

The Political Shadows of Industrial Job Displacements: Economic Deprivation, Blame Attribution, and Compensation

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Abstract

How does globalization-induced industrial decline impact politics? I propose different mechanisms linking job decline to voting. First, if unemployment soars as a consequence of a plant closure this will result in local communities being economically deprived which leads to lower support for the incumbent. Second, blame attribution should also play an important role since incumbents can be blamed for their handling of plant closures. Third, I argue that if people are effectively compensated via active labor market policies this anti-incumbent effect should be minimized. I leverage the case of the closing of Lindø Steel Shipyard in Denmark to test in a quasi-experimental setting how a plant closure is linked to voting. Leveraging a differences-in-difference (DiD) design with national and local election data at the municipality level from 2001-2019, I first find that the closing of the shipyard had a negative effect on votes for the right incumbent government. I further find that the closures increased unemployment in the short to medium term, and unemployment decreased votes for the incumbent. Moreover, leveraging interview data I showcase that local actors blame the government for its inaction and instead credit the EU for its support. Supporting this, DiD estimates also show that impacted areas develop more positive views of the EU. Finally, leveraging an event study design I find that the political effects are not persistent. Three elections after the announcement of the closing in 2009 the effects become insignificant which at least suggests that the compensation could have been effective. I find no evidence of a surge in the populist vote or a systematic anti-incumbent effect as new incumbents are not punished. The paper hence shows how plant closures are related to voting, and how losers of globalization can be compensated.

Introduction

What determines the electoral fate of incumbents? Major structural changes in labor markets create new winners and losers with huge consequences for the electoral landscape. At least since the 1970s industrial jobs have been disappearing due to structural changes in developed democracies. An important literature in economics and political science argues that globalization, technological change, and the transition to the knowledge economy have changed the economic and political landscape (Autor et al., 2013; Autor et al., 2003; Baccini & Weymouth, 2021; Colantone & Stanig, 2018; Dorn et al., 2020; Rickard, 2019; Rommel & Walter, 2018; Iversen & Soskice, 2019, Milner, 2021). Job losses resulting from structural changes also have a regional dimension since industrial job loss is disproportionately located in some localities resulting in areas and communities that are “left behind” (Rodriguez-Pose, 2018; Broz et al., 2021). Individuals and communities losing or at risk of losing their jobs to trade, offshoring, automation, and the knowledge economy tend to respond electorally by punishing the (mainstream) incumbent often opting for populist (right) parties instead (Walter, 2021; Gallego & Kurer, 2022).

This paper focuses on the political consequences of a major steel shipyard closure due to offshoring. I argue that plant closures lead to anti-incumbent voting. I propose three mechanisms – one well-known economic mechanism and two political mechanisms. First, if unemployment soars as a consequence of a plant closure this will result in local communities being economically deprived which leads to lower support for the incumbent. Second, blame attribution should play an important role since incumbents can be blamed for their handling – including unwillingness to handle – the adverse effects of plant closures. Third, I argue that if

people are effectively compensated via active labor market policies – e.g. training and coaching – this anti-incumbent effect should be minimized over time.

I leverage several (new) data sets that have been compiled for this project to examine these arguments. I first show leveraging a difference-in-difference (DiD) design that the shipyard closure is negatively affecting votes for the incumbent right political bloc. I secondly tease out the economic and political mechanisms. I first show with a DiD event study that unemployment increased after the closure. Unemployment moreover seems to negatively impact the incumbent. I secondly show with interview data that local actors involved in the compensation process blame the central government for not providing any assistance.

Workers instead attribute help and credit to the European Globalization Fund – not the government. This is also supported by a DiD study of EU preferences showing that areas and individuals in the compensated areas developed stronger preferences for the EU. These results hence show that the incumbent political bloc is being punished when a plant closes down, and that blame for not helping is a part of the explanation for this anti-incumbent effect. The effects are however not persistent over time and become insignificant after three elections which at least suggests that workers and areas impacted by the closings could have been compensated via active labor market policies.

The paper speaks to several literatures. First, it speaks to the literature on industrial decline and voting (Bolet et al., 2023; Broz et al., 2021; Baccini & Weymouth, 2021; Colantone & Stanig, 2018; Milner, 2021) by showing how industrial decline is causally related to voting and the political temporal dimension of industrial decline. The paper also contributes to this literature by addressing blame attribution showing that blame might be one important mechanism linking industrial decline to the punishment of specific political constellations.

This highlights that political agency plays a central role in understanding the political consequences of industrial jobs disappearing. Relatedly, the paper also speaks to the literature on offshoring showing that offshore-induced industrial job displacement may contribute to economic decline in ways that might impact political behavior (Blinder, 2009; Rickard, 2022; Walter & Rommel, 2018; Owen & Johnston, 2017; Owen, 2017). Moreover, the paper speaks to a large literature on the compensation of globalization losers (Milner, 2021; Rickard, 2023; Ruggie, 1982; Cameron, 1978; Swank & Betz, 2003; Foster & Frieden, 2017) by showing that large-scale active labor market policies may compensate laid-off workers. This gives credence to models stressing the importance of work and dignity for political behavior (Gidron & Hall, 2017; Gidron & Hall, 2019) and the social investment approach in the comparative welfare state literature more broadly (Busemeyer & Garritzmann, 2019; Esping-Andersen et al., 2002; Garritzmann et al., 2021; Hemerjick, 2017; Hemerjick, 2018). The paper also speaks to the literature on preferences for the European Union (Hooghe & Marks, 2004; De Vries, 2018; Halikiopoulou et al., 2012) by showing that economic compensation via the EGF influences EU preferences.

The Lindø Steel Shipyard is an interesting case to study for numerous reasons. First, it is one of the major shipyards to close down in western Europe in a modern political area which makes insights valuable for the scholarship on the political consequences of industrial decline more broadly and for the scholarship of plant closures more specifically. Second, it is an interesting case to study policy intervention. Local actors organized to apply for funding via the European Globalization Fund (EGF). This provides an interesting case to study under which conditions active labor market policies compensate workers adversely affected by an industrial unemployment shock due to offshoring. The evidence provided here at least suggests that even in a case where unemployment insurance is retrenched, active labor market

policies may be an effective policy lever to compensate displaced workers. The displaced workers regained jobs relatively quickly and exhibited high satisfaction with the active labor market policy programs under the EGF. This at least suggests that active labor market policies can compensate losers of globalization in the medium term. However, blindly training displaced workers may not be effective. This case highlights how what I label a “strategic training approach” requires actors to competently identify market needs and “growth sectors” and tailor training programs accordingly. This speaks to the importance of knowledge of local labor market policies and local growth opportunities central to economic geography (Iammarino et al., 2018).

The paper is structured as follows. First, the Lindø case and its history are described. Second, the main literature and theoretical expectations will be presented and developed. Third, the data and identification strategy will be elaborated. Fourth, the results will be presented. The last section concludes.

Case description – The Rise and Fall of Lindø Steel Shipyard

Denmark – like most Western European countries – has a long and proud history of industrial production dating back to around 1840. An important part of the industrial history is steel shipyards. From 1916-1919 many new large steel shipyards were built in Denmark and represent for many a vocal point in Danish industrial history. One of the biggest steel shipyards in the country was Odense Steel Shipyard, founded in 1918. With the modernization of the shipyard in the 1950s, Odense Steel Shipyard outdistanced the other Danish shipyards and in 1958 reached a place as number 20 among the world's shipyards by tonnage delivered (Toftgaard, 2016). In 1956, Arnold Peter Møller – a now famous Danish

shipowner – decided to build a new shipyard on a field at Lindø on the island Fyn – located in Munkebo Municipality. The locality was primarily chosen due to lucrative production conditions. The shipyard was inaugurated in 1959 as a newly modernized version of Odense Steel Shipyard (SLKS, 2023; Toftgaard, 2016). Lindø was one of the major post-war workplaces and represents both the shipyards' transition from slipways to sectional construction and the establishment of an industrial town in a former rural area.

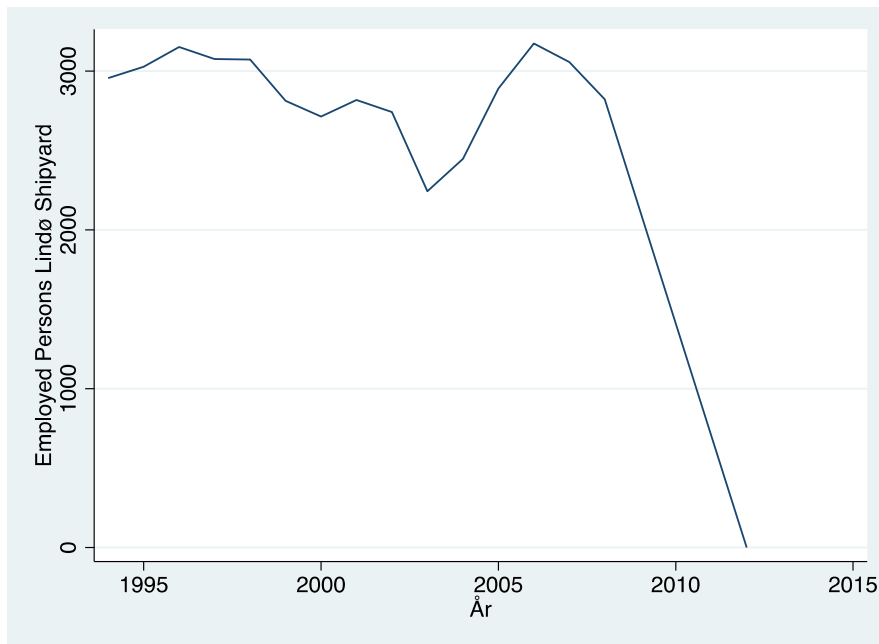
The construction of Lindø accompanied a lot of local economic growth and activity (Toftgaard, 2016). In the original plan in the 1950s, a “working city” with 1000 houses including a city center was envisaged. In Munkebo city alone the population increased fivefold from around 1000 inhabitants in 1955 to around 5000 in 1965 and neighboring cities and municipalities also experienced growth because of the steel shipyard. With the construction of Lindø Steel Shipyard Munkebo’s average income was placed amongst the highest on Fyn.

The good economic development however ended abruptly with the oil crisis in the early 1970s and the crisis continued in the early 1980s. A consultation report even recommended closing the shipyard in the 1980s. However, Maersk Mc-Kinney Møller saw another solution and chose a new strategy: Investments in the development of new production technology (e.g. robotics technology). The development of production technology went hand in hand with new, innovative ship designs created in close collaboration with the Maersk shipping companies. Lindø Steel Shipyard effectively became a development yard for the Maersk companies and found a new specialization: Container ships. Starting in the 1980s the Steel shipyard primarily specialized in the construction of big container ships.

Since the 1980s, Odense Steel Shipyard had been completely dependent on orders from the Maersk shipping companies and was therefore vulnerable to changes in the priorities of Maersk. Due to changes in the container market in the 2000s, it was already rumored in 2007 that the steel shipyard would close down. This was the case even though the steel shipyard had done relatively well in the previous years. The consequence was that Maersk decided to cancel a series of previously ordered container ships in 2007. In [August] 2009 it was finally revealed that the steel shipyard would have to close down step by step. In 2012 the shipyard was de facto closed down. The development in employment at the shipyard from the late 1990s until its final closure in 2012 is depicted in Figure 1. In the late 1990s and early 2000s the shipyard employed a total of more than 3000 people. The number of workers employed fluctuated substantially and reached roughly 2250 in 2004 followed by a period of growth up until 2006. When the shipyard announced its closure in 2009 around 2800 workers were employed at the shipyard. By late 2011/early 2012 the last worker was fired.

Despite its unique situation and history, Lindø Steel Shipyard was by no means the only shipyard to close during the financial crisis. The number of shipyards worldwide, which had soared during the boom, was halved from 2009 to 2014 (Toftgaard, 2016). Odense Steel Shipyard survived longer than many other large shipyards in Europe through its role as a development yard. The closure of the Lindø Steel Shipyard was the end of an era in Danish and European industrial history and was the last shipyard to close down in Denmark. The production was instead outsourced – primarily to Asian economies.

Figure 1. Employment at Lindø Shipyard, 1994-2012



Own elaboration based on Toftgaard 2016, pp 748. There is a data break between 2009 and 2012.

Theory

Economics of voting

A significant body of literature suggests that voters evaluate the performance of incumbent politicians based on the overall state of the economy (Brenden & Drazen, 2008; Healy et al., 2017; Lewis-Beck & Stegmaier, 2000). Indicators such as inflation, unemployment rates, and the growth of the gross domestic product serve as signals to voters regarding the health of the economy. This evaluation can either be retrospective or prospective (Healy & Malhotra, 2013). In other words, voters may judge the incumbent based on past economic performance or expectations for the future. The decline in industrial employment plays into both scenarios. Voters may assess politicians based on the number of industrial jobs lost in the previous term, or they may anticipate job losses if the incumbent remains in power. Implementing policies

that address these concerns reflects the former, while promises to rejuvenate the industrial sector represent the latter.

