

A Service of

ZBU

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Kellermann, Kim Leonie

Working Paper

Trust we lost: The impact of the Treuhand experience on political alienation in East Germany

SOEPpapers on Multidisciplinary Panel Data Research, No. 1175

Provided in Cooperation with: German Institute for Economic Research (DIW Berlin)

Suggested Citation: Kellermann, Kim Leonie (2022) : Trust we lost: The impact of the Treuhand experience on political alienation in East Germany, SOEPpapers on Multidisciplinary Panel Data Research, No. 1175, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin

This Version is available at: https://hdl.handle.net/10419/265518

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



WWW.ECONSTOR.EU







Trust we lost: The impact of the Treuhand experience on political alienation in East Germany

Kim Leonie Kellermann



SOEPpapers on Multidisciplinary Panel Data Research at DIW Berlin

This series presents research findings based either directly on data from the German Socio-Economic Panel (SOEP) or using SOEP data as part of an internationally comparable data set (e.g. CNEF, ECHP, LIS, LWS, CHER/PACO). SOEP is a truly multidisciplinary household panel study covering a wide range of social and behavioral sciences: economics, sociology, psychology, survey methodology, econometrics and applied statistics, educational science, political science, public health, behavioral genetics, demography, geography, and sport science.

The decision to publish a submission in SOEPpapers is made by a board of editors chosen by the DIW Berlin to represent the wide range of disciplines covered by SOEP. There is no external referee process and papers are either accepted or rejected without revision. Papers appear in this series as works in progress and may also appear elsewhere. They often represent preliminary studies and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be requested from the author directly.

Any opinions expressed in this series are those of the author(s) and not those of DIW Berlin. Research disseminated by DIW Berlin may include views on public policy issues, but the institute itself takes no institutional policy positions.

The SOEPpapers are available at http://www.diw.de/soeppapers

Editors:

Jan **Goebel** (Spatial Economics) Stefan **Liebig** (Sociology) David **Richter** (Psychology) Carsten **Schröder** (Public Economics) Jürgen **Schupp** (Sociology) Sabine **Zinn** (Statistics)

Conchita **D'Ambrosio** (Public Economics, DIW Research Fellow) Denis **Gerstorf** (Psychology, DIW Research Fellow) Katharina **Wrohlich** (Gender Economics) Martin **Kroh** (Political Science, Survey Methodology) Jörg-Peter **Schräpler** (Survey Methodology, DIW Research Fellow) Thomas **Siedler** (Empirical Economics, DIW Research Fellow) C. Katharina **Spieß** (Education and Family Economics) Gert G. **Wagner** (Social Sciences)

ISSN: 1864-6689 (online)

German Socio-Economic Panel (SOEP) DIW Berlin Mohrenstrasse 58 10117 Berlin, Germany

Contact: soeppapers@diw.de



Trust we lost: The impact of the Treuhand experience on political alienation in East Germany

Kim Leonie Kellermann^{*,†}

This version: October 2022

Do politically administered mass layoffs undermine trust and political interest? During the German reunification, formerly state-owned socialist firms in East Germany were privatized by the *Treuhand*, which came at the cost of massive job losses and public protest. I demonstrate that these activities had a detrimental effect on attitudes and political behavior of the affected individuals. Using survey data from the German Socio-economic Panel and election results, I find that East Germans who lost their jobs exhibit significantly lower trust levels, lower political interest and a lower identification with mainstream democratic parties, even up to 30 years after reunification. I corroborate the causality of the results using fixed-effects estimations and a placebo analysis, which fails to explain political disenchantment by reasons other than the Treuhand experience. I interpret the findings as the persistent, negative effect of perceived political mismanagement during a crucial phase of economic transition on long-run political identification.

JEL classification: D72, E24, L33

Keywords: East Germany, trust, political alienation, privatization, radical voting

^{*}Ruhr University Bochum, Chair of Public and Regional Economics, Universitätsstr. 150, 44780 Bochum, Germany, kim.kellermann@rub.de

[†] I wish to thank Michael Barkholz and Alexander Giebler at Halle Institute for Economic Research for being granted access to the IWH Treuhand Privatisation Micro Database. Likewise, I would like to thank Anne Küppers at FSU Jena for access to the regional data of the *Thüringenmonitor*. Various staff members at the five East German state statistical offices provided data and helpful information. Also, I would like to thank Thomas Apolte, Thushyanthan Baskaran, Celeste Brennecka, Matthias Brachert, Lena Gerling, Sven Hartmann, Jonas Klärchen, Tommy Krieger, Verena Löffler, Markus Ludwig, Manuel Santos Silva, Mirko Titze, Felix Rösel as well as participants at the 2021 PEDD Online Workshop, the 2021 EPCS Annual Meeting, the 2021 IOS Summer Workshop, the 2021 EEA Conference and the 2021 VfS Annual Meeting for helpful comments. Special thanks go out to Camilla Nienhaus, Janine Bahlcke, Leonard Mühlenweg and Florian Fox for outstanding assistance in assembling the election dataset. Lukas Möller provided additional valuable research assistance.

Helmut, take us by the hand, show us the way to economic wonderland!

Banner at a Christian Democrats campaign rally in the GDR in March 1990 (Deutschlandfunk Kultur 2014).

1 Introduction

When the Berlin Wall fell on November 9, 1989, many citizens of the former German Democratic Republic (GDR) had exuberant expectations regarding the political, economic and social transformation of the country. These hopes were fueled by prominent politicians, such as then-West German chancellor Helmut Kohl, who promised to turn the GDR into "flourishing landscapes" within "three, four, five years" (Sinn 2002). On July 1, 1990, the *Treuhandanstalt (Trust Agency)* started to privatize about 12,000 East German companies, aiming to make the GDR economy fit for the free market. By 1994, when the Treuhand terminated its operations, many of the high hopes lay shattered. The Treuhand had only been able to sell the mostly uncompetitive GDR firms at a deficit of 200 million German Mark (100-130 million \in). Out of a total workforce of 8.5 million East Germans, 2.5 to 3 million jobs had been lost along the way (Böick 2018; zu Eulenburg et al. 2003).

More than 30 years after the end of the GDR, the *Treuhand experience* is a wellremembered trauma among East Germans. Economists generally praise the extraordinary achievement of quickly transforming a run-down socialist system into a market economy with a current performance level of 70 to 80 percent relative to that of the states making up former West Germany (Federal Ministry for Economic Affairs and Energy (ed.) 2021). East Germans, however, appear to perceive the situation differently. Wages are lower, unemployment is higher, and political discontent has grown in the past decades. The much stronger support in eastern Germany for the far-left *Die Linke* and the right-wing populist *Alternative für Deutschland* (AfD) (see appendix figure B.2) reflects this dissatisfaction (Patton 2019; Schweiger 2019; Weisskircher 2020). Both parties have blamed the then-responsible political agents for the "exploitative" Treuhand experience. The AfD especially revives political discontent by referring to the East Germans' "stolen work life achievement" in media reports (Deutschlandfunk Kultur 2019; Tagesspiegel 2019). Social scientists have been emphasizing the crucial role of economic conditions for citizens' political satisfaction, especially against the backdrop of economic pressure caused by globalization and de-industrialization (Baccini & Weymouth 2021; Becker et al. 2017; Colantone & Stanig 2018a,b; Weisskircher 2020). However, most of these studies explain how still-ongoing, complex market dynamics fuel political discontent. Little is known about how citizens may be alienated from politics if job loss is directly caused by an administrative unit.

I provide innovative evidence on this nexus, studying the case of the Treuhand activities in East Germany in the early 1990s. The historically unparalleled German reunification process involved using a holding company to privatize the formerly socialist economy and, thus, represents an exceptional coincidence of politically managed deindustrialization and regime change. I argue that the experience of losing one's job due to activities performed by an administrative unit damaged the affected individuals' trust and political attitudes. In line with this, I find that East Germans who experienced a Treuhand job loss have significantly lower levels of general trust in others, as compared to fellow East Germans who kept their jobs. Furthermore, those who were laid off are less interested in politics and are more likely to hold a radical party preference or to not identify at all with political parties. The effects have persisted for up to 30 years after reunification.

I substantiate these observations with corresponding evidence at the municipality level, investigating state and federal election results in East Germany since reunification. Municipalities with more Treuhand job losses exhibit higher vote shares for the radical-left *Die Linke*, the successor party of the ruling GDR party SED (*Soziale Einheitspartei Deutschlands*, Socialist Unity Party of Germany). At the same time, support for the Christian Democrats, who were in power during the Treuhand period, is lower.

For the primary analysis, I use individual-level data on job losses, trust levels and political behavior from the German Socio-economic Panel (SOEP, Goebel et al. 2019) survey, which previous studies have frequently used to examine the post-socialist behavior of East Germans (Alesina & Fuchs-Schündeln 2007; Boenisch & Schneider 2013; Frijters et al. 2004; Fuchs-Schündeln & Schündeln 2005; Lichter et al. 2020). I calculate an indicator of Treuhand job loss based on self-reported unemployment due to closure or layoff during the Treuhand period. As dependent variables, I use indicators of general trust, political interest and party preferences. Since job loss may have occurred at different points in time, I investigate the cross-sectional effect on behavioral indicators *after* the Treuhand period, that is, from 1995 onwards.

The historic situation precludes using a classic difference-in-differences design for causal inference, as East Germans have not been part of data collections prior to 1990. One may, thus, question whether my findings accurately capture the causal effect of Treuhand job loss, rather than a general discontent from unemployment or political disenchantment among a specific group, or a simple time trend. I tackle this issue in two ways. First, I include a comprehensive vector of demographic, economic and educational control variables as well as a full set of time, federal state and East-fixed effects (FE). This way, I ensure that I only compare East Germans who have identical characteristics that may impact on their attitudes as well as their employment situation. Second, I use a fixed-effects estimator for a subsample in the early 1990s to find a significant impact on political behavior upon a change in the Treuhand job loss indicator. Third, I conduct a falsification analysis, ruling out a number of alternative explanations. I do not find similar effects on political behavior for (i) unemployment in East Germany in later time periods, (ii) job losses among West Germans at the same time or (iii) a random job loss indicator. I am, thus, confident that I observe the actual, deteriorating effect of Treuhand job loss on political behavior of the affected individuals.

Investigating the mechanisms behind my findings, I find evidence in favor of economic grievances as the relevant driving force of political discontent. In reaction to a Treuhand job loss, political alienation is stronger among individuals from higher-income house-holds. These individuals witness their standard of living plummeting relatively more and blame politics for the perceived risk of social relegation. Moreover, the effects are stronger for former GDR citizens who reported to have been happy with the GDR social system. This points to nostalgic feelings toward the socialist regime, which the respective individuals perceive as having provided more social security. Finally, the effects are relatively more pronounced among individuals who live in East Germany today, where the economic performance still lags behind.

To the best of my knowledge, I am the first to comprehensively analyze the effect of the Treuhand experience on political behavior and attitudes in East Germany.¹ Hereby,

¹Only two yet-unpublished papers engage in related empirical analyses. Hager et al. (2021) find higher socialist vote shares in East German municipalities with more privatizations in the early 1990s. Their observation is in line with my results. Lueders (2022) also uses survey data from the SOEP to show that higher regional unemployment rates in the early 1990s have a persistent effect on East Germans' satisfaction with democracy. Both papers make references to an earlier version of this article.

I make two key contributions to the literature. First, I provide evidence on the longterm impact of de-industrialization policies, demonstrating that unaddressed political alienation may shape political behavior over decades. Second, I examine the effects of job loss associated with an administrative unit, rather than with general market developments. In that sense, I empirically highlight the consequences for policymakers if citizens perceive them not only to fail to alleviate economic grievances but to have actively caused them.

At a more general level, I hereby contribute to the growing literature on the effects of globalization and de-industrialization on political alienation. Earlier studies have found that the decline in industrial production in the United States' *Rust Belt* added to the right-wing political shift in the past two decades (Autor et al. 2020; Baccini & Weymouth 2021; Carnes & Lupu 2020; McQuarrie 2017). Likewise, de-industrialization also represents a driving force behind the Brexit vote (Becker et al. 2017; Colantone & Stanig 2018a). Thus, my analysis also relates to studies on the general impact of economic deprivation on political preferences, voting outcomes and the surge of populism in the past 15 years (Ahlquist et al. 2020; Barone & Kreuter 2021; Colantone & Stanig 2018b; Dippel et al. 2022; Funke et al. 2016; Georgiadou et al. 2018; Rodrik 2018).

Additionally, the unemployment shock in East Germany coincided with a political regime change. This allows me to observe how the Treuhand experience impinged on basic democratic identity formation. Given that most GDR citizens had spent their entire lives under authoritarian rule, Treuhand job loss hit during a key period of political opinion formation in the new democratic society. In that respect, I contribute to the strand of literature studying the role of political events and scandals for political preferences, especially during citizens' formative years (Aassve et al. 2018; Dinas 2013; Franklin & Hobolt 2011; Krosnick & Alwin 1989; Lau & Redlawsk 2008; Ohme et al. 2017; Zeglovits & Aichholzer 2014). Finally, the analysis relates to the various behavioral effects of growing up in former socialist regimes, with the GDR as one specific case (Alesina & Fuchs-Schündeln 2007; Boenisch & Schneider 2013; Frijters et al. 2004; Fuchs-Schündeln & Masella 2016; Fuchs-Schündeln & Schündeln 2009; Lichter et al. 2020).

The remainder of this paper is structured as follows. In the next section, I introduce the Treuhand in more detail and elaborate on the historic context. The informed reader may want to skip this part. Subsequently, I place my analysis within the related literature. I proceed by introducing my empirical strategy and data, followed by the estimation results. The conclusion provides policy implications and further research avenues.

2 Historic framework: The Treuhand experience

After the fall of the Berlin Wall, politicians in both parts of Germany strove to quickly integrate the former GDR into the democratic and capitalist system of West Germany, the Federal Republic of Germany (FRG) (Schweiger 2019). Right before the first free election in the GDR on March 18, 1990, GDR parliamentarians installed the *Treuhan-danstalt* as the holding company of some 12,000 East German, former publicly owned companies (*Volkseigene Betriebe, VEB*) (Böick 2018; zu Eulenburg et al. 2003). The Treuhand aimed to sell these firms to solvent investors who would make the firms fit for the market economy (Böick 2018).

On July 1, 1990, the Treuhand started its work, supervised by the West German Federal Ministry of Finance (Böick 2018; Schweiger 2019). From the outset, the public debate about the Treuhand was heated. The institution had rather hastily been founded and suffered from equipment and staff shortages during the first months (Böick 2018; zu Eulenburg et al. 2003). Given the exceptional task of privatizing an entire economy, by the end of 1990, the then-Treuhand president Detlev Karsten Rohwedder called for help. West German firms sent managers, often younger and less experienced ones (zu Eulenburg et al. 2003). West Germans occupied a majority of positions, which caused resentments among East Germans who felt that they had no say in their economic fate (Böick 2018).

The goal to preserve as many companies and jobs as possible got out of reach quickly. Former GDR companies were equipped with outdated machinery and used too high labor inputs, according to world market standards, to compensate for the lack of capital (Böick 2018). The monetary union with the FRG, effective July 1, 1990, further complicated the situation (Akerlof et al. 1991; Schweiger 2019; Sinn 1995, 2002). While the East German Mark had been exchanged for the West German Mark at a rate of 4 to 1 before the monetary union, the union exchange rate was deliberately set at 1 to 1. As a result, East German production costs, particularly wages, increased dramatically (Akerlof et al. 1991; Böick 2018; Schweiger 2019). A majority of firms became unprofitable overnight. Only weeks after the official start, the financial needs of the Treuhand sharply increased as more and more of its companies faced liquidity shortages (Böick 2018). Although economists had warned that the new and strong currency would yield massive job losses, the federal government pushed for the monetary union as a sign of change and intra-German integration (Akerlof et al. 1991; Böick 2018). Right before the first federal election in unified Germany on December 2, 1990, the public realized how difficult saving East German companies would be when the Treuhand closed the prestigious photography manufacturer Pentacon in Dresden, resulting in a loss of 5,700 jobs. Furthermore, the Treuhand announced that 45 other companies with about 50,000 employees would be shut as they were deemed unsaleable (Böick 2018). In a 1991 report, leading experts in the Ministry of Finance feared that up to 80 percent of jobs in Treuhand companies may be lost if operations continued in this fast and radical fashion (Böick 2018; zu Eulenburg et al. 2003).

In the face of rising unemployment, relations between the Treuhand and the East German people deteriorated. The *March protests* in early 1991 brought 60,000 people to the streets (Böick 2018). The conflict escalated on April 1, 1991, when Treuhand president Rohwedder was shot to death in his private house near Düsseldorf, West Germany. Although the left-wing extremist terror group Red Army Fraction claimed responsibility, the murder is still unsolved (Böick 2018).

A prominent example of public upheaval were the protests against the sale of a potash mine in Bischofferode, Thuringia, in 1993, which employed about 1,000 people from the surrounding areas. To save their jobs, the workers occupied the mine, held an 81-day hunger strike that attracted worldwide media attention, and gained access to the Reichstag in Berlin, demanding insight into the papers documenting the sales negotiations with the West German Kali & Salz AG (Potash & Salt Corporation). Yet, their efforts were unsuccessful: The Bischofferode mine was sold and closed shortly afterwards. In this case, as with several other prestigious GDR companies, the Treuhand was accused of having approved below-value sales of presumably profitable firms. The new owners often liquidated the firms to remove a potential competitor or to exploit valuable land (Böick 2018; Patton 2019).

