The Impact of LGBT Civil Union Legislation on Right-Wing Populist Support in Europe

Andres Romero

Coursewrok summited to GV482 - Political Science and Political Economy: Current Issues

2025

1   Introduction

Over the past decades, populism has emerged as a response to collective discontent with traditional politicians, presenting itself as a movement of the common people against the elites (Crutzen et al., 2020). In particular, right-wing populism has gained significant traction across European countries [1] , as shown in Figure 1. Although there are various theories that attempt to explain this phenomenon, one of the most prominent is the backlash theory, which offers a compelling analogy to Newton's third law: 'for every action, there is an equal and opposite reaction'. It suggests that the rise of populism reflects a reaction against rapid cultural changes, such as gender equality or LGBT rights, by traditionalist groups who feel their values and indemnity are being threatened (Norris and Inglehart, 2019).

Figure 1:
Right wing populist voteshare in European countries overtime

This shift in the policy agenda has triggered a cultural backlash, with authoritarian populist parties, leaders, and movements pushing back against these social changes.

In this paper, I aim to examine whether the observed increase in right-wing populism is driven by growing intolerance toward LGBT rights, following the hypothesis proposed by Inglehart and Norris. I focus specifically on the case of same-sex civil unions, as it is often the first LGBT right to be introduced, likely to face greater resistance and thus presents a key opportunity to observe whether such cultural change triggers a populist reaction.
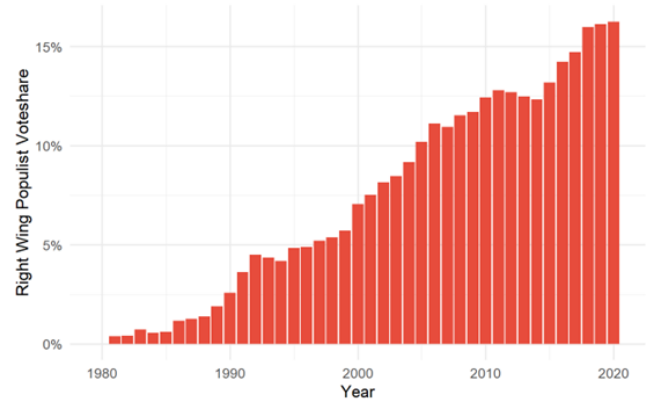
2   Descriptive Statistics

Since I decided to use LGBT civil union recognition as the policy intervention of interest, Figure 2 illustrates the timeline of its implementation across the selected countries [2]. As shown, twenty five out of thirty three countries have implemented LGBT or same-sex civil unions, which represents a significant majority. However, this figure also highlights the uneven adoption of this policy across countries, with a notable increase in the number of countries adopting it after the 2000s.

Table 1 shows the differences between the group of countries that adopted civil union and the group that did not, with data grouped by decades. It indicates that, on average, countries that adopted civil union generally had lower average unemployment from the 1980s to the 2010s (although this reversed in the 2020s), while consistently showing higher average rates of immigration and generally having a higher percentage of population aged 65 and over. GDP growth is shown to be very variable,

---

[1]Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Spain, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Sweden, Switzerland, United Kingdom

[2]The years 1979 and 2021 were excluded from the analysis for methodological reasons and to maintain consistency in the time series. In the case of 1979, there are no recorded data for any country and in 2021, only one country (Montenegro) implemented the policy, and there are no available data for subsequent years that would allow for the observation of medium-term effects or robust comparative analysis. Montenegro will be treated as a never treated country

with no consistent differential tendency between the groups across historical decades, although there was a significant difference in the 2020s.
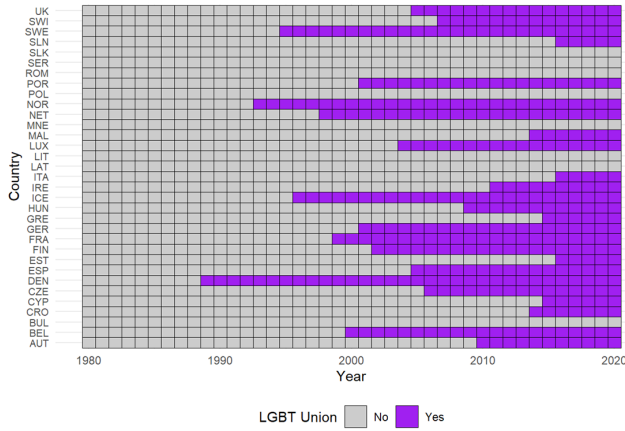

