POLITICO-ECONOMIC REGIMES AND ATTITUDES: FEMALE WORKERS UNDER STATE-SOCIALISM*

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This paper investigates the extent to which attitudes are affected by political regimes and government policies, and the channels of influence. We focus on gender-role attitudes and female attitudes toward work, exploiting the imposition of state-socialist regimes across Central and Eastern Europe, and the fact that the new regimes encouraged women's employment, for both ideological and instrumental reasons. We use two different identification strategies and datasets. First, we take advantage of the German partition into East and West after 1945 and restricted-access information on place of residence to execute a spatial regression discontinuity design. We find more positive attitudes toward work in the sample of women who used to live in East Germany. In terms of channels, we find evidence that the experience of employment, arguably one of the very few positive aspects of living under state-socialism in East Germany, changed women's attitudes. We do not find similar evidence for the role of propaganda. Second, we employ a difference-in-differences strategy that compares attitudes formed in Central and Eastern European countries (CEECs) and Western European Countries (WECs), before and after the imposition of state socialism in CEECs. Gender-role attitudes formed in CEECs during the state socialist period appear to be significantly less traditional than those formed in WECs. Overall, our study addresses previous identification and data limitations and finds that attitudes are profoundly affected by politico-economic regimes. [Z10, P51, J16]

I Introduction

To what extent are attitudes affected by political regimes and government policies? What are the channels of influence? We focus on gender-role attitudes (of males and females) and female attitudes toward work. These attitudes differ significantly across space and over time[1], and have been shown to have significant effects on labor market outcomes.[2]

Answering the question of whether politico-economic regimes affect attitudes is complicated due to the fact that regimes are not randomly assigned. In this paper, we exploit the imposition of state-socialist regimes across Central and Eastern Europe post World War II. Soon after their imposition in the late 1940s, and until the mid 1960s, state-socialist governments throughout the region encouraged women's paid employment outside the home, for both ideological and instrumental reasons (de Haan, 2012).[3] Constitutional changes and new family laws were used to stimulate female labor force participation (Fodor, 2002). Easy access to abortion helped the entry of women into paid employment (David, 2013). Wage-setting policies also provided strong incentives for women to find jobs (Wolchik, 1992).[4] In the years after the imposition of the state-socialist regimes, the female employment rate increased all over Central and Eastern Europe (Berent, 1970; Wolchik, 1981). Within this historical context, we empirically investigate the role played by political regimes in influencing attitudes, overcoming previous identification and data limitations.

We start with an analysis of the influence of state socialism on female attitudes towards work, using the German Socioeconomic Panel (GSOEP), a longitudinal survey of households residing in Germany, which includes restricted-access information on respondents' place of residence. We exploit quasi-experimental variation in political regimes and government policies in postwar Germany. Before 1945, the politico-economic system was the same in the eastern and western parts of Germany. After 1945 the country was split in two, with women in the two resulting countries experiencing very different institutions and policies. As a state socialist government, East Germany strongly encouraged female participation in the formal labor market (with a focus during the 1960s on policies that favored female qualified employment), while capitalist oriented West Germany encouraged a system in which women either stayed home after they had children, or went back to part-time employment after an extended break. Women's participation in the formal labor market was much higher in the East than in the West, and employed women in the East worked longer hours (Trappe, 1996; Shaffer, 1981).

This historical background suggests that we can contrast attitudes towards work in the sample of women who, before re-unification, had lived in East versus those who had lived in West Germany.[5] However a simple comparison of attitudes between the two groups may be biased by unobserved

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[1]Giavazzi, Schiantarelli and Serafinelli (2013) observe variation in attitudes towards the role of women in the labor market over time for the period 1980-2000 in European regions and OECD countries.

[2]Fortin (2015) presents evidence of a substantial effect of gender-role attitudes on a female individual's decision to join the labor market. In a similar vein, Fernández and Fogli (2009) show that cultural differences in gender-role attitudes are an important predictor of differences in women's work behavior across ethnic groups in the United States. Further, Fortin (2008) presents evidence that gender differences in attitudes towards work have a significant role in accounting for the gender wage gap.

[3]First, women's economic independence was seen as a necessary precondition for women's equality, a principle to which state-socialist governments were committed. Second, the rapid industrialization and the general plan for economic growth (which was based on an intensive use of labor) were dependent on women's paid employment outside the home (de Haan, 2012, p.89). Buckley (1981) argues that the need for female labor power was by far more relevant.

[4]The state-socialist governments kept wages low, making two-income earners necessary for a reasonable family income.

[5]An analysis exploiting the German separation has already been conducted in Alesina and Fuchs-Schundeln (2007)'s influential work on preferences for redistribution. Below we discuss in details how we extend their empirical approach in a few important ways.

heterogeneity. To infer the extent to which these two politico-economic regimes influenced the attitudes of their citizens, we therefore build on the spatial regression discontinuity framework (Black, 1999; Lalive, 2008; Dell, 2010; Schumann, 2014). The goal is to compare, before reunification had been completed, only those women who had lived close to the East-West border, on the assumption that attitudes of those who lived in these areas had been similar before separation.

Attitudes towards work are measured using a question about the importance of career success for the respondent's sense of well-being and personal satisfaction. Our estimates show that the likelihood of reporting that career success is important is approximately 11 p.p. higher for women in the East than in the West; and that this finding is not due to selective East-West migration during the divided years.[6]

We also study why women have more positive attitudes towards work in the East. One possibility is that the experience of employment, arguably one of the very few positive aspects of living under state-socialism in East Germany, changed women's attitudes. Another is that women were affected by the government propaganda. We provide evidence that is consistent with the former explanation, but not the latter.[7]

In the second part of the paper, we broaden our focus to state-socialism throughout the entire Central and Eastern European region. We employ a Difference-in-Differences strategy that compares gender-role attitudes formed in Central and Eastern European countries (CEECs) versus Western European countries (WECs), before and after the imposition of state socialism in CEECs.[8] Similar to the argument above for Germany, we maintain that the imposition of state-socialist regimes across Central and Eastern Europe constituted a quasi-experiment that can be exploited to study whether attitudes are endogenous to policy regimes. [9] To this end, we need to obtain a time-varying measure of attitudes, which is problematic because the 1980s is the earliest period in which a measure of gender-role attitudes in cross-country surveys is available. We cope with this challenge by combining the gender-role attitudes of US immigrants and their offspring to construct a time-varying measure of attitudes in the respondents' source countries. This choice is motivated by a recent body of work that has noted and exploited the relation between the behavior of immigrants and that of residents in their countries of origin (Giuliano, 2007; Fernández and Fogli, 2009; Antecol, 2000). The use of inherited attitudes of descendants of US immigrants is also motivated by evidence that the parents' gender-role attitudes are a good predictor of the attitudes of children (Farré and Vella, 2013; Dhar, Jain and Jayachandran, 2015). [10]

In practical terms, we follow an approach in the spirit of Algan and Cahuc (2010).[11] We use the attitudes of US immigrants who immigrated from different European countries at different points

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[6]In addition, we find no evidence of a significant East Germany effect on men's attitudes towards work. This falsification test indicates that the identified East Germany effect is genuine to the focus on female employment under state-socialism and does not reflect a general pattern in attitudes towards work. Further, we present Donut spatial RD estimates showing that our results are not due to non-random selection following regulatory and other changes affecting areas just East/West of the border.

[7]We explore the role of propaganda by (a) employing individual proxies for ideology and (b) exploiting exogenous spatial variation in the availability of West German TV (Bursztyn and Cantoni, 2015).

[8]We use WECs as the control group in order to account for a general trend in gender attitudes that might have been in place, for instance following WWII (Fernández, Fogli and Olivetti, 2004).

[9]For a discussion of some background to Europe after WWII and the imposition of Soviet rule in CEECs see Section A.II.iii

[10]Fernández (2007) also delivers an empirical test of the intergenerational transmission of attitudes by showing that source-country attitudes towards women's work in 1990 predict the labour supply of second-generation American women in 1970. For a discussion of the intergenerational transfer of other attitudes, such as trust, see Guiso, Sapienza and Zingales (2006).

[11]Algan and Cahuc (2010) use the attitudes towards trust of US descendants of immigrants to study the effect of trust on growth over the period 1935–2000.

in time (and the attitudes inherited by their offspring) to identify the over-time variation of gender-role attitudes in the source countries. For example, by contrasting US residents of Spanish and Polish origin who migrated between 1945 and 1990 (and their offspring) we can identify differences in gender-role attitudes formed in Spain and Poland during this time. We can obtain a time varying measure of attitudes in these two countries by implementing the same procedure for US residents (and their offspring) who immigrated between 1900 and 1945.

Our measure of attitudes is taken from the General Social Survey (henceforth, GSS), which provides data regarding the contemporaneous gender-role attitudes of US residents and information that allows us to infer their approximate period of immigration, or that of their ancestors. This approach enables us to track the variation of gender-role attitudes in nineteen European countries, five in the "treatment" group[12] and thirteen in the "control" group.

Once we have procured a measure of gender-role attitudes with intertemporal variation, we can estimate the relationship between the change in the politico-economic regime and the evolution in women and men's gender-role attitudes. More specifically, we use as our outcome measure the response to the following GSS statement: *It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of home and family.* We show that prior to the imposition of the new political and economic regime, gender-role attitudes in CEECs and the WECs appear to have evolved in a manner that is similar to one another. We then show evidence suggesting that attitudes concerning the appropriateness of segregation of male and female roles become significantly less 'traditional' in CEECs versus Western European countries (WECs) after 1945.[13] We perform several tests to address the possibility that at least some of the estimated relation reflects differential changes in the selection of immigrants in CEECs and WECs after the imposition of state-socialism. Overall, the evidence suggests that state-socialism decreased the degree of agreement with the statement above by about one-third of a standard deviation.

To summarize, both of our empirical strategies, on GSOEP and GSS data, provide support for the hypothesis that individuals' attitudes are profoundly affected by the politico-economic system in which they live (despite different potential omitted variables biases).

By blending concepts regarding institutions and attitudes in an original manner, our study adds to a growing literature on related issues. The first related body of work, critically surveyed in Alesina and Giuliano (2013), analyzes the effect of institutional changes and shocks on attitudes. One set of papers studies communities belonging to different historical empires to isolate the effect of formal institutions on attitudes (Peisakhin, 2010; Becker et al., 2014; Grosfeld and Zhuravskaya, 2015; Wysokinska, 2015). Another set of papers within this body of work, which includes our own, uses the advent of state-socialism as a source of institutional change. Most notably, Alesina and Fuchs-Schundeln (2007) analyze preferences for redistribution in Germany in 1997 and 2002, and find that East Germans are more pro-state than West Germans. In addition to the focus on a different outcome (gender-role attitudes and female attitudes toward work as opposed to preferences for redistribution), our work extends the empirical approach used in Alesina and Fuchs-Schundeln (2007)'s seminal study in a few important ways. Specifically, we study the extent to which state-socialism affects attitudes throughout the entire Central and Eastern European region, an approach that arguably increases external validity. To our knowledge, our study is the first to exploit the imposition of state-socialist regimes across Central and Eastern Europe (i.e. not only in East Germany) in order to implement a design-based empirical analysis. Related to the analysis that exploits the German separation, compared to Alesina and Fuchs-Schundeln (2007), we adopt

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[12]The 5 CEECs are: Czechoslovakia, Hungary, Lithuania, Poland and Romania.