During a crisis, the government may face retrospective punishment. A well-known example cited by Achen & Bartels (2016) involves the New Jersey government being blamed for shark attacks, despite the events being beyond their control (though see Fowler & Hall, 2022). However, Healy & Malhotra's (2010) survey experiments suggest that voters tend to judge politicians not solely based on the crisis itself, but on their response to it, highlighting the significance of crisis management.

The direct impact of industrial job loss on voting behavior is primarily through unemployment. The loss of these jobs can have persistent effects, affecting wages negatively. Given that traditional manufacturing roles often provide good pay and high returns for skilled workers, especially those with vocational training, they hold significant appeal for many workers, particularly men and young individuals. Additionally, the decline of the industrial sector can be seen as a sign of economic decline, as abandoned factories become symbols of past industrial prowess (Baccini & Weymouth, 2021).

Furthermore, the repercussions of industrial decline extend beyond individual firms to entire production networks, impacting employment, wages, and even political preferences (Bernard et al., 2019; Acemoglu & Tahbaz-Salehi, 2023; Acemoglu et al., 2016; Betz & Yin, 2023; Rachel & Wellhausen, 2016). Additionally, local communities may suffer from reduced demand due to import competition, leading to higher unemployment, lower wages, and shifts in political affiliations (Colantone & Stanig, 2022; Rodrik, 2021). This can also affect

housing prices and overall economic activity, prompting voters to support parties with policies focused on aiding struggling regions (Dancygier et al., 2024).

Moreover, the outflow of jobs and people from a locality can strain local government budgets, resulting in decreased welfare services and potential austerity measures, which can influence voting behavior (Rickard, 2023; Alesina et al., 2021; Bansak et al., 2021; Fetzer, 2020; Hübscher et al., 2021). While municipal equalization systems may mitigate this effect to some extent, full equalization is necessary for complete mitigation.

Given that the closure of a major steel shipyard de facto will displace a lot of jobs we should hence expect the following:

H1: Areas impacted by the plant closure should vote less for the incumbent government

H2. Unemployment should increase relatively more in impacted areas

H3: Unemployment should be negatively associated with voting for the incumbent

Blame attribution and voting

An important literature in political science states that blame and the avoidance of blame are important for understanding political outcomes (Weaver, 1986). Building on prospect theory (Kahneman & Tversky, 1984), central to blame avoidance theory is loss aversion of actors and negativity bias among voters. As voters put higher weight on losses than gains policy-makers actively try to engage in numerous blame avoidance strategies to shift blame. These might include shifting the agenda or finding a “scapegoat” (Hinterleitner, 2017).

A well-known application of blame avoidance theory in political science is Pierson's (1994; 1996) study of welfare retrenchment. How can policymakers engage in retrenchment and unpopular reforms without being punished by the electorate? According to Pierson politicians have two main goals: They want to achieve their goals and they want to get reelected. The former sometimes comes at the cost of the latter when pursuing unpopular reform so engaging in blame avoidance strategies may be an effective political strategy to achieve both. Pierson's theory of blame avoidance largely builds on economic voting theory with a straightforward punishment logic: Politicians are rewarded for good economic behavior and punished for bad. However, if blame for bad economic performance or unpopular reforms can be shifted it may be possible to retain office in the face of unpopular reforms and a bad economic climate.

Building on this strand of theory I argue that blame attribution is important for understanding voter responses to plant closures. The literature on retrospective voting largely holds that governments are punished for bad economic performance. However, not all bad economic performance can be attributed to the government (such as external shocks), and governments may instead be punished/rewarded for how they handle and respond to a bad economic climate (Healy & Malthora, 2010; Healy & Mathora, 2013). This suggests that while governments may try to engage in blame avoidance strategies if they ultimately are perceived as responsible for how they respond – or rather do not – to an economic crisis they may be punished electorally. To the extent that it is possible to detect such blame attribution for inaction or wrongful action – regardless of the government's stake in the crisis in the first place – the government may be punished electorally. The causal chain linking a plant closure to voting would hence be (1) plant closure impacts individuals and localities negatively; (2)

incumbents policy responses to the adverse effects of the plant closure are being evaluated;
(3) depending on the policy evaluation politicians will either be punished or rewarded electorally.

Moreover, external entities – such as the EU – are often blamed by populist right parties for all sorts of tragedies (Kaltwasser & Mudde, 2017). However, the European Globalization Fund also helps support displaced workers around Europe. The Lindø Steel Shipyard is a case in point. The network of actors managed to secure substantial funding via the EGF to support the training and coaching activities. To the extent that the EU funds are compensating displaced workers, one should expect those said workers to develop more positive attitudes towards the EU. This, however, assumes that voters are aware that the help they receive is due to the EU and not some other governmental agency. Based on these theoretical insights we should expect the following:

H4: Perceptions of ineffective policy responses to a plant closure should lead to blame attribution

H5: Individuals and areas compensated by the EGF should develop more positive attitudes towards the EU relative to non-compensated areas.

Compensating globalization losers

There is a big discussion in comparative political economy and international political economy about how globalization losers can be compensated. To distinguish between different types of compensatory policies one can distinguish between consumption and

investment policies (Beramendi et al., 2015). Consumption policies have an immediate return and normally with clear beneficiaries. Unemployment benefits and pensions are good examples of consumption policies. Unemployment benefits ensure that unemployed workers can maintain a livelihood and pension can ensure a livelihood in old age while at the same time compensating for lost retirement benefits during unemployment throughout the life course. Consumption policies are normally viewed as cases of compensation after the fact. These policies can hence compensate for globalization-induced risks after they have manifested themselves. Investment policies tend to have longer-term returns and more diffuse beneficiaries. Education and active labor market policies are good examples of investment policies. While the former has a more diffuse recipient group the latter is more direct as it at least partly is targeted towards the unemployed. Being equipped with the proper skills needed to succeed in labor markets is oftentimes perceived as protection against risks ex ante by social investment scholars (Busemeyer & Garitzmann, 2018; Hemmerjick, 2017). However, retraining can also be used as a policy tool after the fact. Unemployed receiving training to make them more attractive in labor markets is an example of compensation after the fact, although, it is an investment policy.

Central to the international political economy and comparative political economy literature is the debate on how to compensate globalization losers. The compensation hypothesis and embedded liberalism hypothesis contend that as globalization increases labor market risks compensatory policies such as unemployment benefits and a generous social security net can compensate workers (Cameron, 1978; Ruggie, 1982). This allows countries to integrate into world markets without political backlash. Swank and Betz (2003) provide evidence of this argument at the macro level finding that in countries where the social security net is generous globalization does not lead to more votes for populist parties. Walter (2010) moreover

provides evidence at the individual level showing that workers demand more social protection when faced with globalization risks. More recent studies also find strong support for these claims (Frieden & Foster, 2019; Halikiopoulou and Vlandas, 2016; Roubini, 2016) whereas others find more mixed support (Rickard, 2023). Examining the effects of the European Globalization Fund on voting for protectionist parties Rickard (2023:429-430) writes that “*targeted compensation programmes, like the EGF, may marginally reduce voters’ support for protectionist political parties, [h]owever, (...), targeted compensation alone is unlikely to turn the tide of protectionist sentiment.*”

This compensation thesis has, however, more recently been criticized for its sole focus on compensation via social transfers such as unemployment benefits. Some scholars have for example argued that status anxiety is driving voting for populist parties (Hall & Gidron, 2019). To the extent that globalization-induced labor market changes increase either real or perceived status risks providing strong unemployment benefits may not mitigate the political consequences of globalization as status often times is linked to people’s jobs. Instead, what is needed is the protection of jobs¹ – either via strong job protection laws or a slowing down of globalization – or new skills and retraining to retain or regain social status. Studies find some support for these ideas. In the case of technological change, Gallego et al. (2020) for example find in the Spanish case that when faced with technological change voters prefer a slowdown of technological development over other types of policies. Busemeyer & Garitzmann (2019) moreover find evidence at the individual level that people in countries faced with high globalization risks tend to prefer education spending over unemployment spending suggesting that social investment policies are in higher demand under globalization risks.

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The Lindø Steel Shipyard case provides an interesting avenue for testing the extent to which active labor market policies could function as an effective compensation against economic globalization. Denmark is widely known as a country with a relatively generous welfare state (Esping-Andersen, 1990), although generosity and eligibility criteria have been retrenched substantially since at least the 1980s (Scruggs et al., 2022). This is for example exemplified by the cut in duration of unemployment insurance in 2010 from 2 to four years. This cut was agreed upon by the right government and its supporting party (The Danish People's Party). This means that right in the middle of the closing of the Lindø Steel Shipyard unemployment benefits were retrenched. At the same time, the displaced workers were heavily compensated via the EGF. The EGF provided retraining and coaching for the displaced unemployed workers. This Lindø case does not allow one to examine whether active labor market policies are more or less effective than consumption policies in compensating workers, but it does allow me to test if these policies at least could have been effective.

There is at least one mechanism through which the active labor market policies via the EGF can influence workers' political preferences and the temporal dimension is likely important for understanding compensation via active labor market policies. If displaced workers need to be equipped with new skills and help to imagine a new work path as something other than a shipyard worker, we should expect the compensation to manifest itself in the medium term. This logic is consistent with labor market research showing that the returns to active labor market policies are not immediate. If jobs are being outsourced new jobs will have to be created in the local economy for workers to make a transition into new employment². Once new jobs appear displaced workers with newly updated skills will everything else be more attractive in local labor markets. New skills may also increase productivity which can have

² Workers with high mobility will naturally be able to seek employment outside of the local economy.

positive spillover effects on the local economy. This should dampen the dissatisfaction with people's current situation and should at least minimize the punishment of the incumbent. To the extent that one political bloc is being blamed for the handling – or rather lack of handling – of the adverse effects of the shipyard closure active labor market policy compensation via the EGF should dampen the anti-incumbent effect. Hence, we should expect that:

H6: Areas impacted by the plant closure should not persistently punish the government they blame as they are being compensated via the EGF

Data and identification

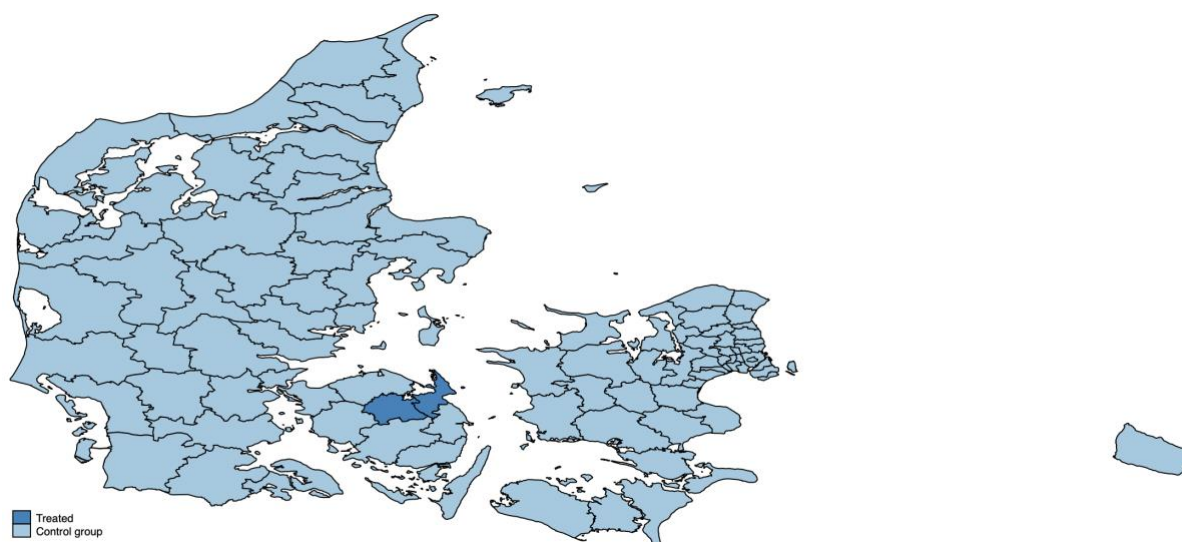
Data

I leverage several (new) data sets to test the hypotheses. First, I create a panel with votes cast at national elections. The data is at the municipality level and covers every election from 2001-2019 (i.e. 2001, 2005, 2007, 2011, 2015, 2019). Second, I create a panel with votes cast at local elections. The data is at the municipality level from 2001-2021 and contains every location election from 2001-2021 (i.e. 2001, 2005, 2009, 2013, 2017, 2021). Both panels are based on data from the Danish Electoral Database. There was a major structural municipality reform in 2007 which drastically reduced the number of municipalities to 98. To make the data consistent over time I use the post-2007 municipality borders across all years so that the entities (i.e. municipalities) are comparable over time. The two respective panels hence consist of a total of 6 periods with a total of 588 observations. Third, I create a panel of yearly unemployment data at the municipality data from 2007-2019. To the best of my knowledge, Statistics Denmark does unfortunately not provide free-of-charge data on

unemployment with consistent municipality borders at the municipality level before 2007. However, with two observations prior to treatment, this data still allows me to track changes in unemployment before and after the treatment. Fourth, to examine changes in preferences for the EU I created a municipality panel based on two surveys from the Danish National Electoral Study (DNES). Specifically, I rely on a national election study before compensation took place and after the compensation took place. As the compensation activities took place from 2010-2013, I chose the 2007 election and the 2015 election study. I chose not to include the 2011 election study as this was right in the middle of the first compensation activities and amidst the final part of the closure. As none of the same individuals are surveyed in both of the surveys, I take the municipality average of individuals' attitudes towards the EU relying on the created EU dummy variable. This gives me a panel with 96 municipalities and a total of 194 observations. As the independent treatment variable, I follow the strategy above and create a variable taking the value 1 if the municipalities are getting compensation and 0 if otherwise. The municipalities getting compensation are equivalent to those that are directly impacted by the closure. Fifth, I leverage interview data conducted in 2012. The first interview covers a focus group interview with two representatives of the local unions. The second interview is based on the final evaluation of the EGF where numerous local actors were present. Taken together the two interviews capture what a group of local actors think of the Lindø EGF project and the role of the government in handling what was perceived as a local labor market crisis. All names are anonymized in the text; however, the author is in possession of the names and contact info of the included interviewees.