The Treuhand ceased operations on December 31, 1994, having processed about 70 percent of GDR companies at a deficit of roughly 200 million Mark (zu Eulenburg et al. 2003). The final Treuhand report stated that about 1.5 million of the initially 4 million jobs in Treuhand companies still existed (zu Eulenburg et al. 2003). Yet, it is unclear how many more employees lost their jobs after companies had been sold. Treuhand insiders estimated that the share of job losses, even in successfully privatized firms, was 70-80 percent (Böick 2018). Unemployment in East Germany rose from nearly zero in 1989 to 15.7 percent in 1994 (see appendix figure B.1).

Given the combination of macro- and microeconomic shocks, disappointed hopes, and West Germans selling off East Germans' livelihoods, resentment against the new system festered among East Germans (Patton 2019; Schweiger 2019). Right after reunification, the left-wing PDS (Party of Democratic Socialism), successor party of the ruling GDR party SED, strongly criticized the Christian Democrat-led federal government for its transition management (Böick 2018). The PDS later merged with other left-wing movements to form the far-left *Die Linke* (The Left) (Coffé & Plassa 2010). In 2019, 30 years after the end of the GDR, top politicians of *Die Linke* emphasized how significant the "traumatic experience" was for East Germany and demanded to politically investigate the Treuhand period (Deutschlandfunk Kultur 2019). *Die Linke* usually receives strong electoral support in East Germany. In the last federal election in September 2021, the party won 10.4 percent of votes in the East, compared to 3.7 percent in the West.²

Likewise, the far-right has also picked up the Treuhand experience, but in an even sharper tone. In the course of rising right-wing populism across Europe in the 2010s, the AfD quickly established a major stronghold in East Germany (Arzheimer 2015). In several speeches, radical-right party member Björn Höcke has referred to the Treuhand as being responsible for the economic hardships and political misrepresentation East Germans face today (Deutschlandfunk Kultur 2019; Tagesspiegel 2019). Speaking to the East German identity and recalling negative emotions, the AfD has politicized the Treuhand experience to increase discontent with political leaders. In the 2021 federal election, the AfD obtained a vote share of 20.5 percent in East Germany.²

While these anecdotal observations suggest that the Treuhand inspired political discontent in East Germany, the precise channels via which de-industrialization and economic distress shape political alienation is yet to be established. In the following, I build on the related literature, explaining why I plausibly expect a political backlash from the Treuhand experience.

3 Economic grievances and political behavior

De-industrialization, global economic competition and the associated economic hardships represent a relevant driving force of the ever-rising political disenchantment in

²Vote shares refer to *second votes* and are taken from the webpage of the German Federal Returning Officer: https://www.bundeswahlleiter.de/.

democracies worldwide. In declining industrial areas in the Upper Midwest,³ working class voters essentially added to the latest right-wing political shift in the United States, which culminated in the election of Donald Trump in 2016 (Autor et al. 2020; Baccini & Weymouth 2021; Rodrik 2020). This phenomenon has been dubbed the *Rust Belt revolt* (McQuarrie 2017). Fearing social relegation, workers sided with Trump's populist campaign, which promised to protect their jobs (Baccini & Weymouth 2021; McQuarrie 2017). Trump particularly appealed to the working class identity, by emphasizing their hard work and, allegedly, how little they are valued by mainstream politicians (McQuarrie 2017).

In the same vein, the decline in manufacturing jobs and rising international competition have boosted populist success in Europe. Becker et al. (2017) show that areas with a declining share of industrial production decisively contributed to the Brexit vote in 2016. Colantone & Stanig (2018a) observe a similar positive effect of large import competition with China on the *Leave* vote. In another influential paper, Colantone & Stanig (2018b) find a general shift to the right in Western Europe, induced by Chinese import competition. Later studies confirmed this result (Ahlquist et al. 2020; Barone & Kreuter 2021; Dippel et al. 2022; Ferrara 2022; Rodrik 2018).

The settings in the mentioned studies are to some extent comparable to the situation in East Germany after 1989. The GDR heavily relied on industrial production and agriculture, and a major share of firms processed by the Treuhand were active in these areas (Böick 2018; zu Eulenburg et al. 2003). However, a novel aspect of my analysis is that job loss was clearly attributable to the Treuhand as a politically administered unit instead of rather complicated processes of international market competition. Therefore, I expect a political backlash after the Treuhand experience to be even more likely.

In line with the described findings, and with my own, recent studies have found a more general link between economic deprivation and support for populist and radical forces (Barone & Kreuter 2021; Emmenegger et al. 2015; Funke et al. 2016; Georgiadou et al. 2018; Hobolt 2016). All of the studies mentioned so far form a part of the literature on *economic voting* (Lewis-Beck & Paldam 2000). Since the 1970s, social scientists have established the relation between economics and election results (Kramer 1971; Tufte 1975). Voters electorally reward policymakers for a good economic situation but punish them for economic hardships. Specifically, incumbents receive lower electoral support if

³See Autor et al. (2013), Fort et al. (2018), and Pierce & Schott (2016) for analyses of the deindustrialization in the Upper Midwest as such.

economic grievances appear to be a collective issue – e.g., due to an economic crisis or political mismanagement – rather than an individual problem (Anderson 2000; Kinder & Kiewiet 1979; Powell & Whitten 1993). The Treuhand period represents exactly such a situation with mass job loss and widespread discontent.

Two circumstances may even have amplified a political backlash in the aftermath of the Treuhand experience. First, after reunification, East Germans essentially were a people of first-time voters, given the long period of two consecutive autocratic regimes since 1933. An individual's first election is crucial for shaping lifelong political behavior, in terms of turnout (Krosnick & Alwin 1989; Lau & Redlawsk 2008) or political preferences (Franklin & Hobolt 2011; Sears & Funk 1999; Sears & Valentino 1997). Also, first-time voters react more strongly to pre-election events (Ohme et al. 2017; Zeglovits & Aichholzer 2014). Political scandals around one's first election can have a detrimental effect on political trust. To mention just two examples, Dinas (2013) finds that younger American voters were relatively more likely to have electorally punished then-President Nixon for the Watergate scandal. Aassve et al. (2018) observe that a major corruption scandal in Italy in the early 1990s persistently damaged political trust among then-first-time voters. Consequently, the Treuhand experience as a negative first encounter with democratic politics may have paved the way for a general political dissatisfaction among East Germans (Patton 2019).

Second, because of their socialist upbringing, former GDR citizens exhibit a number of particular behaviors and attitudes. Lichter et al. (2020) investigate the consequences of the ubiquitous surveillance by the *Stasi*, the GDR intelligence. The permanent threat of being watched led to lower trust in others and political institutions. The Treuhand experience, thus, hit individuals who were already more likely to harbor less interpersonal trust. Frijters et al. (2004) observe a lower life satisfaction among East Germans, in particular in the early post-reunification period, which the authors also trace back to the economic grievances.

Other studies have found that East Germans have a higher risk of unemployment (Fuchs-Schündeln & Masella 2016), lower mobility (Boenisch & Schneider 2013; Fuchs-Schündeln & Schündeln 2009), and stronger preferences in favor of economic state intervention (Alesina & Fuchs-Schündeln 2007). While I do not directly build on these results,

they represent the attitudinal framework in which the negative impact of Treuhand job loss on political behavior could flourish.⁴

To sum up, I argue that the Treuhand experience had a deteriorating effect on trust and political behavior for three main reasons: (i) The affected individuals held the state responsible for their economic situation, (ii) unemployment was a previously unknown concern for East Germans and (iii) the Treuhand operated during the crucial period where East Germans formed their first democratic opinion.

4 Data and measurement

The explanatory variable in the individual-level analysis is Treuhand-induced job loss. Unfortunately, no database, as far as I am concerned, explicitly asks whether individuals lost their jobs due to Treuhand activities. However, the German Socio-economic Panel (SOEP, Goebel et al. 2019) provides the necessary information to construct an indicator of Treuhand job loss. This indicator equals 1 if a respondent fulfills four criteria: (i) They lived in East Germany between 1989 and 1994, (ii) they report to have lost their job (iii) due to a layoff or firm closure (iv) between July 1990 and December 1994. Since all larger state-owned companies passed over into Treuhand ownership after 1989, I conclude that any job loss in the early post-socialist period likely stems from Treuhand procedures or, more generally, the transition process.

Note that the individual Treuhand job loss indicator does not vary over time. It equals 1 if an individual fulfills the above-described conditions at any time during the Treuhand period. The value of 1 is then assigned to all years after 1994 in which the individual was surveyed. Therefore, I estimate the effect of Treuhand job loss on individual outcome variables only for the period from 1995 on. I do so for two reasons. First, relatively few East German individuals were surveyed in 1990 and 1991, implying a rather low statistical variance for these years. Second, my main interest lies in the effect of the Treuhand experience as such and its persistence over time.

I slightly modify several SOEP measures of individual behavior to serve as outcome variables. The SOEP asks for a respondent's general trust level: "How much do you

⁴Becker et al. (2020) question empirically exploiting the German division as a *natural experiment*. The authors argue that crucial social and economic differences between East and West Germany already existed prior to the German division. Thus, post-division differences are not necessarily caused by the distinct political regimes. However, I contrast behaviors *within* the group of East Germans. Therefore, the criticism does not apply to my analysis.

agree with the following statement: 'In general, people can be trusted.'?". Response options are ordered on a four-point scale from low to high: Strongly disagree, disagree, agree, strongly agree. For convenience, I collapse this variable into a binary indicator of general trust with the two sentiments of disagreement corresponding to a value of 0 and the two sentiments of agreement corresponding to a value of 1.

Similarly, I transform a comparable four-point scale of political interest into a binary indicator with 1 being equal to higher levels of political interest. I also compute a binary indicator for radical party preference from the categorical SOEP variable for general party preference. The indicator for radical party preference equals 1 if a respondent states that they harbor a preference for a party at the left or right end of the political spectrum⁵ and 0 otherwise. While political interest and party preferences are surveyed every year, trust data has only been collected in 2003, 2008, 2013 and 2018.⁶

Furthermore, I take a number of control variables from the SOEP, namely sex, age, age squared, secondary education level (lower, medium or higher), marital status (single/divorced/separated vs. married/in a committed relationship), a binary indicator of unemployment at the time of the interview and gross monthly labor income in \in . I also have information on the region (East vs. West Germany),⁷ the federal state and the county an individual is living in.

For the municipality-level analysis, I hand-assembled a comprehensive dataset⁸ comprising official election results in all East German municipalities⁹ for federal and state

 $^{^{5}}Die\ Linke$ at the left end and the AfD, $Die\ Rechte$, NPD and Republikaner at the right end. SOEP respondents can also indicate a combination or coalition of preferred parties. I code such combinations as non-radical if they include at least one mainstream party.

⁶In 2014 and 2018, the SOEP also asked individuals whether they participated in the federal election the year before. From this variable, I calculate a binary indicator of electoral abstention that equals 1 if a respondent stated not to have participated in the election and 0 otherwise. Because there are fewer observations, I only use this indicator in selected estimations.

⁷The SOEP classifies an individual as living in West Germany if they live in the states of Schleswig-Holstein, Hamburg, Lower Saxony, Bremen, North Rhine-Westphalia, Hesse, Rhineland-Palatinate, Saarland, Baden-Wuerttemberg or Bavaria. Living in East Germany corresponds to living in Brandenburg, Mecklenburg-Hither Pomerania, Saxony, Saxony-Anhalt or Thuringia. Although Berlin officially forms one united federal state today, the SOEP still distinguishes between respondents living in former West Berlin (=West Germany) and former East Berlin (=East Germany). Since the federal state variable includes Berlin as only one state, I can include both the region variable and the federal state variable in the same regression without perfect collinearity.

⁸German authorities do not distribute complete election data at the municipality level and the data collection comes with some challenges. Please see appendix A for more details on the data collection.

⁹Berlin is treated as one united municipality. To examine the sensitivity of the results, I repeat the estimations without Berlin.

elections held between 1990 and 2021. I gather the data from the respective state statistical offices, harmonize them and put them together in an overall database. Note that the resulting panel is balanced. That is, I have data for every post-reunification state and federal election for each municipality. However, there are calendar years without an election, as federal elections only take place every four years¹⁰ and state elections every four to five years, depending on the state. Also, state elections are staggered, meaning that election years differ between states and, in some cases, from federal election years.

I only include the so-called *second votes*, which determine the allocation of seats to parties in the German Bundestag or respective state parliament, excluding mail-in votes. I calculate party vote shares, voter turnout rates,¹¹ the share of invalid votes and total vote shares for radical parties at both ends of the political spectrum.¹² I use these variables as aggregate outcome variables.

As the explanatory variable at the aggregate level, I determine the number of job losses in Treuhand-processed firms in a municipality based on the Treuhand Privatisation Micro Database from the IWH Institute for Economic Research in Halle. This unique dataset contains detailed information about 60 to 70 percent of Treuhand companies, such as sector, turnover, size and location. Importantly, the dataset includes information on the outcome of Treuhand procedures, i. e., whether and when a company was privatized or closed, and on the number of employees (Giebler & Wyrwich 2018).

I manipulate the data as follows. Since I have the exact location of a firm, i.e., the municipality, I manually assign the respective municipality and county keys. I replace missing information on either firm status or employee figures whenever possible.¹³ I calculate yearly job losses in each firm by taking yearly differences in employee figures. If a firm exited the market in a given year, I add the number of employees in the exit

¹⁰The observation period contains only one early election in 2005.

¹¹I calculate voter turnout as votes cast divided by eligible voters. Since I understand turnout as a measure of political interest, I can hereby separate those who did not even turn out to vote from those who participated but cast an invalid vote.

 $^{^{12}}$ See appendix table A.1 for the list of radical parties.

¹³For instance, for some firms, I know that they still existed in 1991 but only have employee figures from 1990. In these cases, I replace the 1991 number of employees in 1991 by the 1990 number of employees, assuming that nothing changed. In some cases, the IWH Treuhand Micro Database provides more than one employee figure in one year since the creators consulted different archives for data collection. I then keep the highest figure. In other cases, I lack information on whether a firm *survived* a year, as the respective variable is labeled in the original dataset. However, I have information that the same firm *exited* the market in the sense that it was closed. I can, thus, conclude that the firm did not survive the respective year and replace the missing information on survival.

year to the sum of previous job losses, treating all jobs in the final year as lost. If a firm survived all four Treuhand years, job loss equals the total yearly decline in jobs.

Note that this procedure only captures the lower bound of job losses. First, as mentioned above, not all firms are covered by the IWH Treuhand Micro Database. Second, the official Treuhand records do not list job losses after a successful firm sale. That is, even in firms that survived the Treuhand, jobs may have been lost later. Similar to the individual-level analysis, I estimate the effect of aggregate Treuhand job losses on political behavior in elections *after* the Treuhand period. That is, I consider elections from December 1994 onward, and aggregate Treuhand job losses do not vary over time. To capture the Treuhand shock intensity, I relate the municipality total of job losses in the entire Treuhand period to the municipality population as of German Unity Day on October 3, 1990.

I include a vector of control variables at the aggregate level obtained from the Federal Statistical Office and the INKAR database. However, I have to accept several restrictions. First, for the major share of control variables, statistical authorities do not gather data at the municipality level. Therefore, I include control variables at the county level: the share of females, the mean age of the population, the share of high school graduates with a university qualification degree (*Abitur*), the share of foreigners, GDP per capita, the unemployment rate, net migration (in minus out), net commuters (in minus out), the GDP share of industrial production, and corporate tax revenues per capita. A second restriction is that the statistical offices in East Germany were installed in 1993 at the earliest. Therefore, data for most control variables starts in 1995 or later. While the 1990 federal and state elections are not part of the main analysis, I already include the federal election in 1994, as it took place only very shortly before the Treuhand was dissolved. I fill the gaps in the control variables by linear extrapolation.

In order to account for pre-Treuhand political sentiment, I control for voter turnout, the vote share for the Christian Democratic Union and the vote share for *Die Linke* (back then: PDS) in the 1990 *Volkskammerwahlen*. I obtain the data from historic GDR statistical records and re-code them to fit the 2021 county structure. While turnout was unusually high in the first free GDR elections, the variance in voting behavior between municipalities give an idea of general political preferences in the respective area.

Appendix tables B.1 and B.2 provide summary statistics. Additionally, appendix table B.5 reports balance statistics for the covariates used in the individual-level analysis.

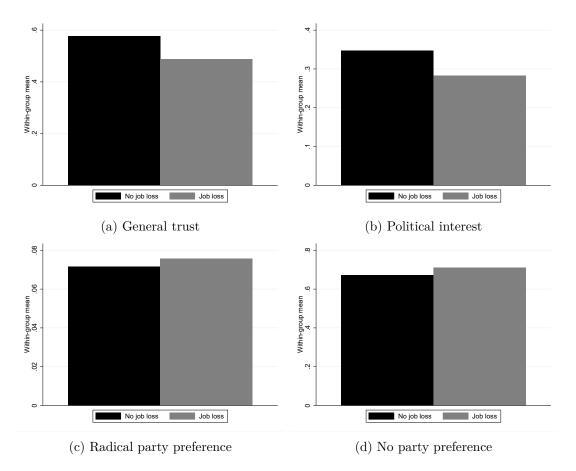
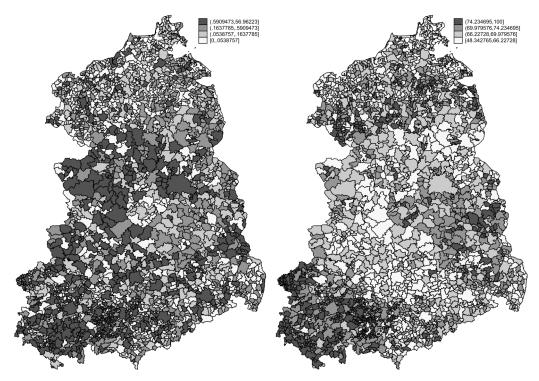


Figure 1: Mean values of dependent variables over Treuhand job loss Notes: Graphs depict mean values of the indicated variables across values of Treuhand job loss. Black bar depicts the mean value for Treuhand job loss=0, grey bar depicts the mean value for Treuhand job loss=1.

