

# Good Bye Lenin Revisited: East-West Preferences Three Decades After Reunification

Mariia Bondar, Goethe University Frankfurt

Nicola Fuchs-Schündeln, Goethe University Frankfurt and CEPR\*

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## Abstract

In this paper, we document that living under Communism vs. Capitalism has lasting effects on preferences for a strong government. Relying on the natural experiment of German reunification and extending the analysis of [Alesina and Fuchs-Schündeln \(2007\)](#), we show that East Germans still have stronger preferences for redistribution than West Germans 27 years after reunification. While convergence of preferences occurs, the speed of convergence decreases significantly over time. Even young East Germans exhibit stronger pro-state preferences, a result of inter-generational transmission of preferences.

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# 1 Introduction

Experiences shape preferences. This has meanwhile been shown for risk and inflation tolerance ([Malmendier and Nagel, 2011](#); [Malmendier, 2021](#)), growing up in a recession ([Giuliano and Spilimbergo, 2014](#)), and for living under democracy ([Fuchs-Schündeln and Schündeln, 2015](#)). [Alesina and Fuchs-Schündeln \(2007\)](#) analyze the effect of having lived under Communism on preferences for a strong welfare state. Based on the 1997 and 2002 releases of the German Socio-Economic Panel, [Alesina and Fuchs-Schündeln \(2007\)](#) find East Germans to be significantly more in favor of the government taking a strong role in caring for vulnerable groups than West Germans. At the same time, they document convergence of preferences between 1997 and 2002, and conclude that it would take 20 to 40 years for the views of East and West Germans to converge if convergence were to continue at the same (linear) speed. By documenting convergence of preferences on the individual level, and stronger East-West differences for older individuals who lived under the different systems for a longer time period, they can establish a causal effect of living under different systems on preferences.

In this paper, we revisit the long-term effects of having lived under Communism vs. Capitalism on preferences. Using the 2017 release of the German Socio-Economic Panel, we update the results obtained by [Alesina and Fuchs-Schündeln \(2007\)](#). We show that East Germans continue to be significantly more pro-state compared to West Germans even 27 years post reunification. Moreover, we find that the speed of convergence slowed down significantly. The convergence of preferences between 2002 and 2017 is mainly driven by the change in the composition of the population, with younger cohorts replacing older cohorts: On the individual level, there was on average no further significant convergence of preferences between 2002 and 2017. Finally, we suggest an explanation for the low speed of aggregate convergence even if the change in the cohort composition is taken into account. Unlike [Svallfors \(2010\)](#), we find that young cohorts from the East born after reunification are still significantly more likely to exhibit pro-state preferences than young West Germans. Linking children to their parents, we can show that this is partly driven by the intergenerational transmission of preferences from parents to children. This intergenerational transmission of preferences implies that the effects of political regimes on preferences can be extremely persistent.

This paper is closely related to a growing strand of literature on the formation

of economic and political preferences. [Ravallion and Lokshin \(2000\)](#) and [Corneo and Grüner \(2002\)](#), among others, show that preferences for redistribution depend on income and perceived social mobility. [Di Tella, Galiant and Schargrotsky \(2007\)](#) discover that land titles increase pro-market materialist attitudes. [Guiso, Sapienza and Zingales \(2006\)](#) and [Luttmer and Singhal \(2011\)](#) show that ethnicity and culture of the birth country are significantly correlated with preferences for redistribution among second-generation migrants. [Alesina and Giuliano \(2011\)](#) provide an overview of the theoretical literature, and conclude that both personal (age, gender, ethnicity, socioeconomic status) and societal (political ideology, cultural norms) characteristics have an impact on preferences for redistribution. [Fong \(2001\)](#), [Alesina and La Ferrara \(2005\)](#), and [Durante, Putterman and van der Weele \(2014\)](#) establish a connection between preferences for redistribution and other values and beliefs such as concern for fairness, risk attitude, preferences regarding efficiency and equality, and belief in luck.

Following [Alesina and Fuchs-Schündeln \(2007\)](#), several studies have looked at political and social preferences in the context of German reunification. [Svallfors \(2010\)](#) uses the International Social Survey Program data for 1990, 1996, and 2006. He finds that attitudes towards state intervention of East Germans converge quickly to those of West Germans, and that there is no East-West difference in attitudes among the younger cohorts. [Brosig-Koch, Helbach, Ockenfels and Weimann \(2011\)](#), on the other hand, see no convergence in attitudes towards solidarity, cooperation, and fairness between East and West Germany, relying on laboratory experiments among students. Finally, [Avdeenko \(2018\)](#) shows that East Germans living in the border regions are less likely to vote for left parties, which the author interprets as retrospective electoral punishment.

An increasing number of studies use German reunification as a natural experiment in other contexts than the effect of preferences, see [Fuchs-Schündeln and Hassan \(2016\)](#) for an overview. If separation and reunification of Germany was exogenous, and there were no East-West differences prior to the separation in 1949, then West Germans constitute a valid control group for East Germans, and the differences in outcome variables right after reunification can be attributed to having lived under different economic and political regimes. The literature evaluates the effect of Communism on a wide range of variables, including savings ([Fuchs-Schündeln and Schündeln, 2005](#); [Fuchs-Schündeln, 2008](#)), income and economic development ([Burchardi and Hassan, 2013](#)), productivity ([Burda and Severgnini, 2018](#)), labor market outcomes ([Fuchs-Schündeln and Masella, 2016](#)), inflation expectations ([Goldfayn-Frank and Wohlfart, 2020](#)), stock market partici-

pation (Laudenbach, Malmendier and Niessen-Ruenzi, 2020; Fuchs-Schündeln and Haliassos, 2021), financial literacy (Davoli and Hou, 2021) and gender norms (Bauernschuster and Rainer, 2012; Lippmann, Georgieff and Senik, 2020). Becker, Mergele and Woessmann (2020), however, question the validity of German reunification as a natural experiment. They document pre-existing differences between East and West before separation, and argue that there was selective out-migration from East Germany between 1949 and 1961. Following the approach taken by Alesina and Fuchs-Schündeln (2007), we argue that we are immune to this criticism. First, we show that the length of experiences with the different regimes is correlated with differences in preferences. Second, we analyze convergence both on the aggregate and the individual levels.

The paper is organized as follows. Section 2 describes the data source and the sample. Section 3 replicates the main analysis of Alesina and Fuchs-Schündeln (2007), including the new data wave from 2017. Section 4 analyzes the preferences of cohorts born after reunification. Section 5 concludes.

## 2 Data and Methodology

### 2.1 The German Socio-Economic Panel

As in Alesina and Fuchs-Schündeln (2007), we use the German Socio-Economic Panel (SOEP) as our primary data source. SOEP is a large representative panel of German households.<sup>1</sup> The survey started in 1984, first sampling only West German households, but adding an East German sample already in the spring of 1990. The respondents of the survey answer a wide array of questions, providing information about their socio-economic background, family ties, labor market experiences, attitudes, and political views. The question concerning preferences about the role of the government in providing financial security was asked only in the 1997, 2002, and 2017 surveys. This question reads: “In addition to the state, private individuals such as free-market companies, organizations, associations or individual citizens are responsible for a large number of social tasks in our

