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DISCUSSION PAPER

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Are the Supporters of Socialism the Losers of Capitalism? Conformism in East Germany and Transition Success

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Are the Supporters of Socialism the Losers of Capitalism? Conformism in East Germany and Transition Success*

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Abstract

The empirical literature is inconclusive about whether a country's democratization has a long-lasting impact on former supporters or opponents of the bygone regime. With newly available individual-level data of former residents of the socialist German Democratic Republic (GDR), we analyze how supporters and opponents of the socialist system performed within the market-based democracy 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 politico-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 differential reactions in the post-transition period, 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 classification: H10, N44, P20, D31
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 economic performance and life satisfaction of different groups within the former autocracy. 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 different groups in the population perform after democratization 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 change of (economic) opportunities, 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 almost 8 percent compared to the majority of the population, such a wage premium is absent for former supporters of the state socialist system. 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, while former opponents do not.

We further explore whether our results are driven by the democratization of the GDR or reunification with West Germany. Using data that was collected before reunification took place, but at a time at which democratization was already initiated, we see that former supporters immediately lose from democratization. Former opponents, however, do not directly benefit from democratization. Their improvements seem to be a result of mid- to longer-term benefits of democratization, while gains of reunification appear to be subordinate.

When elucidating the channels by which our results may have been realized, we focus on individual (labor market) reactions to the transition. We see no differential behavior between conformism groups in engaging in further education, becoming self-employed, or moving to West Germany. Furthermore, we do not find compelling evidence that a preferential treatment of former opponents after democratization explains the improved labor market situation of this group. Similarly, we cannot confirm that differences in traits, such as locus of control or risk preferences, nor differences in trust are able to explain the better outcomes of the opposition group after the democratic transition. We conclude that the differences in 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.

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 and to the inclusion of further control variables.

Our study contributes to the literature about the consequences of democratization. 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., 2021; 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 shift in economic and social outcomes in the new system between former opponents and supporters of the bygone autocracy.

Finally, our study 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, higher preferences for redistribution, a reduced gender gap in labor and educational outcomes, and more negative views about immigration (Ockenfels and Weimann, 1999; Alesina and Fuchs-Schündeln, 2007; Lippmann and Senik, 2018; Campa and Serafinelli, 2019; Lange, 2021). While these well-documented legacies of the socialist period usually rely on East-West German comparisons (e.g. see Becker et al., 2020), our study focuses on differences within the GDR. It thereby contributes to a growing literature that is concerned with intra-GDR differences (see, among others, Lichter et al., 2021; Friehe et al., 2018; Friehe and Pannenberg, 2020; Bursztyn and Cantoni, 2016) 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 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

[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. (2022) and Mohr (2021) for the causes and consequences of this short period of significant opposition in the GDR.

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.

These protests peaked between September 1989 and March 1990. Starting with Monday evening peace prayers organized by church attendees in Leipzig, the movement first spread to mostly industrial southern cities, and then expanded to towns and villages throughout the GDR, reaching hundreds of thousands of protesters (Kuran, 1991). From September to November 1989 alone, 1,287 protests took place across the country (Schwabe, 1999). A critical point in the protest movement was October 9, 1989, when the SED let over 70,000 citizens protest in Leipzig without shedding blood. 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 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

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

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 as well.

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 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 online 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.

[4] In a robustness test, we extend our sample by former GDR residents who joined the GSOEP after 1990. Results are presented in Figures A1 to A3 and in Tables A2 to A4 in the online appendix and are very similar using the enlarged sample.

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., 2021). 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.

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 leaders ultimately decided not to confront the mass demonstrations in early October (Lohmann, 1994). After this date, protesting became less dangerous (Pfaff and Kim, 2003). 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.[5] 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 over five million participants (Lohmann, 1994). Demonstrations continued after the fall of the Berlin Wall on November 9, but to a much lesser extent.

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.

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

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). 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 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. We use the retrospective assessment in order to circumvent that changes in life satisfaction already have been realized in 1990 when the autocracy has been abolished.[6]

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 de-

[6] A common concern regarding retrospective life satisfaction questions is a recall bias, i.e., individuals may be more likely to keep positive than negative memories about the past. In our case, former supporters may remember mostly good things about their life in the GDR some years ago, i.e. before the system has been abolished. When we address this potential issue by considering the current life satisfaction of 1990 as the baseline satisfaction in the GDR for calculating changes in life satisfaction, the life satisfaction penalty for former supporters indeed vanishes (see Table A5 in the online appendix). This is an outcome, however, that is fairly reasonable given that the GDR system has already collapsed in 1990. The results for former opponents remain quite similar to our main results. In addition, seminal work of Diener et al. (1984) and Diener (1994) argues that currently unhappy individuals rather accurately estimate their positive past life satisfaction than currently more satisfied individuals—a circumstance that would alleviate much of the aforementioned concern and speak in favor of an immediate impact of the abolishment of the GDR system on life satisfaction.

Table 1: Summary Statistics

	Mean	SD	Min.	Max.	N
Life Satisfaction	6.42	1.71	0	10	19,145
Life Satisfaction 5 years ago	6.23	2.53	0	10	19,145
Log Gross Labor Income	7.15	0.70	3.90	10.00	10,831
Log Labor Income 1989	5.61	0.52	3.37	6.59	17,958
Unemployment Experience in Years	1.38	2.74	0	26	19,145
SED Member	0.17	0.38	0	1	19,359
X-Area	0.03	0.18	0	1	19,145
Supporter	0.18	0.39	0	1	19,145
Opponent	0.23	0.42	0	1	19,145
Age	51.60	13.70	18	93	19,145
Male	0.42	0.49	0	1	19,145
Education					
No formal Educ.	0.00	0.05	0	1	19,145
8 years	0.25	0.43	0	1	19,145
10 years	0.57	0.49	0	1	19,145
High School	0.17	0.38	0	1	19,145
Qualification					
None	0.03	0.17	0	1	19,145
Vocational Degree	0.66	0.47	0	1	19,145
University/College	0.31	0.46	0	1	19,145
Extraversion	6.24	3.20	-5	13	19,145
Agreeableness	8.45	2.83	-3	13	19,145
Conscientiousness	10.23	2.42	-4	13	19,145
Neuroticism	4.33	3.27	-5	13	19,145
Openness	13.18	3.33	3	21	19,145
Observed by MfS	0.21	0.41	0	1	19,145
West Migration	0.05	0.22	0	1	19,145
Further Training	0.30	0.46	0	1	17,401
Occupational Change	0.81	0.40	0	1	14,996
Self-Employment	0.08	0.27	0	1	19,145
Public Employment	0.31	0.46	0	1	11,787
Log Income in Public Sector	7.24	0.72	4.37	9.32	3,232
Manager in Public Sector	0.01	0.12	0	1	3,587

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.

pendent 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 a set of additional variables for this analysis: further training, occupational change, self-employment, migration to the West, as well as income, employment, and managerial positions in the public sector. Each of these variables are dummy variables (besides of income) that become one and remain so for the rest of the observational period, if an individual was engaged in the respective action.[7]

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

[7]See Table A1 in the online appendix for the full description.

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 quadratic 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.

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).[8] Non-cognitive skills, such as personality, are shown to predict 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.

