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ORIGINAL PAPER

# Predicting satisfaction with democracy in Germany using local economic conditions, social capital, and individual characteristics

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## Abstract

This paper explores the empirical relationship between local economic conditions, social capital, and individual characteristics on the one hand and satisfaction with democracy on the other hand, using detailed information from the German Socio-Economic Panel. In contrast to previous literature, we focus on economic conditions at the *state* level instead of the *national* one. We find that local economic conditions, proxies of social capital, and individual characteristics (e.g., risk attitude, reciprocity, past unemployment experience) are important correlates of satisfaction with democracy and that some heterogeneity between genders, West and East Germany, and people with and without college degree exists in the data.

**Keywords** Democracy · Satisfaction · Economic conditions · SOEP

**JEL classifications** H11 · P16

This paper uses data from the German Socio-Economic Panel (doi: https://doi.org/10.5684/soep.core.v36eu). Details of the data set are provided here: https://www.diw.de/en/diw_01.c.814095.en/edition/soep-core_v36eu__data_1984-2019__eu_edition.html. Instructions for accessing the data can be found here: https://www.diw.de/en/diw_01.c.601584.en/data_access.html.

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## 1 Introduction

The recent rise of populism in the West causes concerns about the associated costs. Many people seem dissatisfied with the workings of governments and democracies they know, as one of the populists' key promises is breaking with the political status quo that involves the "corrupt elite" (Guriev and Papaioannou 2022). There is an ongoing debate about the role of *economic conditions* in the rise of populism (e.g., Guriev 2018; Margalit 2019; Rodrik 2018). For example, Dippel et al. (2022) argue that imports from low-wage countries have contributed to the success of nationalist parties in Germany. Roccato et al. (2020) and Bowler et al. (2017), for example, present results suggesting that a populist orientation can be predicted by low *satisfaction with democracy* (SWD). Sarsfield and Echegaray (2006) argue that low SWD can even undermine support for democracy as such.

SWD is one of the most commonly studied topics in political behavior and public opinion research (Singh and Mayne 2023). It is elicited in many surveys and conveys how citizens perceive the quality and performance of their political system. Thus, SWD must be distinguished from political support of democratic principles per se (e.g., Dahlberg et al. 2015). In deciding their SWD, people incorporate different aspects of the workings of the democratic regime in which they live. These aspects include the decision-making and performance of the acting government, its opposition, and the functioning of institutions and public organizations. For example, Martini and Quaranta (2020: 24) explain that SWD stems from assessing political regime procedures in practice relative to the individual's expectations.

This paper explores the empirical relationship between SWD and local economic conditions, social capital, and individual characteristics. Our study uses rich German Socio-Economic Panel (SOEP) information, including SWD measurements from 2005, 2010, and 2016.

Our main results show that the local unemployment rate and GDP per capita correlate with SWD, while GDP growth is insignificant. The magnitude of the coefficient of the unemployment rate is similar to that of GDP per capita. For example, increasing the per-capita GDP by one standard deviation predicts a higher level of SWD by about 9.6% of SWD's mean. In other words, a robust relationship between SWD and local economic conditions exists in our data independently of the individual's *own* economic circumstances. Moreover, proxies of social capital (information about participation in religious and sports activities) and individual characteristics (e.g., risk attitude, reciprocity, past unemployment experience) are important predictors of SWD. In addition, we show that the data contains some heterogeneity regarding the relationships to SWD concerning men and women, respondents in West and East Germany, and people with and without college education.

Our paper makes two contributions to the literature. First, we consider the effect of economic conditions at the *state* level. The previous literature (e.g., Christmann 2018; Quaranta and Martini 2016) has considered international surveys and included economic conditions at the *country* level. Omitted variables may bias previous results. For example, labor market reforms in a country may directly influence the unemployment rate and citizens' SWD simultaneously. We consider variation in economic

conditions at the *state* level and thus hold country-specific characteristics constant. This approach allows us to complement and potentially support previous findings.

Economic conditions at the state level are meaningful to people's everyday lives. For example, much of the public good provision is undertaken and financed at the local level, and thus, it depends on the local level's economic conditions (e.g., Kuhlmann et al. 2021). In our paper, the local level's economic conditions are proxied by GDP per capita, GDP growth, and unemployment at the state level. In these respects, significant heterogeneity exists across states and over time. The unemployment rate at the state level is much more important to most people in a given state than the national one (e.g., Pfeifer 2012). People obtain signals about the local economic conditions from the development of wages or the number of job postings, for example, but are also regularly updated on these conditions by the media.

Our second contribution to the literature is identifying possibly important but hitherto neglected predictors of SWD. Singh and Mayne (2023) provide a recent survey about the predictors of SWD previously considered in the literature. With participation in religious and sports activities, we include two individual-level proxies of social capital. Social capital is a potentially important input to SWD as it has been found to bear on political participation and interest (e.g., Cantoni et al. 2021). In addition, instead of focusing on the current employment status alone like the previous literature, we also consider whether the respondent has past unemployment experience. The recent literature on experience effects (e.g., Malmendier 2021) supports the hypothesis that respondents with a significant unemployment experience will have a different SWD even if the respondent is currently observationally equivalent to a respondent without unemployment experience. We also consider the association with economic preferences and traits that have important predictive power for other attitudes and behaviors (e.g., Becker et al. 2012). In our study, these are risk tolerance, reciprocity, and locus of control. It seems possible, for example, that people with an internal locus of control are more satisfied with the workings of democracy because they feel less subjected to its outcomes. Moreover, we include responses to survey items that try to identify what domains of public life (e.g., crime, immigration) people are particularly worried about. This may hint at what domains of life can potentially create a spillover to dissatisfaction with democracy when controlling for life satisfaction.

The rest of the paper is structured as follows. Section 2 discusses the related literature. Section 3 presents the data. Section 4 comprises our results. Section 5 concludes.

## 2 Related literature

This paper explores the predictive power of local economic conditions, social capital, and individual characteristics for SWD.

There is previous literature in political science and economics on the association of SWD and national economic conditions, comparing different countries over time. For example, Quaranta and Martini (2016) find that SWD positively correlates with GDP growth and negatively correlates with inflation and unemployment, using individual-level data from the Eurobarometer 1973–2013. Wagner et al. (2009) explore

the role of macroeconomic variables and institutional quality for SWD in a study that uses annual country averages from the Eurobarometer 1990–2000. They report that average SWD is higher in countries with better macroeconomic performance (i.e., higher GDP growth, lower inflation, and unemployment rates) and higher institutional quality (i.e., the rule of law, well-functioning regulation, and low corruption). Christmann (2018) considers how SWD covaries with economic and democratic performance using a panel data set that includes 61 countries. He finds that both performance dimensions can cultivate a higher SWD.

Friedrichsen and Zahn (2014) use individual-level data from the Eurobarometer 1976–2010 to consider the empirical relationship between SWD and national macroeconomic variables. The probability of being satisfied with democracy is larger for individuals living in a country with higher GDP growth, and lower inflation and unemployment rates. Halla et al. (2013) focus on the association of SWD and countries' environmental policy and quality, using individual data from the Eurobarometer 1973–2001. In addition to their main results -- environmental policy and environmental quality are positively correlated with SWD -- they also report that SWD is higher in countries with higher GDP levels and GDP growth.

Compared to the studies mentioned above, our contribution lies in considering *local* economic conditions in different states of Germany to reduce the potential role of omitted variable bias in previous findings.

In addition, we incorporate comprehensive individual characteristics. In this regard, Friedrichsen and Zahn (2014), who include individual unemployment, marital status, gender, age, and education, is probably the paper closest to ours. They find that unemployed and less educated people are less satisfied with democracy. Moreover, there seems to be a U-shaped relationship with age. Halla et al. (2013) also include these individual-level variables with similar results. For example, our longer covariate vector contains per-capita net household income level information. Friedrichsen and Zahn (2014) also report that people in the "rich" category have higher SWD. However, this may be difficult to interpret given that the survey requested income details only for a subset of years in their analysis.[1] Whereas most studies include the current labor-market *status* alone, Altindag and Mocan (2010) explore whether the *duration* of the current unemployment spell matters, finding that long-term unemployment (longer than 1 year) is particularly consequential. In this respect, our *past unemployment experience in years* variable is of interest. Bäck and Kestilä (2009) consider the relationship of social capital and different measures of political trust, using data from the first round of the European Social Survey for Finland. They do not find an effect of participation in activities of voluntary organizations on SWD, whereas we will report one below.

There is also evidence that *perceptions* of more specific economic outcomes can be relevant for SWD. For example, Pfeifer and Schneck (2017) present evidence that workers who perceive their pay or top managers' pay as unfair are, on average, significantly less satisfied with democracy in Germany using the SOEP. Similarly, Braakmann (2018) uses SOEP data to show that job losses due to plant closures lead

[1] The fact that this variable is not available for all years and countries in the Eurobarometer data makes Halla et al. (2013) not include the income information they have available.

to lower identification with mainstream political parties. Job loss feeds into lower life satisfaction. Using data from 8 waves of the European Social Survey, Nowakowski (2021) considers the association between populist support and subjective well-being. Poutvaara and Steinhardt (2018) employ SOEP data to show that people who feel they have not gotten what they deserve are more likely to support the extreme right. Accordingly, when we estimate SWD, we control for the level of life satisfaction.

The political science literature has produced many interesting and intuitive findings on SWD. Singh and Mayne (2023) offer a recent and valuable survey, distinguishing contributions using SWD as a covariate from those where SWD is the outcome variable. For example, SWD is higher among people who voted for the party included in the post-election government and has an ambiguous relationship with turnout (e.g., Williams et al. 2021).

## 3 Data and empirical approach

### 3.1 Data

Our data come from the German Socio-Economic Panel (SOEP). This annual representative panel study collects detailed information about more than 20,000 individuals living in more than 10,000 households in Germany (e.g., Goebel et al. 2019). While many survey items are included in every year, some items are included only in selected years.

The question about SWD ("How satisfied are you with democracy as it exists in Germany?") has been asked in 2005, 2010, and 2016. Possible answers come from an eleven-point Likert scale from zero (completely dissatisfied) to ten (completely satisfied). In other surveys, SWD is often measured on a four-point ordinal scale. For example, the SWD question in the Eurobarometer used by Friedrichsen and Zahn (2014) reads, "On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the way democracy works in <country>?". In our data, the mean of SWD is 5.332, with a standard deviation of 2.384. Figure 1 informs us about the distributions of the SWD ratings in 2005, 2010, and 2016. The final panel shows the distribution over all years. Descriptive statistics for all of our variables are shown in Table A.1.

We focus on local economic conditions as SWD predictors. The macroeconomic regressors considered at the state and year level include unemployment rates, GDP

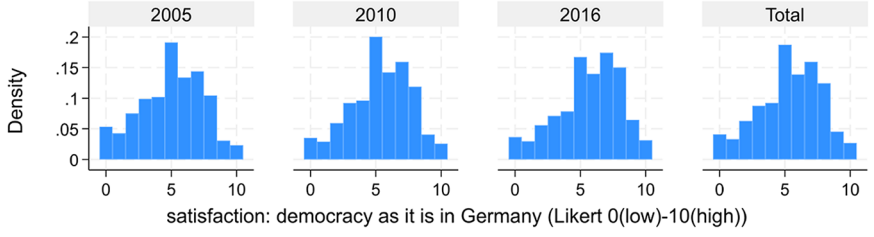


**Fig. 1** Distribution of satisfaction with democracy in Sample A

per capita expressed in 2015 Euros, and GDP growth. Relative to other contributions (e.g., Friedrichsen and Zahn 2014; Wagner et al. 2009), we do not include inflation rates because we think people have little to no knowledge of the local inflation rate (e.g., Hayo and Neumeier 2022). The data stem from the Federal Statistical Office of Germany. With information from 16 states in 3 years, we have 3*16=48 values for each macroeconomic variable. Table 1 displays descriptive statistics at the state level, showing a large spread between extremes – even within a year – and significant standard deviations. For example, in 2012, GDP growth in the state of Bremen was 4.7% and thus much higher than the 1.5% in the state of Berlin, whereas in 2019, the GDP growth in Bremen was only 0.8% and thus much smaller than the 5.2% in Berlin (Federal Statistical Office 2023).

