity of the parallel trend assumption and examine the dynamics of the effect, we employ an event-study approach by estimating the following equation:

$$y_{mt} = \alpha + \sum_{\substack{k=-12 \\ k\neq -1}}^{12} \beta_k \theta_{t+k} \times B_m + \gamma_m + \tau_t + \varepsilon_{mt} \tag{2}$$

We obtain the event study coefficients by interacting B_m, the share of votes for Bolsonaro in the first round of the 2018 elections, with the months to treatment indicators θ_{t+k}. We exclude the pre-treatment period $k = -1$, which serves as the baseline.

[9] We use first round in the baseline results to capture the revealed preferences for homophobic president.

Identification using equations 1 and 2 relies on the unconditional parallel trends assumption. To test the robustness of our findings, we examine whether including a set of controls X_{mt}, such as GDP per capita, population density, and the density of registry offices, affects the results. These variables account for differences in economic development, urbanization, and administrative capacity, which may influence both support for Bolsonaro and the probability of same-sex marriage registrations.

3.2 Data

The dataset underlying the main analysis in this paper consists of a monthly panel of 4,904 Brazilian municipalities from October 2015 to October 2019, covering the 36 months before and after Bolsonaro's election in October 2018.[10] We construct the panel drawing on the following data sources.

Same-sex marriages. We obtain data on our outcome variable, same sex marriages, from the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*, IBGE), which provides monthly and yearly marriage statistics.

Voting data. To generate our treatment variable, we collected data on the results of the first and second rounds of the 2018 presidential elections (and, for robustness checks, also the 2022 elections) from the Superior Electoral Court (*Tribunal Superior Eleitoral*, TSE). To capture revealed preferences for a homophobic leader, we focus on the election results from the first round. Figure 2 shows the geospatial variation in the share of votes for Bolsonaro in the first round of the 2018 presidential election across Brazilian municipalities.[11]

Other data. We collect additional data, such as GDP per capita, population size, and municipality area, which we use to construct our control variables from the IBGE. We also

[10]Table A2 in the Appendix provides descriptive statistics for all variables. We drop all municipalities with missing data on same-sex marriages during the observation period considered in the main analysis. In Panel C of Table A2 we also provide descriptive statistics of additional data we use for a placebo test.

[11]Figure A2 shows the geospatial distribution of the share of votes for Bolsonaro in the second round of the 2018 presidential election across Brazilian municipalities. Our results remain robust when using this alternative vote share.

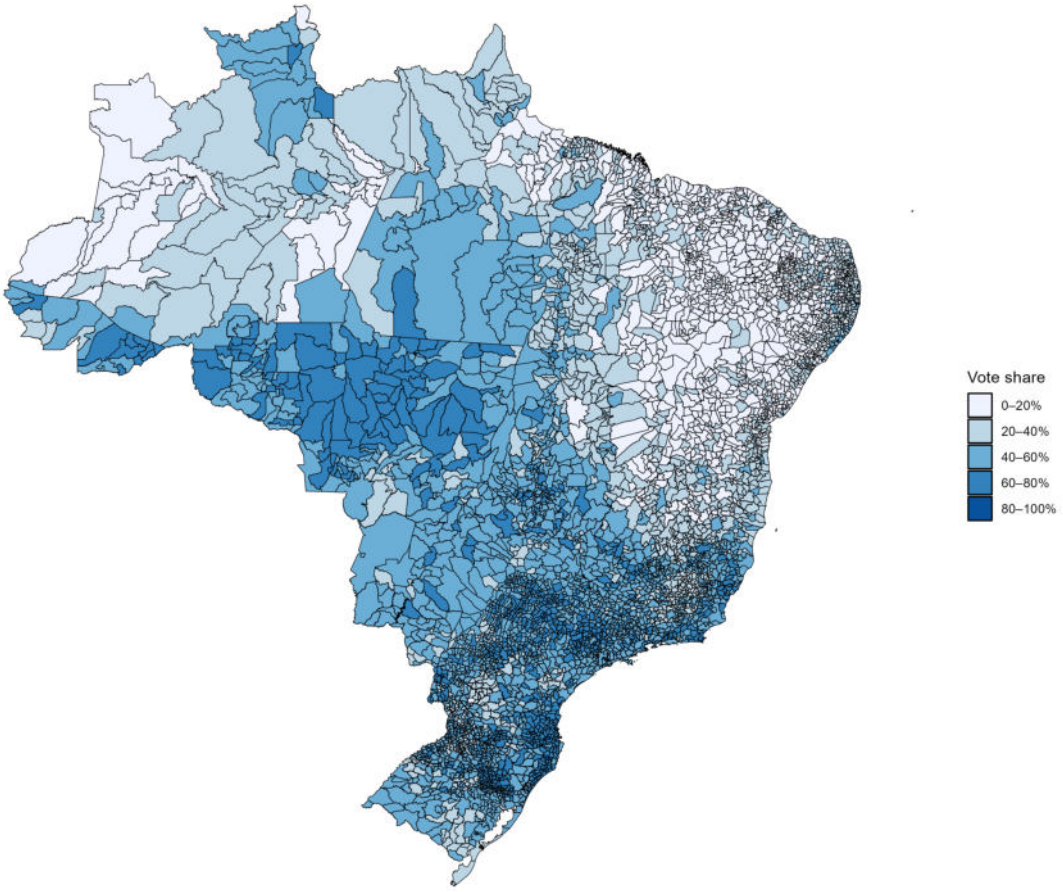


Figure 2: Share of votes for Bolsonaro

Notes: This figure shows the share of votes for Bolsonaro in the first round of the 2018 presidential election across Brazilian municipalities. The continuous variable is presented using a discrete scale for visualization purposes.

obtain information on the density of registry offices offering marriage services, by year and municipality, from the National Council of Justice (*Conselho Nacional de Justiça*, CNJ).[12]

4 Results

4.1 Votes for Bolsonaro and increase in same-sex marriages

Table 1 presents the results for the share of votes for Bolsonaro in the first round of the 2018 presidential election and the number of same-sex marriages. The first column shows that, relative to September 2018, the month before the election, a 10 percentage point higher vote share for Bolsonaro led to approximately 10% increase in the average number

[12]In Brazil, civil marriages must be registered at a *cartório* (registry office), which is not available in all municipalities, and its absence may impose costs that deter couples from getting married. We control for the density of these offices in one of our robustness checks.

of same-sex marriages during the year following his election.[13] Furthermore, columns 3 and 5 show that this increase is largely driven by the rise in lesbian marriages, while the coefficient for gay marriages is smaller and statistically insignificant. All results are robust to the inclusion of controls.

Table 1: Share of votes for Bolsonaro and same-sex marriages

	Same-sex		Lesbian		Gay	
	(1)	(2)	(3)	(4)	(5)	(6)
DiD	0.133***	0.121***	0.104***	0.095***	0.029	0.026
	(0.030)	(0.031)	(0.022)	(0.023)	(0.020)	(0.020)
Controls		✓		✓		✓
Observations	240,296	240,296	240,296	240,296	240,296	240,296
Adjusted R^2	0.024	0.024	0.016	0.016	0.015	0.015

Notes: This table presents results based on a difference-in-differences approach with varying treatment intensity. Our outcome variable is the share of same-sex marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election. Results in columns (2), (4), and (6) rely on the conditional parallel trends assumption. Controls include GDP per capita, population density, and density of registry offices. Robust standard errors are reported in parentheses.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$.

To examine whether the observed increase indeed reflects a specific effect on same-sex marriages rather than on marriages overall, we first conduct a placebo test by examining whether a similar increase occurs among heterosexual couples. Heterosexual couples' decisions to marry should not be affected by Bolsonaro's vote share, as his rhetoric specifically targets the LGBT community and is unlikely to influence the social or personal factors that typically drive marriage decisions among heterosexual couples. Table 2 shows that, although the point estimate is larger due to greater volatility in heterosexual marriages, it is statistically indistinguishable from zero. Moreover, the magnitude of the coefficient is negligible compared to that for same-sex couples. A 10 percentage point higher vote share for Bolsonaro was associated with a decrease in heterosexual marriages of less than 0.5%.

[13] A 10 p.p. increase in vote share implies $0.1 \times 0.1 = 0.01$ more same-sex marriages per 100,000. Relative to the baseline of 0.1, this is a $0.01/0.1 = 10\%$ increase.

Table 2: Placebo test: heterosexual marriages

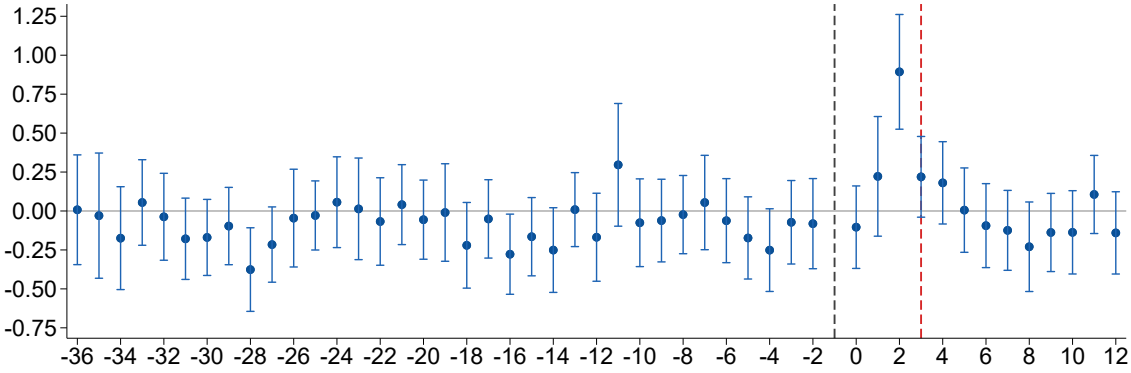
	(1)	(2)
DiD	-1.041	-0.808
	(1.139)	(1.142)
Controls		✓
Observations	122,600	122,600
Adjusted R^2	0.222	0.222

Notes: This table presents results based on a difference-in-differences approach with varying treatment intensity. Our outcome variable is the share of heterosexual marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election. Results in column (2) rely on the conditional parallel trends assumption. Controls include GDP per capita, population density, and density of registry offices. Robust standard errors are reported in parentheses.
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.001$.

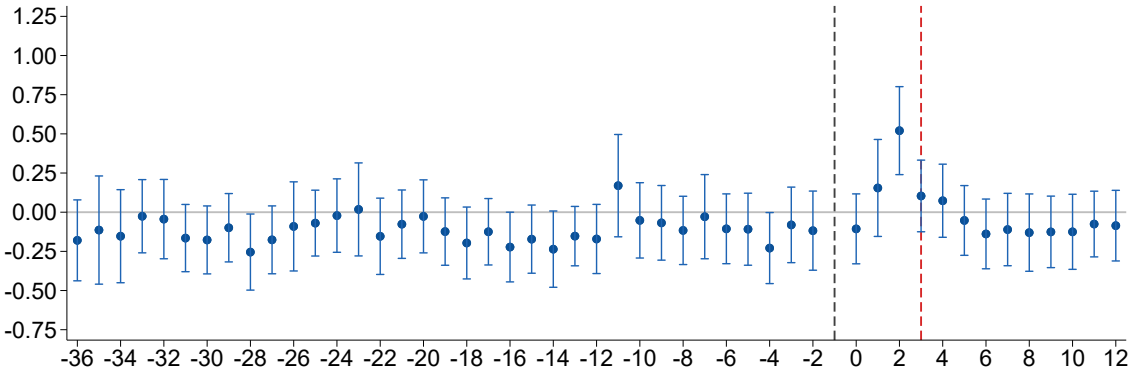
As the next step, we examine event study plots to verify the absence of pre-treatment trends and to analyze the dynamics of the effect. Figure 3 shows no evidence of pre-treatment trends in same-sex marriages. However, there is a clear and sudden jump in the number of same-sex marriages in the month just before Bolsonaro's mandate began in January 2019.[14]

The effect disappears immediately after Bolsonaro takes presidential office. This may suggest two things. First, same-sex couples may have strategically chosen to marry before the start of his mandate. Second, these were likely not simply planned marriages brought forward, since in that case we would expect to observe a subsequent decline in same-sex marriages. Instead, it appears that couples who had not previously intended to marry decided to take this step.