In all models the treated municipalities are two municipalities that were most directly hit by the shipyard closure – Ketamine and Odense Municipality. Figure 2 depicts in dark blue the location of these two municipalities relative to all other municipalities (the control group).

Figure 2. Treated and non-treated municipalities



With the panel data I calculate votes shares for the incumbent right government and its parliamentary supporters by dividing votes cast for the right parties by valid votes in municipality i multiplied by 100 ($\frac{\text{Votes cast}_{\text{Right parties}}}{\text{Valid votes}_i} * 100$). As the government changed in 2011 while the shipyard was in the final process of closing down, I also calculate a variable that captures changes in vote shares for the incumbent government regardless of the partisan affiliation of the incumbent. This is done to test if there is a systematic anti-incumbent effect or if the anti-incumbent effects are primarily directed toward the incumbent at the beginning of the closures. I measure the same variables with national election voting data and local election voting data.

In the unemployment panel, I follow Statistics Denmark and measure unemployment as the average number of full-time unemployed in the municipality per 100 17–64-year-olds. Unemployment is defined as gross unemployment, which is defined as the sum of the registered (net) unemployed and the activated unemployed who are also assessed to be job-

ready. The population is calculated as of January 1st of the year. The data is taken from noegletal.dk. which is a publicly available data portal.

I also include several controls that likely impact voting:

Tax base: The municipality's (personal) income tax base plus a share of the taxable land values.

Socio-economic index: The municipality's relative expenditure needs compared to other municipalities based on a number of socio-economic criteria that are included with different weights in the calculation. These are criteria such as 'Number of 20-59-year-olds without employment' and 'Number of psychiatric patients'. The exact definition can be found in the Ministry of the Interior and Health's (2008) publication 'Municipal Equalization and General Subsidies 2008', page 40. A value above 1 means that the municipality has a higher expenditure need relative to the average of the municipalities, while a value below 1 means a lower expenditure need relative to the average based on numerous socio-economic criteria.

Further education: Number of 25-64 year olds with higher education in relation to the total number of 25-64 year olds in the municipality³.

Population: Number of inhabitants in the municipality as of January 1st.

Population density: Number of inhabitants in the municipality as of January 1st per km².

³ When calculating the level of education, the starting point is a person's longest completed education. Inhabitants with higher education include people who have a bachelor's degree, medium or long-term higher education or a master's degree. However, people with a Ph.D. degree are not included in the calculation before 2007.

Votes: Share of valid votes as a percent of eligible votes in the municipality.

To measure preferences for the EU I leverage the following question: What are your general attitudes towards the EU? 1) Very positive; 2 In general positive; 3) Neutral/neither nor; 4; In general negative; 5 Very negative. I code the EU positive variable taking the value 1 if voters respond very positively or positively in general and 0 if otherwise.

Identification strategy

To examine the effects of the closure on voting at the geographical level I rely on a difference-in-difference (DiD) design. As I am interested in the temporal dimension and not just the average treatment effect, I also rely on an event study version of the DiD design. This allows one to track how the treatment (the closure of the shipyard) impacts voting in each period following the closure. If I am correct in theorizing that the EGF compensation is effectively compensating the workers and areas impacted by the closure one should expect stronger effects in the beginning and a low or no effect as time unfolds. This means that while it might be possible to detect an average treatment effect over the period most of this effect could be driven by the short-term effect. An event study design allows one to tease this temporal dimension out.

DiD designs – under the parallel trend assumption – measure the difference before and after treatment between the treated municipalities compared to a “control” group of non-treated municipalities. DiD design hence compares how each treated group changes over time comparing the groups with themselves to eliminate between-group differences, and then

compares the treated group to the non-treated groups – also known as a control group.

Assuming parallel trends I first estimate the average treatment effect of the treated (ATT) of the closure in the following way:

$$\tau = E(Y_{it}(1) - Y_{it}(0) | X_{it} = 1, X_{it}, t_{-1} = 0) \quad (1)$$

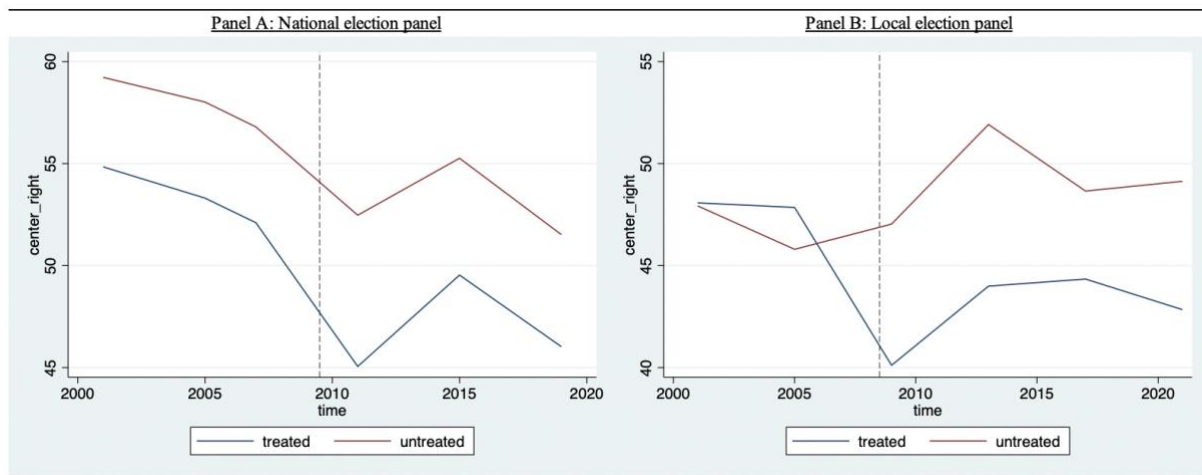
This measures the average difference between votes for the incumbent in the post-period for treated and non-treated municipalities. Second, I rely on an event study that estimates the effect for each period.

In order to claim causal effects in a DiD design the parallel trends assumption (PTA) must hold. The PTA states that treated and not treated groups should have a similar trend prior to treatment. The trend does not need to be “flat”, but it has to be identical between the two groups. This means that nothing else should change the gap between treated and non-treated groups at the same time as the treatment. There is no authoritative test to determine if the parallel trend assumption holds, however, the literature has developed different graphical, parametric, and non-parametric tests to account for the parallel trend assumption.

One common approach is to examine if the gap – i.e. the trend – between treated and non-treated groups is similar prior to the treatment. Figure 2 shows that the parallel trends assumption is valid for the national election panel (Panel A), but is violated for the local election panel (Panel B). In Appendix xx I run several other tests to determine if the parallel trend assumption is violated. For the national election data, the parallel trend assumption seems to be valid. However, for the local election data, the parallel trend assumption is violated. The estimates of the former can hence be interpreted as causal whereas the latter can

“only” be interpreted as associational. Figure 2 also gives a first descriptive indication that the closure on average decreased votes for the right bloc. This seems to be the case for both the national and local election data. How big this effect is and the temporal dimension is examined in the sections below.

Figure 2. Vote shares for the right bloc in treated and non-treated groups, 2001-2019



Results

The political consequences of the shipyard closure

Leveraging the national election data at the municipality level, table 1 shows the effects of the shipyard closure on vote shares for the parties in the right bloc. Model 1 shows the base results and the remaining models add in a stepwise manner the control variables. Across all models, the closure (indicated by the DiD variable) has a negative effect on vote shares in the impacted municipalities. In model 1 the effect amounts to 1.5 percentage points fewer votes for the right bloc. In the full model with all controls (model 7) this effect is increasing to 2 percentage points fewer votes. This seems to be a moderate to large effect on vote shares. In

appendix [xx] I largely obtain similar results with the local elections panel. Although the local election results cannot be interpreted as causal, they are still suggestive of a similar observable pattern.

In appendix [xx] several robustness tests are run. First, a trend specification is included. [Second, random treatment is assigned. Third, a synthetic control approach is implemented. Fourth, a comparison with predominantly industrial municipalities is examined. The latter three are currently not shown in the paper].

I also test in appendix [xx] if the political extremes gain votes – i.e. if populist right parties and far-left parties win votes as a consequence of the closure. The appendix shows that this is not the case. In fact, populist right parties on average lose votes in the impacted areas whereas the far-left parties neither gain nor lose votes.

Since the Lindø shipyard likely had adverse effects beyond the municipalities directly impacted, appendix [xx] also tests if the two neighboring municipalities – Nyborg and Nordfyns Municipalities – also punished the right incumbent bloc. Including these two municipalities, I largely obtain the same results as in the model including the municipalities directly hit by the closures. This suggests that a plant closure has spill-over effects on neighboring localities. Whether this is driven by local production networks or depressed demand effects is beyond the scope of this text. However, these results at least suggest that such mechanisms could be present.

Moreover, as the government changed from a right-leaning to a left-leaning government in 2011 while the shipyard was in its final phase of closing down it might be that the new

government would be blamed in the subsequent 2015 election. To test if there is a general anti-incumbent effect at play appendix [xx] tests if the impacted areas in the aftermath of the closure punished whomever was in government. No evidence is found for this proposition as insignificant coefficients are obtained. It is hence not possible to detect a general anti-incumbent effect.

Taken together these results suggest that the (incumbent) right bloc lost votes in areas severely impacted by the closures. The punishment did not result in more votes for the “extremes” – in fact the populist right party lost votes and the far-left party did not gain any votes. The political consequences also extend to localities beyond those directly hit by the closure. Finally, no general anti-incumbent effect can be detected.

Table 1. Average treatment effect on the treated

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Right bloc	Right bloc	Right bloc	Right bloc	Right bloc	Right bloc	Right bloc
DiD	-1.541*	-1.519*	-1.705**	-2.075***	-2.045***	-2.040***	-2.031***
	(0.877)	(0.785)	(0.734)	(0.762)	(0.742)	(0.741)	(0.741)
Socio-Economic Index		1.908**	1.426*	-1.171	-1.092	-0.931	-0.953
		(0.800)	(0.840)	(0.988)	(0.985)	(1.029)	(1.031)
Tax base			-5.14e-05***	-3.64e-05**	-3.30e-05**	-3.35e-05**	-3.33e-05**
			(1.53e-05)	(1.53e-05)	(1.58e-05)	(1.58e-05)	(1.58e-05)
% Further Education				-0.313***	-0.366***	-0.348***	-0.349***
				(0.0547)	(0.0696)	(0.0746)	(0.0745)
Population					2.50e-05**	2.84e-05**	3.39e-05**
					(1.26e-05)	(1.31e-05)	(1.64e-05)
Population Density						-0.000529	-0.000517
						(0.000625)	(0.000627)
Votes (in %)							-1.28e-05
							(1.87e-05)
Constant	59.16***	57.50***	64.32***	70.53***	69.63***	69.33***	69.49***
	(0.182)	(0.721)	(2.175)	(2.144)	(2.229)	(2.331)	(2.347)
Id and time-fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	591	585	585	585	585	585	585

R-squared	0.801	0.828	0.838	0.857	0.858	0.858	0.858
Number of id	99	98	98	98	98	98	98

Mechanism 1: Unemployment and voting

The section examines the relationship between unemployment and voting for the right bloc. The national election panel at the municipality is once again leveraged. The impact of the shipyard closure on unemployment is first analyzed following by an examination of the relationship between unemployment and voting for the right bloc seeing that the right bloc lost votes as a consequence of the closures.