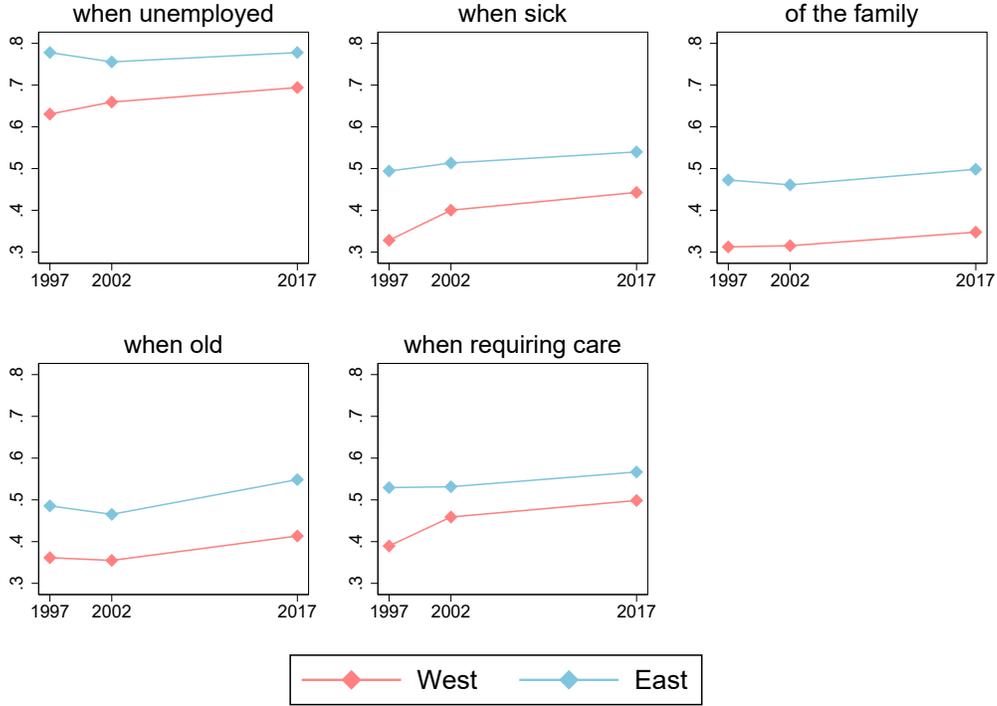
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<sup>1</sup>Socio-Economic Panel (SOEP), data for years 1984-2018, version 35, SOEP, 2019, doi:10.5684/soep.v35.

society today. What is your opinion on who should be responsible for the following areas: financial protection of families/financial security for unemployment/financial protection in case of illness/financial security in old age/financial security for people in need of care”. The answers are given on a scale of 1 to 5, which correspond to “only the state”, “mostly the state”, “both the state and private forces”, “especially private forces”, and “only private forces”. We use the answers to this question to generate five independent dummy variables. Specifically, the dummy variables take the value of 1 when the respondent states that financial security is the responsibility of “only the state” or “mostly the state”, and the value of 0 otherwise. Thus, our dependent variables indicate whether an individual has pro-state preferences. Our main explanatory variable is a dummy variable *East*, which is equal to 1 if the respondent lived in East Germany before reunification, independent of the current residence.

Our basic sample is constructed as follows. For the main analyses, we use data from both individual and household questionnaires for 1997, 2002, and 2017. We look at individuals born before 1989. We use the initial West and East German samples (A and C), as well as all general refreshment samples (samples E, F, H, J and K). The data on parents’ preferences for the analysis of young cohorts is taken from the biography questionnaire. Appendix Tables A1 and A2 provide summary statistics of the preferences separately for the East and West samples and years, once on the full sample and once on the balanced sample that includes only individuals who answer in all three survey waves.

Figure 1 shows the share of the respondents from West and East who state that the government should be responsible for providing financial security for the five different vulnerable groups. The majority of the respondents agree that the state should provide financial support to the unemployed – in 2017, 78% of East Germans and 69% of West Germans had pro-state preferences with respect to this question. At the same time, only 50% of the respondents from the East and 35% of the respondents from the West think that it is government’s duty to support the family, and the averages are in a similar range for the other outcome variables. Over time, the West German sample becomes more pro-state: the fraction of individuals who consider that the state is responsible for financial security increases between 1997 and 2017 across all five variables. The East German sample, on the other hand, becomes on average less pro-state between 1997 and 2002 regarding the state’s role in providing security for unemployed individuals, families, and elderly individuals. However, this pattern reverses between 2002 and 2017, when the opinion moves more pro-state in both samples.



**Figure 1:** Fraction of the respondents from West and East who believe that the financial security is the responsibility of the state. Balanced sample.

## 2.2 Estimation Methodology

$$\Pr(Y = 1|X) = \Phi(East + Year\ 2002 + East*2002 + Year\ 2017 + East*2017 + \mathbf{X}) \quad (1)$$

Following [Alesina and Fuchs-Schündeln \(2007\)](#), we run probit regressions with robust clustered standard errors to estimate the effect of living under Communism on preferences about the role of the state, as depicted in equation 1.<sup>2</sup> In addition to the main explanatory variable *East*, we include two year dummies, as well as interaction terms between *East* and the year dummies (*East\*2002* and *East\*2017*) to evaluate convergence of preferences between East and West Germans. The vector of control variables  $\mathbf{X}$  includes age, its square and cube, gender, number of children and number of adults in the household, dummy variables for education (with fewer than nine years of schooling as omitted category), dummy variables for marital status (with single as omitted category), dummy variables for labor force status (with employed as omitted category), dummy variables for

<sup>2</sup>Appendix Tables A12 and A13 replicate the main results using linear probability model. The results remain unchanged.

the type of work (with blue-collar as omitted category)<sup>3</sup>, and the log of household income. Explanatory variables are summarized in Appendix Tables A3 for the unbalanced sample and A4 for the balanced sample.

### 3 Main Results

Table 1 replicates the basic regression specification from [Alesina and Fuchs-Schündeln \(2007\)](#), but extends the sample to include data from 2017, in addition to the years 1997 and 2002. The dependent variable is a dummy equal to one when the individual supports an active role of the state. The right-hand side variables of interest are the *East* dummy and the interaction terms between *East* and the years 2002 and 2017.

As Table 1 shows, individuals who lived in East Germany before reunification have consistently and significantly stronger pro-state preferences than individuals from West Germany in 1997, as expressed by the positive and significant coefficients on the *East* dummy. Having lived under different systems for 45 years shaped the preferences of East and West Germans. Moreover, the preferences of East and West Germans converge significantly between 1997 and 2002 – the coefficients of the interaction terms *East\*2002* are all significantly negative. This is in line with a common effect on preferences from living under the same system since 1990. The results so far are also quantitatively very similar to the results in [Alesina and Fuchs-Schündeln \(2007\)](#). Extending the time frame to include the 2017 survey has thus no effect on the results from the previous years.

What is interesting, though, is how preferences evolved between 2002 and 2017. First focusing on West Germans, there was already some movement towards stronger state preferences between 1997 and 2002 - the *Year 2002* dummy is positive and significant in 3 out of 5 cases - but this movement became even stronger between 2002 and 2017: the *Year 2017* dummy is positive and significant for all five variables. It is also significantly different from the *Year 2002* dummy (Appendix Table A5). Thus, West German preferences moved more in favor of a strong government in the two decades between 1997 and 2017. Turning to East Germans, their preferences about the role of the state continued to converge towards the ones of West Germans: the coefficients of

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<sup>3</sup>These variables take a value of zero for those who are not employed.