There are some significant differences between individuals who lost their jobs and those who did not. For instance, those who experienced a Treuhand job loss are more likely to be unemployed at a later interview date, which reflects unemployment persistence or the general economic downturn in East Germany. I, thus, control for the whole set of covariates in all specifications to determine the conditional effect of Treuhand job loss.

Figure 1 provides first descriptive evidence of the hypothesized political alienation effect of individual Treuhand job loss. As expected, general trust levels and political interest among those who experienced a Treuhand job loss are relatively lower. At the same time, the probability of favoring a radical party or not identifying with any party is higher.



(a) Relative Treuhand job losses, 1990-1994 (b) Voter turnout, federal election 1994



(c) Radical vote shares, federal election 1994

Figure 2: Geographic distribution of key variables

Notes: Figure 2a depicts distribution of aggregate Treuhand job losses across municipalities in East Germany. Figure 2b depicts voter turnout in the 1994 federal election across municipalities. Figure 2c depicts radical vote shares in the 1994 federal election across municipalities. Areas are shaded according to quartiles.

Figure 2a illustrates the spatial distribution of aggregate Treuhand job losses. Figures 2c and 2b display, respectively, turnout and radical vote shares in the 1994 federal election, at the end of the Treuhand period. There seems to be a positive correlation between turnout and radical voting, and a slightly positive association between radical voting and job losses, in particular, outside the northern state of Mecklenburg-Hither Pomerania. Figure 2a also shows that job losses occurred more frequently in the industrial south of the GDR and in bigger cities, such as Berlin, Leipzig and Dresden. Importantly, both Treuhand job losses and political preferences seem to cluster in certain regions. To account for this, I employ standard errors clustered at the federal state × year level in the baseline analysis and check for robustness using other cluster levels.

5 Results

5.1 Baseline results

I start this section by describing the results of the individual-level analysis. My main line of argument states that the experience of Treuhand job loss eroded individual trust, political interest and mainstream party identification. To test this hypothesis, I estimate the following pooled logit regression:

$$P(Y_{ist} = 1) = \Phi(\alpha_i + \beta Treuhand_{is} + \Theta' \mathbf{C}_{ist} + \Psi' \gamma_{is} + \delta_s + \lambda_t), \tag{1}$$

where *i* denotes the individual, *s* denotes the federal state of residence, *t* denotes the survey year and Φ denotes the standard normal cumulative distribution function. Y_{ist} denotes one of the above-described binary outcome variables capturing general trust, political interest, radical party preference and no party preference. *Treuhand*_{is} represents the individual Treuhand job loss indicator. The coefficient of interest is, thus, β . **C**_{ist} denotes a vector of time-variant control variables (age, age squared, current unemployment, marital status, gross labor income) and γ_{is} denotes a vector of time-invariant control variables (sex and, in most cases, secondary education). δ_s denotes a vector of East FE and state FE, λ_t denotes year FE.

Column (1) in table 1 reports the average marginal effect (AME) of Treuhand job loss on general trust in my preferred estimation, including the full set of control variables and FE. I report two types of standard errors. Standard errors clustered at the federal state ×

year level are in brackets. As explained above, individual political behavior may cluster at this level because of an uneven distribution of the Treuhand job loss indicator or state-specific policies or historically grown political preferences. In parentheses, I report standards errors clustered at the individual level, which accounts for serial correlation within panels in these pooled estimations.

The results imply a significantly negative relation between Treuhand job loss and general trust. East Germans who experienced a Treuhand job loss exhibit significantly lower general trust than East Germans who did not lose their jobs. On average, an individual who experienced a Treuhand job loss has a 7 percentage point lower probability of reporting a high or very high general trust level. This result does not seem to be coincidental, as one can observe a more general deterioration of the affected individuals' mental states. Just as an illustration, I use additional psychological indicators as dependent variables in columns (2) to (4) in table 1. The SOEP collected data for these locus of control indicators in a short period between 1994 and 1996. All three variables are binary indicators. They capture how strongly an individual believed that plans could actively be realized, that wishes could be turned into reality or that oneself is in control of one's own life, respectively. Those who were affected by Treuhand job loss were 3 to 4 percentage points less likely to agree with each of these statements, pointing to a feeling of powerlessness and heteronomy. Additionally, in line with Frijters et al. (2004), column (5) of table 1 suggests a significantly lower life satisfaction among individuals who experienced a Treuhand job loss.

Apparently, a Treuhand job loss is associated with lower personal well-being. Since, for many East Germans, the Treuhand as a politically administered institution represented the cause of their distress, the observed negative sentiment may go hand in hand with political alienation. Table 2 provides evidence in favor of this supposition. Column (1) reports a significantly lower political interest among individuals affected by Treuhand job loss: The probability of indicating a high or very high political interest declines by 3.7 percentage points. At the same time, East Germans who lost their jobs are about 2 percentage points more likely to prefer a party at the far end of the political spectrum and 3 percentage points more likely not to identify with any political party (see columns (2) and (3) of table 2).

As explained above, the SOEP collected data on electoral abstention from the federal election only twice, resulting in relatively few observations toward the end of the observation period. While the estimate in column (4) is positive, as hypothesized, it is not

| DV: | (1) General trust | (2) Plans | (3) Reality | (4) Self | (5) Life satisfaction |
|-------------------|-----------------------------------|-------------------------------------|---------------------------------|---------------------------------|------------------------------------|
| Treuhand job loss | -0.070 [0.024]*** (0.033)** | -0.035 $[0.017]^{**}$ (0.022) | -0.042 [0.017]** (0.022)* | -0.030 [0.011]*** (0.018) | -0.226 [0.034]*** (0.078)*** |
| Observations | 4,400 | 4,414 | 4,414 | 4,403 | 34,506 |
| Pseudo R-squared | 0.04 | 0.05 | 0.03 | 0.03 | 0.02 |
| Controls | Υ | Υ | Υ | Υ | Υ |
| Year FE | Υ | Υ | Υ | Υ | Υ |
| East FE | Y | Υ | Υ | Υ | Υ |
| State FE | Y | Υ | Υ | Υ | Υ |
| Years covered | 2003, '08, '13, '18 | 1995, '96 | 1995, '96 | 1995, '96 | 1995-2020 |

Table 1: Baseline regression results: Individual attitudes

Notes: Table shows AMEs from pooled logit estimations in columns (1)-(4) and estimates from a pooled ordered logit estimation in column (5). Treuhand job loss is a binary indicator, capturing whether an individual in East Germany lost their job due to layoff or closure anytime between July 1990 and December 1994. General trust is a binary indicator, capturing whether an individual agrees or somewhat agrees with the statement "In general people can be trusted." Plans is a binary indicator, capturing whether an individual agrees or somewhat agrees or somewhat disagrees or somewhat disagrees with the statement "Plans cannot be realized." Reality is a binary indicator, capturing whether an individual disagrees or somewhat agrees with the statement "Plans cannot be realized." Reality is a binary indicator, capturing whether an individual agrees or somewhat agrees or somewhat agrees with the statement "Ushes can be turned into reality." Self is a binary indicator, capturing whether an individual agrees or somewhat agrees with the statement "I am in control of my life." Life satisfaction is an ordinally scaled variable, ranging from 0 (very low) to 10 (very high). Vector of control variables includes sex, age, age squared, unemployed at time of interview, secondary education level, gross monthly labor income, marital status. Unit of observation is the individual. Years covered by the dependent variable

statistically significant at conventional levels.¹⁴ Overall, the results support the notion that the Treuhand experience had a deteriorating effect on the affected individuals' attitudes and political identification. At this point, it may be worthwhile to emphasize again that I compare the laid-off individuals to fellow East Germans. That is, I do not observe a general *East Germany effect* in behavior, as compared to West Germany, but measure behavioral differences *within* the group of former GDR citizens.

In the appendix, I provide several robustness checks for the baseline analysis. Since a strong focus of the GDR economy was industrial production, job loss occurred mostly in the industrial sector, with another focus being the agricultural sector (Böick 2018; zu Eulenburg et al. 2003). The sector an individual worked in may, thus, be a determinant of Treuhand job loss. At the same time, workers in blue-collar jobs may exhibit different political behavior than people in service jobs, potentially causing an omitted variable

¹⁴I will, therefore, not report any more results for this variable in the following.

| DV: | (1) Political interest | (2) Rad. party preference | (3) No party preference | (4) Electoral abstention |
|-------------------|----------------------------------|----------------------------------|---|--|
| Treuhand job loss | -0.032 [0.006]*** (0.019)* | 0.024 [0.005]*** (0.011)** | 0.033 $[0.007]^{***}$ $(0.019)^{*}$ | $\begin{array}{c} 0.089 \\ [0.059] \\ (0.056) \end{array}$ |
| Observations | 34,515 | 34,511 | 34,511 | 1,361 |
| Pseudo R-squared | 0.12 | 0.04 | 0.05 | 0.18 |
| Controls | Υ | Υ | Υ | Υ |
| Year FE | Υ | Υ | Υ | Υ |
| East FE | Υ | Υ | Υ | Υ |
| State FE | Υ | Υ | Υ | Υ |
| Years covered | 1995-2020 | 1995-2020 | 1995-2020 | 2014, '18 |

Table 2: Baseline regression results: Individual political behavior

Notes: Table shows AMEs from pooled logit estimations. Treuhand job loss is a binary indicator, capturing whether an individual in East Germany lost their job due to layoff or closure anytime between July 1990 and December 1994. Vector of control variables includes sex, age, age squared, unemployed at time of interview, secondary education level, gross monthly labor income, marital status. Unit of observation is the individual. Years covered by the dependent variables as indicated. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

bias. In table C.1.1, I repeat the baseline analysis, using $sector^{15}$ as an additional control variable. The main results are unchanged. I also use the sector variable to test the validity of the Treuhand job loss indicator. Interacting the latter with the sector variable reveals that the baseline effects are driven by individuals active in the industrial or agricultural sector, see figure C.1.1. The indicator, thus, appears to actually capture those who experienced a Treuhand job loss. In table C.1.2, I also provide results with different cluster levels of the standard errors. The estimations in table C.1.3 incorporate both individual Treuhand job loss and aggregate Treuhand job losses in an individual's county of residence.

Additionally, table C.1.4 reports results using data on political behavior and attitudes, for Thuringia only, from the *Thüringenmonitor*. This survey provides a number of suitable survey items to capture political alienation; however, it does not include information on an individual's job situation in the early 1990s. Therefore, I can only estimate the effect of aggregate Treuhand job losses in the county an individual lives in. The results

 $^{^{15}}Sector$ takes up a value of 1 if an individual reports that they work in industrial production, mining, construction or agriculture, and 0 otherwise.

support the baseline observations, pointing to similarly deteriorating political attitudes in more strongly affected areas.

I come to the preliminary conclusion that experiencing Treuhand job loss is associated with a greater extent of individual political alienation. The aggregate-level analysis complements this picture. Results are based on the following pooled OLS estimation:

$$y_{jdst} = \mu + \sigma Treuhand_{jds} + \Phi' \mathbf{c}_{dst} + \nu_{st} + \delta_s + \lambda_t + u_{jdst}, \tag{2}$$

where j denotes municipality, d denotes county, s denotes federal state and t denotes election year. y_{jdst} denotes the respective outcome variable (vote share for radical-left or radical-right or all radical parties, vote share for established parties, voter turnout, share of invalid votes). I use the aggregate Treuhand job loss ratio $Treuhand_{jds}$ as the main explanatory variable. The coefficient of interest is σ , which captures the average effect of aggregate Treuhand job losses. \mathbf{c}_{dst} denotes a vector of the above-mentioned time-varying covariates at the district level. ν_{st} denotes the election type (federal vs. state), δ_s denotes state FE, λ_t denotes year FE. u_{jdst} denotes the error term.

Table 3 reports the respective results. In line with the individual-level analysis, I observe significantly higher vote shares for radical parties in areas with a higher Treuhand job loss ratio. Parties at the far-left end of the party spectrum seem to drive this observation. Interestingly, the association between Treuhand job losses and radical-right voting is negative. While disenchanted voters may generally shift away from mainstream parties, far-right parties do not seem to gain votes from Treuhand job losses. Two reasons may explain this finding. First, voters did not perceive radical-right parties as adequately representing their economic interests after a job loss. Second, East Germans felt naturally more connected to radical-left parties, especially the SED successor party, which also remained relatively big, compared to the smaller radical-right outlets.

The effect on voter turnout in column (4) of table 3 is insignificant. In line with the results in columns (1) and (2), two effects may outweigh each other. Some voters may use abstention as a measure of political protest, while others felt more encouraged to go to the ballot box and support a radical party. This could lead to a null effect on voter turnout. The negative effect on the share of invalid votes in column (5) undermines this

| DV: | (1) Radical vote share | (2) Radical-left vote share | (3) Radical- right vote share | (4) Voter turnout | (5) Share of invalid votes |
|---------------------------|--|-----------------------------------|--|--|-------------------------------------|
| Aggr. Treuhand job losses | $\begin{array}{c} 0.121 \\ [0.017]^{***} \\ (0.014)^{***} \end{array}$ | 0.163 [0.016]*** (0.013)*** | -0.042 [0.014]*** (0.007)*** | $\begin{array}{c} 0.025 \\ [0.021] \\ (0.016) \end{array}$ | -0.012 [0.004]*** (0.003)*** |
| Observations | 31,329 | 31,329 | 31,329 | 31,329 | 31,329 |
| R-squared | 0.69 | 0.48 | 0.84 | 0.59 | 0.24 |
| Controls | Y | Y | Y | Y | Y |
| Election-type FE | Υ | Υ | Υ | Υ | Υ |
| Year FE | Υ | Υ | Υ | Υ | Υ |
| State FE | Υ | Υ | Υ | Υ | Υ |

Table 3: Effects of aggregate Treuhand job losses on voting behavior

Notes: Table reports results of pooled OLS estimations. Aggr. Treuhand job losses refer to total Treuhand job losses in a municipality between 1990 and 1994, relative to the 1990 municipality population. Vector of control variables includes population density, share of females, share of foreigners, mean population age, net migration, unemployment rate, GDP share of secondary sector production, corporate tax revenue per capita, net commuters, share of high school graduates with higher secondary degrees, voter turnout and vote shares for the Christian Democratic Union and Die Linke in the Volkskammer elections in 1990. Unit of observation is the municipality. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

interpretation. Those who made their way to the ballot box cast an actual vote for a (radical) party instead of using an invalid ballot to express their protest.¹⁶

If East Germans turned away from the responsible mainstream outlets in reaction to the Treuhand experience, one should observe a lower vote share for these parties in more strongly affected municipalities. This is exactly what I find in table 4. By *established parties*, I refer to the four big parties that have participated in federal governments between 1994 and 2021: the CDU (christian democrats/conservatives), the SPD (social democrats), the FDP (liberals) and the Greens. The estimates suggest that an increase of the Treuhand job loss ratio by 0.1 is associated with a 1.2 to 2.7 percentage point decrease in the established parties' vote share.

Overall, the aggregate results confirm that Treuhand job loss is associated with political alienation. Voters in areas with more job losses prefer radical parties over mainstream political outlets, which reflects their disenchantment with established leaders. The strong tendency toward radical-left parties that promote policies most similar to

 $^{^{16}\}mathrm{See}$ appendix figure C.2.2 for separate results across election types.

| DV: | (1) Established | (2) parties |
|---|--|------------------------------------|
| Aggr. Treuhand job losses | -0.121 $[0.013]^{***}$ $(0.018)^{***}$ | -0.163 [0.016]*** (0.026)*** |
| Aggr. Treuhand job losses \times State election | | -0.114 [0.025]*** (0.040)*** |
| Observations | 31,329 | 31,329 |
| R-squared Controls | 0.72 Y | 0.72 Y |
| Election-type FE | Y Y | Y Y |
| Year FE | Ŷ | Ŷ |
| State FE | Υ | Υ |

Table 4: Effects of aggregate Treuhand job losses on voting for established parties

Notes: Table reports results of pooled OLS estimations. Aggr. Treuhand job losses refer to total Treuhand job losses in a municipality between 1990 and 1994, relative to the 1990 municipality population. Dependent variable is vote share for established parties, which equals the sum of vote shares for the CDU, SPD, FDP and the Greens. Column (2) reports separate effects of aggr. Treuhand job losses in federal and state elections. Vector of control variables includes population density, share of females, share of foreigners, mean population age, net migration, unemployment rate, GDP share of secondary sector production, corporate tax revenue per capita, net commuters, share of high school graduates with higher secondary degrees, voter turnout and vote shares for the CDU and Die Linke in the Volkskammer elections in 1990. Unit of observation is the municipality. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

former GDR socialism also suggests a form of nostalgia, which may have prevented the affected individuals from fully developing a democratic identity.