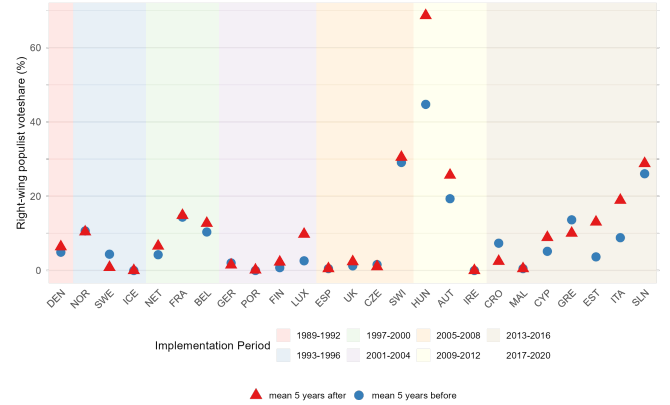Figure 2: Year of LGBT civil union implementation by country

Figure 3: Average right-wing populist voteshare before and after civil union implementation

Table 1: Country Averages by Decade and Civil Union Adoption

Decade	Unemployment (%)	Population 65+ (%)	Immigration (%)	GDP Growth (%)
		Civil Union: YES		
1980	6.82	15.52	—	4.36
1990	6.60	15.17	0.89	6.47
2000	6.31	15.68	1.15	3.56
2010	8.07	17.80	1.31	4.22
2020	6.75	19.36	—	-7.97
		Civil Union: NO		
1980	8.43	12.55	—	9.36
1990	9.00	13.59	0.67	6.31
2000	8.90	15.23	0.78	8.02
2010	10.33	17.48	0.64	3.65
2020	6.14	19.54	—	-0.26

In Figure 3, I present a preliminary and visual analysis of the evolution of right-wing populist voteshare before and after the adoption of the LGBT civil union policy. I chose to calculate the average for the 5 years before and after, based on the idea that the effects of a policy shock may not be immediate and often require time to manifest in both the short and medium term.

A 5-year period is commonly used in policy impact studies because it allows researchers to capture both immediate responses and more persistent behavioral changes (Gertler et al., 2016).

This approach allows us to visually assess whether there was a noticeable change in right-wing populist vote share following the policy adoption; just for visual purposes, I shaded the countries that implemented the policy within a four-year window on the timeline, starting with Denmark in 1989. For most countries, no significant variation is observed, except for a few ones that implemented

the policy between 2009-2012 and 2013-2016. However, to avoid jumping to conclusions based solely on descriptive statistics, a more in-depth analysis will follow in the next section to determine whether the effect of the policy is statistically significant in an aggregate level.

3 Research Design and Methodology

To test whether the effect of pro LGBT civil union leads to an increase in support for right-wing populist parties, this study employs a staggered Difference in Differences (DiD) design, since the treatment occurred at different times across units.

The outcome variable is the vote share of right-wing populist parties, which serves as a measure of support for these parties.

As mentioned earlier, I focus on the implementation of civil union laws as my main policy variable, as it was the first LGBT related policy adopted across most European countries. Focusing on this early stage of LGBT policy adoption is particularly relevant because such measures likely encountered greater societal resistance at the time, potentially amplifying any backlash effect and making it more observable.