[8] 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 asked in 2005, 2009, 2013, 2017.

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

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.

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 that read as follows:

$$y_{it} = \alpha + \beta_1 Supporter_i + \beta_2 Opponent_i + \gamma X_{it} + \delta_t + \delta_s + \epsilon_{it} \ .$$

The dependent variable y_{it} constitutes either the level of our outcomes or the change in outcomes with respect to the GDR period. Our main explanatory variables are the classifications of support for ($Supporter_i$) or opposition to ($Opponent_i$) the socialist system in the GDR. All estimations include a set of baseline control variables X_{it}, i.e. gender and a quadratic polynomial of age, as well as survey year (δ_t) and federal state (δ_s) fixed effects. Standard errors are clustered at the individual level.

We also present estimation results of a full-fledged model that additionally controls for three sets of variables in X_{it} that could potentially confound the estimation of our main parameters of interest β_1 and β_2. 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.

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, as well as for state and survey year fixed effects. Even columns present the full model including additional control variables.[9] 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 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 statistical significant wage premium of almost 8 percent. This higher income level of opponents after transition (Panel A) 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 politically inactive majority of former GDR citizens. The premium in satisfaction levels for former opponents, the wage premium of almost 8 percent, and their lower unemployment

[9]The estimated coefficients of covariates are shown in Table A6 in the online appendix.

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	0.086	-0.014	0.129**	0.042	-0.162	0.101
	(0.117)	(0.106)	(0.050)	(0.044)	(0.249)	(0.243)
Opponent	0.362***	0.266***	0.134***	0.078**	-0.698***	-0.543***
	(0.107)	(0.096)	(0.043)	(0.037)	(0.182)	(0.180)
Baseline Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Additional Control Variables	No	Yes	No	Yes	No	Yes
Survey Year and State Fixed Effects	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	0.025	0.095	0.510	0.609	0.140	0.194
Panel B: Changes						
Supporter	-0.989***	-1.002***	0.073	-0.023		
	(0.250)	(0.248)	(0.070)	(0.065)		
Opponent	0.744***	0.597**	0.161***	0.104**		
	(0.253)	(0.256)	(0.054)	(0.049)		
Baseline Control Variables	Yes	Yes	Yes	Yes		
Additional Control Variables	No	Yes	No	Yes		
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes		
Individuals	678	678	618	618		
Obs.	19,415	19,415	10,776	10,776		
R^2	0.042	0.074	0.587	0.619		

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.

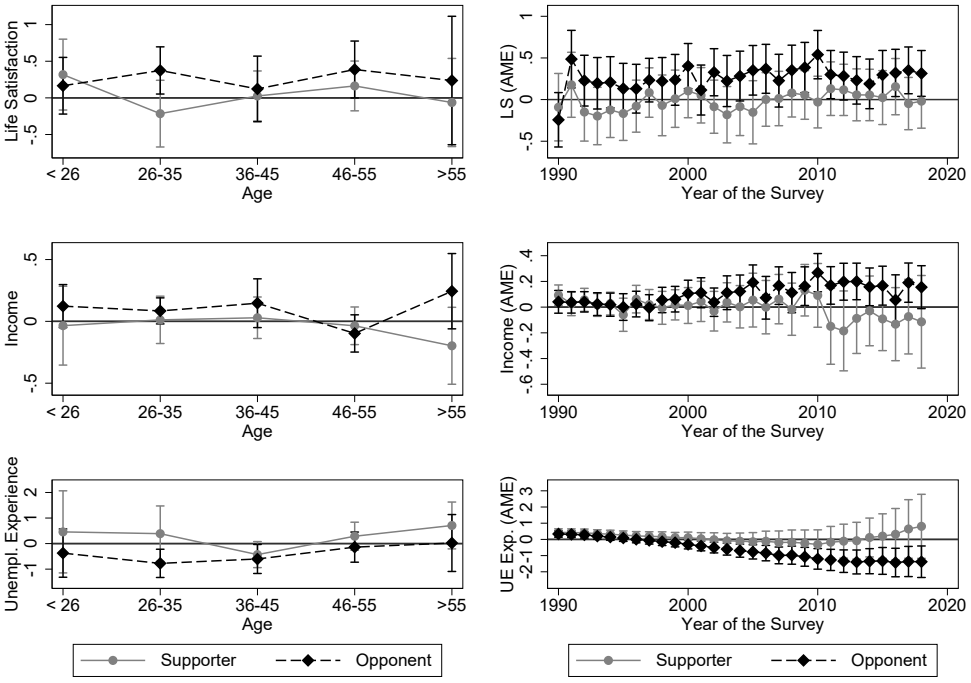
experience hint at a substantial improvement of life conditions of this group. In sum, former opponents fare well relative to the politically inactive majority of the population, whereas former supporters of the GDR lose substantially in terms of life satisfaction.

4.1.1 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

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.

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 for former opponents reduces relative to the unemployment experience of 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 professionals. To discard the burden of the past, even the communist successor party, *die Linke*, excluded most old leaders (although many members remained active in the new party) (Avdeenko, 2018).

4.1.2 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, i.e. individuals who were at the beginning of their career but had already completed their education.[10]

4.1.3 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 is the case and focus on individual reactions to the transition shock as well as on potential mechanisms. We concentrate on two approaches in order to do so. First, we look at potential differential reactions to the transition by conformism groups and elucidate on individual behavior that may have an 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). Second, we focus on two conjectures why former opponents and supporters perform differently after the collapse of the GDR. On the one hand, opponents may feature better outcomes under democracy because they received a preferential treatment by West German authorities. 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. Thus, if former opponents were subject to positive discrimination, we would observe more former opponents employed in the public sector and holding better positions also within this sector than former supporters or the politically inactive population. On the other hand, former opponents may differ from former supporters by a thus far unobserved personality trait that determines both, outcomes under democracy as well as conformism in state socialism.

How the 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 training 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,

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

however, we do not see an increased propensity for vocational upgrading of former opponents nor former supporters. The tendency to engage in further training 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 could be the case that the more positive outcomes of former opponents arise due to a favorable treatment of this group in the new system. We aim to test for this by investigating whether former opponents are more likely (i) to be employed in the public sector, (ii) to have higher salaries in the public sector, and (iii) to hold managerial positions in the public sector than other conformism groups. Table 5 shows the results of this analysis. Once the full model is estimated, we do not see any tendency that former opponents have a higher likelihood to work in the public sector, nor to be better paid or hold a more prestigious position in this sector compared to the politically inactive majority. The same seems to be true for former supporters. In sum, we could not find a preferential treatment of former opponents in the public sector.

Finally, we check whether conformism in the GDR and post-transition outcomes are driven by a thus far neglected personality trait. In order to do so, we augment our main estimation model by three variables: locus of control, risk preferences, and trust. These personality traits relate positively to labor market outcomes and life satisfaction (Borghans et al., 2008; Bonin et al., 2007; Dohmen et al., 2008; Heineck and Anger, 2010; Lu et al., 2020). The results of this analysis can be found in Table A7 in the online appendix. Our parameters of interest hardly react to the inclusion of these additional variables.

