

Political Regimes and the Family: How Sex-Role Attitudes Continue to Differ in Reunified Germany*

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Abstract

We exploit the German separation and later reunification to investigate whether political regimes can shape attitudes about appropriate roles for women in the family and the labor market. During the divided years, East German institutions encouraged female employment, while the West German system deterred women, in particular mothers, from full-time employment. Our results show that East Germans are significantly more likely to hold egalitarian sex-role attitudes than West Germans. Despite a scenario of partial policy convergence after reunification, we find no evidence for a convergence process in gender attitudes. Indeed, if anything, the gap in attitudes rather increased.

Keywords: Political Regimes, Gender Role Attitudes, German Reunification

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1. Introduction

Attitudes and beliefs concerning appropriate roles for men and women in the family and the workplace influence economic outcomes. First, there is evidence of a strong negative correlation between traditional or anti-egalitarian views and female employment (Thornton *et al.* 1983; Fortin 2005). Second, differences in beliefs about appropriate sex roles across geographically differentiated groups turn out to have significant explanatory power for the work and fertility behavior of women (Fernandez and Fogli 2009). Third, gender differences in labor market outcomes are not just the result of discrimination but also partially reflect women’s own beliefs about appropriate gender roles (Fortin 2005). Finally, parental sex-role attitudes appear to play a significant role in shaping the attitudes and behavior of children. For example, whether a man’s wife works is positively associated with whether his mother worked (Fernandez *et al.* 2004; Kawaguchi and Miyazaki 2009), which could be explained by the idea that men with working mothers have more egalitarian views of sex roles.

Despite the mounting evidence that sex-role attitudes matter, research on the factors involved in the formation and the evolution of such attitudes is scarce. In particular, very little is known about whether individual beliefs about gender roles are endogenous to political regimes. In this paper we follow the empirical approach of Alesina and Fuchs-Schündeln (2007) and argue that the separation and reunification of Germany sets up a natural experiment of sorts concerning the influence of political regimes and social policies on attitudes about appropriate roles for women in the family and the compatibility of work and motherhood. Central to our analysis is the use of West Germans as a control group for East Germans. The argument for using this approach is as follows. Prior to separation, East and West Germany were quite similar, amongst other things, in terms of fertility and female employment rates, suggesting no substantial difference in gender role attitudes. Then new political and economic systems were twice imposed in the East, once when Germany was divided in 1949 and again when it was reunified in 1990. During the divided years, institutions and policies that allow women to combine paid work and parenting differed markedly in the two Germanies. The East German politico-economic system not only granted women the constitutional right to work and to receive equal pay, but also encouraged high levels of female employment through extensive public provision of child care and reduced working hours for mothers (Trappe 1996). West German institutions and policies, by contrast, deterred women in general and mothers in particular from paid work. Those women who chose employment were incentivized—through tax policy and half-day nurseries—to work part-time (Rosenfeld *et al.* 2004). After reunification,

a scenario of institutional convergence emerged. More precisely, family-related policies rapidly changed in the East, while those in the West remained largely unchanged.

Against this background, we examine the impact of changing political regimes and social policies on individual sex-role attitudes. The data we use comes from the German General Social Survey (ALLBUS). Our first set of results shows that individuals in the eastern part of reunified Germany are significantly more likely to hold egalitarian or nontraditional sex-role attitudes than their western counterparts. For example, being from East Germany reduces the likelihood of agreeing with the statement “*It is better for all if the husband works and the wife stays at home taking care of the household and the children*” by roughly 22 percentage points. We interpret this as evidence that the state socialist system in East Germany had a discernible effect on people’s thinking about appropriate gender roles. Having established this, we ask of the data whose beliefs are more important in shaping the East-West gap in sex-role attitudes, men’s or women’s? We show that the beliefs of both East German men and women play an important role, though perhaps surprisingly, men’s views appear to be, if anything, more important in driving the gap in sex-role attitudes between East and West Germany. This could be explained by the fact that a substantially larger portion of men in the East grew up with a working mother than in the West. Moreover, we can show that it is the older cohorts, i.e., those who lived under the socialist regime for the longest time span, who exhibit the most pronounced differences to their West German counterparts.

Lastly, we investigate whether the political transformations that took place after reunification—with substantially more change in the East than in the West—are reflected in a convergence of views about gender roles. A remarkable picture emerges. For none of our outcome variables we find any evidence of a convergence process. We show quite to the contrary that there is rather a widening of the East-West gap in sex-role attitudes in the period after 1990. For example, regarding disagreement with the statement “*It is more important for a woman to support her husband’s career instead of making her own*”, the gap between East and West Germans more than tripled in the first fifteen years after reunification. The result of a persistent and in parts even increasing gap in sex role attitudes is statistically significant and robust to the inclusion of covariates accounting for regional economic conditions. Thus, our findings suggest that value and attitude differences caused by different political regimes can be more persistent than shown by Alesina and Fuchs-Schündeln (2007). Indeed, it is striking to find convergence in redistributive preferences and other attitudes between East and West Germans, yet those beliefs associated with the arguably positive aspects of the socialist regime continue to

differ.

Our work is by no means the first in the study of preferences and attitudes to exploit the German separation and later reunification. Alesina and Fuchs-Schündeln (2007) looked at the extent to which the communist regime in East Germany affected people's thinking about redistribution from the rich to the poor. They find that East Germans are much more in favor of redistribution than West Germans. They also detect signs of a convergence process. More precisely, they show that it will take roughly two generations for the difference between East and West Germans to disappear. In addition to this study focussing on preferences for redistribution, there has been work examining social capital in reunified Germany. Rainer and Siedler (2009) show that the communist regime in East Germany had a negative effect on people's social and institutional trust. They also find evidence that the transition to democracy led to a sharp increase in institutional trust amongst East Germans. Finally, Bauernschuster *et al.* (2009) empirically compare individuals born and raised under socialism in East Germany to their West Germans counterparts, and find that the socialist regime had a causal effect on attitudes which are negatively associated with entrepreneurship.

The remainder of this paper is organized as follows. Section two discusses some background to the German separation and later reunification. Section three of the paper describes the data we use, and Section four presents the results. Section five concludes.

2. Institutional Background

2.1. Before Separation

After a period of multiple political and territorial changes, the second half of the 19th century saw the emergence of gradual conformity between German regions. This development found its institutional imprint in the foundation of the German Empire in 1871. After World War I, the period of the Weimar Republic further supported this development. The regions that would later become East and West Germany were parts of one federal republic. This political and institutional background of Germany is crucial for our identification strategy.

In order to isolate the causal impact of the socialist regime on sex-role attitudes, a key identifying assumption is that East and West Germans did not differ from each other in terms of gender views prior to German separation. Unfortunately, we do not have data on reported sex-role attitudes in East and West Germany before separation. However, we do have historic data on variables that are closely related to sex-role attitudes. These data should give us at least some impression about sex roles in East and West Germany in the

first half of the last century. For example, data from the *Statistisches Reichsamt* (1936, p. 322, p. 334) indicate that female labor market participation did hardly differ between what is today's East Germany and West Germany. In 1935, 31 percent of all employed and unemployed were female in the regions of today's East Germany; in West Germany this figure is only slightly lower (30.14 percent). As far as marriage behavior and fertility is concerned, historical data again support our assumption that East and West Germans did not systematically differ before separation (*Statistisches Reichsamt* 1936, p. 36). The same is true for female working hours as compared to male working hours and female wages as compared to male wages (e.g., *Statistisches Reichsamt* 1936, p. 342). Schäfgen (1998) presents complementary statistics to show that in 1955 labor force participation rate among females was 52.2 percent in East Germany; the corresponding figure for West Germany comes from 1960 and is 49 percent. Only in the course of the following decades, East and West Germans gradually diverged due to orthogonal politico-economic regimes and family-related policies.