**Table 1: Basic regressions**

	Dependent variable: Responsibility for financial security...				
	...when unemployed	...when sick	...of the family	...when old	...when requiring care
East	0.439*** (0.030)	0.467*** (0.028)	0.424*** (0.028)	0.438*** (0.028)	0.377*** (0.028)
Year 2002	0.039* (0.020)	0.156*** (0.020)	-0.005 (0.021)	-0.026 (0.020)	0.112*** (0.020)
East*2002	-0.137*** (0.035)	-0.171*** (0.033)	-0.099*** (0.033)	-0.158*** (0.032)	-0.162*** (0.033)
Year 2017	0.200*** (0.024)	0.273*** (0.024)	0.131*** (0.024)	0.151*** (0.023)	0.266*** (0.023)
East*2017	-0.334*** (0.040)	-0.208*** (0.038)	-0.124*** (0.038)	-0.184*** (0.038)	-0.160*** (0.038)
Age	-0.017 (0.011)	0.026** (0.011)	-0.004 (0.011)	0.009 (0.011)	0.011 (0.010)
Age squared(*10 <sup>3</sup> )	0.410* (0.211)	-0.438** (0.204)	0.103 (0.207)	-0.166 (0.204)	-0.263 (0.202)
Age cubed(*10 <sup>5</sup> )	-0.283** (0.127)	0.232* (0.123)	-0.086 (0.125)	0.090 (0.123)	0.151 (0.122)
College	-0.199*** (0.064)	-0.302*** (0.059)	-0.229*** (0.059)	-0.318*** (0.059)	-0.129** (0.058)
Vocational training	-0.162*** (0.061)	-0.227*** (0.056)	-0.257*** (0.057)	-0.227*** (0.057)	-0.108* (0.056)
Secondary schooling	-0.164*** (0.063)	-0.151*** (0.058)	-0.157*** (0.059)	-0.133** (0.058)	-0.053 (0.058)
Intermediate schooling	-0.182*** (0.069)	-0.196*** (0.065)	-0.269*** (0.066)	-0.181*** (0.065)	-0.122* (0.065)
Male	-0.038** (0.015)	-0.046*** (0.015)	-0.015 (0.015)	0.001 (0.015)	0.027* (0.015)
Number of children	0.035*** (0.009)	0.029*** (0.009)	0.060*** (0.009)	0.031*** (0.009)	0.010 (0.009)
Number of adults	0.018*** (0.005)	0.024*** (0.004)	0.014*** (0.005)	0.018*** (0.005)	0.008* (0.004)
Married	0.037 (0.025)	0.060** (0.025)	0.039 (0.025)	0.045* (0.025)	0.052** (0.024)
Divorced	0.013 (0.035)	-0.027 (0.033)	0.030 (0.034)	-0.001 (0.034)	0.007 (0.033)
Married but separated	-0.023 (0.053)	-0.011 (0.051)	-0.001 (0.052)	0.012 (0.052)	0.053 (0.051)
Widowed	0.019 (0.039)	0.020 (0.038)	0.019 (0.038)	0.018 (0.037)	0.038 (0.037)
Log HH income	-0.145*** (0.016)	-0.205*** (0.016)	-0.162*** (0.016)	-0.236*** (0.016)	-0.167*** (0.016)
Civil servant	-0.192*** (0.040)	-0.224*** (0.041)	0.047 (0.041)	-0.117*** (0.041)	-0.169*** (0.039)
Self-employed	-0.322*** (0.035)	-0.328*** (0.036)	-0.265*** (0.037)	-0.394*** (0.036)	-0.240*** (0.035)
White-collar worker	-0.046** (0.023)	-0.049** (0.022)	-0.026 (0.023)	-0.101*** (0.022)	-0.077*** (0.022)
Unemployed	0.122*** (0.039)	0.003 (0.036)	0.118*** (0.036)	-0.000 (0.036)	-0.015 (0.036)
Retired	-0.119*** (0.037)	-0.109*** (0.036)	0.013 (0.037)	-0.068* (0.036)	-0.028 (0.036)
Maternity	0.015 (0.061)	-0.065 (0.058)	0.028 (0.058)	-0.151*** (0.058)	-0.067 (0.057)
Nonworking	-0.036 (0.030)	-0.034 (0.029)	0.063** (0.029)	-0.031 (0.029)	-0.018 (0.029)
Training	-0.091 (0.059)	-0.064 (0.057)	-0.199*** (0.058)	-0.068 (0.057)	-0.065 (0.056)
Other nonworking	-0.008 (0.040)	-0.077** (0.038)	0.000 (0.038)	-0.050 (0.038)	-0.094** (0.038)
Observations	36586	36621	36554	36658	36659
Log likelihood	-22196	-24437	-23655	-24342	-24977

Probit regressions. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups. Omitted categories are fewer than nine years of schooling, female, single, blue-collar worker, and employed. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.

*East\*2017* are not only significantly negative, but also larger in absolute magnitude than the *East\*2002* coefficients. Yet, only in one case of taking care of unemployed individuals is the *East\*2017* coefficient significantly different from the *East\*2002* coefficient. Thus, there is significant convergence between 2002 and 2017 only in one of the five preference variables. In the other four cases, the convergence is not only not significant in this time period, but according to the point estimates also substantially slower than in the period 1997 to 2002. This is true even for the two variables in which significant convergence still occurs between 2002 and 2017: taking into account that this is a 15 year period, compared to the 5 year period between 1997 and 2002, the speed of convergence slowed down significantly. The coefficients on the control variables are very close the estimates in [Alesina and Fuchs-Schündeln \(2007\)](#) both in sign and magnitude. Individuals with more education and higher monthly household income, as well as the self-employed and white-collar workers, are consistently less pro-state.

Appendix Table A6 shows the marginal effects corresponding to Table 1, and allows to talk about the speed of convergence more concretely. In 1997, individuals from East Germany were between 14.8 and 17.9 percentage points more likely to have pro-government preferences than individuals from West Germany. Compared to 1997, the East-West difference in the probability of being pro-state declined by between 3.7 and 6.6 percentage points in 2002, and by between 4.6 to 11.5 percentage points in 2017. Clearly, the convergence of preferences between East and West Germans is not complete – even 27 years after reunification the preferences regarding the active role of state differ between East and West Germans. If the speed of convergence continues as it did between 2002 and 2017, then preferences of taking care of the unemployed should converge by 2023. However, for the other four variables, convergence would take significantly longer. In the case of taking care of the sick, for instance, it will take a further 55 years after 2017 for preferences to converge; both because the differences are still quite high in 2017 (East Germans are 8 percentage points more likely to answer that the state should take care of sick individuals), and because convergence is slow (the East-West difference declined by 1.4 percentage points over the 15 year period 2002 to 2017). For the other three variables, the much lower speed of convergence between 2002 and 2017 implies that full convergence of preferences will take between 84 (taking care of old individuals) and 195 years (taking care of individuals requiring care). Thus, not only is the convergence between 2002 and 2017 not statistically significant, neither is it economically significant.

**Table 2:** Regressions with cohorts interacted with East

	Dependent variable: Responsibility for financial security...				
	...when unemployed	...when sick	...of the family	...when old	...when requiring care
East	0.297*** (0.053)	0.287*** (0.049)	0.236*** (0.050)	0.189*** (0.050)	0.216*** (0.050)
Year 2002	0.032 (0.021)	0.128*** (0.021)	-0.038* (0.021)	-0.065*** (0.021)	0.084*** (0.021)
East*2002	-0.133*** (0.036)	-0.161*** (0.033)	-0.088*** (0.033)	-0.147*** (0.033)	-0.153*** (0.033)
Year 2017	0.180*** (0.035)	0.180*** (0.034)	0.021 (0.035)	0.024 (0.034)	0.168*** (0.033)
East*2017	-0.306*** (0.041)	-0.171*** (0.038)	-0.082** (0.038)	-0.132*** (0.038)	-0.124*** (0.038)
Born 1961-1975	-0.043 (0.040)	-0.187*** (0.038)	-0.216*** (0.039)	-0.275*** (0.039)	-0.156*** (0.038)
Born 1946-1960	-0.124** (0.055)	-0.339*** (0.053)	-0.338*** (0.054)	-0.436*** (0.053)	-0.287*** (0.052)
Born before 1946	-0.140* (0.074)	-0.363*** (0.072)	-0.427*** (0.073)	-0.518*** (0.072)	-0.370*** (0.071)
Born 1961-1975*East	-0.047 (0.054)	0.049 (0.050)	0.048 (0.051)	0.052 (0.051)	0.028 (0.050)
Born 1946-1960*East	0.160*** (0.054)	0.156*** (0.050)	0.143*** (0.051)	0.204*** (0.051)	0.125** (0.050)
Born before 1946*East	0.339*** (0.054)	0.347*** (0.050)	0.378*** (0.051)	0.507*** (0.051)	0.341*** (0.050)
All control variables	Yes	Yes	Yes	Yes	Yes
Observations	36586	36621	36554	36658	36659
Log likelihood	-22142	-24368	-23582	-24207	-24917

Probit regressions. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups. Included as controls are cubic function in age, number of children and number of adults in household, logarithm of household income, and dummies for education, sex, marital status, employment status, and occupation.

The omitted category is *Born after 1989*.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.