To mitigate potential confounding influences, several control variables are included, informed by existing literature. These include economic indicators such as unemployment rate (Funke et al., 2016), GDP growth (Norris and Inglehart, 2019) are included to capture the influence of economic performance. Furthermore, immigration levels, are controlled, given the anti-inmigrant sentiment in many right wing populist (Mudde, 2007). As well as social factor associated with more conservative societies, such as the percentage of the population over 65 years old, that account for traditional values and potential backlash(Norris and Inglehart, 2019). Other potential proxies for social conservatism, such as the percentage of the population identifying as religious, were considered but ultimately excluded from the main models due to data limitations, specifically the limited sample size and availability across countries.

Once the variables have been defined, next step is to reason about the control and treatment groups, accounting for the staggered nature of the treatment adoption. The following two analytical approaches are employed to address this.

3.1 Two-Way Fixed effects (TWFE) Model

A traditional approach to estimating the treatment effect in a DiD framework involves the use of a Two-Way Fixed Effects (TWFE) regression model. The TWFE model is specified as follows

$$RWPopulistVoteshare_{it} = \beta_1 CivilUnion_{it} + \beta_2 X_{it} + \alpha_i + \delta_t + \varepsilon_{it} \tag{1}$$

Where:

$RW\ Populist\ Voteshare$ = Right-wing populist vote share (dependent variable).

β_1 = ATT of Civil Union on the outcome.

β_2 = coefficients capturing the effect of the control variables on the outcome.

X_{it} = Mentioned covariates (Unemployment, GDP growth, Population Over 65, immigration).

$\alpha_i + \delta_t =$ Unit (i) and time (t) fixed effects, respectively.

$\varepsilon_{it} =$ Idiosyncratic error for unit i at time t.

The inclusion of unit fixed effects is crucial to account for time-invariant country-specific factors that may influence both the adoption of civil union laws and the support for right-wing populist parties. On the other hand, the time fixed effects control for common temporal shocks, such as global economic trends or international events, that could affect all countries simultaneously.

In the TWFE model, control variables are directly incorporated into the regression equation. This allows for a straightforward approach to adjust for potential confounding effects of economic and social factors on the relationship between civil union laws and right-wing populist support.

However, it is important to acknowledge that the TWFE estimator, while widely used, can be biased in staggered treatment settings due to heterogeneous treatment effects and problematic weighting, including negative weights (Callaway and Sant'Anna, 2021). This potential bias motivates the use of alternative estimation strategies, as described in the following section.

3.2 Callaway and Sant'Anna (2021) Estimator

To address the potential limitations of the TWFE model in staggered treatment designs, this study also employs the estimator proposed by Callaway and Sant'Anna (2021). This approach offers a more flexible and robust method for estimating treatment effects when treatment adoption varies across units and time. This estimator differs from the TWFE model in its definition of the control group and its estimation of treatment effects. Instead of relying solely on never-treated units, it constructs control groups using units that are not yet treated at a given time period

It is important to clarify that when using the Callaway and Sant'Anna approach, what I am estimating differs from the traditional Average Treatment Effect on the Treated (ATT) because the estimator is computed at the group-time level, it focuses on the group time average treatment effect on the treated (ATT(g,t)).

$$ATT(g,t) = E[Y_t(1) - Y_t(0) \mid G = g] \tag{2}$$

Where $G = g$ refers to the group of units that first received the treatment in period g, and t represents the time period. $Y_t(1)$ is the potential outcome for group g at time t if treated and $Y_t(0)$ is the potential outcome for group g at time t if not treated.

This estimator calculates the average effect of the treatment for units treated in a specific year (g) at a specific time period (t), comparing them to units that are not yet treated or never treated in that specific time period (t). The overall treatment effect is then obtained by aggregating these group-time ATTs using appropriate weighting schemes. However, while the Callaway and Sant'Anna estimator offers significant advantages in staggered treatment settings, incorporating covariates directly presents methodological challenges. The primary implementation of this estimator prioritizes the construction of appropriate control groups based on treatment timing to satisfy the parallel trends assumption. Although methods for covariate adjustment exist, such as doubly robust estimation, their application in this study is limited. These limitations, including issues related to data structure and estimation feasibility, are discussed in detail in Section 7.