In addition, we use several variables at the individual and household level from the SOEP as covariates for our SWD regressions (see Table A.1). We control for *objective* individual-level economic conditions as measured by the own monthly net household income per capita (i.e., the monthly net household income divided by the number of persons in the household; real Euros 2015, mean of 1,349 Euros) and the labor-market status (specified as dummies with non-employed as reference group; we have 14% retired, 5% registered unemployed, 9% part-time in the private sector, 31% full-time in the private sector, 5% part-time in the public sector, and 11% full-time in public sector).[2] To incorporate respondents' labor-market participation more broadly, we also include past years in unemployment, part-time employment, and full-time

**Table 1** Unemployment rates, GDP per Capita, and GDP Growth in German States

| | *Unemployment rate in %* | | | |
|---|---|---|---|---|
| | Total | 2005 | 2010 | 2016 |
| Mean | 9.97 | 13.78 | 9.03 | 7.11 |
| Standard deviation | 4.37 | 4.64 | 2.96 | 2.10 |
| Min | 3.50 | 7.00 | 4.50 | 3.50 |
| Max | 20.30 | 20.30 | 13.60 | 10.50 |
| | *GDP per capita in 1000 Euros (in 2015 real Euros)* | | | |
| | Total | Total | Total | Total |
| Mean | 33.724 | 31.811 | 33.107 | 36.252 |
| Standard deviation | 9.859 | 10.389 | 9.604 | 9.657 |
| Min | 20.863 | 20.863 | 22.952 | 25.318 |
| Max | 61.223 | 60.130 | 59.044 | 61.223 |
| | *Growth real GDP per capita in %* | | | |
| | Total | 2005 | 2010 | 2016 |
| Mean | 1.94 | -0.06 | 4.00 | 1.89 |
| Standard deviation | 2.24 | 1.24 | 1.77 | 1.51 |
| Min | -1.24 | -1.24 | 1.29 | -0.23 |
| Max | 7.27 | 3.81 | 7.27 | 5.84 |

*Notes*: Descriptive statistics for 16 federal states in 2005, 2010, and 2016. Data was obtained from the Federal Statistical Office of Germany

[2] Using an international survey, Borooah et al. (2013) show that household income is important for SWD in a way that may depend on the country. Moreover, individual household income and employment status should be correlated with local economic conditions.

employment. Past unemployment experiences are likely to leave memories behind that influence SWD years after employment has been taken up again. In our sample, the average experience in unemployment is 1.05 years, in part-time jobs 3.55 years, and in full-time employment 17.81 years.

Individual-level economic conditions are also measured via subjective worries about the respondent's own economic situation. In the SOEP, worries are measured on a three-point ordinal scale: (1) not concerned at all, (2) somewhat concerned, and (3) very concerned. We use *not concerned at all* as a reference category and include dummies for the other categories. We also include potential worries about economic development more generally, the environment, peace, crime, xenophobia, and immigration. In our sample, 31% of the observations are not at all concerned about their own economic situation, 49% are somewhat concerned, and 20% are very concerned. Worries about the general economic development seem more widespread: 13% are not at all concerned, 52% are somewhat concerned, and 36% are very concerned. The SWD measurements stem from 2005, 2010, and 2016, years in which people had different topics on their minds. In 2005, Germany experienced very high unemployment rates. In 2010, Germany was suffering from the aftermath of the financial crisis, including the Euro crisis. In 2016, Germany was impressed by a significant influx of refugees, probably influencing worries about immigration (a variable also studied in Poutvaara and Steinhardt 2018).

Social capital has been associated with political participation and support. In research, social capital is often proxied by the percentage of respondents active in different types of voluntary organizations, including sports clubs and churches (e.g., Bjornskov 2006; Pazzona 2020). For our study, we can use information about participation in religious and sports activities at the individual level. The frequencies of attending church or religious events and of participating in sports are measured on a four-point ordinal scale: (1) never, (2) less than monthly (seldom), (3) at least once per month, and (4) at least once per week. We employ *never* as a reference category and include dummies for less than monthly, at least once per month, and at least once per week. Whereas SWD is surveyed in 2005, 2010, and 2016, the frequency of attending church or religious events and participation in sports is surveyed in 2005, 2009, and 2015. Consequently, we use the lagged information for 2010 and 2016. Table A.1 informs about the average frequencies: About 55% of the observations in our sample never attended religious activities, whereas 36% never participated in sports. 29% (17%) participate less than monthly, 9% (7%) at least once per month, and 7% (40%) at least weekly in religious (sports) activities.

Regarding economic preferences and personality traits, we include risk attitude, reciprocity, and the internal locus of control. People with an internal locus of control are likelier to attribute success and failure to their actions instead of exogenous forces (e.g., Kauder et al. 2018). We speculate that these control beliefs may be important for SWD because they moderate the extent to which people feel that they can participate and shape their fate in the democracy they live in. The subject's risk attitude may be important for SWD because the workings of democracy often require compromises, implying that some status quo inertia and risk-averse policies may be observed. General risk-taking preferences, measured on an eleven-point Likert scale from 0 (low) to 10 (high), are included using 2004, 2010, and 2016 data. Positive and

negative reciprocity (for each a mean over three items on seven-point scales from 1 (low) to 7 (high) and internal locus of control (mean over five items on seven-point scales from 1 (low) to 7 (high) are also added. Reciprocity and locus of control were surveyed in 2005, 2010, and 2015, so we use the lag for 2016.

We account for a set of control variables that include health status (five-item scale), secondary schooling degrees (low, medium, and high), apprenticeship and college degrees (as dummy variables), age in years, gender, migration background, number of persons living in the household, having children younger than 16 in the household as a dummy variable, marital status (married, divorced, widowed), federal state, and survey years.

We include life satisfaction (LS) in our analysis. Previous literature has shown that economic conditions influence life satisfaction (e.g., Di Tella et al. 2003; Kang and Rhee 2024). By including LS, we obtain coefficients in the SWD equation that can be interpreted as *direct effects* on SWD, using the terminology of mediation analysis. Below, we will also refer to results from using LS as the dependent variable, producing *indirect effects* via LS on SWD. This allows for a full understanding of the implications of local economic conditions on SWD. In addition, including LS helps address concerns about omitted heterogeneity in interpreting satisfaction questions (Friedrichsen and Zahn 2014). The associated question, "How satisfied are you with your life currently, all things considered?", is included in all relevant survey years and can be answered on a 0 (totally unsatisfied) to 10 (totally satisfied) scale. On average, people in Germany are more satisfied with their life (mean 7.147, SD 1.733) than with democracy (mean 5.332, SD 2.384). The unconditional correlation between SWD and LS amounts to 0.362.

Our estimation samples include German citizens between 20 and 75 years of age. Our use of lagged information makes restricting the set of respondents necessary. Our main sample (Sample A) includes observations without missing values in any of the discussed variables, even if we need to use additional lag information by one year for some variables. As explained above, we use the years 2005, 2010, and 2016 including SWD, and 2004, 2009, and 2015 to generate some variables missing in 2005, 2010 or 2016. These restrictions lead to $n=44{,}003$ observations in our main sample. See Table A.1 for the distribution of observations across states and years.

For robustness checks, we consider empirical specifications excluding the variables for which lags are used (namely participation in religious and sports activities, risk preferences, reciprocity, and locus of control). This allows for $n=51{,}676$ observations (Sample B).

In fixed-effects regressions, we can include only individuals with at least two observations in the data. Applying this restriction leads to Sample AF with $n=26{,}612$ observations from Sample A (stemming from 10,957 individuals with an average panel length of *2.4*) and Sample BF with $n=33{,}804$ observations from Sample B (stemming from 14,296 individuals with average panel length of *2.4*). We exclude time-invariant individual characteristics (no within variance) and age (perfect collinearity with survey years) from the fixed-effects regressions. The fixed-effects regressions serve as a valuable robustness check that considers unobserved time-invariant individual heterogeneity, thereby reducing potential omitted variable biases.

### 3.2 Estimation strategy

We treat our dependent variable SWD, measured on an 11-point Likert scale, as quasi-continuous and employ linear regression models (OLS). This allows us to interpret estimated coefficients straightforwardly and include individual fixed effects to deal with unobserved time-invariant heterogeneity (Ferrer-i-Carbonell and Frijters 2004). In pooled regressions reported in Sect. 4.1, standard errors are clustered at the state level. In fixed-effects regressions reported in Sect. 4.2, standard errors are clustered at the individual level.

Our main results use Sample A. In robustness checks, we present results using Samples AF, B, and BF. The main insights are unaffected by using the larger sample or fixed-effects regressions (Table A.4). Our results are also robust to running ordered probit regressions (Table A.5).

Below, we also explore effect heterogeneity by considering two splits of Sample A. First, we consider potential differences between men and women. Previous literature has shown important gender differences. For example, Williams et al. (2021) find that SWD increases by more for men than women after having voted for the winning party, and explain this by reference to female underrepresentation in politics and other channels. It is also noteworthy that Funk and Gathmann (2015), for example, find evidence that women prioritize different policies than men. In our context, variation in the local unemployment rate may have a different association with SWD for men than women, for example, because men participate in the labor market to a greater extent. Next, we test for differences between people living in East and West Germany (including Berlin). It is well established that SWD is significantly lower in East than West Germany (e.g., Petrunyk and Pfeifer 2016; Biermann and Welsch 2021). Our approach explores whether the relationship between local economic conditions and SWD differs between East and West Germany. This is inspired by Welsch (2022), who explains that East Germans find it relatively more critical that the political system helps ensure their economic interests than West Germans. The hypothesis about a difference in the empirical relationship is also supported by Alesina and Fuchs-Schündeln (2007), reporting that East Germans are more inclined to think that the government is responsible for satisfying their economic needs than West Germans and Van Hoorn and Maseland (2010) stating that East Germans assign more importance to higher income and avoiding unemployment. The sample split reduces the variance of the macroeconomic variables. With only 15 values for the five East German states instead of 48 for all sixteen states, the coefficients of the macroeconomic variables should be interpreted cautiously. Last, we consider results from analyses after splitting the data by whether respondents have a college degree. More educated individuals seem to have higher SWD on average (e.g., Huang et al. 2008), and should be better informed about local economic conditions (e.g., Wobker et al. 2014).

## 4 Results

### 4.1 Satisfaction with democracy in Germany: main results

We want to explore how local economic conditions, social capital, and individual characteristics correlate with SWD. Many of these variables are associated with LS, so we include it as an additional covariate in some of our empirical models for SWD (as in, e.g., Friedrichsen and Zahn 2014). It is interesting to understand which variables produce significant coefficients for LS because these effects may contribute to indirect effects on SWD. For example, Halla et al. (2013) show that environmental quality is similarly associated with SWD and LS. In this regard, we find, for example, that the unemployment rate in the state where the respondent resides, the "unemployed" status, and worries about the respondent's economic situation are negatively associated with LS. In contrast, a higher net household income and active participation in religious and sports clubs are positively associated with it. In addition, a greater risk tolerance, positive reciprocity, and internal locus of control produce positive and significant coefficients. Table A.2 in the Appendix presents full results for LS as the dependent variable using Samples A and B.

Table 2 presents our results for SWD. We focus on the main results here and show all coefficients for the full specification in Table A.3. Column (1) considers only *local economic conditions* in a state and year. Column (2) adds *objective* indicators for the respondent's economic situation (e.g., net household income per capita, labor market status, and labor market experiences). Column (3) adds *subjective* indicators for the own and general economic conditions. As measured by participation in religious and sports activities, social capital is added in Column (4). Columns (5)-(6) show results from the specifications that include all individual and aggregated control variables (see Table A.1 for a list and descriptive statistics). Column (5) does not include individual life satisfaction. Column (6) is our preferred specification with LS as a covariate. LS has a positive and significant coefficient. To that extent, factors that raise LS at least indirectly raise SWD. For some variables, there will be a direct effect on SWD and an indirect one via LS. Notably, the inclusion of LS has little consequence on most coefficients. We first discuss the impact of local economic conditions before we turn to social capital and individual and household characteristics.