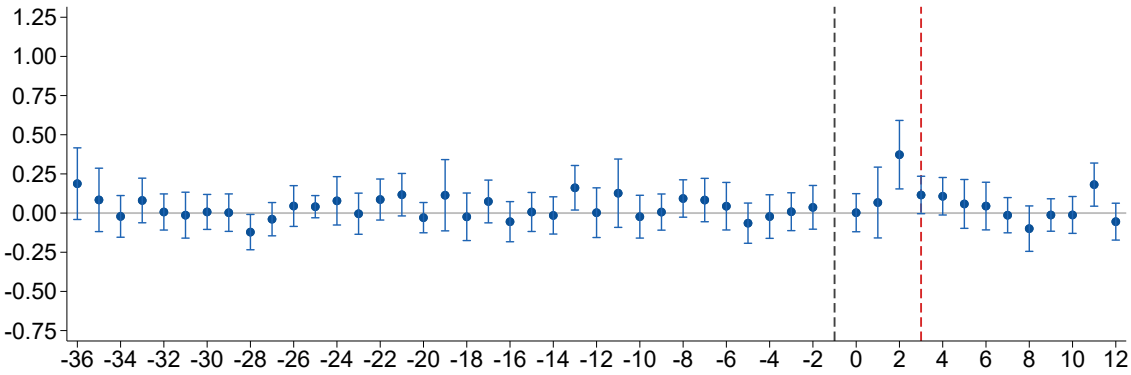
[14]This increase does not occur immediately after the election. The delay is mechanical, since a date at the registry office must be scheduled in advance.



(a) Same-sex



(b) Lesbian



(c) Gay

Figure 3: Share of votes for Bolsonaro and same-sex marriages: Event study

Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate. We conduct joint F-tests on all pre-treatment coefficients. The corresponding p-values are 0.0757 in Panel (a), 0.0768 in Panel (b), and 0.2609 in Panel (c), none of which are statistically significant at the 5% level.

Given the short-term nature of the effect, the event study reveals its true magnitude. Specifically, relative to September 2018, which is the month preceding the election, a 10 percentage point higher vote share for Bolsonaro is associated with an approximately 90 percent increase in the average number of same-sex marriages during the month immediately before the start of his presidential mandate.[15] This surge appears to be primarily driven by an increase in lesbian marriages, although the event study also shows a smaller yet statistically significant effect among gay marriages.

Taken together, the results show that Bolsonaro's election triggered a strong behavioral response among same-sex couples. In particular, the magnitude of the effect suggests that anticipation of his presidency significantly influenced the decision of same-sex couples to enter into a formal union. In the following section, we examine the robustness of the results.

4.2 Robustness checks

Conditional parallel trends. Since our baseline results rely on the unconditional parallel trends assumption, we first examine whether the results hold under the parallel trends assumption conditional on control variables. Figure A3 in the Appendix shows that our results remain robust after controlling for GDP per capita, population density, and the density of registry offices.

Alternative treatment definition. We examine whether our results are robust to an alternative treatment definition. In the baseline specification, we use the share of votes for Bolsonaro from the first round of the presidential election on October 7, 2018, as these reflect local preferences for a homophobic candidate. For robustness, Figure A4 in the Appendix shows the results when using the share of votes for Bolsonaro from the second round, held on October 28, 2018, when voters often select the candidate they consider to be the more acceptable or less unfavorable option, rather than their preferred candidate. While the point estimates are slightly lower for the total number of homosexual marriages

[15] A 10 p.p. increase in vote share implies $0.1 \times 0.9 = 0.09$ more same-sex marriages per 100,000. Relative to the baseline of 0.1, this is a $0.09/0.1 \approx 90\%$ increase.

and for lesbian marriages, the results remain highly statistically significant, and the overall findings hold.

Large versus small municipalities. As the next step, we examine whether the observed effect could be driven by very large cities. To do so, we exclude all municipalities with more than 500,000 inhabitants and present the results in Figure A5 in the Appendix. The results are nearly identical to our baseline estimates, clearly indicating that large cities are not driving the findings. As an additional test, Figure A6 presents results for a sample restricted to municipalities with more than 500,000 inhabitants. We find no evidence of any effect on same-sex marriages in this subsample. This suggests that in large urban environments, the revealed preference for a homophobic leader does not have a measurable impact on same-sex marriage rates. One possible explanation is that these areas, even if they vote for Bolsonaro, tend to be more socially progressive. A further explanation could be that the diversity within large cities allows same-sex couples to live in socially progressive neighborhoods and are therefore less affected by the overall political preferences of the municipality.

Municipalities with extreme levels of support for Bolsonaro. We examine whether the results are driven by municipalities with extremely low or extremely high shares of votes for Bolsonaro. In Figure A7 in the Appendix, we show the results after dropping all municipalities where the share of votes for Bolsonaro was higher than 80%, and in Figure A8, after dropping those where it was lower than 20%. Taken together, our baseline results are not driven by municipalities with extremely low or high support for Bolsonaro.

Leave-one-out analysis. We test whether our results are driven by any specific region of Brazil by performing a leave-one-out analysis, excluding each of the country's five regions in separate estimations. Figures A9 to A13 in the Appendix present the results after excluding municipalities from the North, Northeast, Central-West, Southeast, and South regions, respectively. The effect on lesbian marriages becomes statistically insignificant when we exclude municipalities from Southeast Brazil, but the overall effect remains

positive and statistically significant. Overall, we find no evidence that the results are driven by any single region.

2022 presidential elections. As a final check, we run a placebo test using the 2022 presidential elections instead of the 2018 elections. In the 2022 election, Bolsonaro ran again and faced the left-wing candidate and former President Lula da Silva as his main opponent. Since local preferences for the homophobic Bolsonaro had already been apparent in the previous election, and no relevant legislative changes were enacted during his mandate, we do not expect to find any effect in this election if our results are indeed driven by the initial demonstration of preferences for a homophobic leader. Figures A14 and A15 show the results of the first and second rounds of the elections, respectively. There is clearly no increase in same-sex marriages after the election of Lula da Silva as president of Brazil in places with a higher vote share for Bolsonaro. This suggests that the revealed local preferences for the homophobic leader are indeed behind the increase in same-sex marriages following Bolsonaro's election in 2018. In fact, the number of same-sex marriages appears to decrease after Lula da Silva took over the mandate, suggesting a reduced need for political backlash.

5 Concluding remarks

This paper provides novel evidence on how the election of a homophobic leader affects marriage decisions among same-sex couples. We exploit variation in revealed local support for Jair Bolsonaro during Brazil's 2018 presidential election to analyze changes in same-sex marriages. We find that a 10 percentage point higher share of votes for Bolsonaro is associated with an increase of about 90% in same-sex marriages in the month before the start of his presidential mandate.

This rapid and substantial surge in same-sex marriages occurred despite the unlikely prospect of any legal changes affecting same-sex marriage. This suggests that the rhetoric and electoral success of openly homophobic leaders can influence life choices among sexual minorities, even when formal laws are unlikely to change. Taken together, this underscores

that political leadership and public sentiment play key roles in shaping demographic behavior among minority groups, highlighting the importance of political and social inclusiveness beyond formal legal protections.

References

Ajzenman, N., Cavalcanti, T. and Da Mata, D. (2023). More than words: Leaders' speech and risky behavior during a pandemic. *American Economic Journal: Economic Policy*, **15** (3), 351–371.

Aksoy, C. G., Carpenter, C. S., De Haas, R. and Tran, K. D. (2020). Do laws shape attitudes? Evidence from same-sex relationship recognition policies in Europe. *European Economic Review*, **124**, 103399.

—, — and Frank, J. (2018). Sexual orientation and earnings: New evidence from the United Kingdom. *ILR Review*, **71** (1), 242–272.

—, —, — and Huffman, M. L. (2019). Gay glass ceilings: Sexual orientation and workplace authority in the UK. *Journal of Economic Behavior & Organization*, **159**, 167–180.

Badgett, L., Waaldijk, K. and van der Meulen Rodgers, Y. (2019). The relationship between LGBT inclusion and economic development: Macro-level evidence. *World Development*, **120**, 1–14.

Badgett, M. L., Carpenter, C. S., Lee, M. J. and Sansone, D. (2025). A review of the effects of legal access to same-sex marriage. *Journal of Policy Analysis and Management*, **44** (1), 266–294.

Barros, L. and Silva, M. S. (2025). Economic shocks, gender, and populism: Evidence from Brazil. *Journal of Development Economics*, **174**, 103412.

BBC News Brasil (2021). O que esperar de André Mendonça no STF após aprovação no Senado. https://www.bbc.com/portuguese/brasil-59389598, accessed on: May 28, 2025.

Black, D. A., Sanders, S. G. and Taylor, L. J. (2007). The economics of lesbian and gay families. *Journal of Economic Perspectives*, **21** (2), 53–70.

Brown, C., Contreras, D. and Schmidt, L. (2019). Sexual orientation and labor force participation: findings from Chile and Uruguay. *Feminist Economics*, **25** (2), 90–115.

Bursztyn, L., Egorov, G. and Fiorin, S. (2020). From extreme to mainstream: The erosion of social norms. *American Economic Review*, **110** (11), 3522–3548.

Conselho Nacional de Justiça (2013). Resolução nº 175/2013: Dispõe sobre a habilitação, celebração de casamento civil, ou de conversão de união estável em casamento, entre pessoas do mesmo sexo.

Câmara dos Deputados (2007). Projeto de Lei nº 580/2007: Altera a Lei nº 10.406, de 10 de janeiro de 2002 – Código Civil, para dispor sobre o contrato civil de união homoafetiva.

Drydakis, N. (2022a). Sexual orientation and earnings: A meta-analysis 2012–2020. *Journal of Population Economics*, **35**, 409–440.

— (2022b). Sexual orientation discrimination in the labor market against gay men. *Review of Economics of the Household*, **20** (3), 1027–1058.

El País (2018). Casamentos homossexuais como resistência a Bolsonaro. https://brasil.elpais.com/brasil/2018/11/14/politica/1542216213_918450.html, accessed on: May 28, 2025.

Exame (2019). Número de casamentos LGBT cresceu 340% após eleição de Bolsonaro. https://exame.com/brasil/casamento-lgbt-salta-60-em-2018-novembro-e-dezembro-lideram-registros/, accessed on: May 28, 2025.

Graves, J. and Trond, C. (2024). Employment discrimination and labor market protections for sexual minorities in Brazil. *Labour Economics*, **90**, 102548.

Gutierrez, E. and Rubli, A. (2024). LGBT+ persons and homophobia prevalence across job sectors: Survey evidence from Mexico. *Labour Economics*, **87**, 102500.

Los Angeles Times (2018). Fearful that the president will change the law, same-sex couples in Brazil rush to the altar. https://www.latimes.com/world/mexico-americas/la-fg-brazil-same-sex-marriage-20181214-story.html, accessed on: May 28, 2025.

Marcén, M. and Morales, M. (2022). The effect of same-sex marriage legalization on interstate migration in the USA. *Journal of Population Economics*, **35** (2), 441–469.

NBC News (2018). Gay Brazilians rush to wed before 'homophobic' president-elect takes office. https://www.nbcnews.com/feature/nbc-out/gay-brazilians-rush-wed-homophobic-president-elect-takes-office-n951066, accessed on: May 28, 2025.

Nettuno, L. (2024). Gender identity, labor market outcomes, and socioeconomic status: Evidence from Chile. *Labour Economics*, **87**, 102487.

Plug, E. and Berkhout, P. (2004). Effects of sexual preferences on earnings in the Netherlands. *Journal of Population Economics*, **17**, 117–131.

Sansone, D. (2019). Pink work: Same-sex marriage, employment and discrimination. *Journal of Public Economics*, **180**, 104086.

Senado Federal (2011). Projeto de Lei do Senado nº 612/2011: Altera os arts. 1.723 e 1.726 do Código Civil, para permitir o reconhecimento legal da união estável entre pessoas do mesmo sexo.

Tampellini, J. (2024). Latin American pride: Labor market outcomes of sexual minorities in Brazil. *Journal of Development Economics*, **167**, 103239.

The New York Times (2018). Brazil's President-Elect Jair Bolsonaro's Most Controversial Quotes. https://www.nytimes.com/2018/10/28/world/americas/brazil-president-jair-bolsonaro-quotes.html, accessed on: April 11, 2025.

Zanoni, W., Hernández, H., Zambrano, O. and Quiroz, G. (2024). Discrimination against lesbian and gay job seekers: An artefactual field experiment in urban Ecuador. *Labour Economics*, **88**, 102531.