First, leveraging a DiD event study design figure 3 shows that the adverse employment consequences of shutting down the shipyard were relatively short-lived. Six years after the initial closing unemployment was not statistically higher in treated vs untreated municipalities. A PTA plot is provided in the appendix suggesting seemingly parallel trends in 2007 and 2008 – i.e. prior to the closing of the shipyard. Effect size in time 5: 1,4 percentage points increase in unemployment which seems substantial.

Second, estimating a two-way fixed effects regression, table 2 moreover indicates that unemployment is negatively associated with voting for the right bloc. This at least indicates that the right bloc on average lost votes in areas where unemployment went up, and since unemployment increased more in treated areas it seems plausible that unemployment at least partly explains why the right bloc lost more votes in the treated areas (i.e. Odense and Kerteminde municipalities).

Figure 3. Shipyard closure and unemployment

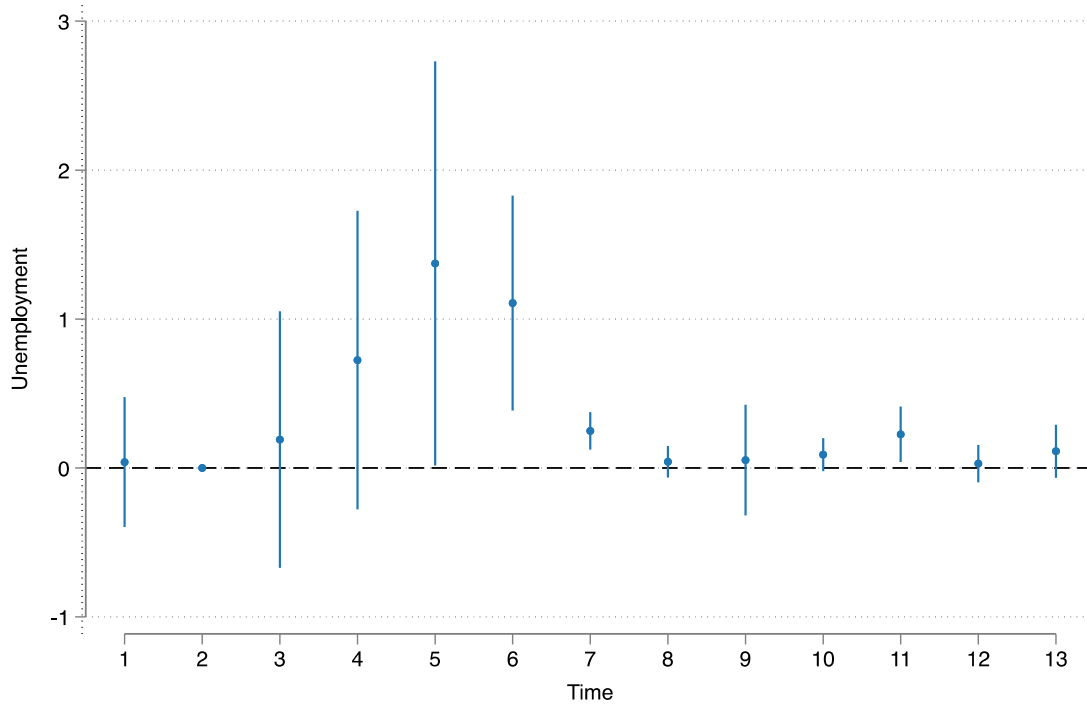


Table 2. Unemployment and voting for the right bloc

VARIABLES	(1) Right-bloc	(2) Right-bloc	(3) Right-bloc	(4) Right-bloc	(5) Right-bloc	(6) Right-bloc	(7) Right-bloc
Unemployment	-0.769*** (0.215)	-0.649*** (0.200)	-0.687*** (0.190)	-0.562*** (0.197)	-0.539*** (0.200)	-0.542*** (0.203)	-0.486** (0.201)
Tax base		-5.82e-05*** (1.57e-05)	-5.33e-05*** (1.57e-05)	-4.44e-05*** (1.47e-05)	-4.12e-05*** (1.49e-05)	-4.13e-05*** (1.50e-05)	-0.000149*** (1.95e-05)
Socio-Economic Index			3.171* (1.680)	-0.828 (1.827)	-0.132 (1.846)	-0.109 (1.848)	-1.649 (2.218)
% Further Education				-0.334*** (0.0694)	-0.397*** (0.0843)	-0.393*** (0.0876)	-0.391*** (0.100)
Population					2.92e-05* (1.53e-05)	3.00e-05* (1.69e-05)	-4.93e-05 (4.93e-05)
Population Density						-0.000156 (0.000698)	-0.000109 (0.000484)
Votes (in %)							0.000101 (0.000134)
Constant	58.81*** (0.527)	66.94*** (2.253)	63.34*** (2.949)	72.84*** (2.831)	71.43*** (2.964)	71.38*** (2.993)	89.10*** (4.723)
Id & time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	392	392	392	392	392	392	294
R-squared	0.762	0.781	0.785	0.807	0.809	0.809	0.826
Number of id	98	98	98	98	98	98	98

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Mechanism 2: Blame attribution

Why did the right lose so many votes in the impacted areas? This section examines to what extent the right government is blamed for its handling of the acute labor market crisis that the closure of Lindø Steel Shipyard brought about. The section relies on interview data plus descriptive survey data to show who is blamed and credited for the governance of the closure.

Below is an interview extract from a longer focus group interview with two union representatives that was conducted in 2012. Both union representatives represent blue-collar workers – that is, many previous Lindø workers – and were involved in the local network that

tried to help the displaced workers. IP1 refers to interview person 1 and IP2 stands for interview person 2. All names are anonymized with "xx" in the following as agreed upon with the interviewees ahead of the interview.

IP1 "I remember that xx and I, when we were discussing with our members at these courses, we were standing in a forum where there was a lot of EU opposition in general. Then we stood there and said "Isn't it fantastic that we've received 100 million from the EU?" No matter how we look at it, we are still one of the richest countries in the EU, and yet we are granted so much money by the others. Something we should be doing ourselves. I think it's worth noting that both you and xx visited the then Minister of Labor several times.

Interviewer: Inger?

IP2: Inger Støjberg. We went to see Brian [Minister of Justice] and then Inger Støjberg participated. They spent more than an hour on us. We wanted them to front the money. It took so damn long.

Interviewer: Because when you apply for the Globalization Fund, the project period starts. The funds come first, and if they come, they come after a year.

IP1: It was a disgrace - they stood in line at Lindø after August 10th to come in and say "This was really sad", these politicians.

Interviewer: Is it 2009 or 2010?

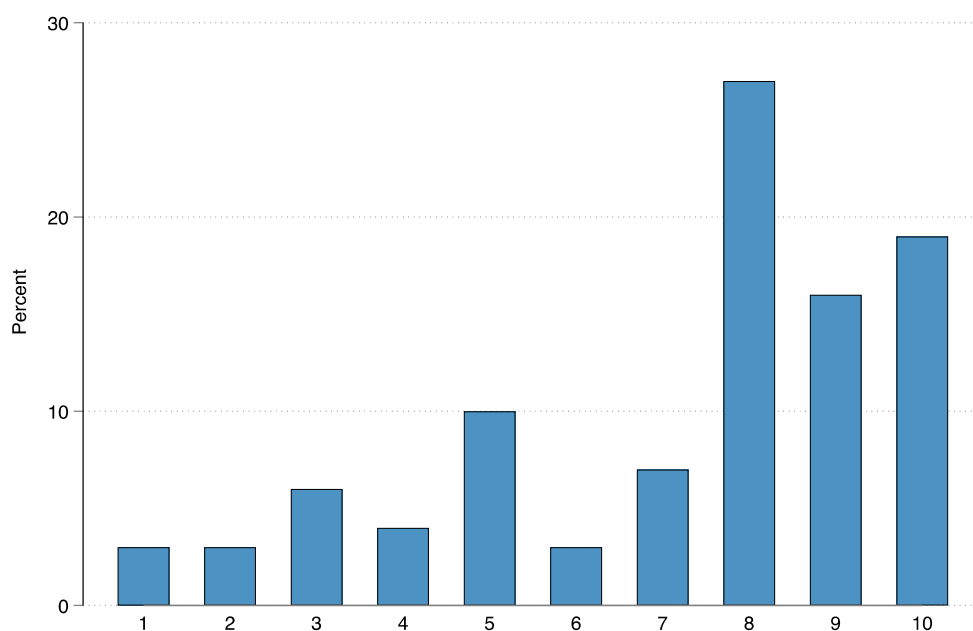
IP1: 2009. 10. August 2009. And xx and xx are not over there to ask for money. They are only over there to ask them to front the money. There was no doubt in anyone's mind that we would get the money from the EU.”

The interview extract highlights several interesting aspects of how the two union representatives perceived the situation and their role in communicating with their members. First, they communicated at courses that they had received a lot of money from the EU. They hence stress where the support is coming from. Second, they are of the opinion that it is something the “we” (i.e. the Danish state) should provide for – i.e. the Danish state should provide the funds that the EU did. They hence also seem to blame the government for not providing the necessary funds. Third, while they were happy that two ministers allocated the time to talk with them, they showcased what is perceived as a hypocritical position: When the shipyard closed down the politicians were quick to show up and tell the workers what a sad situation it all was. When they then asked them to front money and they got declined they felt let down. As one interviewee puts it: “It was a disgrace”. This shows that the feeling of being let down is strong amongst the union representatives. They hence blame the right government for its unwillingness to help.

Moreover, actors involved in the EGF project expressed positive views towards the Lindø EGF project. This is the case for numerous different local actors including worker representatives. A worker in one of the focus group interviews for example noted that *“I have taken 21.5 weeks of adult education courses and I would not have had these opportunities and been able to survive if it had not been for the EGF”*. For this worker, the help from EGF is perceived as fundamental for his “survival”. The positive attitudes towards

the EGF-funded project can also be depicted quantitatively. As Figure 4 shows, the workers involved in the project were in general very happy with the outcome of the EGF project. 75 % of the respondents noted on a scale from 1-10 at least a “6” with the weight put on the upper end of the scale. A vast majority of the workers included in the project hence express (very) positive attitudes towards the EGF project. This measure might be biased towards positive responses as the more critical participants likely declined to participate in the survey. The numbers nonetheless indicate overall positive attitudes towards the project and the outcome of the project.

Figure 4. EGF participants are in general very satisfied with the proceeds/outcome of the EGF project



Source: Question reads: “How satisfied are you in general with the outcome of the EGF project?” Based on participants in the EGF project 2. Source: Mploy (2014)

Table 3 moreover shows DiD estimates for the panel based on the Danish National Election

Study covering the election before the compensation took place (2007) and the election after (2015). Recall that the dependent variable measures positive attitudes toward the EU =1 and 0 if otherwise. Model 1 in table 3 shows that areas receiving compensation increase their general preferences for EU by 0.12. This effect increase to 0.15 in model 6 it all the controls which is approximate a half of a standard deviation in the dependent variable. Given that there are relatively few observations per municipality I run robustness check in the appendix testing if the results changes as the minimum number of respondents per municipality changes. Changing the minimum number of respondents to both 20 and 50 for example does not change the results. I also run models only with the 2015 election to see if individuals in the compensated areas on average have more positive attitudes towards the EU. This seems to be the case.

Table 3. Preferences for the EU: Difference-indifference models

	(1)	(2)	(3)	(4)	(5)	(6)
	eu_positive	eu_positive	eu_positive	eu_positive	eu_positive	eu_positive
DiD	0.118** (0.0498)	0.124** (0.0510)	0.125** (0.0509)	0.143*** (0.0458)	0.140*** (0.0494)	0.154*** (0.0364)
Population		2.48e-06** (1.20e-06)	1.65e-06 (1.74e-06)	-1.12e-06 (1.58e-06)	-6.78e-07 (1.49e-06)	-1.62e-07 (1.63e-06)
Pop density			6.51e-05 (0.000101)	-6.89e-05 (9.86e-05)	-6.78e-05 (0.000103)	-7.70e-05 (0.000111)
Further education				0.0244** (0.0103)	0.0251** (0.0106)	0.0170 (0.0130)
Socio-economic index					0.163 (0.285)	0.158 (0.293)
Transfers (expenditures)						-2.49e-05 (2.26e-05)
Constant	1*** (0.00895)	0.861*** (0.0658)	0.872*** (0.0688)	0.565*** (0.146)	0.371 (0.382)	0.699 (0.437)
Id & time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	194	194	194	194	194	194
R-squared	0.908	0.909	0.910	0.914	0.914	0.915
Number of id	98	98	98	98	98	98

Taken together the interview statements and the general perceptions of the EGF suggest that the right government was blamed for its unwillingness to help. “It was a disgrace” as one interviewee puts it. The help from the EGF is also recognized by a worker stating that he would not have “been able to survive” without the assistance from the EGF. The DiD regressions moreover show that the compensated areas develop more positive attitudes towards the EU after compensation took place. This evidence paints a picture of a government that is blamed for its unwillingness to help, and that credit is attributed to the European Globalization Fund – not the government.