2.2. *During the Divided Years*

During the divided years, the two Germanies encouraged women to combine paid work and the family in very different ways. In East Germany, the principle of “equal pay for equal work” was made part of the first constitution in 1949. During the 1960s, the policy focus in the East was on giving women special opportunities to improve their qualifications. This orientation came about within the context of an accelerated development of the economy's scientific and technical level (Huinink and Solga 2007). By the 1970s, the regime recognized that women's increasing employment seemed to be associated with lower fertility rates (Engelhardt *et al.* 2002). In the latter years of the socialist regime, the policy focus therefore changed from qualified employment to the reconciliation of work and maternity. In addition to providing extensive child care, the implemented policies made it possible for women to take paid leaves with a job-return guarantee after childbirth and to reduce working hours while the children were small (Trappe 1996).

In West Germany, by contrast, combining work and family was difficult for women due to the lack of public child care (Rosenfeld *et al.* 2004). Family policy centered around extended maternal leave for child care, which allowed mothers to stay at home with their children, depending economically on their partners and a means-tested payment. During their time of nonemployment, women's entitlements were largely derived from their husbands' rights (Engelhardt *et al.* 2002). Overall, therefore, West German policy encouraged a male breadwinner model in which women worked until they had children

and then either stayed at home or returned to part-time work after a long interruption.

Taken together, the discussion so far is suggestive that our comparison of sex-role attitudes between East and West Germans is embedded in a natural experiment. On the one hand, the two Germanies differed remarkably in family-related policies and institutions during the forty years of separation. On the other hand, both parts resembled each other economically, politically and culturally before the exogenously imposed separation in 1949. If individual beliefs about gender roles are endogenous to political regimes, this should be visible in differential sex-role attitudes in the two parts of reunified Germany.

2.3. After Reunification

After reunification, family-related policies and institutions largely converged in the two Germanies. One notable exception is the public supply of child care for children up to the age of three. On one side, the institutional transformations that took place after reunification led to a slight decrease in the provision of public child care in the East. However, publicly provided child care in East Germany nevertheless remained at a substantially higher level than in West Germany (Rosenfeld *et al.* 2004). Another notable exception is the percentage of jobs in the public sector, which was still higher in the East than in the West. Given this scenario of partial policy convergence, an interesting question to ask is whether a unification of gender role attitudes took place after 1990.

3. Data

The ALLBUS survey (Allgemeine Bevölkerungsumfrage der Sozialwissenschaften) is a valuable data source for our research. ALLBUS is the German equivalent to the U.S. General Social Survey (GSS) and currently covers the period from 1980 to 2008.¹ The data set is based on biennial, representative surveys of the German population conducted through personal interviews. These surveys cover a wide range of topics pivotal to empirical research in social sciences. A core set of questions is asked in every wave of the survey, with various sets of additional questions added in different years.² We use the 1991, 1992, 1996, 2000, 2004, and 2008 waves. In these years, interviewees were asked to report their level of agreement with six statements about the role of women in families, where respondents could choose “*Fully agree*”, “*Rather agree*”, “*Rather don’t agree*”, or

¹The ALLBUS program was financially supported by the German Research Foundation (DFG) from 1980 to 1986 and in 1991. Further surveys were financed on a national and federal state (Laender) level via the GESIS network (Gesellschaft Sozialwissenschaftlicher Infrastruktureinrichtungen).

²Terwey and Baltzer (2009) provide detailed information on the ALLBUS surveys in general and present all variables available in the cumulated data set from 1980 until 2008.

“*Don’t agree at all*” for each single statement. The first three statements concern attitudes about the compatibility of work and motherhood, while the other three statements capture attitudes about the appropriateness of specialization of male and female roles. In particular, the statements belonging to the first group read:

- (I) “*A working mother can just as well have a hearty and trustful relationship with her children as a non-working mother*”
- (II) “*It is even good for a child if his or her mother is employed instead of merely focussing on household work*”
- (III) “*Certainly, a baby suffers if his or her mother is employed*”.

On the other hand, the statements referring to the appropriateness of segregation of male and female roles read:

- (IV) “*It is more important for a woman to support her husband’s career instead of making her own career*”
- (V) “*It is better for all if the husband works and the wife stays at home taking care of the household and the children*”
- (VI) “*A married woman should turn a job down if only a limited number of jobs is available and her husband is able to make a living for the family*”.

In order to analyze to which extent East Germans and West Germans differ in their attitudes towards a woman’s role in the family, we group the two agreement levels (“*Fully agree*”, “*Rather agree*”) together to represent individuals who agree with the respective statement, and group the two disagreement levels (“*Rather don’t agree*”, or “*Don’t agree at all*”) together to capture individuals who do not agree. We then create six dummy variables which we order so that a value of one reflects an egalitarian or nontraditional response and a value of zero represents a traditional orientation. Thus, positive coefficients on the explaining variables will reflect more egalitarian or nontraditional views about gender roles.

The six dummy variables are used as outcome variables of probit regressions where our independent variable of main interest is a dummy for East Germany. Additionally, we control for an individual’s gender, age (and its square), and education. Moreover, we include a set of year dummies to capture common time trends. In addition to the probit models, we also ran ordered probit models using all information on the four agreement

categories, which did not change our results. In extended specifications, we also included the logarithm of an individual’s monthly income. Moreover, in order to proxy for wealth, we introduced a dummy variable which takes the value of unity for individuals owning a flat or a house, and zero otherwise. Including these additional covariates did not affect our main findings. However, these controls give rise to various endogeneity concerns, which (at least) unnecessarily complicates the interpretation of the coefficients. This is why, in the rest of this paper, we focus on our basic specification. Summary statistics for all variables used in the paper are presented in the Appendix.

4. Results

4.1. Baseline Results

The results presented in Table 1 show that East Germans hold more egalitarian gender views than do West Germans. The difference between East and West in terms of sex-role attitudes is not only highly significant across all six specifications, but also quantitatively substantial. Conditional on our controls, being from East Germany increases the likelihood of agreeing with the statement “*It is even good for a child if his or her mother is employed instead of merely focusing on household work*” by 28 percentage points [column (II)]. Moreover, concerning the statement that “*It is better for all if the husband works and the wife stays at home taking care of the household and the children*”, being from East Germany decreases the likelihood of agreeing by 22 percentage points [column (V)].³ Note that these differences between East and West Germans are averaged over 19 post Reunification years. We will later come back to that and analyze the dynamics of these gaps in more detail. The coefficients on our covariates seem sensible. On average, women hold more modern views about working mothers and their relationships to their children as well as about family models. Moreover, having rather egalitarian attitudes toward working mothers and family models is an inverted u-shaped function of age. Schooling seems to increase agreement with less traditional attitudes toward working mothers and family models. Indeed, the coefficients steadily increase with the level of schooling for all six outcome variables.⁴ Additionally, the increasing coefficients of the year dummies reveal that over the past two decades, individuals adopted more modern views about

³In additional estimations, we drop the “rather agree” and “rather disagree” categories and only use information of those individuals showing strong agreement or strong disagreement. The coefficients of the East dummy now become even larger for five out of our six outcome variables. The results of this robustness check are available from the authors upon request.