**Local economic conditions:** We find that local economic conditions are relevant predictors of SWD. Overall, our results support previous findings from cross-country evidence (e.g., Friedrichsen and Zahn 2014). Column (1) indicates that the three variables informing us about the local economic conditions can explain almost 5% of the variance in SWD ratings ($R^2 = 0.048$). More specifically, the coefficient of the unemployment rate at the state level is negative and significant. Based on the results in Column (6), increasing the unemployment rate by one standard deviation predicts a level of SWD lower by 0.191 (i.e., 3.6% of the mean of SWD). While the level of GDP per capita at the state level tends to lower LS (consistent with status concerns; e.g., Luttmer 2005), it is positively linked to SWD. Based on the results in Column (6), increasing the per-capita GDP by one standard deviation predicts a level of SWD higher by 0.511 (i.e., 9.6% of the mean of SWD). GDP growth is insignificant. This

**Table 2** Predicting satisfaction with democracy (SWD)

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| Unemployment Rate in % | -0.081*** (0.001) | -0.078*** (<0.001) | -0.047** (0.017) | -0.033* (0.081) | -0.060*** (0.007) | -0.046** (0.025) |
| GDP per capita in 1,000 Euros | 0.036*** (0.003) | 0.022** (0.015) | 0.023** (0.027) | 0.020** (0.039) | 0.063* (0.072) | 0.069** (0.040) |
| GDP per capita growth in % | -0.030 (0.374) | -0.016 (0.568) | -0.039 (0.175) | -0.031 (0.236) | -0.003 (0.790) | -0.001 (0.944) |
| Own Net Household Income per capita in 1,000 Euros | | 0.290*** (<0.001) | 0.192*** (<0.001) | 0.179*** (<0.001) | 0.131*** (<0.001) | 0.105*** (<0.001) |
| Employment status (ref.: other non-employed) | | | | | | |
| Retired (dummy) | | 0.022 (0.748) | -0.083 (0.170) | -0.090 (0.180) | 0.117* (0.071) | 0.072 (0.269) |
| Unemployed (dummy) | | -0.636*** (<0.001) | -0.393*** (<0.001) | -0.334*** (0.001) | -0.274*** (0.003) | -0.155* (0.062) |
| Part-time in the private sector (dummy) | | 0.051* (0.077) | 0.048* (0.081) | 0.057** (0.016) | -0.028* (0.099) | -0.017 (0.306) |
| Full-time in the private sector (dummy) | | -0.049* (0.053) | -0.010 (0.680) | 0.050 (0.102) | -0.001 (0.968) | 0.016 (0.570) |
| Part-time in the public sector (dummy) | | 0.362*** (<0.001) | 0.292*** (<0.001) | 0.225*** (<0.001) | 0.080 (0.146) | 0.092 (0.109) |
| Full-time in the public sector (dummy) | | 0.313*** (<0.001) | 0.214*** (<0.001) | 0.186*** (<0.001) | 0.109*** (0.002) | 0.117*** (0.001) |
| Unemployment experience in years | | -0.110*** (<0.001) | -0.097*** (<0.001) | -0.076*** (<0.001) | -0.038*** (<0.001) | -0.031*** (<0.001) |
| Work experience in part-time in years | | -0.011*** (0.001) | -0.010*** (<0.001) | -0.014*** (<0.001) | -0.002 (0.471) | -0.001 (0.652) |
| Work experience in full-time in years | | -0.015*** (<0.001) | -0.015*** (<0.001) | -0.013*** (<0.001) | -0.002 (0.142) | -0.002* (0.059) |
| Worries about own economic situation (ref.: not concerned at all) | | | | | | |
| Somewhat concerned (dummy) | | | -0.503*** (<0.001) | -0.459*** (<0.001) | -0.237*** (<0.001) | -0.120*** (0.003) |
| Very concerned (dummy) | | | -1.108*** (<0.001) | -0.997*** (<0.001) | -0.562*** (<0.001) | -0.248*** (0.004) |
| Worries about general economic development (ref.: not concerned at all) | | | | | | |
| Somewhat concerned (dummy) | | | -0.314*** (<0.001) | -0.367*** (<0.001) | -0.211*** (<0.001) | -0.205*** (<0.001) |
| very concerned (dummy) | | | -1.013*** (<0.001) | -1.090*** (<0.001) | -0.667*** (<0.001) | -0.654*** (<0.001) |
| Frequency of participation in religious and church activities (ref.: never) | | | | | | |
| Less than monthly (dummy) | | | | 0.511*** (<0.001) | 0.375*** (<0.001) | 0.357*** (<0.001) |
| At least once per month (dummy) | | | | 0.766*** (<0.001) | 0.589*** (<0.001) | 0.541*** (<0.001) |

**Table 2** (continued)

| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| At least once per week (dummy) | | | | 0.831*** (<0.001) | 0.568*** (<0.001) | 0.501*** (<0.001) |
| Frequency of participation in sport activities (ref.: never) | | | | | | |
| Less than monthly (dummy) | | | | 0.072* (0.084) | -0.008 (0.844) | -0.003 (0.939) |
| At least once per month (dummy) | | | | 0.274*** (<0.001) | 0.133** (0.036) | 0.128** (0.048) |
| At least once per week (dummy) | | | | 0.381*** (<0.001) | 0.179*** (0.002) | 0.160*** (0.003) |
| Other control variables (see Table A.1 and Table A.3) | No | No | No | No | Yes | Yes |
| Federal states (16)+survey years (3) | No | No | No | No | Yes | Yes |
| Control for life satisfaction | No | No | No | No | No | Yes |
| Individual fixed-effects | No | No | No | No | No | No |
| Constant | 4.892*** (<0.001) | 5.312*** (<0.001) | 6.165*** (<0.001) | 5.669*** (<0.001) | 4.963*** (<0.001) | 2.950*** (0.008) |
| Number of observations | 44,003 | 44,003 | 44,003 | 44,003 | 44,003 | 44,003 |
| $R^2$ | 0.048 | 0.095 | 0.158 | 0.180 | 0.277 | 0.302 |
| Mean SWD (dependent variable) | 5.332 | 5.332 | 5.332 | 5.332 | 5.332 | 5.332 |

*Notes*: Results from ordinary least squares regressions using Sample A. The outcome variable is SWD measured on an 11-point Likert scale from 0 (low) to 10 (high). The covariates are explained in Table A.1. Complete results for the full specifications (5) and (6) are presented in Appendix Table A.3. Standard errors are clustered at the state level. p-values in parentheses.*** $p<0.01$,** $p<0.05$,* $p<0.10$

differs from the results in Friedrichsen and Zahn (2014) who found that national growth is more important than the level of GDP per capita at the national level. When we run fixed-effects regressions, we also find an effect for growth (see Columns (1) and (2) of Table A.4). In summary, people rate the performance of their political system more highly when it creates more favorable economic conditions. This is consistent with Welsch (2022), for example.

**Individual economic conditions:** Like local economic conditions, *objective* indicators for the respondent's economic conditions are very relevant to SWD. The per-capita net household income level has a positive and significant coefficient. Based on the results in Column (6), an increase in this variable by its standard deviation increases SWD by about 0.1 (i.e., by about 2% of the mean of SWD). This suggests that changing local GDP per capita by one standard deviation has a more considerable impact on SWD than changing the monthly net household income per capita by one standard deviation. Having the labor-market status "unemployed" predicts lower SWD (by about 3% of mean SWD), which is also valid for having experienced unemployment in the past.[3] An increase in the unemployment experience by its standard deviation decreases SWD by about 0.08 (i.e., by about 1.5% of the mean of SWD), signifying that changing the local unemployment rate by one standard deviation has a more considerable impact on SWD than changing the own unemployment experience by one standard deviation. This confirms that past unemployment experiences leave long-lasting traces concerning SWD. Interestingly, the coefficient for the unemployed status strongly reacts to the inclusion of LS as a covariate, which is not similarly true for the unemployment experience. This suggests that the overall effect of unemployment status on SWD is indirect via LS. Including per-capita net household income, labor-market status, and labor-market experience in Column (2) increases the explained variance of the SWD ratings by almost 5% points ($R^2 = 0.095$). When we consider the *subjective* indicators in Column (3), we find that being concerned about the own and general economic situation predicts lower SWD. The dummy variable "very concerned" coefficient size in Column (6) is −0.248 for the own economic situation and even −0.654 for the general economic situation. It is thus very high when the mean SWD is considered. The extent to which the covariates can explain the variance in the SWD ratings increases by about 6% points when moving from Column (2) to Column (3).

**Social Capital:** Our social capital proxies -- the frequency of participation in religious and church activities and the frequency of involvement in sports activities -- produce positive and significant coefficients. Among people who participate in a religious or church activity at least once per month, we are likely to encounter a much higher SWD. The same holds for people who are active in sports. This finding is consistent, for example, with the idea that people high in social capital monitor the government more closely and perceive greater political accountability (e.g., Jottier and Heyndels

[3] Based on similar evidence about individual unemployment and the unemployment rate at the national level, Altindag and Mocan (2010) conclude that joblessness can hinder the development of democracy or even threaten its existence.

2012). Likewise, it is consistent with the literature regarding the relationship between social capital and political participation (e.g., Fiorino et al. 2021). The extent to which the covariates can explain the variance in the SWD ratings increases by about 2% points ($R^2$=0.180).

**Some further findings about individual characteristics (Table A.3):** Regarding economic preferences and personality traits, we find that a higher risk tolerance predicts lower SWD. This seems consistent with the idea that risk-tolerant respondents dislike some political compromises and inertia that actual democratic regimes may be associated with. In addition, being negatively reciprocal (i.e., preferring to act unkindly towards others who have behaved unkindly to oneself) predicts lower SWD. Consistent with earlier contributions (e.g., Friedrichsen and Zahn 2014), better education predicts higher SWD.

### 4.2 Robustness checks

Using pooled OLS regressions on Sample A, we established the predictive power of local economic conditions, social capital, and individual and household characteristics for SWD in Sect. 4.1. This section considers the robustness of main insights using fixed-effect regressions and a larger sample. This addresses potential concerns about unobserved, time-invariant heterogeneity, for example. The complete results for a larger sample, fixed-effects estimates, and ordered probit regressions are presented in Tables A.4 and A.5.

**Local economic conditions:** In fixed-effects regressions, we find significant coefficients for the unemployment rate and GDP growth, whereas the level of GDP per capita is no longer significant. The findings reported for pooled regressions using Sample A are matched by the results for the larger Sample B.

**Social Capital:** In fixed-effects regressions, the within-individual variance is too small to produce reliable effects. Therefore, social capital variables are no longer included in Sample B regressions.

**Individual characteristics** Our main results are unaffected by the consideration of fixed-effects regressions or the change to the larger Sample B with the caveat that some variables of interest are missing.

### 4.3 Satisfaction with democracy: effect heterogeneity concerning gender, West/East Germany, and college education

We consider splits of Sample A to study whether the different variables have asymmetric importance as predictors of SWD. For this purpose, we separately consider men and women, people in West and East Germany, and people with and without a college degree. Although there are many parallels regarding which variables have

predictive power, we find some interesting differences in Table A.6. Important examples are the following ones:

The data suggest that the status "unemployed" predicts lower SWD only if the respondent is a woman. However, past unemployment is relevant for both groups and seemingly even more for men. In contrast, the influence of being employed in the public sector only shows for male respondents, as does the role of negative reciprocity.

Considering the possibility of different effects for East Germany, we find that the role of GDP per capita, participation in sports activities as a social capital proxy, and negative reciprocity are significant only for respondents who reside in West Germany. In contrast, the finding referring to the internal locus of control only stems from observations from East Germany. For East Germany, we also find a marginally significant correlation with GDP growth.

Local GDP per capita seems to have a larger impact on SWD for people without a college degree. The objective and subjective indicators for the economic situation (household income, unemployment, worries) seem relatively more important for people without a college degree than those with one. Participation in sports activities and negative reciprocity produce a significant coefficient only for respondents without a college degree.

## 5 Conclusion

This paper explores the predictive power of *subnational* economic conditions, social capital, and individual and household characteristics for SWD. The previous literature has shown findings regarding the role of economic conditions at the *national* level, raising concerns about omitted variables. Our results do not suffer from this concern and support previous findings.

In addition, we add to the literature by considering a very comprehensive vector of individual-level variables. For example, we can show that the respondents' own economic circumstances are important for SWD, using different variables to describe the individual economic conditions. Moreover, social capital predicts higher SWD. Interestingly, economic preferences and personality traits are also influential. Using sample splits, we identify that some associations seem stronger for men as compared to women, people from West as compared to East Germany, or people with a college degree when compared to those without one.

The comprehensiveness of the data set we use is very valuable for obtaining a profound understanding of the determinants of SWD. However, in the SOEP, SWD is only included in selected years. This makes it difficult to study, for example, how SWD responds to exogenous events and how this response is moderated by individual-level characteristics.