Mechanism 3: Compensating the losers via the EGF and temporal industrial decline

This section examines the content of the EGF projects and the temporal nature of the punishment of the incumbent. Numerous local actors organized a network to address the extraordinary labor market situation that the closing of Lindø Steel Shipyard had resulted in. Workers as well as local communities were severely adversely impacted by the closure, and this was widely acknowledged by a large group of actors. The network consisted of Odense and Kerteminde Municipalities, local unions, local employer organizations, and local firms. The network – led by Odense municipality – applied for support in the European Union via the European Globalization Fund. As EGF projects start from the day of the application the network realized that they had to apply for two project periods to cover workers at different stages of closing of the shipyard. The first EGF project ran from October 6 2010 to October 5, 2012, however, concrete activities started in early May of 2011. The project covered 1358 workers with 568 participants. The second EGF project ran from November 1 2021 until October 31, 2013, and concrete activities started in June 2012. The project covered 980 workers with 345 participants. To be a participant the worker had to be unemployed. The

reason for the lag in the start of activities is that activities can first take place when the EGF application is formally accepted.

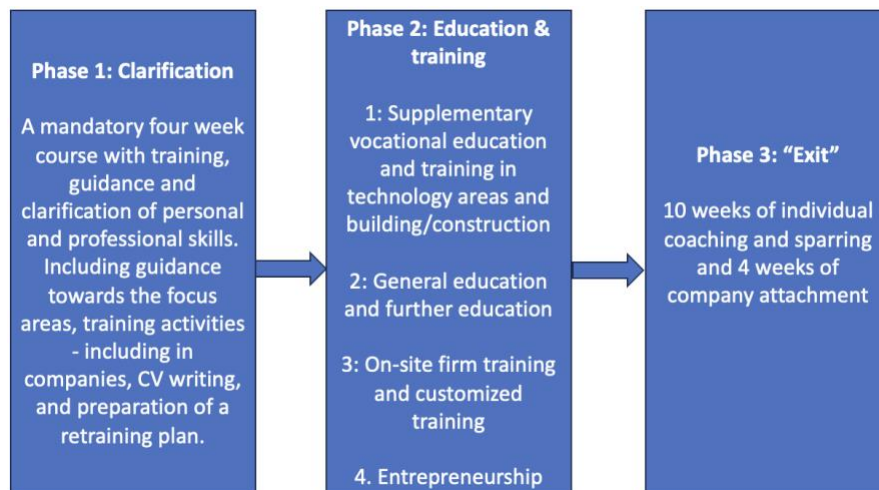
The purpose of the support was to help the affected workers find and retain new employment through training and retraining in areas with good employment opportunities. Due to the long application process in the EU, the network had time to strategically identify “growth sectors” that the training activities could target. A growth plan was therefore developed and initiated by the network, which has formed the framework for the training initiatives in the project.

The growth plan focuses on the following industries: 1) Energy technology 2) Welfare technology 3) Robot and automation technology 4) Building and construction. All these sectors were expected to have high labor market demand in the years following the closure. The network hence early structured its activities based on the assumption that some sectors would have high labor market demand.

Each of the courses consisted of three phases, see Figure 5. The first phase was a mandatory four-week clarification process where the participants’ skills were clarified individually. The phase also included information about potential education and training activities and job opportunities in the identified growth sectors. Participants also got help with writing a CV, and an individual training plan was developed for each of the participants based on their existing skills and preferences for future work. Again, with a special focus on the growth sectors. The second phase consisted of education and training activities. Four main activities were offered. First supplementary vocational training and education relevant for transitioning into the growth sectors were offered. Second, general and further education was offered. Third, firm training and customized training were offered. Finally, a few participated in courses about entrepreneurship and how to start one’s own business. The third and final

“exit” phase consisted of 10 weeks of individual coaching to prepare the workers for the transition they were about to undertake. The final phase also consisted of four weeks of attachment to a company.

Figure 5. Training activities in the EGF projects

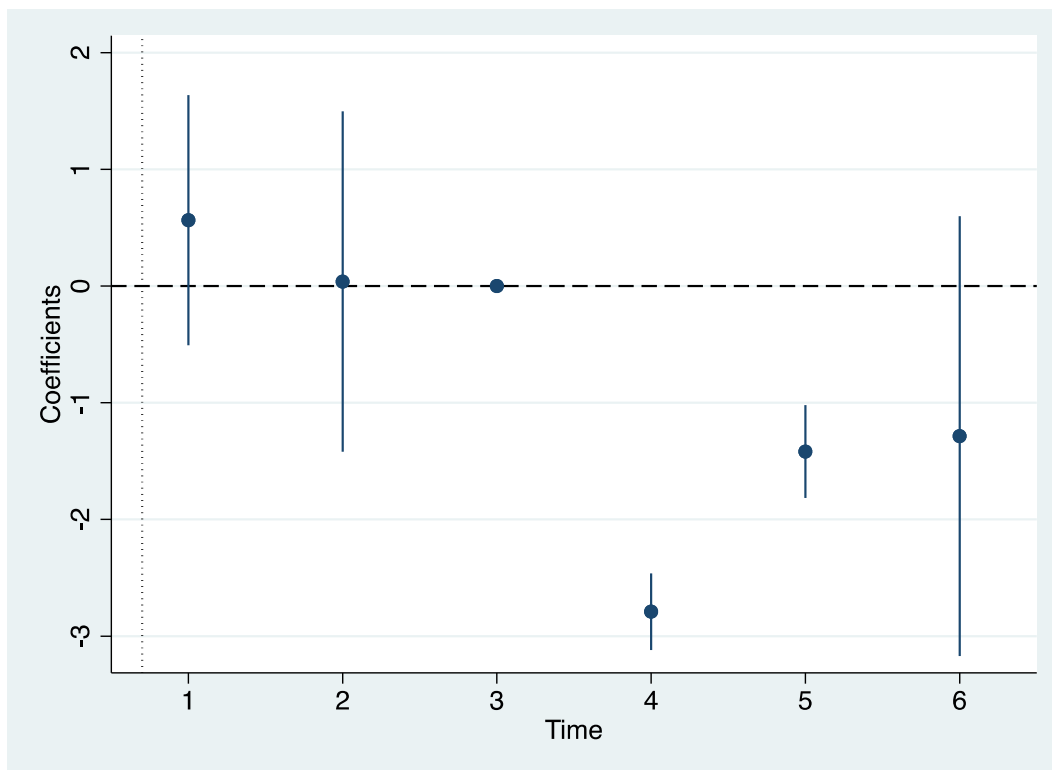


To what extent did the EGF training and coaching activities mitigate the political backlash documented above? I cannot directly test this but a way to test the argument that the strategic training activities have been effective is to test the temporal political consequences of the shipyard closure. A substantial literature shows that the disappearance of industrial jobs has long-term political consequences. As training activities take a time-wise medium long time to manifest themselves we should expect the political backlash to be minimized over time and maybe even fully disappear. Below I find empirical support for this proposition leveraging a DiD event study design with the national election data at the municipality level.

Figure 6 shows the event study and plots the effects of the closure on voting for the right bloc in each election relative to the 2007 national election – i.e. the election before the closure. As expected no statistically significant effects can be detected in the elections before 2007

(period 1-2). However, in the 2011 election – the first election after the closure – the right government is most strongly punished (-2.8 percentage points). In the 2015 election, the effect diminished substantially (-1.4 percentage points) and in the 2019 election the estimate while still negative is no longer statistically significantly different from 0. These results suggests that the effects of the closure on voting for a party in the right bloc is strongest immediately after the closure and diminish over time. The results also suggest that the effect may not be different from 0 in 2019 – i.e. ten years after the closure of the shipyard. This at least suggests that the training activities under the EGF could have been effective in compensating workers, and is consistent with the argument that active labor market policies can compensate globalization losers.

Figure 6. Effects of closure on votes for the incumbent over time: Event study-design (with controls)



Conclusion

How does globalization-induced industrial decline impact politics? A large literature contends that industrial decline has long-term political consequences and may linger for years after their disappearance. Examining the political temporal consequences of industrial decline this paper examines the political consequences of the closure of the Lindø Steel Shipyard in Denmark. I argue that industrial decline impacts politics via three channels. First, the industrial decline impacts politics economically by adversely impacting local communities. As unemployment soars voters tend to punish the incumbent. This is consistent with retrospective voting theory and suggests that economic factors at least partly influence politics. Second, I argue that blame attribution impacts the political consequences of industrial decline. As the political entity blamed for the misfortune brought about by industry will be punished, blame at least partly explains why some and not other political parties are punished. Central to the theory of blame attribution posited here is that the political reaction to the disappearance of jobs is important. Third, to the extent that the actors adversely impacted by industrial decline are compensated the political consequences should be muted and may even completely disappear over time.

The arguments are tested using several new data sets. I find that the closing of the shipyard had an average negative effect on votes for the right incumbent government. Teasing out the different mechanisms I first found that unemployment decreased votes for the incumbent. This suggests that economic factors at least partly are important in understanding the political consequences of industrial decline. Unemployment is however not the whole story as I second find that local actors blame the government for its inaction. The latter speaks to political agency – or rather to the lack of political agency – as the right-government could

have handled the crisis differently. Third, the political effects are not persistent over time which at least could suggest that the compensation via the European Globalization Fund could have muted the blow from the closure of the shipyard. Three elections after the announcement of the closing in 2009 the effects become insignificant. Local actors developed an effective strategy to bring laid-off workers back to employment. I however stress that it is important that the compensation is targeted. A network of local actors identified key growth sectors and tailored training activities towards these sectors. Strategic training activities hence seem important for the success of bringing the laid-off workers back into employment.

I moreover find no evidence of a surge in the populist vote or a systematic anti-incumbent effect as new incumbents are not punished. The former might be because the populist right party in Denmark was very closely politically aligned with the center-right government and its most important coalitional partner. The Lindø case hence at least suggests that there is no automatic response towards voting for the populist right when industries close down.

References To be continued...

Acemoglu, D., & Tahbaz-Salehi, A. (2023). The network origins of the gains from trade. *American Economic Review*, 113(1), 233-270.

Alesina, A., Baqir, R., & Easterly, W. (2021). Public goods and ethnic divisions. *Quarterly Journal of Economics*, 136(2), 851-898.

Autor, D. H., Dorn, D., & Hanson, G. H. (2020). The China shock: Learning from labor market adjustment to large changes in trade. *Annual Review of Economics*, 12(1), 1-32.

Autor, D. H., Katz, L. F., & Kearney, M. S. (2003). Trends in U.S. wage inequality: Revising the revisionists. *Review of Economics and Statistics*, 96(4), 189-198.

Baccini, L., & Weymouth, S. (2021). The politics of industrial decline. *World Politics*, 73(3), 543-581.

Bansak, K., Hainmueller, J., & Hangartner, D. (2021). Europe's populist surge: Refugees, immigration, and the rise of right-wing politics. *Annual Review of Political Science*, 24, 403-425.

Bernard, A. B., Eaton, J., Jensen, J. B., & Kortum, S. (2003). Plants and productivity in international trade. *American Economic Review*, 93(4), 1268-1290.

Broz, J. L., Hawes, M. B., & Shank, C. (2021). The politics of structural change: Political institutions and economic restructuring in postwar Europe. *World Politics*, 73(2), 237-280.

Busemeyer, M. R., & Garritzmann, J. L. (2019). Powering ahead? Structural power, active labour market policies and deregulation in the Danish, Dutch, and Swiss welfare states. *Journal of European Public Policy*, 26(7), 1032-1052.

Cameron, D. R. (1978). The expansion of the public economy: A comparative analysis. *The American Political Science Review*, 72(4), 1243-1261.

Colantone, I., & Stanig, P. (2018). Global competition and Brexit. *American Political Science Review*, 112(2), 201-218.

Dancygier, R., Dehdari, S. H., Laitin, D., Marbach, M., & Vernby, K. (2022). Emigration and Radical Right Populism. *SocArXiv. preprint*.

Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Princeton University Press.

Fetzer, T. (2020). Did austerity cause Brexit? *American Economic Review*, 110(4), 384-437.

Fowler, Anthony, and Andrew B. Hall. "Do shark attacks influence presidential elections? Reassessing a prominent finding on voter competence." *The Journal of Politics* 80.4 (2018): 1423-1437.