⁴In controlling for education, we eliminate any indirect effects that political regimes may have on gender role attitudes through the education channel. Regimes that promote a male breadwinner model are less likely to induce female human capital investments than regimes which encourage female employment.

working mothers and family models.

Insert Table 1 about here

One might argue that religion might be key for the differences in attitudes between East and West Germans. The Lutheran Reformation concentrically dispersed around Wittenberg (Becker and Wössmann 2009), and Wittenberg lies in the very heart of East Germany. As a consequence, historically most of the East German regions were protestant whereas we see both catholic and protestant regions in West Germany. Simply controlling for an individual's current confession in our multivariate regressions would lead to spurious results since religion might itself be an outcome of the East German regime, which gives rise to bad control problem. Indeed, religiosity was suppressed by the Communist regime in the GDR. Consequently, almost 70 percent of the individuals in our East German sample state that they do not adhere to any religion. But even if individuals state that they do not adhere to any religion, the deeply rooted Protestant ethic might still shape their minds. In order to account for this fact, we restrict our sample to historically clearly protestant regions by dropping observations from Bavaria, Baden-Wuerttemberg, Northrhine Westfalia, Rhineland Palatinate, and Saarland. Running regressions on this restricted sample reveals that the East German dummy is still positive and highly significant across all our outcomes variables, although the absolute size of the coefficients slightly decreases.

To further check that religion does not drive our results, we concentrate on the West German sample and investigate how strong an individual's confession is associated with her sex role attitudes. It turns out that religion does indeed matter. Just as expected, Catholics exhibit more traditional role attitudes than Protestants. In particular, being Catholic decreases the likelihood of exhibiting egalitarian attitudes by 1.5 to 3.3 percentage points as compared to being Protestant. Taking into consideration that also roughly 40 percent of all West Germans in our sample are Protestants, the size of these associations between religion and gender role attitudes appears to be rather modest. Indeed, conducting a thought experiment and making all Catholic West Germans Protestants, religion could explain a mere 1 percentage point of the large sex role attitude differences between East and West Germans we have found in our regressions, ranging from 9 to 28 percentage points. Consequently, this exercise suggests that religion should not be the confounding factor responsible for the large differences in sex role attitudes between East and West Germans.

So far, we have seen that East Germans are less traditional or more egalitarian than West Germans when it comes to views about the compatibility of work and motherhood

and the appropriateness of specialization of male and female roles. But it would be interesting to know more details about the structure of these differences. We might, for example, wonder whether the East Germany dummy is mainly driven by men or women. The results reported in Table 2 shed light on this issue. Splitting the sample by gender and running separate regressions, we find that both East German men as well as women differ in their attitudes from their West German fellow citizens. However, interestingly, the coefficient on the East Germany dummy is considerably larger in the male subsample (second panel of Table 2) than in the female subsample (first panel of Table 2), in particular concerning the compatibility of work and motherhood (see columns (I) through (III)).

Insert Table 2 about here

If the observed differences concerning sex roles are a causal effect of the socialist regime in the former GDR, we should see these effects in virtually every single federal state of today's Eastern Germany. In order to test this prediction, we run regressions where we include dummies for East Berlin and the five East German federal states (Brandenburg, Mecklenburg Western Pomerania, Saxony-Anhalt, Saxony, and Thuringia) rather than one East Germany dummy; just like in our earlier regressions we use West Germans as the baseline category. The results of this exercise are displayed in Table 3. We can see clear evidence that individuals from every single East German federal state hold a more egalitarian and less traditional gender role attitudes than the average West German. The coefficients of the remaining covariates are not affected by this alternative specification. It might be interesting to note that West German TV programs could not be received in parts of Saxony and Mecklenburg Western Pomerania whereas they could be received in the remaining East German federal states. One might therefore argue that individuals from Saxony and Mecklenburg Western Pomerania are even more different from West Germans than East Germans from East Berlin, Brandenburg, Saxony-Anhalt, and Thuringia. Our results do not support this hypothesis.⁵

Insert Table 3 about here

⁵Also for the subsample of individuals born before 1975, we cannot find evidence for the hypothesis that the availability of West German TV in East Germany before Reunification mattered as far as our outcome variables are concerned. However, more detailed data on the availability of West German TV in the regions of the former GDR might well be able to detect impacts.

4.2. Family Values and Mobility

In the wake of German reunification, many people moved from East to West Germany whereas only few people migrated from West to East Germany. We now switch the focus to those 214 East Germans in our sample who moved to West Germany after the fall of the Berlin Wall and compare them to those individuals who were born in West Germany and still live there.⁶ This subpopulation of movers was socialized in the socialist regime of the former GDR and was then confronted with the economic and institutional situation of West Germany. The results reported in the upper panel of Table 4 indicate that even this very selective subgroup of East Germans is significantly different from the average West German for five out of our six outcome variables. On the other hand, a comparison of East-West movers to those who are born in and still live in East Germany reveals that, conditional on our covariates, the movers are not very different from the average East German as far as sex role attitudes are concerned (see lower panel of Table 4). Just for one out of our six outcome variables, we find significant evidence ($p=0.63$) that the East-to-West-movers are somewhat more traditional than other East Germans. For the remaining outcome variables, no clear picture emerges with all coefficients of interest being far from significance.

Insert Table 4 about here

This result is particularly interesting given the argument that the attitude gap between East and West Germans might be driven by selective migration, i.e., those who are more traditional in terms of family values choose to move from East Germany to West Germany. Unfortunately, we do not have panel data which would allow us to track individuals over time and thus more directly test the relevance of these selection concerns. However, observing that East-West migrants exhibit sex role attitudes not really different from individuals who are born in and still live in East Germany leaves us with the conclusion that self-selection should not be a major problem in our analysis. This argument is reinforced if we consider that the migrants in our data set had on average already spent more than six years in West Germany before they were eventually interviewed. Within these six years, one might have expected these migrants to gradually have adopted West German sex role attitudes; yet, our data show that they are still not different from the average East German citizen.

⁶Since this mobility information is not available for 1996 and 2008, we drop all observations from those years.

To complete the picture, we perform an anti-test and switch to those 431 individuals in our sample who moved from East Germany to West Germany before the Berlin Wall was built. Just as expected, this subgroup does not differ at all from the average West German in terms of attitudes toward working mothers and family values. These results are available from the authors upon request. Unfortunately, the very low number of West Germans who moved to East Germany does not allow an analysis similar to the one for individuals who moved from East Germany to West Germany.