The causes for the estimated differences between former opponents and former supporters of the GDR system remain somewhat unclear. Our analysis could not confirm the relevance of differential behavior on the labor market after the collapse of the GDR, nor could we detect a positive discrimination of opponents in the public sector, or find a personality trait that may explain different post-transition outcomes. Nonetheless, it remains plausible 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 may be explained by eliminated 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.

Table 4: Individual Responses to the Transition

	Further Training		Occ. Change		Self-Employment		West Migration	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Supporter	0.101**	0.056	0.109***	0.124***	-0.023	-0.026	0.004	0.001
	(0.040)	(0.040)	(0.027)	(0.028)	(0.024)	(0.024)	(0.009)	(0.010)
Opponent	0.080**	0.046	0.026	0.035	0.022	0.008	0.000	0.000
	(0.040)	(0.039)	(0.032)	(0.033)	(0.025)	(0.027)	(0.009)	(0.010)
Baseline Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Additional Control Variables	No	Yes	No	Yes	No	Yes	No	Yes
Survey Year and State Fixed Effects	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	0.132	0.181	0.118	0.129	0.034	0.054	0.683	0.686

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.

Table 5: Positive Discrimination in the Public Sector

	Public		Income Public		Manager Public	
	(1)	(2)	(3)	(4)	(5)	(6)
Supporter	0.013	-0.014	0.086	0.056	0.013	0.010
	(0.049)	(0.050)	(0.058)	(0.048)	(0.011)	(0.011)
Opponent	0.034	-0.002	0.173***	0.077	0.006	0.002
	(0.040)	(0.039)	(0.054)	(0.048)	(0.015)	(0.015)
Baseline Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Additional Control Variables	No	Yes	No	Yes	No	Yes
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Individuals	660	660	614	614	664	664
Obs.	11,787	11,787	3,232	3,232	3,587	3,587
R^2	0.059	0.105	0.674	0.729	0.023	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.

4.1.4 Democratization vs. Reunification

Our results in the previous sections document significant differences in life satisfaction and earnings by conformism group. Given our unique setting of the abolishment of state socialism in East Germany that was almost immediately followed by reunification with West Germany, the estimated differences may arise due to two reason. One the one hand, the democratization of East Germany may have sparked immediate changes in outcomes of supporters and opponents of the former regime. On the other hand, not democratization but the swift reunification with West Germany caused these differential changes by conformism.

In this subsection, we aim to elucidate on both possible explanations for our main results. In order to do so, we zoom into the immediate responses of life satisfaction and wages after the collapse of the GDR. Using only data from the survey in 1990, we explore how our main outcomes differ between their levels in the GDR before the fall of the Berlin wall, i.e. prior to November 1989, and their manifestations in summer 1990, i.e. after the first free elections in the GDR took place but before reunification was completed. By this analysis, we are able to gauge the immediate reactions in the outcomes that can be attributed to the effect of democratization.

Figure 2 plots the average marginal effects of a our conformism groups from a regression that is restricted to the survey data from 1990. The left panel of Figure 2 presents the differences in life satisfaction in 1985 (retrospectively asked in 1990) and 1990 for supporters and opponents of the old system relative to the politically inactive majority. The right panel shows the differences in log income between earnings in May 1989 and in May 1990 (asked for both in 1990). Both panels show that former supporters lose their premium in life satisfaction and income immediately after the collapse of the GDR. The point estimate for former opponents increases for both outcomes but remains statistically indistinguishable from zero.

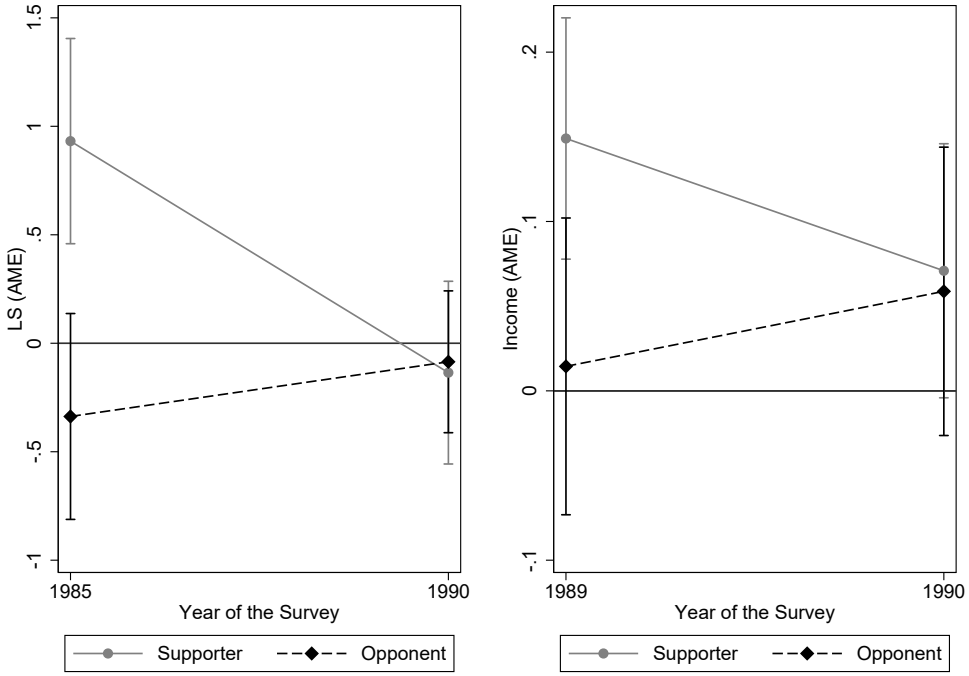
These results suggest that democratization had a direct impact on the well-being of former supporters of the GDR system. Former opponents, however, do not benefit immediately from democratization. For this group, the positive total effects derived from our main analysis may be influenced by mid- to longer-term effects of democratization and/or by the reunification of Germany. Benefits of reunification to former opponents may be primarily associated with a potential preferential treatment of this group by West German authorities as well as with the possibility to freely move to West Germany in order to reap the wage premium in West Germany. Our results from the previous section, however, undermine a potential differential effect of reunification on conformism groups, as opponents are not more likely to move to West Germany, nor more likely to have a steeper careers in the public sector.

Thus, it seems that our results are more influenced by democratization than by reunification. However, this analysis is only indicative and should be taken with a grain of salt as we cannot rule out differential anticipation effects of reunification between conformism groups, a differential recall bias in life satisfaction between conformism groups, nor do we find clear evidence that opponents directly benefited from democratization.

4.2 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 3 shows the asso-

Figure 2: Outcomes of Democratization



Note: The graphs on the left-hand side show the average marginal effect (AME) of life satisfaction (left-hand side) and income (right-hand side) 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 year dummy variables. Data is taken from GSOEP (see Section 3). 95 percent confidence intervals are shown. Own depiction.

