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Abstract

The empirical literature is inconclusive about whether a country's democratization goes hand in hand with a reallocation of economic resources. With newly available individual-level data of former residents of the socialist German Democratic Republic (GDR), we analyse how supporters and opponents of the socialist system performed within the market-based democracy of West Germany after reunification. Protesters, those who helped to overthrow the socialist regime in the Peaceful Revolution show higher life satisfaction and better labor market outcomes in the new economic system. Former members of the ruling socialist party and employees in state-supervised sectors become substantially less satisfied. These results do not seem to be driven by individual reactions to the transition, but rather by the removal of discriminatory practices in the GDR. Additional results indicate that conformism in the GDR also explains political preferences over the almost three decades after the reunification of Germany.

JEL-Codes: H100, N440, P200, D310.

Keywords: East Germany, state socialism, transition, labor market, life satisfaction.

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1 Introduction

Autocracies have been the dominant form of government throughout the history of mankind. Oftentimes, when the population of a country is able to overthrow an autocratic regime and implement a democratic system, high hopes emerge that this new system will improve economic prosperity. While there seems to be a consensus that democracies are in general better suited to improving overall living conditions and economic welfare when compared to autocracies (i.e. see Acemoglu et al., 2015, 2019), it is less clear how democratization affects the reallocation of economic resources and opportunities within the population. On the one hand, the new system may favor former opponents of the autocracy who helped to overthrow the old system. On the other hand, the new system may depend highly on former supporters of the autocracy who can thereby maintain their access to opportunities and power. This question on how economic resources and power is reallocated between different groups in the population is not only relevant for the individuals themselves, but also directly impacts approval of the new system. If former supporters of the autocracy retain their higher societal and economic status, the majority of the people may lose confidence in the new system. The same could be true if opponents of the overthrown system do not adequately benefit from the politico-economic transition.

In this article, we analyze how the transition from autocratic to democratic rule affects the economic position of different groups within the population. In particular, we are interested in the differences in economic and social outcomes between opponents and supporters of the former regime after the transition to democracy. Former opponents of the autocracy, who helped to overthrow the old system, may be favored in a democracy, but at the same time may suffer from the repercussions of discrimination from the autocracy (e.g., missing networks, denied work experience or education). Conversely, former supporters of the autocracy may be excluded from certain jobs and benefits in the new system and may therefore loose their previous status. Nevertheless, former supporters may also find ways to retain their economic and social privileges through networks and skills that can be transferred from the old to the new system.

To investigate our research question, we consider the case of East Germany, which was a state socialist, authoritarian country (German Democratic Republic, GDR) for 40 years until October 3, 1990. After that date, East Germany reunited with West Germany, thereby adopting parliamentary democracy and a market-based economy. The rapid transformation from autocracy to democracy presents a unique case. This setting may therefore serve as a best-case scenario for a potential swift reallocation of resources and power, allowing us to estimate the direct impact of the politico-economic transition on the resident population.

Using rich individual-level panel data over almost three decades, we are able to analyze the economic, social, and political outcomes of former supporters and opponents of the state socialist system in reunified Germany. The data allows us to observe outcomes in the pre- and post-transition years, such that we can investigate changes in outcomes from the old to the new system. We identify supporters and opponents by their political engagement in favor (party membership and state-sensitive jobs) or against the autocratic system (protest participation). In our main linear regression framework, we analyze the outcomes of supporters and opponents relative to the majority of the population, who were politically inactive in the autocratic regime.

Our results show that former opponents benefited from East Germany's transition to a democratic, market-based system. Individuals, who helped to overthrow the government in the Peaceful Revolution of 1989/90, score higher on levels and changes in economic outcomes after the transition. The effect of the transition on outcomes is substantial. Life satisfaction improved by more than half a point on a zero-to-ten scale, which is comparable to the effect of an unemployed person finding a new job (Gielen and Van Ours, 2014). In contrast, supporters of the autocracy, measured by Communist Party membership and employment in state-supervised sectors, lost almost one point in life satisfaction in the new system compared to pre-transition levels. While opponents exhibit more stable employment arrangements and increase their income by 6 percent compared to the majority of the population, such a wage premium is absent for former supporters of the state socialist system. When elucidating individual (labor market) reactions to the transition, we see no differential behavior between groups in engaging in further education, becoming self-employed, or moving to West Germany. We conclude that the different outcomes seem to be affected by the system change itself and discuss how the removal of the autocracy's discriminatory practices may hint at improved conditions for former opponents of the GDR. In addition, the regression results for today's political preferences show significant differences between former supporters and opponents of the GDR. Former supporters tend to vote much more often for the successor party of the single ruling party in the GDR, *The Left*, while opponents do not.

Since group status within the autocracy is non-random, we address potential endogeneity concerns by a selection on observables strategy. By controlling for several variables that prove important for post-transition outcomes and group status within the GDR, i.e., measures of ability, personality traits, and repression experiences, we aim to circumvent a potential omitted variable bias. In addition, our results are robust to several alterations of our estimation sample.

Our study contributes to the literature about the impact of democratization on the reallocation of power and income. After democratization, old elites can keep their de facto political power by lobbying, repression, media control, and connections to the new elites (Scheve and Stasavage, 2012; Martinez-Bravo et al., 2017). Complementary to the commonly performed cross-national comparisons of autocratic and democratic countries (e.g. Rodrik, 1999; Acemoglu et al., 2015), we contribute to a rapidly growing recent literature that focuses on within-country variation. Previous studies that have taken a similar approach seem to indicate that transitions to democracy have had little impact on incomes or political power of the (former) ruling class (Larcinese, 2011; Berlinski et al., 2011; Anderson et al., 2015; Aidt et al., 2020; González et al., 2021)—especially if the transition is slow (Martinez-Bravo et al., 2017). However, different from most studies that analyze democratic reforms within a country, for example in improvements in voting rights (e.g. Larcinese, 2011; Naidu and Yuchtman, 2013; Cascio and Washington, 2013) or new voting technologies (Fujiwara, 2015), we contribute to the literature by focusing on a complete transformation of the politico-economic system, i.e. from a state-socialist autocracy to a market-based democracy. The most innovative aspect that we introduce is the focus on the development of life outcomes of former supporters and opponents of the old regime.

For the case of socialist countries, previous studies have documented that the communist elites usually maintained their privileges after the fall of the Iron Curtain, and show higher

economic outcomes (Ivlevs et al., 2020; Rona-Tas, 1994; Djankov et al., 2005; Aidis et al., 2008). For instance, studies for the Czech Republic, the former Soviet Union, Poland, and Hungary find a wage premium of 5-15 percent for Communist party members after the collapse of communism (Večerník, 1995; Geishecker and Haisken-DeNew, 2004; Wasilewski, 1995; Eyal et al., 1998). In that vein, Bird et al. (1998), who use ownership of a telephone as a proxy for belonging to the socialist upper class in East Germany, find persistence in relative income positions in the immediate years after reunification. In our study, we also document a wage premium for former supporters before the end of socialism. However, using newly available data to analyze former supporters' economic outcomes over a much longer period, we find that these privileges disappear after the first years in the market-based democracy.

In terms of life satisfaction, Otrachshenko et al. (2021) show that individuals with former connections to the Communist Party in the former Soviet Union, display higher life satisfaction than those without these connections, but this is not the case for those in Central and Eastern European countries. Consistently with their finding, we document that former Communist Party membership does not relate to higher satisfaction after the fall of the Iron Curtain in the case of East Germany. Instead, former supporters of the state socialist regime become substantially less satisfied under the new system compared to life in the GDR. This finding is in line with the interpretation that a strong historical reappraisal of the socialist period can lead to a different allocation of economic and social outcomes in the new system.

Our study also relates to the economic literature on the long-lasting effects of state socialism. Previous studies documented that, compared to West Germans, former citizens of the GDR persistently show increased selfishness, preferences for redistribution, career intentions for women, and negative views about immigration (Ockenfels and Weimann, 1999; Alesina and Fuchs-Schündeln, 2007; Necker and Voskort, 2014; Laudenbach et al., 2018; Campa and Serafinelli, 2019; Lange, 2021). While these studies usually rely on East-West German comparisons (e.g. see Becker et al., 2020), our study focuses on differences within the GDR. We contribute to this literature by showing that the extent to which individuals were involved in the socialist system, i.e., the extent to which they expressed conformism, can also persistently shape economic and social outcomes, depending on the system they live in.

The paper continues as follows. In Section 2, we discuss the historical background, followed by an introduction to the data and methodology. Section 4 presents our main empirical results. Finally, we provide a discussion of our findings and offer some conclusions in Section 5.

2 Historical Background

The autocratic system of the GDR The GDR, a highly authoritarian and repressive state socialist regime, was founded in the Soviet occupation zone afer World War II. The GDR was designed by Soviet authorities to become a role model for the socialist system. A fortified border with West Germany separated the country from Western influences from 1961. East Germany had one of the most rigid systems of the former communist states, with the single ruling party, the SED (Socialist Unity Party), and the Ministry of State Security (MfS), the so-called *Stasi*, repressing opposition by extensive observation, imprisonment, and psychological destruction

(*Zersetzung*) (Rainer and Siedler, 2009; Hensel et al., 2009; Grashoff, 2006).