Appendix

(intended for online publication)

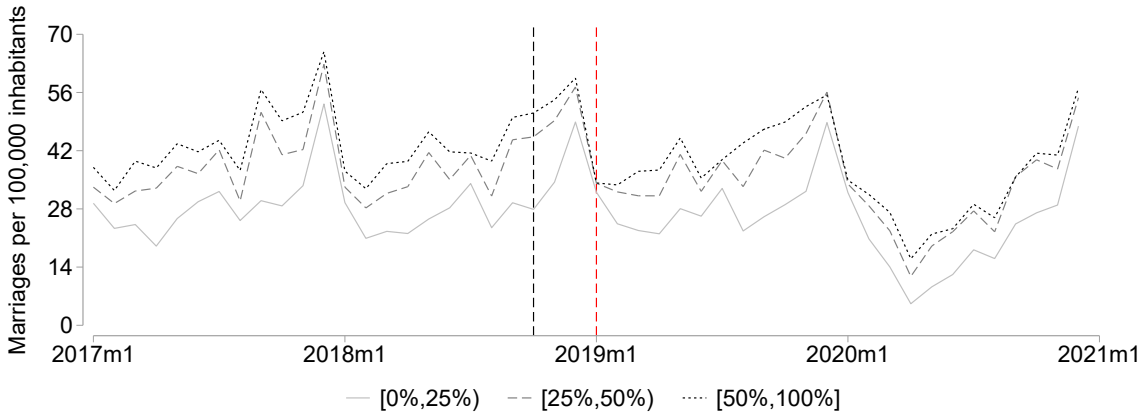


Figure A1: Number of heterosexual marriages in Brazil over time

Notes: This figure shows the number of monthly marriages per 100,000 inhabitants between 2012 and 2021, by the share of votes for Bolsonaro in the first round of the 2018 presidential election. The vertical black dashed line indicates when Bolsonaro was elected president, and the red line marks the start of his mandate.

Table A1: Supreme Court Justices Composition Changes

Name of the Justices when the same-sex bill was approved	**Voted in favor**	**Retired**	**Current in place**	**Nominated by left-wing President**
Cezar Peluso	✓	✓	Alexandre de Moraes since 2017	Temer
Celso de Mello	✓	✓	Nunes Marques since 2020	X (Bolsonaro)
Marco Aurélio	✓	✓	André Mendonça since 2021	X (Bolsonaro)
Ellen Gracie	✓	✓	Flávio Dino since 2024	✓ (Lula)
Gilmar Mendes	✓			
Ayres Britto	✓	✓	Luis Roberto Barroso since 2013	✓ (Dilma)
Joaquim Barbosa	✓			
Ricardo Lewandowski	✓			
Cármen Lúcia	✓	✓	Cristiano Zanin since 2023	✓ (Lula)
Luiz Fux	✓			
Dias Toffoli	abstained			

Notes: Four justices who voted in favor remained. One who abstained also remained. Three justices were nominated by a left-wing president, indicating that they would likely not revoke the bill. In addition to that, despite Temer not being considered a left-wing politician, the justice who was appointed by him, Alexandre De Moraes, is often associated with the left-wing political spectrum.

Table A2: Summary Statistics

Panel A: Oct. 2015 - Oct. 2019 (pooled)	N	Mean	SD	Min	Max
Marriages (per 100,000 inhabitants)					
Same-sex	240,296	0.111	1.140	0.00	102.00
Lesbian	240,296	0.063	0.821	0.00	81.00
Gay	240,296	0.048	0.781	0.00	102.00
Straight	240,296	38.754	44.231	0.00	1,787.00
Controls					
GDP per capita (R$)	240,296	23,103.59	23,048.90	3,805.00	582,655.00
Population density	240,296	130.36	658.48	0.00	14,208.00
Registry office density	240,296	6.92	11.00	0.00	127.00

Panel B: September 2018 (baseline)					
Marriages (per 100,000 inhabitants)					
Same-sex	4,904	0.105	1.042	0.00	48.00
Lesbian	4,904	0.071	0.917	0.00	48.00
Gay	4,904	0.035	0.474	0.00	17.00
Straight	4,904	42.423	42.223	0.00	730.00
Controls					
GDP per capita (R$)	4,904	24,065.36	25,263.79	4,960.00	582,655.00
Population density	4,904	131.02	662.83	0.00	14,007.00
Registry office density	4,904	6.69	11.01	0.00	93.00

Panel C: Oct. 2021 - Oct. 2023 (pooled)	N	Mean	SD	Min	Max
Marriages (per 100,000 inhabitants)					
Same-sex	122,600	0.195	1.456	0.00	99.00
Lesbian	122,600	0.121	1.132	0.00	65.00
Gay	122,600	0.073	0.902	0.00	99.00
Straight	122,600	35.064	41.780	0.00	2,518.00
Controls					
GDP per capita (R$)	14,712	34,417.11	42,550.51	5,732.00	920,834.00
Population density	73,560	131.06	653.39	0.00	14,593.00
Registry office density	73,560	19.53	20.07	0.00	216.00

Notes: This table presents summary statistics. Panel A covers Oct. 2017–Oct. 2019 (main analysis). Panel B shows values for September 2018, one month before the 2018 presidential election. Panel C covers Oct. 2021–Oct. 2023 (placebo test based on the 2022 election). The number of observations for the control variables varies across panels due to data availability. In particular, data on population and registry offices are available only up to 2022, while municipality-level GDP data is available only up to 2021.

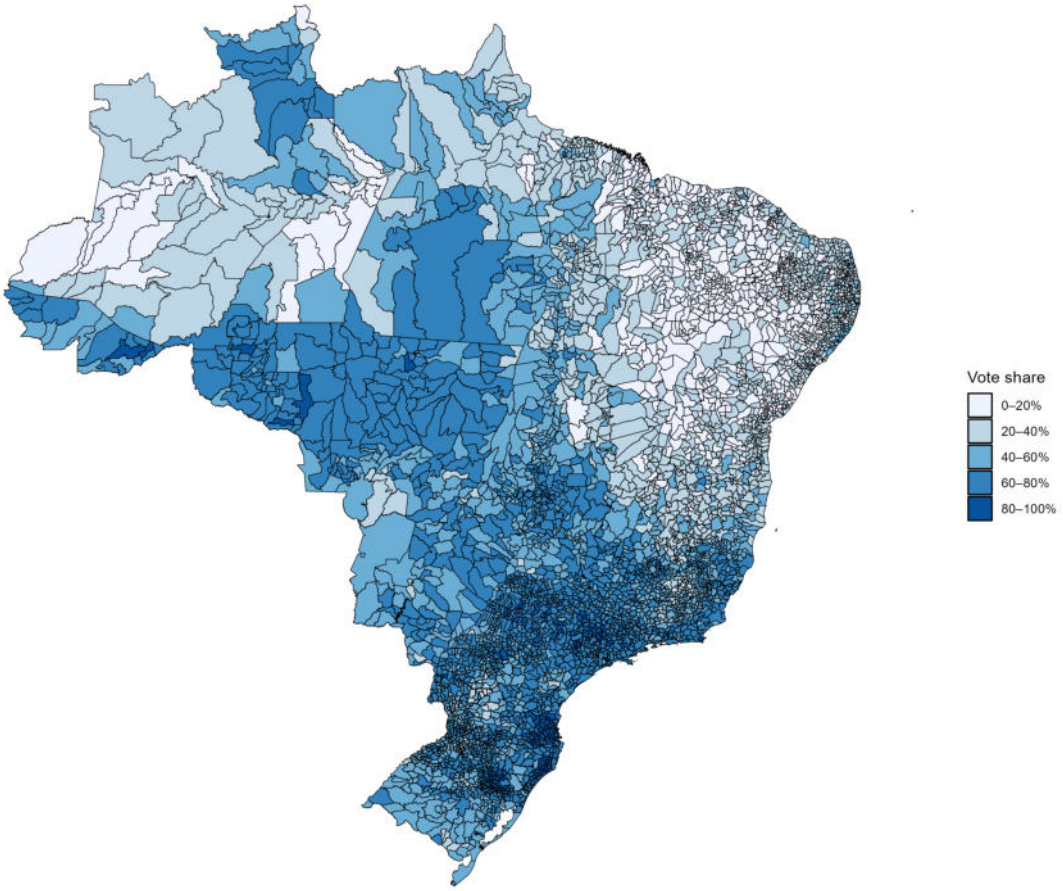
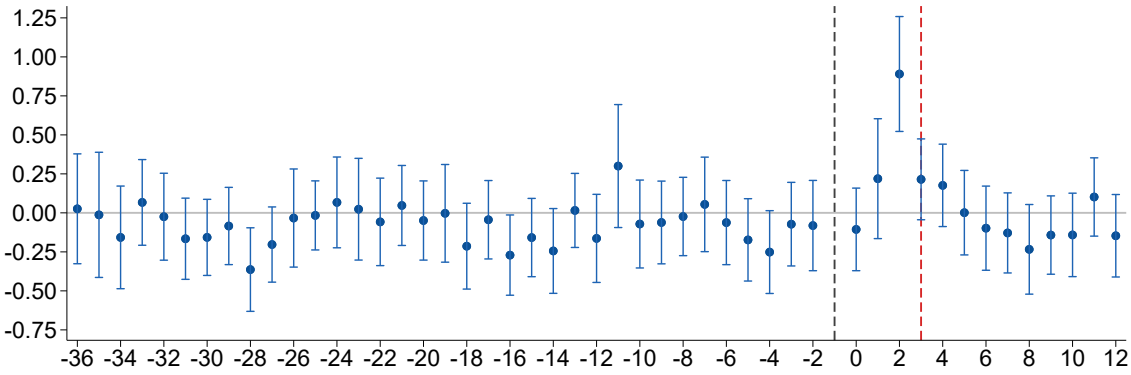
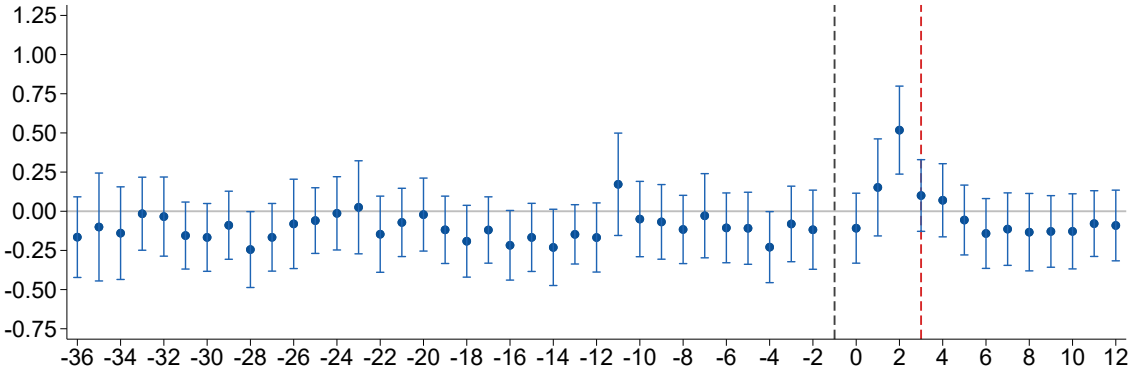


Figure A2: Share of votes for Bolsonaro: second round

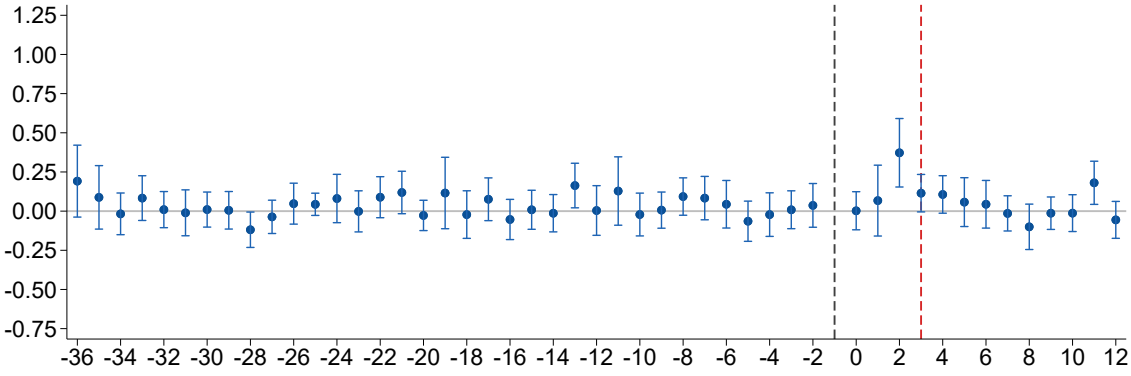
Notes: This figure shows the share of votes for Bolsonaro in the second round of the 2018 presidential election across Brazilian municipalities. The continuous variable is presented using a discrete scale for visualization purposes.