Gallego, A., & Kurer, T. (2022). The economic determinants of right-wing populism. *Journal of Political Economy*, 130(3), 728-773.

Garrizmann, J. L., Häusermann, S., & Palier, B. (2021). Social Investment. *The Oxford Handbook of the Welfare State*, 188-206.

Garrizmann, J. L., Häusermann, S., & Palier, B. (ed.) (2022). *The World Politics of Social Investment: Volume 1. Oxford University Press.*

Gidron, N., & Hall, P. A. (2017). The politics of social status: Economic and cultural roots of the populist right. *British Journal of Sociology*, 68(S1), 57-84.

Hemerijck, A. (2018). *The uses of social investment. Oxford University Press.*

Healy, A. J., & Malhotra, N. (2012). Retrospective voting reconsidered. *Annual Review of Political Science*, 15, 1-29.

Healy, A. J., & Malhotra, N. (2013). Retrospective voting reconsidered: Evidence from a natural experiment. *Political Science Research and Methods*, 1(1), 101-117.

Hübscher, E., Kousser, T., & Mullinix, K. J. (2021). Austerity and the spread of misinformation. *Quarterly Journal of Political Science*, 16(1), 1-37.

Iversen, T., & Soskice, D. (2019). *Democracy and Prosperity. Princeton University Press.*

Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. *American Psychologist*, 39(4), 341-350.

Owen, E., & Johnston, N. P. (2017). Occupation and the political economy of trade: Job routineness, offshorability, and protectionist sentiment. *International Organization*, 71(4), 665-699.

Pierson, P. (1994). *Dismantling the welfare state? Reagan, Thatcher, and the politics of retrenchment*. Cambridge University Press.

Rachel, L. M., & Wellhausen, R. L. (2016). Winners and losers in international trade: The effects on U.S. presidential voting. *International Organization*, 70(4), 717-749.

Rodriguez-Pose, A. (2018). The revenge of the places that don't matter (and what to do about it). *Cambridge Journal of Regions, Economy and Society*, 11(1), 189-209.

Ruggie, J. G. (1982). International regimes, transactions, and change: Embedded liberalism in the postwar economic order. *International Organization*, 36(2), 379-415.

Scruggs, L., Kosmidis, S., & Matsaganis, M. (2022). Trends in the generosity and targeting of social insurance since the 1980s. *World Politics*, 74(2), 1-34.

Swank, D., & Betz, T. (2003). Globalization, the welfare state and right-wing populism in Western Europe. *Socio-Economic Review*, 1(2), 215-245.

Walter, S. (2021). Winners and losers of globalization in advanced manufacturing: Evidence from Germany. *International Organization*, 75(4), 1029-1058.

Appendix

This is the online appendix for the paper “The Political Shadows of Industrial Job Displacements: Economic Deprivation, Blame Attribution, and Compensation”.

Table 1. 2x2 DiD 2007-2011 (ATT)

VARIABLES	(1) center_right	(2) center_right	(3) center_right
D	-2.701*** (0.167)	-2.621*** (0.231)	-2.457*** (0.366)
Socio-Economic Index		-0.639 (4.022)	-0.451 (4.016)
Tax base		-4.62e-06 (6.55e-05)	-1.05e-05 (6.72e-05)
% Further Education		0.293* (0.157)	0.282* (0.162)
Population		0.000137 (0.000152)	0.000145 (0.000152)
Population Density		-0.00107** (0.000501)	-0.00112** (0.000508)
Votes (in %)		-0.000223 (0.000260)	-0.000234 (0.000260)
Unemployed			-0.118 (0.201)
Constant	56.96*** (0.0713)	52.68*** (10.33)	53.87*** (11.01)
Time-fixed effects	Yes	Yes	Yes
Observations	196	196	196
R-squared	0.909	0.913	0.913
Number of id	98	98	98

Strong effect of shipyard closure on voting for the incumbent coalitional bloc in impacted districts (municipalities).

Table 2. Average Treatment Effect (ATT) on Voting for a center-right party, 2001-2019

	(1)	(2)	(3)
	center_right	center_right	center_right
D	-1.619*	-2.031***	-1.958***
	(0.874)	(0.741)	(0.185)
Socio-Economic Index		-0.953	-1.730
		(1.031)	(2.235)
Tax base		-3.33e-05**	-0.000149***
		(1.58e-05)	(1.96e-05)
Further Education		-0.349***	-0.402***
		(0.0745)	(0.100)
Population		3.39e-05**	-4.97e-05
		(1.64e-05)	(4.82e-05)
Population Density		-0.000517	-0.000102
		(0.000627)	(0.000478)
Votes		-1.28e-05	0.000104
		(1.87e-05)	(0.000132)
Unemployment			-0.438**
			(0.200)
Constant	59.25***	69.49***	89.23***
	(0.151)	(2.347)	(4.755)
Time-fixed effects	Yes	Yes	Yes
Observations	585	585	294
R-squared	0.825	0.858	0.830
Number of id	98	98	98

Also long-term average treatment effect of the treated (ATT)

Table xx. Anti-Incumbent effect (ATT)

VARIABLES	(1) incumbent_change	(2) incumbent_change
D	0.430 (0.435)	0.199 (0.524)
Socio-Economic Index		-3.162*** (1.203)
Tax base		-2.50e-05** (1.11e-05)
% Further Education		-0.0954 (0.0693)
Population		-2.50e-05 (2.05e-05)
Population Density		0.00101 (0.000845)
Votes (in %)		-1.07e-05 (2.69e-05)
Constant	-0.916*** (0.141)	8.066*** (2.154)
Time-fixed effects		
Observations	590	584
R-squared	0.804	0.842
Number of id	99	98

No evidence of a general anti-incumbent effects. Taken together with previous models, it seems as if the center-left in particular are being punished in the immediate period following the closure.

Table xx. ATTs on far left and populist right parties

VARIABLES	(1) pop_right	(2) pop_right	(3) far_left	(4) far_left
D	-0.147** (0.0724)	-0.269*** (0.0956)	1.959 (1.779)	2.284 (1.669)
SÄindeks		-1.044** (0.493)		-1.647 (1.055)
BeskatG		-7.59e-06* (4.08e-06)		1.32e-05 (1.46e-05)
MedVudd		-0.0326 (0.0269)		0.0672 (0.0731)
Indb		-7.99e-06* (4.33e-06)		7.12e-05*** (9.34e-06)
BtÄthed		0.000220 (0.000246)		0.00269*** (0.000391)
votes		-1.59e-05*** (3.59e-06)		2.33e-06 (8.50e-06)
2005.time	-0.614*** (0.0616)	-0.413*** (0.106)	0.859*** (0.0514)	0.446* (0.244)
2007.time	-0.617*** (0.0613)	-0.307** (0.124)	-0.293*** (0.0331)	-0.858** (0.334)
2011.time	-0.614*** (0.0619)	-0.0818 (0.187)	3.472*** (0.158)	2.337*** (0.586)
2015.time	-0.614*** (0.0619)	0.171 (0.262)	8.349*** (0.297)	6.766*** (0.852)
2019.time	3.784*** (0.137)	4.798*** (0.383)	5.879*** (0.262)	3.837*** (1.083)
Constant	0.616*** (0.0557)	3.996*** (0.673)	1.890*** (0.125)	-4.881** (2.299)
Observations	585	585	585	585
R-squared	0.916	0.921	0.878	0.923
Number of id	98	98	98	98

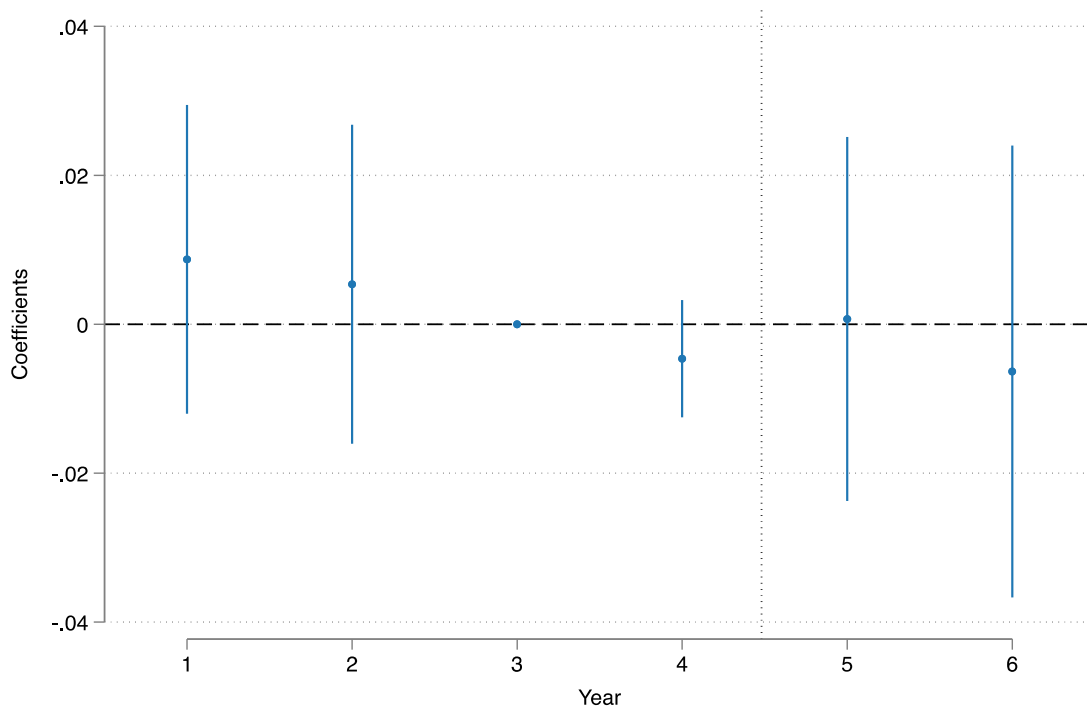
No evidence that voters went to the extremes. Populist right parties in fact lost votes in the impacted areas.

Full-time unemployed pr 100 17-64 year old's, 2007-2019

ATT, 2007-2019

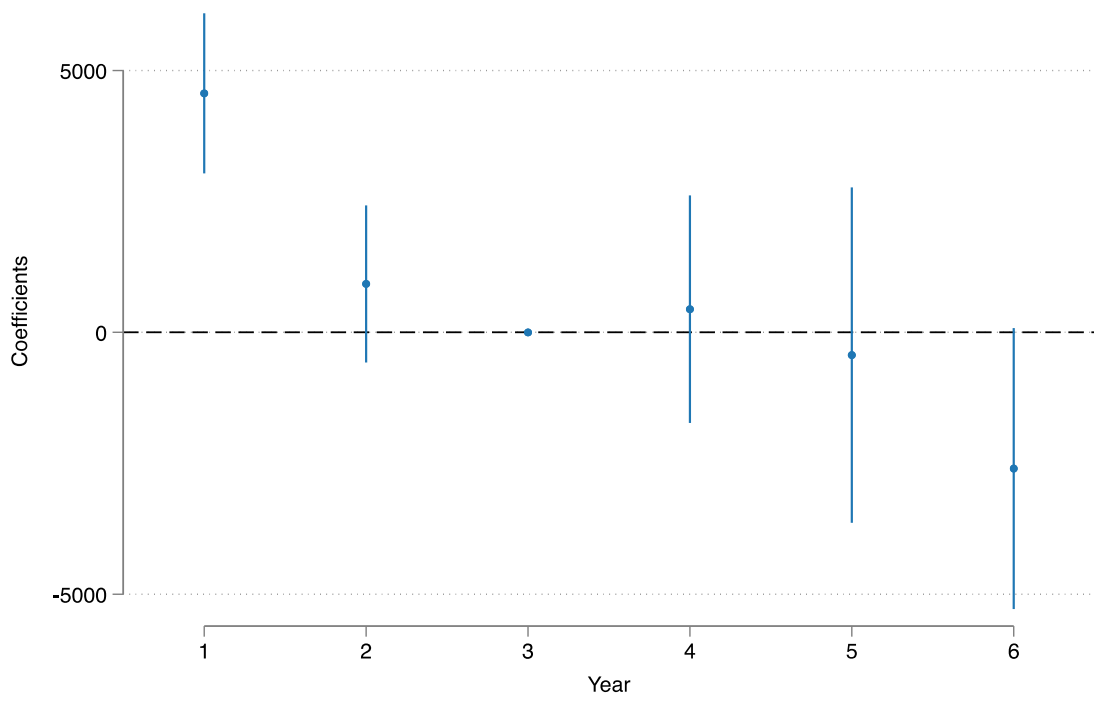
VARIABLES	(1)	(2)
	Unemr	Unemr
D	0.757*** (0.252)	0.741*** (0.248)
Socio-Economic Index		-1.537 (1.377)
Tax base		-2.46e-05*** (8.26e-06)
% Further Education		-0.0246 (0.0658)
Population		1.39e-05 (1.27e-05)
Population Density		1.15e-05 (0.000248)
Constant	2.408*** (0.0619)	7.183*** (1.964)
Observations	1,274	1,274
R-squared	0.679	0.684
Number of id	98	98

Population (log)



Note: Controls are included.