Supporters and Opposition in the GDR The Nomenklatura in the GDR, i.e. the ruling elites, consisted almost exclusively of members of the SED (Atkinson et al., 1992). In a population of about 12 million adults, 2.3 million were members of the SED in 1989 (Knabe, 2007).[1] The many members of the SED demonstrated that it was not a party in a strict sense, but rather a community of political conviction and a career ladder. Party leaders estimated that they could rely only on one in ten of its members—a number that was confirmed after the fall of the Berlin Wall in 1989, when only 285,000 of its original members remained in the party (Kowalczuk, 2019).

An effective outside opposition did not exist for decades in East Germany. The secret service surveilled and spotted dissident behavior, which was punished by the denial of basic rights and imprisonment (Lohmann, 1994). Freedom of speech, freedom of the press, and religious conviction were repressed. Between 170,000 and 280,000 citizens were imprisoned for political reasons. Oppositional behavior also led to limited job opportunities. The *Stasi* had the "primary duty of ensuring that only those loyal to the Party got good or important jobs, and that those disloyal got the worst ones" (Popplewell, 1992). As a consequence of severe repression and limited opportunities, the country had one of the highest suicide rates in the world (Hensel et al., 2009; Grashoff, 2006).

Before 1989, outside party opposition became notable only once, in 1953, when the dissatisfaction with working conditions and the implementation of socialism led to the People's Uprising.[2] When the Soviet forces and German police violently suppressed the movement, East Germans "felt they had to try to work with socialism, and to confront and make the best of the constraints within which they had to operate" (Fulbrook, 2014). Opposition became visible again in the East German public after the rigged local elections in May 1989, when the SED declared a voter turnout of almost 99 percent (Kowalczuk, 2019). Peaceful protests were formed all across the country, demanding a reform of the GDR system to find a self-determined way to freedom and social justice. When the protest movement increased to millions of people in October and November 1989, the SED leadership decided to allow migration to West Germany on November 9, an act that signified the dissolution of the GDR (Rödder, 2009; Hirschman, 1993). This came as a total surprise for the majority of the East and West German population (Frijters et al., 2005). Quantitative empirical studies on the causes of the revolution showed that access to West German television (Grdešić, 2014), visits from West Germany (Stegmann, 2019), and a lower incidence of emigration (Lueders, 2021) partly contributed to the revolution in 1989.

Transition Shortly after the opening of the border to West Germany, a free election took place in East Germany in 1990. The *Alliance for Germany*, which favored a quick reunification, won by a large margin (48.1 percent). Reunification between East and West Germany occurred

[1] Another 500,000 were part of the "block parties", i.e. other parties in the parliament that basically supported the decisions of the SED.

[2] See for instance Martinez et al. (2020) and Mohr (2021) for the causes and consequences of this short period of significant opposition in the GDR.

within one year after the opening of the border, leaving East Germans with almost no time to adapt to the new democratic and economic system.

Although expectations for welfare increases were high in the beginning,[3] the transition was accompanied by an economic collapse and mass unemployment in the early 1990s. After two decades of structurally high unemployment in East Germany, unemployment rates are approaching relatively low levels today, comparable to West Germany (Federal Labor Office, 2021). GDP per capita is about two-thirds of that of West Germany (Federal Statistical Office, 2020). Life satisfaction has followed the V-shaped pattern of GDP (Shleifer, 1997), and in 2018 has almost reached the same level as in West Germany.

The transition from autocratic to democratic rule might have benefited supporters and opponents of the old system differently. Communist Party members could have enjoyed privileges and connections at least in the first years after reunification (Bird et al., 1998). Moreover, Communist Party membership was (and is, see China) not only used as a rent-seeking device, but also as a screening for talent, comparable to the education system in the West (Bishop and Liu, 2008; McLaughlin, 2017). Thus, since productivity is remunerated more highly in market-based economies, former supporters might have benefited in economic terms from transition (Andren et al., 2005). However, due to the comprehensive documentation of the actions of the SED by the state itself, former elites were easily spotted and denied access to high-ranking public employment. Furthermore, due to the same language and culture, elite positions in East Germany were often filled with West German professionals who were educated and trained in a market-based democracy.

The opposition within the former GDR may have become more satisfied because of their self-liberalization and recognition of basic rights. East Germans experienced an improvement in life satisfaction to which increased household incomes, better average life circumstances and greater political freedom, in particular, contributed (Frijters et al., 2004). We expect that better (economic) opportunities benefited the opposition to a much greater extent than the supporters of the old regime. However, former discrimination in the labor market and the psychological *destruction* in the GDR could result in long-term economic and psychological scars (Popplewell, 1992; Lichter et al., 2021). Lower work experience in the GDR might have persistent effects on economic success in reunified Germany.

3 Data and Empirical Strategy

3.1 Data

In our empirical analysis, we use data from the German Socio-Economic Panel (GSOEP), a representative, annual panel survey of the German population, for the years 1990-2018 (Goebel et al., 2019). In 2018, a special survey was conducted on former GDR residents who were at least 18 years old in 1989. The survey asked respondents retrospectively about their life in the GDR, including questions about Communist Party membership, participation in protests, and surveillance by the MfS. Combining the 2018 special survey with all previous waves of the

[3]Then-chancellor Helmut Kohl promised "flourishing landscapes" and that "nobody would be worse off than before" (Mitteldeutscher Rundfunk, 2004).

GSOEP including 1990, the year in which the survey was also conducted in the GDR, allows us to observe individual life trajectories over 29 years in two different politico-economic systems. We are thus able to investigate how different groups of former GDR residents adapted to the new system and compare their economic, political, and social outcomes in unified Germany.

Our sampling design includes only former GDR residents, who were interviewed in the initial survey in 1990 and the special survey in 2018.[4] We restrict the sample to individuals for whom we have full information for all explanatory and control variables to facilitate the interpretation of the results. Thus, our sample for the main analysis covers 678 individuals, resulting in 19,415 person-year observations between 1990 and 2018.

In Table A1 in the appendix, we present a detailed overview of the operationalization of the explanatory variables and the outcomes. The next subsections briefly introduce the main variables used in the empirical analysis.

3.1.1 System Conformism in the GDR

We define three societal groups in the GDR to approximate conformism with the socialist system. In order to do so, we rely on retrospective information from the special 2018 GSOEP questionnaire concerning an individual's political engagement and employment in the GDR.

Supporters To approximate support for the GDR system we combine two measures, SED party membership and employment in the so-called Sensitive Public Sector or *X-Area*. In our sample, over 19 percent stated to have been a member of the SED—a figure that corresponds to official numbers (Kowalczuk, 2019) and also Communist Party membership rates in other Eastern European countries and the former Soviet Union (Ivlevs et al., 2020). The Sensitive Public Sector was the sector that was supervised by the *Stasi* and encompassed all jobs that were deemed crucial for national security, including the MfS itself, the NVA (National Army), police forces, penal system, fire brigade, border troops, customs duty, political parties, mass organizations, and the AG-Wismut, an uranium producer. To work in this sector, potential employees had to undergo a rigorous assessment about their loyalty and mindset concerning the socialist system (Koehler, 2008; Kowalczuk, 2013). We define the variable *Supporters* as equal to one if an individual worked in the Sensitive Public Sector and/or was a SED member, and else set it to zero.[5]

Opponents Since opposition to the GDR system became salient only once protests started in 1989, we define opposition status in the GDR by protest participation in the Peaceful Revolution of 1989/90. Demonstrating in the streets was a dangerous endeavor in 1989. The SED leadership openly supported the Tiananmen Square massacre in the communist People's Republic of China, during which thousands of protesters were shot dead by the police. The so-called "Chinese solution" was a possible scenario for the GDR to deal with the protests, but SED

[4] In a robustness test, we extend our sample by former GDR residents who joint the GSOEP after 1990. Results are presented in Figures A3 and A5 in the appendix and are very similar using the enlarged sample.

[5] Only about three percent (see Table 1) of supporters stated to have worked in the X-Area. If we restrict supporters in the main results to either SED members or X-Area employees, the results are very similar. The regression results are available upon request.

leaders ultimately decided not to confront the mass demonstrations. If respondents stated that they joined the protests that led to the Peaceful Revolution in 1989 or 1990, we categorize these individuals as opponents of the former socialist system in the GDR. In our sample, 20 percent stated that they participated in the demonstrations starting in 1989.[6] Even though this seems to be a high number, estimates about the number of participants at the Berlin demonstrations on November 4 1989, are compatible with this number. Scholars believe that at this single event, the number of participants ranged from 300,000 to almost one million (German Historical Museum, 2021). There were numerous protests across the country, not only in big cities, showing that there was large-scale support for a change in the system (Federal Commission on German Reunification, 2020; Kowalczuk, 2019). In October and November 1989, the months preceding the fall of the Wall, protests peaked with 60 demonstrations containing almost five million citizens (Lohmann, 1994). Demonstrations continued after the fall of the Berlin Wall on November 9, but to a much lesser extent.[7]

Silent Majority The remaining group in our sample, i.e., individuals that were neither supporters nor opponents of the system, is referred to as the *silent majority* (Gieseke, 2015) that mainly stayed politically inactive in the GDR. This group serves as a reference group for all empirical analyses.