4 Testing Assumptions

The two main assumptions underlying a Difference-in-Differences (DiD) approach are: (i) in the absence of treatment, the pre-treatment trends in the outcome variable would have been the same for both treated and control units (Parallel Trends), and (ii) the treatment has no effect before it is implemented, that is, units do not change their behavior in anticipation of treatment (No Anticipation).

Although these assumptions cannot be directly tested, since potential outcomes under the counterfactual scenario are unobservable, there are methods that allow for the visual inspection of pretreatment dynamics, which can help assess the plausibility of these assumptions.

4.1 Parallel Trends
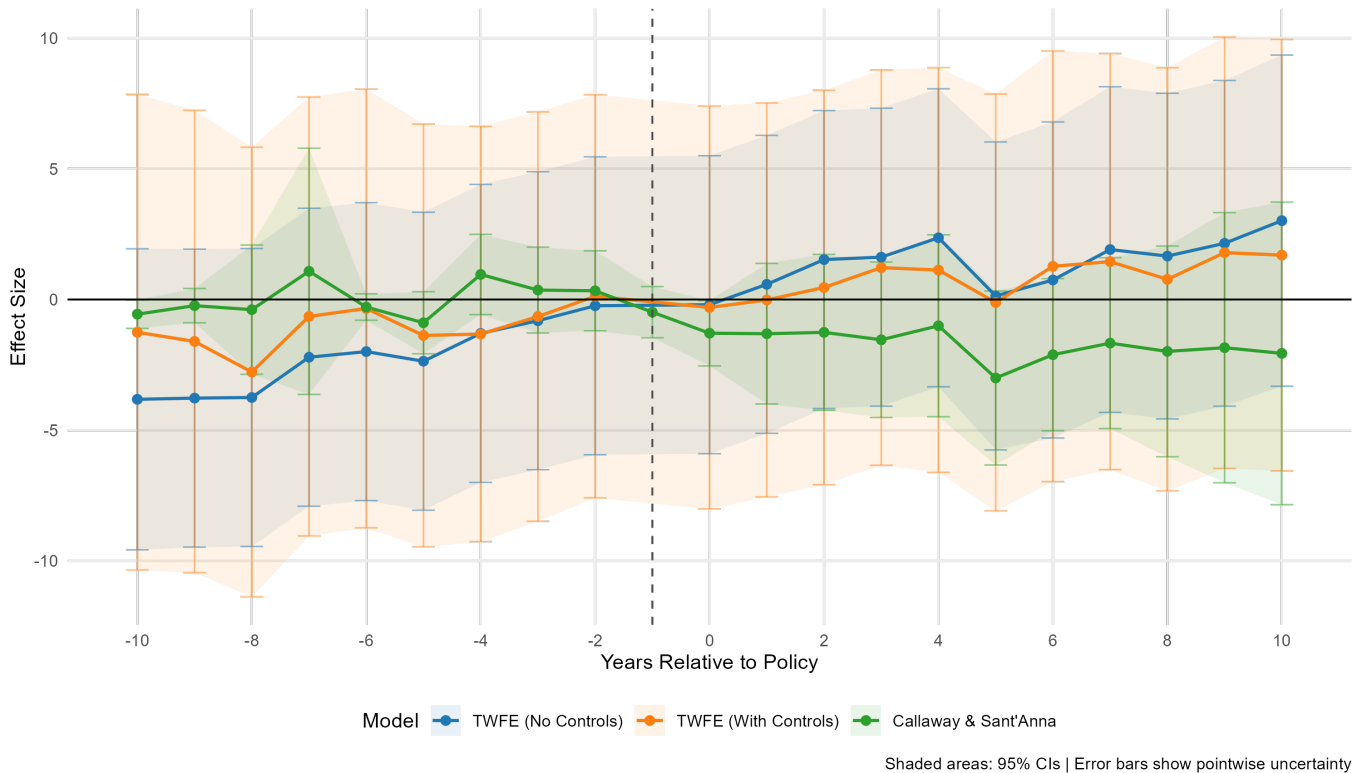
Figure 4: Parallel Trends Test

As shown in Figure 4, the event study plots for the TWFE models (with and without controls) and the lead effects in the Callaway and Sant'Anna model suggest that the parallel trends assumption is reasonably likely to hold. Specifically, the pre-treatment coefficients are generally close to zero and statistically insignificant, indicating no significant pre-existing differences in the outcome variable's trend between the treatment and control groups prior to the policy change.