[13]We use, for convenience, the term 'traditional attitudes' to reflect agreement with the appropriateness of segregation of male and female roles (i.e. women specialized in home production and men specialized in market production).

a more stringent identification strategy. In particular, we address more directly the issue of local unobservable determinants of attitudes (through our spatial regression discontinuity design) and that of selective East-West migration. Last but not least, the fact that in the GSOEP individuals are asked questions that are relevant for our study before the process of unification is completed allows us to disentangle the effect on attitudes of having lived in a state-socialist country from that of living in a post-socialist country.[14]

The second related body of work investigates the determinants of cultural attitudes and their transmission (Bisin and Verdier, 2001; Tabellini, 2008; Durante, 2009; Voigtländer and Voth, 2012; Alesina, Giuliano and Nunn, 2013). The central message of this body of work is that attitudes have a component which is quite persistent. Yet, this message does not imply that attitudes are absolutely invariant, a point well-made by Algan and Cahuc (2010) and Giavazzi, Petkov and Schiantarelli (2014). Our study blends these different views by acknowledging that an element of attitudes can be transmitted within families, but that attitudes can also change as a reaction to large shocks in institutions and economic incentives.[15] The European ancestors of modern Americans have experienced very different politico-economic regimes. Ancestors from CEECs who migrated after 1945 were influenced by the advent of state socialism. We show evidence of a change in gender-role attitudes following the change in politico-economic regime and of these attitudes being transmitted within families in the following decades. The cultural transmission within families after 1945 generates persistence in the effect of the institutional shock on attitudes.

The remainder of this paper is organized as follows: Section II discusses some institutional background to women's work under state-socialism. Section III discusses the analysis exploiting the German separation. The Difference-in-Differences analysis which compares CEECs and WECs using the GSS is presented in Section IV. Section V concludes.

II   Institutional Background

II.A   State-socialist governments in CEECs

Soon after their imposition in the late 1940s, the state-socialist governments in CEECs adopted the principle of equality between men and women in their new constitutions (Wolchik, 1981, p.446). For instance, the Hungarian Constitution of 1949 stated that women had the right to the same work under the same working conditions as men, and "the new family laws in 1952 – preceding the revision of the Austrian family law by almost two-and-a half decades – supported the independence of women" (Fodor, 2002, p.117). [16]Easy access to abortion helped the entry of women into paid employment (David, 2013).[17] Wage setting policies also provided strong incentives for women to find a job. Specifically, "elite efforts to encourage women to enter the labor force to help their

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[14]Related to our study is also the analysis by Beblo and Goerges (2015). They use the same strategy in Alesina and Fuchs-Schundeln (2007) and three waves of ALLBUS (1991, 1998/2000 and 2010/2012), the German equivalent to the GSS, and show that the gender gap in preferences toward work is smaller in east versus west Germany, consistent with an impact of "nurture" on preference formation. In a similar vein, Bauernschuster and Rainer (2011), using the ALLBUS for the period 1991-2008, show that being from the East is associated with a lower likelihood of believing that segregation of male and female roles is appropriate.

[15]Giuliano and Spilimbergo (2009) present evidence that historical macroeconomic environment affects preferences for redistribution; Di Tella, Galiant and Schargrodsky (2007) show that obtaining land rights affects an extensive set of attitudes. Additional (theoretical) contributions are Fogli and Veldkamp (2011) and Fernández (2013).

[16]Fodor (2002) also points that the Hungarian government used propaganda to encourage women's employment. Pictures of female workers appeared in newspapers and newscasts, and political posters and other central propaganda materials.

[17]In Romania abortion was legalized in 1957, but the government reversed its policy in 1966 due to concerns over the low fertility rates.

homelands were accompanied by wage scales that virtually required two incomes per family to maintain a decent standard of living" (Wolchik, 1992, p.122). In the years after the imposition of state-socialist regimes, CEECs experienced a large increase in female participation in economic activity outside the home (Berent, 1970; Wolchik, 1981; Fodor, 2002; de Haan, 2012). The available information also shows that during this period women generally comprised higher shares of the labor forces in CEECs than in WECs.

It should be noted that under state-socialism most women were workers as well as mothers, but in many areas of CEECs there were not sufficient social services, and everywhere women continued to perform the majority of domestic work and childcare (Szelenyi and Rueschemeyer, 1989; Alpern Engel and Posadskaya-Vanderbeck, 1998).[18] However, despite being structurally overburdened, women did not seem to want to work solely at home (De Haan, p.91). Indeed many women acknowledged, and made use of, the opportunities that state-socialism had made available to them. The significance of the workplace collectives for women's sense of self can be seen in contemporary sources and later interviews (Massino, 2009; Toth, 2009). [19,20]

II.B   Germany

In 1945, the Allied Forces partitioned Germany into two countries. Their motives were unrelated to any differences in attitudes between East Germans and West Germans. The border between East and West Germany was determined by the location of the occupying armies and the negotiation between the Soviet Union and other Allied Forces at the end of World War II. In 1949, the German Democratic Republic (GDR) in the Soviet bloc (East Germany) and the Federal Republic of Germany (FRG) in the Allied bloc (West Germany) were officially established. Starting from 1952, a sophisticated arrangement of border barriers and other obstacles was built on the eastern side of the border to prevent migration from East Germany to West Germany, even though there remained the opportunity for limited transit between East and West Berlin until the erection of the Berlin Wall in 1961.[21] The division of Germany was formalized with the Basic Treaty of 1972, after which East and West Germany were accepted as full members of the United Nations. In 1989, large-scale demonstrations of disappointment with the government by East German citizens ended with the fall of the Berlin Wall on November 9th. A monetary union between East and West Germany was established on Jun 30, 1990, and a formal reunification was declared on Oct 3, 1990. East Germany became part of the FRG, and the politico-economic regime of the West was transferred to the East.

As a consequence of the long separation, women in the two Germanys experienced "different policy configurations and contrasting gendered divisions of labor" (Rosenfeld, Trappe and Gornick, 2004, p.107). East Germany strongly encouraged long weekly hours for women, including mothers

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[18]Several studies also emphasize that women were not fully equal to men in the labor markets of CEECs. A gender wage gap of more than 30 percent existed throughout the region, due to several reasons which include women's tendency to take jobs for which they were overqualified in order to be closer to their homes (Wolchik, 1992; Molyneux, 2001). The unequal sharing of care for children between men and women is also evident in Bela Tarr's quasi-doc movie *Prefab People* (1982) which follows the day-to-day life of an Hungarian couple.

[19]From the early 1960s, birthrates dropped significantly in CEECs, and, as a reaction, political leaders took initiatives to facilitate the reconciliation of employment and childcare. Paid maternity leave and mothers' allowances did ease women's burden. However, they also strengthened the identification of women as a group with domestic work and care for children. In the 1970s and 1980s, female employment rates either grew or remained high throughout the region. However, amidst economic crises, "so-called women's issues remained low on the list of politicians' priorities"(de Haan, 2012, p.92).

[20]For a longer overview of women's work in Central and Eastern Europe, see de Haan (2012) and Wolchik (1981). Additionally, Section A.II.i discusses some background to women's work in Western Europe.

[21]See Section III.C.iii for a discussion of migration between the two Germanys during the divided years.

(Rosenfeld, Trappe and Gornick, 2004).[22] The government adopted the principle of equal work under equal conditions in its 1949 constitution, and the new family laws in 1965 supported the independence of women. Table A.1 presents detailed data on trends in part-time and full-time employment in East and West Germany for the period 1950-90. The table clearly shows that women's participation in the formal labor market was much higher in the East than in the West, and employed women in the East worked longer hours. During the 1960s, "many efforts were made to give women special opportunities to improve their qualifications, to develop a better understanding of technologies, and to get greater access to positions of higher responsibility" (Trappe, 1996, p.357).[23] Interview analysis carried out in East Germany shows how work "emerges as a significant part of women's lives. Some even state explicitly that they feel confident and that they feel as selves due to the fact that they work also outside the home"(Watson-Franke, 1981, p.263).[24] By the 1970s, fertility in East Germany had dropped significantly. The GDR government interpreted the fertility decline as women's reaction to their "double burden" of work and childcare (Engelhardt, Trappe and Dronkers, 2003) and they therefore took initiatives to facilitate the combination of employment and family responsibilities. These initiatives included the public provision of extensive childcare, paid maternity leaves with a job-return assurance, and decreased working time in the first few years of the children's lives (Trappe, 1996).

In West Germany, reconciling employment outside the home with maternity was problematic for females because of the lack of public child care (Rosenfeld, Trappe and Gornick, 2004). Further, FRG tax policy permitted income splitting within couples, so that the greatest tax benefits accrued to married couples where one member earned significantly less than the other (Guenther, 2010). Overall, the FRG encouraged a system in which women stayed home after they had children, or went back to part-time employment after an extended break.

Given such background, in Section III we can contrast gender differences in attitudes toward work between the samples of individuals who have lived under different regimes (state-socialism in the GDR vs capitalism in FRG) in order to evaluate the extent to which politico-economic regimes influence such attitudes.[25]

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[22]As pointed out by Duggan (1995, p.182):

> Rights of East German citizens were based on their status as labor-force workers, so with these rights came an obligation to do labor-force work, full-time if in any way possible.

[23]This focus was in part driven by the fact that the industrial expansion, and the flight of skilled workers to West Germany (see Section III.C.iii) that had caused a shortage of available labor (Schenk, 2003, p.55).

[24]It may be instructive to consider some examples of quotes reported in Watson-Franke (1981):

> I would like very much to be accepted into an advanced graduate program of Education so that I could become a principal one day. I do not want to be an elementary school teacher all my life. I wish to test my limits....After all, the most important thing in my life is my profession [...] (Elementary school teacher, 30 years, married)

> Some think that it is good to completely turn off after work hours. But this is not possible. I have read that work is the metabolism between people and nature. This is the way I feel about it. (Commercial artist, 23 years, single)

> It was not during my stay at the health spa [where she met another man], but at my workplace that I got my self-confidence back [...] (Social worker, 47 years, married)

[25]Anecdotal evidence suggests that attitudes might have evolved differently in West and East Germany after separation. For instance, West Germans would refer to East German mothers who left their children in day-care facilities while they went to work as *Rabenmütter*, or raven mothers, after the black bird that, according to old myths, pushes its chicks out of the nest (Guenther, 2010). Such divergence of attitudes is also suggested in Christian Petzold's movie *Barbara* (2012).