Ensuring people's satisfaction with their political regime is crucial for maintaining social stability, political legitimacy, and economic development. For example, Besley and Dray (2024) explain that higher trust in government leads to more citizen compliance and higher state effectiveness. Our empirical results suggest that policies leading to better economic outcomes can increase people's SWD via the impact

that local economic conditions and their own economic circumstances have on the measure. In both regards, unemployment seems essential in shaping attitudes toward the political system.

## Appendix: Tables with full regression results

**Table A.1** Definitions and descriptive statistics of variables in sample A

| | Mean | SD | Min | Max |
|---|---|---|---|---|
| Satisfaction with Democracy (11-point Likert scale from 0 (low) to 10 (high)) | 5.332 | 2.384 | 0 | 10 |
| Life Satisfaction (11-point Likert scale from 0 (low) to 10 (high)) | 7.147 | 1.733 | 0 | 10 |
| Unemployment rate in % (federal state, year) | 8.944 | 4.163 | 3.500 | 20.300 |
| GDP per capita in 1,000 Euros (in 2015 real Euros) (federal state, year) | 33.893 | 7.408 | 20.863 | 61.223 |
| Growth real GDP per capita in % (federal state, year) | 2.005 | 2.349 | -1.767 | 7.165 |
| Own net household income per capita in 1,000 Euros (in 2015 real Euros) | 1.349 | 0.947 | 0 | 39.801 |
| Worries about own economic situation (dummies) | | | | |
| Not concerned at all | 0.305 | | 0 | 1 |
| Somewhat concerned | 0.493 | | 0 | 1 |
| Very concerned | 0.202 | | 0 | 1 |
| Worries about general economic development (dummies) | | | | |
| Not concerned at all | 0.126 | | 0 | 1 |
| Somewhat concerned | 0.518 | | 0 | 1 |
| Very concerned | 0.356 | | 0 | 1 |
| Worries about the environment (dummies) | | | | |
| Not concerned at all | 0.129 | | 0 | 1 |
| Somewhat concerned | 0.586 | | 0 | 1 |
| Very concerned | 0.284 | | 0 | 1 |
| Worries about peace (dummies) | | | | |
| Not concerned at all | 0.117 | | 0 | 1 |
| Somewhat concerned | 0.458 | | 0 | 1 |
| Very concerned | 0.426 | | 0 | 1 |
| Worries about crime (dummies) | | | | |
| Not concerned at all | 0.121 | | 0 | 1 |
| Somewhat concerned | 0.438 | | 0 | 1 |
| Very concerned | 0.441 | | 0 | 1 |
| Worries about xenophobia (dummies) | | | | |
| Not concerned at all | 0.153 | | 0 | 1 |
| Somewhat concerned | 0.503 | | 0 | 1 |
| Very concerned | 0.343 | | 0 | 1 |
| Worries about immigration (dummies) | | | | |
| Not concerned at all | 0.227 | | 0 | 1 |
| Somewhat concerned | 0.414 | | 0 | 1 |
| Very concerned | 0.360 | | 0 | 1 |

**Table A.1** Definitions and descriptive statistics of variables in sample A

| | Mean | SD | Min | Max |
|---|---|---|---|---|
| Employment status (reference: other non-employed) (dummies) | | | | |
| Retired | 0.141 | | 0 | 1 |
| Unemployed (officially registered) | 0.048 | | 0 | 1 |
| Part-time in the private sector | 0.089 | | 0 | 1 |
| Full-time in the private sector | 0.306 | | 0 | 1 |
| Part-time in the public sector | 0.048 | | 0 | 1 |
| Full-time in the public sector | 0.110 | | 0 | 1 |
| Unemployment experience in years | 1.044 | 2.567 | 0 | 34.167 |
| Work experience in part-time in years | 3.550 | 6.386 | 0 | 50.167 |
| Work experience in full-time in years | 17.814 | 13.564 | 0 | 58.167 |
| Frequency of participation in religious and church activities (dummies) | | | | |
| Never | 0.551 | | 0 | 1 |
| Less than monthly | 0.290 | | 0 | 1 |
| At least once per month | 0.087 | | 0 | 1 |
| At least once per week | 0.072 | | 0 | 1 |
| Frequency of participation in sport activities (dummies) | | | | |
| Never | 0.362 | | 0 | 1 |
| Less than monthly | 0.174 | | 0 | 1 |
| At least once per month | 0.069 | | 0 | 1 |
| At least once per week | 0.396 | | 0 | 1 |
| General risk-taking preferences (11-point Likert scale from 0 (low) to 10 (high)) | 4.651 | 2.297 | 0 | 10 |
| Positive reciprocity (mean over three items on a 7-point scale from 1 (low) to 7 (high)) | 5.866 | 0.891 | 1 | 7 |
| Negative reciprocity (mean over three items on a 7-point scale from 1 (low) to 7 (high)) | 2.944 | 1.406 | 1 | 7 |
| Internal locus of control (mean over five items on a 7-point scale from 1 (low) to 7 (high)) | 4.756 | 0.951 | 1 | 7 |
| Health status categories (dummies) | | | | |
| Very good | 0.083 | | 0 | 1 |
| Good | 0.412 | | 0 | 1 |
| Satisfactory | 0.340 | | 0 | 1 |
| Not satisfactory | 0.135 | | 0 | 1 |
| Bad | 0.031 | | 0 | 1 |
| Low school degree (dummy) | 0.296 | | 0 | 1 |
| Medium school degree (dummy) | 0.336 | | 0 | 1 |
| High school degree (dummy) | 0.317 | | 0 | 1 |
| Apprenticeship degree (dummy) | 0.729 | | 0 | 1 |
| College degree (dummy) | 0.248 | | 0 | 1 |
| Age in years | 48.539 | 14.597 | 20 | 75 |
| Female (dummy) | 0.527 | | 0 | 1 |
| Migration background (direct or indirect) (dummy) | 0.114 | | 0 | 1 |
| Number of persons in the household | 2.726 | 1.271 | 1 | 14 |
| Children < 16 years in the household (dummy) | 0.314 | | 0 | 1 |
| Marital status (reference: other) (dummies) | | | | |
| Married | 0.654 | | 0 | 1 |

**Table A.1** Definitions and descriptive statistics of variables in sample A

| | Mean | SD | Min | Max |
|---|---|---|---|---|
| Divorced | 0.092 | | 0 | 1 |
| Widowed | 0.041 | | 0 | 1 |
| Living in East German federal state (dummy) | 0.236 | | 0 | 1 |
| Federal states (dummies) | | | | |
| Schleswig Holstein | 0.030 | | 0 | 1 |
| Hamburg | 0.016 | | 0 | 1 |
| Lower Saxony | 0.095 | | 0 | 1 |
| Bremen | 0.007 | | 0 | 1 |
| Northrhine-Westphalia | 0.197 | | 0 | 1 |
| Hesse | 0.067 | | 0 | 1 |
| Rhineland Palatinate | 0.047 | | 0 | 1 |
| Baden-Wuerttemberg | 0.109 | | 0 | 1 |
| Bavaria | 0.147 | | 0 | 1 |
| Saarland | 0.010 | | 0 | 1 |
| Berlin | 0.039 | | 0 | 1 |
| Brandenburg | 0.045 | | 0 | 1 |
| Mecklenburg-West Pomerania | 0.026 | | 0 | 1 |
| Saxony | 0.076 | | 0 | 1 |
| Saxony-Anhalt | 0.044 | | 0 | 1 |
| Thuringia | 0.046 | | 0 | 1 |
| Survey years (outcome year dummies) | | | | |
| 2005 | 0.341 | | 0 | 1 |
| 2010 | 0.304 | | 0 | 1 |
| 2016 | 0.356 | | 0 | 1 |

*Notes* Sample A with n = 44,003 observations. No standard deviation (SD) for dummy variables

**Table A.2** Determinants of life satisfaction (LS)

| | Sample A | | Sample B | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Unemployment rate in % | -0.051*** | -0.046*** | -0.052*** | -0.050*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| GDP per capita in 1000 Euros | -0.023** | -0.016 | -0.019* | -0.021* |
| | (0.040) | (0.210) | (0.063) | (0.063) |
| GDP per capita growth in % | -0.007 | 0.004 | -0.004 | 0.002 |
| | (0.104) | (0.499) | (0.168) | (0.769) |
| Own net household income per capita in 1000 Euros | 0.095*** | 0.063*** | 0.122*** | 0.070*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Worries about own economic situation (ref.: none) | | | | |
| Somewhat concerned (dummy) | -0.427*** | -0.244*** | -0.529*** | -0.282*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Very concerned (dummy) | -1.150*** | -0.770*** | -1.340*** | -0.847*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Worries about general economic development (ref.: none) | | | | |

**Table A.2** Determinants of life satisfaction (LS)

| | Sample A | | Sample B | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Somewhat concerned (dummy) | -0.022 | -0.026 | -0.037 | -0.019 |
| | (0.273) | (0.460) | (0.104) | (0.526) |
| Very concerned (dummy) | -0.049*** | -0.042 | -0.064*** | -0.048 |
| | (0.007) | (0.330) | (0.005) | (0.200) |
| Worries about environment (ref.: none) | | | | |
| Somewhat concerned (dummy) | 0.003 | 0.026 | 0.027 | 0.035 |
| | (0.907) | (0.505) | (0.364) | (0.326) |
| Very concerned (dummy) | -0.005 | 0.014 | 0.042 | 0.044 |
| | (0.874) | (0.759) | (0.254) | (0.295) |
| Worries about peace (ref.: none) | | | | |
| Somewhat concerned (dummy) | 0.049* | 0.047 | 0.049** | 0.032 |
| | (0.070) | (0.167) | (0.040) | (0.312) |
| Very concerned (dummy) | 0.138*** | 0.131*** | 0.143*** | 0.122*** |
| | (0.002) | (0.002) | (0.001) | (0.001) |
| Worries about crime (ref.: none) | | | | |
| Somewhat concerned (dummy) | -0.027 | 0.019 | -0.013 | 0.001 |
| | (0.347) | (0.619) | (0.644) | (0.987) |
| Very concerned (dummy) | 0.026 | 0.035 | 0.030 | 0.018 |
| | (0.345) | (0.443) | (0.326) | (0.656) |
| Worries about xenophobia (ref.: none) | | | | |
| Somewhat concerned (dummy) | 0.002 | 0.022 | 0.034 | 0.055* |
| | (0.924) | (0.522) | (0.259) | (0.077) |
| Very concerned (dummy) | 0.054 | 0.038 | 0.122*** | 0.091** |
| | (0.109) | (0.365) | (0.002) | (0.016) |
| Worries about immigration (ref.: none) | | | | |
| Somewhat concerned (dummy) | -0.027 | -0.035 | -0.054** | -0.053** |
| | (0.253) | (0.197) | (0.039) | (0.034) |
| Very concerned (dummy) | -0.096** | -0.072* | -0.149*** | -0.077** |
| | (0.011) | (0.052) | (<0.001) | (0.024) |
| Employment status (ref.: other non-employed) | | | | |
| Retired (dummy) | 0.165*** | -0.027 | 0.227*** | 0.034 |
| | (<0.001) | (0.554) | (<0.001) | (0.450) |
| Unemployed (dummy) | -0.433*** | -0.654*** | -0.451*** | -0.579*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Part-time in private sector (dummy) | -0.037* | 0.007 | -0.033 | 0.020 |
| | (0.099) | (0.881) | (0.119) | (0.605) |
| Full-time in private sector (dummy) | -0.061** | -0.026 | -0.047** | 0.003 |
| | (0.013) | (0.458) | (0.023) | (0.914) |
| Part-time in public sector (dummy) | -0.044 | 0.033 | -0.072** | -0.005 |
| | (0.238) | (0.587) | (0.050) | (0.927) |
| Full-time in public sector (dummy) | -0.028 | 0.004 | -0.039*** | <0.001 |
| | (0.165) | (0.926) | (0.009) | (0.998) |
| Unemployment experience in years | -0.026*** | 0.066*** | -0.033*** | 0.063*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Work experience in part-time in years | -0.003 | 0.010 | -0.001 | 0.009 |