Appendix C.2 presents a number of further results and robustness checks for the aggregate-level analysis. I repeat the estimations, excluding (i) Berlin as a special case, (ii) the 1994 elections shortly before the Treuhand closed, and (iii) cluster the standard errors at the county and county \times year level. These modifications do not qualitatively change the baseline results. Furthermore, in table C.2.5, I present results excluding *Die Linke* and the AfD as the largest, and most moderate, radical parties. In table C.2.6, I report separate results for major mainstream parties and selected far-end parties. These two analyses further disentangle the larger radical-left vote shares in more strongly affected municipalities. Clearly, *Die Linke* party vote shares drive the radical-left preference. This is in line with my interpretation that affected East German voters

remain more committed to nostalgic ideas and had a harder time making a full transition to the democratic system. Moreover, the separate analysis for single parties reveals that more Treuhand job losses are related to lower vote shares for both the CDU and FDP, which were the ruling parties at the time of the German reunification.

5.2 Heterogeneity analysis

In order to provide a deeper understanding of the observed individual-level baseline effects, I present several heterogeneity tests in this section, specifically with respect to time and region of residence.

Figure 3 shows the AMEs of individual Treuhand job loss separately for each year in which the respective dependent variable is observed. In the underlying regression, the Treuhand job loss dummy is interacted with a full set of year dummies to determine the yearly effect. As explained above, the general trust variable is only observed in four years in the SOEP. Nevertheless, I find a negative effect of Treuhand job loss for the first two of these four years. This suggest that Treuhand job loss not only has a deteriorating effect on general trust levels, but it also persists over time, at least until 2008, which is almost 20 years after the fall of the Berlin Wall.

A similar pattern is observable for political interest and the probability of having no party preference. Strikingly, the effects seem to be insignificant or small at best in the early 1990s and pick up from the early 2000s on. As there was a second migration wave out of East Germany in the late 1990s and another economic downturn around 2000, the initially high hopes of East Germans may have completely faded by then. Not seeing the expected economic improvements after a decade of German unity may have boosted political alienation. The results for radical party preferences mirror these observations. Treuhand job loss appears to have fueled radical party preferences at the beginning of the observation period – which we already know is driven by votes for *Die Linke* – while this tendency seems to have faded over time as non-preferences grew stronger. Former GDR citizens may have been disappointed by the *Die Linke*/PDS party's political performance, as it no longer passed the vote share threshold for the

federal parliament in $2002.^{17}$ Also note that estimation precision declines over this relatively long survey period, probably because of attrition.¹⁸

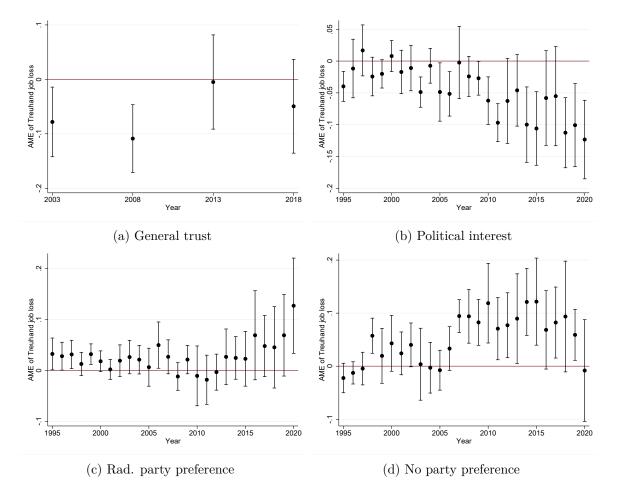


Figure 3: Average marginal effects of Treuhand job loss by year

Notes: Graphs show results from pooled logit regressions. Circles indicate AMEs of *Treuhand job loss* on the respective dependent variable. *Treuhand job loss* has been interacted with a full set of year dummies to determine separate effects for each observation year. All estimations include a full vector of control variables, year FE, East FE and federal state FE. Standard errors are clustered at the federal state \times year level. Caps indicate 90 percent confidence intervals. Red line indicates a value of 0.

The over-time effects suggest that political alienation persisted. Given not only Treuhand unemployment but also the relatively lower economic performance in East Germany today, East Germans may have turned away from politics since they feel economically

¹⁷As mentioned above, the German Federal Returning Officer provides comprehensive information on all German federal elections on their webpage.

¹⁸I also conduct the yearly analysis at the aggregate level, including only federal election years, to ensure comparability. The observed baseline effects do not significantly vary over election years. Results are available upon request. I refrain from interpreting over-time analyses for the state elections, as the results for different election years in different states are not fully comparable.

disadvantaged. The second heterogeneity test supports this interpretation. Here, I test whether the effect of Treuhand job loss depends on the individual's region of residence.

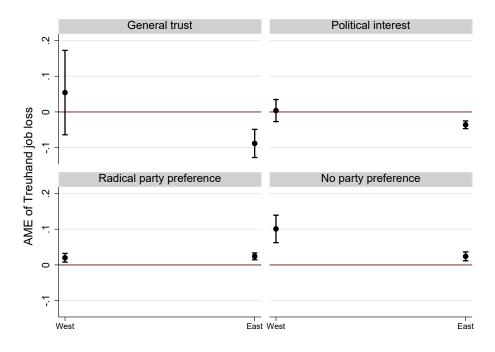


Figure 4: Average marginal effects of Treuhand job loss by region

Notes: Graphs show results from pooled logit regressions. Circles indicate AMEs of *Treuhand job loss* on the respective dependent variable across values of *East Germany*. The latter variable takes up a value of 1 if an individual lived in East Germany (former GDR) at the time of the interview and 0 if an individual lived in West Germany. All estimations include a full vector of control variables, year FE, East FE and federal state FE. Standard errors are clustered at the federal state \times year level. Caps indicate 90 percent confidence intervals. Red line indicates a value of 0.

Figure 4 depicts Treuhand job loss effects separately for individuals residing in either the west or the east of Germany at the time of the interview. The sample still consists of former GDR citizens but accounts for potential relocation to West Germany during and after reunification. The declines in general trust and political interest are clearly driven by individuals who stayed in East Germany. The feeling of living in the worse of the two parts of Germany may have contributed to political disenchantment. The effects on having no party preference is larger for those now living in West Germany than for those still living in East Germany. While, on the one hand, this could be a backlash against the forced relocation to find a new job, it could also be the result of radical parties, such as *Die Linke* and the AfD, leading more campaigns in their strongholds in East Germany, which increases identification.

Finally, I also test effect heterogeneity by individual age group in 1990 and gender. In both cases, I do not find consistent effect patterns. Results are, therefore, not reported.

5.3 Causality analysis

Ideally, at the individual level, the explanatory variable would be used as a treatment in a difference-in-differences design to determine the causal effect of Treuhand job loss. A major obstacle, however, makes this approach unfeasible. No observations exist for East German individuals before the fall of the Berlin Wall. That is, I only have data for the post-treatment period, not for the pre-treatment period. Besides that, as explained above, no survey question directly asked for individual Treuhand job loss. Therefore, I rely on the Treuhand job loss indicator as a kind of proxy. A likely objection may, thus, be that the effects found so far do not causally relate to the Treuhand experience. Instead, political alienation may result from unemployment as such or from the East Germans' specific cultural imprint.

In this section, I aim to alleviate these concerns by ruling out alternative explanations and strengthening my claim that the results in fact capture the unique effect of postreunification Treuhand job loss. First, I exploit the existing within-variance to highlight how a switch of the Treuhand job loss indicator affects political behavior. Second, I conduct a placebo analysis by re-running the baseline estimations for fictitious Treuhand job loss scenarios.

Not all affected individuals lost their job at the same time. The first East Germans took part in the SOEP in 1990 so that I can run a fixed-effects estimation for individuals that already participated before their Treuhand job loss occurred. That way, I examine the conditional effect of a *change* of the Treuhand job loss indicator on political behavior. Panel A of table 5 reports the results of a two-way fixed-effects least-squares estimation similar to equation 1 but that include individual-fixed effects (alongside time-fixed effects). In addition, I include state-fixed effects in all estimations. Every second estimation in table 5 also includes state×year-fixed effects. Since I do not know the exact date of a job loss, the Treuhand job loss indicator is lagged by one year. Thereby, I mirror the baseline analysis and give preferences some time to adjust.

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|-----------------------------|---------------------------|--------------------------|--------------------------|
| DV: | Political interest | | Radical party preference | | No party preference | |
| Panel A: Actual Treuhand job loss in $t-1$ | | | | | | |
| Treuhand job loss $(t-1)$ | (0.051) (0.025) ** | $(0.054)(0.025)^{**}$ | -0.012 (0.007) | -0.012 (0.008) | $0.033 \\ (0.018)^*$ | $0.032 \\ (0.018)^*$ |
| Adj. R-squared Observations Years covered | $0.08 \\ 11,846 \\ 1991-1$ | $0.08 \\ 11,846 \\ .995$ | $0.03 \\ 11,854 \\ 1991-1$ | $0.04 \\ 11,854 \\ 995$ | 0.16 11,854 1991-1 | $0.17 \\ 11,854 \\ .995$ |
| Panel B: Actual Treuhand | job loss in | t + 2 | | | | |
| Treuhand job loss $(t+2)$ | $\begin{array}{c} 0.013 \\ (0.052) \end{array}$ | $\begin{array}{c} 0.013 \\ (0.052) \end{array}$ | -0.042 (0.016)*** | (0.043) $(0.016)^{***}$ | -0.058 (0.039) | -0.054 (0.039) |
| Adj. R-squared Observations Years covered | 0.13 4,947 1990-1 | $0.13 \\ 4,947 \\ .992$ | $0.02 \\ 4,957 \\ 1990-1$ | $0.02 \\ 4,957 \\ 992$ | 0.34 4,957 1990-1 | $0.35 \\ 4,957 \\ .992$ |
| Panel C: Job loss in West | Germany in | n t - 1 | | | | |
| Job loss West $(t-1)$ | $\begin{array}{c} 0.039 \\ (0.038) \end{array}$ | $\begin{array}{c} 0.040 \\ (0.038) \end{array}$ | -0.007 (0.005) | -0.007 (0.005) | -0.024 (0.029) | -0.025 (0.028) |
| Adj. R-squared Observations Years covered | 0.03 26,274 1991-1 | 0.03 26,274 .995 | $0.004 \\ 26,212 \\ 1991-1$ | $0.01 \\ 26,212 \\ 995$ | 0.01 26,212 1991-1 | $0.01 \\ 26,212 \\ .995$ |
| Controls Individual FE Year FE State FE State × year FE | Y Y Y Y N | Y Y Y Y Y | Y Y Y Y N | Y Y Y Y Y | Y Y Y Y N | Y Y Y Y Y |

Table 5: Effects of a change in the job loss indicator, fixed-effects estimations

Notes: Table shows results from two-way fixed-effects least-squares estimations. Treuhand job loss is an indicator switching from 0 to 1 if an individual experienced a Treuhand job loss in t. Political interest refers to the original four-category variable (low to high) from the SOEP. Observation period is limited to years between 1990 and 1995. Vector of control variables includes age, age squared, unemployed at time of interview, secondary education level, gross monthly labor income, marital status. Unit of observation is the individual. Years covered by the dependent variables as indicated. Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Experiencing a Treuhand job loss significantly reduces political interest in columns (1) and (2).¹⁹ On average, losing one's job due to Treuhand closures reduces political interest by 0.05 units on the 1-to-4 scale. At the same time, the probability of not identifying with a political party increases by 3 percentage points, on average, see columns (5) and (6). This clearly suggests that Treuhand job loss quickly caused political identification and participation to decline. The probability of holding a radical party preference does not seem to change in the short run upon a Treuhand job loss. A plausible explanation is the still high support for the SED successor party PDS in the early 1990s.

Panel B in table 5 repeats the estimation considering *future* Treuhand job losses two years after the interview.²⁰ If affected individuals generally harbor attitudes different from unaffected individuals, one should find the same effects as in the baseline analysis, even when the job loss has not occurred yet. That is not the case, radical party preferences even seem to be lower among those affected by future job loss. These results underpin the notion that political behavior changes *after* a Treuhand job loss. Likewise, I do not find similar changes in political attitudes for West Germans in panel C. The explanatory variable here captures job losses among West Germans between 1990 and 1994, also due to layoffs or firm closures. That is, the circumstances of a job loss are the same, but unemployment cannot be blamed on the Treuhand. In line with this, West Germans do not react to a job loss with a comparable political backlash.

As a second check, I conduct a placebo analysis by re-running the baseline estimations with fictitious Treuhand job loss indicators. Provided that the baseline analysis does not adequately capture the impact of Treuhand job loss, I should obtain similar findings in the placebo tests. To eliminate as many alternative explanations as possible, I use three different placebo indicators. Each panel of table 6 presents one of these variants.

In panel A, I shift the individual unemployment experience by 10 years. To this end, I again calculate an indicator that takes a value of 1 if an individual in East Germany was unemployed due to firm closure or layoff, but in this case between July 2000 and December 2004. That is, I have the same criteria and individual economic situation as for the actual Treuhand job loss indicator but refer to a different time period. No similar effect on political behavior seems to exist.

¹⁹I use the original four-point political interest scale from the SOEP here. As the observation period and the number of individuals are reduced in this approach, I can hereby exploit a greater statistical variance and more fine-grained changes in political interest.

²⁰I shift the job loss by two years to minimize the risk of short-term anticipation effects.

| Table 6: Placebo analysis | | | | | | | |
|---|---|---|---|--|--|--|--|
| DV: | (1) General trust | (2) Political interest | (3) Rad. party preference | (4) No party preference | | | |
| Panel A: Time period 2000 | Panel A: Time period 2000-2004 | | | | | | |
| Placebo Treuhand job loss | $\begin{array}{c} 0.021 \\ [0.045] \\ (0.066) \end{array}$ | $\begin{array}{c} -0.034 \\ [0.025] \\ (0.054) \end{array}$ | $\begin{array}{c} -0.003 \\ [0.016] \\ (0.036) \end{array}$ | $\begin{array}{c} 0.043 \\ [0.029] \\ (0.064) \end{array}$ | | | |
| Pseudo R-squared Observations Years covered | 0.04 5,197 2008, '13, '18 | $\begin{array}{c} 0.13 \\ 28,510 \\ 20052020 \end{array}$ | 0.06 28,483 2005-2020 | 0.07 28,483 2005-2020 | | | |
| Panel B: Time period 2000 | -2004, no actual Tre | uhand job losse. | 8 | | | | |
| Placebo Treuhand job loss | $\begin{array}{c} 0.140 \\ [0.100] \\ (0.121) \end{array}$ | -0.024 [0.040] (0.060) | -0.057 [0.007]*** (0.018)*** | $\begin{array}{c} 0.032 \\ [0.049] \\ (0.102) \end{array}$ | | | |
| Pseudo R-squared Observations Years covered | 0.05 2,165 2008, '13, '18 | $0.14 \\ 11,837 \\ 2005-2020$ | $0.08 \\ 11,824 \\ 2005-2020$ | 0.06 11,824 2005-2020 | | | |
| Panel C: Random placebo | | | | | | | |
| Placebo Treuhand job loss | $\begin{array}{c} -0.012 \\ [0.021] \\ (0.026) \end{array}$ | 0.003 [0.007] (0.008) | -0.004 [0.005] (0.004) | 0.001 [0.008] (0.008) | | | |
| Pseudo R-squared Observations Years covered | 0.04 4,440 2003, '08, '13, '18 | $\begin{array}{c} 0.12 \\ 34,515 \\ 1995-2020 \end{array}$ | $0.04 \\ 34,511 \\ 1995-2020$ | $\begin{array}{c} 0.05 \\ 34{,}511 \\ 1995{-}2020 \end{array}$ | | | |
| Controls Year FE State FE | Y Y Y | Y Y Y | Y Y Y | Y Y Y | | | |

Notes: Table shows AMEs from pooled logit estimations. Placebo Treuhand job loss refers to a fictitious job loss according to the criteria indicated above each panel. Vector of control variables includes sex, age, age squared, unemployed at time of interview, secondary education level, gross monthly labor income, marital status. Unit of observation is the individual. Years covered by the dependent variables as indicated. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

To avoid hysteresis-like effects from previous unemployment experiences, I use the same placebo in panel B but exclude all individuals that are part of both this placebo sample and experienced an actual Treuhand job loss 10 years earlier. Again, I find no effects, except for radical party preferences. However, the effect here is opposite to the baseline result. Consequently, being laid off as such does not seem to cause the political backlash observed in the baseline analysis.

In panel C, I construct a random placebo in order to rule out that East Germans as a group harbor negative political attitudes, regardless of whether they were affected by Treuhand job loss. I randomly assign the placebo job loss to 19.9 percent of the baseline sample. The frequency of job loss, thus, matches that in the baseline analysis. Again, I observe no similar effects on the dependent variables. Thus, political alienation does not seem to be a general issue among East Germans in my sample.

Overall, the evidence does not support explanations for the observed political alienation other than a Treuhand job loss. Being unable to conduct a difference-in-differences model, I am still somewhat limited in claiming causality of the results. However, I feel confident that the results presented in this section make a strong case in favor of an actual impact of Treuhand job loss on political alienation.

5.4 Mechanisms

Up to this point, all results speak in favor of Treuhand job loss eroding trust and fostering a lack of identification with mainstream politics. Yet, why exactly do the affected East Germans hold politics accountable? In this section, I study the respective mechanisms. Two mechanisms are conceivable: group identity and economic grievances.

Regarding the first mechanism, East Germans as a group may feel mistreated by (West German) politics. In fact, back in the early 1990s and still today, Treuhand opponents often bring forward the argument that, among former GDR citizens, the sudden loss of work and well-known economic structures caused a their life achievements to be perceived as devalued or left feeling discriminated against as a socio-cultural group (Deutschlandfunk Kultur 2019; Patton 2019; Schweiger 2019; Tagesspiegel 2019). Regarding the second mechanism, citizens may hold politics accountable for the income decline associated with job loss. Coming from a system with relatively secure income

flows and maximum state intervention, individuals may fear financial grievances and economic marginalization.