4.2 No Anticipation

The estimates for the pre-treatment periods are all close to zero and statistically insignificant. This provides supporting evidence that there was no anticipation effect: countries did not alter their behavior before the implementation of the policy. Thus, the no anticipation assumption appears reasonably plausible in this setting.

5 Findings and Discussion

Table 2 presents the main findings of this study, derived from two distinct Difference-in-Differences (DiD) approaches. The first approach employs the traditional Two-Way Fixed Effects (TWFE) model, adding covariates up to model 5 where the full set of covariates are incorporated (economic and social factors). The second approach utilizes the Callaway and Sant'Anna (2021) estimator.

Table 2: Effect of LGBT Civil Union in Right Wing Populist

| | TWFE | | | | | Callaway and Sant'Anaa |
	Model 1	Model 2	Model 3	Model 4	Model 5	estimator
LGBT Union	−2.303	−1.273	−0.065	−0.060	−0.084	−2.703
	(2.141)	(2.374)	(2.333)	(2.504)	(2.513)	(2.162)
Immigration (%)		−0.336	−0.316	−0.045	0.099	
		(0.857)	(0.955)	(1.029)	(1.246)	
Unemployment (%)			−0.261	−0.260	−0.179	
			(0.215)	(0.233)	(0.227)	
GDP Growth (%)				−0.021	−0.029	
				(0.046)	(0.044)	
Population 65+ (%)					1.811*	
					(0.710)	
Num.Obs.	1353	774	686	640	640	
R2	0.589	0.723	0.748	0.748	0.757	
R2 Within	0.009	0.004	0.012	0.011	0.047	
Std.Errors	by: Country	by: Country	by: Country	by: Country	by: Country	
FE: Country	X	X	X	X	X	
FE: Year	X	X	X	X	X	

Across the models, the estimated effect of civil union legislation on right-wing populist vote share exhibits a predominantly negative sign, suggesting a potential decrease in right-wing populist support following the implementation of such laws. The TWFE models (1 - 5) and the Callaway and Sant'Anna Estimator yield estimates that are close to zero and statistically insignificant, indicating that, according to these models, there is little to no robust relationship between civil union legislation and populist vote share.

Rather than delving deeply into the discrepancies between the estimators and their potential sources, which could be attributed to differences in how they handle staggered adoption and treatment effect heterogeneity (as discussed in the methodology section), the discussion will focus on exploring potential explanations for the failure to observe the backlash effect predicted by Inglehart and Norris (2016).

One of populism core rhetoric relies on anti-elite mobilization. Therefore, we might expect LGBT rights to trigger a backlash if populist leaders frame them as an 'elite-imposed' agenda. However, this backlash may be weaker if elites don't strongly advocate for these policies or if economic or

other cultural issues resonate more with populist voters. For instance, Gidron and Hall (2017) argue that populist movements tend to prioritize material concerns like jobs and welfare, rather than post-materialist issues such as LGBT rights, unless these rights are presented as a threat to national identity. This aligns with (Norris and Inglehart, 2016), who show that economic grievances often have a greater influence on voting behavior than cultural issues.

Another key element of populism is defending the 'in-group' against perceived threats to its identity. Anti-immigrant rhetoric often serves this purpose more effectively than opposition to LGBT rights. This is because immigrants are frequently portrayed as a more direct and immediate threat to national unity and culture (Norris and Inglehart, 2019;Rydgren, 2017). This pattern reflects issue substitution: when political debate focuses on immigration or economic decline, LGBT rights become less important for mobilizing voters. If we see Model 5, when we control for all (or most) of the factor related to right wing populist, the sign of inmigration is positive, which can support this argument.