(a) Same-sex



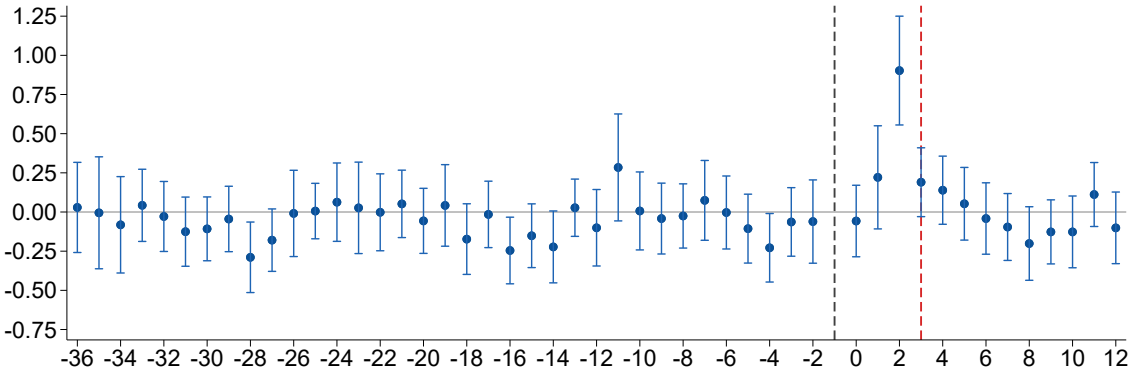
(b) Lesbian



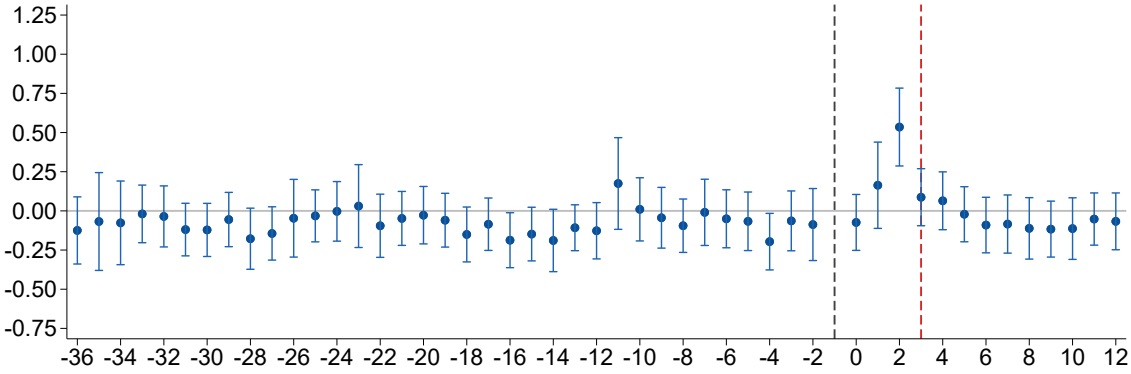
(c) Gay

Figure A3: Robustness: Baseline event study with controls

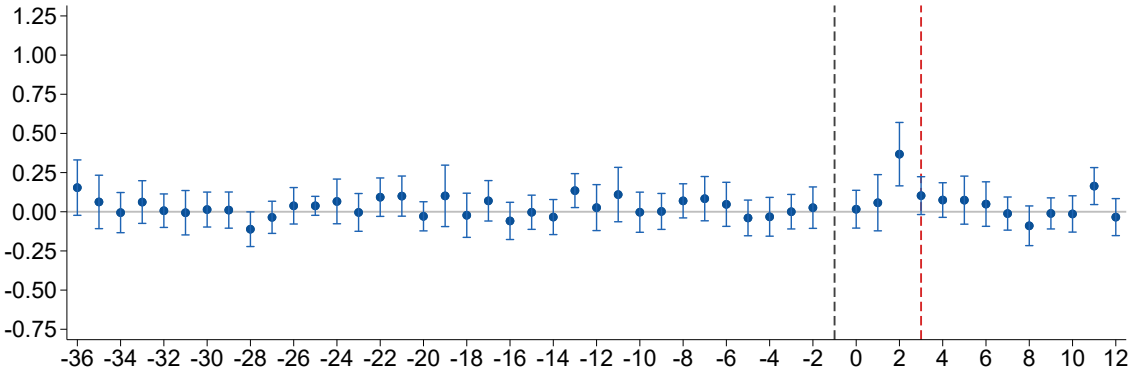
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election. Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate. We conduct joint F-tests on all pre-treatment coefficients. The corresponding p-values are 0.1014 in Panel (a), 0.0794 in Panel (b), and 0.2915 in Panel (c), none of which are statistically significant at the 5% level.



(a) Same-sex



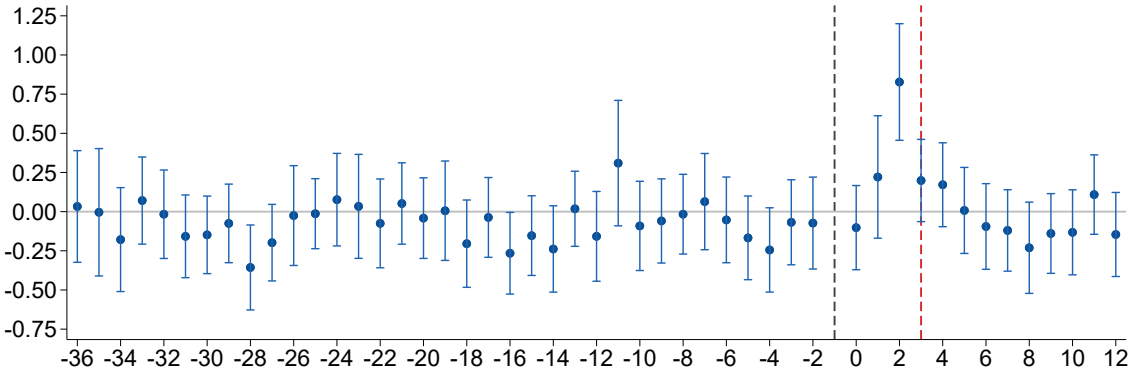
(b) Lesbian



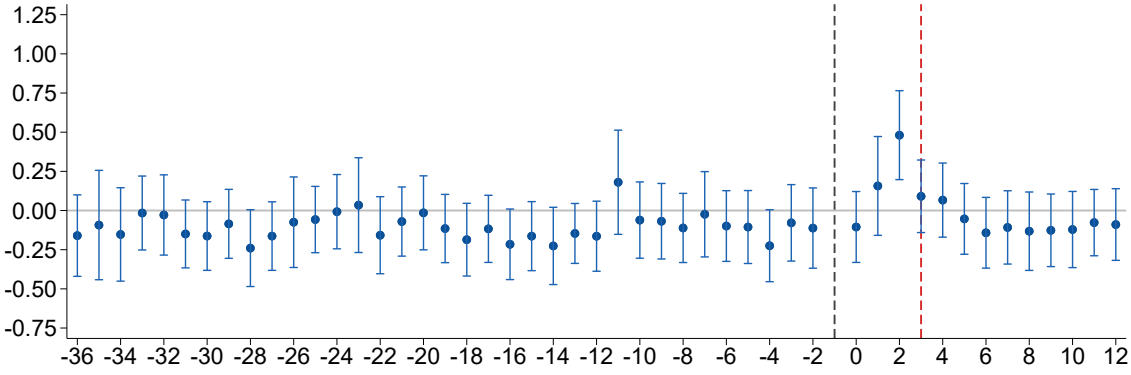
(c) Gay

Figure A4: Robustness: Second round

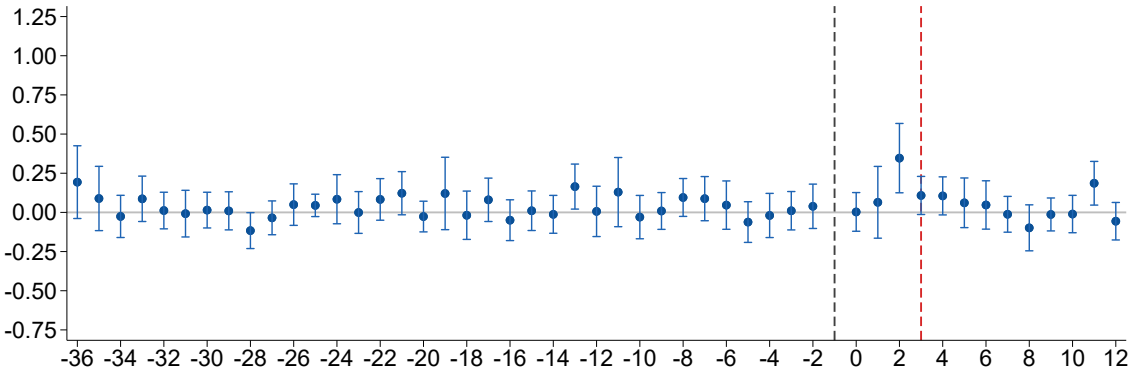
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the second round of the 2018 presidential election. Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



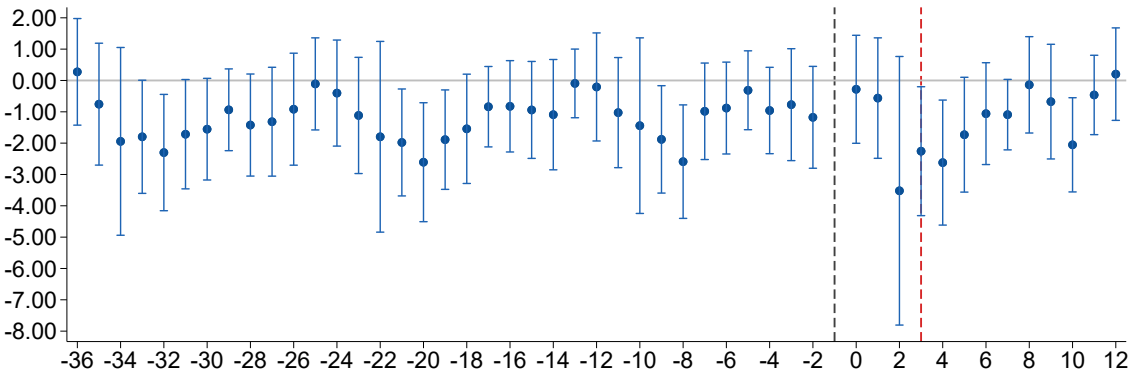
(b) Lesbian



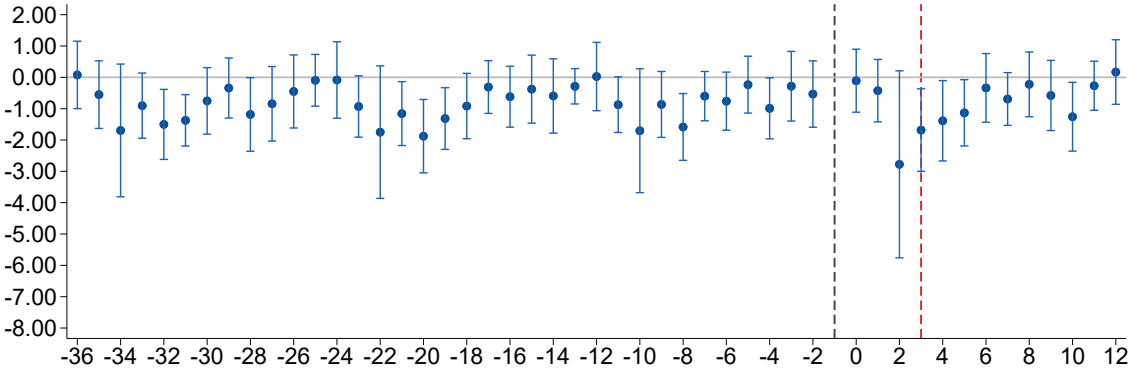
(c) Gay

Figure A5: Robustness: Municipalities with less than 500,000 inhabitants

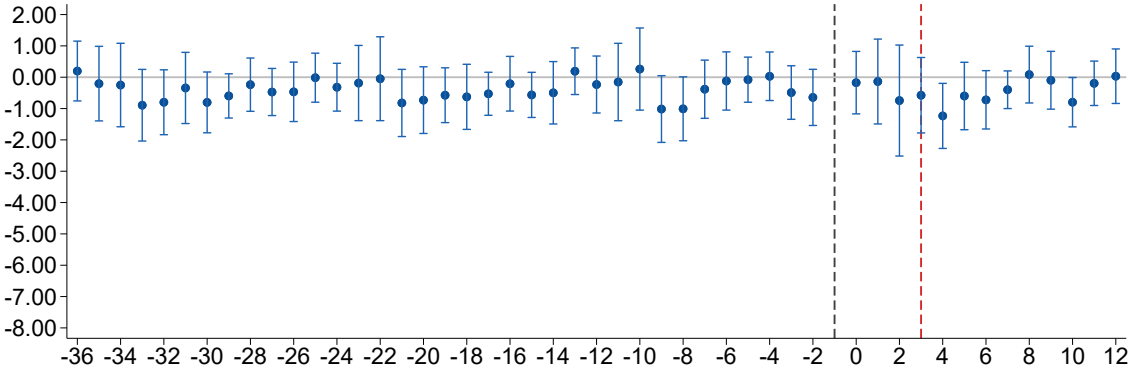
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election, excluding municipalities with more than 500,000 inhabitants.Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