3.1.2 Outcome Variables

We use three main outcomes to assess transition success after reunification: Life satisfaction, log gross labor income, and unemployment experience. Life satisfaction is based on responses to the question, "On a scale from 0 to 10, where 0 means completely dissatisfied and 10 means completely satisfied, how satisfied are you with your life, all things considered?". Self-reported life satisfaction recognizes the fact that "everybody has their own ideas about happiness and a good life" and "people are reckoned to be the best judges of the overall quality of life" (Frey and Stutzer, 2002, p.405). Although self-reported satisfaction statements can be biased, for example by daily moods (Schwarz and Strack, 1999), they contain a signal about an individual's true overall satisfaction with life and are correlated with assessments of an individual's life satisfaction by friends and relatives. Moreover, self-reported life satisfaction correlates with physiological measures of well-being, such as heart rate and blood pressure (for an overview, see Kahneman, 2006). Life satisfaction is positively associated with income, economic growth, democracy, and employment (Stevenson and Wolfers, 2008; Gardner and Oswald, 2007; Frey and Stutzer, 2000; Clark, 2003; Deter, 2020).

In terms of labor market success, we consider individual labor income and unemployment experience. Labor income is measured by log monthly personal gross income. The East German "Ostmark" was converted 1:1 to the German Mark on July 1, 1990, shortly before or after the first interviews in 1990. Furthermore, we convert pre-Euro income and adjust all incomes

[6] In order to have a clear definition of supporters and opponents, we disregard supporters that also demonstrated.

[7] Our measure of opposition might also include individuals that might have joint the protest very late, when it was clear that the GDR system will be abolished. When we restrict our definition of the opposition to only those who were actively engaged in an oppositional movement, results remain very similar.

to 2016 price levels to account for inflation Unemployment experience is defined as the time spent in unemployment (measured in years) over the life course. When considering income and unemployment experience as an outcome, we only include working-age individuals, i.e. 18 to 65 years of age, in our analysis.

We assess transition success by looking at the levels of our outcome variables and changes from the GDR to post-reunification values for life satisfaction and income. To calculate changes in life satisfaction we subtract the individual retrospective assessment of life satisfaction from 1985 from the annual life satisfaction scores after 1990. Specifically, we make use of the answers to the question "How satisfied were you with your life five years ago?" in 1990.[8] Similarly, when calculating the change in income, we subtract the deflated gross labor income in May 1989 (surveyed in 1990) from later incomes after reunification. Finally, we calculate the logarithm of this income difference to assess relative changes in real income gains. Changes in outcomes from the GDR to the post-reunification period supplement outcome levels as dependent variables by enabling a direct comparison of relative improvements or deterioration of life outcomes. This may be highly relevant if, for example, a group earns on average higher incomes relative to others, but at the same time experiences an income reduction compared to their income in the GDR.

In an additional analysis, we investigate potential channels of our results. We employ four additional variables for this analysis: further training, occupational change, self-employment, and migration to the West. Each of these variables are dummy variables that become one and remain so for the rest of the observational period, if an individual was engaged in the respective action.[9]

Furthermore, we check whether conformism in the GDR also predicts political preferences in reunified Germany. To do so, we make use of the survey questions regarding party tendencies that have been available in the GSOEP since 1992 ("Which party do you lean toward?") as well as their actual voting decisions in the federal elections in 2013 and 2017 ("Which party did you vote for?"). We focus on the six major parties that are currently present in the Bundestag, Germany's federal parliament (CDU, SPD, Green Party, FDP, AfD, The Left).

3.1.3 Additional Variables

In the main analysis, we control for a set of socio-economic factors determined before the change of the system: age and gender. We control for a cubic polynomial of age, as age may influence both, the selection into groups and post-transition outcomes. In addition, we include a gender dummy in the main regressions. The variable *male* is equal to one if a respondent considers himself male and zero otherwise.

[8] In the GSOEP, life satisfaction in 1990 is also available. We, however, abstain from using this measure as it could be already confounded by the severe uncertainties revolving around the reunification process at that time. The same argument may apply to a retrospective assessment of life satisfaction, but presumably to a lesser extent.

[9] In terms of *Further Education* this means that the dummy variable is equal to one if an individual stated to be in vocational retraining, continued vocational education, professional rehabilitation, continued general education, or continued other education. The dummy variable *Occupational Change* becomes one, if an individual changed his or her occupation according to the ISCO-88 between two subsequent years. *Self-Employment* is equal to one, if an individual stated to be self-employed. *West Migration* is one, if an individual moved to West Germany. See also Table A1 in the Appendix for the full description.

Table 1: Summary Statistics

	Mean	SD	Min.	Max.
Life Satisfaction	6.42	1.71	0	10
Life Satisfaction 5 years ago	6.23	2.53	0	10
Log Gross Labor Income	7.15	0.70	4	10
Log Labor Income 1989	5.61	0.52	3	7
Unemployment Experience in Years	1.38	2.74	0	26
SED Member	0.17	0.38	0	1
X-Area	0.03	0.18	0	1
Supporter	0.18	0.39	0	1
Opponent	0.23	0.42	0	1
Age	51.60	13.70	18	93
Male	0.42	0.49	0	1
Education				
No formal Educ.	0.00	0.05	0	1
8 years	0.25	0.43	0	1
10 years	0.57	0.49	0	1
High School	0.17	0.38	0	1
Qualification				
None	0.03	0.17	0	1
Vocational Degree	0.66	0.47	0	1
University/College	0.31	0.46	0	1
Extraversion	6.24	3.20	-5	13
Agreeableness	8.45	2.83	-3	13
Conscientiousness	10.23	2.42	-4	13
Neuroticism	4.33	3.27	-5	13
Openness	13.18	3.33	3	21
Observed by MfS	0.21	0.41	0	1
West Migration	0.05	0.22	0	1
Further Training	0.30	0.46	0	1
Occupational Change	0.81	0.40	0	1
Self-Employment	0.08	0.27	0	1
Observations	19,415			
Individuals	678			

Note: The Table reports the sample averages, standard deviations, minimum and maximum values, and number of observations of the applied variables. Data comes from GSOEP. A detailed explanation of the variables can be found in Table A1 in the appendix.

In some specifications, we include dummies for education and qualification in the GDR as a proxy of individual ability. Under socialism, education was often used as an instrument for the consolidation and perpetuation of political regimes and their elites (Fuchs-Schündeln and Masella, 2016). We distinguish between four levels of educational attainment: no formal educational degree, secondary schooling of 8 years, secondary schooling of 10 years, and an upper secondary degree (equivalent to high school), surveyed in 1990. Qualifications are classified as follows: no vocational degree, vocational degree, and university/technical college. Education and qualifications may function as a predictor of economic success after transition, both as a signal for ability and through work experience in the GDR.

We also consider personality traits (Big 5 − extraversion, agreeableness, conscientiousness, neuroticism, and openness).[10] Non-cognitive skills, such as personality, are shown to predict

[10]As the Big 5 are shown to be quite constant over the life course from adulthood onwards (Caliendo et al., 2014), we use measures of them that have been surveyed post-transition. Questions about the Big 5 were only asked in 2005, 2009, 2013, 2017.

economic outcomes (Heckman and Kautz, 2012; Almlund et al., 2011) and may also explain selection into group status in the GDR.

Finally, we control for whether an individual was observed by the *Stasi*. Respondents answered the question "Did you know or have you had the feeling that during the time in the GDR you were observed/monitored by other people?". We construct a dummy variable that takes the value of one if the individual answered "knew it", and 0 if the answer was "had the feeling" or "no". We apply this restrictive coding to come as close as possible to an objective measure of actual *Stasi* surveillance. The *Stasi* not only observed citizens that could become a threat to the system, but also surveilled MfS employees and SED members as their work was crucial for state security.

Table 2 shows the socio-economic characteristics of the three groups in 1990, when the GDR was still in place. Life Satisfaction is surveyed retrospectively for the year 1985 and income for May 1989, thus, when the collapse of East German communism could not have been foreseen. In the GDR, supporters are relatively older, substantially more satisfied with life, have the highest labor income and almost half hold a university degree. For the 1989 income, East German supporters have a wage premium of 10 percent when all controls are applied (not shown). Opponents are the youngest and least satisfied, but show high employment and education levels. Opponents are the group that have the highest likelihood to be observed by the MfS.

3.2 Empirical Strategy

To investigate the influence of conformism with the socialist system on economic success after reunification, we estimate standard linear regression models with either the level of our main outcomes or the change in outcomes with respect to the GDR period as the dependent variable. Our main explanatory variables are the classifications of support for or opposition to the socialist system in the GDR. All estimations include a set of baseline control variables, i.e. gender and a cubic polynomial of age, as well as survey year fixed effects and clustered standard errors at the individual level.

We also present estimation results of a full-fledged model that controls for three sets of variables that could potentially confound the estimation of our main parameters of interest. First, we aim to control for individual ability by using educational attainment and professional qualifications as proxies. Even though these concepts were influenced by the socialist system itself, they may nonetheless be important proxies for human capital accumulation and correlate with the general component of individual productivity. Second, we control for differences in personality traits, which have shown to be important for labor market success in market-based economies (Borghans et al., 2008; Almlund et al., 2011). Finally, recent studies have documented a negative relationship between state surveillance and individual productivity (Lichter et al., 2021; Jacob and Tyrell, 2010). In the full model, we include information on individual surveillance by the *Stasi* to control for the potential negative effect of repressive state actions on labor market productivity. Controlling for these three potential sources of confounding variation should eliminate alternative explanations for differences in transition success and strengthens the interpretation of our main coefficients of interest.