**Table A.2** Determinants of life satisfaction (LS)

| | Sample A | | Sample B | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| | (0.140) | (0.131) | (0.559) | (0.147) |
| Work experience in full-time in years | 0.001 | 0.007 | 0.003** | 0.012** |
| | (0.267) | (0.231) | (0.018) | (0.036) |
| Frequency of participation in religious and church activities (ref.: never) | | | | |
| Less than monthly (dummy) | 0.068*** | 0.045 | | |
| | (0.007) | (0.145) | | |
| At least once per month (dummy) | 0.177*** | 0.041 | | |
| | (<0.001) | (0.414) | | |
| At least once per week (dummy) | 0.245*** | 0.145** | | |
| | (<0.001) | (0.044) | | |
| Frequency of participation in sport activities (ref.: never) | | | | |
| Less than monthly (dummy) | -0.018 | 0.046 | | |
| | (0.489) | (0.159) | | |
| At least once per month (dummy) | 0.021 | 0.044 | | |
| | (0.397) | (0.302) | | |
| At least once per week (dummy) | 0.068*** | 0.070** | | |
| | (<0.001) | (0.028) | | |
| General risk-taking preferences (0 (low) to 10 (high)) | 0.034*** | 0.019*** | | |
| | (<0.001) | (0.001) | | |
| Positive reciprocity (1 (low) to 7 (high)) | 0.107*** | 0.086*** | | |
| | (<0.001) | (<0.001) | | |
| Negative reciprocity (1 (low) to 7 (high)) | -0.034*** | -0.025** | | |
| | (<0.001) | (0.011) | | |
| Internal locus of control (1 (low) to 7 (high)) | 0.306*** | 0.239*** | | |
| | (<0.001) | (<0.001) | | |
| Health status categories (ref.: very good) | | | | |
| Good (dummy) | -0.437*** | -0.269*** | -0.502*** | -0.298*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Satisfactory (dummy) | -1.027*** | -0.682*** | -1.144*** | -0.714*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Not satisfactory (dummy) | -1.709*** | -1.194*** | -1.848*** | -1.245*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Bad (dummy) | -2.886*** | -2.252*** | -3.135*** | -2.386*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Low school degree (dummy) | -0.101** | | -0.084** | |
| | (0.017) | | (0.041) | |
| Medium school degree (dummy) | -0.220*** | | -0.150*** | |
| | (<0.001) | | (0.003) | |
| High school degree (dummy) | -0.250*** | | -0.170*** | |
| | (<0.001) | | (0.001) | |

**Table A.2** Determinants of life satisfaction (LS)

| | Sample A | | Sample B | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Apprenticeship degree (dummy) | -0.094*** | | -0.057** | |
| | (0.001) | | (0.033) | |
| College degree (dummy) | -0.053 | | -0.012 | |
| | (0.104) | | (0.727) | |
| Age in years | >-0.001 | | -0.005*** | |
| | (0.793) | | (0.009) | |
| Female (dummy) | 0.142*** | | 0.127*** | |
| | (<0.001) | | (<0.001) | |
| Migration background (dummy) | 0.097** | | 0.110*** | |
| | (0.028) | | (0.002) | |
| Number of persons in the household | 0.053*** | 0.037** | 0.064*** | 0.025* |
| | (0.007) | (0.022) | (<0.001) | (0.091) |
| Children < 16 years in the household (dummy) | 0.031 | 0.004 | 0.096** | 0.034 |
| | (0.419) | (0.907) | (0.011) | (0.319) |
| Marital status (ref.: other) | | | | |
| Married (dummy) | 0.158*** | 0.152** | 0.190*** | 0.116** |
| | (<0.001) | (0.015) | (<0.001) | (0.035) |
| Divorced (dummy) | -0.053** | 0.210** | -0.019 | 0.117 |
| | (0.043) | (0.020) | (0.546) | (0.153) |
| Widowed (dummy) | -0.114** | -0.157 | -0.055 | -0.191 |
| | (0.039) | (0.224) | (0.351) | (0.130) |
| Federal states (16) + survey years (3) | Yes | Yes | Yes | Yes |
| Individual fixed-effects | No | Yes | No | Yes |
| Constant | 7.369*** | 6.819*** | 9.598*** | 8.754*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Number of observations | 44,003 | 26,612 | 51,676 | 33,804 |
| Number of individuals | | 10957 | | 14296 |
| $R^2$ (within for FE) | 0.373 | 0.162 | 0.332 | 0.136 |
| Mean LS (dependent variable) | 7.147 | 7.087 | 7.189 | 7.156 |

*Notes* The outcome variable is Life Satisfaction measured on an 11-point Likert scale from 0 (low) to 10 (high). Covariates described in Table A.1. Coefficients estimated with OLS regressions. Standard errors clustered at the federal-state level. p-values in parentheses.*** p < 0.01,** p < 0.05,* p < 0.10

*Source*: SOEP version 36

**Table A.3** Predicting satisfaction with democracy (SWD) – full results for columns (5) & (6) of Table 3

| | Without LS | With LS |
|---|---|---|
| | (1) | (2) |
| Life satisfaction (0 (low) to 10 (high)) | | 0.273*** |
| | | (<0.001) |
| Unemployment Rate in % | -0.060*** | -0.046** |
| | (0.007) | (0.025) |
| GDP per capita in 1,000 Euros | 0.063* | 0.069** |
| | (0.072) | (0.040) |
| GDP per capita growth in % | -0.003 | -0.001 |

**Table A.3** Predicting satisfaction with democracy (SWD) – full results for columns (5) & (6) of Table 3

| | Without LS | With LS |
|---|---|---|
| | (1) | (2) |
| | (0.790) | (0.944) |
| Own Net Household Income per capita in 1,000 Euros | 0.131*** | 0.105*** |
| | (<0.001) | (<0.001) |
| Worries about own economic situation (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | -0.237*** | -0.120*** |
| | (<0.001) | (0.003) |
| Very concerned (dummy) | -0.562*** | -0.248*** |
| | (<0.001) | (0.004) |
| Worries about general economic development (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | -0.211*** | -0.205*** |
| | (<0.001) | (<0.001) |
| Very concerned (dummy) | -0.667*** | -0.654*** |
| | (<0.001) | (<0.001) |
| Worries about the environment (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | 0.155** | 0.154** |
| | (0.017) | (0.014) |
| Very concerned (dummy) | 0.059 | 0.061 |
| | (0.369) | (0.317) |
| Worries about peace (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | -0.092* | -0.106** |
| | (0.064) | (0.024) |
| Very concerned (dummy) | -0.235*** | -0.272*** |
| | (0.001) | (<0.001) |
| Worries about crime (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | -0.158** | -0.151** |
| | (0.011) | (0.015) |
| Very concerned (dummy) | -0.469*** | -0.476*** |
| | (<0.001) | (<0.001) |
| Worries about xenophobia (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | 0.345*** | 0.345*** |
| | (<0.001) | (<0.001) |
| Very concerned (dummy) | 0.572*** | 0.558*** |
| | (<0.001) | (<0.001) |
| Worries about immigration (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | -0.134*** | -0.127*** |
| | (0.001) | (0.002) |
| Very concerned (dummy) | -0.901*** | -0.875*** |
| | (<0.001) | (<0.001) |
| Employment status (ref.: other non-employed) | | |

**Table A.3** Predicting satisfaction with democracy (SWD) – full results for columns (5) & (6) of Table 3

| | Without LS | With LS |
|---|---|---|
| | (1) | (2) |
| Retired (dummy) | 0.117* | 0.072 |
| | (0.071) | (0.269) |
| Unemployed (dummy) | -0.274*** | -0.155* |
| | (0.003) | (0.062) |
| Part-time in the private sector (dummy) | -0.028* | -0.017 |
| | (0.099) | (0.306) |
| Full-time in the private sector (dummy) | -0.001 | 0.016 |
| | (0.968) | (0.570) |
| Part-time in the public sector (dummy) | 0.080 | 0.092 |
| | (0.146) | (0.109) |
| Full-time in the public sector (dummy) | 0.109*** | 0.117*** |
| | (0.002) | (0.001) |
| Unemployment experience in years | -0.038*** | -0.031*** |
| | (<0.001) | (<0.001) |
| Work experience in part-time in years | -0.002 | -0.001 |
| | (0.471) | (0.652) |
| Work experience in full-time in years | -0.002 | -0.002* |
| | (0.142) | (0.059) |
| Frequency of participation in religious and church activities (ref.: never) | | |
| Less than monthly (dummy) | 0.375*** | 0.357*** |
| | (<0.001) | (<0.001) |
| At least once per month (dummy) | 0.589*** | 0.541*** |
| | (<0.001) | (<0.001) |
| At least once per week (dummy) | 0.568*** | 0.501*** |
| | (<0.001) | (<0.001) |
| Frequency of participation in sport activities (ref.: never) | | |
| Less than monthly (dummy) | -0.008 | -0.003 |
| | (0.844) | (0.939) |
| At least once per month (dummy) | 0.133** | 0.128** |
| | (0.036) | (0.048) |
| At least once per week (dummy) | 0.179*** | 0.160*** |
| | (0.002) | (0.003) |
| General risk-taking preferences (0 (low) to 10 (high)) | -0.034*** | -0.044*** |
| | (0.001) | (<0.001) |
| Positive reciprocity (1 (low) to 7 (high)) | 0.039* | 0.010 |
| | (0.051) | (0.602) |
| Negative reciprocity (1 (low) to 7 (high)) | -0.035** | -0.026** |
| | (0.013) | (0.044) |
| Internal locus of control (1 (low) to 7 (high)) | 0.111** | 0.027 |
| | (0.020) | (0.508) |
| Health status categories (ref.: very good) | | |
| Good (dummy) | -0.206*** | -0.086* |
| | (0.001) | (0.064) |
| Satisfactory (dummy) | -0.636*** | -0.356*** |
| | (<0.001) | (<0.001) |

**Table A.3** Predicting satisfaction with democracy (SWD) – full results for columns (5) & (6) of Table 3

| | Without LS | With LS |
|---|---|---|
| | (1) | (2) |
| Not satisfactory (dummy) | -0.920*** | -0.453*** |
| | (<0.001) | (<0.001) |
| Bad (dummy) | -1.420*** | -0.632*** |
| | (<0.001) | (<0.001) |
| Low school degree (dummy) | -0.457*** | -0.429*** |
| | (0.001) | (0.001) |
| Medium school degree (dummy) | -0.361*** | -0.301*** |
| | (0.001) | (0.002) |
| High school degree (dummy) | -0.182* | -0.114 |
| | (0.082) | (0.251) |
| Apprenticeship degree (dummy) | -0.016 | 0.010 |
| | (0.509) | (0.707) |
| College degree (dummy) | 0.041 | 0.056 |
| | (0.409) | (0.217) |
| Age in years | 0.004*** | 0.004*** |
| | (0.010) | (0.005) |
| Female (dummy) | 0.008 | -0.030 |
| | (0.758) | (0.238) |
| Migration background (dummy) | 0.258*** | 0.231*** |
| | (<0.001) | (<0.001) |
| Number of persons in the household | 0.095*** | 0.081*** |
| | (0.003) | (0.003) |
| Children < 16 years in the household (dummy) | -0.026 | -0.035 |
| | (0.732) | (0.610) |
| Marital status (ref.: other) | | |
| Married (dummy) | 0.057 | 0.014 |
| | (0.130) | (0.680) |
| Divorced (dummy) | -0.278*** | -0.263*** |
| | (<0.001) | (<0.001) |
| Widowed (dummy) | -0.178* | -0.147* |
| | (0.054) | (0.084) |
| Federal states (16) + survey years (3) | Yes | Yes |
| Individual fixed-effects | No | No |
| Constant | 4.963*** | 2.950*** |
| | (<0.001) | (0.008) |
| Number of observations | 44,003 | 44,003 |
| $R^2$ | 0.277 | 0.302 |
| Mean SWD (dependent variable) | 5.332 | 5.332 |

*Notes* Results from ordinary least squares regressions using Sample A. The outcome variable is SWD measured on an 11-point Likert scale from 0 (low) to 10 (high). The covariates are explained in Table A.1. Standard errors are clustered at the state level. p-values in parentheses.*** $p<0.01$,** $p<0.05$,* $p<0.10$