In a first step, I test the potential identity mechanism. To this end, I restrict the sample to individuals for which the individual Treuhand job loss indicator is 0. As these individuals did not lose their jobs, I do not expect them to exhibit protest voting based on personal financial grievances. I then estimate the effect of aggregate Treuhand job losses in their county of residence on political behavior. If I find effects similar to those I observe for their affected fellow citizens, I can conclude that they sympathize with their peers, probably due to identification with the same socio-national group.

| | | 0 | 5 | | | | |
|--|-----------------------------|--------------------------------------|--|--|--|--|--|
| DV: | (1) General trust | (2) Political interest | (3) Rad. party preference | (4) No party preference | | | |
| Panel A: Aggr. job loss in the county the individual lived in in 1990 | | | | | | | |
| Aggr. Treuhand job losses (county) | 0.001 [0.001] (0.001) | -0.001 [0.0002]*** (0.0002)*** | $\begin{array}{c} -0.0001 \\ [0.0001] \\ (0.0001) \end{array}$ | $\begin{array}{c} 0.002 \\ [0.0003]^{***} \\ (0.0003)^{***} \end{array}$ | | | |
| Observations | 3,150 | 24,220 | 24,213 | 24,213 | | | |
| Pseudo R-squared | 0.04 | 0.12 | 0.05 | 0.05 | | | |
| Panel B: Aggr. job loss in the county the individual lived in at the time of the interview | | | | | | | |
| Aggr. Treuhand job loss (county) | 0.001 [0.001] (0.001) | -0.0005 [0.0002]** (0.0002)** | -0.0007 [0.002]*** (0.002)*** | 0.001 [0.0003]*** (0.0003)*** | | | |
| Observations | 3,175 | 24,734 | 24,728 | 24,728 | | | |
| Pseudo R-squared | 0.03 | 0.13 | 0.05 | 0.05 | | | |
| Controls | Y | Y | Y | Y | | | |
| Year FE | Y | Υ | Υ | Υ | | | |
| State FE | Υ | Υ | Υ | Υ | | | |
| Years covered | 2003, '08, '13, '18 | 1995 - 2020 | 1995 - 2020 | 1995-2020 | | | |

Table 7: Mechanisms II: Peer-group solidarity

Notes: Table shows results from pooled logit estimations. Aggr. Treuhand job losses (county) refer to total Treuhand job losses in a county between 1990 and 1994, relative to the 1990 county population. Vector of control variables includes sex, age, age squared, unemployed at time of interview, secondary education level, gross monthly labor income, marital status. Unit of observation is the individual. Years covered by the dependent variables as indicated. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 7 displays AMEs of the aggregate Treuhand job loss ratio on East Germans who were themselves unaffected by individual Treuhand job loss. Panel A uses aggregate Treuhand job losses in the county an individual lived in in 1990 as the explanatory variable. Panel B reports effects of aggregate Treuhand job losses in the county an individual lived in at the time of the interview. One should interpret these latter results with more caution, as peer solidarity is less likely to occur if an individual only moved to a highly affected area after 1994. In both cases, I do not find evidence that is completely consistent with the baseline effects. A higher aggregate Treuhand job loss ratio in panel A is associated with lower political interest and a higher probability to have no party preference. However, for the other dependent variables, effects are insignificant or even go the opposite direction than the baseline effects. Apparently, observing one's neighbors lose their jobs does not provoke the same political backlash that being personally affected by job loss does. Peer sympathy, and, thus, a shared East German identity, may play a certain role but cannot fully explain political alienation.

In a second step, I examine economic grievances as a potential channel. As already mentioned, the results from the regional subsample analysis in figure 4 point to such an effect, as a Treuhand job loss is associated with stronger political alienation among those who stayed in the economically less prosperous East Germany. To test the mechanism, I calculate the log mean yearly income for the household an individual lived in for the period 1990 to 1994. By this variable, I capture the economic situation right before or at the time when individuals potentially lost their jobs. I expect a greater political alienation at the upper end of the income distribution. In principle, a higher mean household income reflects a more comfortable economic fallback position in terms of, for instance, a partner's income. However, individuals in high-income households have to cut back on their living standards by more if they lose their jobs. Finding themselves in an unknown situation of financial constraints, individuals may be more inclined to blame politics.

In fact, I find support in favor of the economic grievances mechanism, see figure 5. Individuals with a higher average household income during the Treuhand period lose political interest and identify less with parties, while the opposite seems to apply to lower-income individuals. Likewise, the effect on general trust is significantly negative only at the upper end of the income scale. Only radical party preferences do not seem to depend on income. Hence, I observe effects similar to the baseline effects among individuals with an economically more privileged starting position.

To underpin the notion that economic grievances are the relevant mechanism, I provide a second test. In the 1990 SOEP survey, East Germans were asked whether they were satisfied with social security in the GDR. I re-code the original four-point scale of this variable to yield a binary indicator that captures whether an individual was happy (1) or

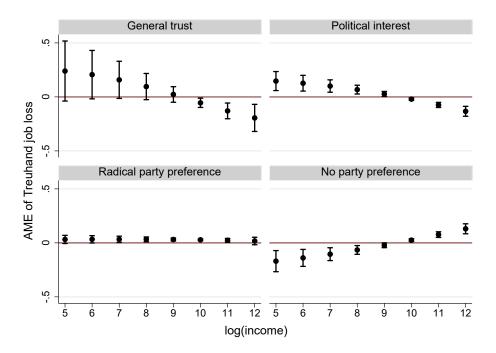


Figure 5: Average marginal effects of Treuhand job loss by log income

Notes: Graphs show results from pooled logit regressions. Circles indicate AMEs of *Treuhand job loss* on the respective dependent variable across values of *log (income)*. The latter variable captures logged values of average yearly income in the household an individual lived in for the period 1990-1994. All estimations include a full vector of control variables, year FE, East FE and federal state FE. Standard errors are clustered at the federal state \times year level. Caps indicate 90 percent confidence intervals. Red line indicates a value of 0.

unhappy (0) with social security in the GDR. The underlying question was only asked once in June 1990, that is, prior to the Treuhand activities. The answers are, thus, unaffected by later experiences of job loss. I hypothesize that individuals who stated that they were happy with social security in the GDR would react more strongly to a job loss. As they felt well protected by the socialist system, they would be more likely to oppose the new regime that put them into an economically more vulnerable position.

Figure 6 displays AMEs of Treuhand job loss for the two groups of respondents. The results point to a stronger negative effect on general trust and political interest among those who reported to have been happy with social security in the GDR. In addition, the probability of holding no party preference is higher in this group. The effects are, thus, as expected. One can interpret the results as a form of nostalgia. Being convinced that the GDR social system was satisfying, individuals do not have the same confidence in the social market economy due to their unemployment experience. Instead, they blame politics for a more insecure livelihood after a Treuhand job loss. In conclusion, the

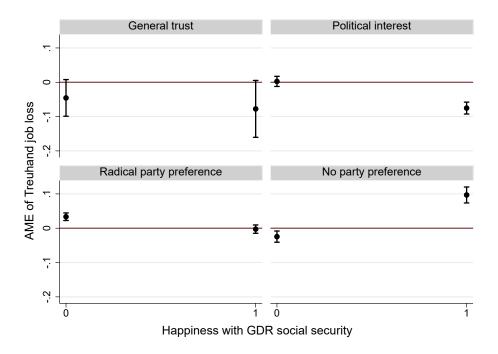


Figure 6: Average marginal effects of Treuhand job loss by satisfaction with GDR social security

Notes: Graphs show results from pooled logit regressions. Circles indicate AMEs of *Treuhand job loss* on the respective dependent variable across values of *happiness with GDR social security*. The latter variable takes up a value of 1 if a former GDR citizen reported to be happy with the GDR social security and 0 if not. The respective question was asked only once in the SOEP in June 1990 before the Treuhand was installed. All estimations include a full vector of control variables, year FE, East FE and federal state FE. Standard errors are clustered at the federal state \times year level. Caps indicate 90 percent confidence intervals. Red line indicates a value of 0.

mechanism tests suggest that political alienation among individuals affected by Treuhand job loss is primarily driven by economic concerns and a fear of social relegation.

6 Conclusion

Shortly after the fall of the Berlin Wall, the Treuhand was installed as a public institution to coordinate the privatization of some 12,000 formerly state-owned firms in East Germany. Selling these firms to private investors involved an estimated loss of 2.5 to 3 million jobs and a heated public debate. To date, political parties at both ends of the German political spectrum use the associated *loss of the East German life achievement* as an instrument of political mobilization. Yet, no comprehensive research so far has examined whether and how the Treuhand experience actually shaped the political behavior of the affected individuals. In this article, I empirically investigate the link between Treuhand layoffs and political alienation. The results suggest a deteriorating effect on identification with politics. East German individuals who lost their jobs exhibit significantly lower general trust, as compared to unaffected East Germans. The affected are also less interested in politics and have a higher probability of supporting a radical party or not identifying with a party at all. A complementary analysis at the municipality level delivers corroborating results. I argue that the unique combination of high expectations regarding the transition, unemployment as a new phenomenon, and a negative first encounter with the market economy resulted in political disappointment and impeded democratic identification.

Testing the underlying mechanisms, I find stronger effects among laid-off individuals in higher-income households. I interpret this result as a stronger fear of financial constraints and social relegation. The transition toward an entirely different political, social and economic system represented an extraordinary life challenge for the East German people. However, the experience of losing one's job and livelihood created a negative impression of the new political regime. Hereby, politics failed to fully integrate East Germans into the reunified German system.

These results on the yet understudied Treuhand experience demonstrate the consequences associated with a severe crisis and political mismanagement, the way the affected citizens perceived it. Disenchantment can pile up and become permanent. The need for a political reappraisal of crisis (mis)management is, thus, substantial. Comparable political backlashes against imminent social relegation caused by de-industrialization have recently been observed in other parts of the world (Autor et al. 2020; Baccini & Weymouth 2021; Barone & Kreuter 2021; Becker et al. 2017; Colantone & Stanig 2018a,b; Dippel et al. 2022). Policymakers are well advised to tackle the negative consequences of de-industrialization, or actively solicit voters' damaged trust immediately after the bad experience. Otherwise, the lack of participation and the turn toward radical forces may weaken democratic principles in the long run.

Beyond that, my findings are of interest for civic educators and activists promoting democracy. While it is understandable why East Germans lost faith in politics after the Treuhand experience, their lack of participation aggravates political underrepresentation. Citizens from a non-democratic background especially may benefit from an active integration into public decision-making to see the potential of political participation, in particular during crises. That said, the results should not be misinterpreted. Individuals that were negatively affected by the de-industrialization are not generally hostile toward democracy and the market economy. On average, political alienation is more pronounced; yet, just like negative experiences undermine political trust, positive experiences and adequate reactions from policymakers may help gain back confidence in the political system.

The analysis opens several avenues for future research. First, some other countries used comparable direct sales to privatize their economies, such as Estonia and Hungary (Havrylyshyn & McGettigan 1999a,b). These politically administered processes may have had similar effects on political behavior. At a more general level, mass unemployment or de-industrialization processes as such may be investigated as a potential driving force of yet unexplained political alienation. Second, results are based on proxies for the Treuhand experience due to a lack of data on actual individual Treuhand job losses. While the chance to create such a database from the early 1990s on has been missed, survey data may still be useful to deliver a reliable picture of the long-term effects as long as interviewing the affected individuals is still possible. Finally, the analysis reveals that transition experiences still shape present-day political behavior. As the Iron Curtain fell more than 30 years ago, now is the time to test effect persistence regarding various transition experiences, such as unemployment, early democratic involvement or consumption patterns.

References

- Aassve, A., Daniele, G., & Moglie, M. L. (2018). Never Forget the First Time: Youth Exposure to Corruption, Institutional Trust and Populist Voting. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3280498
- Ahlquist, J., Copelovitch, M., & Walter, S. (2020). The Political Consequences of External Economic Shocks: Evidence from Poland. American Journal of Political Science, 64(4), 904–920. https://doi.org/10.1111/ajps.12503
- Akerlof, G. A., Rose, A. K., Yellen, J. L., & Hessenius, H. (1991). East Germany in from the Cold: The Economic Aftermath of Currency Union. Brookings Papers on Economic Activity, 1.

- Alesina, A., & Fuchs-Schündeln, N. (2007). Good-Bye Lenin (or Not?): The Effect of Communism on People's Preferences. American Economic Review, 97(4), 1507– 1528.
- Anderson, C. J. (2000). Economic voting and political context: A comparative perspective. *Electoral Studies*, 19(2-3), 151–170. https://doi.org/10.1016/s0261-3794(99)00045-1
- Arzheimer, K. (2015). The AfD: Finally a Successful Right-Wing Populist Eurosceptic Party for Germany? West European Politics, 38(3), 535–556. https://doi.org/10. 1080/01402382.2015.1004230
- Autor, D. H., Dorn, D., & Hanson, G. H. (2013). The China Syndrome: Local Labor Market Effects of Import Competition in the United States. American Economic Review, 103(6), 2121–2168. https://doi.org/10.1257/aer.103.6.2121
- Autor, D. H., Dorn, D., Hanson, G. H., & Majlesi, K. (2020). Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure. American Economic Review, 110(10), 3139–3183. https://doi.org/10.1257/aer.20170011
- Baccini, L., & Weymouth, S. (2021). Gone For Good: Deindustrialization, White Voter Backlash, and US Presidential Voting. American Political Science Review, 115(2), 550–567. https://doi.org/10.1017/s0003055421000022
- Barone, G., & Kreuter, H. (2021). Low-wage import competition and populist backlash: The case of Italy. European Journal of Political Economy, 67, 101970. https: //doi.org/10.1016/j.ejpoleco.2020.101970
- Becker, S. O., Fetzer, T., & Novy, D. (2017). Who voted for Brexit? A comprehensive district-level analysis. *Economic Policy*, 32(92), 601–650. https://doi.org/10. 1093/epolic/eix012
- Becker, S. O., Mergele, L., & Woessmann, L. (2020). The Separation and Reunification of Germany: Rethinking a Natural Experiment Interpretation of the Enduring Effects of Communism. *Journal of Economic Perspectives*, 34(2), 143–171. https: //doi.org/10.1257/jep.34.2.143
- Boenisch, P., & Schneider, L. (2013). The social capital legacy of communism Results from the Berlin Wall experiment. *European Journal of Political Economy*, 32, 391–411. https://doi.org/10.1016/j.ejpoleco.2013.09.007

Böick, M. (2018). Die Treuhand. Idee – Praxis – Erfahrung 1990-1994. Wallstein.

- Carnes, N., & Lupu, N. (2020). The White Working Class and the 2016 Election. Perspectives on Politics, 19(1), 55–72. https://doi.org/10.1017/s1537592720001267
- Coffé, H., & Plassa, R. (2010). Party policy position of Die Linke: A continuation of the PDS? Party Politics, 16(6), 721–735. https://doi.org/10.1177/1354068809346075
- Colantone, I., & Stanig, P. (2018a). Global Competition and Brexit. American Political Science Review, 112(2), 201–218. https://doi.org/10.1017/s0003055417000685
- Colantone, I., & Stanig, P. (2018b). The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe. American Journal of Political Science, 62(4), 936–953. https://doi.org/10.1111/ajps.12358
- Deutschlandfunk Kultur. (2014). Report on slogans used during the German Reunification process [Available at https://www.deutschlandfunkkultur.de/deutsche-rufe-7-8-kommt-die-d-mark-bleiben-wir.1001.de.html?dram:article_id=294872].
- Deutschlandfunk Kultur. (2019). All against the Treuhand. Radio report [Available at https://www.deutschlandfunkkultur.de/streit-um-privatisierungsbehoerde-alle-gegen-die-treuhand.976.de.html?dram:article_id=461511].
- Dinas, E. (2013). Opening "Openness to Change": Political Events and the Increased Sensitivity of Young Adults. *Political Research Quarterly*, 66(4), 868–882. https: //doi.org/10.1177/1065912913475874
- Dippel, C., Gold, R., Heblich, S., & Pinto, R. (2022). The Effect of Trade on Workers and Voters. *Economic Journal*, 132(641), 199–217. https://doi.org/10.1093/ej/ ueab041
- Emmenegger, P., Marx, P., & Schraff, D. (2015). Labour market disadvantage, political orientations and voting: How adverse labour market experiences translate into electoral behavior. *Socio-Economic Review*, 13(2), 189–213.
- Federal Ministry for Economic Affairs and Energy (ed.) (2021). Annual Report of the Federal Government on the State of German Unity (tech. rep.) [Available at https://www.bmwi.de/Redaktion/DE/Publikationen/Neue-Laender/2021-jahresbericht-der-bundesregierung-zum-stand-der-deutschen-einheit-jbde.pdf?___blob=publicationFile&v=16, (German version)].