4.3. Cohort Analysis

In a next step, we analyze the gap in sex-role attitudes between East and West Germans across cohorts. In particular, we define five groups according to the year of birth: born before 1935, born between 1935 and 1945, born between 1945 and 1955, born between 1955 and 1965, and born after 1965. We split the whole sample and run probit regressions for every cohort subsample, using the dummy for East Germany as our variable of main interest. All estimations include the usual covariates. The interesting pattern arising from this exercise becomes apparent in Table 5. The difference concerning gender role attitudes between East and West Germans is largest for the earliest cohort, and this holds true for all six outcome variables dealing with either attitudes about the compatibility of work and motherhood or views about the appropriateness of specialization of male and female roles. Indeed, we observe a strikingly consistent decrease in the coefficients on the East dummies once we move to later cohorts. This finding can be interpreted along the lines of Alesina and Fuchs-Schündeln (2007): those East Germans who lived under the socialist regime for a longer time show the biggest differences from West Germans. Given that the gap between East and West Germans is largest for the earlier cohorts and smaller for the young, we might also wonder whether we can observe a certain convergence process in family values between East and West Germans in the years after Reunification.

Insert Table 5 about here

4.4. Dynamics

Since we have got repeated cross-section data on family values for the period from 1991 to 2008, we can explore whether the differences between East and West Germans decreased in the course of the years after Reunification. In order to analyze whether a convergence process emerges, we interact the East German dummy with year dummies for 1996, 2000, 2004, and 2008. Then, we include these interaction terms in addition to the East Germany

dummy, the year dummies, and the usual covariates in our probit models. If the coefficients on the interactions show the opposite sign of the East German dummy coefficients, this indicates the presence of a convergence process of East and West German sex-role attitudes after reunification. On the other hand, if the coefficients of the interactions show the same signs as the East German dummy coefficients, this would rather indicate an increase in the gap over the years.

Table 6 depicts the remarkable results of this exercise. In none of the six specifications, we find any evidence at all for an emerging convergence process. Indeed, it rather seems that East Germans became comparatively more egalitarian than West Germans after reunification. In particular, looking at the results for the interaction terms of the East dummy and the years 2004 and 2008, we find five out of six coefficients significant with the signs being identical to the ones of the East Germany dummies. This suggests that the attitude gap between East and West Germans does not decrease, i.e., we see no signs of convergence. Quite to the contrary, nineteen years after reunification, East and West Germans differ more from each other in terms of gender views than they used to in 1991 and 1992, i.e., right after reunification. At the same time as being highly significant, the magnitude of the increase of the gap seems rather substantial. In column (IV), which deals with the agreement to the statement that it is better for a woman to support her husband's career than to make her own career, the gap between East and West Germans has virtually more than tripled 15 years after the fall of the Berlin Wall and even grew further until 2008. But also in columns (II), (III), (V), and (VI), we see a substantial widening of the gap peaking in 2004, where we observe the gap being roughly 1.4 to 1.6 the size of the gap right after Reunification. From 2004 to 2008, this gap slightly decreases again; yet, it is still substantially larger than right after German Reunification. Further investigating these dynamics, we find that both East and West Germans adopt more egalitarian sex-role attitudes in the course of the 19 years following German Reunification. However, East Germans start out more egalitarian and follow steeper trend lines towards even less traditional gender views, which ultimately leads to an increase in the East-West gap. The general picture for the other covariates remains unaffected.

Insert Table 6 about here

4.5. Can We Explain the Persistent Gap?

Given that East and West Germans have been living in one country since 1990, the persistent and even increasing gap in beliefs about appropriate gender roles seems puzzling—even more so given that other studies have found at least some convergence in terms of

preferences for redistribution (Alesina and Fuchs-Schündeln 2007) and trust (Rainer and Siedler 2009). Therefore, further investigating this gap in family values seems a worthwhile exercise. Are there any persistent, or increasing, differences in institutions and social policies which might be responsible for the persistence or even the widening of the gap?

As a first natural candidate, we might think of differences in labor markets or the economic situation in general. The labor market situation in the post-unification era substantially differed between East and West Germany, with much higher unemployment rates in the East.⁷ To check the relevance of the labor market and the economic situation in general, we include GDP per capita as well as unemployment rates at the federal state level in our regressions. Due to endogeneity concerns, we do not over-interpret these results. However, from Table 7 we can see that the size of the East dummies somewhat decreases, yet they remain highly significant across all our outcome variables. The signs and significance of the coefficients on the interactions of the East dummies with the year dummies largely confirms our previous results. Even when controlling for GDP per capita and unemployment rates, the persisting (and partly even increasing) gap in gender role attitudes between East and West Germans after Reunification remains unexplained.

Insert Table 7 about here

The socialist regime in East Germany built up an elaborated child care system while there were hardly any day nurseries—in particular for very young children—in West Germany. This might well have been one channel through which the socialist regime had an effect on the gender role attitudes of its citizens. One might argue that childcare spaces are endogenous to sex role attitudes. However, also note that the former GDR was not a democratic state in which people elected politicians who were supposed to represent their opinions. Rather, the Communist regime superimposed policies upon its people which were in line with socialist ideology. Many child care centers in East Germany survived reunification and are still in place, so to speak as a legacy of the socialist regime. Any potential problems notwithstanding, we include childcare spaces at the federal state

⁷Theoretically, the effect of high regional unemployment on gender role attitudes is ambiguous. On the one hand, high regional unemployment rates might discourage women from joining the labor force and rather render them housewives, which could in turn lead to more traditional family values. On the other hand, if high regional unemployment endangers the job of the husband, a wife might just as well join the labor force and search for a job herself in order to minimize the negative effects for the family arising from her husband getting unemployed (see, e.g., Kohara 2010). Last but not least, causality might also run from sex-role attitudes to unemployment. If people hold the view that a working mother is not harmful to children or the family, women might look for jobs on the labor market, which in turn increases the labor force and *ceteris paribus* the unemployment rate.

level in our regressions, in addition to GDP per capita, unemployment rates, and the other known covariates. Table 8 reveals that this strategy somewhat decreases the East dummy, while the coefficients on the interactions slightly increase. Overall, we can conclude that the general picture is not altered by these exercises. The persisting difference in sex role-attitudes between East and West Germans cannot be explained by individual characteristics such as age, sex, or education, nor by GDP per capita, unemployment rates, or childcare spaces. For some of our variables, we even find a considerable increase in the gap that remains unexplained. Virtually no signs of a convergence process can be detected.

Insert Table 8 about here

In order to collect further pieces of evidence for the nature of this persistent and partly increasing gap in gender role attitudes, we investigate the dynamics of the gap by cohorts. The results are presented in Table 9. Not only is the sex-role attitude gap most pronounced amongst the oldest cohort, we can also observe that the increase in the gap after Reunification is mainly driven by this group of individuals who lived under the socialist regime for a long time span. Also note that these individuals are neither in the childbearing age, where child care spaces could matter, nor in the working age, where unemployment could matter in terms of sex role attitudes. For younger cohorts, the gap stays roughly constant over time; at least for column (I), we can even observe some convergence.

Insert Table 9 about here

On a final note, it is worth pointing out that East German ALLBUS respondents were also asked the question “*Do you have feelings of belonging to the former German Democratic Republic (GDR) and its citizens*”.⁸ Figure 1 clearly demonstrates that more people felt very strongly or quite strongly attached to the former GDR in 2000 and 2008 than right after reunification. Simple regressions also reveal that this result is again driven in particular by people from earlier cohorts. They also reveal that the variable measuring attachment to the former GDR is highly correlated with our gender role attitude variables.⁹

Insert Figure 1 about here

⁸This question was only asked in the 1991, 2000, and 2008 surveys.