Table 2 replicates the results presented in Table 3 of [Alesina and Fuchs-Schündeln \(2007\)](#), in which we allow for separate cohort patterns in East and West.<sup>4</sup> As in [Alesina and Fuchs-Schündeln \(2007\)](#), we find that older cohorts from the East are significantly more pro-state compared to younger cohorts, while the opposite is true for West Germans. Thus, the East-West differences in preferences are increasing in the time the individuals lived under separate regimes. This is convincing evidence for an effect of the regime on

<sup>4</sup>Appendix Table A8 replicates Table 2 of [Alesina and Fuchs-Schündeln \(2007\)](#), which allows instead for separate age patterns in East and West.

preferences.

Finally, Table 3 again builds on an exercise by [Alesina and Fuchs-Schündeln \(2007\)](#), in which we restrict the sample to a balanced sample, but now also include observations from the year 2017. Since here we include only individuals who are observed over two decades, the sample size drops from around 36,500 observations to roughly 7,000 observations. This allows us to understand whether the shift in state-related preferences is driven by the change in the cohort composition of the sample, or whether it occurs on the individual level. Given that younger cohorts have more similar preferences than older cohorts, some convergence will naturally occur over time as the relative role of younger cohorts increases. This effect is controlled for if we only include individuals whom we observe in all sample years. While we include all control variables in these regressions as well, we only show the coefficients on the main variables of interest in the table.

**Table 3:** Balanced sample: regressions with individuals who answer in 1997, 2002 and 2017

Dependent variable: Responsibility for financial security...					
	State responsibility when unemployed	...when sick	...of the family	...when old	...when requiring care
East	0.413*** (0.060)	0.400*** (0.057)	0.409*** (0.057)	0.287*** (0.057)	0.304*** (0.057)
Year 2002	0.063 (0.046)	0.189*** (0.045)	0.005 (0.048)	-0.012 (0.046)	0.197*** (0.046)
East*2002	-0.140* (0.073)	-0.136** (0.069)	-0.027 (0.070)	-0.029 (0.067)	-0.163** (0.068)
Year 2017	0.153*** (0.057)	0.318*** (0.055)	0.108* (0.057)	0.162*** (0.056)	0.350*** (0.055)
East*2017	-0.164** (0.079)	-0.167** (0.073)	-0.042 (0.071)	0.028 (0.072)	-0.168** (0.074)
All control variables	Yes	Yes	Yes	Yes	Yes
Observations	6969	6969	6969	6969	6969
Log likelihood	-4117	-4645	-4526	-4619	-4737

Probit regressions. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups. Included as controls are cubic function in age, number of children and number of adults in household, logarithm of household income, and dummies for education, sex, marital status, employment status, and occupation.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.

The results based on the balanced sample remain qualitatively unchanged: Individuals from East Germany have significantly stronger preferences for an active role of the state in providing financial security, and the East-West difference in preferences becomes smaller over time. Thus, the convergence of preferences between East and West is not explained by a shift in the cohort composition alone. Similarly to the unbalanced sample, the pace of convergence is the highest during 1997 and 2002, and is heterogeneous across the dimensions of preferences. In the balanced sample, we still observe convergence of

preferences between 2002 and 2017 in all dimensions but taking care of the old, but this convergence is never significant: none of the coefficients on the interactions of  $East*2002$  and  $East*2017$  are significantly different.

Looking at the marginal effects across the two samples (Appendix Tables A6 and A7), we notice that the estimated convergence between 2002 and 2017 is in fact quite a bit faster in the unbalanced sample. For instance, the probability of being pro-state when it comes to the role of the state in case of unemployment decreased by 7.1 percentage points in 2017 compared to 2002 in the unbalanced sample, but only by 0.8 percentage points in the balanced sample. This means that the overall convergence between 2002 and 2017 is driven mainly by the change in the composition of the sample. The coefficient of *Year 2017* is significant and positive in the balanced sample as well – West Germans became more pro-state compared to both 1997 and 2002. Relative to the West Germans, there is no development of East German preferences away from the state.

Generally, our analysis confirms the results presented in [Alesina and Fuchs-Schündeln \(2007\)](#). As the German reunification experiment shows, political systems shape individual preferences toward the role of government. People subjected to 45 years of Communism in East Germany exhibit views in favor of an active role of state in providing social security. Yet, the speed of convergence of East-West preferences decreased substantially over time. While in the initial period after reunification preferences converged rapidly, the remaining convergence in the last 15 years we observe is almost exclusively driven by changes in the cohort composition. At the same time, the preferences of West Germans shifted towards state-provided social security. Given the uneven pace of convergence, it seems unlikely that the difference in preferences will disappear completely anytime soon.

## 4 Preferences of Post-Reunification Cohorts

So far, we find that convergence significantly slowed down between 2002 and 2017, and in fact any remaining convergence occurs on the aggregate level, not on the individual one. Yet, shouldn't we observe faster aggregate convergence over time, as more and more individuals born after reunification and thus never having accumulated different experiences enter the economy?

We analyze this question explicitly by focusing on the cohorts born 1990 to 1999. Table 4 presents the results of the regression analysis based on the sample of these young individuals in 2017. The regressor of interest is *Born in East States* – a dummy variable equal to one if the respondent was born in one of the states that formerly belonged to East Germany. Given the small number of observations, and the young age of this sample, the control variables only include age, gender, and labor market variables (with *Employed* as omitted category).

**Table 4:** Regressions with those who were born in 1990-1999

	Dependent variable: Responsibility for financial security...				
	when unemployed	when sick	of the family	when old	when requiring care
Born in East States	0.037 (0.105)	0.176* (0.100)	0.210** (0.099)	0.339*** (0.101)	0.144 (0.100)
Age	0.017 (0.015)	0.009 (0.015)	0.020 (0.015)	0.028* (0.015)	0.045*** (0.015)
Male	-0.108 (0.087)	-0.050 (0.083)	0.075 (0.082)	-0.088 (0.083)	-0.042 (0.083)
Unemployed	0.408 (0.267)	0.144 (0.236)	-0.036 (0.228)	0.038 (0.233)	-0.029 (0.233)
Maternity	0.689 (0.558)	0.624 (0.467)	-0.324 (0.428)	-0.036 (0.418)	0.153 (0.451)
Training	0.163 (0.108)	0.095 (0.103)	-0.047 (0.103)	0.070 (0.103)	0.114 (0.104)
Other nonworking	0.424*** (0.162)	0.263* (0.146)	0.100 (0.146)	0.231 (0.146)	-0.005 (0.145)
Observations	951	948	952	950	950
Log likelihood	-570	-645	-651	-645	-641

Probit regressions. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.

The results presented in Table 4 refute the ex ante assumption that East and West Germans born after reunification do not exhibit any difference in preferences. Individuals born in East German states in the period 1990 to 1999 exhibit stronger pro-state preferences compared to their Western counterparts, despite the fact that they have never lived under Communism. The coefficients of the dummy variable *Born in East States* are

positive in all and statistically significant in three regressions.<sup>5</sup> Although not affected directly by Communism,<sup>6</sup> respondents from former Eastern states are more likely to support the responsibility of the state when it comes to sickness, family, and old-age support.

**Table 5:** Regressions with those who were born in 1990-1999, including parents' preferences

	Dependent variable: Responsibility for financial security...				
	when unemployed	when sick	of the family	when old	when requiring care
Born in East States	-0.007 (0.114)	0.090 (0.108)	0.163 (0.108)	0.297*** (0.110)	0.075 (0.109)
Parent pro-state in 2017	0.471*** (0.114)	0.198** (0.090)	0.412*** (0.088)	0.299*** (0.088)	0.233** (0.093)
Age	0.004 (0.017)	0.003 (0.016)	0.012 (0.016)	0.021 (0.016)	0.041*** (0.016)
Male	-0.052 (0.092)	-0.005 (0.088)	0.068 (0.089)	-0.099 (0.088)	-0.052 (0.088)
Unemployed	0.398 (0.306)	0.117 (0.265)	-0.060 (0.259)	-0.080 (0.264)	-0.102 (0.265)
Maternity	0.619 (0.609)	0.988* (0.575)	-0.504 (0.495)	0.072 (0.486)	0.821 (0.625)
Training	0.199* (0.112)	0.086 (0.106)	-0.058 (0.107)	0.040 (0.106)	0.112 (0.107)
Other nonworking	0.442*** (0.168)	0.287* (0.154)	0.104 (0.157)	0.159 (0.153)	0.003 (0.151)
Observations	846	843	844	845	846
Log likelihood	-510	-572	-564	-571	-570

Probit regressions. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.