Tax bases

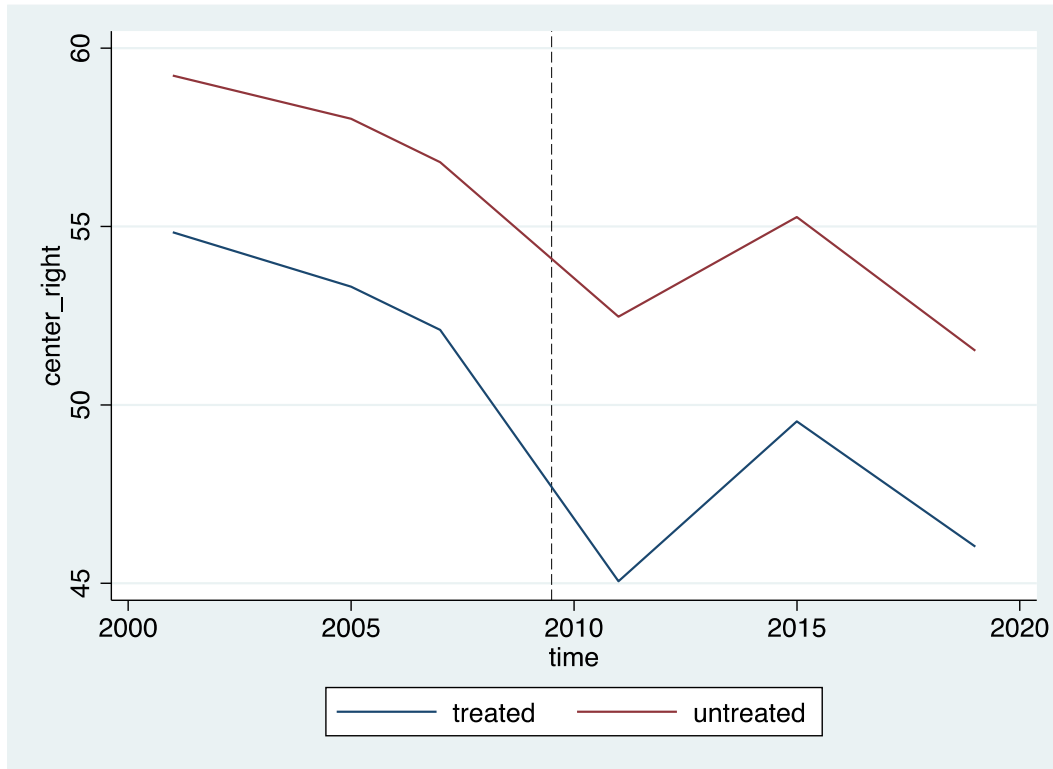


Note: Controls are included.

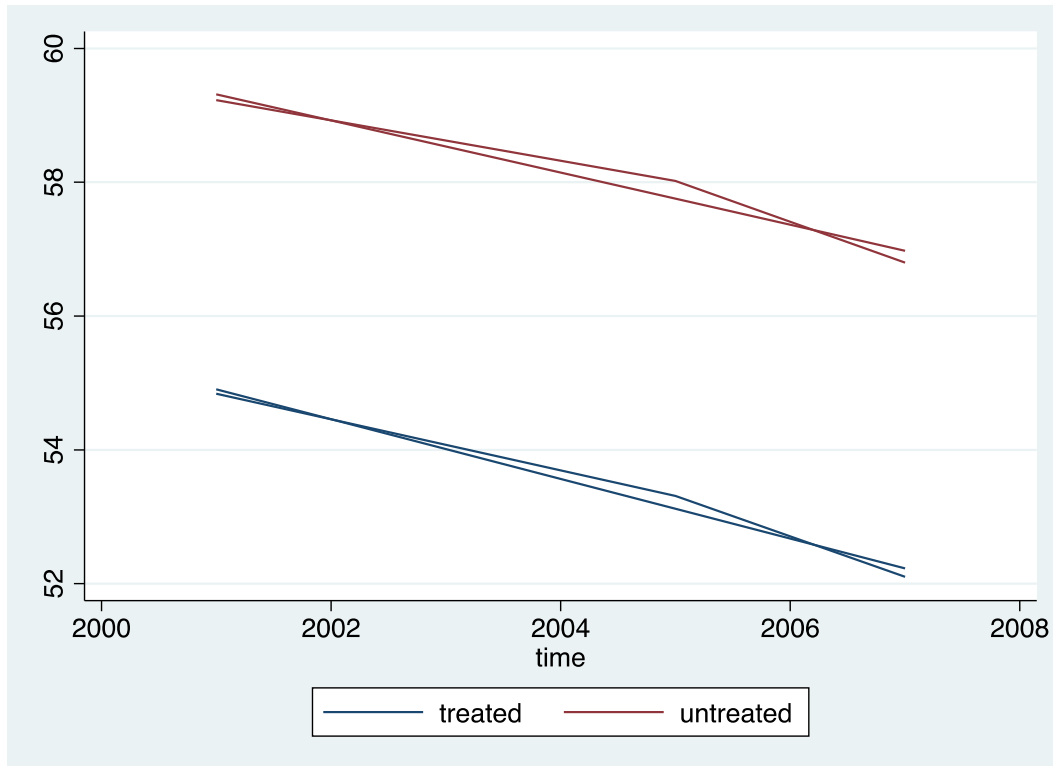
Parallel trend assumption

I run different tests to showcase the validity of the parallel trend assumption. All tests indicate that pre-treatment trends are rather parallel.

Pre-trend plot – looks good



Pre treatment trend with linear fit



Parametric tests: linear and quadratic – looks good (F-test insignificant)

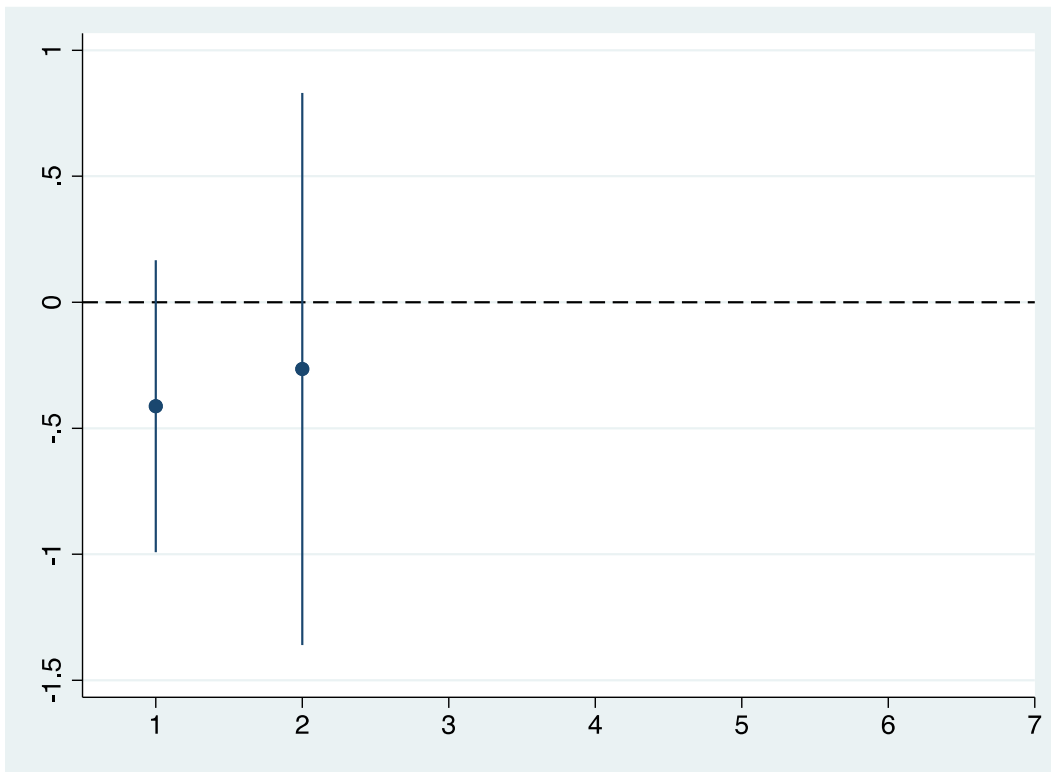
Linear regression

center_right	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
: base 0	0	.	.	.	.	.
1	-4.286	.666	-6.44	0	-5.607	-2.965	***
time	-1.213	.116	-10.48	0	-1.443	-.984	***
treated#co : base 0	0	.	.	.	.	.
1	-.155	.276	-0.56	.574	-.703	.392	
Constant	60.441	.617	98.00	0	59.217	61.665	***
Mean dependent var		57.916	SD dependent var			6.985	
R-squared		0.029	Number of obs			294	
F-test		.	Prob > F			.	
Akaike crit. (AIC)		1973.556	Bayesian crit. (BIC)			1984.607	

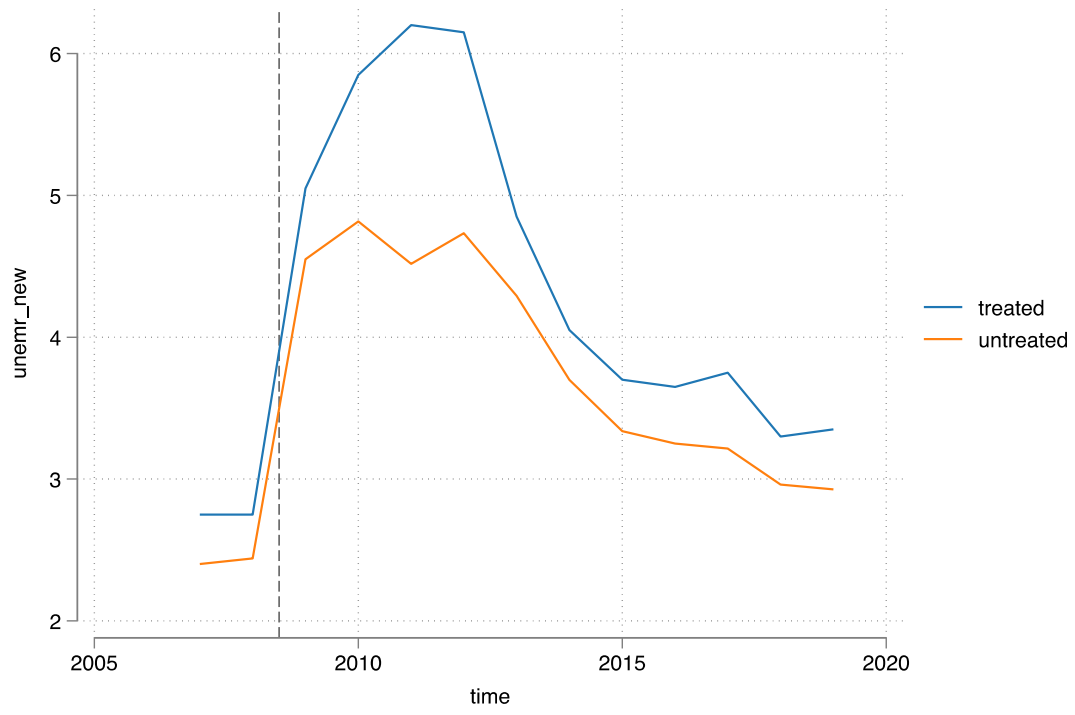
*** $p < .01$, ** $p < .05$, * $p < .1$

(1) 1.treated#c.time = 0
 $F(1, 98) = 0.32$
 Prob > F = 0.5744

Non-parametric trend – looks okay Period 3 should also be shown?