⁹The results from these additional regressions are available from the authors upon request.

One possible line of reasoning is now as follows. After the collapse of the former GDR, the West German politico-economic system was superimposed upon East Germany, and both East and West Germans were promised a bright future in a unified country. Soon, however, reality proved that the process of growing together would be more demanding than sometimes expected. East Germany was confronted with unemployment, which was virtually absent during the socialist regime, and even more, unemployment rates in East Germany reached double the level of West Germany. Although the communist regime of the former GDR was unmasked as a regime of suppression and injustice, there were a few aspects that were considered to be worthwhile achievements. One of them was the elaborated child care system and another the role of women in society.¹⁰ It is striking to find convergence in preferences for redistribution and other attitudes between East and West Germans, yet an impressive persistence and even increase in differences for exactly those beliefs that are associated with the arguably few positive aspects of the former socialist regime. The persistence in sex-role attitudes we observe might therefore reflect an identity-conserving behavior, one through which East Germans hold up the values central to their past, in particular those related to areas where the positive achievements of the socialist regime are generally accepted.

5. Conclusion

There is evidence showing that attitudes and beliefs concerning appropriate roles for men and women in the family and the workplace influence economic outcomes. However, little is known about the formation and evolution of such beliefs. In particular, it is not clear to what degree political regimes and social policies affect sex-role attitudes.

Drawing upon German separation and reunification as a natural experiment, we show that the socialist regime in the former GDR had a causal impact on sex-role attitudes. After more than four decades of separation, East Germans exhibit far more egalitarian or nontraditional gender role attitudes than their western counterparts. Strikingly, despite a scenario of partial policy convergence, we find that the gap in sex-role attitudes between East, and West Germans persisted and sometimes even dramatically increased in the years after reunification.

Our findings have important implications for a wide range of politico-economic issues. Political regimes can shape values and attitudes and have long-term effects on these

¹⁰In West Germany, there have been lively discussions for years about increasing child care resources and thus allowing women to combine both having a family and a career. However, the child care system in today's West Germany is still far from being elaborated.

attitudes even if a regime itself is no longer in place. Consequently, establishing a common political ground in historically divided regions is not a *panacea* for creating a convergence of attitudes. What does this mean for one-fits-all politics? For example, when it comes to voting on EU legislation, do member states hold up their very special and typical values and opt against centralized interference in some specific fields? Which issues are more sensitive to these problems of finding consensus? Our results make it conceivable that attitudes are historically shaped and not easily manipulated even in the presence of a general political convergence process.

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Tables and Figures

Table 1: Determinants of Attitudes toward Working Mothers and Family Models

	Mothers and work			Women in the family		
	(I)	(II)	(III)	(IV)	(V)	(VI)
East	.171 ***	.283 ***	.256 ***	.091 ***	.218 ***	.133 ***
	<i>.006</i>	<i>.006</i>	<i>.006</i>	<i>.007</i>	<i>.007</i>	<i>.007</i>
Female	.054 ***	.143 ***	.083 ***	.021 ***	.069 ***	.065 ***
	<i>.005</i>	<i>.006</i>	<i>.006</i>	<i>.006</i>	<i>.006</i>	<i>.007</i>
Age	.004 ***	.008 ***	-.000	-.000	.003 ***	.005 ***
	<i>.001</i>	<i>.001</i>	<i>.001</i>	<i>.001</i>	<i>.001</i>	<i>.001</i>
Age squared (*10 ²)	-.004 ***	-.010 ***	-.002 **	-.005 ***	-.009 ***	-.010 ***
	<i>.001</i>	<i>.001</i>	<i>.001</i>	<i>.001</i>	<i>.001</i>	<i>.001</i>
Lower secondary education	.068 ***	.072 ***	.035	.110 ***	.102 ***	.071 ***
	<i>.015</i>	<i>.023</i>	<i>.023</i>	<i>.020</i>	<i>.021</i>	<i>.022</i>
Medium secondary education	.099 ***	.115 ***	.095 ***	.199 ***	.204 ***	.167 ***
	<i>.016</i>	<i>.023</i>	<i>.023</i>	<i>.020</i>	<i>.022</i>	<i>.022</i>
Higher secondary education	.140 ***	.189 ***	.156 ***	.308 ***	.339 ***	.318 ***
	<i>.016</i>	<i>.023</i>	<i>.023</i>	<i>.021</i>	<i>.022</i>	<i>.022</i>
Other	.087 **	.105 **	.093 **	.169 ***	.229 ***	.226 ***
	<i>.036</i>	<i>.046</i>	<i>.046</i>	<i>.041</i>	<i>.043</i>	<i>.045</i>
Pupil	.136 ***	.122 ***	.049	.231 ***	.304 ***	.216 ***
	<i>.034</i>	<i>.044</i>	<i>.044</i>	<i>.044</i>	<i>.045</i>	<i>.045</i>
Year 1992	.018 **	.010	.032 ***	-.046 ***	-.023 **	.029 ***
	<i>.009</i>	<i>.012</i>	<i>.012</i>	<i>.011</i>	<i>.011</i>	<i>.011</i>
Year 1996	.033 ***	.044 ***	.045 ***	.012	.029 **	.083 ***
	<i>.009</i>	<i>.012</i>	<i>.012</i>	<i>.011</i>	<i>.011</i>	<i>.011</i>
Year 2000	.054 ***	.102 ***	.101 ***	.021 *	.029 **	.153 ***
	<i>.009</i>	<i>.012</i>	<i>.011</i>	<i>.011</i>	<i>.011</i>	<i>.011</i>
Year 2004	.035 ***	.160 ***	.195 ***	.123 ***	.123 ***	.168 ***
	<i>.009</i>	<i>.012</i>	<i>.012</i>	<i>.012</i>	<i>.012</i>	<i>.012</i>
Year 2008	.076 ***	.215 ***	.249 ***	.118 ***	.137 ***	.183 ***
	<i>.009</i>	<i>.012</i>	<i>.011</i>	<i>.011</i>	<i>.011</i>	<i>.012</i>
N	19,950	19,278	19,804	19,340	19,774	19,463
Log likelihood	-8,562	-11,922	-11,934	-10,585	-11,513	-11,671

Notes: The table reports probit average marginal effects where the columns I) to VI) correspond to the six dummy outcome variables discussed in the text. Positive coefficients on the explaining variables are associated with more egalitarian or non-traditional views about gender roles. Omitted categories are West Germany, male, no secondary education, and year 1991. Robust standard errors are given in italics. *** 1% level of significance, ** 5% level of significance, * 10% level of significance.