Table 5 sheds some light on this puzzling result. In this estimation, we link the 1990-1999 cohort of individuals to their parents, and include preferences of parents as the control variable. Specifically, we create a dummy variable *Parent pro-state in 2017* equal to one if at least one of individual's parents – mother or father – answered *only the state* or *mostly the state* to the question about the state's responsibilities in providing financial security in 2017. The coefficient of this dummy variable is positive

<sup>5</sup>The results remain qualitatively unchanged if we include the log of household income as a control variable. However, this further reduces the number of observations.

<sup>6</sup>If anything, younger cohorts were more likely to grow up in an anti-communist environment (Azaryahu, 1997; Volk, 2021).

and statistically significant in all regressions: parents' preferences are a strong predictor of a young person's attitudes. The marginal effect of this variable is sizable: individuals whose parents believe in government's responsibility for providing social security are 8-20 percentage points more likely to exhibit pro-state preferences themselves. This is true for both East and West Germans. At the same time, the coefficient of *Born in East States* is now smaller in magnitude across all five regressions, and is only statistically significant when it comes to taking care of old. This means that the variable *Born in East States* acts to a certain extent as a proxy for the previously unobserved parental preferences. Respondents from the East are more likely to have parents with strong pro-state preferences, and the intergenerational transmission of preferences leads to differences in preferences also among the cohorts born after reunification.<sup>7</sup>

Appendix tables A10 and A11 confirm that preferences of both parents matter. Fathers' attitudes are equally important as mothers' attitudes – all the coefficients of *Mother pro-state in 2017* and *Father pro-state in 2017* are large and statistically significant.

Summarizing, young cohorts born in 1990-1990 in the East states exhibit stronger pro-state preferences compared to their peers from the West states. They are more likely to hold the view that it is the state's responsibility to provide financial security for the sick, the family, and older individuals. However, the pro-state attitudes of these cohorts are no longer driven by the Communist context of their upbringing, as they were born in a united Germany, but by the pro-state views of their parents, who were subject to this context in the past. This result is in contrast with [Svallfors \(2010\)](#), who finds no difference in political preferences among young cohorts based on ISSP data.

## 5 Conclusion

In this paper, we investigate the influence of the political system on preferences about the role of the government. The German reunification experiment provides an ideal setting for such an investigation, as it constitutes an exogenous shock to the political system. East

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<sup>7</sup>Apart from parental preferences, there is a difference in the number of observations between Tables 4 and 5, as not every young individual can be linked with parental data. Appendix Table A9 shows that our results are qualitatively unchanged if we use the smaller sample.

Germans spent several decades under the Communist regime, being exposed to its doctrine and values. After reunification in 1990, Communism gave way to a market-based economy. Under the assumption that there were no meaningful differences between the residents of East and West Germany before the separation, the differences in preferences that we observe after reunification can be attributed to living under the Communist regime. Even if there were differences between East and West before the separation, convergence in preferences after reunification, as well as stronger differences in preferences for cohorts that lived under different systems for longer point towards the effect of Communism.

[Alesina and Fuchs-Schündeln \(2007\)](#) quantified the East-West differences in preferences after reunification, using data from the German SOEP until 2002. Here, we replicate and extend their findings, using the 2017 data release. We find that even 27 years after reunification, East Germans remain significantly more pro-state than West Germans. Our analysis suggests that they are more likely to state it is the government's responsibility to provide financial security for individuals who are sick, unemployed, old, or in need of care, as well as for families, compared to their West German peers. We also observe that preferences converge and adjust over time, with East Germans becoming relatively less pro-state, and West Germans appreciating the welfare state more than before. However, the pace of convergence is not uniform. The adjustment of preferences among East Germans was rapid in the first years after reunification, but slowed down significantly after 2002. Most of the remaining convergence comes from shifts in the cohort composition, not from convergence of preferences on the individual level.

How do preferences of individuals born *after* reunification compare between East and West? Maybe surprisingly, we find that also East Germans born after reunification exhibit stronger preferences for a strong government. Although these young individuals have never lived under Communism, we show that they inherit the pro-state preferences of their parents, preserving the East-West differences in political views and opinions. It seems that through intergenerational transmission of preferences the effects of Communism are thus truly long-lasting.

## References

- ALESINA, A. and FUCHS-SCHÜNDELN, N. (2007). Good-bye lenin (or not?): The effect of communism on people's preferences. *American Economic Review*, **97** (4), 1507–1528.
- and GIULIANO, P. (2011). Chapter 4 - Preferences for Redistribution. *Handbook of Social Economics*, vol. 1, North-Holland, pp. 93–131.
- and LA FERRARA, E. (2005). Preferences for redistribution in the land of opportunities. *Journal of Public Economics*, **89** (5), 897–931.
- AVDEENKO, A. (2018). Long-term evidence of retrospective voting: A natural experiment from the German Democratic Republic. *European Economic Review*, **103**, 83–107.
- AZARYAHU, M. (1997). German reunification and the politics of street names: the case of East Berlin. *Political Geography*, **16** (6), 479–493.
- BAUERNSCHUSTER, S. and RAINER, H. (2012). Political regimes and the family: how sex-role attitudes continue to differ in reunified Germany. *Journal of Population Economics*, **25**, 5–27.
- BECKER, S. O., MERGELE, L. and WOESSMANN, L. (2020). The Separation and Reunification of Germany: Rethinking a Natural Experiment Interpretation of the Enduring Effects of Communism. *Journal of Economic Perspectives*, **34** (2), 143–71.
- BROSIG-KOCH, J., HELBACH, C., OCKENFELS, A. and WEIMANN, J. (2011). Still different after all these years: Solidarity behavior in East and West Germany. *Journal of Public Economics*, **95** (11), 1373–1376, special Issue: International Seminar for Public Economics on Normative Tax Theory.
- BURCHARDI, K. B. and HASSAN, T. A. (2013). The Economic Impact of Social Ties: Evidence from German Reunification. *The Quarterly Journal of Economics*, **128** (3), 1219–1271.
- BURDA, M. C. and SEVERGNINI, B. (2018). Total factor productivity convergence in German states since reunification: Evidence and explanations. *Journal of Comparative Economics*, **46** (1), 192–211.

- CORNEO, G. and GRÜNER, H. P. (2002). Individual preferences for political redistribution. *Journal of Public Economics*, **83** (1), 83–107.
- DAVOLI, M. and HOU, J. (2021). Financial literacy, institutions and education: Lessons from the German reunification. *German Economic Review*, **forthcoming**.
- DI TELLA, R., GALIANT, S. and SCHARGRODSKY, E. (2007). The Formation of Beliefs: Evidence from the Allocation of Land Titles to Squatters. *The Quarterly Journal of Economics*, **122** (1), 209–241.
- DURANTE, R., PUTTERMAN, L. and VAN DER WEELE, J. (2014). Preferences for Redistribution and Perception of Fairness: An Experimental Study. *Journal of the European Economic Association*, **12** (4), 1059–1086.
- FONG, C. (2001). Social preferences, self-interest, and the demand for redistribution. *Journal of Public Economics*, **82** (2), 225–246.
- FUCHS-SCHÜNDELN, N. (2008). The Response of Household Saving to the Large Shock of German Reunification. *American Economic Review*, **98** (5), 1798–1828.
- and HALIASSOS, M. (2021). Participation following sudden access. *Journal of Monetary Economics*, **117**, 671–688.
- and HASSAN, T. (2016). Chapter 12 - Natural Experiments in Macroeconomics. *Handbook of Macroeconomics*, vol. 2, Elsevier, pp. 923–1012.
- and MASELLA, P. (2016). Long-Lasting Effects of Socialist Education. *The Review of Economics and Statistics*, **98** (3), 428–441.
- and SCHÜNDELN, M. (2005). Precautionary Savings and Self-Selection: Evidence from the German Reunification "Experiment". *The Quarterly Journal of Economics*, **120** (3), 1085–1120.
- and — (2015). On the endogeneity of political preferences: Evidence from individual experience with democracy. *Science*, **347** (6226), 1145–1148.
- GIULIANO, P. and SPILIMBERGO, A. (2014). Growing up in a Recession. *The Review of Economic Studies*, **81** (2), 787–817.