Cultural backlash against LGBT rights often operates through subnational or non-institutional channels rather than national elections. Opposition may manifest as social stigmatization, local policy obstruction (e.g., municipal bans on Pride events), or grassroots mobilization by religious groups(Patternotte and Tremblay, 2021;Ayoub, 2016). These dynamics are frequently overlooked in aggregate electoral data, which prioritizes national issues like economic performance over localized cultural conflicts.

6 Additional Test

6.1 Interactions

To further explore potential heterogeneity in the treatment effect, I estimate additional interaction terms between the treatment variable and key covariates. Given the lack of statistically significant results in the baseline TWFE model, these interaction terms allow for the possibility that the effect of the treatment may vary systematically across different contextual or demographic factors. This approach helps to identify whether the treatment effect is conditional on, for example, the level of immigration, the share of elderly population, or the unemployment rate. By doing so, I aim to uncover any subgroup specific effects that might be masked in the average treatment effect.

Nevertheless, despite the inclusion of multiple interaction terms to explore potential heterogeneity in the effect of civil union legislation, the results consistently show a statistically insignificant relationship between civil unions and populist right-wing voting.The consistent positive and statistically significant coefficient on the 'Over 65' variable suggests a robust relationship between the age structure of the population and support for right-wing populism. But interestingly the interaction between LGBT Civil Union and over 65 population variation suggests a non- significant and negative relationship. This supports the idea mentioned earlier about how older people tend to prioritize other issues.

Table 3: Models with interaction

	Union * Over65	Union * Immigration	Union * Unemployment	Union * Growth
Union	1.428	1.340	1.587	−0.325
	(7.470)	(4.526)	(3.782)	(2.354)
	(0.850)	(0.769)	(0.678)	(0.891)
Over65	1.862*	1.637*	1.856*	1.800*
	(0.818)	(0.759)	(0.707)	(0.712)
	(0.030)	(0.040)	(0.014)	(0.017)
Immigration_percent	0.091	1.365	−0.078	0.056
	(1.240)	(2.184)	(1.296)	(1.255)
	(0.942)	(0.537)	(0.952)	(0.965)
Unemployment	−0.174	−0.138	−0.111	−0.178
	(0.227)	(0.214)	(0.257)	(0.227)
	(0.451)	(0.524)	(0.670)	(0.439)
Growth	−0.028	−0.019	−0.027	−0.053
	(0.044)	(0.038)	(0.044)	(0.064)
	(0.526)	(0.625)	(0.539)	(0.414)
Union × Over65	−0.092			
	(0.489)			
	(0.851)			
Union × Immigration_percent		−1.432		
		(2.514)		
		(0.573)		
Union × Unemployment			−0.195	
			(0.187)	
			(0.305)	
Union × Growth				0.056
				(0.078)
				(0.478)
Num.Obs.	640	640	640	640
R2	0.757	0.758	0.758	0.757
R2 Adj.	0.730	0.731	0.731	0.730
Std.Errors	by: Country	by: Country	by: Country	by: Country
FE: Country	X	X	X	X
FE: Year	X	X	X	X

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, ***

6.2 Subset years close to election

As a robustness check, I re-estimated the models from Table 2 using a restricted sample limited to election adjacent years. This approach follows the recommendations of Gertler et al. (2016) for impact evaluation in political contexts. The results show no statistically significant differences from the main specification, suggesting that electoral cycles do not substantially influence the estimated

effects.