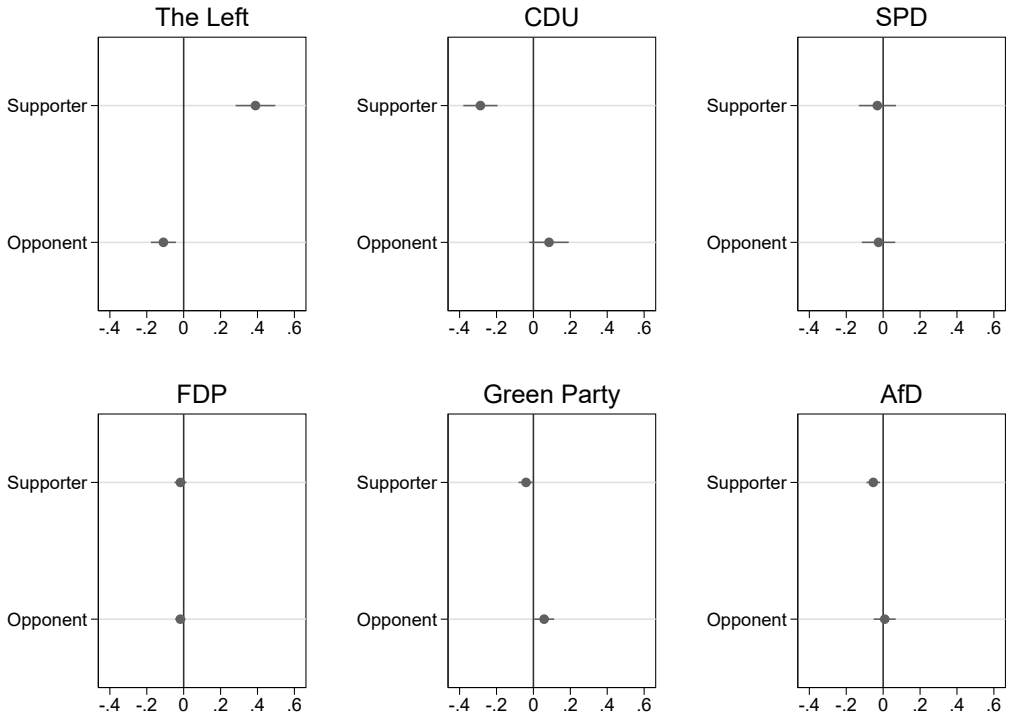
ciation between individuals' differences in conformism in the GDR and their preferences for the six major parties in Germany. Former supporters of the GDR system substantially favor the successor party of the SED, *The Left*, and are less likely to vote for the CDU, Germany's major conservative party, 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 A4 in the online appendix). Moreover, Figure A5 in the online appendix shows that these political preferences are relatively stable over time within conformism groups.

4.3 Robustness

In this section, we examine the sensitivity of our results regarding the sampling design, the way we identify former opponents of the GDR, and the inclusion of further, potentially important covariates. The respective tables and figures of these additional analyses can be found in the

Figure 3: 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.

online appendix.

First, we explore the representativeness of our sample with regard to the East German population at the time of reunification. We do so by using the full sample of East Germans that were interviewed in 1990 as the reference group for our sample that includes East Germans that were interviewed in 1990 and 2018. The full sample was drawn in such a way that it is representative for the East German population at that time. Table A8 compares our sample with the full sample of East Germans with respect to the means of key variables that have been surveyed in 1990. In terms of our main outcomes, we do not see a statistically significant difference in means between the full sample and our sample. Respondents in our sample are on average about three years younger than in the full sample—a reasonable deviation given that older people are more likely to drop out of the survey due to our long observational period. Furthermore, respondents in our sample seem to be on average slightly better educated and more women are included in our sample as compared to the full sample. Given that we follow individuals over almost three decades in our sample, the deviations from the full sample are astonishingly minor. In addition to this comparison, we reconduct our main analyses by including longitudinal weights to control for survey attrition, averaging all variables over all survey waves 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 in

order to gauge the sensitivity of our results with respect to alterations in sampling. Figures A1 to A3 in the appendix give a concise overview about how our parameters of interest change by weighting and the alteration of the sampling. Tables A2 to A4 present further details of the robustness check. In all three additional specifications, the coefficients of interest remain mostly unchanged, indicating the robustness of our results regarding sampling and potential survey attrition.

Second, we redefine how we identify former opponents of the autocracy. While our measures of former supporters precisely capture approval of the state socialist system, definitions of opponents are less clear cut. Even though protest participation is a strong signal of discontent with the regime, there are also other possibilities to capture oppositional attitudes toward the GDR autocracy. We utilize two additional concepts how to identify oppositional attitudes toward the regime: whether an individual attended church services regularly and whether an individual intended to leave the GDR.[11]

As churches played a vital role for the opposition movement in the GDR (Tyndale, 2016) they are a natural candidate for identifying opposition to the GDR system. At the same time, religion and religious people themselves were heavily oppressed in the GDR. This circumstance may confound our estimate of interest of oppositional identities by severe repression experience when church attendance is used as a proxy for opposition against the former regime. Thus, we expect results to be much more driven by the consequences of repression, when using regular church attendance as an alternative measure of opposition status. Table A9 shows the results for our main outcomes when we categorize opposition by regular church attendance. Results remain fairly stable in terms of life satisfaction in levels (Panel A). A statistically significant change in life satisfaction is, however, absent for regular church attendees in the GDR (Panel B). Similarly, positive influences on labor market performance could not be find. These results are in line with the idea that repression experience had a negative impact on economic outcomes (see also Lichter et al., 2021), but not on life satisfaction.

If individuals wanted to leave the GDR, discontent with the autocracy had to be high. We therefore also employ emigration intentions as an alternative measure of opposition status. However, emigration intentions—surveyed retrospectively in 2018—were less frequent than church attendance or protest participation and are less reliable given a potentially severe recall bias. Table A10 presents estimates of our parameters of interest with emigration intentions as proxy for opposition status. In terms of life satisfaction, we do not see a difference in levels between individuals who had emigration intentions and the politically inactive majority (Panel A), but much more pronounced differences in changes (Panel B) compared to our main results. This may be driven by a rather low life satisfaction in the GDR by individuals with emigration intentions. The point estimates for labor income show the same pattern as in our main results, but do not become statistically distinguishable from zero due to higher imprecision in the estimates.

Taken together, these alternative measures for oppositional status in the GDR corroborate our main results using protest participation as an indicator for non-conformism in the autocracy. Nonetheless, there remain some differences in the point estimates that can by and large be

[11] Please see Table A1 for details concerning the precise definition of these variables.

explained by other confounding factors (church attendance) as well as less precision in the estimates (emigration intentions).

Finally, we turn to other, potentially omitted variables. As we have seen in the upper paragraphs, other definitions for oppositional status generate similar results. While the alternative proxies for opposition status may also measure other dimensions of life, we add them as further controls to our estimation model. Even though the alternative measures for opposition status are correlated with protest participation (see Table A11), the parameters of interest remain fairly stable (Table A12).

A further concern could be that the main outcomes as well as conformism is influenced by a rural-urban divide in the GDR. Controlling for state fixed effects reduce this concern only marginally as these fixed effects control only for disparities between regions but not within. In order to adjust for potential rural-urban differences, we further control for the distance to the next large city.[12] Table A13 in the online appendix presents the estimates when further controlling for this distance measure—results hardly change.

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 the autocracy and enables us to compare their life satisfaction and labor market outcomes in two very different politico-economic systems.