- GOLDFAYN-FRANK, O. and WOHLFART, J. (2020). Expectation formation in a new environment: Evidence from the German reunification. *Journal of Monetary Economics*, **115**, 301–320.
- GUIISO, L., SAPIENZA, P. and ZINGALES, L. (2006). Does Culture Affect Economic Outcomes? *Journal of Economic Perspectives*, **20** (2), 23–48.
- LAUDENBACH, C., MALMENDIER, U. and NIESSEN-RUENZI, A. (2020). The Long-Lasting Effects of Experiencing Communism on Attitudes Towards Financial Markets. *CEPR Discussion Paper No. DP14939*.
- LIPPMANN, Q., GEORGIEFF, A. and SENIK, C. (2020). Undoing Gender with Institutions: Lessons from the German Division and Reunification. *The Economic Journal*, **130** (629), 1445–1470.
- LUTTMER, E. F. P. and SINGHAL, M. (2011). Culture, Context, and the Taste for Redistribution. *American Economic Journal: Economic Policy*, **3** (1), 157–79.
- MALMENDIER, U. (2021). FBBVA Lecture 2020 Exposure, Experience, and Expertise: Why Personal Histories Matter in Economics. *Journal of the European Economic Association*, **19** (6), 2857–2894.
- and NAGEL, S. (2011). Depression Babies: Do Macroeconomic Experiences Affect Risk Taking? *The Quarterly Journal of Economics*, **126** (1), 373–416.
- RAVALLION, M. and LOKSHIN, M. (2000). Who wants to redistribute?: The tunnel effect in 1990s Russia. *Journal of Public Economics*, **76** (1), 87–104.
- SVALLFORS, S. (2010). Policy feedback, generational replacement, and attitudes to state intervention: Eastern and Western Germany, 1990–2006. *European Political Science Review*, **2** (1), 119–135.
- VOLK, S. (2021). Patriotic History in Postcolonial Germany, Thirty Years After “Reunification”. *Journal of Genocide Research*, pp. 1–12.

# Appendix

## Summary statistics

**Table A1:** Mean of the dependent variables, by East/West and Year, unbalanced sample

	West		East	
	Mean	N	Mean	N
1997				
State responsibility when unemployed	0.63	6101	0.79	3683
...when sick	0.35	6104	0.53	3677
...of the family	0.33	6094	0.49	3682
...when old	0.39	6107	0.56	3688
...when requiring care	0.41	6106	0.57	3688
2002				
State responsibility when unemployed	0.64	12480	0.76	5306
...when sick	0.39	12494	0.52	5310
...of the family	0.32	12479	0.45	5302
...when old	0.36	12500	0.49	5315
...when requiring care	0.44	12492	0.54	5320
2017				
State responsibility when unemployed	0.69	7873	0.74	3358
...when sick	0.42	7891	0.54	3366
...of the family	0.35	7861	0.48	3347
...when old	0.41	7899	0.53	3371
...when requiring care	0.48	7900	0.59	3372

**Table A2:** Mean of the dependent variables, by East/West and Year, balanced sample

	West		East	
	Mean	N	Mean	N
1997				
State responsibility when unemployed	0.63	1386	0.78	937
...when sick	0.33	1386	0.49	937
...of the family	0.31	1386	0.47	937
...when old	0.36	1386	0.49	937
...when requiring care	0.39	1386	0.53	937
2002				
State responsibility when unemployed	0.66	1386	0.76	937
...when sick	0.40	1386	0.51	937
...of the family	0.32	1386	0.46	937
...when old	0.35	1386	0.47	937
...when requiring care	0.46	1386	0.53	937
2017				
State responsibility when unemployed	0.69	1386	0.78	937
...when sick	0.44	1386	0.54	937
...of the family	0.35	1386	0.50	937
...when old	0.41	1386	0.55	937
...when requiring care	0.50	1386	0.57	937

**Table A3:** Mean of the independent variables, by East/West and Year, unbalanced sample

	West		East	
	Mean	N	Mean	N
1997				
Age	46.35	6171	44.56	3717
College	0.12	6099	0.24	3710
Vocational training	0.63	6118	0.62	3716
Secondary schooling	0.18	6122	0.09	3683
Intermediate schooling	0.04	6171	0.03	3717
Male	0.47	6171	0.48	3717
Number of children	0.76	6171	0.65	3717
Number of adults	3.41	6171	2.86	3717
Married	0.61	6162	0.63	3714
Divorced	0.06	6162	0.06	3714
Married but separated	0.02	6162	0.02	3714
Widowed	0.08	6162	0.06	3714
Log of net HH monthly income, in 2011 Euro	7.90	5898	7.73	3622
Civil servant	0.05	6156	0.02	3713
Self-employed	0.06	6170	0.05	3711
White-collar worker	0.29	6171	0.27	3717
Unemployed	0.04	6171	0.11	3717
Retired	0.16	6171	0.12	3717
Maternity	0.02	6171	0.02	3717
Nonworking	0.13	6171	0.10	3717
Training	0.02	6171	0.02	3717
Other nonworking	0.05	6171	0.05	3717
2002				
Age	48.47	12658	46.77	5382
College	0.15	12585	0.23	5372
Vocational training	0.65	12645	0.64	5381
Secondary schooling	0.13	12586	0.08	5341
Intermediate schooling	0.04	12658	0.03	5382
Male	0.48	12658	0.48	5382
Number of children	0.66	12658	0.50	5382
Number of adults	2.85	12658	2.87	5382
Married	0.63	12647	0.57	5381
Divorced	0.06	12647	0.08	5381
Married but separated	0.02	12647	0.02	5381
Widowed	0.07	12647	0.07	5381
Log of net HH monthly income, in 2011 Euro	7.93	11787	7.75	5202
Civil servant	0.05	12656	0.02	5381
Self-employed	0.06	12658	0.04	5382
White-collar worker	0.29	12648	0.27	5377
Unemployed	0.03	12658	0.09	5382
Retired	0.18	12658	0.16	5382
Maternity	0.02	12658	0.01	5382
Nonworking	0.13	12658	0.10	5382
Training	0.03	12658	0.03	5382
Other nonworking	0.05	12658	0.05	5382
2017				
Age	58.64	8065	57.66	3425
College	0.25	8043	0.28	3423
Vocational training	0.63	8061	0.66	3425
Secondary schooling	0.08	8051	0.04	3415
Intermediate schooling	0.03	8065	0.01	3425
Male	0.46	8065	0.46	3425
Number of children	0.44	8065	0.51	3425
Number of adults	2.79	8065	2.70	3425
Married	0.64	8064	0.60	3425
Divorced	0.10	8064	0.11	3425
Married but separated	0.03	8064	0.02	3425
Widowed	0.09	8064	0.10	3425
Log of net HH monthly income, in 2011 Euro	7.95	7674	7.77	3335
Civil servant	0.05	8064	0.03	3425
Self-employed	0.06	8065	0.05	3425
White-collar worker	0.34	8065	0.32	3421
Unemployed	0.02	8065	0.04	3425
Retired	0.33	8065	0.31	3425
Maternity	0.01	8065	0.01	3425
Nonworking	0.07	8065	0.07	3425
Training	0.00	8065	0.00	3425
Other nonworking	0.02	8065	0.02	3425