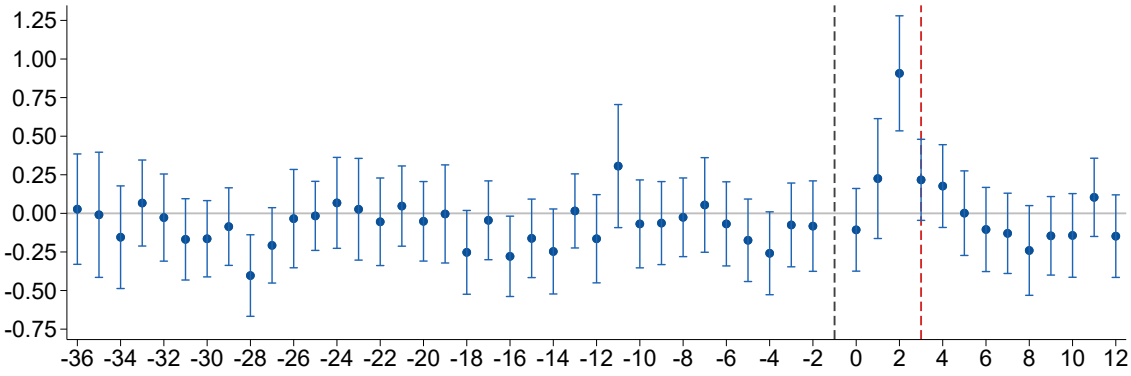
(b) Lesbian



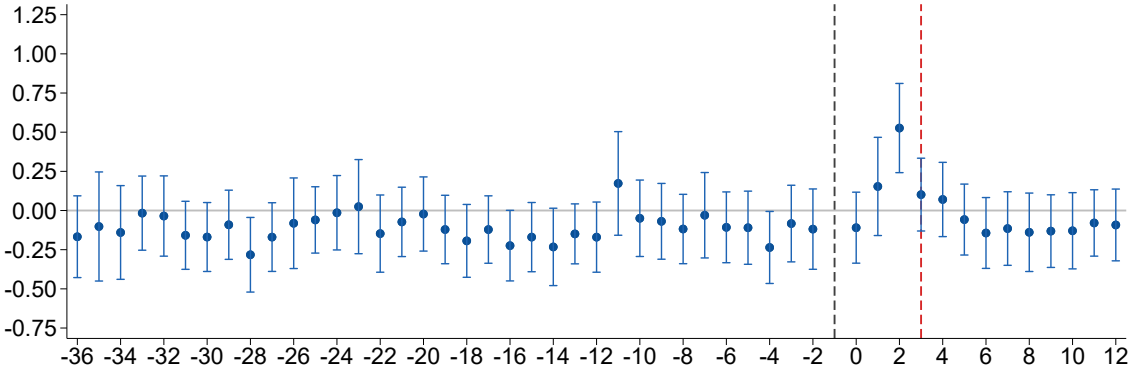
(c) Gay

Figure A6: Robustness: Municipalities with more than 500,000 inhabitants

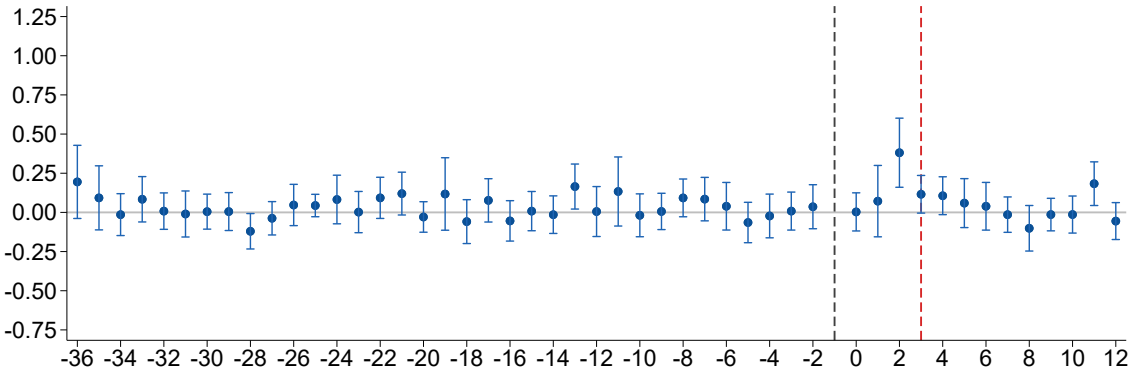
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants, excluding municipalities with less than 500,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election. Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



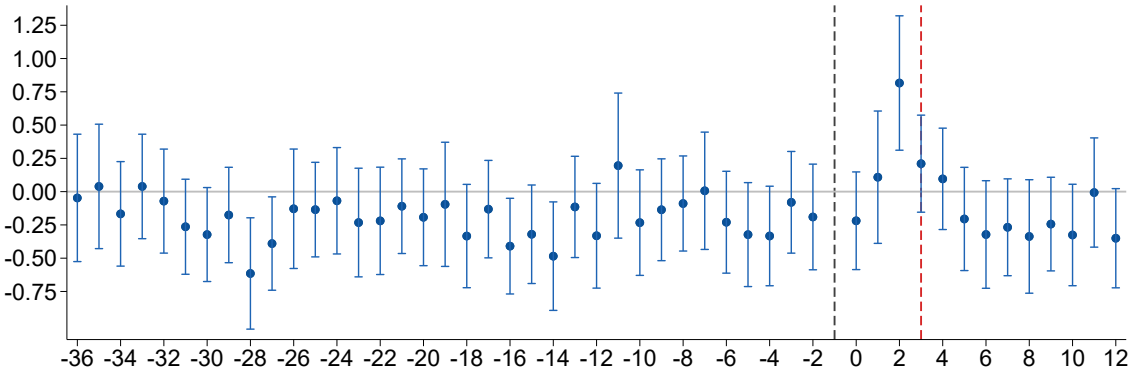
(b) Lesbian



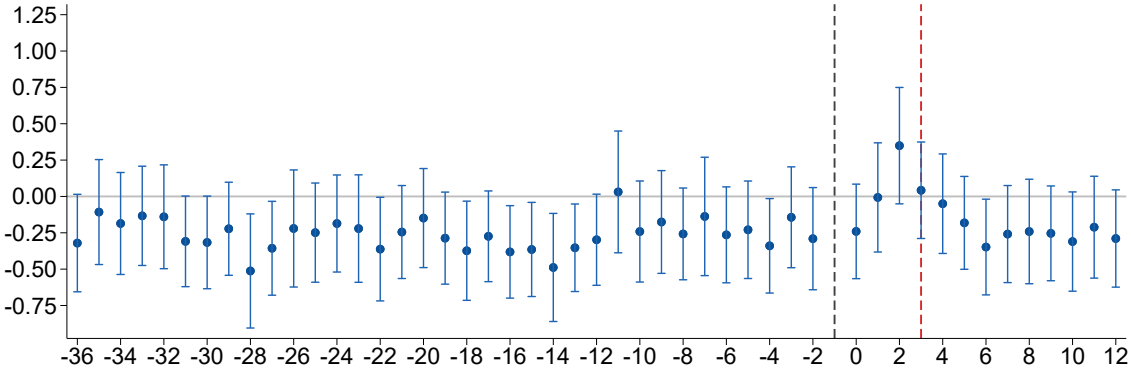
(c) Gay

Figure A7: Robustness: Municipalities with vote share $\leq 80\%$

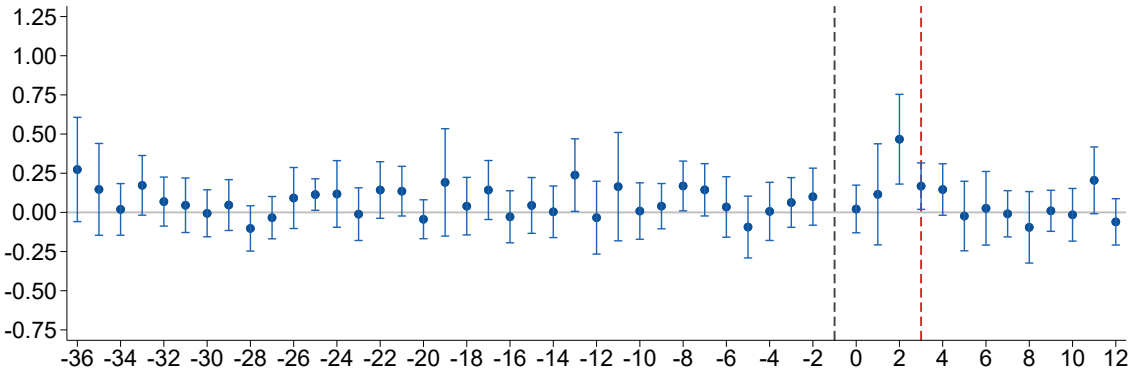
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election, excluding municipalities where Bolsonaro obtained more than 80% of the votes. Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



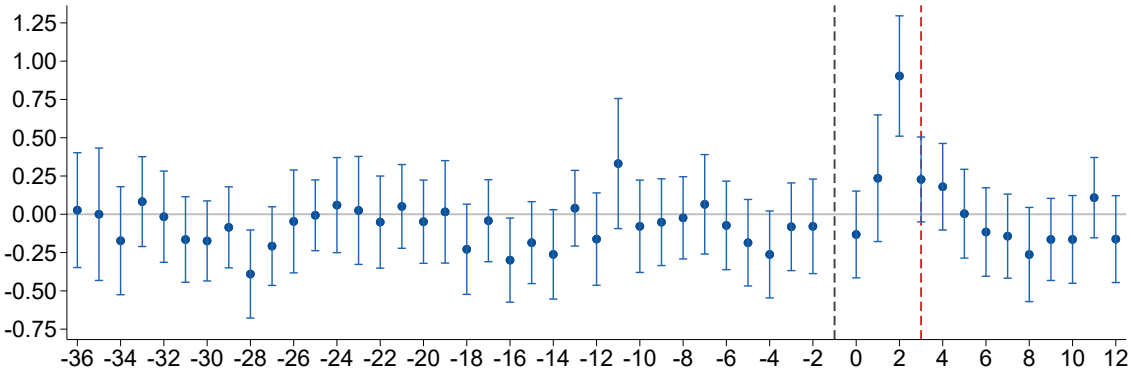
(b) Lesbian



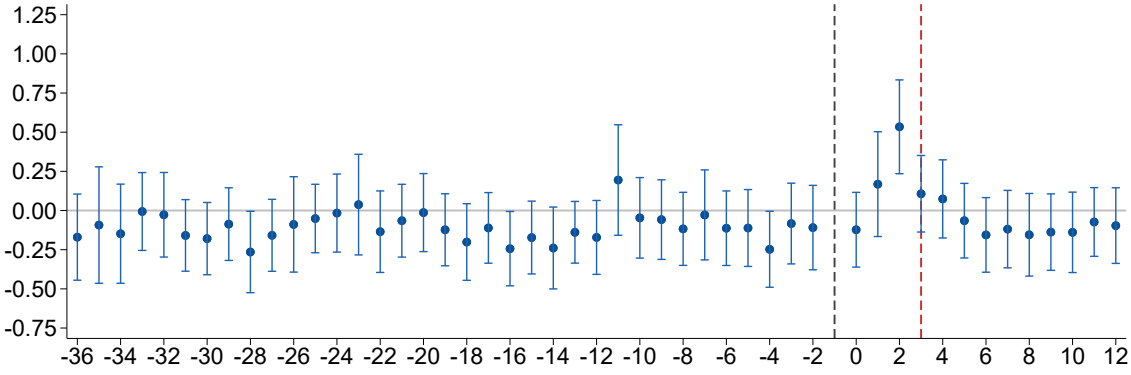
(c) Gay

Figure A8: Robustness: Municipalities with vote share $\geq 20\%$

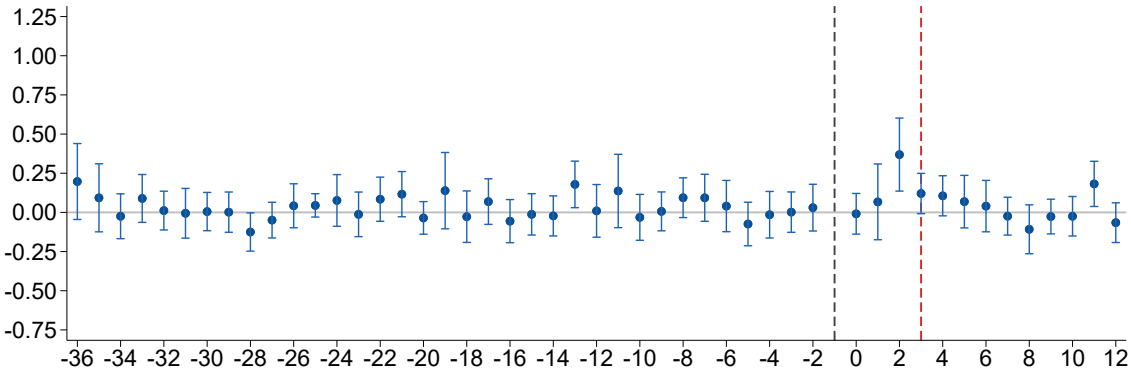
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election, excluding municipalities where Bolsonaro obtained less than 20% of the votes. Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