- Ferrara, F. M. (2022). Why does import competition favor republicans? Localized trade shocks and cultural backlash in the US. *Review of International Political Econ*omy, forthcoming, 1–24. https://doi.org/10.1080/09692290.2021.1980898
- Fort, T. C., Pierce, J. R., & Schott, P. K. (2018). New Perspectives on the Decline of US Manufacturing employment. *Journal of Economic Perspectives*, 32(2), 47–72. https://doi.org/10.1257/jep.32.2.47
- Franklin, M. N., & Hobolt, S. B. (2011). The Legacy of Lethargy: How Elections to the European Parliament Depress Turnout. *Electoral Studies*, 30(1), 67–76. https: //doi.org/10.1016/j.electstud.2010.09.019
- Frijters, P., Haisken-Denew, J. P., & Shields, M. A. (2004). Money Does Matter! Evidence from Increasing Real Income and Life Satisfaction in East Germany Following Reunification. American Economic Review, 94(3), 730–740. https://doi.org/10. 1257/0002828041464551
- Fuchs-Schündeln, N., & Masella, P. (2016). Long-Lasting Effects of Socialist Education. Review of Economics and Statistics, 98(3), 428–441. https://doi.org/10.1162/ rest_a_00583
- Fuchs-Schündeln, N., & Schündeln, M. (2005). Precautionary Savings and Self-Selection: Evidence from the German Reunification "Experiment". Quarterly Journal of Economics, 120(3), 1085–1120. https://doi.org/10.1093/qje/120.3.1085
- Fuchs-Schündeln, N., & Schündeln, M. (2009). Who stays, who goes, who returns? East– West migration within Germany since reunification. *Economics of Transition*, 17(4), 703–738. https://doi.org/10.1111/j.1468-0351.2009.00373.x
- Funke, M., Schularick, M., & Trebesch, C. (2016). Going to extremes: Politics after financial crises, 1870-2014. European Economic Review, 88, 227–260. https://doi. org/10.1016/j.euroecorev.2016.03.006
- Georgiadou, V., Rori, L., & Roumanias, C. (2018). Mapping the far-right in the 21st century: A meso-level analysis. *Electoral Studies*, 54, 103–115.
- Giebler, A., & Wyrwich, M. (2018). The Privatisation Activities of the Treuhandanstalt and the Transformation of the East German Corporate Landscape: A New Dataset for First Explorations (tech. rep.). IWH Institute for Economic Research.

- Goebel, J., Grabka, M. M., Liebig, S., Kroh, M., Richter, D., Schröder, C., & Schupp, J. (2019). The German Socio-Economic Panel (SOEP). Jahrbücher für Nationalökonomie und Statistik, 239(2), 345–360. https://doi.org/10.1515/jbnst-2018-0022
- Hager, A., Hennicke, M., Krause, W., & Mergele, L. (2021). Privatizations Spark Socialist Backlash: Evidence from East Germany's Transformation [Available at: https://files.osf.io/v1/resources/cmsyn/providers/osfstorage/ 61ce056bce4dbc0992c73dca?format=pdf&action=download&direct&version=1].
- Havrylyshyn, O., & McGettigan, D. (1999a). Privatization in Transition Countries: A Sampling of the Literature. *IMF Working Papers*, 99/6.
- Havrylyshyn, O., & McGettigan, D. (1999b). Privatization in Transition Countries: Lessons of the First Decade. *IMF Economic Issues*, 18.
- Hobolt, S. B. (2016). The Brexit vote: A divided nation, a divided continent. Journal of European Public Policy, 23(9), 1259–1277. https://doi.org/10.1080/13501763. 2016.1225785
- Kinder, D. R., & Kiewiet, D. R. (1979). Economic Discontent and Political Behavior: The Role of Personal Grievances and Collective Economic Judgments in Congressional Voting. American Journal of Political Science, 23(3), 495–527. https://doi.org/ 10.2307/2111027
- Kramer, G. H. (1971). Short-Term Fluctuations in U.S. Voting Behavior, 1896–1964. American Political Science Review, 65(1), 131–143. https://doi.org/10.2307/ 1955049
- Krosnick, J. A., & Alwin, D. F. (1989). Aging and Susceptibility to Attitude Change. Journal of Personality and Social Psychology, 57(3), 416–425. https://doi.org/ 10.1037/0022-3514.57.3.416
- Lau, R. R., & Redlawsk, D. P. (2008). Older but Wiser? Effects of Age on Political Cognition. Journal of Politics, 70(1), 168–185. https://doi.org/10.1017/ s0022381607080127
- Lewis-Beck, M. S., & Paldam, M. (2000). Economic voting: An introduction. *Electoral Studies*, 19(2-3), 113–121. https://doi.org/10.1016/s0261-3794(99)00042-6

- Lichter, A., Löffler, M., & Siegloch, S. (2020). The Long-Term Costs of Government Surveillance: Insights from Stasi Spying in East Germany. Journal of the European Economic Association, 19(2), 741–789. https://doi.org/10.1093/jeea/jvaa009
- Lueders, H. (2022). When Democracy Brings Insecurity: The Political Legacies of Regime Change [Available at: https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ ID4050111_code3414794.pdf?abstractid=3541911&mirid=1].
- McQuarrie, M. (2017). The revolt of the Rust Belt: place and politics in the age of anger. British Journal of Sociology, 68(S1), S121–S152. https://doi.org/10.1111/1468-4446.12328
- Ohme, J., de Vreese, C. H., & Albaek, E. (2017). The uncertain first-time voter: Effects of political media exposure on young citizens' formation of vote choice in a digital media environment. New Media & Society, 20(9), 3243–3265. https://doi.org/ 10.1177/1461444817745017
- Patton, D. F. (2019). Protest Voting in Eastern Germany. German Politics and Society, 37(3), 72–88. https://doi.org/10.3167/gps.2019.370306
- Pierce, J. R., & Schott, P. K. (2016). The Surprisingly Swift Decline of US Manufacturing Employment. American Economic Review, 106(7), 1632–1662. https://doi.org/ 10.1257/aer.20131578
- Powell, G. B., & Whitten, G. D. (1993). A Cross-National Analysis of Economic Voting: Taking Account of the Political Context. American Journal of Political Science, 37(2), 391–414. https://doi.org/10.2307/2111378
- Rodrik, D. (2018). Populism and the economics of globalization. Journal of International Business Policy, 1(1-2), 12–33. https://doi.org/10.1057/s42214-018-0001-4
- Rodrik, D. (2020). Why Does Globalization Fuel Populism? Economics, Culture, and the Rise of Right-wing Populism. *NBER Working Papers*, 27526.
- Schweiger, C. (2019). German Politics and Society, 37(3), 18–31. https://doi.org/10. 3167/gps.2019.370303
- Sears, D. O., & Funk, C. L. (1999). Evidence of the Long-Term Persistence of Adults' Political Predispositions. *Journal of Politics*, 61(1), 1–28.

- Sears, D. O., & Valentino, N. A. (1997). Politics Matters: Political Events as Catalysts for Preadult Socialization. American Political Science Review, 91(1), 45–65. https: //doi.org/10.2307/2952258
- Sinn, H.-W. (1995). Staggering along: Wages policy and investment support in East Germany. *Economics of Transition*, 3(4), 403–426.
- Sinn, H.-W. (2002). Germany's Economic Unification: An Assessment after Ten Years. Review of International Economics, 10(1), 113–128. https://doi.org/10.1111/ 1467-9396.00321
- Tagesspiegel. (2019). The AfD uses the Treuhand as a campaign issue [Available at https://www.tagesspiegel.de/politik/das-erbe-der-ddr-die-afd-entdeckt-die-treuhand-fuer-den-wahlkampf/24276654.html].
- Tufte, E. R. (1975). Determinants of the Outcomes of Midterm Congressional Elections. American Political Science Review, 69(3), 812–826. https://doi.org/10.2307/ 1958391
- Weisskircher, M. (2020). The Strength of Far-Right AfD in Eastern Germany: The East-West Divide and the Multiple Causes behind 'Populism'. *Political Quarterly*, 91(3), 614–622. https://doi.org/10.1111/1467-923x.12859
- Zeglovits, E., & Aichholzer, J. (2014). Are People More Inclined to Vote at 16 than at 18? Evidence for the First-Time Voting Boost Among 16- to 25-Year-Olds in Austria. Journal of Elections, Public Opinion and Parties, 24(3), 351–361. https://doi.org/10.1080/17457289.2013.872652
- zu Eulenburg, R., Janus, R., Kalischer, D. W., Keil, M., Hetzel, M., Preuß, B.-S., von Lenthe, N., Leitschuh, T., Halstenberg, B., Pietras, C.-P., & Scheuering, O. (2003). Schnell privatisieren, entschlossen sanieren, behutsam stilllegen. Ein Rückblick auf 13 Jahre Arbeit der Treuhandanstalt und der Bundesanstalt für vereinigungsbedingte Sonderaufgaben (Bundesanstalt für vereinigungsbedingte Sonderaufgaben, Ed.) [English summary available in chapter 9.2]. Wegweiser.

Appendix

For online publication

A Collecting election data at the municipality level

Two major challenges arise when assembling a comprehensive dataset of German election results at the municipality level. First, elections, in particular at the state level, are a matter of state politics in Germany. Different statistical offices provide data according to different standards, implying the need to harmonize the data. Second, administrative structures in Germany have massively changed since 1990, especially in East Germany. Smaller municipalities have been merged into larger ones, larger municipalities have absorbed adjacent villages, and even at the county level, county borders have been redrawn various times. The main objective behind these changes is efficiency with regard to public administration. If a municipality is too small, it is too costly to maintain its own local administration.

The declared aim within our team was to obtain a balanced panel which contains all German federal and state election results for all parties running in the respective election at the municipality level, matching the 2021 administrative structure. We focused on East Germany for the purpose of this study, i. e., obtained data for Berlin and municipalities in the states of Brandenburg, Mecklenburg-Hither Pomerania, Saxony, Saxony-Anhalt and Thuringia. When available, we downloaded the respective dataset directly from the webpages of the state statistical offices. In some cases, we had to contact the statistical offices to obtain data at the municipality level or older data, since only the latest election was still available online. At this point, we would like to thank the staff at the East German state statistical offices for their cooperation. We were provided with the necessary data upon request, and in some cases, the staff was even able to send us data that had been converted to the 2021 municipality structure or provided us with additional helpful information.

In the majority of cases, however, the municipality structure represented the situation at the time of the election. That involves data for municipalities that, as of today, do not exist as legally independent communities anymore but are part of a bigger or newly founded city. We then did the following. For every municipality in East Germany, we tracked its status and potential mergers since 1990 with the help of official records. These records are provided by the German Federal Statistical Office. They list the original municipality, the (larger) municipality that absorbed it or the name of the new, larger municipality that several smaller ones were amalgamated into. With the help of an algorithm, we follow the changes year by year and assign every municipality its official identifier (*municipality key*) as of 2021, even if the municipality did not yet belong to this administrative unit at an earlier point in time. Having an original and a current municipality key, we add up voters and votes for the different parties at the current municipality structure. That is, we sum up votes in smaller municipalities as if they had already been part of the combined municipality they are part of today.

We can speak of a balanced panel because we have data for all state and federal elections for a municipality that existed in Germany in 2021. However, not all calendar years are covered, as elections take place only every four to five years. Additionally, election years are the same for all municipalities within a federal state but differ across states.

In addition, we harmonized labels for the same party so that each party occurs only once in our final dataset. Sometimes different labels for the same party were simply the result of spelling mistakes or a different use of lower- and upper-case letters. However, there were also some party names changes over time. Here, we confirmed the continued existence of the same party under a different name with the help of an online search on the party history.

Note that we excluded mail-in votes. Mail-in ballots are collected and counted separately from in-person ballots. Usually, in particular in smaller municipalities, this job is done by the county administration or a council that handles mail-in voting for several municipalities at the same time. Thereby, mail-in ballots are not processed separately for each municipality. It is, thus, impossible to conclude from the official mail-in vote results in which municipality the votes were cast and add them to the respective in-person vote. The significance of mail-in voting increased over time. That contributes, e.g., to the declining trend in turnout, since we only observe in-person turnout. However, in order to empirically account for such trends, the regressions contain year FE and election FE.

We also did extensive online research to classify parties as *radical*. First, we identified all different parties in the complete election dataset. Many are very small outlets that only ran in one or two elections over the course of our 30-year observation period. Second, we searched for the party name to find expert information, for instance from social scientists or public lawyers, that rated the respective party as *radical* or even *extremist* on one end of the political spectrum. We also did so when we found expert or scholarly assessment attributing anti-democratic positions to the outlet or reporting links of leading members to extremist organizations.

| Radical left | Radical right |
|---------------------------------|---|
| Die Linke, PDS, MLPD, | AfD, Die Freiheit, NPD, DM, |
| DKP, Bündnis-DKPKPD, | Republikaner, |
| KPD, SGP, APDD, PSG, | proDeutschland, DSU, FBU, |
| SGP, ÖkoLi, DAP, Soziale | SVP, BFB, DVU, ProDM, |
| Einheit, Internationalistisches | Schillpartei, VPMV, |
| Bündnis | Offensive D, LIGA, BüSo, |
| | Perspektiv, Freie Bürger, |
| | Freie Bürger Leipzig, Pro |
| | Chemnitz, Christliche Liga, |
| | StattPartei, FDVP, RBP, |
| | Bündnis Offensive für ST, |
| | Die Rechte, VIBT, BSU, |
| | BFB, Die Offensive, Mündige, |
| | Patrioten, Solidarität, BIG, |
| | Bürgerbund, UFB, ddp, |
| | Deutsche Konservative, Die |
| | Einheit, Konservative, PRO, |
| | BGD, dieBasis, WiR2020, III. |
| | Weg |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | DKP, Bündnis-DKPKPD, KPD, SGP, APDD, PSG, SGP, ÖkoLi, DAP, Soziale Einheit, Internationalistisches |

Table A.1: Parties classified as *radical* in the election dataset

Notes: Party names/abbreviations as listed in the election dataset used for the complementary analysis at the municipality level. Votes for subgroups of the same party have been combined in the dataset unless there were significant ideological differences.

Finally, whenever we found official records that the party was observed or investigated by the German Office for the Protection of the Constitution due to suspected unconstitutional actions, we also classified the party as radical. For a number of party names, we could not find sufficient information online, in terms of a webpage, media reports or the like. This was mostly the case for parties that only participated in one election, sometimes even only in one state. From this lack of information, we concluded that the party is not of major relevance, which was usually confirmed by looking at their vote shares, and neglected the party throughout the analysis. Some cases were debatable: If we did not find clear evidence or expert judgment of a party's radical orientation, we kept the party in the mainstream category. We excluded individual candidacies/one-person parties, which are harder to consistently classify and do not play a significant role in the elections studied here. Note that there are only a few big radical parties that obtain vote shares greater than 1 percent. For all of these outlets, the classification was clear. Potentially unclear alignments of other parties should, thus, not alter the results to a crucial extent. Table A.1 lists the final classification.

B Additional descriptives

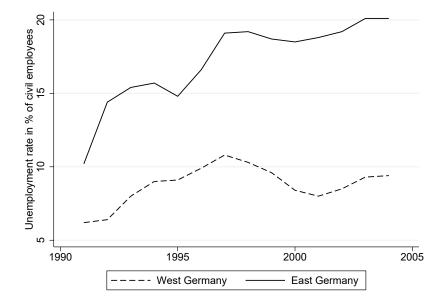


Figure B.1: Unemployment rates in West and East Germany, 1991-2004

Notes: Figure shows average yearly unemployment rates in percent of civil employees. Data were obtained from the official statistics of the Federal Employment Agency.

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|-----------------------------|-------------|---------------|--------------|-----|------------|
| Indiv. Treuhand job loss | 107,942 | 0.20 | 0.40 | 0 | 1 |
| General trust | 8,220 | 0.56 | 0.50 | 0 | 1 |
| Political interest | 83,204 | 0.33 | 0.47 | 0 | 1 |
| Radical party preference | 78,769 | 0.07 | 0.26 | 0 | 1 |
| No party preference | 78,769 | 0.68 | 0.47 | 0 | 1 |
| Electoral abstention | $2,\!580$ | 0.18 | 0.39 | 0 | 1 |
| Unemployed | $78,\!517$ | 0.11 | 0.31 | 0 | 1 |
| Sex | 98,782 | 1.52 | 0.50 | 1 | 2 |
| Age | 98,748 | 41.93 | 20.77 | 0 | 102 |
| Age squared | 98,748 | $2,\!189.491$ | $1,\!820.36$ | 0 | $10,\!404$ |
| Marital status | $83,\!302$ | 0.62 | 0.49 | 0 | 1 |
| Secondary education level | $107,\!942$ | 1.358 | 0.05 | 0 | 2 |
| Gross monthly labor income | $48,\!294$ | $1,\!659.66$ | 1,283.20 | 0 | 40,903 |
| Primary or secondary sector | $107,\!942$ | 0.58 | 0.49 | 0 | 1 |
| East Germany | 98,782 | 0.95 | 0.23 | 0 | 1 |
| Federal state | 98,782 | 13.51 | 2.37 | 1 | 16 |

Table B.1: Summary statistics: Individual level

Notes: Sample is restricted to respondents who have lived in East Germany between July 1990 and December 1994. Individual Treuhand job loss equals 1 if individual reports to have experienced unemployment due to closure or layoff between July 1990 and December 1994 and 0 otherwise. $General \ trust$ is a binary indicator based on the respective four-point scale SOEP variable: 0=no to low general trust, 1=some to high general trust. Political interest is a binary indicator based on the respective four-point scale SOEP variable: 0=no to low interest, 1=some to strong interest. Radical party preference: 1 if individual reported to have a party preference for Die Linke (radical left) or AfD, NPD, Die Rechte, Republikaner (radical/extremist right), 0 if individual reported a preference for any other party. No party preference: 1 if individual reported no party preference and 0 otherwise. Electoral abstention: 1 if individual reported to have abstained from the 2013 or 2017 federal election and 0 if individual reported to have participated in the respective federal election. Unemployed: 1=unemployed at time of the interview, 0=other employment status. Sex: 1=male, 2=female. Marital status: 0=single/not living with partner, divorced, separated, 1=married/committed relationship and living with partner. Secondary education level: 0=lower (no degree (yet)), 1=medium (German Hauptschulabschluss or Mittlere Reife, completed), 2=higher (German Abitur, high school degree). Income in €. Primary or secondary sector: 1 if individual works in agriculture, mining, industry or construction, 0 otherwise. East Germany: 1 if individual lives in former East Berlin or in one of the five East German states, 0 if individual lives in former West Berlin or one of the nine West German states. Federal state: dummy for each of the 16 German federal states, treating Berlin as one united state.