III Analysis exploiting the German separation

III.A Data and Variables

Our goal is to compare, before reunification had been completed, female attitudes toward work of East and West-German women who had lived close to the East-West border. To this end, we use data from the German Socioeconomic Panel (GSOEP), a longitudinal survey of private households, launched in West Germany in 1984 and conducted annually. Since 1990, households residing in the former GDR have also been interviewed. In 1990, 6695 individuals in West Germany (around March) and 4,304 in East Germany (around June) answered a survey question about the importance of career success for their sense of well-being and personal satisfaction. For the West German sample, the question reads: "*Different individuals find different things in life important. How important are the following things to you today? Succeed in one's occupation*".[26] For the East German subsample the question reads: "*Which of the following things are very important, important, not so important, or unimportant to your sense of well-being and personal satisfaction? Your career success*".[27] Responses are provided on a scale from 1 to 4, which correspond to "unimportant," "not very important," "important," "very important". We group the answers "unimportant" and "not very important" under "0", and "very important" and "important" under "1"; we call the resulting variable *Job Success Important*: when it takes value of one, the respondent thinks that career success is important for the individual's personal satisfaction.[28]

Individuals are also asked the question "*Where did you live in 1989: East or West?*". We create the dummy *East* taking on the value of one if the respondent lived in East Germany in 1989. Further, we use restricted-access information about respondents' place of residence at the time of the interview. [29] Table A.2 reports summary statistics for our baseline sample.

III.B Econometric Model and Identification

The institutional background of the German separation suggests an empirical strategy that compares women who lived in East versus West Germany during the separation period. One could interpret any differences between them as the result of exposure to different regimes. The identifying assumption underlying such a strategy would be that East and West Germany were not systematically different before the forced division of the country. While this assumption is supported by the lack of differences in a few relevant observables between the East and the West[30], it can still be violated due to local differences in unobservables. In our analysis we directly address this possibility by building on the spatial regression discontinuity (henceforth, spatial RD) design

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[26]The same question is repeated, in sequence, for the following items: *1) Able to afford something; 2) Be there for others; 3) Fulfill oneself; 4) Succeed in one's occupation; 5) Own a house; 6) Have a good marriage/partnership; 7) Have children; 8) Be together with friends often; 9) Be politically/socially involved; 10) See the world; 11) Travel frequently.*

[27]The same question is repeated, in sequence, for the following items: *1) Your work; 2) Your family; 3) Your friends; 4) Your income; 5) Your power to influence political decisions; 6) Your career success; 7) Your leisure time; 8) Your health; 9) The protection of the environment.*

[28]Given the slightly different phrasing of the questions for the two samples of Germans, we use this grouping to make the answers of East and West Germans more comparable. Estimates are very similar if the original coding is used.

[29]Due to confidentiality reasons, this version of the GSOEP dataset with sensitive regional data can be accessed and analyzed only (a) on the premises of DIW Berlin, or (b) remotely, by preparing a job request for each step of the analysis that is screened and processed by local staff.

[30]Alesina and Fuchs-Schundeln (2007) show that the two regions were similar on average before separation in terms of income, the percentage of the population working in industry, agriculture, or commerce, and support for the Social Democrats.

framework. The basic idea is to place more weight on observations that are closer to the border versus those farther away. These areas were arguably more similar before the political separation, being geographically closer. In the spatial RD design the running variable is two-dimensional; as recommended by Imbens and Zajonc (2011), we collapse it to one dimension, thus using distance from the border as our running variable (Black, 1999; Lalive, 2008; Schumann, 2014). Specifically, we measure the Euclidean distance between the centroid of each respondent's county of residence and the East-West German border (Fig. A.2).[31] Following the recommendation in recent work by Gelman and Imbens (2014), we estimate a local linear RD polynomial, which controls linearly for distance from the border, and weights observation by proximity to the border using a triangular Kernel.

The regression equation that forms the basis of our empirical analysis on the sample of women in the GSOEP is:

$$Y_{icb} = \beta_0 + \beta_1 East_c + \beta_2 Distance_c + \beta_3 Distance_c * East_c + \varphi_b + \varepsilon_{icb} \tag{1}$$

where the dependent variable is *Job Success Important* for the woman *i* living in county *c* along segment *b* of the border, and the variable $East_c$ is a dummy for having lived in the GDR, as defined above. $Distance_c$ is distance from the border (with West German distances listed as negative values); and ϕ_b is a set of border-segment fixed effects that denote which of four equally sized portions of the East-West border is closest to the county of residence of individual *i*.[32] Our main explanatory variable of interest is the dummy variable $East_c$. Weights are equal to $pw = max(0, bandwidth - abs(Distance_c))$. We show results for bandwidths between 200 and 50 km from the border.

For comparison, we show estimates under two alternative specification of the RD polynomial that control for a smooth function of geographic location. First, instead of the linear polynomial, we fit a third polynomial in distance, thus estimating the following equation:

$$Y_{icb} = \beta_0 + \beta_1 East_c + \beta_2 Distance_c + \beta_3 Distance_c^2 + \beta_4 Distance_c^3 +$$
$$\beta_4 Distance_c * East_c + \beta_5 Distance_c^2 * East_c + \beta_6 Distance_c^3 * East_c + \varphi_b + \varepsilon_{icb} \tag{2}$$

Second, following Dell (2010), we specify a multidimensional (in latitude x and longitude y) RD polynomial of third order, thus estimating

$$Y_{icb} = \beta_0 + \beta_1 East_c + \beta_2 x_c + \beta_3 y_c + \beta_4 x_c^2 + \beta_5 y_c^2 + \beta_6 x_c y_c + \beta_7 x_c^3 +$$
$$\beta_8 y_c^3 + \beta_9 x_c^2 y_c + \beta_{10} x_c y_c^2 + \varphi_b + \varepsilon_{icb} \tag{3}$$

It is important to note that our strategy differs significantly from a standard regression discontinuity design (RDD). Our long-run (1949-1990) horizon departs from that of most RDDs, which aim at estimating the short-run effect of some reform. Therefore, we do not expect the state-socialist

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[31] See Section A.I.i for a discussion of potential measurement error in our running variable.

[32] The analysis excludes Berlin, because of its peculiar status (with West Berlin politically aligned to the FRG but surrounded by GDR territory) and particularly strong concerns of selective migration. As Cooper (1998, p.57) put it:

> East Berlin, with its proximity to the West, was a magnet for young people and dissidents. West Berlin attracted young draft resisters (Berlin's occupied status meant draft laws did not apply there) and people looking for an alternative to the bland materialism of postwar West Germany.

treatment to be unrelated to other observables; on the contrary we believe that the state-socialist regime in East Germany may have influenced some demographics. [33] What is important is that state-socialist treatment can be considered an exogenous institutional shock, a view supported by historical accounts about the process that led to the German separation post WWII.

III.C   Estimation Results

III.C.i   Main Estimates

In an RDD the estimation results can be conveniently visualized in graphs. Fig. I shows bin-averages and second order polynomial fit for *Job Success Important* in the sample of German women, and is based on the intuition behind the spatial RD strategy of comparing female attitudes surrounding the border. A discontinuity can be observed, with more positive attitudes towards work for women on the East side of the border. We interpret such discontinuity as the impact of state-socialism on attitudes.

[FIGURE I AROUND HERE]

The main estimates of Equations (1) to (3) are reported in Table I, which shows spatial RD estimates for progressively smaller bandwidths (from 200 down to 50 Km). Specifically, we estimate Equation (1) by OLS, i.e. we estimate a linear probability model.[34] Each column reports two standard errors: robust (above) and clustered (below) that allow for arbitrary patterns of correlation within counties. Point estimates of the state-socialist regime effect on attitudes range from 7 to 17 percentage points, with the mean of the point estimates in Columns (1)-(4) being 11 percentage points. This compares to a mean likelihood of reporting that career success is important of around 70% throughout the GSOEP sample of women.

[TABLE I AROUND HERE]

III.C.ii   Changes in Observables and Channels

Our analysis of potential channels of the effect of state socialism in East Germany on women's attitudes toward work comprehends two steps. First, we investigate the extent to which the state-socialist regime in East Germany has influenced observable characteristics. We then study how different demographics correlate with the probability of believing that career success is important. As a result of this analysis, we suggest as plausible channels for the East Germany effect variables that (a) display a clear discontinuity at the border and (b) have an economically meaningful statistical association with East German women's attitudes towards work.

Changes in Observables   In analyzing the effect of the state-socialist regime in East-Germany on observable characteristics, we consider age, education, satisfaction with the income of the household, marital status, full-time employment, number of children and dummies for catholic, protestant, other christian, other religion. The results of this analysis are reported in Table A.5. We find clear evidence of a discontinuity at the border for four outcomes: full-time employment, satisfaction with the income of the household, number of children and protestant religion. As we will discuss in the following subsection, only full-time employment turns out to be a plausible channel.

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[33]In Section III.C.ii we investigate the extent to which we observe discontinuous changes in observables at the East-West border.

[34]In robustness checks we also estimate probit models. Results are very similar to the linear specification and are available upon request.

Channels Why is the likelihood of reporting that career success is important higher for women in the East? One reason may be that the experience of employment changes women's attitudes. Another potential reason is that women are affected by the regime's propaganda to bring them into the labor force. We explore these possibilities using individual-level information available in the GSOEP; specifically, we look at survey respondents' employment status, and at political attitudes which may reflect the exposure to the regime's propaganda. We also propose an indirect measure of exposure to propaganda based on reception of Western television in East-Germany. Finally, we investigate the role of the other demographic changes observed in Table A.5.

Experience of employment We start off by investigating the role of employment experience. Recall that female employment significantly increased in East Germany after 1945 (Table A.1). Consistent with this fact, the variable *East* is positive and significant when we modify Equation (1) so that the dependent variable is a dummy for full-time employment (Table A.5). With this in mind, we estimate (in the sample of all women) the following equation:

$$Y_i = \gamma_0 + \gamma_1 Full\_time\_Empl_i^{1989} + \gamma_2 X_i + \varepsilon_i \tag{4}$$

where the dependent variable is *Job Success Important*, X_i includes all the demographic characteristics analyzed in Table A.5 and $Full\_time\_Empl_i^{1989}$ is a dummy for full-time employment in 1989, i.e. the year before Y_i is measured. The estimates of Equation (4) are presented in column (1) of Table II We show these estimates with the caveat that while the effect of the politico-economic regime on female attitudes towards work is well-identified thanks to the random assignment of the treatment, the investigation presented here depends on the observed correlation of employment status to attitudes, which may be subject to omitted variable bias. If this concern is set aside, the estimates show a positive and significant coefficient for $Full\_time\_Empl_i$. These estimates, combined with the fact that we find supporting evidence of a discontinuity at the border for employment status, and the fact that female participation was precisely the outcome targeted by state-socialist policies, suggest an important role of female employment in determining women's attitudes toward work.