Table 2: The East-West Gaps by Gender

	Mothers and work			Women in the family		
	(I)	(II)	(III)	(IV)	(V)	(VI)
<i>Female subsample</i>						
East	.135 ***	.259 ***	.241 ***	.092 ***	.222 ***	.123 ***
	<i>.008</i>	<i>.009</i>	<i>.009</i>	<i>.009</i>	<i>.009</i>	<i>.010</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	10,355	9,990	10,259	10,056	10,220	10,038
Log likelihood	-4,091	-6,137	-6,340	-5,460	-5,822	-5,865
<i>Male subsample</i>						
East	.211 ***	.310 ***	.272 ***	.090 ***	.214 ***	.144 ***
	<i>.009</i>	<i>.009</i>	<i>.009</i>	<i>.010</i>	<i>.011</i>	<i>.010</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	9,595	9,288	9,545	9,284	9,554	9,425
Log likelihood	-4,446	-5,759	-5,573	-5,114	-5,680	-5,797

Notes: The table reports probit average marginal effects where the columns I) to VI) correspond to the six dummy outcome variables discussed in the text. Positive coefficients on the explaining variables are associated with more egalitarian or non-traditional views about gender roles. Included as controls are gender, age (and its square), and dummies for education and years. Robust standard errors are given in italics. *** 1% level of significance, ** 5% level of significance, * 10% level of significance.

Table 3: Determinants of Attitudes toward Women and Family Models – Federal States Specification

	Mothers and work			Women in the family		
	(I)	(II)	(III)	(IV)	(V)	(VI)
East Berlin	.169 ***	.290 ***	.257 ***	.182 ***	.335 ***	.228 ***
	<i>.021</i>	<i>.022</i>	<i>.020</i>	<i>.023</i>	<i>.025</i>	<i>.023</i>
Brandenburg	.197 ***	.307 ***	.260 ***	.108 ***	.207 ***	.157 ***
	<i>.014</i>	<i>.015</i>	<i>.013</i>	<i>.014</i>	<i>.014</i>	<i>.014</i>
Mecklenburg W.Pomerania	.178 ***	.334 ***	.326 ***	.123 ***	.251 ***	.164 ***
	<i>.017</i>	<i>.018</i>	<i>.016</i>	<i>.017</i>	<i>.018</i>	<i>.018</i>
Saxony	.160 ***	.263 ***	.227 ***	.085 ***	.203 ***	.094 ***
	<i>.010</i>	<i>.011</i>	<i>.010</i>	<i>.011</i>	<i>.011</i>	<i>.011</i>
Saxony-Anhalt	.167 ***	.287 ***	.270 ***	.083 ***	.238 ***	.124 ***
	<i>.013</i>	<i>.014</i>	<i>.012</i>	<i>.013</i>	<i>.013</i>	<i>.013</i>
Thuringia	.165 ***	.257 ***	.240 ***	.040 ***	.167 ***	.132 ***
	<i>.013</i>	<i>.014</i>	<i>.014</i>	<i>.013</i>	<i>.014</i>	<i>.015</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	19,950	19,278	19,804	19,340	19,774	19,463
Log likelihood	-8,560	-11,913	-11,919	-10,566	-11,489	-11,651

Notes: The table reports probit average marginal effects where the columns I) to VI) correspond to the six dummy outcome variables discussed in the text. Positive coefficients on the explaining variables are associated with more egalitarian or non-traditional views about gender roles. Included as controls are gender, age (and its square), and dummies for education and years. Robust standard errors are given in italics. *** 1% level of significance, ** 5% level of significance, * 10% level of significance.

Table 4: Attitudes toward Women and Family Models of East German Movers

	Mothers and work			Women in the family		
	(I)	(II)	(III)	(IV)	(V)	(VI)
East-West mover vs. West	.123 ***	.204 ***	.218 ***	.047	.114 ***	.129 ***
	<i>.043</i>	<i>.042</i>	<i>.037</i>	<i>.041</i>	<i>.043</i>	<i>.043</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	6,453	6,237	6,433	6,282	6,417	6,318
Log likelihood	-3,327	-3,931	-3,648	-3,335	-3,802	-3,779

	Mothers and work			Women in the family		
	(I)	(II)	(III)	(IV)	(V)	(VI)
East-West mover vs. East	-.041 *	-.056	.010	.018	-.022	.022
	<i>.022</i>	<i>.041</i>	<i>.044</i>	<i>.040</i>	<i>.039</i>	<i>.042</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	4,368	4,264	4,341	4,227	4,356	4,282
Log likelihood	-1,176	-2,569	-2,877	-2,191	-2,386	-2,454

Notes: The table reports probit average marginal effects where the columns I) to VI) correspond to the six dummy outcome variables discussed in the text. The main variables of interests are a dummy for individuals who were born in East Germany and moved to West Germany after Reunification. This dummy variable is zero for individuals born and living in West Germany (upper panel) or born and living in East Germany (lower panel). Positive coefficients on the explaining variables are associated with more egalitarian or non-traditional views about gender roles. Included as controls are gender, age (and its square), and dummies for education and years. Robust standard errors are given in italics. *** 1% level of significance, ** 5% level of significance, * 10% level of significance.

Table 5: The East-West Gaps by Cohort

	Mothers and work			Women in the family		
	(I)	(II)	(III)	(IV)	(V)	(VI)
<i>Cohort -1935</i>						
East	.227 ***	.361 ***	.293 ***	.183 ***	.319 ***	.216 ***
	<i>.014</i>	<i>.011</i>	<i>.011</i>	<i>.015</i>	<i>.011</i>	<i>.014</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	4,247	4,064	4,220	4,043	4,219	4,099
Log likelihood	-2,092	-2,335	-2,170	-2,656	-2,410	-2,496
<i>Cohort 1935-1945</i>						
East	.187 ***	.940 ***	.285 ***	.155 ***	.287 ***	.167 ***
	<i>.014</i>	<i>.014</i>	<i>.013</i>	<i>.016</i>	<i>.014</i>	<i>.016</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	3,477	3,372	3,445	3,360	3,432	3,389
Log likelihood	-1,490	-2,087	-1,957	-2,045	-2,095	-2,179
<i>Cohort 1945-1955</i>						
East	.142 ***	.244 ***	.239 ***	.035 **	.160 ***	.094 ***
	<i>.015</i>	<i>.017</i>	<i>.016</i>	<i>.017</i>	<i>.017</i>	<i>.017</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	3,480	3,374	3,463	3,379	3,448	3,415
Log likelihood	-1,371	-2,124	-2,135	-1,828	-2,064	-2,083
<i>Cohort 1955-1965</i>						
East	.158 ***	.236 ***	.222 ***	.016	.143 ***	.090 ***
	<i>.014</i>	<i>.016</i>	<i>.016</i>	<i>.014</i>	<i>.016</i>	<i>.016</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	4,327	4,205	4,300	4,226	4,290	4,240
Log likelihood	-1,733	-2,632	-2,783	-2,038	-2,424	-2,410
<i>Cohort 1965-</i>						
East	.128 ***	.253 ***	.224 ***	.031 **	.128 ***	.085 ***
	<i>.014</i>	<i>.016</i>	<i>.015</i>	<i>.013</i>	<i>.015</i>	<i>.015</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	4,416	4,262	4,373	4,329	4,383	4,319
Log likelihood	-1,836	-2,670	-2,806	-1,909	-2,400	-2,422

Notes: The table reports probit average marginal effects where the columns I) to VI) correspond to the six dummy outcome variables discussed in the text. Positive coefficients on the explaining variables are associated with more egalitarian or non-traditional views about gender roles. Included as controls are gender, age (and its square), and dummies for education and years. Robust standard errors are given in italics. *** 1% level of significance, ** 5% level of significance, * 10% level of significance.