Table 2: Socio-Economic Characteristics in the GDR

	Supporter		Opponent		Silent Majority	
	Mean	SD	Mean	SD	Mean	SD
Age	42.14	9.85	35.50	10.49	36.88	10.94
Male	0.54	0.50	0.55	0.50	0.34	0.47
Life Satisfaction 5 years ago	7.12	2.13	5.78	2.46	6.12	2.62
Log Labor Income 1989	5.85	0.38	5.65	0.49	5.52	0.54
Full-Time Employment	0.89	0.32	0.82	0.39	0.69	0.46
Part-Time Employment	0.06	0.23	0.07	0.25	0.15	0.36
in Education	0.00	0.00	0.04	0.19	0.03	0.17
Non-Employed	0.06	0.23	0.08	0.27	0.13	0.33
UE Experience	0.00	0.00	0.01	0.07	0.03	0.17
Education						
No formal Educ.	0.01	0.09	0.00	0.00	0.00	0.05
8 years	0.24	0.43	0.16	0.36	0.29	0.45
10 years	0.50	0.50	0.63	0.49	0.57	0.49
High School	0.25	0.43	0.22	0.41	0.13	0.34
Qualification						
None	0.02	0.15	0.01	0.08	0.04	0.20
Vocational Degree	0.49	0.50	0.67	0.47	0.71	0.46
University/College	0.49	0.50	0.32	0.47	0.25	0.43
Extraversion	5.79	3.08	6.62	3.10	6.30	3.25
Agreeableness	8.80	2.81	8.08	2.69	8.62	2.90
Conscientiousness	10.35	2.41	10.03	2.26	10.54	2.30
Neuroticism	4.34	3.31	4.17	3.37	4.68	3.17
Openness	12.83	2.90	13.75	3.39	13.06	3.45
Observed by MfS	0.24	0.43	0.29	0.46	0.16	0.37
Observations	125		153		400	

Note: The Table reports the sample averages and standard deviations of former supporters, opponents, and the silent majority from the 1990 survey. Data comes from GSOEP. A detailed explanation of the variables can be found in Table A1 in the appendix.

4 Results

4.1 Conformism in the GDR and Transition Success

Table 3 shows the main results of post-transitional outcomes for former supporters and opponents of the old system. Odd columns show the baseline regression, in which we control for age, gender, and survey year fixed effects. Even columns present the full model including additional control variables.[11] Panel A presents the results for outcomes in levels while Panel B shows the results for changes in outcomes between our single GDR survey wave and the respective post-transition years. The reference group throughout this section is the politically inactive majority of the population.

Column (1) and (2) in Table 3 show the results for life satisfaction. When all controls are applied, former opponents show significantly higher life satisfaction after the transition than the politically inactive majority. The results for changes in life satisfaction (Panel B) are even stronger. This can be explained by both a comparably lower life satisfaction in the GDR (compared to the general population, see Table 2) and a relatively higher life satisfaction in the new system. Former supporters experienced a large drop in life satisfaction which can mostly

[11] The estimated coefficients of covariates are shown in the Tables A2, A3 and A4 in the appendix.

be explained by their previous high level of life satisfaction in the GDR (see Table 2). More precisely, being a former supporter reduces life satisfaction by almost one point on the zero-to-ten well-being scale. This difference is comparable to losing one's job (Gielen and Van Ours, 2014).

Column (3) and (4) in Panel A of Table 3 present income differences between the different conformism groups. Estimates in column (3) show that former supporters and opponents hold a 13 percent wage premium compared to the politically inactive population in the GDR. These estimates seem to reflect the higher productivity of these groups as they are both better educated than the reference group. When controlling for ability, personality, and the repression experienced in the GDR in column (4), former supporters of the GDR regime do no longer display a statistically significant wage premium. Former opponents, on the other hand, still show a marginally statistical significant wage premium of 6 percent. This higher income level of opponents after transition (Panel A) almost exactly matches the relative income increase after 1989 (Panel B).

Columns (5) and (6) show the results for unemployment experience in reunified Germany. Over the life cycle, former opponents experience, on average, half a year less unemployment than the political inactive majority of former GDR citizens. The premium in satisfaction levels for former opponents, the wage premium of 6 percent, and their lower unemployment experience hint at the substantial improvement of life conditions of this group. In sum, former opponents fare well relative to the politically inactive majority of the population, whereas former supporters of the GDR lose substantially in terms of life satisfaction.

Transition Success over Time

In the almost three decades since reunification, East Germany experienced very different economic phases. The turbulent transition years and hopes for improvement in economic conditions were followed by a recession in the early 1990s and mass unemployment. High unemployment rates persisted until the mid-2000s and approached West German levels thereafter.

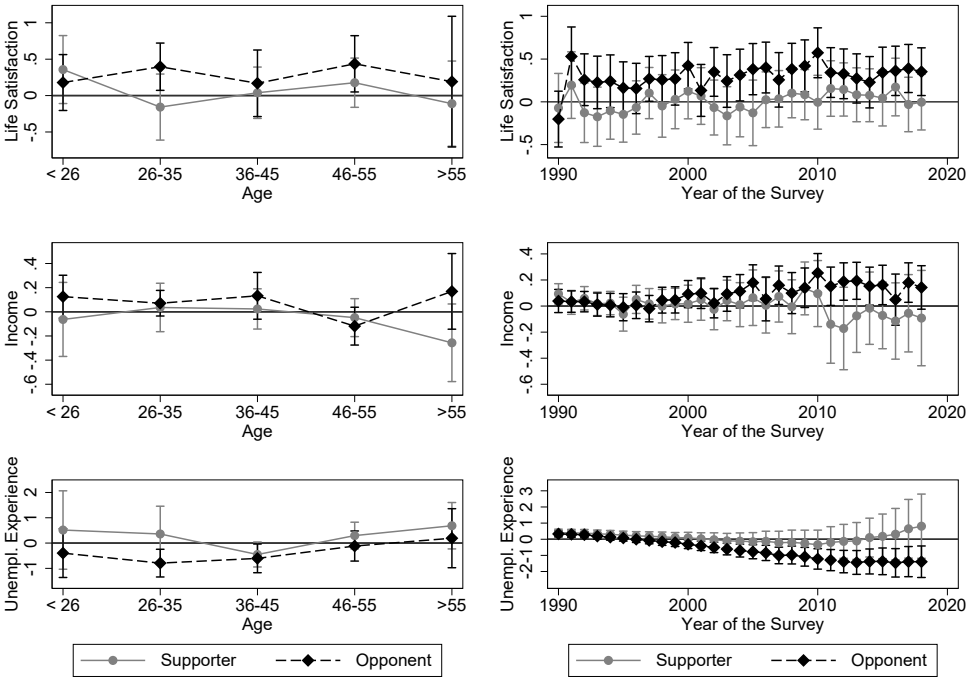
Conformism in the GDR may be sensitive to the overall economic conditions, which may amplify existing differences between the groups. Thus, we adjust the full model by interacting group status with survey year dummy variables. Figure 1 shows the estimated average marginal effects of conformism on outcome levels by year (right-hand side). Estimates of former supporters are shown in gray, while those of former opponents are depicted in black in Panel (a). Former opponents' life satisfaction shows a jump directly after 1990 and remains fairly stable thereafter. A positive association of income with opposition status becomes visible only after the economic recovery phase of the mid-2000s. Similarly, unemployment experience reduces relatively for the politically inactive population over this period. Over the total observational period, former supporters do not outperform nor underperform the economic outcomes of the reference group. However, we estimate a wage premium for former supporters of the GDR for the first four years after reunification. This is in line with the finding of Bird et al. (1998) that the socialist upper class retained its privileges in the early years after reunification. The absence of longer-term advantageous outcomes for former supporters of the socialist regime might be due to a severe historical reappraisal in Germany and the opportunity of replacing jobs with Western profes-

Table 3: Post-Transition Outcomes for Supporters and Opponents

	Life Satisfaction		Labor Income		Unempl. Experience	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Levels						
Supporter	0.088	0.008	0.129**	0.047	-0.162	0.086
	(0.117)	(0.107)	(0.050)	(0.047)	(0.249)	(0.244)
Opponent	0.361***	0.298***	0.134***	0.062*	-0.698***	-0.557***
	(0.107)	(0.097)	(0.043)	(0.038)	(0.182)	(0.177)
Baseline Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Additional Control Variables	No	No	No	Yes	No	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Individuals	678	678	618	618	678	678
Obs.	19,415	19,415	10,776	10,776	16,169	16,169
R^2	0.026	0.087	0.510	0.593	0.140	0.187
Panel B: Changes						
Supporter	-0.989***	-0.962***	0.072	-0.013		
	(0.250)	(0.251)	(0.071)	(0.068)		
Opponent	0.744***	0.682***	0.161***	0.082*		
	(0.253)	(0.251)	(0.054)	(0.049)		
Baseline Control Variables	Yes	Yes	Yes	Yes		
Additional Control Variables	No	Yes	No	Yes		
Year FE	Yes	Yes	Yes	Yes		
Individuals	678	678	618	618		
Obs.	19,415	19,415	10,776	10,776		
R^2	0.042	0.060	0.587	0.613		

Note: The table reports OLS regression results of the respective outcome on two dummy variables indicating whether an individual was a supporter or a opponent of the system in the GDR. Panel A shows the results for outcomes in levels, Panel B for changes in outcomes from pre- to post-transition years. Standard errors are clustered at the individual level and are displayed in parentheses. Statistical significance is indicated by asterisks according to: *p < 0.10, **p < 0.05, ***p < 0.01.