[TABLE II AROUND HERE]

Propaganda One may argue that women whose attitudes were shaped by the exposure to government propaganda are more favorable to the regime itself. Under this scenario, we should observe more positive attitudes toward work for East-German women who are more in favor of the socialist regime. We explore this possibility by estimating (in the sample of East German women) the following equation:

$$Y_i = \delta_0 + \delta_1 Ideology_i + \delta_2 X_i + \varepsilon_i \tag{5}$$

where the variable *Ideology* is constructed using one of either two questions, asked in 1990 and 1992 respectively, concerning how satisfied the respondent was with democracy in the GDR, and which political party was supported by the respondent. Specifically the dummy variable *Party Support* takes on value 1 if the respondent expresses support for the PDS (Party of Democratic Socialism), which was the successor of the SED (Socialist Unity Party of Germany), the ruling party in the GDR; and the variable *Satisfaction with Democracy* takes a higher value, the larger is one's reported satisfaction with democracy.

The estimates of equation (5) are shown in columns 2 and 3 of Table II. As the coefficient estimate of δ_1 is not significant in either specification, we fail to find evidence that the likelihood of

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reporting that career success is important increases with support for the regime. This is suggestive that propaganda might be an implausible channel behind our results in Section III.C.i.

In the Online Appendix we show that this finding is robust to using an alternative measure of propaganda, based on TV consumption during the divided years.[35] In practice, we regard as more exposed to propaganda East Germans who used to live in counties not reached by the West Germany TV. We therefore re-estimate equation (5) using as independent variable a dummy for lack of reception of West German TV. While this variable, compared to the proxies for ideology, has the advantage of exploiting exogenous spatial variation, it constitutes a more indirect measure of exposure to propaganda. See Section A.I.iii for details regarding the variable and the estimation results.

The Role of Demographic Changes Table II also shows that protestant religion and satisfaction with the income of the household are not significantly associated with female attitudes towards work. Number of children has a significant statistical association with female attitudes. In Table A.5 we find supporting evidence that the number of children increased for East German woman as a result of exposure to socialism. The coefficient on the number of children is however *negative* in Table II. Therefore the higher average number of children for East German women cannot explain the *positive* change in the likelihood of reporting that career success is important.[36]

III.C.iii Validity and Robustness

Our estimates of Equation (1) show that the likelihood of reporting that career success is important is higher for women in East Germany. We now investigate the robustness of this result to various specifications and explore several possible confounding factors for the estimated effect. Specifically, we first evaluate the role of East-West migration during the divided years. We then present the results of a falsification test using men's attitudes towards work. Finally, we discuss estimates using a Donut spatial RD approach, to explore the issue of potential non-random selection following regulatory and other changes in areas just East/West of the border.

East-West migration during the divided years Around 3 million people migrated from the East to the West before the erection of the Berlin Wall in 1961. [37] From 1961 to the end of 1988, around 600,000 people emigrated from the GDR to the FRG.[38] In contrast about 30,000 individuals per year emigrated from the FRG to the GDR in the 1950s, and almost none after the Wall was built (Fassmann and Münz, 1994a).

This migration creates an identification challenge in our context. Specifically, if the distributions of female attitudes towards work were similar in the East and the West at the time of the separation, but women attaching less importance to job success migrated from the GDR to the FRG, then this could be driving our main finding from Section III.C.i. To test for this, we restrict the sample

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[35]A large literature documents the effect of exposure to television on political (Gentzkow (2006); Della Vigna and Kaplan (2007); Enikolopov, Petrova and Zhuravskaya (2011); Della Vigna et al. (2014)) and social (Jensen and Oster (2009); Olkean (2009); La Ferrara, Chong and Duryea (2012)) outcomes.

[36]In Table II we also control for income of the household. The likelihood that one believes that career success is important increases with income. While we cannot empirically investigate whether there is a discontinuity at the border in income due to issues of comparability between the two Germanys, the fact that the East was poorer than the West indicates that changes in income cannot explain the state-socialist effect on attitudes.

[37]This number represents a significant share of the peak population (of around 19 million) living in the Soviet-controlled territory in 1947 that officially became the GDR in 1949.

[38]Family reunions and general economic reasons were the two chief motives for migration during the divided years. See Alesina and Fuchs-Schundeln (2007, p.1510) for a discussion and references.

to women who lived in the East in 1949, and add two dummy variables, "Moved E to W 49-55" and "Moved E to W 56-89". These dummies take on a value of one if a woman migrated from the East to the West during 1949-1955 or during 1956-1989, respectively. [39] The coefficients on the two dummies thus capture the attitudes of women who migrated East-West relatively early or relatively late, respectively, with respect to women who stayed in East Germany. As the regression estimates in Table III column (1) show, women who migrated East-West during the divided years attach significantly less importance to job success, and the difference is more pronounced for earlier movers.[40] To explore this possibility further, we code the women who moved from East to West as if they lived in East Germany in 1989, in the spirit of "restoring" the distribution of preferences in GDR as if migration had not occurred. On this "manipulated" sample, we then estimate the main relation of interest between politico-economic regimes and attitudes towards work. Notice that we cannot execute a spatial RD in this context, since we do not know the (old) county of residence in East Germany of individuals who had moved to West Germany by 1990. We perform this exercise in the remaining part of Table III. In column (2) we report OLS estimates on the entire sample of women in the GSOEP (i.e. women observed in East and West in 1990). In column (3) we operate the "manipulation" in order to address selective migration. The coefficient estimates in columns (2) and (3) are very similar, indicating that our main finding from Section III.C.i is not explained by East-West migration during the divided years.

[TABLE III AROUND HERE]

Falsification test: men's attitudes toward work   A potential explanation of our main result could be that the identified East Germany effect reflects a general pattern in attitudes toward work, not specific to women.

A comparison of Fig. I and Fig. A.3 indicates that the identified East Germany effect is genuine to the promotion of female employment under state-socialism, and does not reflect a general pattern in attitudes towards work.[41] Specifically, while a discontinuity can be easily observed for women, the attitudes of East and West German men are quite similar. Table A.3 reports spatial RD estimates of Equation (1) in the sample of German men. We find no evidence of a significant East Germany effect on men's attitudes towards work.

Non-random selection just East/West of the border: Donut spatial RD   The basic idea of a spatial RD is to place more weight on observations that are closer to the border versus those farther away. In our context, however, there are concerns of potential non-random selection in areas just East/West of the border. These concerns arise because of regulatory and other changes affecting these areas after the separation. In East Germany access to the areas very close to the border with the FRG was restricted (Rottmann, 2008, p.21). Specifically, apart from the border guards, only local residents had access to areas within 5 Km of the border. Border crossing between the two Germanys also became a tedious process, increasing trading difficulties between localities on the

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[39]Women who did not migrate from East Germany compose the reference group. We select 1956 because this year divides the distribution of East-West female migrants approximately into two halves.

[40]We reject the null that the coefficients on *Moved E to W 49-55* and *Moved E to W 56-89* are equal at 5%. East-West female migrants might attach less importance to job success than stayers for two (non-mutually exclusive) reasons: self-selection and differential treatment. For what concern the latter explanation, recall from Section II.B that the FRG encouraged a system in which women stayed home after they had children, or went back to part-time employment after an extended break. East-West female migrants were exposed to the West Germany system, which may have negatively affected their attitudes towards work. At the same time the reference group was exposed to the GDR regime that positively affected their attitudes towards work.

[41]Fig. A.3 shows bin-averages and second order polynomial fit for *Job Success Important* in the sample of men.

two sides. Redding and Sturm (2008), for example, show evidence of a population decline in West German cities close to the border due to a loss in market access. At the same time, the border areas enjoyed some level of economic subsidization in both Germanys, designed to compensate somewhat for the disadvantages arising from the closed border (Buchholz, 1994). [42] In order to explore the possibility of non-random selection of women just East/West of the border, we estimate Equation (1) excluding any observations located within 10 km of the border, in the spirit of a Donut RDD (Barreca et al., 2011) applied to our spatial framework. Table A.4 shows that our Donut estimates are consistent with the main finding in Section III.C.i.

Changes in urbanization rates as a result of the separation As mentioned above, West German cities close to the intra-German border experienced a population decline after the separation. Even though the FRG offered a substantial subsidy for the border regions, directed to improvements in infrastructure and to revive businesses (Deutscher Bundestag, 1970), a concern arises that urbanization rates in the West may have been affected in a way that could potentially explain our results. Three pieces of evidence suggest that this is not a likely explanation (results available upon request). First, there is no evidence of a positive discontinuity at the border (moving from West to East) in the likelihood that a woman report living in an urban area (as opposed to a rural area or an area undergoing urbanization). Further, whether the woman lives in an urban area does not have a statistically significant association with female attitudes towards work, whether or not we condition on the demographics shown in Table A.5. Finally, the estimates of Equation 1 are similar to those shown in Table I when we control for whether the woman lives in an urban area.

IV   Comparison of CEECs and WECs

This Section presents our Diff-in-Diff analysis that compares gender-role attitudes formed in CEECs and WECs, before and after the imposition of state socialism in CEECs. We circumvent the lack of a long time-series of measures of attitudes by using the attitudes of US immigrants and their offspring as a time-varying measure of attitudes in their source country.

IV.A   Measurement and Data

IV.A.i   Measure of Attitudes and Data Description

In order to implement our Diff-in-Diff analysis, we need to observe individuals in both CEECs and WECs before and after the establishments of state socialism in CEECs. This is problematic because the 1980s are the earliest years in which a measure of gender-role attitudes in cross-country surveys is available, long after the imposition of state socialist regimes. We cope with this challenge by combining the gender-role attitudes of US immigrants and their offspring to construct a time-varying measure of attitudes in their source country, in the spirit of Algan and Cahuc (2010). Our source of information about gender-role attitudes is the General Social Survey database (GSS), which collects answers by US residents between 1972 and 2014, and contains individual data on the respondent's country of birth and that of her ancestors since 1977. The GSS question on the country of origin reads: "From what countries or part of the world did your ancestors come?". The individual can list up to three countries by order of preference.[43] We select the country of origin which the individual ranks highest.

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[42]See Section A.I.ii for further details on the "inner border".

[43]Around two respondents out of three list only one country.

List of Countries   The CEECs in our sample are Czechoslovakia, Hungary, Lithuania, Poland and Romania. The Soviet Union exercised a major influence in these five countries starting from the end of WWII. Lithuania had already been incorporated into the Soviet Union.[44] In the other countries Stalin favored a system of "indirect rule through national communist elites" (Mazower, 2009, p.282). State-socialist regimes were imposed in these four countries, with the Soviet hold over them ultimately consolidated in the formation of the Warsaw Pact (McMahon, 2003).[45] The WECs in our sample include: Austria, Belgium, Denmark, Finland, France, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, and the UK. Table A.6 reports the count of immigrants from each of the 19 countries in our sample.