Table 6: Dynamics of Attitudes toward Working Mothers and Family Models

	Mothers and work			Women in the family		
	(I)	(II)	(III)	(IV)	(V)	(VI)
East	.171 ***	.242 ***	.197 ***	.042 ***	.186 ***	.102 ***
	<i>.010</i>	<i>.012</i>	<i>.012</i>	<i>.011</i>	<i>.011</i>	<i>.012</i>
East * 1996	-.008	.053 **	.066 ***	.067 ***	.064 ***	.034 *
	<i>.019</i>	<i>.021</i>	<i>.020</i>	<i>.019</i>	<i>.021</i>	<i>.021</i>
East * 2000	-.003	.025	.078 ***	.030	.010	.057 ***
	<i>.018</i>	<i>.020</i>	<i>.019</i>	<i>.019</i>	<i>.020</i>	<i>.020</i>
East * 2004	.021	.110 ***	.114 ***	.111 ***	.080 ***	.062 ***
	<i>.020</i>	<i>.023</i>	<i>.022</i>	<i>.023</i>	<i>.023</i>	<i>.022</i>
East * 2008	-.009	.088 ***	.100 ***	.127 ***	.064 ***	.038 *
	<i>.020</i>	<i>.023</i>	<i>.021</i>	<i>.022</i>	<i>.022</i>	<i>.022</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	19,950	19,278	19,804	19,340	19,774	19,463
Log likelihood	-8,561	-11,906	-11,913	-10,559	-11,502	-11,664

Notes: The table reports probit average marginal effects where the columns I) to VI) correspond to the six dummy outcome variables discussed in the text. Positive coefficients on the explaining variables are associated with more egalitarian or non-traditional views about gender roles. Included as controls are gender, age (and its square), and dummies for education and years. Robust standard errors are given in italics. *** 1% level of significance, ** 5% level of significance, * 10% level of significance.

Table 7: Dynamics of the East-West Gap with GDP and unemployment rate controls

	Mothers and work			Women in the family		
	I	II	III	IV	V	VI
East	.147 ***	.224 ***	.132 ***	.070 ***	.207 ***	.117 ***
	<i>.017</i>	<i>.022</i>	<i>.022</i>	<i>.021</i>	<i>.021</i>	<i>.022</i>
East * 1996	-.020	.030	.056 ***	.045 **	.019	.002
	<i>.020</i>	<i>.023</i>	<i>.022</i>	<i>.022</i>	<i>.022</i>	<i>.023</i>
East * 2000	-.030	-.023	.039 *	-.004	-.064 ***	.005
	<i>.021</i>	<i>.024</i>	<i>.023</i>	<i>.023</i>	<i>.023</i>	<i>.024</i>
East * 2004	-.008	.058 **	.074 ***	.075 ***	-.001	.004
	<i>.023</i>	<i>.028</i>	<i>.026</i>	<i>.027</i>	<i>.027</i>	<i>.027</i>
GDP per capita	.007	.043	.015	.073 ***	.113 ***	.080 ***
	<i>.022</i>	<i>.028</i>	<i>.027</i>	<i>.026</i>	<i>.026</i>	<i>.027</i>
Unemployment rate	.006 ***	.008 **	.010 ***	.004 **	.010 ***	.007 ***
	<i>.001</i>	<i>.002</i>	<i>.002</i>	<i>.002</i>	<i>.002</i>	<i>.002</i>
Other covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	16,527	15,943	16,407	15,983	16,386	16,129
Log likelihood	-7,226	-9,918	-9,778	-8,910	-9,609	-9,743

Notes: The table reports probit average marginal effects where the columns I) to VI) correspond to the six dummy outcome variables discussed in the text. Positive coefficients on the explaining variables are associated with more egalitarian or non-traditional views about gender roles. Included as controls are gender, age (and its square), dummies for education and years, standardized GDP per capita and the unemployment rate at the federal state level. Robust standard errors are given in italics. *** 1% level of significance, ** 5% level of significance, * 10% level of significance.

Table 8: Dynamics of the East-West Gap with GDP, unemployment rate, and childcare spaces controls

	Mothers and work			Women in the family		
	I	II	III	IV	V	VI
East	.119 ***	.154 ***	.085 ***	.072 **	.191 ***	.109 ***
	<i>.028</i>	<i>.033</i>	<i>.031</i>	<i>.030</i>	<i>.030</i>	<i>.032</i>
East * 1996	-.009	.062 **	.069 ***	.044 *	.030	.011
	<i>.023</i>	<i>.026</i>	<i>.024</i>	<i>.024</i>	<i>.025</i>	<i>.025</i>
East * 2000	-.011	.022	.067 ***	.009	-.042	.031
	<i>.024</i>	<i>.027</i>	<i>.026</i>	<i>.025</i>	<i>.026</i>	<i>.027</i>
East * 2004	.012	.103 ***	.102 ***	.091 ***	.022	.031
	<i>.026</i>	<i>.030</i>	<i>.028</i>	<i>.029</i>	<i>.029</i>	<i>.029</i>
GDP per capita	-.028	.004	.038	.017	.080 **	.031
	<i>.026</i>	<i>.034</i>	<i>.033</i>	<i>.030</i>	<i>.032</i>	<i>.033</i>
Unemployment rate	.003	.004 *	.006 *	-.001	.006 **	.002
	<i>.002</i>	<i>.003</i>	<i>.002</i>	<i>.002</i>	<i>.002</i>	<i>.003</i>
Childcare spaces (*10 ²)	.007	.014 **	.018 ***	.004	.005	.005
	<i>.006</i>	<i>.007</i>	<i>.006</i>	<i>.006</i>	<i>.006</i>	<i>.006</i>
Other covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	13,551	13,058	13,441	13,103	13,410	13,208
Log likelihood	-5,918	-8,080	-7,982	-7,265	-7,812	-7,934

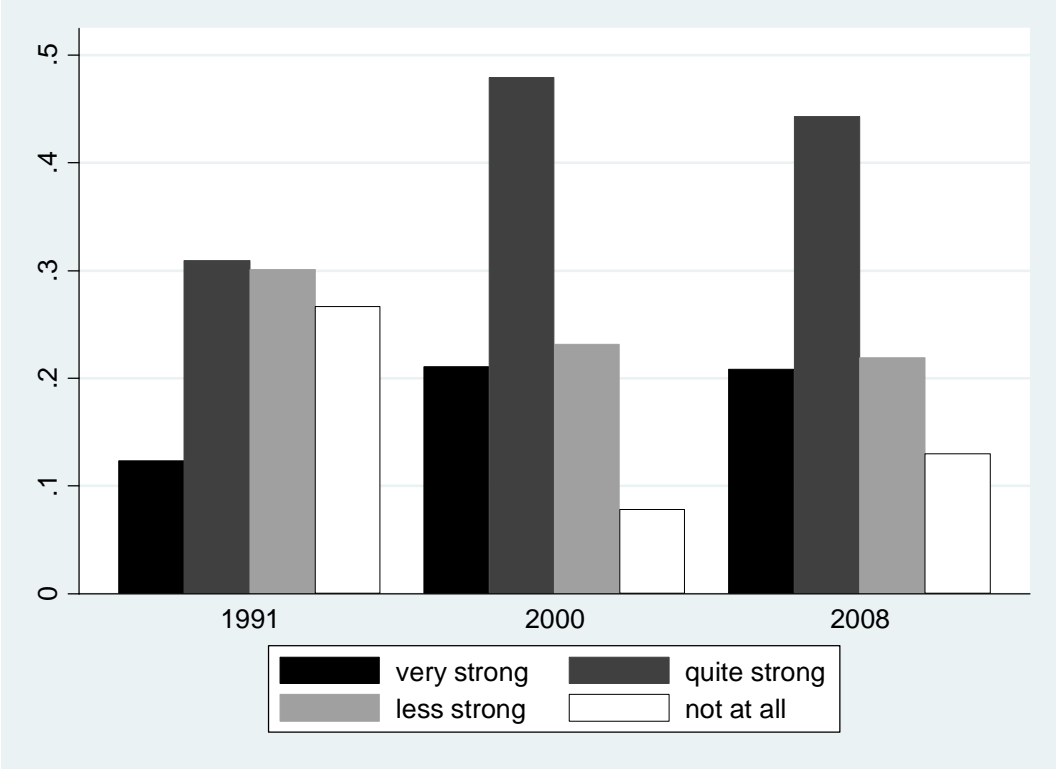
Notes: The table reports probit average marginal effects where the columns I) to VI) correspond to the six dummy outcome variables discussed in the text. Positive coefficients on the explaining variables are associated with more egalitarian or non-traditional views about gender roles. Included as controls are gender, age (and its square), dummies for education and years, standardized GDP per capita, the unemployment rate as well as the number of childcare spaces for up to three years old children per 1,000 children of that age at the federal state level. Robust standard errors are given in italics. *** 1% level of significance, ** 5% level of significance, * 10% level of significance.