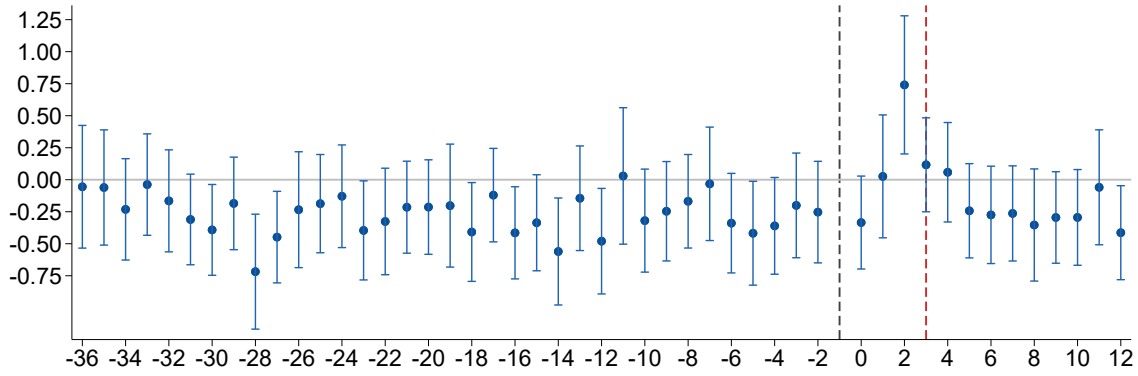
(b) Lesbian



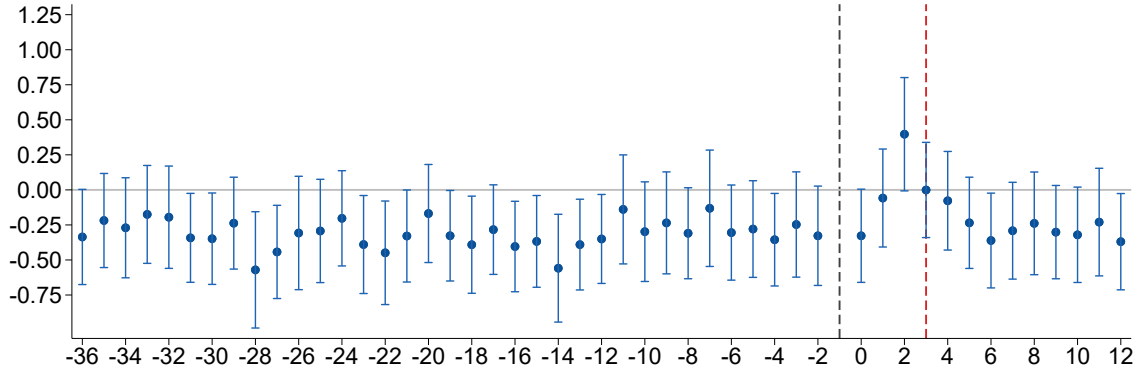
(c) Gay

Figure A9: Robustness: Drop Municipalities from the North of Brazil

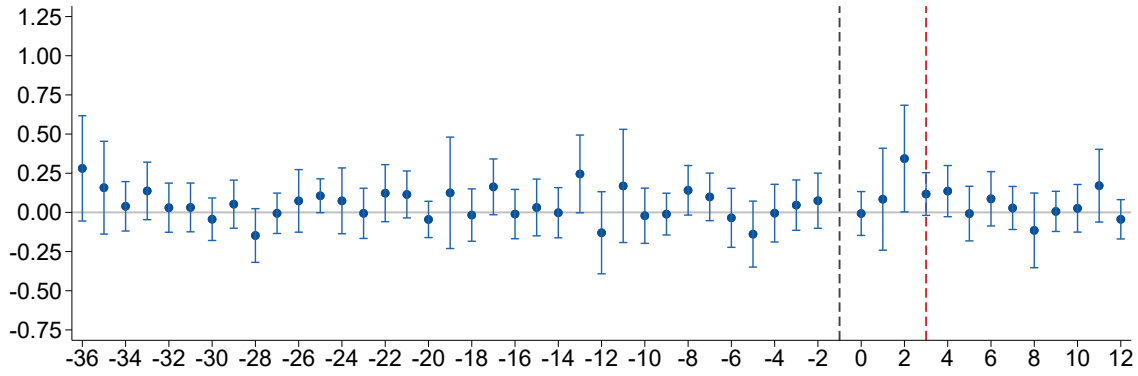
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election, excluding municipalities from the North of Brazil. Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



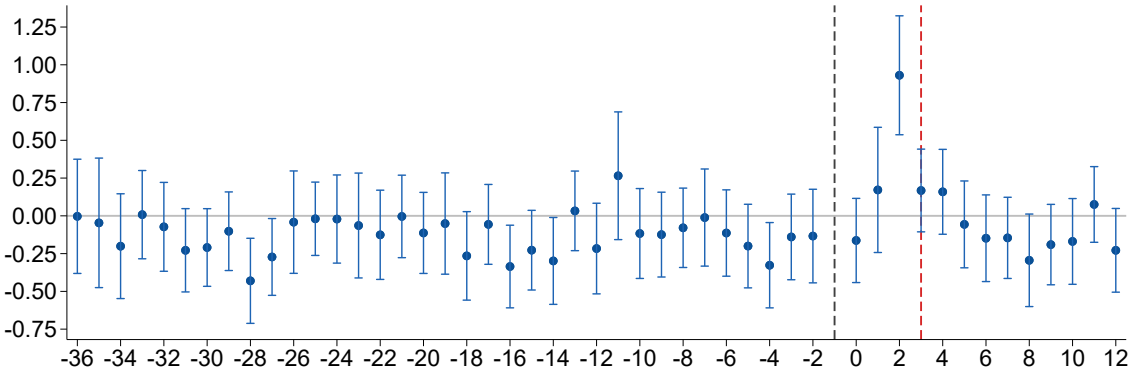
(b) Lesbian



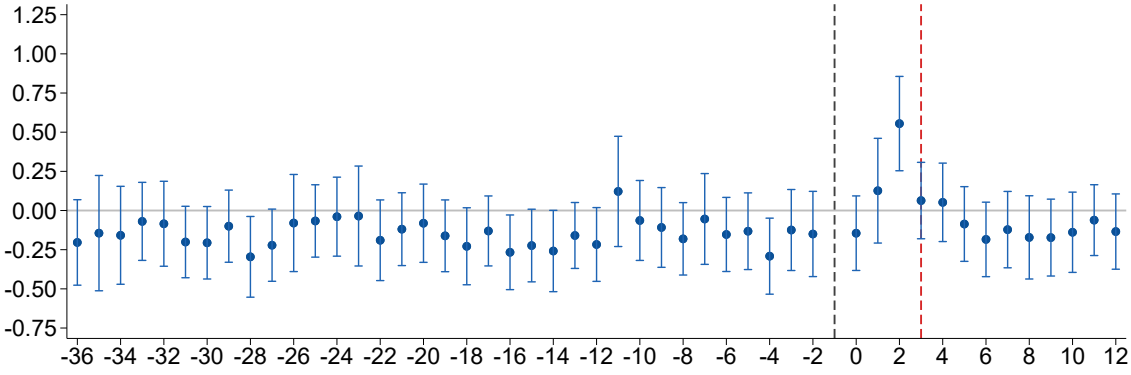
(c) Gay

Figure A10: Robustness: Drop Municipalities from the Northeast of Brazil

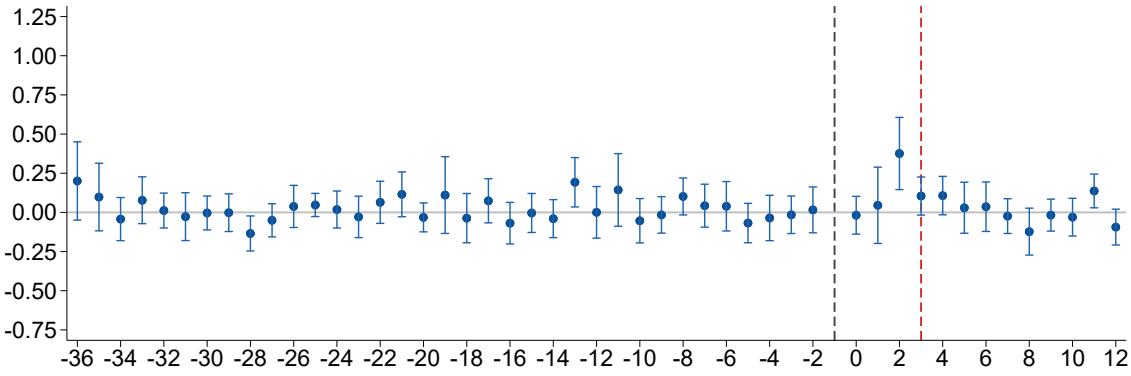
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election, excluding municipalities from the Northeast of Brazil. Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