Measuring the evolution of gender-role attitudes   We measure the evolution of gender-role attitudes by separating GSS respondents into waves of immigration. Individuals are asked if they were born in the United States and how many of their parents and grandparents were born in the United States. The responses allow us to separate four potential groups of immigrants: fourth-generation Americans and above (more than two grandparents born in the US and both parents born in the country)[46], third-generation Americans (at least two grandparents born outside US and both parents born in the country), second-generation Americans (at least one parent immigrated to the US) and first-generation Americans.[47]

Gender-role attitudes are measured by the following question: "*Please tell me whether you strongly agree, agree, disagree, or strongly disagree with the following statement. It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of home and family*". We recode the answers to this question, "*Strongly Agree," "Agree," "Don't Know," "Disagree,"* and *"Strongly Disagree,"* as respectively, 1, 2, 2.5, 3, and 4.[48] We call the resulting index "*Better for Man to Work, Woman Tend Home*"; the higher its value, the less traditional are an individual's attitudes toward working women. Gender-role attitudes in the home country in 1990 are also used to provide a benchmark comparison with attitudes of US immigrants, as shown below. Attitudes in the source country are measured using the 1990 wave of the World Value Survey (WVS) database. The gender-role attitude question in the WVS reads as follows: "*Do you agree or disagree: husband and wife should both contribute to income*". We recode the answers to this question, "*Strongly Agree," "Agree," "Don't Know," "Disagree,"* and *"Strongly Disagree"* as, respectively, 4, 3, 2.5, 2, and 1; once again, the higher the value, the less traditional are an individual's attitudes toward working women. We call the resulting index "*Husband and Wife Should Both Contribute to Income*".

Attitudes of US immigrants and Attitudes in the Home Country

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[44]Lithuania was first incorporated into the Soviet Union in July 1940, but was under German occupation between June 1941 and July 1944. See Misiunas and Taagepera (1993) for a discussion of Lithuania under Soviet rule.

[45]See Section A.II.iii for a discussion of some background to the imposition of Soviet rule in CEECs, and Section A.II.iv for an explanation why our sample does not include other countries located in the region.

[46]For simplicity, in most of the text we will refer to this group as "fourth-generation Americans".

[47]We depart from Algan and Cahuc (2010) by adding first-generation immigrants to the sample, while at the same time always controlling for generation dummies in our regressions where the outcome of interest is the gender-role attitude of US immigrant *i*. We include responses of first-generation immigrants to obtain the maximum number of observations on gender-role attitudes. However, our main results still hold when we drop first-generation Americans.

[48]Only 147 out of 8846 respondents answer *"Don't Know"*. Results are similar if we use alternative approaches, such as recoding *"Don't Know"* as missing, and recoding the answers *"Strongly Agree," "Agree," "Don't Know," "Disagree,"* and *"Strongly Disagree"* as, respectively, 1, 2, 3, 4, and 5.

Attitudes of US immigrants   We now describe in detail how we track the change over time in gender-role attitudes using the GSS. We measure the attitudes formed before the imposition of state-socialism in CEECs (before 1945) with the attitudes of GSS respondents who immigrated (or whose ancestors immigrated) to the United States before 1945. We assume a gap of 20 years between two generations,[49] which lets us identify four groups of pre-1945 immigrants, depending on wave and approximate year of own (for first generation) or ancestors' (for second generation and above) migration : first generation Americans who migrated before 1945,[50] second generation Americans born before 1945 (whose parents left Europe for the US before 1945), third generation Americans born before 1965 (whose grandparents left Europe before 1945), and fourth-generation Americans born before 1985.[51] We call individuals in these four groups the *1945 cohort.*

The attitudes of GSS respondents who immigrated (or whose ancestors immigrated) to the United States between 1945 and 1990 are used to measure the attitudes formed between the imposition of state-socialism regimes and their collapse, i.e. between 1945 and 1990. This group includes first generation Americans who migrated between 1945 and 1990,[52] second-generation Americans born between 1955 and 1990,[53] third-generation Americans born between 1975 and 1990, and fourth-generation Americans born before 1995. We call individuals in these four groups the *1990 cohort.*[54] Tables A.7 and A.11 report summary statistics. Notice that we have a much lower number of observations for the *1990 cohort* than for the *1945 cohort.* This is due to the fact that the most recent year in GSS is 2014. Therefore the survey does not capture many of the third generation Americans born after 1975, and most of the fourth-generation Americans born after 1995. This issue of the lower number of observations for the *1990 cohort* is particularly relevant for the CEECs, since they are only five out of the nineteen countries in the sample. That said, the number of available observations appears large enough to enable us to obtain precise estimates of the coefficient of interest (see estimates of Equation 7 in Table V).

Correlation Between Attitudes of US immigrants and Attitudes in the Home Country   The hypothesis behind our strategy to measure the evolution of gender-role attitudes is that immigrants' attitudes mirror those in their country of origin, and that there is a cultural transmission of gender-role attitudes within families. If our hypothesis is correct, one should observe a statistically significant correlation between gender-role attitudes of US immigrants and gender-role attitudes in their source countries. Moreover, let us assume that there has been temporal varia-

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[49]Results are very similar if we assume a gap of 25 or 30 years.

[50]These are the first generation Americans born before 1929 who report to have been living in the US when 16 years old - we use answers to the question *"In what state or foreign country were you living when you were 16 years old?"* - or first generation Americans born before 1945.

[51]For what concerns third- and fourth- generation Americans, we use responses of some Americans born after 1945. However they have inherited the attitudes formed in the country of origin of their ancestors before 1945. We use responses of multiple generations of immigrants to obtain the maximum number of observations on gender-role attitudes. However, our main results still hold when we drop third- and fourth- generation Americans.

[52]These are first-generation Americans who are either born after 1929, report to have been living in a foreign country when 16 years old, and are interviewed before 1990; or are born after 1945 and are interviewed before 1990.

[53]Given that we cannot directly observe the time of arrival for the parents of second-generation immigrants, we select 1955 (instead of 1945) as the lower bound of the interval for the birth year to reduce the probability of misclassification, i.e. the assignment to the *1990 cohort* of some second-generation US immigrants who inherited attitudes formed in the country of origin before 1945. We similarly add 10 years to the lower bound of the intervals for third- and fourth- generation immigrants. This is a seemingly small but important departure from the strategy in Algan and Cahuc (2010) and should reduce measurement error. Some misclassification is obviously still possible but it would arguably affect both CEECs and WECs; moreover it would lead us to underestimate the evolution of attitudes during the period 1945-1990, when looking at differences between the *1945 cohort* and the *1990 cohort.* Such misclassification is therefore highly unlikely to drive our results of a significant effect of state-socialism.

[54]Our decomposition eliminates overlap in the gender-role attitudes of the two groups.

tion in gender-role attitudes in the European source countries (either CEECs or WECs); then, the correlation between the gender-role attitudes of a source country in 1990, and those of immigrants from the same country who left before 1945, should be weaker that the correlation between the gender-role attitudes of the source country in 1990, and those of immigrants who left between 1945 and 1990.

We evaluate the link between gender-role attitudes of US immigrants and gender-role attitudes in the source country, following the approach in Algan and Cahuc (2010). More precisely, we run individual-level regressions in which the dependent variable is the gender-role attitude question of the GSS, and the variable of interest is the average gender-role attitudes in the country of origin, obtained from the 1990 wave of the WVS. We only keep countries with more than 10 US respondents to the question *Better for Man to Work, Woman Tend Home* for the period 1945-1990.[55] The regression equation is:

$$Y_{igrcp} = \gamma_0 + \gamma_1 Y_c^{WVS,1990} + \gamma_2 X_{icr} + \eta_r + \rho_g + \varepsilon_{igrc} \tag{6}$$

where Y_{igrcp} is the answer to the question *Better for Man to Work, Woman Tend Home* of individual i, belonging to generation g, residing in US region r, who migrated (or whose ancestors migrated) from country c in period p. $Y_c^{WVS,1990}$ is the average response in the country of origin of individual i, obtained using the answers of country c residents to the question *Husband and Wife Should Both Contribute to Income*. X_i are individual-level characteristics, and ρ_g and η_r are generational and regional dummies, respectively. For the baseline specification we only include in X_i individual characteristics that are available for the full sample: gender, age, marital status, satisfaction with the financial situation of the household, current employment status (i.e. in the US labor market), number of kids, political views). However, we also present estimates which include a richer set of individual characteristics.

We report the results in Table IV.[56] Column 1 reports the results with the attitudes formed in the period 1945-1990 as the dependent variable. The correlation between attitudes in the United States and attitudes in the home country in 1990 is statistically significant at the 1 percent level. Column 2 shows the estimates when we regress the attitudes formed in the period *before 1945* on $Y_c^{WVS,1990}$. While positive, the coefficient is an order of magnitude smaller than in the previous column, and far from significant. This result suggests that gender-role attitudes acquired before 1945 by the first generation immigrants in the source country (CEEC or WECs), and transmitted to their offspring, were different from the gender-role attitudes acquired (and transmitted) in the period 1945-1990. A competing explanation for the weak correlation in Column 2 could be a convergence in attitudes of immigrants as the years they or their family spent in the US increased. To explore this issue in Table A.8 we regress individual attitudes formed in the period *before 1945* on country of origin dummies, with attitudes inherited by British Americans used as the reference group. Having ancestors coming from a different source country than United Kingdom has a statistically significant effect on inherited attitudes. This result suggests that an element of attitudes can be transmitted within families. It also suggests that the finding in Column 2 of Table IV is not due to adaptation of immigrants to the norms of the new society in which they live.[57] In

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[55]These countries are Czechoslovakia, France, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Spain, Sweden, UK. The first period in which attitudes in the European countries were measured is 1980. The reason we do not use the 1980 wave of WVS is that the only CEEC participating to that wave is Hungary.

[56]Regarding the estimation of the standard errors, in the baseline specification we cluster by country of origin (12 clusters). We also bootstrap the standard errors following the procedure developed by Cameron, Gelbach and Miller (2008) to improve the inference with clustered standard errors. We report the p-values using this alternative approach at the bottom of Table IV.

[57]A further competing explanation for the difference in the correlations in Column 1 and that in Column 2 is

Column 3 of Table IV we estimate equation (6) with the attitudes formed in the period 1945-1990 as dependent variable and include additional individual controls: education, income, mother's and father's education (to control for the fact that inherited attitudes might transfer through parents' human capital rather than through cultural transmission), and religion. Estimates are very similar to those in Column 1.

[TABLE IV AROUND HERE]

IV.B Empirical Strategy

The imposition of state-socialist regimes in CEECs arguably constitutes a quasi-experimental setting. Therefore, in principle, the before-after difference in attitudes (where "after" means "following the imposition of state-socialism") could be interpreted as the effect of state-socialism itself. A concern arises, however, that a general trend in gender attitudes might have been in place, due for instance to WWII.[58] In order to account for such a trend, we estimate a Diff-in-Diff equation, where we compare the evolution of attitudes in CEECs versus WECs.