Figure 1: Economic Outcomes by Age and Year



Note: The graphs on the left-hand side show the average marginal effect (AME) of life satisfaction (upper graph), income (middle graph), and unemployment experience by age at the time of reunification. The graphs on the left-hand side show the average marginal effect (AME) of life satisfaction (upper graph), income (middle graph), and unemployment experience by year. AME were calculated from an OLS regression of the respective outcome on whether the individual was a supporter or opponent of the GDR, interacted with cohort dummy variables (left-hand side) as well as year dummy variables (right-hand side). Data is taken from GSOEP (see Section 3). 95 percent confidence intervals are shown. Own depiction.

sionals. To discard the burden of the past, even the communist successor party excluded most old leaders (although many members remained active in the new party) (Avdeenko, 2018).

Cohort Differences

The end of socialism and the subsequent transition to a market-based democracy came unexpectedly for the majority of former GDR citizens. This severe politico-economic shock hit individuals in different phases of their life, giving rise to potential heterogeneities with respect to age. We test for these differences by including conformism-age-group interaction effects in the full-model with outcome levels as dependent variables. Figure 1 presents the average marginal effects of conformism by age in 1990 (left-hand side). Age in 1990 was pooled into five age groups spanning approximately ten years.

Interestingly, within the conformist groups, age at reunification does not seem to be highly important for economic outcomes. The only group that displays statistically significant higher life satisfaction are former opponents at ages 26-35 at the time of reunification.[12] Individuals who were at the beginning of their career but had already completed their education.

[12]We also tested for heterogeneous effects by gender. We could, however, do not detect any substantial differences (results not shown).

4.2 Responses to the Transition

The previous results have shown that opponents of socialism benefited from the transition to a market-based democracy in terms of higher life satisfaction and better labor market outcomes. In this section, we investigate why this was the case and focus on individual reactions to the transition shock. We concentrate on four factors that may have a potential influence on income, employment, and life satisfaction: further training, a change in occupation, becoming self-employed, or moving to West Germany. Further training may be seen as a means to improve opportunities in the labor market. This could, on the one hand, also be true for changing one's occupation as this behavior may signal a high degree of professional flexibility. On the other hand, it could also be a sign of an unstable employment biography. Becoming self-employed may also indicate both a high individual potential, or barriers to entering regular employment. Moving to West Germany is likely associated with higher productivity (Fuchs-Schündeln and Schündeln, 2009).

How these individual responses to the transition are associated with conformism in the GDR is presented in Table 4. Again, odd columns show the basic model, while the full model is shown in even columns. Columns (1) and (2) show the results for further education in reunified Germany. Further training as a means to improve competitiveness in the labor market seems to have been used much more by former supporters as well as former opponents relative to the politically inactive majority, according to column (1). When considering the full model, however, we do not see an increased propensity for educational or vocational upgrading of former opponents nor former supporters. The tendency to engage in further education for both groups seems to be driven by their already higher levels of education and qualifications compared to the control group. Columns (4) and (5) show that former supporters changed their occupation much more often than the majority. Taken together with the result that former supporters see a drop in life satisfaction and exhibit no labor market surplus in the market economy, changing occupations may be an indication of both, less stable work arrangements and, at the same time, a way to prevent economic downgrading. In terms of increased self-employment or the propensity to move to West Germany, we see no statistically significant difference for former supporters and opponents with respect to the politically inactive majority.

Table 4 documents that—besides occupational change for former supporters—these (labor market) reactions play only a minor role in understanding our main results, if at all. It remains plausible , therefore, that the system change itself altered the playing field for former supporters and—even more so—for former opponents of the autocracy. The relative improvements for former opponents may have been most notably influenced by intangible factors of the system change. For instance, income increases for former opponents might be explained by reduced discrimination in the GDR, when the abilities of opponents were not adequately rewarded for political reasons. After reunification, when the importance of ability increased in the market-based economy, former opponents may have been more able to find jobs that match their productivity. Furthermore, the more positive outcomes in levels and changes could be due to the favorable treatment of opponents in the new system. In particular, the public sector and political parties prioritized the employment of those with "clean hands", or, to an even larger degree, those who participated in the protest movement in 1989/90.

Table 4: Individual Responses to the Transition

	Further Training		Occupat. Change		Self-Employment		West Migration	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Supporter	0.102**	0.058	0.112***	0.129***	-0.021	-0.025	-0.002	-0.008
	(0.040)	(0.040)	(0.026)	(0.028)	(0.024)	(0.024)	(0.017)	(0.018)
Opponent	0.085**	0.056	0.031	0.038	0.019	0.005	-0.005	-0.008
	(0.040)	(0.039)	(0.032)	(0.033)	(0.026)	(0.027)	(0.018)	(0.019)
Basel. Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Add. Control Variables	No	Yes	No	Yes	No	Yes	No	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individuals	678	678	645	645	678	678	678	678
Obs.	17,401	17,401	14,996	14,996	19,415	19,415	19,415	19,415
R^2	0.113	0.162	0.101	0.114	0.028	0.049	0.029	0.039

Note: The table reports OLS regression results of the respective outcome on two dummy variables indicating whether an individual was a supporter or an opponent of the system in the GDR. Standard errors are clustered at the individual level and are displayed in parentheses. Statistical significance is indicated by asterisks according to: *p < 0.10, **p < 0.05, ***p < 0.01.

4.3 Political Preferences

Next, we test whether conformism in the GDR predicts not only life satisfaction and labor market outcomes but also political preferences in reunified Germany. Figure 2 shows the association between individuals' different levels of conformism in the GDR and their preferences for the six major parties in Germany.

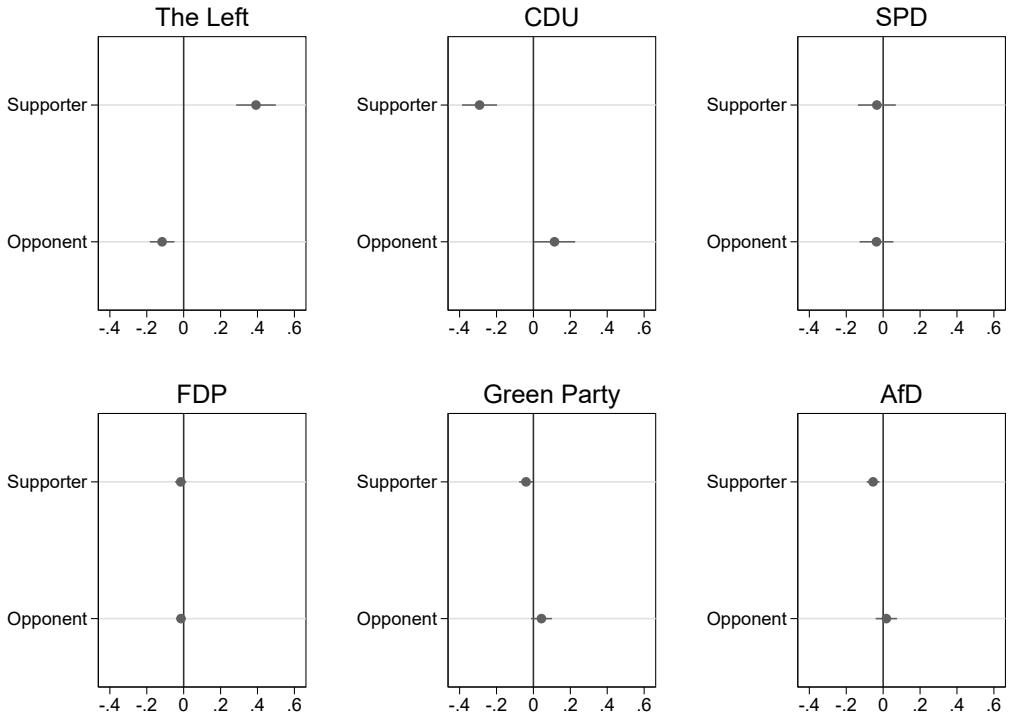
Former supporters of the GDR system substantially favor the successor party of the SED, *The Left*, and are less likely to vote for the CDU, Germany's major conservative party, and the AfD, Germany's main right-wing populist party. This seems to be a clear sign for ideological persistence.

Former opponents are statistically significantly less likely to support *The Left* and are more inclined to vote for the CDU—the party that is heavily associated with the swift reunification of Germany under its Chancellor Helmut Kohl. Interestingly, although representatives of the AfD in East Germany claim to be the successors of the revolutionary democratic resistance against the SED regime (Federal Commission on German Reunification, 2020), former opponents are not more likely to lean toward the right-wing populist party. The results on political preferences are robust to actual voting behavior (see Figure A1 in the appendix). Moreover, Figure A2 in the appendix shows that these political preferences are relatively stable over time within the conformism groups.

4.4 Robustness

Finally, we check the sensitivity of our results regarding the sampling design. We reconduct our main analyses by including longitudinal weights to control for survey attrition, averaging all variables to compensate for the fact that we observe the same individuals multiple times, and enlarge our sample to also include GDR citizens that joined the GSOEP after 1990. Figures A3 - A5 in the appendix present these robustness checks. In all three additional specifications, the coefficients of interest remain mostly unchanged, indicating the robustness of our results.