Table 4: 2 years window effect of LGBT Civil Union in Right Wing Populist

| | TWFE | | | | | Callaway and Sant'Anaa |
	Model 1	Model 2	Model 3	Model 4	Model 5	estimator
LGBT Union	−1.958	−1.257	−0.240	−0.076	−0.113	−2.7032
	(2.167)	(2.508)	(2.314)	(2.558)	(2.553)	(2.089)
Immigration (%)		−0.568	−0.352	−0.115	0.019	
		(0.983)	(0.989)	(1.050)	(1.268)	
Unemployment (%)			−0.208	−0.239	−0.149	
			(0.217)	(0.247)	(0.245)	
GDP Growth (%)				−0.079	−0.081	
				(0.081)	(0.080)	
Population 65+ (%)					1.873*	
					()	
Num.Obs.	1312	562	501	466	466	
R2	0.588	0.718	0.745	0.744	0.754	
Std.Errors	by: Country	by: Country	by: Country	by: Country	by: Country	
FE: Country	X	X	X	X	X	
FE: Year	X	X	X	X	X	

7   Critics and Limitations

As previously mentioned and discussed in more detail, the Two-Way Fixed Effects (TWFE) estimator has several well-documented limitations, particularly in staggered adoption designs. One of the main criticisms is that TWFE assumes a homogeneous treatment effect—meaning that the effect of the treatment is the same across all units and time periods. This assumption can lead to biased estimates when treatment effects are heterogeneous or when treatment timing varies across units.

To address these concerns, the Callaway and Sant'Anna (2021) estimator was adopted. However, this approach also presents technical and methodological challenges. Its primary implementation focuses on effectively comparing treated units with appropriate control groups based on treatment timing in order to satisfy the parallel trends assumption. While methods such as doubly robust estimation allow for the inclusion of covariates, the analysis revealed limited variation in the control variables, Unemployment, Growth, Immigration and Over 65 years population during the relevant pre-treatment periods.

This lack of variation, especially when using the 'not-yet-treated' units as controls, resulted in singularity issues in the estimation of the outcome model, preventing reliable inclusion of these covariates. Moreover, the staggered adoption of the treatment and the limited sample sizes for specific treatment groups and pre-treatment periods further constrained the ability to apply more sophisticated covariate adjustment techniques. Additionally, the group of never-treated units was too small, which made it necessary to use the not-yet-treated units as the control group.

As a result, the main results presented using the Callaway and Sant'Anna (2021) estimator were estimated without the inclusion of covariates and with the not-yet-treated sample.

This highlights a methodological trade-off between the ability to adjust for covariates and the robustness of the control group identification.

8 Conclusion

As mentioned earlier, right-wing populism has generally increased over time. However, the results of this study indicate that the implementation of LGBT civil unions does not account for this trend. The traditional DiD approach and the Callaway and Sant'Anna estimator showed no statistically significant effect, the signs of the coefficients in all models were negative, directly contradicting the cultural backlash hypothesis. Many reasons can explain this deviation, such as populism's tendency to prioritize economic and anti-immigrant rhetoric over LGBT issues, combined with the fact that cultural backlash can manifest in various ways beyond national elections.

9 References

Ayoub, P., 2016. When states come out: Europe's and the United States' sexual revolutions. Camb. Univ. Press.

Callaway, B., Sant´Anna, P., 2021. Difference-in-Differences with Multiple Time Periods. J. Econom.

Funke, M., Schularick, M., Trebesch, C., 2016. Going to extremes: Politics after financial crises, 1870–2014. Eur. Econ. Rev. 227–260.

Gertler, P., Martinez, S., Premand, P., Rawling, L., Vermeersch, C., 2016. Impact Evaluation in Practice, 2nd ed. The World Bank.

Gidron, N., Hall, P.A., 2017. The politics of social status: On the cultural origins of economic cleavages. Am. Polit. Rev. 757–778.

Mudde, C., 2007. Populist radical right parties in Europ. Camb. Univ. Press.

Norris, P., Inglehart, R., 2019. Cultural Backlash: Trump, Brexit, and Authoritarian Populism. Cambridge University Press.

Norris, P., Inglehart, R., 2016. Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash. HKS Fac. Res. Work. Pap. Ser. RWP16-026.

Patternotte, D., Tremblay, M., 2021. The LGBT movement and the state: Paradoxes of success and failure. Crit. Policy Stud. 1–17.

Rydgren, J., 2017. The Oxford handbook of the radical right. Oxf. Univ. Press.