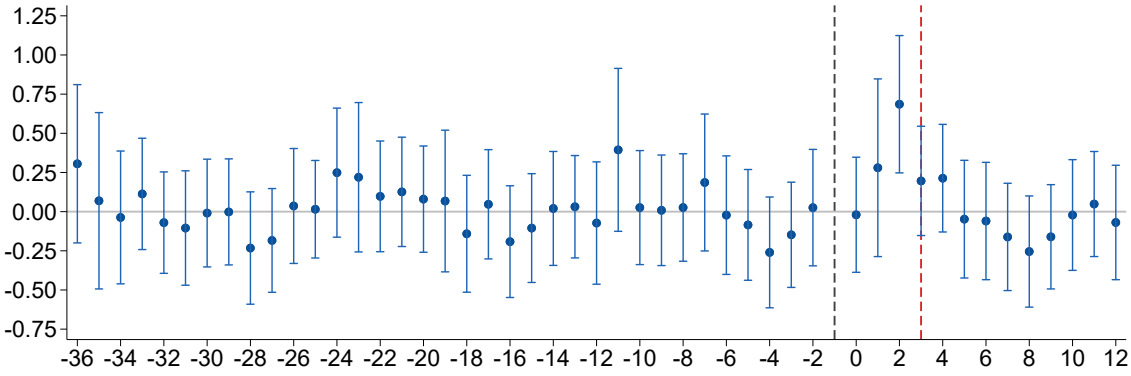
(b) Lesbian



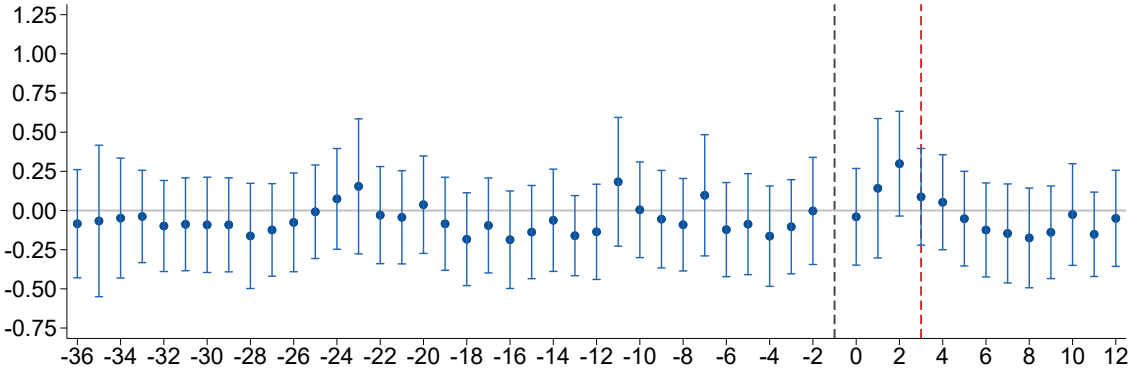
(c) Gay

Figure A11: Robustness: Drop Municipalities from the Central-West of Brazil

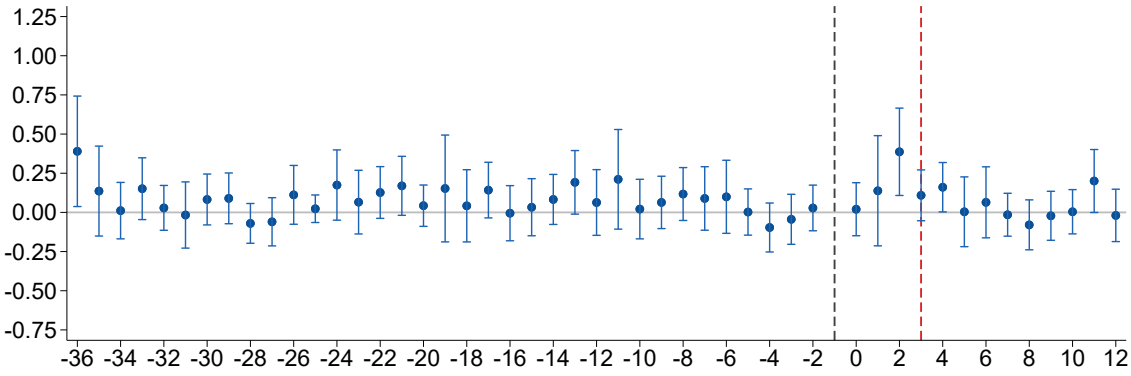
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election, excluding municipalities from the Central-West of Brazil. Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



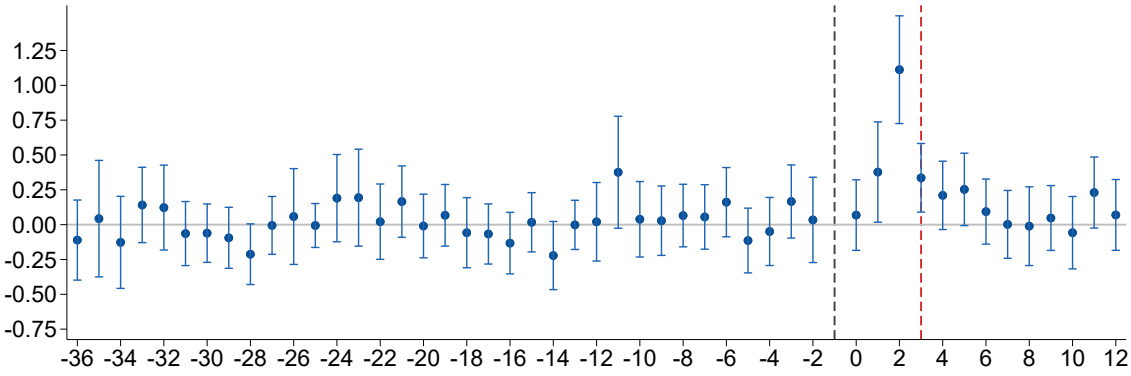
(b) Lesbian



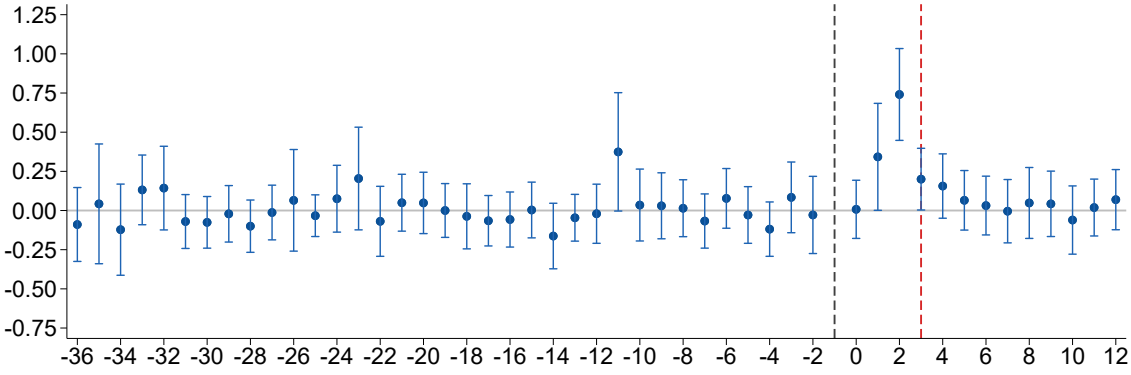
(c) Gay

Figure A12: Robustness: Drop Municipalities from the Southeast of Brazil

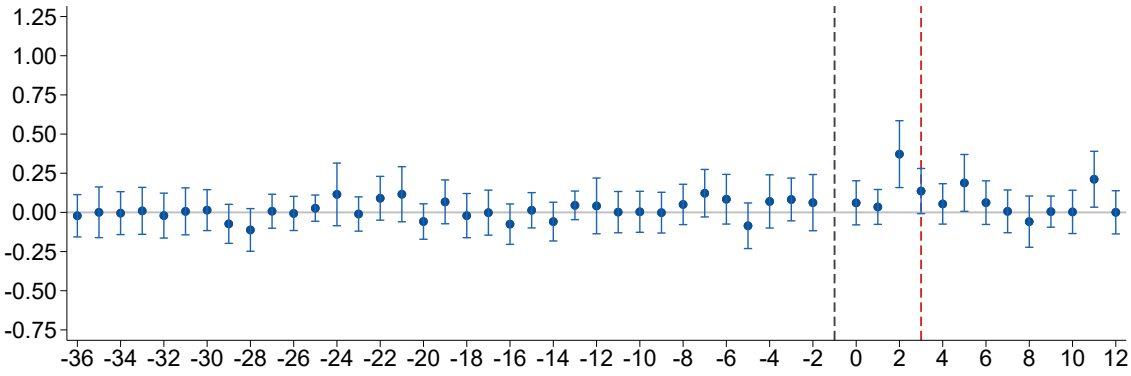
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election, excluding municipalities from the Southeast of Brazil. Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



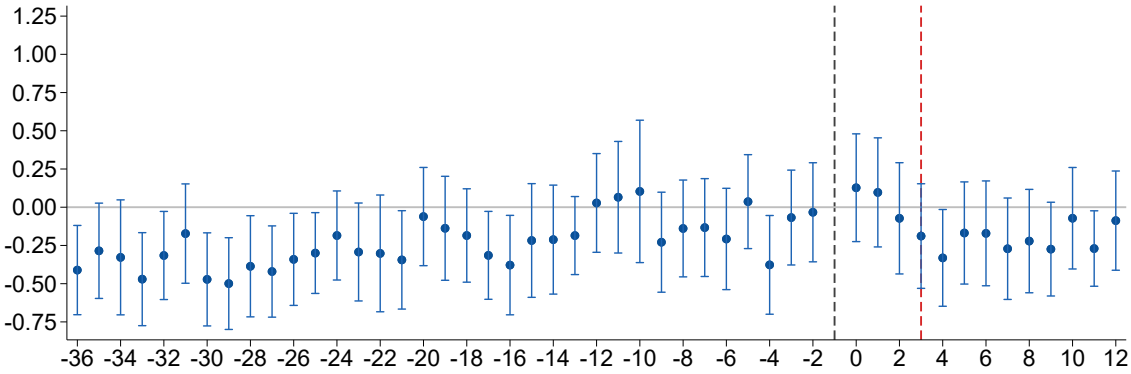
(b) Lesbian



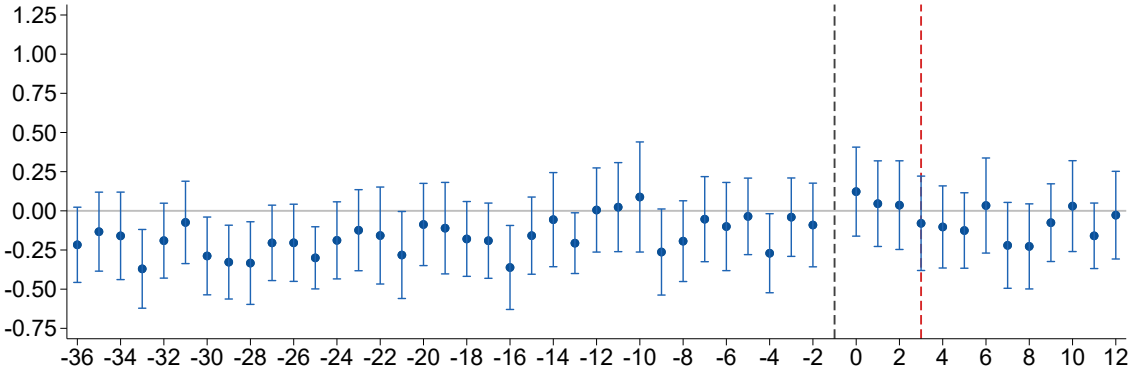
(c) Gay

Figure A13: Robustness: Drop municipalities from the South of Brazil

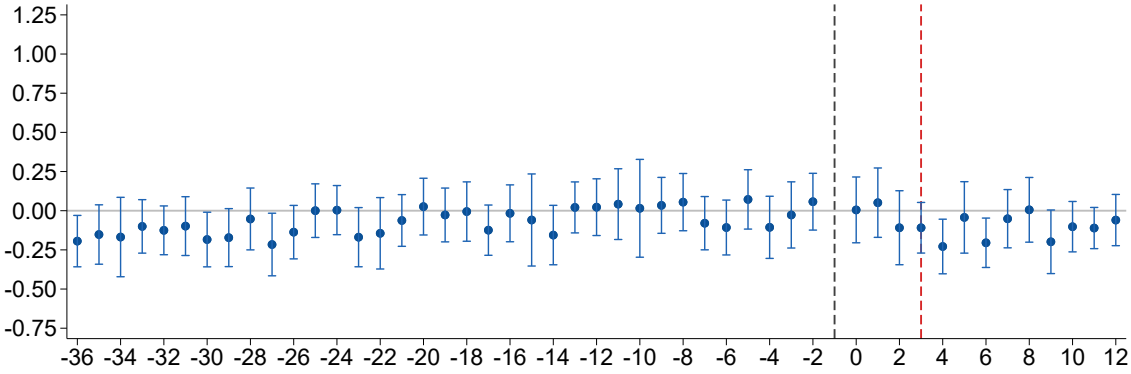
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2018 presidential election, excluding municipalities from the South of Brazil. Controls include GDP per capita, population density, and density of registry offices. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