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. Former opponents lose directly after the collapse of the GDR in terms of life satisfaction—a circumstance that strengthens the interpretation that democratization may be more important for the outcomes of former supporters than reunification. Similarly, the improved outcomes of former opponents do not seem to be influenced by new opportunities created by reunification nor by a potential preferential treatment by West German authorities. We conclude that the most plausible cause for improvements of outcomes of former opponents is the removal of discriminatory practices by the autocracy.

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 different outcomes of conformism groups than in the other former state socialist and communist countries in central and eastern Europe.

[12] See Table A1 for a characterization of this variable.

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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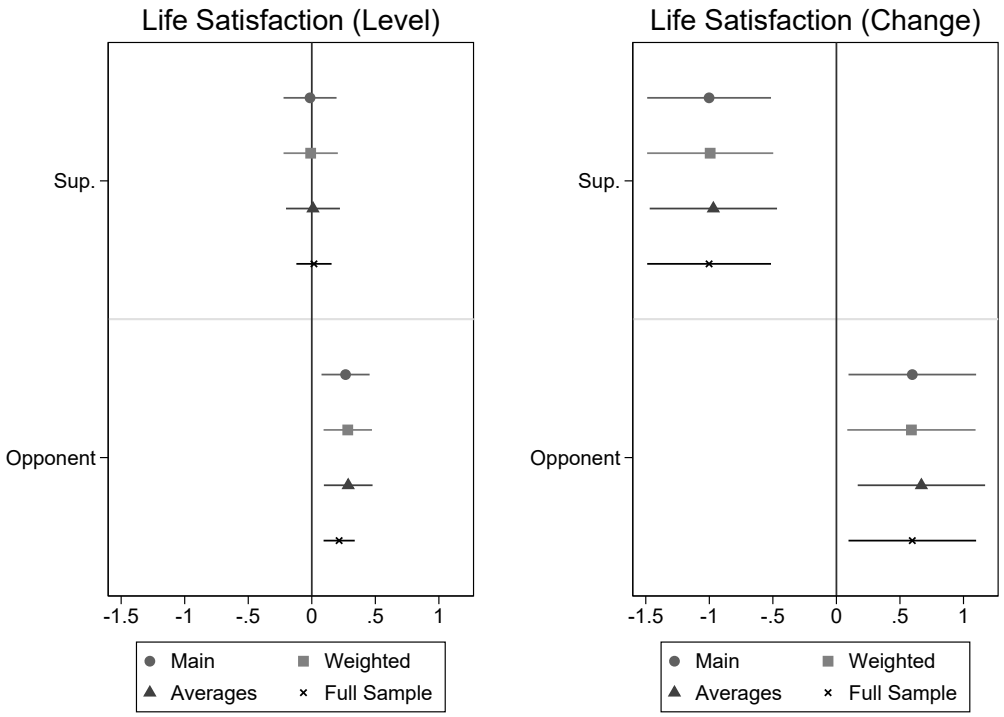
A Online Appendix

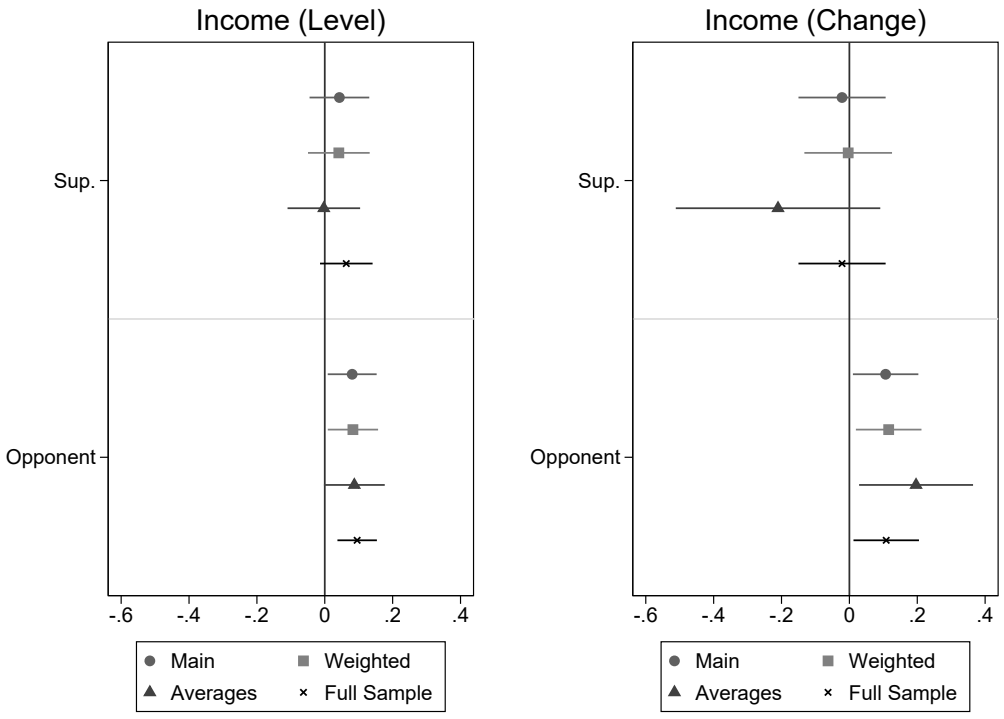
A.1 Figures

Figure A1: Robustness of Life Satisfaction



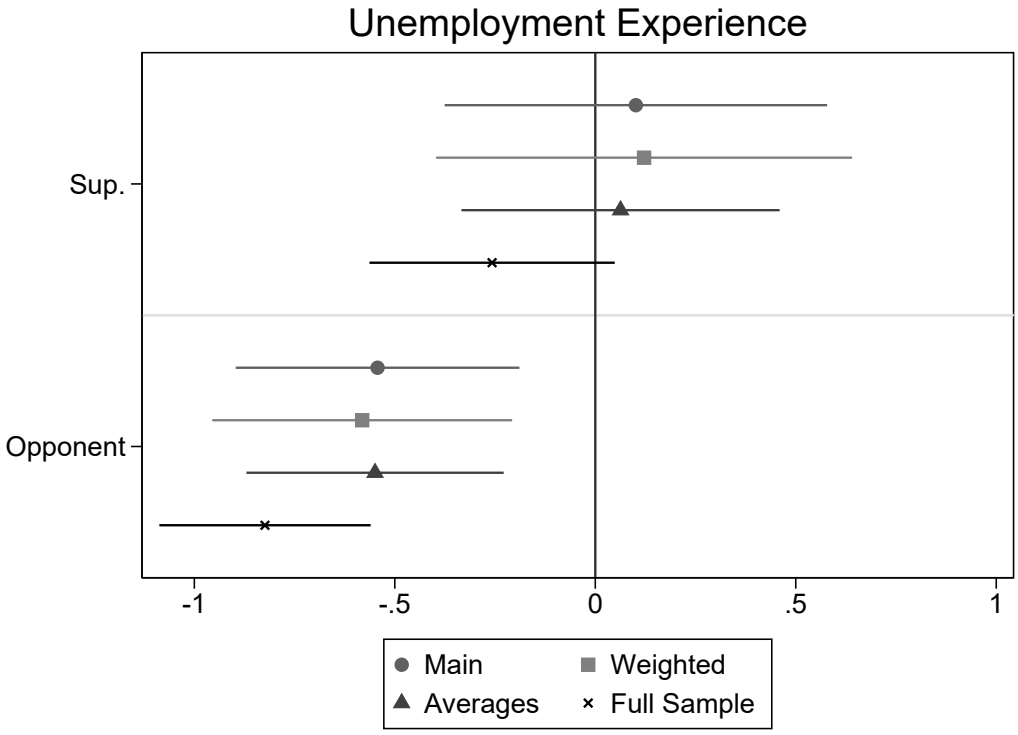
Note: The graphs show the coefficients of the main regressions (Table 3), once with the original sample, with weights applied, the averages of all variables (number of observations = individuals), and with the full sample. 95 percent confidence intervals are shown. Own depiction.