The regression equation that forms the basis of our empirical analysis is:

$$Y_{igrcp} = \beta_0 + \beta_1 CEEC_c + \beta_2 Post1945_p + \beta_{DiD} CEEC \cdot Post1945_{c,p} + \tag{7}$$
$$\beta_4 X_{icrp} + \rho_g + \eta_r + \varepsilon_{igrcp}$$

where Y_{igrcp} is the answer to the question *Better for Man to Work, Woman Tend Home* of individual i, belonging to generation g, residing in US region r, who migrated (or whose ancestors migrated) from country c in period p (either before 1945 or between 1945 and 1990); $CEEC_c$ is a dummy taking the value of one if country c belong to the group of CEECs; $Post1945_p$ is a dummy taking the value of one if the individual's attitudes were formed in the country of origin between 1945 and 1990 (or inherited from someone whose attitudes were formed in the country of origin between 1945 and 1990); ρ_g and η_r are generational and regional dummies, respectively; and X_i are individual-level characteristics.[59] For the baseline specification we only include gender in X_i because the politico-economic regime may have affected some demographics. However, we also present estimates which include a very rich set of individual characteristics.[60]

IV.B.i Identifying Assumptions

Parallel trend assumption   The first identifying assumption in our context is that, absent the state-socialist regime, the evolution of gender attitudes in CEECs would have followed a path that cannot, on average, be distinguished from that in WECs. We discuss evidence related to this assumption in detail in Section IV.C.ii.

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that the selection of immigrants from the source countries changed before and after 1945, causing a decline in the correlation between attitudes in the source country in 1990 and attitudes of US immigrants before 1945. Variation over time in gender-role attitudes could therefore be linked to variation in the sample selection of immigrants. We return to this issue in Section IV.B.i.

[58]Using US census data for various years from the 1940s to the 1980s, Fernández, Fogli and Olivetti (2004) show that the male mobilization rate in WWII has a positive effect on women's employment status in later years.

[59]Results are very similar if we allow the coefficients on the regional dummies to vary by period.

[60]In particular, the inclusion of this rich set of control attempts to address concerns of biases arising from immigrants selection.

Selection of Immigrants   Since we use the attitudes of immigrants, there is an additional identifying assumption, namely that the selection of immigrants on unobservables does not change differentially in CEECs and WECs after the imposition of state-socialism in a way that may affect gender-role attitudes. In our context, a concern of differential selection arises because the individual incentives for migrating from CEECs into the US were likely to be different before and after 1945 (Fassmann and Münz, 1994a).[61] To explore this possibility we investigate the extent of differential selection on a rich set of observable variables. This should help infer something regarding the degree of differential selection on unobservables. More precisely, we estimate:

$$x_{igrcp} = \beta_0 + \beta_1 Post1945_p + \beta_{DiD} CEEC \cdot Post1945_{c,p} + \rho_g + \eta_r + \varepsilon_{igrcp} \tag{8}$$

where x_i represent each one of the many individual characteristics we observe. We report both OLS and within-country estimates of Equation (8). The OLS estimates should be interpreted cautiously because the composition of the population of US immigrants might change over time simply in terms of country of origin. If this concern is set aside, the OLS regressions (Table A.9) show that immigrants from CEEC countries in the period after 1945 are less likely to be satisfied with the financial situation of the household (10% sig. level), have higher educated mothers (5% sig. level), are more likely to be Jewish (1% sig. level) and less likely to be politically conservative (10% sig. level). The selection does not change differentially in terms of gender, age, education, marital status, income, employment status, number of kids, father's education, and other religious categories (catholic, protestant, orthodox, other religion, no religion).

The within-country estimates, shown in Table A.10, attempt to address the issue of a changed population of immigrants in terms of country of origin. Immigrants from CEECs in the period after 1945 are shown to be 7% less likely to be satisfied with the financial situation of the household (5% sig. level) and 7% less likely to be politically conservative (5% sig. level). Unlike the OLS, the within $\widehat{\beta}_{DiD}$'s on mother's education and Jewish religion are not significant. Like in the OLS estimates, the selection does not change differentially in terms of gender, age, education, marital status, income, employment status, number of kids, father's education, and other religious categories.[62]

Overall, the limited degree of selection on observables supports the validity of our empirical strategy. Regarding the documented change in political views, this may reflect a direct treatment effect of state-socialism rather than differential selection (Alesina and Fuchs-Schundeln, 2007). Furthermore, below we show that estimates of our coefficient of interest in the main regression equation are qualitatively similar when we control for this rich set of individual characteristics.[63]

IV.C   Diff-in-Diff Estimates

IV.C.i   Main Findings

Estimates of Equation (7) are shown in Table V. In our main estimates we cluster at country-period level (38 clusters). [64] Our baseline estimates in Column 1 suggest that attitudes are affected by state-socialism; gender-role attitudes formed in CEECs during the state-socialist regime are less

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[61]Section A.II.v provides descriptive statistics and some background to migration patterns from countries in our sample to the United States over the period of analysis.

[62]We do not find systematic evidence of differential selection which may affect gender-role attitudes in terms of immigration wave nor destination region in the United States (results are available upon request).

[63]The inclusion of these individual characteristics also controls for the possibility that the sample of immigrants in the GSS is not representative of the population of US immigrants.

[64]At the bottom of Table we report the p-values based on two alternative approaches: (a) cluster the standard errors by country (19 clusters); (b) cluster by country and bootstrap the standard errors following the procedure developed by Cameron, Gelbach and Miller (2008).

traditional, even when the general trend in attitudes during this period is accounted for. In Column 2 we include many individual controls: age, education, marital status, income, satisfaction with the financial situation of the household, employment status, number of kids, mother's and father's education, religion and political views. In column 3-4 the "Post-1945" period is restricted to 1945-1967. Specifically, in these two columns the sample is formed exclusively by immigrants who left Europe before 1967 and their descendants. The motivation for such robustness check is that we want to consider a shorter interval for the "post" period (1945-1967 rather than 1945-1990) so that the likelihood of shocks that may drive our results is smaller. Estimates in Column 2-4 are very similar to those in Column 1 and 2. The coefficient on *CEEC · Post* 1945 means that having experienced state-socialism appears to decrease the degree of approval with the statement *Better for Man to Work, Woman Tend Home.* According to these estimates, attitudes formed in CEECs between 1945 and 1990 are less traditional that those formed in WECs during the same period, a gap of 0.19-0.36 in the attitudinal index. The mean of the point estimates in Columns (1)-(4) is 0.28, a large difference when measured against the standard deviation of the index, which is 0.84.

[TABLE V AROUND HERE]

As a robustness check, we have estimated the 4 specifications in Table V dropping individuals from one of the 5 state-socialist countries in order to check that no particular country is driving the results. The estimates (available upon request) are very similar to the ones for the full sample of individuals.

IV.C.ii   How credible is the parallel trend assumption?

In Table A.13 we run placebo regressions where we estimate Equation (7) using 1900 as the date of the imposition of state-socialist regimes in CEECs rather than the true date of 1945. In Column 1 the point estimate for the coefficient on *CEEC · Post* 1945 is positive, but smaller than the respective coefficient in Column 1 of Table V, and not significant. In Column 2 (where we include additional controls) the estimates is negative, and not significant.

In Fig. II we plot the estimated residuals of *Better for Man to Work, Woman Tend Home*, obtained from a OLS regression against generation dummies, regional dummies and gender, i.e. the control variables in our baseline and placebo specifications (Column 1 of Table V and Table A.13, respectively). The residuals are shown separately for CEECs and WECs at three points in time (two of which before the imposition of state socialism). The figure graphically summarizes the estimates of Equation (7) and the placebo estimates. Before 1945 the attitudes in CEECs evolved similarly to attitudes in WECs; there is just a small positive difference, which we know from Column 1 of Table A.13 is not significant.[65] After 1945 gender-role attitudes formed in CEECs during the state-socialist regime become significantly less traditional compared to WECs, as reflected in the estimates of Column 1 in Table V. Overall, the evidence suggests that prior to the imposition of the new political and economic regime, gender-role attitudes in CEECs and the WECs evolved in a similar fashion. In Section A.II.ii we further compare CEECs and WECs in terms of economic development and demographics.

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[65]Since families of immigrants in the *1945 cohort* have on average spent a longer time in the US than those of immigrants in the *1990 cohort*, a competing explanation for the pattern observed in the graph could be the adaptation of immigrants to the norms of the new society in which they live. In other words, it could be that attitudes in the two groups were similar in 1945 and 1990, but the process of cultural integration has completed only for the 1945 cohort. However Table A.8 (discussed in Section IV.A.i) suggests this explanation is not likely given that the coefficients of the country effects in the regression with inherited attitudes in 1945 as dependent variable are statistically highly significant.

IV.C.iii Interpretation

Overall, the evidence reported in Section IV.C.i suggests that the political and economic regime in state-socialist countries exerted a noticeable influence on people's attitudes about gender-roles. In interpreting our estimates, two points need to be highlighted. First, it is incorrect to interpret the estimated change in gender-role attitudes in CEECs as the partial equilibrium effect of the politico-economic regime, holding constant everything else in the CEECs' economies. Instead, it reflects the effect of the politico-economic regime change and the associated increase in female employment. Our estimates of the change in gender-role attitudes should therefore be interpreted as a general equilibrium reduced-form effect that combines both the direct effect of the politico-economic regime change (new policies targeting women, wage setting) and the effect of increased female participation in economic activity outside the home.

Second, we estimate the effect of state-socialism on gender-role attitudes relative to the effect of any other policy regime in place in Europe. Overall, while some Western governments, especially in the 1970s, embraced change in women's opportunities as a formal policy objective, in no case have their commitments been as long-standing as those of the governments in CEECs (Wolchik, 1981, p.446). See section A.II.i for more details.

IV.C.iv Within Estimates

Since country of origin is an important determinant of gender-role attitudes (Table A.8), our estimates may be affected by the changing composition of the population of immigrants over time in terms of country of origin. The bias would be upward if the share of immigrants arriving from less traditional countries (in terms of average gender-role attitudes) increases in CEECs vs WECs, while that of immigrants from more traditional countries decreases. To investigate this issue in Table A.12 we report within country estimates of Equation (7), which compare the evolution of attitudes in a given country versus that in other countries. These estimates are consistent with the evidence above of individuals' gender-role attitudes being shaped by the politico-economic system in which they live.

V   Conclusion

To what extent are attitudes affected by political regimes and government policies? Answering this question is complicated due to the fact that regimes are not randomly assigned. In this paper, we exploit the imposition of state-socialist regimes across Central and Eastern Europe post World War II. Soon after their imposition in the late 1940s, and until the mid 1960s, state-socialist governments throughout the region encouraged women's paid employment outside the home. We first take advantage of the German separation after 1945 and of restricted-access information on place of residence to execute a spatial regression discontinuity design. We find more positive attitudes toward work in the sample of women who used to live in East Germany. We then employ a Difference-in-Differences strategy that compares attitudes formed in Central and Eastern European countries (CEECs) to those formed in Western European Countries (WECs), before and after the imposition of state socialism in CEECs. We cope with the lack of a long time-series of measures of attitudes by using the attitudes of US immigrants and their offspring as a time-varying measure of attitudes in their source country. Gender-role attitudes formed in CEECs during the state

socialist period appear to be significantly less traditional than those formed in WECs. Overall, we overcome previous identification and data limitations and find that attitudes are profoundly affected by politico-economic regimes.