**Table A4:** Mean of the independent variables, by East/West and Year, balanced sample

	West		East	
	Mean	N	Mean	N
1997				
Age	42.50	1386	42.48	937
College	0.16	1386	0.32	937
Vocational training	0.67	1386	0.59	937
Secondary schooling	0.12	1386	0.06	937
Intermediate schooling	0.04	1386	0.02	937
Male	0.48	1386	0.46	937
Number of children	0.89	1386	0.71	937
Number of adults	3.58	1386	2.99	937
Married	0.67	1386	0.68	937
Divorced	0.06	1386	0.07	937
Married but separated	0.02	1386	0.02	937
Widowed	0.03	1386	0.02	937
Log of net HH monthly income, in 2011 Euro	8.01	1386	7.80	937
Civil servant	0.09	1386	0.02	937
Self-employed	0.06	1386	0.05	937
White-collar worker	0.40	1386	0.37	937
Unemployed	0.04	1386	0.12	937
Retired	0.03	1386	0.02	937
Maternity	0.02	1386	0.02	937
Nonworking	0.14	1386	0.08	937
Training	0.02	1386	0.02	937
Other nonworking	0.04	1386	0.05	937
2002				
Age	47.50	1386	47.48	937
College	0.19	1386	0.33	937
Vocational training	0.70	1386	0.63	937
Secondary schooling	0.09	1386	0.04	937
Intermediate schooling	0.02	1386	0.00	937
Male	0.48	1386	0.46	937
Number of children	0.92	1386	0.64	937
Number of adults	3.71	1386	3.31	937
Married	0.71	1386	0.70	937
Divorced	0.08	1386	0.08	937
Married but separated	0.02	1386	0.02	937
Widowed	0.04	1386	0.04	937
Log of net HH monthly income, in 2011 Euro	8.04	1386	7.84	937
Civil servant	0.07	1386	0.02	937
Self-employed	0.06	1386	0.05	937
White-collar worker	0.41	1386	0.35	937
Unemployed	0.03	1386	0.09	937
Retired	0.08	1386	0.07	937
Maternity	0.02	1386	0.02	937
Nonworking	0.14	1386	0.12	937
Training	0.01	1386	0.01	937
Other nonworking	0.04	1386	0.04	937
2017				
Age	62.50	1386	62.48	937
College	0.21	1386	0.35	937
Vocational training	0.70	1386	0.62	937
Secondary schooling	0.08	1386	0.02	937
Intermediate schooling	0.02	1386	0.00	937
Male	0.48	1386	0.46	937
Number of children	0.50	1386	0.49	937
Number of adults	3.52	1386	3.05	937
Married	0.70	1386	0.68	937
Divorced	0.10	1386	0.09	937
Married but separated	0.02	1386	0.02	937
Widowed	0.10	1386	0.12	937
Log of net HH monthly income, in 2011 Euro	7.99	1386	7.79	937
Civil servant	0.05	1386	0.02	937
Self-employed	0.06	1386	0.06	937
White-collar worker	0.32	1386	0.28	937
Unemployed	0.02	1386	0.02	937
Retired	0.37	1386	0.39	937
Maternity	0.00	1386	0.00	937
Nonworking	0.08	1386	0.08	937
Training	0.00	1386	0.00	937
Other nonworking	0.02	1386	0.02	937

## T-statistics

**Table A5:**  $\chi^2$  of the Wald test, which tests the equality of the parameters estimated in Table 1. Stars indicate that the parameters are significantly different at the 1% (\*\*\*) , 5% (\*\*) or 10% (\*) level.

Responsibility for financial security...	Year 2002 - Year 2017	East*2002 - East*2017
...when unemployed	64.7***	30.9***
...when sick	35.9***	1.25
...of the family	47.1***	0.6
...when old	82.4***	0.6
...when requiring care	65.4***	0.0

## Marginal effects

**Table A6:** Percentage point difference in probability of being pro-state in 2002 and 2017 compared to 1997. Based on the coefficients of East, East\*2002 and East\*2017 from Table 1.

Responsibility for financial security...	1997	2002	2017
...when unemployed	15.1	-4.7	-11.5
...when sick	17.9	-6.6	-8.0
...of the family	15.7	-3.7	-4.6
...when old	16.6	-6.0	-7.0
...when requiring care	14.8	-6.4	-6.3

**Table A7:** Percentage point difference in probability of being pro-state in 2002 and 2017 compared to 1997. Based on the coefficients of East, East\*2002 and East\*2017 from Table 3.

Responsibility for financial security...	1997	2002	2017
...when unemployed	13.9	-4.7	-5.5
...when sick	15.3	-5.2	-6.4
...of the family	15.2	-1.0	-1.5
...when old	10.9	-1.1	1.1
...when requiring care	11.9	-6.4	-6.6

## Age effects

**Table A8:** Regressions with age interacted with East

Dependent variable: Responsibility for financial security...					
	...when unemployed	...when sick	...of the family	...when old	...when requiring care
East	0.052 (0.053)	0.078 (0.049)	0.040 (0.049)	-0.104** (0.049)	0.026 (0.048)
Year 2002	0.046** (0.020)	0.163*** (0.020)	0.002 (0.021)	-0.017 (0.020)	0.117*** (0.020)
East*2002	-0.161*** (0.035)	-0.190*** (0.033)	-0.118*** (0.033)	-0.188*** (0.033)	-0.180*** (0.033)
Year 2017	0.233*** (0.024)	0.307*** (0.024)	0.166*** (0.024)	0.200*** (0.024)	0.297*** (0.024)
East*2017	-0.452*** (0.042)	-0.317*** (0.040)	-0.233*** (0.040)	-0.341*** (0.040)	-0.260*** (0.040)
Age	-0.001 (0.001)	-0.002** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.005*** (0.001)
East*age	0.009*** (0.001)	0.009*** (0.001)	0.009*** (0.001)	0.012*** (0.001)	0.008*** (0.001)
All control variables	Yes	Yes	Yes	Yes	Yes
Observations	36586	36621	36554	36658	36659
Log likelihood	-22156	-24391	-23608	-24245	-24937

Probit regressions. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups. Included as controls are number of children and number of adults in household, logarithm of household income, and dummies for education, sex, marital status, employment status, and occupation.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.

## Parents' preferences

**Table A9:** Regressions with those who were born in 1990-1999, information about at least one parent is present

	Dependent variable: Responsibility for financial security...				
	when unemployed	when sick	of the family	when old	when requiring care
Born in East States	-0.017 (0.113)	0.108 (0.108)	0.191* (0.107)	0.307*** (0.109)	0.097 (0.108)
Age	0.007 (0.016)	0.002 (0.016)	0.012 (0.016)	0.022 (0.016)	0.043*** (0.016)
Male	-0.062 (0.091)	-0.009 (0.088)	0.076 (0.088)	-0.097 (0.088)	-0.046 (0.088)
Unemployed	0.432 (0.299)	0.106 (0.264)	-0.067 (0.257)	-0.031 (0.264)	-0.078 (0.264)
Maternity	0.631 (0.592)	0.982* (0.590)	-0.400 (0.502)	0.021 (0.480)	0.810 (0.607)
Training	0.188* (0.111)	0.089 (0.106)	-0.050 (0.106)	0.022 (0.106)	0.118 (0.106)
Other nonworking	0.446*** (0.168)	0.271* (0.154)	0.096 (0.155)	0.144 (0.152)	-0.006 (0.152)
Observations	846	843	844	845	846
Log likelihood	-519	-575	-575	-577	-573

Probit regressions. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.

**Table A10:** Regressions with those who were born in 1990-1999, including mother's preferences

	Dependent variable: Responsibility for financial security...				
	when unemployed	when sick	of the family	when old	when requiring care
Born in East States	-0.032 (0.118)	0.087 (0.113)	0.166 (0.113)	0.278** (0.115)	0.088 (0.113)
Mother pro-state in 2017	0.492*** (0.101)	0.276*** (0.091)	0.405*** (0.091)	0.476*** (0.091)	0.219** (0.090)
Age	-0.001 (0.017)	0.007 (0.016)	0.007 (0.016)	0.007 (0.017)	0.040** (0.016)
Male	-0.018 (0.095)	-0.001 (0.091)	0.061 (0.091)	-0.117 (0.091)	-0.023 (0.090)
Unemployed	0.410 (0.308)	0.162 (0.274)	0.024 (0.270)	-0.125 (0.274)	-0.028 (0.274)
Maternity	0.569 (0.652)	0.837 (0.593)	-0.366 (0.515)	0.341 (0.567)	0.719 (0.644)
Training	0.153 (0.113)	0.045 (0.109)	-0.070 (0.110)	0.007 (0.109)	0.126 (0.110)
Other nonworking	0.498*** (0.182)	0.338** (0.164)	0.158 (0.162)	0.136 (0.163)	0.061 (0.159)
Observations	801	796	798	799	798
Log likelihood	-480	-537	-533	-533	-539

Probit regressions. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.