Figure 2: Conformism and Political Preferences



Note: The graphs show the coefficients from two OLS regressions of a dummy variable on party preferences on whether the individual was a supporter or opponent. The same control variables are included as in the main regression (see Section 3). Data is taken from GSOEP. 95 percent confidence intervals are shown. Own depiction.

5 Conclusion

This study documents the economic and political differences between former supporters and opponents of a state socialist autocracy in a market-based democracy over almost three decades. Employing rich individual-level panel data covering pre- and post-transition years allows us to differentiate between former supporters and opponents of autocracy and enables us to compare their life satisfaction and labor market outcomes in two very different politico-economic systems. The unique rapid transformation of East Germany from a state socialist regime to a market-based democracy permits us to estimate the influence of the system change on the potential reallocation of economic resources and power within the East German population.

Our results show that former opponents of the system benefited from the abolition of the old system in terms of life satisfaction, income, and employment. Former supporters of the state socialist system lack the wage premium that exists for other transition countries, and even lost substantially in terms of life satisfaction. Further analyses suggest that these results are not grounded in differential behavior between supporters and opponents after reunification, but seem to be affected by the system change itself. The removal of discriminatory practices by the autocracy hints at an improvement of opportunities for former opponents of the GDR.

This study particularly contributes to the literature concerned with transformation processes from former state socialist and communist countries to modern democracies. The findings of this study are in line with the interpretation that a stark historical reappraisal of the socialist period and a swift economic and political transformation in East Germany led to a different reallocation of economic resources than in the other former state socialist and communist countries in central and eastern Europe.

Our study also speaks to the broader literature on elite persistence, and documents that former elites, i.e. supporters of the East German autocracy, were not able to retain their (economic) privileges. Moreover, our results highlight that those who fight for democracy may be compensated by higher life satisfaction and better labor market outcomes than those who cling to a doomed system.

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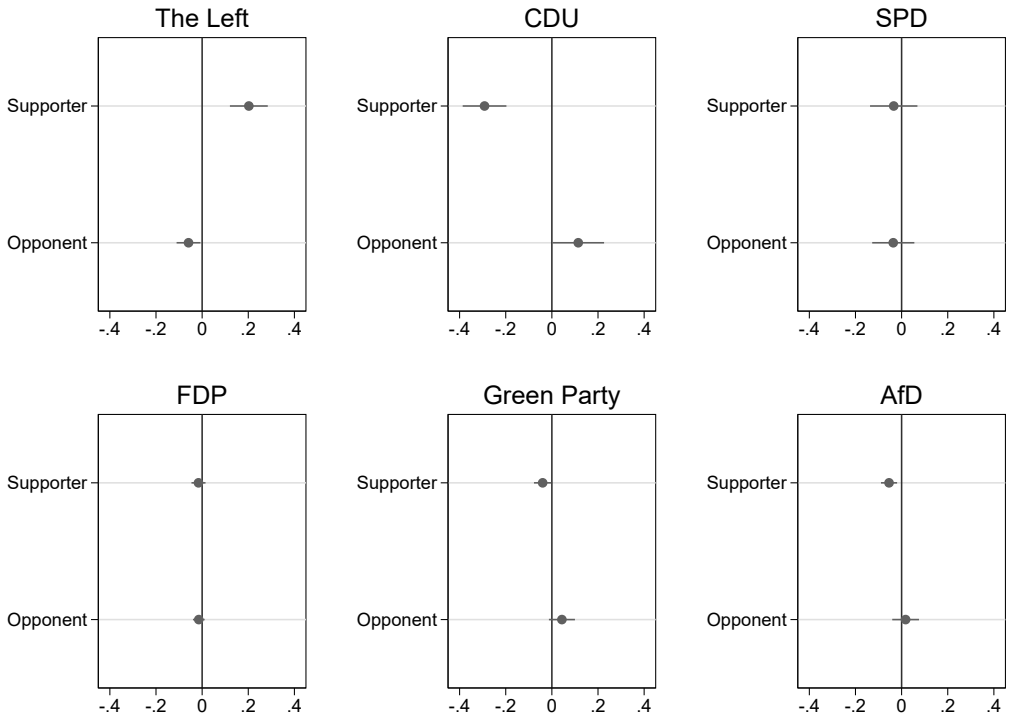
A Online Appendix

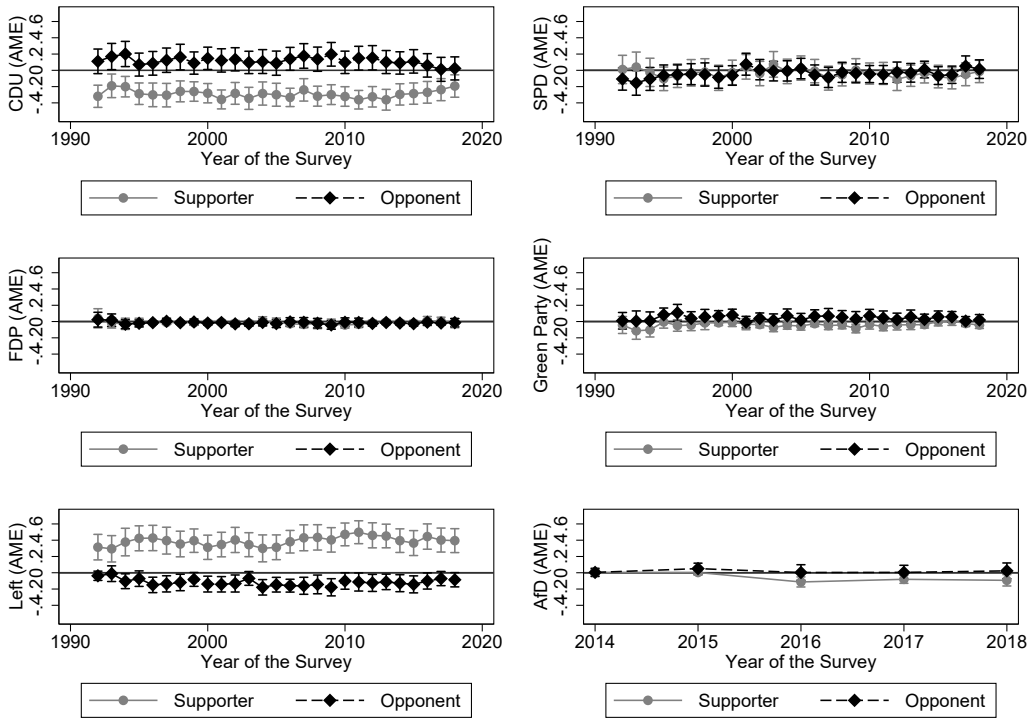
Figures

Figure A1: Voting Behavior



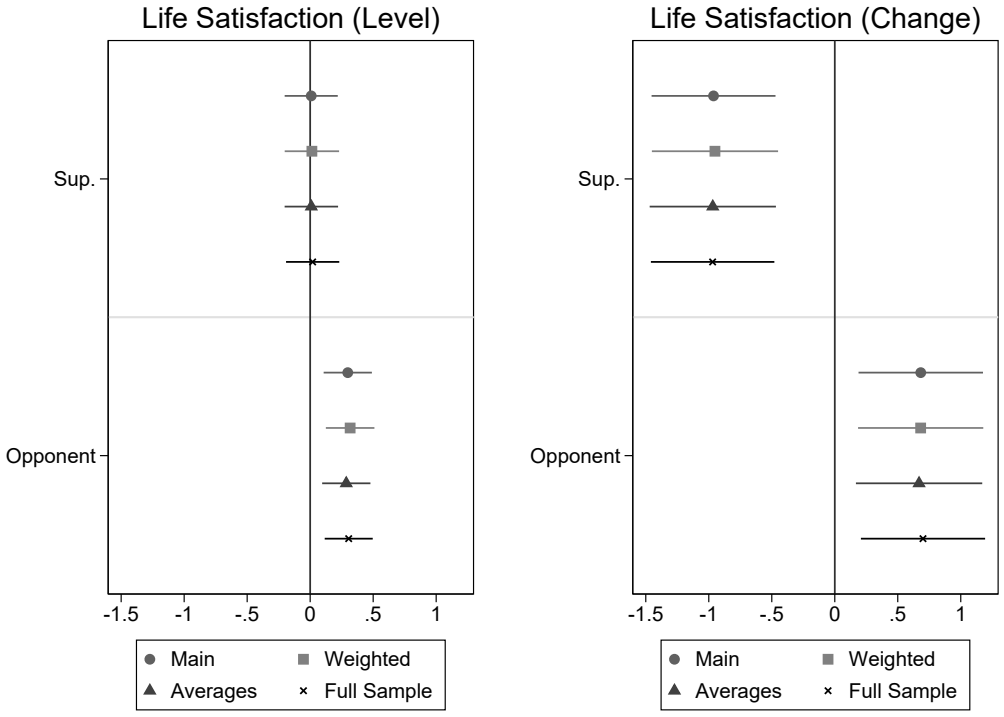
Note: The graphs show the coefficients from two OLS regressions of a dummy variable on voting behavior in the 2013 and 2017 General Federal Elections on whether the individual was a supporter or opponent. The same controls are included as in the main regression (see section 3). Data is taken from GSOEP (see Section 3). 95 percent confidence intervals are shown. Own depiction.