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Figures and Tables

Figure I
Job Success Important: Women
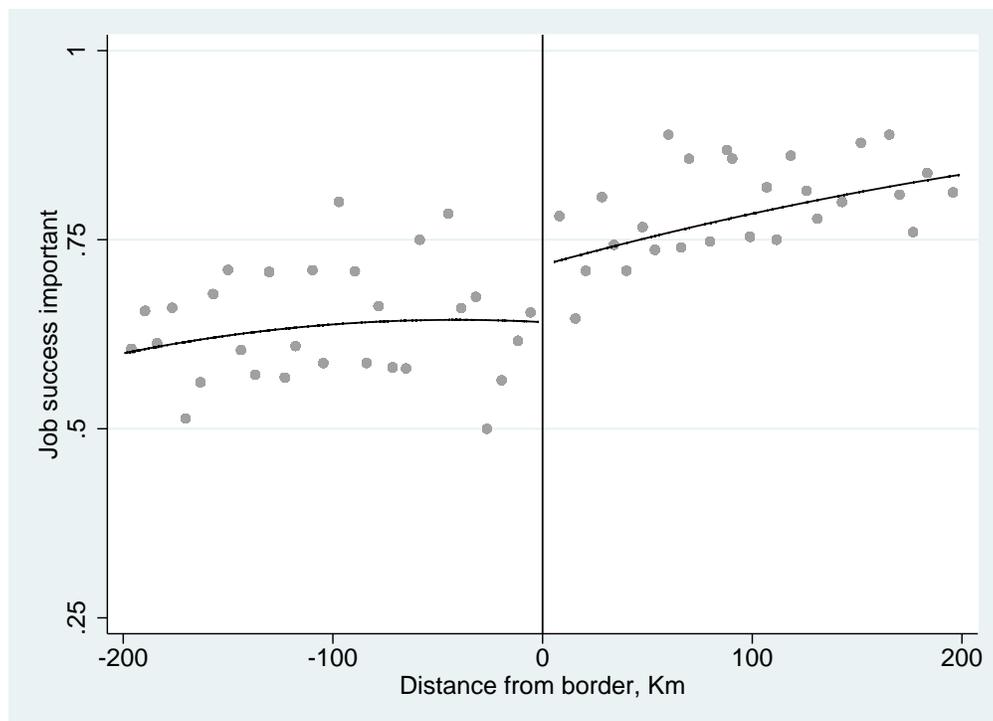
Note: the Figure shows bin-averages and third order polynomial fit for the women in GSOEP. Specifically, the lines are fitted values from a regression of Job Success Important on second order polynomials in distance, estimated on the two sides of the border. The size of the bins is a little over 5 km, chosen as to have thirty bins on each side of the threshold. Left side of the threshold is West Germany. The variable Job Success Important is constructed using answers to the question on how important is career success for the individual's personal satisfaction. The polynomial bandwidth is chosen with the Imbens and Kalyanaraman (2011) criterion.

Figure II
Evolution of Gender-role attitudes in CEECs versus WECs
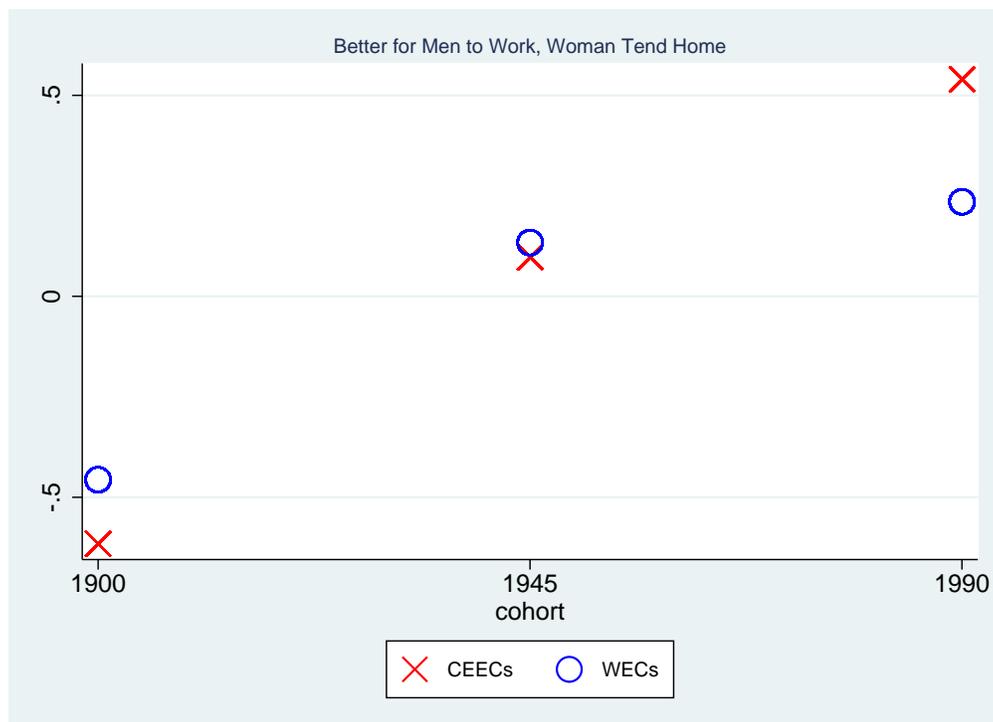
Note: in this figure we plot the estimated residuals of "Better for Man to Work, Woman Tend Home", obtained from a OLS regression against generation dummies, regional dummies and gender, i.e. the control variables in our baseline and placebo specifications (Column 1 of Table V and Table A.13, respectively).

Table I

Female attitudes towards work: Job success important, spatial RD estimates.

	(1) <= 200 km	(2) <= 150 km	(3) <= 100 km	(4) <= 50 km
	Panel A: Local linear polynomial in distance from border			
East	0.072	0.083	0.105	0.165
	(0.035)**	(0.041)**	(0.052)**	(0.077)**
	(0.041)*	(0.048)*	(0.061)*	(0.089)*
Adjusted R-squared	0.017	0.013	0.009	0.009
	Panel B: Third order polynomial in distance from border			
East	0.152	0.168	0.301	0.341
	(0.082)**	(0.099)*	(0.136)**	(0.248)
	(0.071)**	(0.086)*	(0.119)**	(0.270)
Adjusted R-squared	0.025	0.018	0.011	0.007
	Panel C: Third order polynomial in lat. and long.			
East	0.096	0.093	0.140	0.165
	(0.041)**	(0.045)**	(0.051)***	(0.062)***
	(0.035)***	(0.040)**	(0.047)***	(0.061)***
Adjusted R-squared	0.026	0.018	0.009	0.008
Counties	252	180	118	64
Observations	3,853	2,870	1,915	978
Mean y	0.704	0.707	0.703	0.694
Border segment F.E.s	YES	YES	YES	YES

This table shows the main estimates of Equations (1) to (3) ; specifically, it displays spatial RD estimates for progressively smaller bandwidths, using three different specification for the RD polynomial. The estimates indicate that the likelihood of reporting that career success is important is higher for women in East Germany. The dependent variable is *Job Success Important*, constructed using answers to the question on how important is career success for the woman's personal satisfaction. We group the answers "unimportant" and "not very important" under "0", and "very important" and "important" under "1". We estimate a linear probability model. The dummy East takes on the value of one if the respondent lived in East Germany in 1989. Robust standard errors in parentheses (below: clustered, allowing for arbitrary correlations within counties). Significance levels: 1% ***, 5% ** and 10% *

Table II

Job success is important: channels of regime influence on attitudes.

	(1)	(2)	(3)
Full Time Empl. 1989	0.104	0.099	0.103
	(0.019)***	(0.021)***	(0.019)***
	(0.019)***	(0.021)***	(0.019)***
Party Support		-0.006	
		(0.058)	
		(0.054)	
Satisfaction with Democracy			-0.013
			(0.011)
			(0.013)
Satisfaction with HH Income	0.002	0.002	0.002
	(0.003)	(0.004)	(0.003)
	(0.003)	(0.004)	(0.003)
Children in HH	-0.028	-0.032	-0.027
	(0.009)***	(0.010)***	(0.009)***
	(0.009)***	(0.011)***	(0.009)***
Protestant	0.011	0.013	0.014
	(0.018)	(0.020)	(0.018)
	(0.020)	(0.021)	(0.020)
Observations	1,856	1,582	1,853
Adjusted R-squared	0.377	0.328	0.375
Additional Controls	YES	YES	YES

In this table we investigate why the likelihood of reporting that career success is important is higher for women in East Germany. The evidence suggests an important effect of female employment, which significantly increased in East Germany following the regime change in 1945, on women's attitudes toward work. We find no evidence of an important role of propaganda in shaping attitudes. Sample is East German women. *Full Time Empl. 1989* is a dummy for full-time employment in 1989, i.e. the year before the dependent variable is measured. Ideology is measured in Column 2 with the variable *Party Support* and in Column 3 with the dummy variable *Satisfaction with Democracy*. The variable Satisfaction with Democracy takes a higher value, the larger is one's reported satisfaction with democracy; the dummy variable Party Support takes on value 1 if the respondent expresses support for the PDS (Party of Democratic Socialism), which was the successor of the SED (Socialist Unity Party of Germany), and ruled the GDR. While we control for all the demographic characteristics in table A.5 plus income of the household, we only show coefficients for those characteristics for which we find at least some evidence of a discontinuity at the border. Robust standard errors in parentheses (below: clustered, allowing for arbitrary correlations within counties). Significance levels: 1% ***, 5% ** and 10% *.

Table III

Job Success Important: the Role of Selective Migration During the Divided Years.