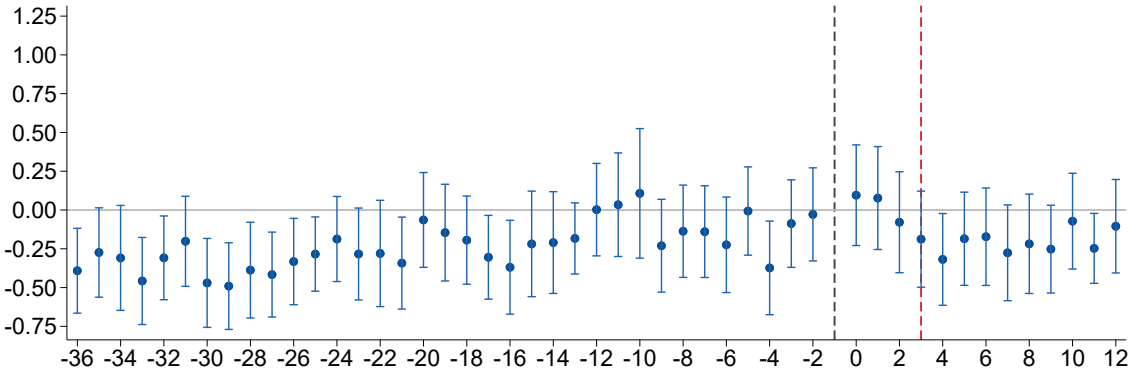
(b) Lesbian



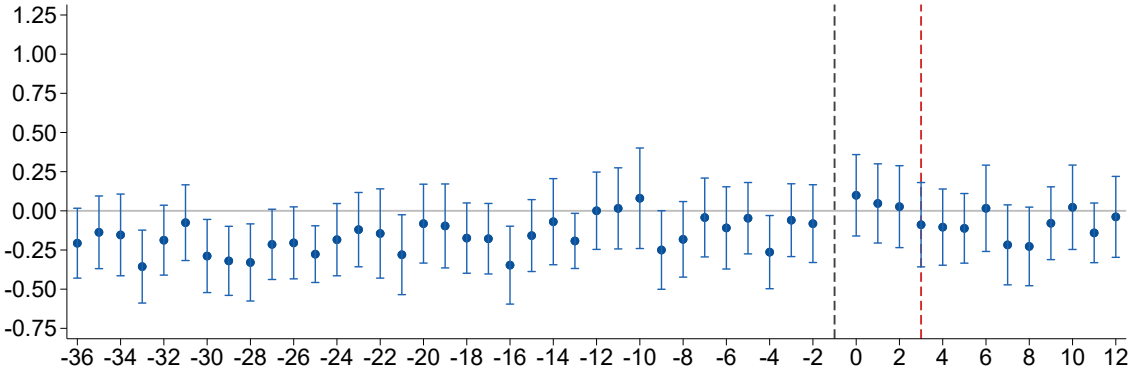
(c) Gay

Figure A14: Placebo test: First round of the 2022 election

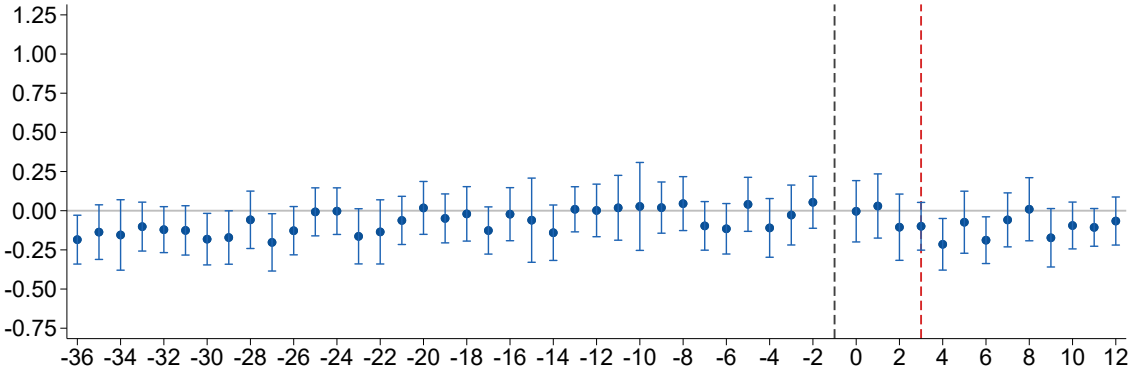
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the first round of the 2022 presidential election. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



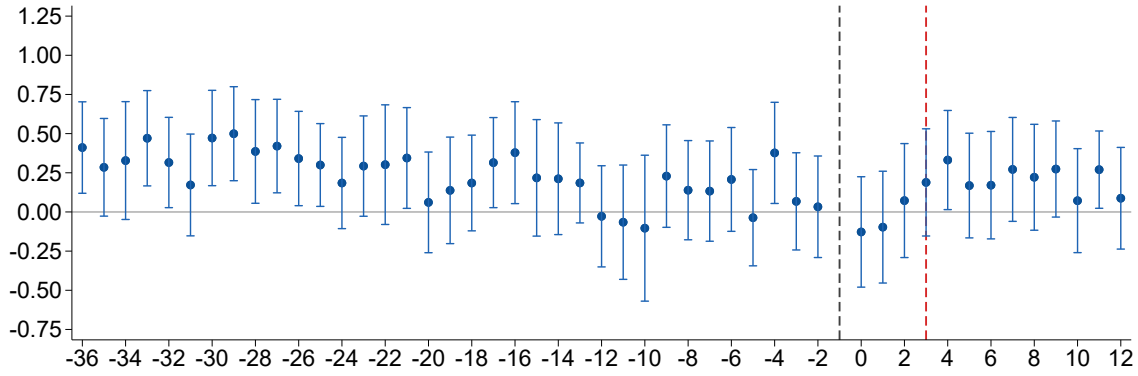
(b) Lesbian



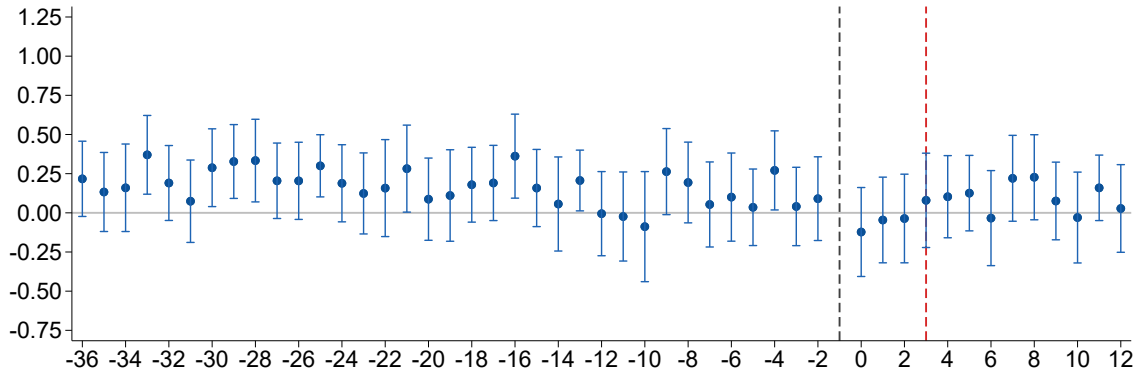
(c) Gay

Figure A15: Placebo test: Second round of the 2022 election

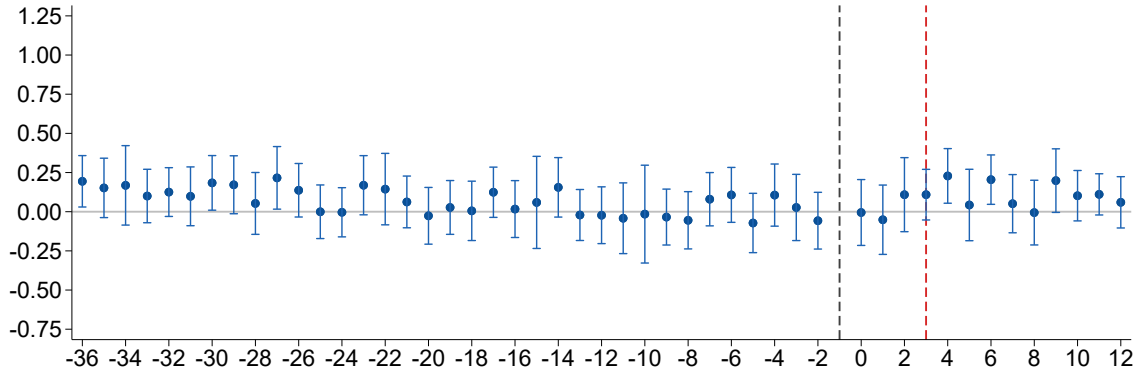
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Bolsonaro in the second round of the 2022 presidential election. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



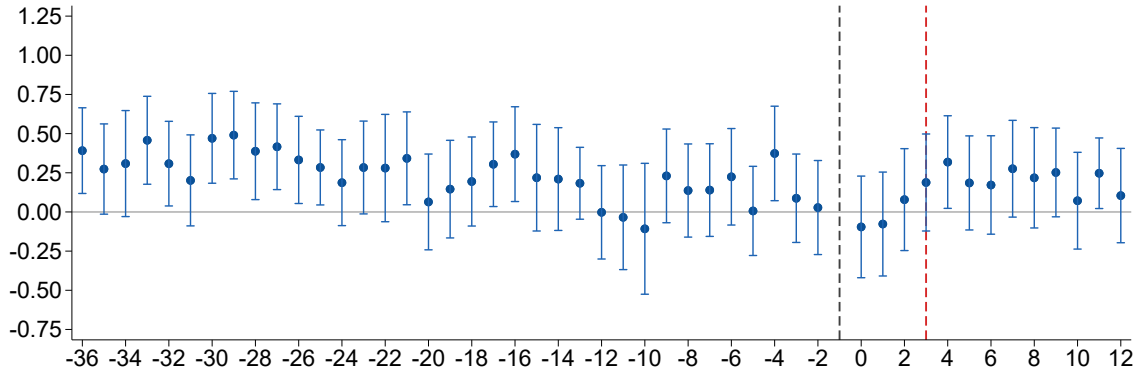
(b) Lesbian



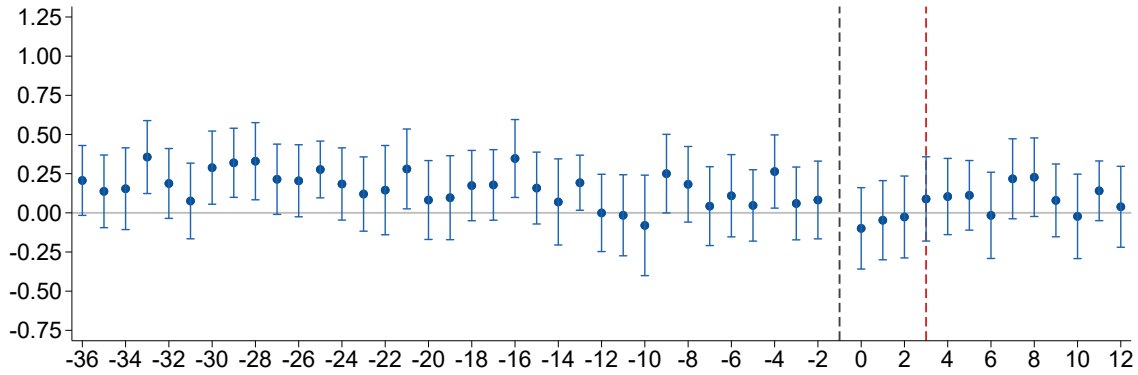
(c) Gay

Figure A16: Placebo test: First round of the 2022 election (Lula vote share)

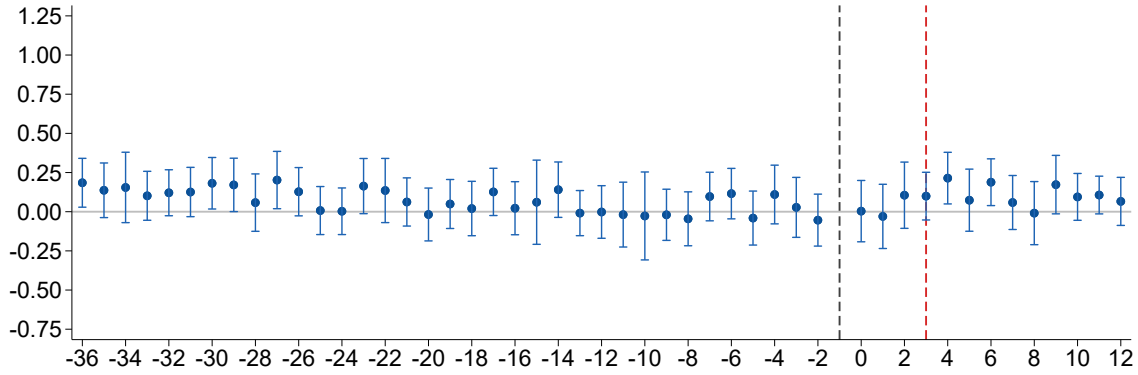
Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Lula in the first round of the 2022 presidential election. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.



(a) Same-sex



(b) Lesbian



(c) Gay

Figure A17: Placebo test: Second round of the 2022 election (Lula vote share)

Notes: This figure presents results based on a difference-in-differences approach with varying treatment intensity. Panels (a), (b), and (c) show, respectively, the number of same-sex, lesbian, and gay marriages per 100,000 inhabitants. The treatment is the share of votes for Lula in the second round of the 2022 presidential election. Coefficients are shown with 95% confidence intervals. The x-axis shows the number of months relative to October 2018, the month of Bolsonaro's election. The black dashed line indicate when Bolsonaro was elected president, and the red line marks the start of his mandate.