Figure A2: Political Preferences over time (CDU, SPD, FDP, Green Party, the Left, AfD)



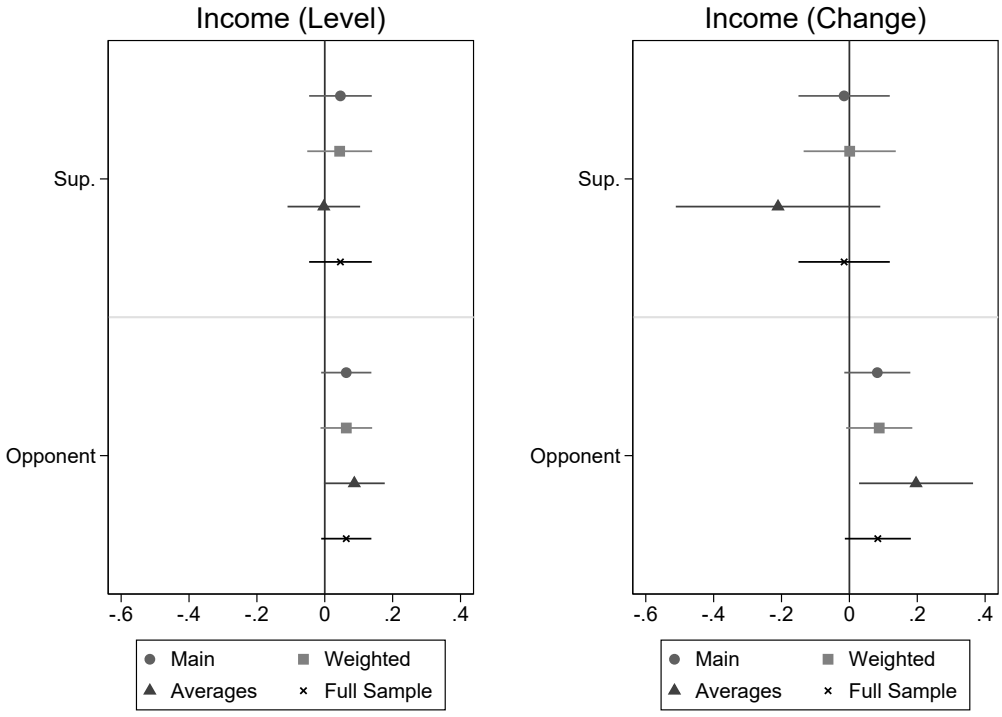
Note: Graph shows the average marginal effect (AME) of political preferences by year. AME were calculated from an OLS regression of a variable on the party preference on whether the individual was a supporter or opponent interacted with year dummies. Data is taken from GSOEP (see Section 3). 95 percent confidence intervals are shown. Own depiction.

Figure A3: Robustness of Life Satisfaction



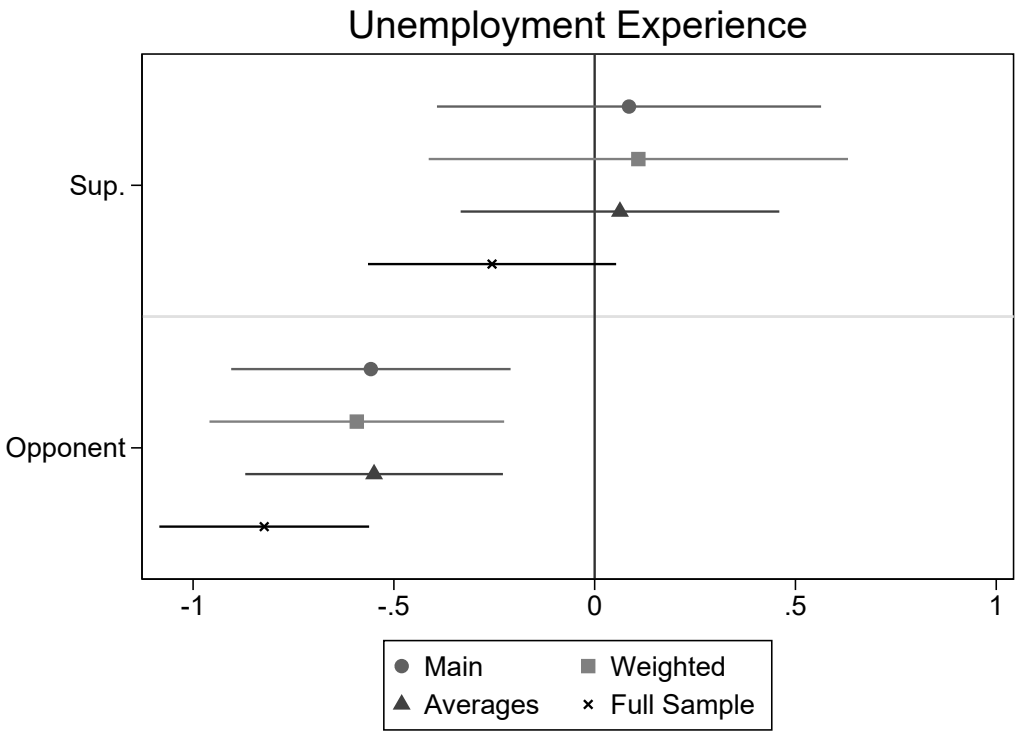
Note: The graphs show the coefficients of the main regressions (Table 3), once with the original sample, with weights applied, the averages of all variables (number of observations = individuals), and with the full sample. 95 percent confidence intervals are shown. Own depiction.

Figure A4: Robustness of Income



Note: The graphs show the coefficients of the main regressions (Table 3), once with the original sample, with weights applied, the averages of all variables (number of observations = individuals), and with the full sample. 95 percent confidence intervals are shown. Own depiction.

Figure A5: Robustness of Unemployment Experience



Note: The graphs show the coefficients of the main regressions (Table 3), once with the original sample, with weights applied, the averages of all variables (number of observations = individuals), and with the full sample. 95 percent confidence intervals are shown. Own depiction.

Tables

Table A1: Operationalization of Variables

Variables	**Item**	**Years**
Life Satisfaction	"On a scale from 0 to 10, where 0 means completely dissatisfied and 10 means completely satisfied. How satisfied are you with your life, all things considered."	all
Life Satisfaction Pre-Transition	"All in all: How satisfied were you with your life five years ago?" (0-10)	1990
Income	"How much did you earn from your work last month?" Gross income	all
Income Pre-Transition	Amount of wages, salary in May 1989 Gross income	1990
Unemployment Experience	Generated unemployment experience in years	All
Further Training	Vocational Retraining, continued vocational education, professional rehabilitation, continued general education, or continued other education	1990-2015
Occupational Change	if change in Current Occupational Classification (ISCO-88) between two subsequent years	All
Self-Employment	Occupational Position: Self-Employed	All
West Migration	Region (West-Germany, East Germany)	All
Political Preferences	"Which party do you lean toward?"	1992-2018
Voting Behavior	"And how was it at the last general election (Bundestagswahl)? Which party did you vote for?"	2014, 2018
Supporter	Before 1.1.1989 Member of the Socialist Unity Party (SED) (and have not left the party before 1989) or Sector mostly worked in GDR: [10] Sensitive Public Sector (Supporter = 1 if individual was SED member, worked in Sensitive Public sector, or both)	2018 2018
Opponent	Have you personally participated in the demonstrations of the opposition movements in the years 1989 and 1990?	2018
Age	Age in year of survey (1990-2018)	all
Male	Gender in year of survey (1990-2018)	all
Education	no formal educational degree Secondary school (*Polytechnische Hochschule, POS*) - 8 years Secondary school (*Polytechnische Hochschule, POS*) - 10 years Upper Secondary Degree (*Erweiterte Oberschule*, EOS)	all
Qualification	No vocational degree Vocational degree University/technical college	all

Operationalization of Variables (continued)

Variables	**Item**	**Years**
Big 5 Personality	1 ('does not apply to me at all') to 7 ('applies to me perfectly'), I see myself as someone who is/has Openness: original, values artistic experiences, active imagination Conscientiousness: a thorough worker, efficient, (reversed) tends to be lazy Extraversion: communicative, outgoing, (reversed) reserved Agreeableness: forgiving, kind, (reversed) rude Neuroticism: worries, nervous, (reversed) relaxed	2005, 2009, 2013, 2017
MfS Observation	"Did you know or felt that during the time in the GDR time in the GDR, you were observed by others? "Yes, knew it" (=1)	2018

Note: The Table reports measures of outcome and explanatory variables. Data comes from GSOEP. For the personality questions three values are added (and subtracted for reversed measures) to represent the Big Five Factor Model Scale (Gerlitz and Schupp, 2005; Caliendo et al., 2014). As the Big 5 are shown to be quite constant over the life course from adulthood onwards (Caliendo et al., 2014)), we use measures of them that have been surveyed post-transition. More specifically, if a personality trait is missing for some years (for example from 2010-2012) we insert the value of the last observed year (2009). For the years 1990-2004, we insert the value from 2005.