| Table B.2: | Summarv | statistics: | Aggregate level |
|------------|---------|-------------|-----------------|
| | | | |

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|------------|--------|-----------|-----------|--------------|
| Aggr. Treuhand job loss | 31,329 | 0.78 | 2.51 | 0 | 56.96 |
| Radical vote share | 31,329 | 27.84 | 10.75 | 0 | 77.97 |
| Radical-left vote share | 31,329 | 18.63 | 7.41 | 0 | 53.25 |
| Radical-right vote share | 31,329 | 9.21 | 9.20 | 0 | 65.46 |
| Voter turnout | 31,329 | 63.82 | 10.72 | 19.09 | 121.27 |
| Share of invalid votes | 31,329 | 2.35 | 1.52 | 0 | 97.29 |
| Population density | 31,329 | 184.83 | 256.40 | -1,371.16 | $4,\!055.00$ |
| Share of females | 31,329 | 50.69 | 0.52 | 49.53 | 53.08 |
| Share of foreigners | 31,329 | 1.93 | 0.98 | 0 | 17.65 |
| Mean age of population | 31,329 | 43.45 | 3.33 | 36.29 | 50.53 |
| Net migration | 31,329 | -0.38 | 7.92 | -32.37 | 41.79 |
| GDP p.c. (in 1000 €) | 31,329 | 17.74 | 5.34 | 2.43 | 45.65 |
| Unemployment rate | 31,329 | 15.11 | 5.94 | 3.38 | 30.08 |
| Share of industrial production | 31,329 | 31.84 | 10.04 | 7.29 | 103.13 |
| Corporate tax revenues p.c. (in $1000 \in$) | 31,329 | 171.60 | 127.33 | 11.18 | 1,243.24 |
| Net commuters | 31,329 | -19.35 | 19.39 | -58.51 | 232.25 |
| Share of university qualifications | 31,329 | 27.40 | 7.49 | 8.81 | 64.23 |
| Type of election | 31,329 | 1.46 | 0.50 | 1 | 2 |
| Voter turnout, Volkskammer election 1990 | 31,329 | 94.36 | 1.29 | 90.34 | 97.06 |
| Union vote share, Volkskammer election 1990 | 31,329 | 47.84 | 10.71 | 18.28 | 74.39 |
| Die Linke vote share, Volkskammer election 1990 | $31,\!329$ | 14.69 | 5.79 | 6.16 | 30.51 |
| Federal state | $31,\!329$ | 13.97 | 1.46 | 11 | 16 |

Notes: Aggr. Treuhand job loss is measured as the total number of job losses in a municipality during the entire Treuhand period (July 1990-December 1994) relative to the 1990 population. Election data comprises federal elections and state elections held between 1994 and 2019. Vote shares refer to the second votes only, mail-in votes have been excluded. Radical vote share measures total vote shares for parties classified as being at the ends of the German political spectrum as in table A.1. Likewise, radical-left vote share and radical-right vote share refer to the total vote shares for parties at the respective end of the political spectrum. Voter turnout equals the number of voters relative to the number of eligible voters in an election. Share of invalid votes measures invalid ballots relative to all ballots cast. Net migration captures the yearly difference between in-migrants and out-migrants in a county. Net commuters captures the difference between incommuters and out-commuters in a county. Share of university qualifications captures the share of high school graduates who leave school with a university qualification/higher secondary degree (Abitur). Voter turnout, Volkskammer election 1990, Union vote share Volkskammer election 1990 and Die Linke vote share, Volkskammer election 1990 refer to the first free elections for the GDR parliament held on March 18, 1990. Type of election: 1=federal election, 2=state election. Election years differ across states. Some federal state hold state elections every four years, others every five years. Thus, elections are staggered and there are years during our observation period without any election. Federal elections during our observation period were held in 1994, 1998, 2002, 2005 (early election), 2009, 2013 and 2017. Treuhand job losses as well as voting variables vary at the municipality level (territorial structure as of January 1, 2022). Covariates vary at the county level as most statistics are not available at the municipality level.

| Variables | v1 | v2 | v3 | v4 | v5 | $^{\rm v6}$ |
|-------------------------------|---------------|----------------|----------------|----------------|---------------|-------------|
| Treuhand job loss (v1) | 1.000 | | | | | |
| General trust $(v2)$ | -0.075*** | 1.000 | | | | |
| Political interest $(v3)$ | -0.058*** | 0.084^{***} | 1.000 | | | |
| Radical party preference (v4) | -0.007* | -0.000 | 0.168^{***} | 1.000 | | |
| No party preference (v5) | 0.034^{***} | -0.103^{***} | -0.325^{***} | -0.408^{***} | 1.000 | |
| Electoral abstention $(v6)$ | 0.053^{***} | -0.085*** | -0.229^{***} | -0.128^{***} | 0.317^{***} | 1.000 |

Table B.3: Correlation matrix: Individual level

Notes: Lable shows pairwise correlation coefficients. The listed variables are binary/categorical, whic should be kept in mind when interpreting the coefficients. *** p<0.01, ** p<0.05, * p<0.1.

| TADIE | TADIE D.4. CUITEIAUUII IIIAUIIX. AZZIEZAVE IEVEI | INDIT TIDAN | IX. ASSIC | gare rever | | |
|---|--|----------------|----------------|----------------|-------------|-------------|
| Variables | vl | v2 | v3 | v4 | ςγ | $^{\rm v6}$ |
| Aggr. Treuhand job loss (v1) | 1.000 | | | | | |
| Radical vote share $(v2)$ | 0.045^{***} | 1.000 | | | | |
| Radical-left vote share (v3) | 0.086^{***} | 0.540^{***} | 1.000 | | | |
| Radical-right vote share (v_4) | -0.016^{***} | 0.735^{***} | -0.175^{***} | 1.000 | | |
| Voter turnout $(v5)$ | -0.002 | -0.216^{***} | -0.165^{***} | -0.120^{***} | 1.000 | |
| Share of invalid votes (v6) | -0.049^{***} | -0.131^{***} | 0.025^{***} | -0.173^{***} | -0.028*** 1 | 1.000 |
| <i>Notes</i> : Table shows pairwise correlation coefficients. *** p<0.01, ** p<0.05, * p<0.1. | orrelation coe | fficients. *** | p<0.01, ** | p<0.05, * p< | <0.1. | |

Table B.4: Correlation matrix: Aggregate level

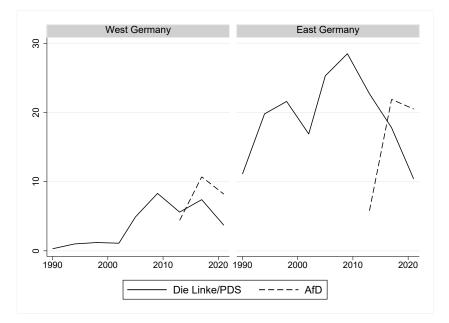


Figure B.2: Far-end vote shares in federal elections, 1990-2021

Notes: Figure shows vote shares in federal elections. Vote shares refer to the *second vote*. Data were obtained from the Federal Returning Officer.

| | Job loss= 0 | Job loss= 1 | Difference in means |
|-----------------------------|---------------|---------------|---------------------|
| Unemployed | 0.06 | 0.25 | 0.19*** |
| Sex | 1.49 | 1.62 | 0.13^{***} |
| Age | 40.61 | 47.16 | 6.55^{***} |
| Marital status | 0.59 | 0.70 | 0.11^{***} |
| Secondary education level | 1.40 | 1.18 | -0.22*** |
| Gross monthly labor income | 1,744.21 | $1,\!357.52$ | -386.87^{***} |
| Primary or secondary sector | 0.58 | 0.59 | 0.01** |
| East Germany | 0.95 | 0.94 | -0.01** |
| Federal state | 13.51 | 13.52 | 0.011 |
| Observations | 86,500 | 21,442 | |

Table B.5: Balance table: Individual level

C Additional results

C.1 Robustness - individual level

| Table C.1.1: Robustness: Sector as a control variable | | | | | |
|---|--|---------------------------------|---|---|--|
| DV: | (1) General trust | (2) Political interest | (3) Rad. party preference | (4) No party preference | |
| Treuhand job loss | -0.070 $[0.024]^{**}$ $(0.033)^{**}$ | -0.032 [0.006]*** (0.019) | $\begin{array}{c} 0.024 \\ [0.005]^{***} \\ (0.011)^{**} \end{array}$ | 0.033 $[0.007]^{***}$ $(0.019)^{*}$ | |
| Observations | 4,440 | 34,515 | 34,511 | 34,511 | |
| Controls | Y | Y | Y | Y | |
| Year FE | Y | Υ | Υ | Υ | |
| East FE | Y | Υ | Υ | Υ | |
| State FE | Y | Υ | Υ | Υ | |
| Pseudo R-squared | 0.04 | 0.12 | 0.05 | 0.05 | |
| Years covered | 2003, '08, '13, '18 | 1995-2020 | 1995-2020 | 1995-2020 | |

Notes: Table shows AMEs from pooled logit estimations. Treuhand job loss is a binary indicator, capturing whether an individual in East Germany lost their job due to layoff or closure anytime between July 1990 and December 1994. Vector of control variables as in tables 1 and 2 but additionally including *Primary or secondary sector as a control variable*. The latter variable takes up a value of 1 if an individual reports to work in industrial production, mining, construction or agriculture and 0 otherwise. Unit of observation is the individual. Years covered by the dependent variables as indicated. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table C.1.1: Robustness: Sector as a control variable

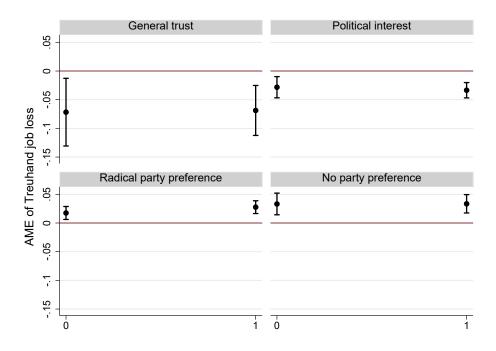


Figure C.1.1: Average marginal effects of Treuhand job loss by sector

Notes: Graphs show results from pooled logit regressions. Circles indicate AMEs of *Treuhand job loss* on the respective dependent variable across values of *Primary or secondary sector*. The latter variable takes up a value of 1 if an individual reports to work in industrial production, mining, construction or agriculture and 0 otherwise. All estimations include a full vector of control variables, year FE, East FE and federal state FE. Standard errors are clustered at the federal state \times year level. Caps indicate 90 percent confidence intervals. Red line indicates a value of 0.

| Table C | Table C.1.2: Robustness: Clustered standard errors | | | | | | | |
|---|--|---------------------------------|----------------------------------|---------------------------------|--|--|--|--|
| DV: | (1) General trust | (2) Political interest | (3) Rad. party preference | (4) No party preference | | | | |
| Treuhand job loss Cluster level: county Cluster level: county \times year | -0.070 (0.029)** (0.025)*** | -0.032 (0.020) (0.008)*** | 0.024 (0.011)** (0.005)*** | 0.033 (0.017)* (0.008)*** | | | | |
| Observations | 4,400 | 34,515 | 34,511 | 34,511 | | | | |
| Pseudo R-squared | 0.04 | 0.12 | 0.04 | 0.05 | | | | |
| Controls Year FE | Y Y | Y Y | Y Y | Y Y | | | | |
| East FE | Y Y | Y Y | Y | Y Y | | | | |
| State FE | Y | Y | Y | Y | | | | |
| Years covered | 2003, '08, '13, '18 | 1995-2020 | 1995-2020 | 1995-2020 | | | | |

| Notes: Table shows results from pooled logit estimations. Treuhand job loss is a binary indicator, capturing whether |
|--|
| an individual in East Germany lost their job due to layoff or closure anytime between July 1990 and December 1994. |
| Vector of control variables includes sex, age, age squared, unemployed at time of interview, secondary education |
| level, gross monthly labor income, marital status. Unit of observation is the individual. Years covered by the |
| dependent variables as indicated. Standard errors clustered at the indicated level; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ |

| DV: | (1) General trust | (2) Political interest | (3) Rad. party preference | (4) No party preference | | | | |
|--|------------------------------------|--------------------------------------|--|---|--|--|--|--|
| Panel A: Aggr. job losses in the county the individual lived in at the time of the interview | | | | | | | | |
| Treuhand job loss | -0.082 [0.025]*** (0.028)*** | -0.034 [0.006]*** (0.008)*** | 0.019 $[0.005]^{***}$ $(0.005)^{***}$ | 0.023 $[0.008]^{***}$ $(0.008)^{***}$ | | | | |
| Aggr. Treuhand job losses (county) | 0.001 [0.001] (0.001) | -0.001 [0.0001]*** (0.0002)*** | -0.001 [0.0002]*** (0.0002)*** | 0.001 [0.0003]*** (0.0002)*** | | | | |
| Observations Pseudo R-squared | 3,937 0.04 | $31,288 \\ 0.12$ | $31,279 \\ 0.04$ | $31,279 \\ 0.05$ | | | | |
| Panel B: Aggr. job losses in the cou | nty the individual lived in | in 1990 | | | | | | |
| Treuhand job loss | -0.057 [0.025]** (0.028)** | -0.030 [0.007]*** (0.008)*** | 0.022 [0.005]*** (0.005)*** | 0.031 $[0.008]^{***}$ $(0.008)^{***}$ | | | | |
| Aggr. Treuhand job losses (county) | 0.0007 [0.001] (0.0008) | -0.001 [0.0002]*** (0.0002)*** | $\begin{array}{c} -0.0001 \\ [0.0001] \\ (0.0001) \end{array}$ | 0.001 [0.0003]*** (0.0002)*** | | | | |
| Observations Pseudo R-squared | 3,947 0.05 | $30,962 \\ 0.12$ | $30,956 \\ 0.05$ | $30,956 \\ 0.05$ | | | | |
| Controls | Y | Y | Y | Y | | | | |
| Year FE | Υ | Υ | Y | Υ | | | | |
| East FE | Υ | Υ | Υ | Υ | | | | |
| State FE | Y | Y | Y | Y | | | | |
| Years covered | 2003, '08, '13, '18 | 1995-2020 | 1995-2020 | 1995-2020 | | | | |

Notes: Table shows results from pooled logit estimations. Treuhand job loss is a binary indicator, capturing whether an individual in East Germany lost their job due to layoff or closure anytime between July 1990 and December 1994. Vector of control variables includes sex, age, age squared, unemployed at time of interview, secondary education level, gross monthly labor income, marital status. Additional control variable: Aggr. Treuhand job losses (county) in the individual's county of residence at the time of the interview (panel A) or in 1990 (panel B), respectively. Unit of observation is the individual. Years covered by the dependent variables as indicated. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

| | (1) Trust in others | (2) No party preference | (3) Support for socialism | (4) Misrepresentation of citizens |
|---------------------------|---------------------------|-------------------------------|---------------------------------|---|
| Aggr. Treuhand job losses | -0.026 (0.003)*** | 0.018 $(0.003)^{***}$ | $0.153 \\ (0.003)^{***}$ | $0.016 (0.004)^{***}$ |
| Observations | 917 | 10,015 | 9,780 | 4,404 |
| Pseudo R-squared | 0.06 | 0.05 | 0.05 | 0.04 |
| Controls | Y | Y | Y | Y |
| Year FE | Υ | Υ | Υ | Υ |
| County \times year FE | Υ | Υ | Υ | Y |
| Years covered | 2013 | 2008, 2008 | 010, 2011, 2013-2 | 2020 |

Table C.1.4: Robustness: Data from *Thüringenmonitor*

Notes: Table shows results from logit estimations in column (2) and from ordered logit estimations in columns (1), (3) and (4). The unit of observation is the individual. Aggr. Treuhand job losses refer to total Treuhand job losses between 1990 and 1994, relative to the 1990 municipality population, in the county the survey respondent lives in. Trust in others captures agreement with the statement "In times of crisis, I have people I can confide in." on a four-point scale (1=completely disagree, 2=disagree, 3=agree, 4=completely agree). No party preference is a binary indicator capturing whether the individual has stated to identify with a political party or not. Support for socialism captures agreement with the statement "Socialism should be re-introduced." on a four-point scale (1=completely disagree, 2=disagree, 3=agree, 4=completely agree). Misrepresentation of citizens captures agreement with the statement "In our democracy, the interests of citizens are not adequately represented." on a four-point scale (1=completely disagree, 2=disagree, 2=disagree, 3=agree, 4=completely agree). Vector of control variables includes sex, age, age squared, unemployed at time of citizens are obtained from the Thüringenmonitor, containing individuals in the federal state or Thuringia only. Standard errors clustered at the county × year level in brackets; *** p<0.01, ** p<0.05, * p<0.1