**Table A.4** Satisfaction with democracy (SWD): robustness checks

| | Sample AF | | Sample B | | Sample BF | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Life satisfaction (0 (low) to 10 (high)) | | 0.142*** | | 0.279*** | | 0.156*** |
| | | (<0.001) | | (<0.001) | | (<0.001) |
| Unemployment rate in % | -0.056*** | -0.050*** | -0.066*** | -0.051** | -0.060*** | -0.052*** |
| | (<0.001) | (<0.001) | (0.004) | (0.014) | (<0.001) | (<0.001) |
| GDP per capita in 1,000 Euros | 0.019 | 0.021 | 0.066** | 0.071** | 0.035** | 0.038** |
| | (0.270) | (0.216) | (0.043) | (0.022) | (0.028) | (0.016) |
| GDP per capita growth in % | 0.023** | 0.022** | 0.001 | 0.002 | 0.011 | 0.011 |
| | (0.014) | (0.017) | (0.901) | (0.784) | (0.175) | (0.182) |
| Own net household income per capita in 1,000 Euros | 0.088*** | 0.079*** | 0.139*** | 0.105*** | 0.076*** | 0.065*** |
| | (<0.001) | (0.001) | (<0.001) | (<0.001) | (0.001) | (0.006) |
| Worries about own economic situation (ref.: not concerned at all) | | | | | | |
| Somewhat concerned (dummy) | -0.091** | -0.056 | -0.288*** | -0.141*** | -0.105*** | -0.062* |
| | (0.012) | (0.120) | (<0.001) | (<0.001) | (0.001) | (0.061) |
| Very concerned (dummy) | -0.313*** | -0.204*** | -0.655*** | -0.281*** | -0.307*** | -0.175*** |
| | (<0.001) | (<0.001) | (<0.001) | (0.005) | (<0.001) | (0.001) |
| Worries about general economic development (ref.: not concerned at all) | | | | | | |
| Somewhat concerned (dummy) | -0.231*** | -0.227*** | -0.173*** | -0.162*** | -0.209*** | -0.206*** |
| | (<0.001) | (<0.001) | (<0.001) | (0.001) | (<0.001) | (<0.001) |
| Very concerned (dummy) | -0.513*** | -0.507*** | -0.637*** | -0.619*** | -0.512*** | -0.505*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Worries about the environment (ref.: not concerned at all) | | | | | | |
| Somewhat concerned (dummy) | 0.061 | 0.058 | 0.169*** | 0.161*** | 0.019 | 0.014 |
| | (0.238) | (0.263) | (0.007) | (0.006) | (0.680) | (0.764) |

**Table A.4** Satisfaction with democracy (SWD): robustness checks

| | Sample AF | | Sample B | | Sample BF | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Very concerned (dummy) | 0.015 | 0.013 | 0.072 | 0.060 | -0.050 | -0.057 |
| | (0.816) | (0.839) | (0.233) | (0.266) | (0.383) | (0.317) |
| Worries about peace (ref.: not concerned at all) | | | | | | |
| Somewhat concerned (dummy) | -0.040 | -0.047 | -0.054 | -0.068** | -0.036 | -0.041 |
| | (0.412) | (0.335) | (0.131) | (0.044) | (0.412) | (0.347) |
| Very concerned (dummy) | -0.134** | -0.152*** | -0.166*** | -0.206*** | -0.103* | -0.122** |
| | (0.023) | (0.009) | (0.001) | (<0.001) | (0.053) | (0.021) |
| Worries about crime (ref.: not concerned at all) | | | | | | |
| Somewhat concerned (dummy) | -0.087* | -0.089* | -0.150*** | -0.147*** | -0.061 | -0.062 |
| | (0.098) | (0.085) | (0.004) | (0.006) | (0.180) | (0.176) |
| Very concerned (dummy) | -0.280*** | -0.285*** | -0.447*** | -0.456*** | -0.263*** | -0.266*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Worries about xenophobia (ref.: not concerned at all) | | | | | | |
| Somewhat concerned (dummy) | 0.058 | 0.055 | 0.352*** | 0.342*** | 0.079* | 0.070* |
| | (0.214) | (0.237) | (<0.001) | (<0.001) | (0.061) | (0.093) |
| Very concerned (dummy) | 0.206*** | 0.200*** | 0.587*** | 0.553*** | 0.252*** | 0.238*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Worries about immigration (ref.: not concerned at all) | | | | | | |
| Somewhat concerned (dummy) | -0.050 | -0.045 | -0.171*** | -0.156*** | -0.056 | -0.048 |
| | (0.201) | (0.247) | (<0.001) | (<0.001) | (0.111) | (0.171) |
| Very concerned (dummy) | -0.415*** | -0.405*** | -0.987*** | -0.945*** | -0.478*** | -0.466*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Employment status (ref.: other non-employed) | | | | | | |

**Table A.4** Satisfaction with democracy (SWD): robustness checks

| | Sample AF | | Sample B | | Sample BF | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Retired (dummy) | -0.028 | -0.024 | 0.156** | 0.092 | -0.003 | -0.008 |
| | (0.665) | (0.708) | (0.018) | (0.143) | (0.965) | (0.896) |
| Unemployed (dummy) | -0.193** | -0.100 | -0.302*** | -0.176** | -0.212*** | -0.122* |
| | (0.015) | (0.200) | (0.001) | (0.045) | (0.003) | (0.084) |
| Part-time in the private sector (dummy) | -0.087 | -0.088 | -0.041** | -0.032 | -0.041 | -0.044 |
| | (0.143) | (0.136) | (0.039) | (0.103) | (0.428) | (0.390) |
| Full-time in the private sector (dummy) | -0.017 | -0.013 | -0.024 | -0.011 | -0.011 | -0.012 |
| | (0.727) | (0.785) | (0.389) | (0.655) | (0.800) | (0.789) |
| Part-time in the public sector (dummy) | 0.008 | 0.004 | 0.093 | 0.114* | 0.072 | 0.072 |
| | (0.916) | (0.963) | (0.113) | (0.061) | (0.301) | (0.292) |
| Full-time in the public sector (dummy) | 0.051 | 0.050 | 0.143*** | 0.154*** | 0.058 | 0.058 |
| | (0.430) | (0.430) | (0.001) | (0.001) | (0.314) | (0.309) |
| Unemployment experience in years | 0.027 | 0.018 | -0.049*** | -0.040*** | 0.004 | -0.006 |
| | (0.151) | (0.340) | (<0.001) | (<0.001) | (0.810) | (0.735) |
| Work experience in part-time in years | 0.005 | 0.004 | <0.001 | <0.001 | 0.008 | 0.006 |
| | (0.555) | (0.668) | (0.997) | (0.883) | (0.352) | (0.448) |
| Work experience in full-time in years | -0.011 | -0.012 | -0.002* | -0.003*** | -0.006 | -0.008 |
| | (0.158) | (0.123) | (0.062) | (0.010) | (0.421) | (0.292) |
| Frequency of participation in religious and church activities (ref.: never) | | | | | | |
| Less than monthly (dummy) | 0.082* | 0.075* | | | | |
| | (0.051) | (0.070) | | | | |
| At least once per month (dummy) | 0.114* | 0.109 | | | | |
| | (0.096) | (0.111) | | | | |
| At least once per week (dummy) | 0.173* | 0.152 | | | | |
| | (0.073) | (0.112) | | | | |

**Table A.4** Satisfaction with democracy (SWD): robustness checks

| | Sample AF | | Sample B | | Sample BF | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Frequency of participation in sports activities (ref.: never) | | | | | | |
| Less than monthly (dummy) | 0.051 | 0.045 | | | | |
| | (0.237) | (0.301) | | | | |
| At least once per month (dummy) | 0.092 | 0.086 | | | | |
| At least once per week (dummy) | 0.021 | 0.011 | | | | |
| | (0.630) | (0.797) | | | | |
| General risk-taking preferences (0 (low) to 10 (high)) | 0.007 | 0.005 | | | | |
| | (0.359) | (0.565) | | | | |
| Positive reciprocity (1 (low) to 7 (high)) | 0.036* | 0.024 | | | | |
| | (0.061) | (0.211) | | | | |
| Negative reciprocity (1 (low) to 7 (high)) | -0.017 | -0.014 | | | | |
| | (0.216) | (0.323) | | | | |
| Internal locus of control (1 (low) to 7 (high)) | 0.037* | 0.003 | | | | |
| | (0.068) | (0.893) | | | | |
| Health status categories (ref.: very good) | | | | | | |
| Good (dummy) | -0.041 | -0.002 | -0.224*** | -0.084*** | -0.048 | -0.002 |
| | (0.516) | (0.970) | (<0.001) | (0.007) | (0.354) | (0.970) |
| Satisfactory (dummy) | -0.159** | -0.062 | -0.690*** | -0.372*** | -0.190*** | -0.079 |
| | (0.019) | (0.362) | (<0.001) | (<0.001) | (0.001) | (0.174) |
| Not satisfactory (dummy) | -0.254*** | -0.085 | -1.007*** | -0.491*** | -0.289*** | -0.095 |
| | (0.001) | (0.290) | (<0.001) | (<0.001) | (<0.001) | (0.172) |
| Bad (dummy) | -0.535*** | -0.216* | -1.528*** | -0.654*** | -0.583*** | -0.210* |
| | (<0.001) | (0.080) | (<0.001) | (<0.001) | (<0.001) | (0.052) |
| Low school degree (dummy) | | | -0.532*** | -0.509*** | | |
| | | | (<0.001) | (<0.001) | | |

**Table A.4** Satisfaction with democracy (SWD): robustness checks

| | Sample AF | | Sample B | | Sample BF | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Medium school degree (dummy) | | | -0.363*** | -0.321*** | | |
| | | | (<0.001) | (<0.001) | | |
| High school degree (dummy) | | | -0.149** | -0.102 | | |
| | | | (0.044) | (0.124) | | |
| Apprenticeship degree (dummy) | | | 0.004 | 0.020 | | |
| | | | (0.856) | (0.424) | | |
| College degree (dummy) | | | 0.074 | 0.077 | | |
| | | | (0.188) | (0.129) | | |
| Age in years | | | 0.006*** | 0.008*** | | |
| | | | (0.002) | (<0.001) | | |
| Female (dummy) | | | 0.068** | 0.033 | | |
| | | | (0.050) | (0.299) | | |
| Migration background (dummy) | | | 0.308*** | 0.277*** | | |
| | | | (<0.001) | (<0.001) | | |
| Number of persons in the household | 0.111*** | 0.105*** | 0.112*** | 0.094*** | 0.082*** | 0.078*** |
| | (<0.001) | (<0.001) | (0.001) | (0.002) | (<0.001) | (<0.001) |
| Children < 16 years in the household (dummy) | 0.030 | 0.030 | 0.020 | -0.007 | 0.080* | 0.075* |
| | (0.538) | (0.543) | (0.782) | (0.915) | (0.078) | (0.097) |
| Marital status (ref.: other) | | | | | | |
| Married (dummy) | 0.034 | 0.012 | 0.117*** | 0.064* | -0.031 | -0.049 |
| | (0.665) | (0.873) | (0.004) | (0.067) | (0.658) | (0.482) |
| Divorced (dummy) | -0.051 | -0.081 | -0.260*** | -0.255*** | -0.124 | -0.143 |
| | (0.655) | (0.478) | (<0.001) | (<0.001) | (0.220) | (0.157) |
| Widowed (dummy) | -0.034 | -0.012 | -0.089 | -0.074 | -0.047 | -0.017 |
| | (0.828) | (0.940) | (0.266) | (0.334) | (0.751) | (0.906) |
| Federal states (16) + survey years (3) | Yes | Yes | Yes | Yes | Yes | Yes |

**Table A.4** Satisfaction with democracy (SWD): robustness checks

| | Sample AF | | Sample B | | Sample BF | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Individual fixed-effects | Yes | Yes | No | No | Yes | Yes |
| Constant | 5.465*** | 4.498*** | 5.463*** | 2.789** | 5.572*** | 4.206*** |
| | (<0.001) | (<0.001) | (<0.001) | (0.012) | (<0.001) | (<0.001) |
| Number of observations | 26,612 | 26,612 | 51,676 | 51,676 | 33,804 | 33,804 |
| Number of individuals | 10,957 | 10,957 | | | 14,296 | 14,296 |
| $R^2$ (within for FE) | 0.055 | 0.065 | 0.259 | 0.286 | 0.051 | 0.063 |
| Mean SWD (dependent variable) | 5.281 | 5.281 | 5.347 | 5.347 | 5.329 | 5.329 |

*Notes* Sample AF in Columns (1) & (2), Sample B in Columns (3) & (4), and Sample BF in Columns (5) & (6). The outcome variable is SWD measured on an 11-point Likert scale from 0 (low) to 10 (high). Covariates described in Table A.1. Coefficients estimated with OLS regressions. Standard errors clustered at the federal state level for pooled regressions and at the individual level for fixed-effects regressions. p-values in parentheses.*** $p<0.01$,** $p<0.05$,* $p<0.10$