Table A2: Life Satisfaction of Supporters and Opponents

	Life Satisfaction				Change in Life Satisfaction			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Supporter	0.088	0.001	0.008	0.008	-0.989***	-0.965***	-0.948***	-0.962***
	(0.117)	(0.118)	(0.107)	(0.107)	(0.250)	(0.254)	(0.251)	(0.251)
Opponent	0.361***	0.324***	0.299***	0.298***	0.744***	0.750***	0.719***	0.682***
	(0.107)	(0.106)	(0.098)	(0.097)	(0.253)	(0.254)	(0.253)	(0.251)
Age	-0.123***	-0.139***	-0.115***	-0.115***	0.044	0.045	0.060	0.059
	(0.043)	(0.043)	(0.042)	(0.042)	(0.073)	(0.072)	(0.073)	(0.073)
Age^2	0.002**	0.002***	0.002**	0.002**	-0.000	-0.000	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age^3	-0.000**	-0.000**	-0.000**	-0.000**	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Male	0.125	0.158*	0.070	0.070	0.062	0.069	0.043	0.038
	(0.091)	(0.091)	(0.089)	(0.089)	(0.201)	(0.206)	(0.210)	(0.210)
Education								
8 Years Educ.		-1.269**	-1.179**	-1.179**		1.535	1.661	1.618
		(0.632)	(0.536)	(0.536)		(1.491)	(1.470)	(1.472)
10 Years Educ.		-1.165*	-1.105**	-1.105**		1.764	1.862	1.819
		(0.638)	(0.543)	(0.543)		(1.504)	(1.484)	(1.486)
High School		-1.172*	-1.112**	-1.112**		1.531	1.644	1.580
		(0.649)	(0.555)	(0.555)		(1.526)	(1.505)	(1.508)
Qualification								
Vocational Degree		0.037	0.118	0.118		-0.387	-0.420	-0.448
		(0.204)	(0.196)	(0.196)		(0.621)	(0.606)	(0.608)
Univ./Techn. College		0.321	0.304	0.304		-0.455	-0.597	-0.662
		(0.227)	(0.217)	(0.216)		(0.650)	(0.638)	(0.639)
Extraversion			0.044***	0.044***			0.008	0.008
			(0.012)	(0.012)			(0.030)	(0.030)
Agreeableness			0.018	0.018			0.012	0.016
			(0.015)	(0.015)			(0.032)	(0.032)
Conscientiousness			0.011	0.011			0.032	0.030
			(0.015)	(0.015)			(0.036)	(0.036)
Neuroticism			-0.100***	-0.100***			-0.058**	-0.056**
			(0.012)	(0.012)			(0.027)	(0.027)
Openness			0.022*	0.021*			0.063**	0.060**
			(0.012)	(0.012)			(0.028)	(0.028)
MfS Observation				0.001				0.351
				(0.101)				(0.242)
Constant	8.745***	10.089***	9.123***	9.124***	-0.707	-2.097	-3.479*	-3.426*
	(0.672)	(0.929)	(0.866)	(0.866)	(1.201)	(1.944)	(2.003)	(2.005)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individuals	678	678	678	678	678	678	678	678
Obs.	19,415	19,415	19,415	19,415	19,415	19,415	19,415	19,415
R^2	0.026	0.034	0.087	0.087	0.042	0.045	0.057	0.060

Note: The table reports OLS regression results of life satisfaction (1-4) and change in life satisfaction (5-8) on two dummy variables indicating whether an individual was a supporter or an opponent. Standard errors are clustered at the individual level and displayed in parentheses. Statistical significance is indicated by asterisks according to: *p < 0.10, **p < 0.05, ***p < 0.01.

Table A3: Income of Supporters and Opponents

	Income				Change in Income			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Supporter	0.131***	0.037	0.046	0.046	0.072	-0.027	-0.016	-0.016
	(0.050)	(0.047)	(0.047)	(0.047)	(0.071)	(0.069)	(0.068)	(0.068)
Opponent	0.136***	0.083**	0.067*	0.063*	0.161***	0.104**	0.087*	0.082*
	(0.043)	(0.038)	(0.037)	(0.038)	(0.054)	(0.049)	(0.049)	(0.050)
Age	-0.006	-0.033	-0.033	-0.033	-0.187***	-0.216***	-0.215***	-0.215***
	(0.044)	(0.035)	(0.033)	(0.033)	(0.056)	(0.052)	(0.052)	(0.052)
Age^2	0.001	0.002*	0.002**	0.002**	0.005***	0.006***	0.006***	0.006***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Age^3	-0.000	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Male	0.184***	0.236***	0.222***	0.221***	0.192***	0.247***	0.232***	0.230***
	(0.036)	(0.034)	(0.034)	(0.034)	(0.047)	(0.046)	(0.047)	(0.047)
Education								
8 Years Educ.		0.287***	0.270***	0.267***		0.419***	0.399**	0.395**
		(0.040)	(0.040)	(0.040)		(0.160)	(0.166)	(0.166)
10 Years Educ.		0.443***	0.419***	0.415***		0.662***	0.635***	0.629***
		(0.040)	(0.042)	(0.043)		(0.152)	(0.159)	(0.159)
High School		0.571***	0.551***	0.545***		0.774***	0.748***	0.740***
		(0.065)	(0.068)	(0.069)		(0.169)	(0.177)	(0.177)
Qualification								
Vocational Degree		0.241***	0.234***	0.233***		0.166	0.158	0.156
		(0.078)	(0.070)	(0.070)		(0.124)	(0.121)	(0.121)
Univ./Techn. College		0.541***	0.521***	0.516***		0.469***	0.448***	0.441***
		(0.087)	(0.082)	(0.082)		(0.135)	(0.134)	(0.134)
Extraversion			0.001	0.001			-0.000	0.000
			(0.005)	(0.005)			(0.007)	(0.007)
Agreeableness			-0.015***	-0.015***			-0.017**	-0.016**
			(0.005)	(0.005)			(0.007)	(0.007)
Conscientiousness			-0.001	-0.001			-0.003	-0.003
			(0.006)	(0.006)			(0.009)	(0.009)
Neuroticism			-0.007	-0.006			-0.006	-0.005
			(0.004)	(0.004)			(0.006)	(0.006)
Openness			0.009*	0.009			0.010	0.009
			(0.006)	(0.006)			(0.008)	(0.008)
MfS Observation				0.033				0.045
				(0.043)				(0.055)
Constant	5.179***	4.846***	4.912***	4.923***	4.763***	4.301***	4.399***	4.413***
	(0.579)	(0.476)	(0.468)	(0.468)	(0.805)	(0.784)	(0.798)	(0.798)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Individuals	618	618	618	618	618	618	618	618
Obs.	10,831	10,831	10,831	10,831	10,831	10,831	10,831	10,831
R^2	0.505	0.583	0.589	0.589	0.584	0.607	0.609	0.609

Note: The table reports OLS regression results of income (1-4) and change in income (5-8) on two dummy variables indicating whether an individual was a supporter or an opponent. Standard errors are clustered at the individual level and displayed in parentheses. Statistical significance is indicated by asterisks according to: *p < 0.10, **p < 0.05, ***p < 0.01.

Table A4: Unemployment Experience of Supporters and Opponents

	Unemployment Experience			
	(1)	(2)	(3)	(4)
Supporter	-0.236	0.051	0.029	0.023
	(0.212)	(0.215)	(0.210)	(0.211)
Opponent	-0.726***	-0.582***	-0.571***	-0.588***
	(0.175)	(0.170)	(0.173)	(0.171)
Age	-0.272***	-0.217***	-0.228***	-0.228***
	(0.069)	(0.068)	(0.068)	(0.068)
Age^2	0.006***	0.005***	0.005***	0.005***
	(0.001)	(0.001)	(0.001)	(0.001)
Age^3	-0.000***	-0.000***	-0.000***	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)
Male	-0.721***	-0.808***	-0.736***	-0.738***
	(0.152)	(0.155)	(0.158)	(0.158)
Education				
8 Years Educ.		1.723***	1.658***	1.638***
		(0.439)	(0.487)	(0.488)
10 Years Educ.		1.069**	1.016**	0.995**
		(0.443)	(0.492)	(0.494)
High School		1.058**	0.982*	0.951*
		(0.456)	(0.504)	(0.505)
Qualification				
Vocational Degree		0.102	0.075	0.062
		(0.591)	(0.596)	(0.594)
Univ./Techn. College		-0.714	-0.723	-0.753
		(0.589)	(0.594)	(0.592)
Extraversion			-0.004	-0.004
			(0.020)	(0.020)
Agreeableness			0.056**	0.058**
			(0.023)	(0.023)
Conscientiousness			-0.030	-0.031
			(0.027)	(0.027)
Neuroticism			0.024	0.026
			(0.020)	(0.019)
Openness			-0.003	-0.004
			(0.020)	(0.020)
MfS Observation				0.164
				(0.185)
Constant	4.208***	2.284**	2.289**	2.314**
	(0.989)	(1.060)	(1.146)	(1.151)
Year FE	Yes	Yes	Yes	Yes
Individuals	678	678	678	678
Obs.	19,415	19,415	19,415	19,415
R^2	0.141	0.177	0.180	0.181

Note: The table reports OLS regression results of unemployment experience on two dummy variables indicating whether an individual was a supporter or an opponent. Standard errors are clustered at the individual level and displayed in parentheses. Statistical significance is indicated by asterisks according to: *p < 0.10, **p < 0.05, ***p < 0.01.