**Table A11:** Regressions with those who were born in 1990-1999, including father's preferences

	Dependent variable: Responsibility for financial security...				
	when unemployed	when sick	of the family	when old	when requiring care
Born in East States	-0.148 (0.127)	0.008 (0.124)	0.118 (0.122)	0.353*** (0.126)	0.032 (0.125)
Father pro-state in 2017	0.344*** (0.110)	0.317*** (0.101)	0.419*** (0.104)	0.252** (0.102)	0.391*** (0.100)
Age	0.010 (0.018)	0.012 (0.018)	0.026 (0.018)	0.027 (0.018)	0.055*** (0.018)
Male	0.014 (0.104)	0.032 (0.100)	0.130 (0.101)	-0.076 (0.100)	-0.054 (0.101)
Unemployed	0.566 (0.373)	0.336 (0.320)	-0.040 (0.299)	-0.095 (0.309)	0.070 (0.301)
Maternity	0.000 (.)	0.000 (.)	-0.565 (0.681)	-0.326 (0.584)	0.618 (0.724)
Training	0.235* (0.127)	0.096 (0.121)	-0.068 (0.121)	0.088 (0.120)	0.100 (0.122)
Other nonworking	0.398** (0.184)	0.329* (0.174)	-0.031 (0.178)	0.075 (0.171)	0.035 (0.172)
Observations	649	644	654	652	654
Log likelihood	-398	-437	-435	-442	-436

Probit regressions. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.

## OLS results

**Table A12:** Balanced sample: regressions with individuals who answer in 1997, 2002 and 2017

	Dependent variable: Responsibility for financial security...				
	...when unemployed	...when sick	...of the family	...when old	...when requiring care
East	0.138*** (0.020)	0.152*** (0.022)	0.154*** (0.021)	0.110*** (0.022)	0.119*** (0.022)
Year 2002	0.024 (0.017)	0.070*** (0.017)	0.002 (0.017)	-0.005 (0.017)	0.076*** (0.018)
East*2002	-0.047* (0.024)	-0.049* (0.026)	-0.011 (0.026)	-0.012 (0.026)	-0.063** (0.027)
Year 2017	0.057*** (0.020)	0.119*** (0.021)	0.038* (0.021)	0.060*** (0.021)	0.136*** (0.021)
East*2017	-0.059** (0.025)	-0.060** (0.028)	-0.012 (0.027)	0.013 (0.028)	-0.065** (0.029)
All control variables	Yes	Yes	Yes	Yes	Yes
Observations	6969	6969	6969	6969	6969
Log likelihood	-4306	-4873	-4749	-4846	-4965

Linear probability model. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups. Included as controls are cubic function in age, number of children and number of adults in household, logarithm of household income, and dummies for education, sex, marital status, employment status, and occupation.  
 \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.

**Table A13:** Basic regressions

	Dependent variable: Responsibility for financial security...				
	...when unemployed	...when sick	...of the family	...when old	...when requiring care
East	0.146*** (0.010)	0.180*** (0.011)	0.162*** (0.011)	0.170*** (0.011)	0.149*** (0.011)
Year 2002	0.014* (0.007)	0.058*** (0.007)	-0.001 (0.007)	-0.009 (0.008)	0.043*** (0.008)
East*2002	-0.043*** (0.011)	-0.064*** (0.013)	-0.040*** (0.012)	-0.063*** (0.012)	-0.063*** (0.013)
Year 2017	0.073*** (0.009)	0.102*** (0.009)	0.047*** (0.009)	0.057*** (0.009)	0.104*** (0.009)
East*2017	-0.112*** (0.013)	-0.078*** (0.015)	-0.046*** (0.014)	-0.071*** (0.015)	-0.063*** (0.015)
Age	-0.006 (0.004)	0.010** (0.004)	-0.002 (0.004)	0.004 (0.004)	0.004 (0.004)
Age squared(*10 <sup>3</sup> )	0.141* (0.073)	-0.168** (0.078)	0.039 (0.077)	-0.063 (0.078)	-0.102 (0.079)
Age cubed(*10 <sup>5</sup> )	-0.097** (0.045)	0.088* (0.047)	-0.033 (0.046)	0.034 (0.047)	0.059 (0.048)
College	-0.068*** (0.021)	-0.116*** (0.023)	-0.087*** (0.023)	-0.121*** (0.023)	-0.050** (0.023)
Vocational training	-0.055*** (0.020)	-0.088*** (0.022)	-0.097*** (0.022)	-0.088*** (0.022)	-0.042* (0.022)
Secondary schooling	-0.055*** (0.020)	-0.058*** (0.022)	-0.060*** (0.022)	-0.052** (0.023)	-0.021 (0.023)
Intermediate schooling	-0.063*** (0.023)	-0.075*** (0.025)	-0.101*** (0.025)	-0.070*** (0.025)	-0.048* (0.025)
Male	-0.013** (0.005)	-0.017*** (0.006)	-0.005 (0.006)	0.001 (0.006)	0.010* (0.006)
Number of children	0.012*** (0.003)	0.011*** (0.003)	0.022*** (0.003)	0.012*** (0.003)	0.004 (0.003)
Number of adults	0.006*** (0.002)	0.009*** (0.002)	0.005*** (0.002)	0.007*** (0.002)	0.003* (0.002)
Married	0.014 (0.009)	0.022** (0.009)	0.014 (0.009)	0.017* (0.009)	0.020** (0.010)
Divorced	0.004 (0.012)	-0.010 (0.013)	0.012 (0.013)	-0.000 (0.013)	0.003 (0.013)
Married but separated	-0.008 (0.018)	-0.003 (0.019)	0.001 (0.019)	0.005 (0.020)	0.021 (0.020)
Widowed	0.007 (0.013)	0.007 (0.014)	0.007 (0.014)	0.007 (0.014)	0.015 (0.014)
Log HH income	-0.051*** (0.006)	-0.078*** (0.006)	-0.059*** (0.006)	-0.089*** (0.006)	-0.065*** (0.006)
Civil servant	-0.071*** (0.015)	-0.083*** (0.015)	0.017 (0.015)	-0.045*** (0.015)	-0.066*** (0.015)
Self-employed	-0.118*** (0.013)	-0.121*** (0.013)	-0.092*** (0.013)	-0.143*** (0.013)	-0.093*** (0.013)
White-collar worker	-0.015* (0.008)	-0.019** (0.009)	-0.010 (0.008)	-0.039*** (0.009)	-0.030*** (0.009)
Unemployed	0.033*** (0.012)	0.002 (0.014)	0.048*** (0.014)	0.001 (0.014)	-0.006 (0.014)
Retired	-0.040*** (0.013)	-0.043*** (0.014)	0.005 (0.014)	-0.027* (0.014)	-0.011 (0.014)
Maternity	0.005 (0.020)	-0.025 (0.023)	0.012 (0.022)	-0.058*** (0.022)	-0.026 (0.023)
Nonworking	-0.013 (0.010)	-0.013 (0.011)	0.024** (0.011)	-0.012 (0.011)	-0.007 (0.011)
Training	-0.032 (0.021)	-0.025 (0.022)	-0.073*** (0.021)	-0.027 (0.022)	-0.026 (0.022)
Other nonworking	-0.002 (0.013)	-0.030** (0.015)	0.000 (0.014)	-0.020 (0.015)	-0.037** (0.015)
Observations	36586	36621	36554	36658	36659
Log likelihood	-23249	-25632	-24819	-25536	-26173

Linear probability model. The dependent variable is an indicator variable that takes the value one if the household responds *only the state* or *mostly the state* to the question of who should be responsible for the financial security of different groups. Omitted categories are fewer than nine years of schooling, female, single, blue-collar worker, and employed. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust clustered standard errors in parentheses.