Figure A2: Robustness of Income



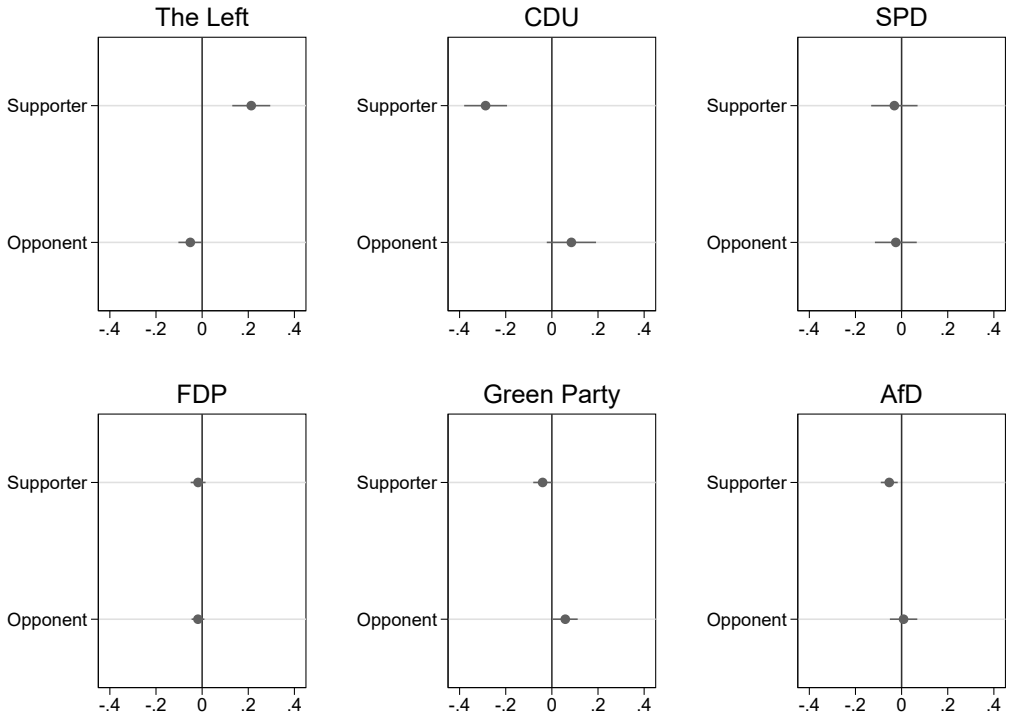
Note: The graphs show the coefficients of the main regressions (Table 3), once with the original sample, with weights applied, the averages of all variables (number of observations = individuals), and with the full sample. 95 percent confidence intervals are shown. Own depiction.

Figure A3: Robustness of Unemployment Experience



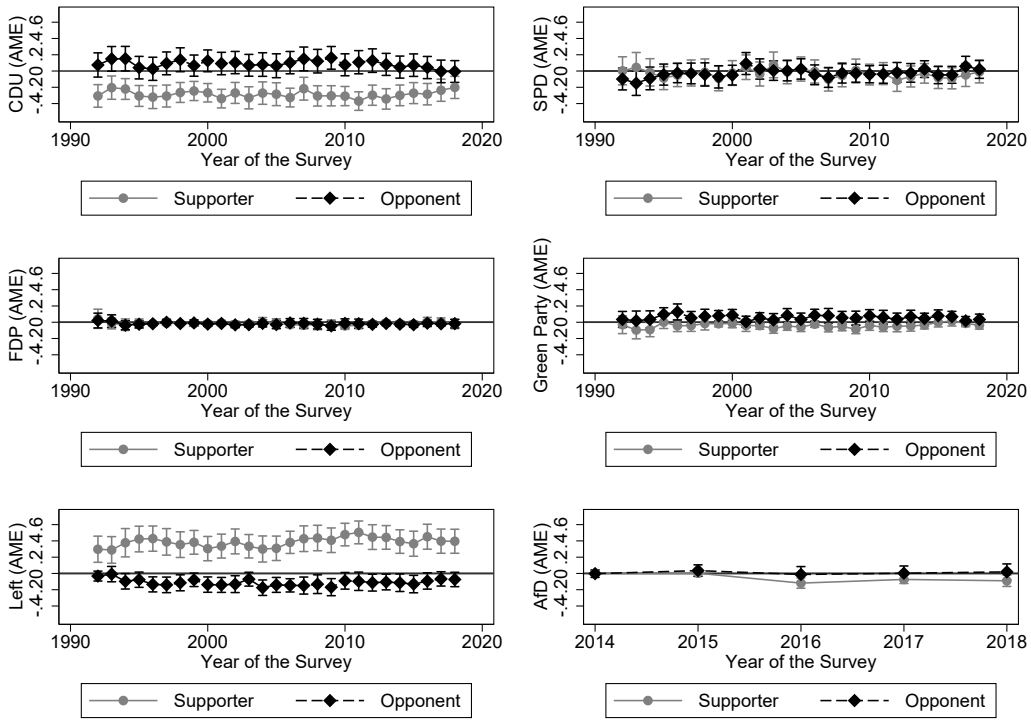
Note: The graphs show the coefficients of the main regressions (Table 3), once with the original sample, with weights applied, the averages of all variables (number of observations = individuals), and with the full sample. 95 percent confidence intervals are shown. Own depiction.

Figure A4: 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 A5: 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.

A.2 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
Church Attendance	Attend Church Or Other Religious Events "weekly" or "monthly" (=1) "less frequently" or never (=0); inserted for all other years	1990
Emigration intentions	planned move to FRG, application for departure, (thought about) flight to FRG (=1), otherwise (=0)	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)	2018
	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
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

Operationalization of Variables (continued)

Variables	**Item**	**Years**
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
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
Distance To Nearest City Center	Dummies for below 10 km distance, 10-25 km, 25-40 km, 40-60 km, and above 60 km	1994, 99, 2004, 09, 14
Risk Preference	"Would you describe yourself as someone who tries to avoid risks (risk-averse) or as someone who is willing to take risks (risk-prone)?" (0-10)	2004, 06, 08-18
Trust	People can generally be trusted (1: fully disagree, 2:somewhat disagree, 3: somewhat agree, 4: fully agree)	2003, 08, 13, 18
Locus of Control	I have little control over my life (1-7; 1: fully disagree, 7: fully agree)	2005, 10, 15

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 and preferences (risk, locus of control, trust) are shown to be quite constant over the life course from adulthood onwards (Caliendo et al., 2014; Schildberg-Hörisch, 2018)), we use measures of them that have been surveyed post-transition. More specifically, if a personality trait or a preference 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: Robustness of Life Satisfaction