C.2 Robustness - aggregate level

| | to of aggregat | | 00 106565 011 | oung (exei. | Dermij |
|---------------------------|--|--|--|--|-------------------------------------|
| DV: | (1) Radical vote share | (2) Radical-left vote share | (3) Radical- right vote share | (4) Voter turnout | (5) Share of invalid votes |
| Aggr. Treuhand job losses | $\begin{array}{c} 0.121 \\ [0.018]^{***} \\ (0.014)^{***} \end{array}$ | $\begin{array}{c} 0.164 \\ [0.016]^{***} \\ (0.164)^{***} \end{array}$ | -0.043 [0.014]*** (0.007)*** | $\begin{array}{c} 0.024 \\ [0.021] \\ (0.016) \end{array}$ | -0.012 [0.004]*** (0.003)*** |
| Observations | 31,316 | 31,316 | 31,316 | 31,316 | 31,316 |
| R-squared | 0.69 | 0.48 | 0.84 | 0.59 | 0.24 |
| Controls | Υ | Υ | Υ | Υ | Υ |
| Election-type FE | Υ | Υ | Υ | Υ | Υ |
| Year FE | Υ | Υ | Υ | Υ | Υ |
| State FE | Υ | Υ | Y | Υ | Υ |

Table C.2.1: Effects of aggregate Treuhand job losses on voting (excl. Berlin)

Notes: Table reports results of pooled OLS estimations. Aggr. Treuhand job losses refer to total Treuhand job losses in a municipality between 1990 and 1994, relative to the 1990 municipality population. Vector of control variables includes population density, share of females, share of foreigners, mean population age, net migration, unemployment rate, GDP share of secondary sector production, corporate tax revenue per capita, net commuters, share of high school graduates with higher secondary degrees, voter turnout and vote shares for the Christian Democratic Union and *Die Linke* in the *Volkskammer* elections in 1990. Unit of observation is the municipality. Berlin has been excluded from all estimations. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

| | 00 0 | J | | 0 (| / |
|---------------------------|--|--|--|---|-------------------------------------|
| DV: | (1) Radical vote share | (2) Radical-left vote share | (3) Radical- right vote share | (4) Voter turnout | (5) Share of invalid votes |
| Aggr. Treuhand job losses | $\begin{array}{c} 0.111 \\ [0.017]^{***} \\ (0.015)^{***} \end{array}$ | $\begin{array}{c} 0.161 \\ [0.018]^{***} \\ (0.015)^{***} \end{array}$ | -0.050 $[0.015]^{***}$ $(0.009)^{***}$ | $\begin{array}{c} -0.004 \\ [0.019] \\ (0.017) \end{array}$ | -0.016 [0.003]*** (0.002)*** |
| Observations | 26,508 | 26,508 | 26,508 | 26,508 | 26,508 |
| R-squared | 0.64 | 0.49 | 0.82 | 0.63 | 0.29 |
| Controls | Υ | Υ | Υ | Υ | Y |
| Election-type FE | Υ | Υ | Υ | Υ | Y |
| Year FE | Υ | Υ | Υ | Υ | Y |
| State FE | Υ | Υ | Υ | Υ | Υ |

Table C.2.2: Effects of aggregate Treuhand job losses on voting (excl. 1994 elections)

Notes: Table reports results of pooled OLS estimations. Aggr. Treuhand job losses refer to total Treuhand job losses in a municipality between 1990 and 1994, relative to the 1990 municipality population. Vector of control variables includes population density, share of females, share of foreigners, mean population age, net migration, unemployment rate, GDP share of secondary sector production, corporate tax revenue per capita, net commuters, share of high school graduates with higher secondary degrees, voter turnout and vote shares for the Christian Democratic Union and *Die Linke* in the *Volkskammer* elections in 1990. Unit of observation is the municipality. The federal and state elections in 1994 have been excluded from all estimations. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

| DV: | (1) Radical vote share | (2) Radical-left vote share | (3) Radical- right vote share | (4) Voter turnout | (5) Share of invalid votes |
|---------------------------|--|-----------------------------------|--|---|-------------------------------------|
| Aggr. Treuhand job losses | $\begin{array}{c} 0.111 \\ [0.017]^{***} \\ (0.015)^{***} \end{array}$ | 0.161 [0.018]*** (0.015)*** | -0.051 [0.015]*** (0.009)*** | $\begin{array}{c} -0.006 \\ [0.018] \\ (0.017) \end{array}$ | -0.016 [0.003]*** (0.002)*** |
| Observations | 26,490 | 26,490 | 26,490 | 26,490 | 26,490 |
| R-squared | 0.641 | 0.490 | 0.824 | 0.629 | 0.294 |
| Controls | Υ | Υ | Υ | Υ | Υ |
| Election-type FE | Υ | Υ | Υ | Υ | Υ |
| Year FE | Υ | Υ | Υ | Υ | Υ |
| State FE | Υ | Υ | Υ | Υ | Υ |

Table C.2.3: Effects of aggregate Treuhand job losses on voting (excl. cases with turnout >101)

Notes: Table reports results of pooled OLS estimations. Aggr. Treuhand job losses refer to total Treuhand job losses in a municipality between 1990 and 1994, relative to the 1990 municipality population. Vector of control variables includes population density, share of females, share of foreigners, mean population age, net migration, unemployment rate, GDP share of secondary sector production, corporate tax revenue per capita, net commuters, share of high school graduates with higher secondary degrees, voter turnout and vote shares for the Christian Democratic Union and *Die Linke* in the *Volkskammer* elections in 1990. Unit of observation is the municipality. All cases where voter turnout exceeds 101 percent, mainly due to misreporting in the original data, have been excluded. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

| DV: | (1) Radical vote share | (2) Radical-left vote share | (3) Radical-right vote share | (4) Voter turnout | (5) Share of invalid votes |
|---|------------------------------------|------------------------------------|------------------------------------|----------------------|-----------------------------------|
| Aggr. Treuhand job losses | 0.121 | 0.163 | -0.042 | 0.025 | -0.012 |
| Cluster level: county Cluster level: county × year | $(0.043)^{***}$ $(0.025)^{***}$ | $(0.040)^{***}$ $(0.024)^{***}$ | $(0.022)^{*}$ $(0.014)^{***}$ | (0.055) (0.027) | $(0.005)^{**}$ $(0.004)^{***}$ |
| Observations | 31,329 | 31,329 | 31,329 | 31,329 | 31,329 |
| R-squared | 0.69 | 0.48 | 0.84 | 0.59 | 0.24 |
| Controls | Y | Υ | Υ | Y | Υ |
| Election-type FE | Y | Υ | Υ | Y | Υ |
| Year FE | Υ | Υ | Υ | Υ | Υ |
| State FE | Υ | Υ | Υ | Υ | Y |

Table C.2.4: Effects of aggr. Treuhand job losses on voting, clustered standard errors

Notes: Table reports results of pooled OLS estimations. Aggr. Treuhand job losses refer to total Treuhand job losses in a municipality between 1990 and 1994, relative to the 1990 municipality population. Vector of control variables includes population density, share of females, share of foreigners, mean population age, net migration, unemployment rate, GDP share of secondary sector production, corporate tax revenue per capita, net commuters, share of high school graduates with higher secondary degrees, voter turnout and vote shares for the Christian Democratic Union and Die Linke in the Volkskammer elections in 1990. Unit of observation is the municipality. Standard errors clustered at the indicated levels; *** p < 0.01, ** p < 0.05, * p < 0.1

| DV: | (1) Radical vote share | (2) Radical-left vote share | (3) Radical- right vote share |
|---------------------------|--|-----------------------------------|--|
| Aggr. Treuhand job losses | -0.047^{***} [0.009]*** (0.004)*** | 0.0007 [0.0004] (0.0004)* | -0.048*** [0.009]*** (0.004)*** |
| Observations | 31,329 | 31,329 | 31,329 |
| R-squared | 0.497 | 0.197 | 0.497 |
| Controls | Υ | Υ | Υ |
| Election-type FE | Υ | Υ | Υ |
| Year FE | Υ | Υ | Υ |
| State FE | Υ | Υ | Υ |

Table C.2.5: Effects of aggregate Treuhand job losses on voting (excl. *Die Linke* and AfD)

Notes: Table reports results of pooled OLS estimations. Aggr. Treuhand job losses refer to total Treuhand job losses in a municipality between 1990 and 1994, relative to the 1990 municipality population. Vector of control variables includes population density, share of females, share of foreigners, mean population age, net migration, unemployment rate, GDP share of secondary sector production, corporate tax revenue per capita, net commuters, share of high school graduates with higher secondary degrees, voter turnout and vote shares for the Christian Democratic Union and Die Linke in the Volkskammer elections in 1990. Unit of observation is the municipality. Die Linke and AfD parties have been excluded from all estimations. Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

| | Table C.2.6: | 0.6: Effects o | of aggregate | Treuhand | job losses o | Effects of aggregate Treuhand job losses on voting, selected parties | ected part | ies | |
|---|---|---|--|---|---|---|---|---|---|
| DV: | (1) CDU | $^{(2)}_{ m SPD}$ | $^{(3)}_{ m FDP}$ | (4) Greens | (5) Linke | (6) MLPD | (7) AfD | (8) NPD | $_{\rm Rep}^{(9)}$ |
| Aggr. Treuhand job loss | -0.291 $[0.031]^{***}$ $(0.018)^{***}$ | $\begin{array}{c} 0.122 \\ [0.018]^{***} \\ (0.013)^{***} \end{array}$ | -0.009 [0.005]* (0.005)** | 0.057 [0.006] *** (0.004) *** | $\begin{array}{c} 0.163 \\ [0.016]^{***} \\ (0.013)^{***} \end{array}$ | $\begin{array}{c} 0.001 \\ [0.0004]^{***} \\ (0.0003)^{***} \end{array}$ | $\begin{array}{c} 0.0003 \\ [0.012] \\ (0.007) \end{array}$ | -0.031 [0.008]*** (0.004)*** | -0.008 $[0.002]^{***}$ $(0.001)^{***}$ |
| Observations R-squared Controls | 31,329 0.59 Y | $31,329 \\ 0.76 \\ Y$ | ${31,329 \atop 0.59}$ | 30,869 0.29 Y | ${31,329 \atop 0.48}$ | 29,761 0.23 Y | 30,475 0.91 Y | 30,486 0.54 Y | 30,604 0.42 Y |
| Election-type FE Year FE State FE | K K K | ΥY | ΥY | χ χ | ΥY | ΥY | ΥY | ЧЧ | X X X |
| <i>Notes:</i> Table reports results of pooled OLS estimations. Dependent variable is the second-vote share for the respective party as indicated in the column header. <i>Aggr. Treuhand job losses</i> refer to total Treuhand job losses in a municipality between 1990 and 1994, relative to the 1990 municipality population. Vector of control variables includes population density, share of females, share of foreigners, mean population age, net migration, unemployment rate, GDP share of secondary sector production, corporate tax revenue per capita, net commuters, share of high school graduates with higher secondary degrees, voter turnout and vote shares for the Christian Democratic Union and <i>Die Linke</i> in the <i>Volkskammer</i> elections in 1990. Unit of observation is the municipality. Standard errors clustered at the federal state × revel in brackets, robust standard errors in parentheses: *** $p_{-}0.01$, ** $p_{-}0.05$, * $p_{-}0.1$ | s of pooled \overline{OI} refer to total pulation densi e tax revenue j c Union and L brackets, robu | S estimations. Treuhand job 1 ty, share of fem per capita, net <i>ie Linke</i> in the ust standard err | Dependent va osses in a mu ales, share of f commuters, sh <i>Volkskammer</i> ors in parenth | ariable is the se- nicipality betwe oreigners, meau rare of high sch " elections in 19 resses: *** p<0.0 | scond-vote shal een 1990 and J 1 population ag nool graduates 900. Unit of ob 31, ** p<0.05, | re for the respected 1994, relative to $(e, net migration)$ with higher sector servation is the * $p<0.1$ | the party a the 1990 m , unemployr ondary degre municipality. | s indicated in the unicipality popu nent rate, GDP sl es, voter turnout . Standard errors | stimations. Dependent variable is the second-vote share for the respective party as indicated in the column header. hand job losses in a municipality between 1990 and 1994, relative to the 1990 municipality population. Vector of hare of females, share of foreigners, mean population age, net migration, unemployment rate, GDP share of secondary capita, net commuters, share of high school graduates with higher secondary degrees, voter turnout and vote shares <i>inke</i> in the <i>Volkskammer</i> elections in 1990. Unit of observation is the municipality. Standard errors clustered at the tandard errors in parentheses: *** $p<0.01$, ** $p<0.05$, * $p<0.1$ |

, 7 2 ----Ę ų с Ц Ц ζ - -

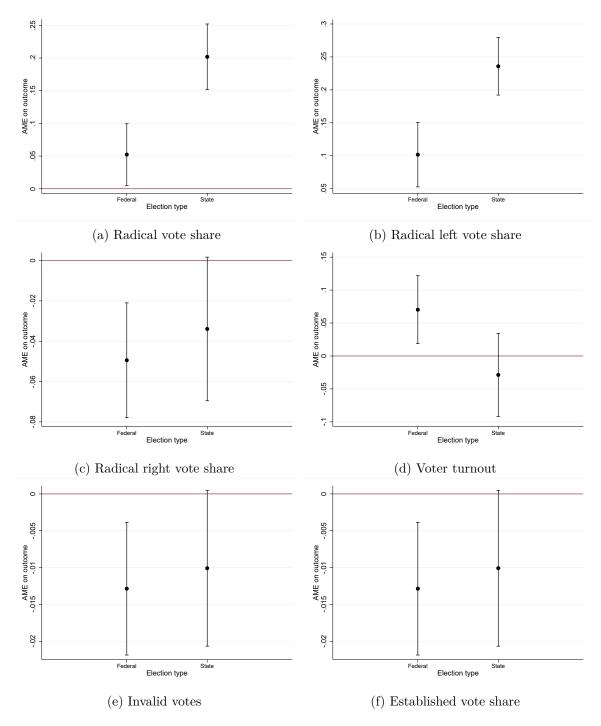


Figure C.2.2: Effects of aggr. Treuhand job loss by election type

Notes: Graphs show results from pooled OLS regressions. Circles indicate AMEs of Aggregate Treuhand job loss on the respective dependent variable. Aggregate Treuhand job loss has been interacted with the election-type dummy to determine separate effects for federal and state elections. All estimations include a full vector of control variables, year FE and federal state FE. Standard errors are clustered at the federal state \times year level. Caps indicate 90 percent confidence intervals. Red line indicates a value of 0.

C.3 Mechanism tests

| DV: | (1) General trust | (2) Political interest | (3) Rad. party preference | (4) No party preference |
|---|--------------------------------|--------------------------------------|--|--|
| Treuhand job loss | 3.021 [1.450]** (2.437) | 2.750 [0.772]*** (2.123) | $ \begin{array}{c} 1.521 \\ [1.141] \\ (2.444) \end{array} $ | -2.285 [0.640]*** (1.716) |
| Treuhand job loss \times Mean household income | -0.325 [0.149]** (0.244) | -0.287 $[0.077]^{***}$ (0.211) | $\begin{array}{c} -0.111 \\ [0.113] \\ (0.244) \end{array}$ | $\begin{array}{c} 0.241 \\ [0.065]^{***} \\ (0.170) \end{array}$ |
| Observations | 4,435 | 34,478 | 34,474 | 34,474 |
| Controls | Y | Y | Y | Y |
| Year FE | Υ | Υ | Υ | Υ |
| East FE | Υ | Υ | Υ | Υ |
| State FE | Υ | Υ | Υ | Υ |
| Pseudo R-squared | 0.04 | 0.12 | 0.04 | 0.05 |
| Years covered | 2003, '08, '13, '18 | 1995-2020 | 1995-2020 | 1995-2020 |

Table C.3.1: Mechanisms: Mean household income

Notes: Table shows coefficients from pooled logit estimations. Treuhand job loss is a binary indicator, capturing whether an individual in East Germany lost their job due to layoff or closure anytime between July 1990 and December 1994. Mean household income measures the average yearly income between 1990 and 1994 for the household an individual lived in at that time period. Vector of control variables includes sex, age, age squared, unemployment at time of interview, secondary education level, gross monthly labor income, marital status. Unit of observation is the individual. Estimation periods as indicated. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

| | | | | - |
|--|------------------------------|---|----------------------------------|---|
| DV: | (1) General trust | (2) Political interest | (3) Rad. party preference | (4) No party preference |
| Treuhand job loss \times Happy with GDR social security = 0 | -0.046 [0.032] (0.045) | 0.003 [0.009] (0.028) | 0.034 [0.007]*** (0.016)** | -0.024 [0.010]** (0.026) |
| Treuhand job loss \times Happy with GDR social security= 1 | -0.078 [0.050] (0.500) | -0.075 $[0.011]^{***}$ $(0.034)^{**}$ | -0.003 [0.007] (0.019) | 0.097 $[0.014]^{***}$ $(0.033)^{***}$ |
| Observations | 2,977 | 24,973 | 24,959 | 24,973 |
| Controls | Υ | Y | Υ | Υ |
| Year FE | Υ | Υ | Υ | Υ |
| East FE | Υ | Υ | Y | Υ |
| State FE | Y | Υ | Υ | Υ |
| Pseudo R-squared | 0.05 | 0.11 | 0.06 | 0.05 |
| Years covered | 2003, '08, '13, '18 | 1995-2020 | 1995-2020 | 1995-2020 |

Table C.3.2: Mechanisms: Happiness with GDR social security

Notes: Table shows AMEs from pooled logit estimations. Treuhand job loss is a binary indicator, capturing whether an individual in East Germany lost their job due to layoff or closure anytime between July 1990 and December 1994. Happy with GDR social security takes up the value 1 if an individual reported to be happy or somewhat happy with social security in the GDR, and 0 otherwise. The respective question has been asked only once in the 1990 SOEP survey. Vector of control variables includes sex, age, age squared, unemployment at time of interview, secondary education level, gross monthly labor income, marital status. Unit of observation is the individual. Years covered by the dependent variables as indicated. Standard errors clustered at the federal state \times year level in brackets, robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1