**Table A.5** Predicting satisfaction with democracy (SWD) using ordered probit

| | Without LS | With LS |
|---|---|---|
| | (1) | (2) |
| Life satisfaction (0 (low) to 10 (high)) | | 0.140*** |
| | | (<0.001) |
| Unemployment Rate in % | -0.028*** | -0.021*** |
| | (<0.001) | (<0.001) |
| GDP per capita in 1,000 Euros | 0.033*** | 0.036*** |
| | (<0.001) | (<0.001) |
| GDP per capita growth in % | -0.002 | -0.001 |
| | (0.614) | (0.764) |
| Own Net Household Income per capita in 1,000 Euros | 0.067*** | 0.054*** |
| | (<0.001) | (<0.001) |
| Worries about own economic situation (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | -0.124*** | -0.066*** |
| | (<0.001) | (<0.001) |
| Very concerned (dummy) | -0.265*** | -0.109*** |
| | (<0.001) | (<0.001) |
| Worries about general economic development (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | -0.129*** | -0.128*** |
| | (<0.001) | (<0.001) |
| Very concerned (dummy) | -0.337*** | -0.336*** |
| | (<0.001) | (<0.001) |
| Worries about the environment (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | 0.066*** | 0.066*** |
| | (<0.001) | (<0.001) |
| Very concerned (dummy) | 0.025 | 0.026 |
| | (0.196) | (0.176) |
| Worries about peace (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | -0.052*** | -0.059*** |
| | (0.003) | (0.001) |
| Very concerned (dummy) | -0.122*** | -0.144*** |
| | (<0.001) | (<0.001) |
| Worries about crime (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | -0.091*** | -0.089*** |
| | (<0.001) | (<0.001) |
| Very concerned (dummy) | -0.243*** | -0.251*** |
| | (<0.001) | (<0.001) |
| Worries about xenophobia (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | 0.169*** | 0.172*** |
| | (<0.001) | (<0.001) |
| Very concerned (dummy) | 0.283*** | 0.281*** |
| | (<0.001) | (<0.001) |

**Table A.5** Predicting satisfaction with democracy (SWD) using ordered probit

| | Without LS | With LS |
|---|---|---|
| | (1) | (2) |
| Worries about immigration (ref.: not concerned at all) | | |
| Somewhat concerned (dummy) | -0.076*** | -0.074*** |
| | (<0.001) | (<0.001) |
| Very concerned (dummy) | -0.446*** | -0.440*** |
| | (<0.001) | (<0.001) |
| Employment status (ref.: other non-employed) | | |
| Retired (dummy) | 0.056*** | 0.034* |
| | (0.005) | (0.088) |
| Unemployed (dummy) | -0.130*** | -0.073*** |
| | (<0.001) | (0.005) |
| Part-time in the private sector (dummy) | -0.016 | -0.011 |
| | (0.422) | (0.569) |
| Full-time in the private sector (dummy) | -0.002 | 0.006 |
| | (0.898) | (0.655) |
| Part-time in the public sector (dummy) | 0.042* | 0.048* |
| | (0.098) | (0.054) |
| Full-time in the public sector (dummy) | 0.053*** | 0.058*** |
| | (0.004) | (0.002) |
| Unemployment experience in years | -0.018*** | -0.015*** |
| | (<0.001) | (<0.001) |
| Work experience in part-time in years | -0.001 | -0.001 |
| | (0.340) | (0.537) |
| Work experience in full-time in years | -0.001 | -0.001* |
| | (0.111) | (0.064) |
| Frequency of participation in religious and church activities (ref.: never) | | |
| Less than monthly (dummy) | 0.183*** | 0.177*** |
| | (<0.001) | (<0.001) |
| At least once per month (dummy) | 0.293*** | 0.273*** |
| | (<0.001) | (<0.001) |
| At least once per week (dummy) | 0.293*** | 0.264*** |
| | (<0.001) | (<0.001) |
| Frequency of participation in sport activities (ref.: never) | | |
| Less than monthly (dummy) | -0.006 | -0.004 |
| | (0.673) | (0.805) |
| At least once per month (dummy) | 0.062*** | 0.061*** |
| | (0.003) | (0.003) |
| At least once per week (dummy) | 0.087*** | 0.079*** |
| | (<0.001) | (<0.001) |
| General risk-taking preferences (0 (low) to 10 (high)) | -0.018*** | -0.023*** |
| | (<0.001) | (<0.001) |
| Positive reciprocity (1 (low) to 7 (high)) | 0.022*** | 0.007 |
| | (<0.001) | (0.185) |
| Negative reciprocity (1 (low) to 7 (high)) | -0.019*** | -0.014*** |

**Table A.5** Predicting satisfaction with democracy (SWD) using ordered probit

| | Without LS | With LS |
|---|---|---|
| | (1) | (2) |
| | (<0.001) | (<0.001) |
| Internal locus of control (1 (low) to 7 (high)) | 0.053*** | 0.011** |
| | (<0.001) | (0.047) |
| Health status categories (ref.: very good) | | |
| Good (dummy) | -0.120*** | -0.060*** |
| | (<0.001) | (0.001) |
| Satisfactory (dummy) | -0.338*** | -0.199*** |
| | (<0.001) | (<0.001) |
| Not satisfactory (dummy) | -0.473*** | -0.242*** |
| | (<0.001) | (<0.001) |
| Bad (dummy) | -0.717*** | -0.327*** |
| | (<0.001) | (<0.001) |
| Low school degree (dummy) | -0.233*** | -0.222*** |
| | (<0.001) | (<0.001) |
| Medium school degree (dummy) | -0.185*** | -0.157*** |
| | (<0.001) | (<0.001) |
| High school degree (dummy) | -0.096*** | -0.063** |
| | (<0.001) | (0.021) |
| Apprenticeship degree (dummy) | -0.012 | 0.001 |
| | (0.364) | (0.958) |
| College degree (dummy) | 0.026* | 0.034** |
| | (0.098) | (0.031) |
| Age in years | 0.002*** | 0.002*** |
| | (0.008) | (0.005) |
| Female (dummy) | -0.003 | -0.023* |
| | (0.785) | (0.057) |
| Migration background (dummy) | 0.131*** | 0.120*** |
| | (<0.001) | (<0.001) |
| Number of persons in the household | 0.051*** | 0.044*** |
| | (<0.001) | (<0.001) |
| Children < 16 years in the household (dummy) | -0.014 | -0.018 |
| | (0.349) | (0.221) |
| Marital status (ref.: other) | | |
| Married (dummy) | 0.032* | 0.010 |
| | (0.055) | (0.535) |
| Divorced (dummy) | -0.130*** | -0.125*** |
| | (<0.001) | (<0.001) |
| Widowed (dummy) | -0.084*** | -0.070** |
| | (0.005) | (0.020) |
| Federal states (16) + survey years (3) | Yes | Yes |
| Individual fixed-effects | No | No |
| Cut point 1 | -1.873 | -0.874 |
| Cut point 2 | -1.521 | -0.517 |
| Cut point 3 | -1.093 | -0.081 |
| Cut point 4 | -0.680 | 0.340 |

**Table A.5** Predicting satisfaction with democracy (SWD) using ordered probit

| | Without LS | With LS |
|---|---|---|
| | (1) | (2) |
| Cut point 5 | -0.339 | 0.689 |
| Cut point 6 | 0.241 | 1.280 |
| Cut point 7 | 0.674 | 1.721 |
| Cut point 8 | 1.248 | 2.304 |
| Cut point 9 | 1.938 | 3.004 |
| Cut point 10 | 2.441 | 3.516 |
| Number of observations | 44,003 | 44,003 |
| Pseudo $R^2$ | 0.071 | 0.079 |
| Mean SWD (dependent variable) | 5.332 | 5.332 |

*Notes* Results from ordered probit regressions using Sample A. The outcome variable is SWD measured on an 11-point Likert scale from 0 (low) to 10 (high). Covariates are explained in Table A.1. p-values in parentheses.*** $p<0.01$,** $p<0.05$,* $p<0.10$

*Source*: SOEP version 36

**Table A.6** Satisfaction with democracy (SWD): Splits by Gender, West/East Germany, and No College/College

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| | Total | Men | Women | West | East | No College | College |
| Life satisfaction (0 (low) to 10 (high)) | 0.273*** | 0.304*** | 0.245*** | 0.277*** | 0.254*** | 0.265*** | 0.309*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Unemployment Rate in % | -0.046** | -0.058** | -0.035* | 0.001 | 0.072 | -0.042* | -0.064** |
| | (0.025) | (0.020) | (0.073) | (0.977) | (0.382) | (0.054) | (0.014) |
| GDP per capita in 1,000 Euros | 0.069** | 0.071* | 0.064** | 0.072** | 0.070 | 0.081** | 0.033 |
| | (0.040) | (0.060) | (0.031) | (0.049) | (0.482) | (0.016) | (0.345) |
| GDP per capita growth in % | -0.001 | -0.010 | 0.008 | -0.006 | 0.116* | -0.005 | 0.010 |
| | (0.944) | (0.285) | (0.544) | (0.454) | (0.091) | (0.704) | (0.589) |
| Own net household income per capita in 1,000 Euros | 0.105*** | 0.080*** | 0.141*** | 0.094*** | 0.204** | 0.135*** | 0.099*** |
| | (<0.001) | (0.001) | (0.001) | (0.001) | (0.027) | (0.005) | (<0.001) |
| Worries about own economic situation (ref.: not concerned at all) | | | | | | | |
| Somewhat concerned (dummy) | -0.120*** | -0.074** | -0.158*** | -0.116** | -0.156*** | -0.149*** | -0.031 |
| | (0.003) | (0.049) | (0.003) | (0.026) | (0.003) | (0.001) | (0.510) |
| Very concerned (dummy) | -0.248*** | -0.204** | -0.285*** | -0.208** | -0.387*** | -0.304*** | 0.019 |
| | (0.004) | (0.038) | (0.004) | (0.032) | (0.004) | (<0.001) | (0.918) |
| Worries about general economic development (ref.: not concerned at all) | | | | | | | |
| Somewhat concerned (dummy) | -0.205*** | -0.156*** | -0.260*** | -0.178*** | -0.301** | -0.175*** | -0.261*** |
| | (<0.001) | (0.003) | (<0.001) | (0.002) | (0.044) | (0.001) | (0.002) |
| Very concerned (dummy) | -0.654*** | -0.593*** | -0.720*** | -0.583*** | -0.885*** | -0.615*** | -0.734*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (0.004) | (<0.001) | (<0.001) |
| Worries about the environment (ref.: not concerned at all) | | | | | | | |
| Somewhat concerned (dummy) | 0.154** | 0.182** | 0.113* | 0.122* | 0.261** | 0.135** | 0.190** |
| | (0.014) | (0.011) | (0.094) | (0.062) | (0.046) | (0.039) | (0.014) |