	Main (1)	Weighted (2)	Averages (3)	Full Sample (4)
Panel A: Levels				
Supporter	-0.014	-0.009	0.009	0.017
	(0.106)	(0.109)	(0.108)	(0.071)
Opponent	0.266***	0.283***	0.287***	0.215***
	(0.096)	(0.097)	(0.098)	(0.063)
Baseline Control Variables	Yes	Yes	Yes	Yes
Additional Control Variables	Yes	Yes	Yes	Yes
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes
Individuals	678	678	678	2,062
Obs.	19,415	18,737	678	37,860
R^2	0.095	0.100	0.187	0.120
Panel B: Changes				
Supporter	-1.002***	-0.993***	-0.968***	-1.002***
	(0.248)	(0.253)	(0.255)	(0.248)
Opponent	0.597**	0.590**	0.669***	0.597**
	(0.256)	(0.257)	(0.255)	(0.256)
Baseline Control Variables	Yes	Yes	Yes	Yes
Additional Control Variables	Yes	Yes	Yes	Yes
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes
Individuals	678	678	678	678
Obs.	19,415	18,737	678	19,415
R^2	0.074	0.074	0.073	0.074

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.

Table A3: Robustness of Labor Income

	Main (1)	Weighted (2)	Averages (3)	Full Sample (4)
Panel A: Levels				
Supporter	0.043	0.041	-0.003	0.063
	(0.045)	(0.046)	(0.054)	(0.039)
Opponent	0.081**	0.083**	0.087*	0.095***
	(0.037)	(0.038)	(0.046)	(0.030)
Baseline Control Variables	Yes	Yes	Yes	Yes
Additional Control Variables	Yes	Yes	Yes	Yes
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes
Individuals	618	618	618	1,671
Obs.	10,831	10,380	618	23,001
R^2	0.603	0.532	0.422	0.414
Panel B: Changes				
Supporter	-0.022	-0.003	-0.210	-0.022
	(0.065)	(0.066)	(0.153)	(0.065)
Opponent	0.107**	0.116**	0.197**	0.109**
	(0.049)	(0.049)	(0.085)	(0.049)
Baseline Control Variables	Yes	Yes	Yes	Yes
Additional Control Variables	Yes	Yes	Yes	Yes
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes
Individuals	618	618	618	618
Obs.	10,831	10,380	618	10,837
R^2	0.613	0.502	0.300	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.

Table A4: Robustness of Unemployment Experience

	Main	Weighted	Averages	Full Sample
	(1)	(2)	(3)	(4)
Levels				
Supporter	0.101	0.122	0.063	-0.257*
	(0.243)	(0.264)	(0.202)	(0.156)
Opponent	-0.543***	-0.581***	-0.549***	-0.824***
	(0.180)	(0.190)	(0.163)	(0.134)
Baseline Control Variables	Yes	Yes	Yes	Yes
Additional Control Variables	Yes	Yes	Yes	Yes
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes
Individuals	678	678	678	678
Obs.	16,169	15,491	678	37,822
R^2	0.194	0.194	0.155	0.158

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.

Table A5: Life Satisfaction Change from 1990

	Life Satisfaction	
	(1)	(2)
Supporter	0.178	0.104
	(0.191)	(0.191)
Opponent	0.426***	0.353**
	(0.154)	(0.150)
Baseline Control Variables	Yes	Yes
Additional Control Variables	No	Yes
Survey Year and State Fixed Effects	Yes	Yes
Individuals	678	678
Obs.	19,415	19,415
R^2	0.034	0.055

Note: The table reports OLS regression results of the change in life satisfaction on two dummy variables indicating whether an individual was a supporter or a 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.

Table A6: Main Results with Control Variables shown

	Life Satisfaction (1)	Income (2)	Unempl. Exper. (3)
Supporter	-0.014	0.043	0.033
	(0.106)	(0.045)	(0.212)
Opponent	0.266***	0.081**	-0.576***
	(0.096)	(0.037)	(0.174)
Age	-0.018	0.064***	0.106***
	(0.013)	(0.008)	(0.019)
Age^2	0.000	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)
Male	0.087	0.223***	-0.762***
	(0.089)	(0.034)	(0.159)
Education			
8 Years	-1.106**	0.292***	1.840***
	(0.511)	(0.055)	(0.549)
10 Years	-1.034**	0.419***	1.215**
	(0.518)	(0.056)	(0.552)
High School	-1.046**	0.560***	1.203**
	(0.531)	(0.085)	(0.564)
Qualification			
Vocational Degree	0.128	0.223***	0.053
	(0.199)	(0.065)	(0.607)
Univ./Techn. College	0.371*	0.496***	-0.799
	(0.221)	(0.077)	(0.609)
Extraversion	0.042***	-0.000	-0.007
	(0.012)	(0.005)	(0.020)
Agreeableness	0.018	-0.015***	0.057**
	(0.015)	(0.005)	(0.024)
Conscientiousness	0.013	-0.001	-0.031
	(0.015)	(0.006)	(0.028)
Neuroticism	-0.098***	-0.008**	0.022
	(0.011)	(0.004)	(0.019)
Openness	0.021*	0.009*	-0.003
	(0.012)	(0.005)	(0.020)
MfS Observation	0.007	0.008	0.215
	(0.101)	(0.043)	(0.187)
Constant	7.366***	3.964***	-4.435***
	(0.773)	(0.228)	(1.073)
Survey Year and State Fixed Effects	Yes	Yes	Yes
Individuals	678	618	678
Obs.	19,415	10,831	19,415
R^2	0.095	0.603	0.183

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. 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.

Table A7: Additional Controls: risk, locus of control, and trust

	Life Satisfaction		Labor Income		Unempl. Experience	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Levels						
Supporter	0.073	-0.043	0.120**	0.037	-0.139	0.086
	(0.115)	(0.100)	(0.048)	(0.044)	(0.249)	(0.242)
Opponent	0.339***	0.213**	0.158***	0.069*	-0.709***	-0.529***
	(0.107)	(0.091)	(0.042)	(0.036)	(0.185)	(0.177)
Baseline Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Additional Control Variables	No	Yes	No	Yes	No	Yes
Survey Year and State Fixed Effects	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	0.035	0.140	0.534	0.613	0.149	0.199
Panel B: Changes						
Supporter	-0.999***	-1.001***	0.058	-0.026		
	(0.248)	(0.246)	(0.068)	(0.064)		
Opponent	0.675***	0.593**	0.187***	0.095*		
	(0.258)	(0.255)	(0.053)	(0.049)		
Baseline Control Variables	Yes	Yes	Yes	Yes		
Additional Control Variables	No	Yes	No	Yes		
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes		
Individuals	678	678	618	618		
Obs.	19,415	19,415	10,776	10,776		
R^2	0.055	0.079	0.597	0.620		

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.