Table 9: Dynamics of the East-West Gap by Cohorts

	Mothers and work			Women in the family		
	(I)	(II)	(III)	(IV)	(V)	(VI)
<i>Cohort -1935</i>						
East dummy	.199 ***	.316 ***	.212 ***	.081 ***	.272 ***	.144 ***
	<i>.020</i>	<i>.020</i>	<i>.019</i>	<i>.024</i>	<i>.020</i>	<i>.0252</i>
East * 1996	.089 **	.104 ***	.085 **	.172 ***	.098 **	.095 **
	<i>.043</i>	<i>.040</i>	<i>.036</i>	<i>.044</i>	<i>.039</i>	<i>.041</i>
East * 2000	.018	.027	.106 ***	.105 **	.023	.116 ***
	<i>.041</i>	<i>.040</i>	<i>.036</i>	<i>.044</i>	<i>.039</i>	<i>.042</i>
East * 2004	.101 *	.123 **	.212 ***	.224 ***	.095 *	.180 ***
	<i>.056</i>	<i>.052</i>	<i>.045</i>	<i>.057</i>	<i>.049</i>	<i>.052</i>
East * 2008	.024	.093 *	.206 ***	.322 ***	.146 ***	.137 ***
	<i>.054</i>	<i>.052</i>	<i>.045</i>	<i>.058</i>	<i>.050</i>	<i>.052</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	4,247	4,064	4,220	4,043	4,219	4,099
Log likelihood	-2,089	-2,330	-2,151	-2,634	-2,403	-2,486
<i>Cohort 1965-</i>						
East dummy	.189 ***	.241 ***	.244 ***	.015	.142 ***	.089 ***
	<i>.032</i>	<i>.037</i>	<i>.038</i>	<i>.029</i>	<i>.034</i>	<i>.034</i>
East * 1996	-.074	-.013	-.007	.006	-.011	-.039
	<i>.047</i>	<i>.056</i>	<i>.056</i>	<i>.044</i>	<i>.051</i>	<i>.063</i>
East * 2000	-.056	-.001	-.048	-.019	-.057	.015
	<i>.044</i>	<i>.050</i>	<i>.050</i>	<i>.039</i>	<i>.045</i>	<i>.047</i>
East * 2004	-.071 *	.048	.001	.044	.031	.038
	<i>.042</i>	<i>.052</i>	<i>.051</i>	<i>.041</i>	<i>.049</i>	<i>.047</i>
East * 2008	-.096 **	.017	-.037	.049	-.015	-.026
	<i>.041</i>	<i>.050</i>	<i>.049</i>	<i>.039</i>	<i>.045</i>	<i>.045</i>
Covariates	Yes	Yes	Yes	Yes	Yes	Yes
N	4,416	4,262	4,373	4,329	4,383	4,319
Log likelihood	-1,833	-2,669	-2,805	-1,906	-2,398	-2,420

Notes: The table reports probit average marginal effects where the columns I) to VI) correspond to the six dummy outcome variables discussed in the text. Positive coefficients on the explaining variables are associated with more egalitarian or non-traditional views about gender roles. Included as controls are gender, age (and its square), and dummies for education and years. Robust standard errors are given in italics. *** 1% level of significance, ** 5% level of significance, * 10% level of significance.

Figure 1: East Germans' emotional ties to the former GDR



Notes: The graph represents answers of people living in East Germany to the question “Do you have feelings of belonging to the former GDR and its citizens?”. Respondents could choose one out of four categories, namely „very strong“, “quite strong”, „less strong“, or “not at all”.

Appendix

Appendix 1: Summary statistics

		West	East	Total
Gender				
	Male	6,425 <i>48.78</i>	3,425 <i>47.76</i>	9,850 <i>48.42</i>
	Female	6,746 <i>51.22</i>	3,747 <i>52.24</i>	10,493 <i>51.58</i>
	Total	13,171 <i>100.00</i>	7,172 <i>100.00</i>	20,343 <i>100.00</i>
Education				
	No secondary	326 <i>2.48</i>	152 <i>2.13</i>	478 <i>2.36</i>
	Lower secondary	6,082 <i>46.31</i>	2,489 <i>34.81</i>	8,571 <i>42.26</i>
	Medium secondary	3,287 <i>25.03</i>	3,053 <i>42.70</i>	6,340 <i>31.26</i>
	Higher secondary	3,241 <i>24.68</i>	1,354 <i>18.94</i>	4,595 <i>22.65</i>
	Other	70 <i>0.53</i>	66 <i>0.92</i>	136 <i>0.67</i>
	Pupil	127 <i>0.97</i>	36 <i>0.50</i>	163 <i>0.80</i>
	Total	13,133 <i>100.00</i>	7,150 <i>100.00</i>	20,283 <i>100.00</i>
Birth Cohort				
	-1935	2,767 <i>21.04</i>	1,599 <i>22.31</i>	4,366 <i>21.49</i>
	1935-1945	2,152 <i>16.37</i>	1,372 <i>19.15</i>	3,524 <i>17.35</i>
	1945-1955	2,212 <i>16.82</i>	1,319 <i>18.41</i>	3,531 <i>17.38</i>
	1955-1965	2,877 <i>21.88</i>	1,516 <i>21.16</i>	4,393 <i>21.62</i>
	1965-	3,142 <i>23.89</i>	1,360 <i>18.98</i>	4,502 <i>22.16</i>
	Total	13,150 <i>100.00</i>	7,166 <i>100.00</i>	20,316 <i>100.00</i>
Age				
	Mean	46.87	47.64	47.14
	Std. dev.	17.35	16.95	17.21
	N	13,150	7,166	20,316

Notes: Unless otherwise specified, the figures show number of observations in each cell; percentage shares are given in italics.