PTA unemployment panel

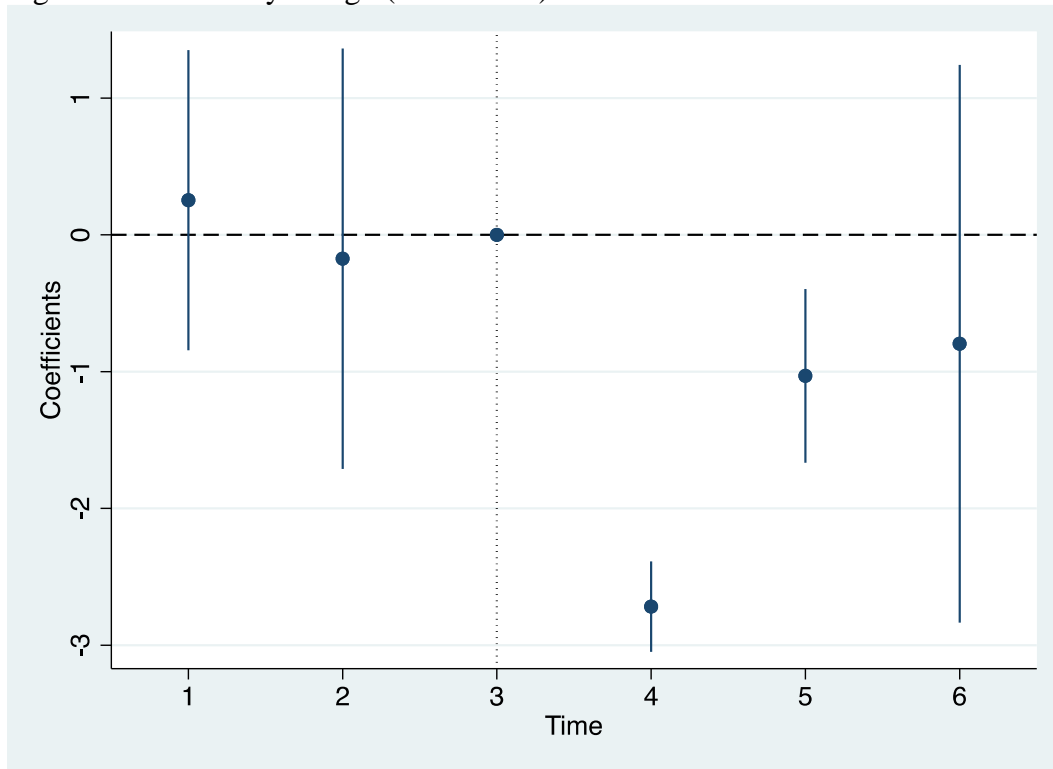


Robustness test

Static specification with linear trends by treatment group – looks good

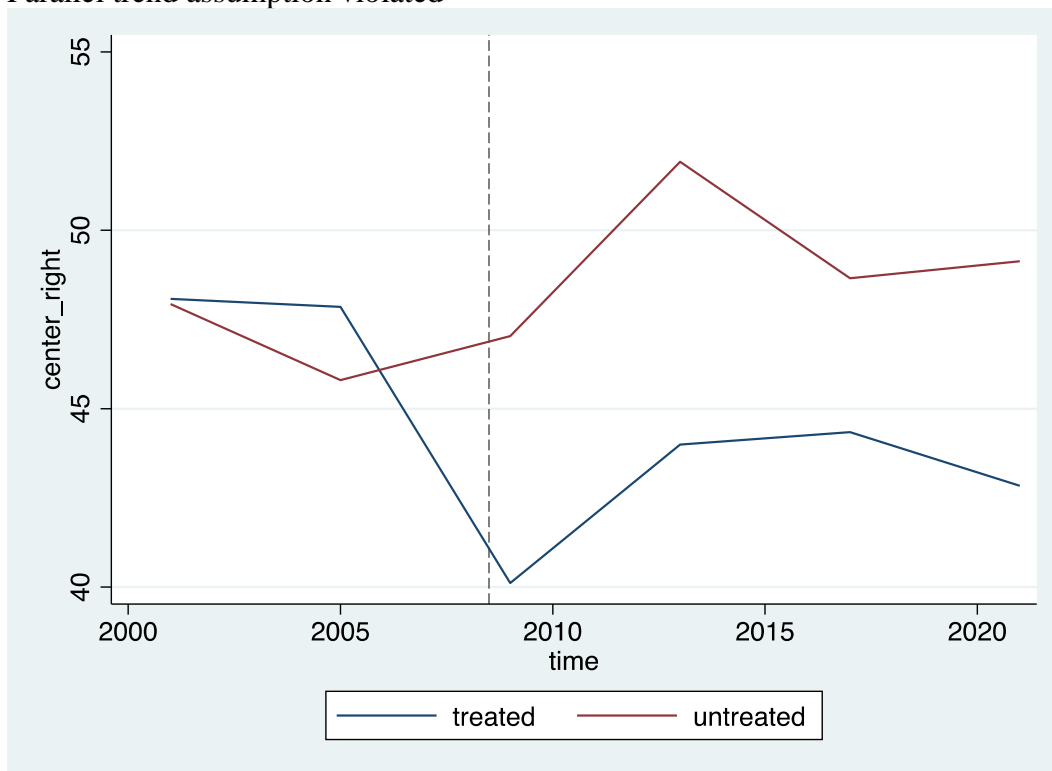
	(1)	(2)
	Right votes	Right votes
D	-2.941*** (0.240)	-2.906*** (0.385)
ltrend	0.124 (0.0987)	0.0822 (0.102)
Socio-Economic Index		-0.950 (1.032)
Tax base		-3.31e-05** (1.58e-05)
% Further Education		-0.349*** (0.0745)
Population		3.41e-05** (1.65e-05)
Population Density		-0.000520 (0.000627)
Votes (in %)		-1.29e-05 (1.87e-05)
Constant	50.54*** (4.067)	65.40*** (5.315)
Observations	585	585
R-squared	0.971	0.977

Figure 1. Event study-design (no controls)

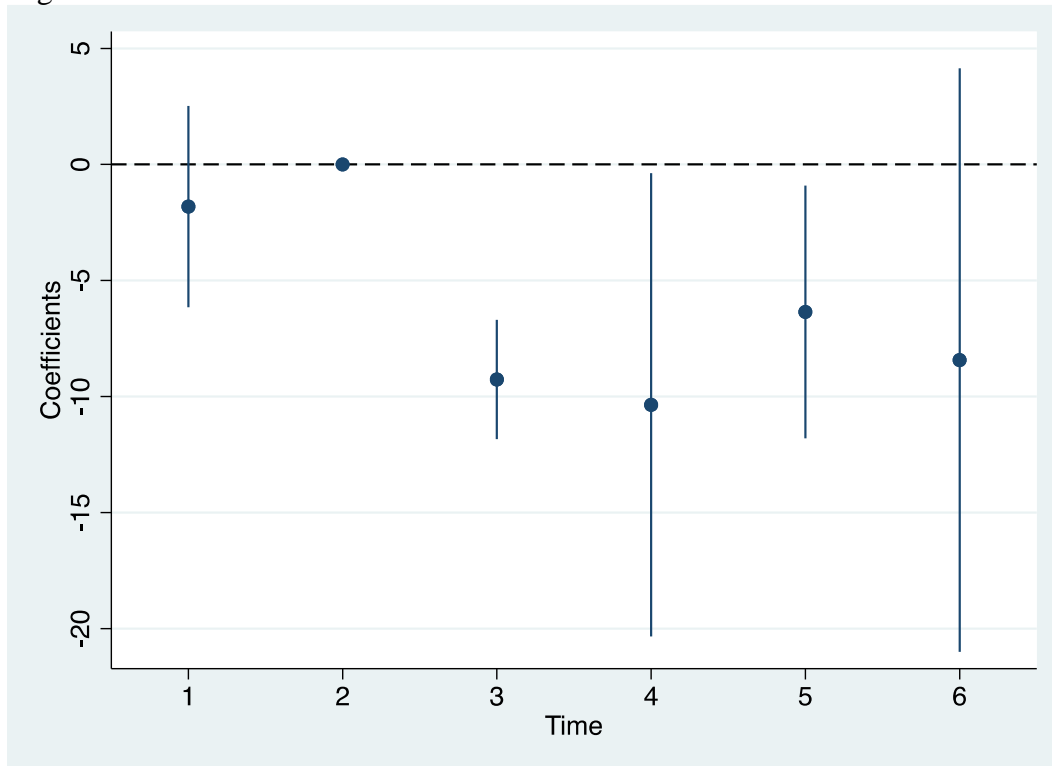


Local elections data

Parallel trend assumption violated

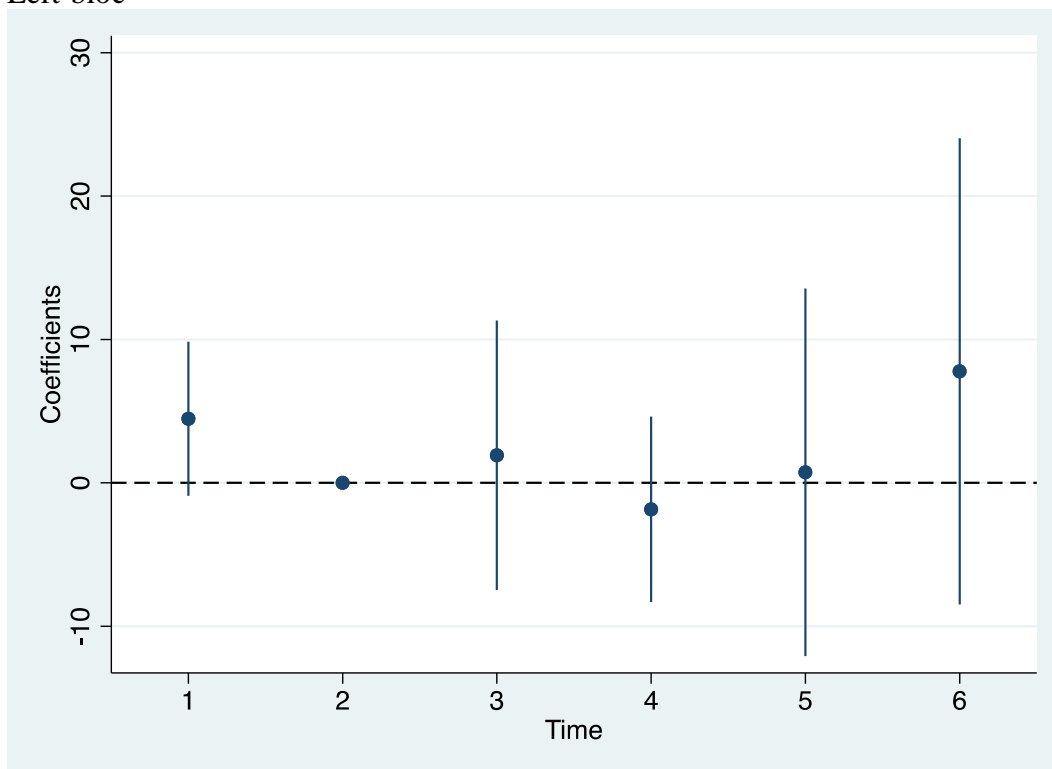


Right-bloc

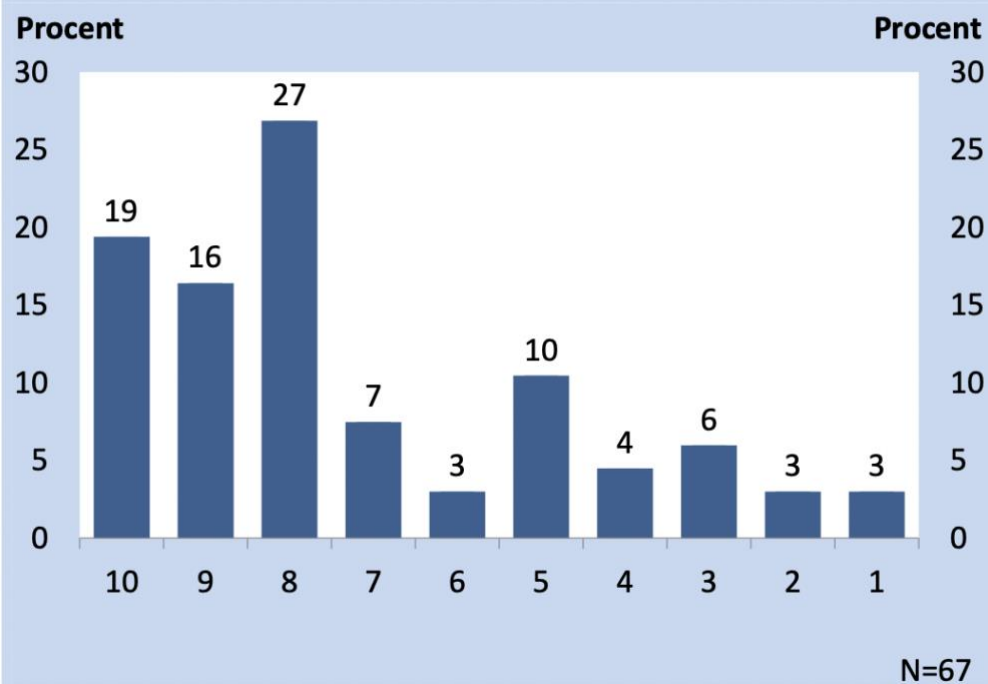


Find similar patterns using local election data. Note that parallel trend assumption is violated, so these estimates should be interpreted as correlates and not as effects.

Left-bloc



Figur 6: Hvor tilfreds er du samlet set med dit udbytte af EGF-Lindø projektet?



Kilde: Spørgeskemaundersøgelse blandt deltagere i Lindø-projektet (n=300)