Table A8: Representativeness

	Full Sample	Used Sample	Difference	No. Obs.
Life Satisfaction	6.63	6.71	-0.09	2,692
Life Satisfaction 5 years ago	6.31	6.23	0.08	2,692
Log Gross Labor Income	5.79	5.80	-0.01	1,706
Log Labor Income 1989	5.60	5.61	-0.01	2,361
Unemployment Experience in Years	0.03	0.02	0.01	2,693
Age	40.40	37.54	2.86***	2,693
Male	0.47	0.42	0.05**	2,693
Education				
No formal Educ.	0.01	0.00	0.01**	2,693
8 years	0.33	0.25	0.08***	2,693
10 years	0.50	0.57	-0.07***	2,693
High School	0.16	0.17	-0.02	2,693
Vocational Degree				
None	0.05	0.03	0.02**	2,693
Vocational Degree	0.68	0.66	0.02	2,693
University/College	0.28	0.31	-0.03*	2,693
Extraversion	6.37	6.28	0.09	2,693
Agreeableness	8.42	8.53	-0.12	2,693
Conscientiousness	10.19	10.39	-0.20*	2,693
Neuroticism	4.50	4.50	-0.01	2,693
Openness	13.13	13.18	-0.04	2,693
Individuals	2,015	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.

Table A9: Opponents: Church Attendance

	Life Satisfaction		Labor Income		Unempl. Experience	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Levels						
Supporter	0.024	-0.041	0.058	0.008	-0.063	0.122
	(0.113)	(0.104)	(0.048)	(0.044)	(0.236)	(0.230)
Opponent	0.372**	0.434***	-0.078	-0.090	-0.372	-0.417
	(0.173)	(0.153)	(0.067)	(0.060)	(0.261)	(0.256)
Baseline Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Additional Control Variables	No	Yes	No	Yes	No	Yes
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Individuals	678	678	618	618	678	678
Obs.	18,927	18,927	10,579	10,579	15,808	15,808
R^2	0.032	0.095	0.527	0.609	0.139	0.190
Panel B: Changes						
Supporter	-1.199***	-1.182***	-0.014	-0.067		
	(0.248)	(0.250)	(0.067)	(0.065)		
Opponent	0.134	0.058	-0.076	-0.093		
	(0.362)	(0.373)	(0.084)	(0.077)		
Baseline Control Variables	Yes	Yes	Yes	Yes		
Additional Control Variables	No	Yes	No	Yes		
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes		
Individuals	678	678	618	618		
Obs.	18,927	18,927	10,579	10,579		
R^2	0.047	0.068	0.592	0.617		

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.

Table A10: Opponents: Emigration Intentions

	Life Satisfaction		Labor Income		Unempl. Experience	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Levels						
Supporter	-0.021	-0.137	0.100**	0.038	-0.095	0.157
	(0.116)	(0.109)	(0.048)	(0.045)	(0.228)	(0.228)
Opponent	0.128	0.020	0.128*	0.094	-0.001	-0.014
	(0.144)	(0.133)	(0.066)	(0.058)	(0.305)	(0.284)
Baseline Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Additional Control Variables	No	Yes	No	Yes	No	Yes
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Individuals	678	678	618	618	678	678
Obs.	18,553	18,553	10,432	10,432	15,536	15,536
R^2	0.030	0.090	0.533	0.610	0.137	0.186
Panel B: Changes						
Supporter	-1.075***	-1.081***	0.029	-0.034		
	(0.249)	(0.254)	(0.067)	(0.066)		
Opponent	1.209***	1.087***	0.117	0.086		
	(0.398)	(0.396)	(0.086)	(0.079)		
Baseline Control Variables	Yes	Yes	Yes	Yes		
Additional Control Variables	No	Yes	No	Yes		
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes		
Individuals	678	678	618	618		
Obs.	18,553	18,553	10,432	10,432		
R^2	0.063	0.076	0.597	0.619		

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.

Table A11: Correlation of Opponent Groups

	Demonstration	Church Attendance	Emigration Intentions
Demonstration	1.0000		
Church Attendance	0.2045***	1.0000	
	0.0000		
Emigration Intentions	0.2691***	0.0624***	1.0000
	0.0000	0.0000	

Statistical significance is indicated by asterisks according to: *p < 0.10, **p < 0.05, ***p < 0.01.

Table A12: Additional Controls: attending church and emigration intentions

	Life Satisfaction		Labor Income		Unempl. Experience	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Levels						
Supporter	0.073	-0.047	0.120**	0.048	-0.139	-0.005
	(0.115)	(0.114)	(0.048)	(0.046)	(0.249)	(0.246)
Opponent	0.339***	0.200*	0.158***	0.081**	-0.709***	-0.571***
	(0.107)	(0.104)	(0.042)	(0.041)	(0.185)	(0.184)
Baseline Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Additional Control Variables	No	No	No	Yes	No	Yes
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Individuals	678	678	618	618	678	678
Obs.	19,415	18,235	10,776	10,294	16,169	15,285
R^2	0.035	0.095	0.534	0.613	0.149	0.195
Panel B: Changes						
Supporter	-0.999***	-0.944***	0.058	-0.017		
	(0.248)	(0.269)	(0.068)	(0.067)		
Opponent	0.675***	0.384	0.187***	0.109**		
	(0.258)	(0.276)	(0.053)	(0.052)		
Baseline Control Variables	Yes	Yes	Yes	Yes		
Additional Control Variables	No	No	No	Yes		
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes		
Individuals	678	678	618	618		
Obs.	19,415	18,235	10,776	10,294		
R^2	0.055	0.079	0.597	0.618		

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.

Table A13: Additional Controls: Distance to Large City (imputed)

	Life Satisfaction		Labor Income		Unempl. Experience	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Levels						
Supporter	0.073	-0.008	0.120**	0.038	-0.139	0.094
	(0.115)	(0.106)	(0.048)	(0.044)	(0.249)	(0.236)
Opponent	0.339***	0.264***	0.158***	0.070*	-0.709***	-0.569***
	(0.107)	(0.096)	(0.042)	(0.037)	(0.185)	(0.186)
Baseline Control Variables	Yes	Yes	Yes	Yes	Yes	Yes
Additional Control Variables	No	Yes	No	Yes	No	Yes
Survey Year and State Fixed Effects	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	0.035	0.097	0.534	0.612	0.149	0.201
Panel B: Changes						
Supporter	-0.999***	-1.020***	0.058	-0.028		
	(0.248)	(0.244)	(0.068)	(0.064)		
Opponent	0.675***	0.559**	0.187***	0.091*		
	(0.258)	(0.256)	(0.053)	(0.049)		
Baseline Control Variables	Yes	Yes	Yes	Yes		
Additional Control Variables	No	Yes	No	Yes		
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes		
Individuals	678	678	618	618		
Obs.	19,415	19,415	10,776	10,776		
R^2	0.055	0.077	0.597	0.620		

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.

Table A14: Outcomes of Democratization

	Life Satisfaction		Income	
	1985	1990	1989	1990
	(1)	(2)	(3)	(4)
Supporter	0.903***	-0.106	0.137***	0.092**
	(0.250)	(0.208)	(0.037)	(0.037)
Opponent	-0.308	-0.118	0.032	0.050
	(0.249)	(0.170)	(0.041)	(0.042)
Baseline Control Variables	Yes	Yes	Yes	Yes
Additional Control Variables	Yes	Yes	Yes	Yes
Survey Year and State Fixed Effects	Yes	Yes	Yes	Yes
Individuals	678	678	590	590
Obs.	678	678	590	590
R^2	0.092	0.041	0.446	0.379

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. 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.

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