A   Appendix

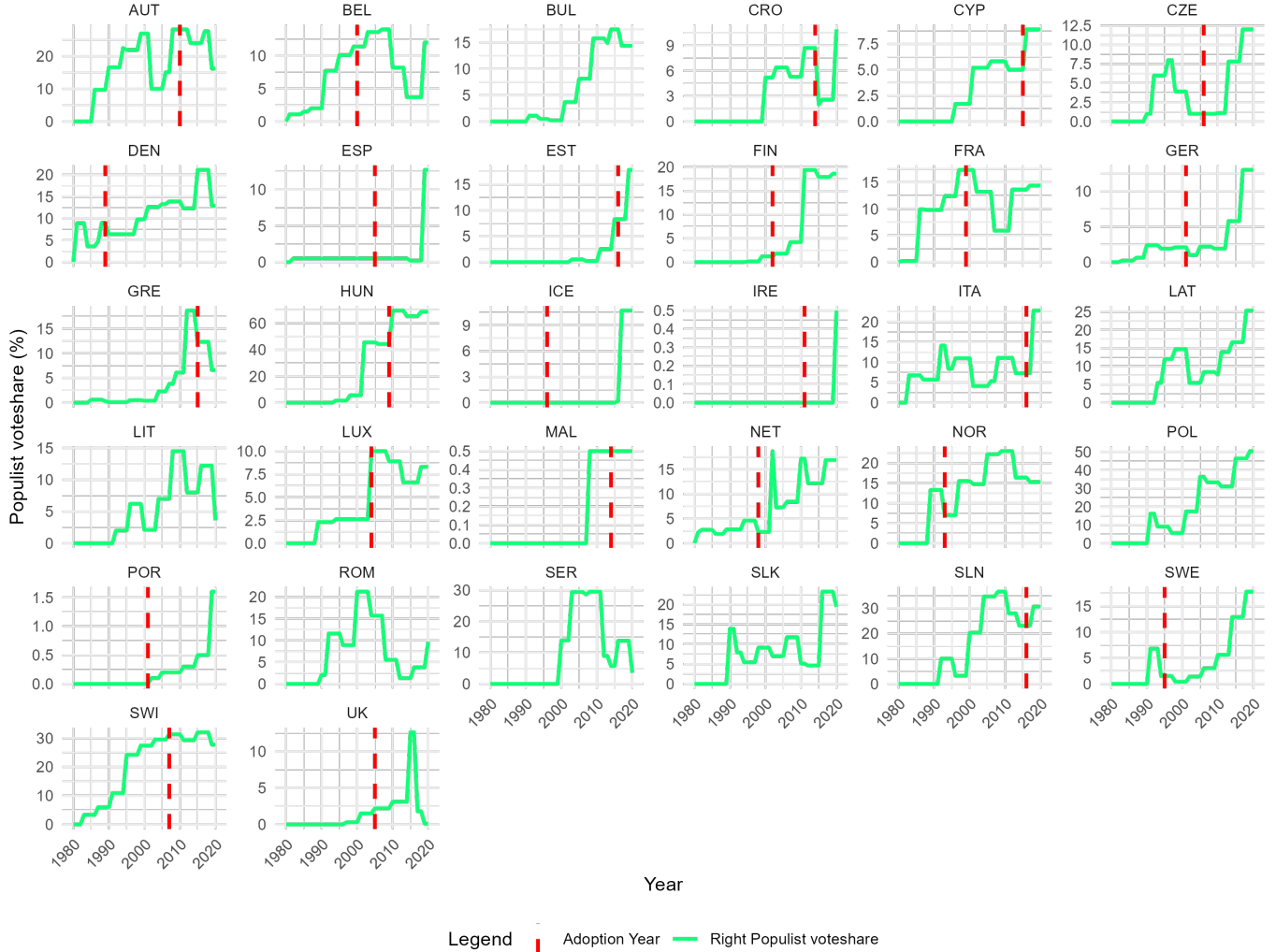**Right-wing Populist Vote Share and Civil Union Adoption**

Figure 5: Populist voteshare evolution and Year of LGBT Civil Union Adoption