**Table A.6** Satisfaction with democracy (SWD): Splits by Gender, West/East Germany, and No College/College

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| | Total | Men | Women | West | East | No College | College |
| Very concerned (dummy) | 0.061 | 0.066 | 0.041 | 0.025 | 0.188* | 0.029 | 0.130 |
| | (0.317) | (0.392) | (0.462) | (0.706) | (0.057) | (0.603) | (0.182) |
| Worries about peace (ref.: not concerned at all) | | | | | | | |
| Somewhat concerned (dummy) | -0.106** | -0.060 | -0.172** | -0.091* | -0.106 | -0.096 | -0.120* |
| | (0.024) | (0.154) | (0.018) | (0.082) | (0.304) | (0.128) | (0.060) |
| Very concerned (dummy) | -0.272*** | -0.266*** | -0.302*** | -0.295*** | -0.159 | -0.288*** | -0.208*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (0.210) | (0.001) | (0.001) |
| Worries about crime (ref.: not concerned at all) | | | | | | | |
| Somewhat concerned (dummy) | -0.151** | -0.147** | -0.151* | -0.104* | -0.345* | -0.130* | -0.165*** |
| | (0.015) | (0.016) | (0.089) | (0.057) | (0.071) | (0.077) | (0.004) |
| Very concerned (dummy) | -0.476*** | -0.465*** | -0.484*** | -0.420*** | -0.716*** | -0.427*** | -0.577*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (0.009) | (<0.001) | (<0.001) |
| Worries about xenophobia (ref.: not concerned at all) | | | | | | | |
| Somewhat concerned (dummy) | 0.345*** | 0.414*** | 0.263*** | 0.310*** | 0.460** | 0.337*** | 0.378*** |
| | (<0.001) | (<0.001) | (0.001) | (<0.001) | (0.014) | (<0.001) | (0.001) |
| Very concerned (dummy) | 0.558*** | 0.590*** | 0.505*** | 0.538*** | 0.613*** | 0.586*** | 0.483*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (0.003) | (<0.001) | (<0.001) |
| Worries about immigration (ref.: not concerned at all) | | | | | | | |
| Somewhat concerned (dummy) | -0.127*** | -0.144*** | -0.111** | -0.163*** | -0.011 | -0.173*** | -0.046 |
| | (0.002) | (0.004) | (0.011) | (<0.001) | (0.918) | (0.001) | (0.346) |
| Very concerned (dummy) | -0.875*** | -0.889*** | -0.862*** | -0.882*** | -0.845*** | -0.950*** | -0.622*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (<0.001) |
| Employment status (ref.: other non-employed) | | | | | | | |
| Retired (dummy) | 0.072 | 0.046 | 0.081 | 0.030 | 0.225* | 0.022 | 0.228*** |
| | (0.269) | (0.551) | (0.284) | (0.712) | (0.055) | (0.766) | (0.009) |

**Table A.6** Satisfaction with democracy (SWD): Splits by Gender, West/East Germany, and No College/College

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| | Total | Men | Women | West | East | No College | College |
| Unemployed (dummy) | -0.155* | -0.089 | -0.211** | -0.171 | -0.121 | -0.194** | 0.212 |
| | (0.062) | (0.401) | (0.010) | (0.137) | (0.305) | (0.032) | (0.306) |
| Part-time in the private sector (dummy) | -0.017 | -0.019 | -0.032 | -0.018 | -0.029 | -0.050** | 0.044 |
| | (0.306) | (0.849) | (0.168) | (0.378) | (0.306) | (0.028) | (0.583) |
| Full-time in the private sector (dummy) | 0.016 | 0.039 | -0.019 | 0.021 | -0.028 | -0.015 | 0.024 |
| | (0.570) | (0.316) | (0.566) | (0.489) | (0.590) | (0.535) | (0.729) |
| Part-time in the public sector (dummy) | 0.092 | 0.236 | 0.061 | 0.116* | -0.007 | -0.033 | 0.275*** |
| | (0.109) | (0.107) | (0.321) | (0.058) | (0.966) | (0.626) | (0.005) |
| Full-time in the public sector (dummy) | 0.117*** | 0.185*** | 0.029 | 0.121*** | 0.056 | 0.011 | 0.248*** |
| | (0.001) | (<0.001) | (0.461) | (0.008) | (0.346) | (0.822) | (<0.001) |
| Unemployment experience in years | -0.031*** | -0.038*** | -0.029*** | -0.033*** | -0.024* | -0.028*** | -0.036** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (0.079) | (<0.001) | (0.039) |
| Work experience in part-time in years | -0.001 | -0.010 | -0.001 | -0.002 | 0.005 | -0.002 | 0.003 |
| | (0.652) | (0.194) | (0.755) | (0.350) | (0.598) | (0.346) | (0.590) |
| Work experience in full-time in years | -0.002* | -0.004 | -0.004* | -0.003* | 0.002 | -0.001 | -0.007 |
| | (0.059) | (0.445) | (0.093) | (0.081) | (0.653) | (0.986) | (0.162) |
| Frequency of participation in religious and church activities (ref.: never) | | | | | | | |
| Less than monthly (dummy) | 0.357*** | 0.374*** | 0.341*** | 0.366*** | 0.320*** | 0.384*** | 0.242*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (0.005) | (<0.001) | (<0.001) |
| At least once per month (dummy) | 0.541*** | 0.552*** | 0.534*** | 0.563*** | 0.365** | 0.578*** | 0.394*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (0.017) | (<0.001) | (<0.001) |
| At least once per week (dummy) | 0.501*** | 0.537*** | 0.479*** | 0.507*** | 0.477** | 0.520*** | 0.399*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (0.047) | (<0.001) | (<0.001) |
| Frequency of participation in sport activities (ref.: never) | | | | | | | |
| Less than monthly (dummy) | -0.003 | -0.022 | 0.016 | 0.028 | -0.107 | 0.016 | -0.092 |

**Table A.6** Satisfaction with democracy (SWD): Splits by Gender, West/East Germany, and No College/College

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| | Total | Men | Women | West | East | No College | College |
| | (0.939) | (0.636) | (0.632) | (0.498) | (0.163) | (0.694) | (0.175) |
| At least once per month (dummy) | 0.128** | 0.157** | 0.093 | 0.217*** | -0.137 | 0.167*** | -0.044 |
| | (0.048) | (0.015) | (0.221) | (0.001) | (0.284) | (0.009) | (0.619) |
| At least once per week (dummy) | 0.160*** | 0.198*** | 0.130*** | 0.204*** | 0.008 | 0.183*** | 0.050 |
| | (0.003) | (0.007) | (0.008) | (0.001) | (0.899) | (0.001) | (0.324) |
| General risk-taking preferences (0 (low) to 10 (high)) | -0.044*** | -0.040*** | -0.045*** | -0.047*** | -0.026** | -0.039*** | -0.044** |
| | (<0.001) | (0.008) | (<0.001) | (0.001) | (0.016) | (<0.001) | (0.049) |
| Positive reciprocity (1 (low) to 7 (high)) | 0.010 | -0.010 | 0.028 | 0.017 | -0.008 | 0.006 | 0.023 |
| | (0.602) | (0.667) | (0.162) | (0.481) | (0.777) | (0.813) | (0.434) |
| Negative reciprocity (1 (low) to 7 (high)) | -0.026** | -0.032** | -0.018 | -0.033* | -0.011 | -0.035*** | 0.019 |
| | (0.044) | (0.027) | (0.195) | (0.062) | (0.452) | (0.003) | (0.402) |
| Internal locus of control (1 (low) to 7 (high)) | 0.027 | 0.034 | 0.025 | -0.004 | 0.114*** | 0.010 | 0.085 |
| | (0.508) | (0.484) | (0.474) | (0.938) | (0.010) | (0.780) | (0.222) |
| Health status categories (ref.: very good) | | | | | | | |
| Good (dummy) | -0.086* | -0.093** | -0.080 | -0.121** | 0.081** | -0.048 | -0.136** |
| | (0.064) | (0.044) | (0.213) | (0.043) | (0.037) | (0.437) | (0.027) |
| Satisfactory (dummy) | -0.356*** | -0.308*** | -0.394*** | -0.412*** | -0.112 | -0.329*** | -0.350*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (0.196) | (<0.001) | (<0.001) |
| Not satisfactory (dummy) | -0.453*** | -0.392*** | -0.500*** | -0.488*** | -0.252** | -0.427*** | -0.447*** |
| | (<0.001) | (<0.001) | (<0.001) | (<0.001) | (0.033) | (<0.001) | (0.001) |
| Bad (dummy) | -0.632*** | -0.509** | -0.729*** | -0.703*** | -0.336 | -0.670*** | -0.251 |
| | (<0.001) | (0.011) | (<0.001) | (<0.001) | (0.217) | (<0.001) | (0.216) |
| Low school degree (dummy) | -0.429*** | -0.417*** | -0.438*** | -0.455*** | -0.124 | -0.413*** | -0.299 |
| | (0.001) | (<0.001) | (0.004) | (0.003) | (0.534) | (<0.001) | (0.359) |
| Medium school degree (dummy) | -0.301*** | -0.364*** | -0.244** | -0.306** | -0.018 | -0.263*** | -0.457** |

**Table A.6** Satisfaction with democracy (SWD): Splits by Gender, West/East Germany, and No College/College

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| | Total | Men | Women | West | East | No College | College |
| | (0.002) | (0.001) | (0.011) | (0.011) | (0.897) | (0.002) | (0.045) |
| High school degree (dummy) | -0.114 | -0.149 | -0.092 | -0.145 | 0.226 | -0.046 | -0.371 |
| | (0.251) | (0.110) | (0.420) | (0.246) | (0.270) | (0.543) | (0.113) |
| Apprenticeship degree (dummy) | 0.010 | -0.016 | 0.023 | 0.012 | 0.022 | 0.070 | -0.150** |
| | (0.707) | (0.729) | (0.562) | (0.609) | (0.826) | (0.107) | (0.011) |
| College degree (dummy) | 0.056 | 0.052 | 0.055 | 0.101* | -0.039 | | |
| | (0.217) | (0.423) | (0.144) | (0.061) | (0.587) | | |
| Age in years | 0.004*** | 0.007 | 0.003** | 0.005*** | -0.004 | 0.006*** | -0.006 |
| | (0.005) | (0.116) | (0.038) | (0.003) | (0.484) | (0.003) | (0.238) |
| Female (dummy) | -0.030 | | | -0.055 | 0.045 | 0.008 | -0.161*** |
| | (0.238) | | | (0.116) | (0.473) | (0.779) | (0.004) |
| Migration background (dummy) | 0.231*** | 0.248*** | 0.222*** | 0.218*** | 0.345* | 0.289*** | -0.002 |
| | (<0.001) | (0.006) | (<0.001) | (0.002) | (0.075) | (<0.001) | (0.984) |
| Number of persons in the household | 0.081*** | 0.088*** | 0.065* | 0.104*** | -0.005 | 0.083*** | 0.098** |
| | (0.003) | (<0.001) | (0.077) | (0.001) | (0.637) | (0.001) | (0.021) |
| Children < 16 years in the household (dummy) | -0.035 | -0.028 | -0.042 | -0.106 | 0.181* | -0.056 | 0.020 |
| | (0.610) | (0.741) | (0.421) | (0.123) | (0.052) | (0.336) | (0.878) |
| Marital status (ref.: other) | | | | | | | |
| Married (dummy) | 0.014 | -0.041 | 0.045 | 0.056 | -0.056 | -0.031 | 0.099 |
| | (0.680) | (0.380) | (0.296) | (0.122) | (0.196) | (0.506) | (0.117) |
| Divorced (dummy) | -0.263*** | -0.320*** | -0.213*** | -0.240*** | -0.273** | -0.321*** | -0.065 |
| | (<0.001) | (<0.001) | (0.003) | (0.001) | (0.038) | (<0.001) | (0.249) |
| Widowed (dummy) | -0.147* | -0.167** | -0.137 | -0.056 | -0.380* | -0.233** | 0.125 |
| | (0.084) | (0.047) | (0.205) | (0.514) | (0.061) | (0.021) | (0.433) |
| Federal state + survey year | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

**Table A.6** Satisfaction with democracy (SWD): Splits by Gender, West/East Germany, and No College/College

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| | Total | Men | Women | West | East | No College | College |
| Individual fixed-effects | No | No | No | No | No | No | No |
| Constant | 2.950*** | 2.680** | 3.242*** | 2.388* | 0.231 | 2.513** | 4.339*** |
| | (0.008) | (0.024) | (0.003) | (0.062) | (0.934) | (0.018) | (0.001) |
| Number of observations | 44,003 | 20,831 | 23,172 | 33,598 | 10,405 | 33,070 | 10,933 |
| $R^2$ | 0.302 | 0.304 | 0.304 | 0.259 | 0.300 | 0.287 | 0.300 |
| Mean SWD (dependent variable) | 5.332 | 5.325 | 5.338 | 5.628 | 4.374 | 5.118 | 5.978 |

*Notes* Sample A. The outcome variable is SWD measured on an 11-point Likert scale from 0 (low) to 10 (high). The covariates are described in Table A.1. Coefficients estimated with OLS regressions. Standard errors clustered at the federal-state level for pooled regressions. p-values in parentheses.*** $p<0.01$,** $p<0.05$,* $p<0.10$

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**Data availability** This paper uses data from the German Socio-Economic Panel (doi: 10.5684/soep.core.v36eu). Details of the data set are provided here: https://www.diw.de/en/diw_01.c.814095.en/edition/soep-core_v36eu__data_1984-2019__eu_edition.html. Instructions for accessing the data can be found here: https://www.diw.de/en/diw_01.c.601584.en/data_access.html.

## Declarations

**Competing interests** The authors declare no competing interests.

**Conflict of interest** The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

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