	(1) Women in East in 1949	(2)	(3)
		All women in 1990	
		Original Sample	East-West migrants coded as East-Germans
Moved E to W 49-55	-0.332 (0.078)*** (0.081)***		
Moved E to W 56-89	-0.180 (0.071)** (0.071)**		
East		0.146 (0.013)*** (0.015)***	0.132 (0.013)*** (0.015)***
Observations	2,015	5,058	5,058
Adjusted R-squared	0.015	0.023	0.019
N movers 49-55	42		
N movers 56-89	50		
Mean y	0.760	0.681	0.681

This table shows that our main finding from the analysis exploiting the German separation is not due to selective East-West migration during the divided years. The dependent variable is *Job Success Important*, constructed using answers to the question on how important is career success for the woman's personal satisfaction. We group the answers "unimportant" and "not very important" under "0", and "very important" and "important" under "1". We estimate a linear probability model. In column (1), we restrict the sample to women who lived in the East in 1949. The dummies *Moved E to W 49-55* and *Moved E to W 56-89* take on a value of one if a woman migrated from the East to the West during 1949-1955 or during 1956-1989, respectively. Women who did not migrate from East Germany compose the reference group. In column (2) and (3) we report OLS estimates on the entire sample of women. In column (3) we code the women who moved from East to West as if they lived in East Germany in 1989. The dummy East takes on the value of one if the respondent lived in East Germany in 1989. Robust standard errors in parentheses (below: clustered, allowing for arbitrary correlations within counties).Significance levels: 1% ***, 5% ** and 10% *

Table IV

Correlation between gender-role Attitudes of US Immigrants and Attitudes in their Source Country

VARIABLES	(1) Immigrants' attitudes 1990	(2) Immigrants' attitudes 1945	(3) Immigrants' attitudes 1990
Average Home Country Attitudes	0.263**	0.015	0.391**
	(0.097)	(0.051)	(0.158)
Male	-0.081	-0.215***	-0.011
	(0.081)	(0.015)	(0.049)
Age	-0.072	0.002	-0.058**
	(0.047)	(0.004)	(0.022)
Age squared	0.001	-0.000***	0.001*
	(0.001)	(0.000)	(0.000)
Married	0.205**	-0.095***	0.233
	(0.070)	(0.023)	(0.145)
Satisfied with Financial Situation	-0.136	-0.017	-0.024
	(0.081)	(0.014)	(0.131)
Employed	0.221**	0.118***	0.360*
	(0.079)	(0.019)	(0.155)
Children	-0.063	-0.036***	-0.081
	(0.065)	(0.008)	(0.065)
Education (yrs)	0.076***	0.067***	0.024
	(0.009)	(0.002)	(0.017)
Politically Conservative			-0.093
			(0.053)
Household Income (categ.)			-0.011
			(0.031)
Mother's Education			0.022
			(0.044)
Father's Education			0.005
			(0.015)
Catholic			-0.337
			(0.227)
Protestant			-0.338*
			(0.151)
Jew			0.067
			(0.332)
Other Religion			-0.542*
			(0.263)
Observations	235	8,433	151
Adjusted R-squared	0.131	0.193	0.127
Regional and Generation Dummies	YES	YES	YES
Number of Countries	7	19	7
P-value CGM	0.000	0.658	0.066
Mean y	2.783	2.694	2.805
Mean Average attitudes home country	2.961	2.948	2.933
SD Average attitudes home country	0.212	0.202	0.228

In this Table, we document the extent to which gender-role attitudes among immigrants up to the fourth generation mirror those in their country of origin. The dependent variables are in (1) and (3) gender-role attitudes inherited by US immigrants in the period 1990; in (2) gender-role attitudes inherited by US immigrants in the period 1945. The dependent variables are constructed using the answers to the GSS question "Better for Man to Work, Woman Tend Home". The variable "gender-role Attitudes in home country" is the average level of gender-role attitudes in the source country of the US immigrants in the period 1990 and are obtained using the answers to the WVS question "Do you agree or disagree: husband and wife should both contribute to income". We only keep countries with more than 10 respondent to the GSS question in the relevant period. Reference group in Column 3: non-religious. Estimation method: OLS. Standard Errors clustered by country of origin in parentheses. "P-value CGM" is the p-value corresponding to Average attitudes home country" obtained using the bootstrap procedure the procedure developed by Cameron et al (2008). Significance levels: 1% ***, 5% ** and 10% *. Source : General Social Survey 1977-2012; World Values Survey wave 1990.

Table V

State-socialism and Attitudes Toward gender-role, Diff-in-Diff Estimation: Disagreement with
"Better for Man to Work, Woman Tend Home"

	(1)	(2)	Post-1945: 1945-1967 (3)	(4)
CEEC	0.121***	0.083***	0.122***	0.080***
	(0.024)	(0.026)	(0.024)	(0.027)
Post-1945	0.461***	-0.086*	0.489***	-0.071*
	(0.053)	(0.046)	(0.052)	(0.039)
CEEC x Post-1945	0.193*	0.323**	0.237*	0.357**
	(0.112)	(0.124)	(0.119)	(0.148)
Male	-0.156***	-0.220***	-0.157***	-0.221***
	(0.014)	(0.018)	(0.014)	(0.018)
Age		0.002		0.002
		(0.004)		(0.004)
Age squared		-0.000**		-0.000**
		(0.000)		(0.000)
Education (yrs)		0.050***		0.050***
		(0.003)		(0.004)
Married		-0.094***		-0.094***
		(0.016)		(0.016)
Household Income (Cat.)		0.033***		0.034***
		(0.004)		(0.004)
Satisfied with Financial Situation		-0.018*		-0.016
		(0.010)		(0.010)
Employed		0.120***		0.115***
		(0.025)		(0.025)
Children		-0.026***		-0.025***
		(0.009)		(0.009)
Mother's Education		0.002		0.003
		(0.005)		(0.005)
Father's Education		0.011***		0.011***
		(0.003)		(0.003)
Catholic		-0.162***		-0.159***
		(0.031)		(0.031)
Protestant		-0.235***		-0.237***
		(0.033)		(0.034)
Jew		0.021		0.055
		(0.081)		(0.083)
Orthodox		-0.173		-0.224
		(0.204)		(0.217)
Other Religion		-0.164*		-0.161*
		(0.084)		(0.085)
Politically Conservative		-0.111***		-0.111***
		(0.007)		(0.007)
Observations	8,846	6,083	8,707	6,002
Adjusted R-squared	0.048	0.229	0.049	0.230
Regional and Generation Dummies	YES	YES	YES	YES
Number of Countries	19	19	19	19
P-value cluster country	0.127	0.016	0.054	0.028
P-value cluster country CGM	0.270	0.018	0.082	0.014
Mean y	2.699	2.762	2.700	2.763
SD y	0.839	0.828	0.840	0.828

This table reports estimates of equation 7 , i.e. the main estimates for our comparisons of
CEECs and WECs. In column 3-4 the "Post-1945" period is restricted to 1945-1967, i.e.
the sample for the "Post-1945" period includes first-generation immigrants who left Europe
between 1945 and 1967 and their descendants. Gender-role attitudes are measured by the
following question: *"Please tell me whether you strongly agree, agree, disagree, or strongly
disagree with the following statement. It is much better for everyone involved if the man is
the achiever outside the home and the woman takes care of home and family"*. We recode the
answers to this question, *"Strongly Agree"*, *"Agree"*, *"Don't Know"*, *"Disagree"*, and *"Strongly
Disagree"* as, respectively, 1, 2, 2.5, 3, and 4. Reference group in Column 2 and 4: non-
religious. Estimation method: OLS. Standard Errors clustered at country-period level in
parentheses. "P-value cluster country" is the p-value corresponding to "CEEC x post-1945"
obtained when clustering at country level. "P-value CGM" is the p-value corresponding to
"CEEC x post-1945" obtained clustering at country level and using the bootstrap procedure
developed by Cameron et al. (2008). Significance levels: 1% ***, 5% ** and 10% *.

Appendix (For Online Publication)

A.I Analysis exploiting the German separation: Further Information

A.I.i Measurement error in our running variable

As discussed above, we use distance from the border as running variable in the spatial regression discontinuity design. We use confidential information on the county where the respondent resides at the time of the interview, and we measure the Euclidean distance from the border of each respondent's county of residence centroid. The true value of distance might be measured with error.

If what matters for attitudes' formation is where an individual spent a large part of her life, rather than her location at the time of the interview, distance is measured with error for respondents who moved across counties shortly before the interview. One might suspect that this error is correlated with the initial location, and thus with the true value of distance, if individuals closer to the border were more likely to move further away from it, given the disruptions that the division of previously integrated areas might have caused. This would thus induce a bias in the estimate of the effect of distance, whose sign we cannot a priori determine, affecting also the consistency of the other estimated coefficients. To explore this potential issue we exploit some useful information available in SOEP. We start by dropping individuals who live in West-Germany at the time of the interview, but who report having lived in East-Germany before 1990, and vice-versa. Additionally, since SOEP respondents are asked in what year they moved to their current dwelling, we drop individuals who report having moved in the last five years (i.e after 1985); while having changed dwelling does not necessarily imply having changed county of residence, the sample we are left with necessarily includes only individuals who lived in the same county at least in the last five years. The geo diff-in-disc estimates on this sample are virtually unchanged with respect to our main estimates in Table I (results available upon request).

A.I.ii The "inner border"

This Section briefly discusses some background to the German "inner border".[66] After the German separation the GDR invested more and more effort into fortifying its border with the FRG, which served several purposes. First, the heavily guarded border was supposed to stop the migration of the East-Germans to the FRG, a phenomenon that was especially strong in the first decade of the GDR's existence (Rottmann, 2008, p.10). Further, by closing the borders in 1952 the GDR tried to force out its official recognition as a state (Schaefer, 2011, p.509). Last but not least, the strong border control had an ideological role as well as it was supposed to keep the influence of the capitalist West from reaching the citizens of the GDR and to protect them from western aggression (Ahonen, 2012, p.84).

It is important to note that border fortifications were present solely on the eastern side; the FDR did not place great emphasis on such activities. The GDR continually upgraded the initial fence, and protective measures were constantly modernized from 1952 up until the fall of the Berlin Wall. The fortifications ran along the total length of the border[67] and were very severe. The original setup consisted of a barbed wire fence followed by the Controlled Zone (10 meters wide), later came the 500m wide Security Zone, and then as an extra precaution the 5km wide Restricted Zone was established (Buchholz, 1994, p.57). Apart from the border guards only locals residing in these zones

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[66]For a longer overview, see Rottmann (2008)

[67]1381 km according to Rottmann (2008, p.14)

had access to these areas, and even for them movement was restricted. The border cut through roads, highways and railroads; several previously existing crossing points to West-Germany were thus completely shut down. Along some sections of the border minefields were installed starting from 1961.

These fortifications, combined with numerous other protective measures, were mostly successful in reaching the first of the above mentioned goals; they made the illegal migration to the FRG incredibly difficult in the countryside just as the Wall proved to be an effective way to diminish the number of escapes to the West in Berlin. However, the closing of the border had other direct effects on the lives of people who resided very close to it.

As mentioned before, the FRG did not protect its border with the GDR, people were allowed to go close to it. Nevertheless, this didn't diminish the negative effects of the border on either side of it. The safety measures and the closing of the roads in the GDR meant that previously operating trading connections were completely severed for decades. Since there was no regard for the interests of local communities, the border cut through villages, even houses (Rottmann, 2008, p.17), and separated previously smoothly cooperating neighboring localities which relied upon each other for various reasons (Schaefer, 2011).

This meant in some cases that people belonging to the same village now became citizens of two different countries and were not allowed to visit each other. In other cases villages lying close to the border or on the border in the GDR were destroyed and people from these areas were relocated to other parts of the country. Two major government-organized deportation waves took place in East Germany in the early 1950s and mid 1960s: some twelve thousand people were forced to move from the border regions to places chosen by the authorities (Rottmann, 2008, p.16). The deported individuals were considered to be politically unreliable thus dangerous to state security. These people were basically branded for life as at their new living location they were known as the enemies of the state.

For those who were not subjected to deportation or other types of relocation, life close to the border became difficult. These citizens needed special permits to move and work within the Restricted Zone (Rottmann, 2008, p.21) and were generally not allowed to visit other villages located there. Agricultural activity very close to the border was also monitored by the border troops and could be dangerous as mines were "often washed out by rains into farmers' fields", as Rottmann (2008, p.18) notes. Moreover, citizens were more closely monitored than anywhere else in the country in order to detect any signs of illegal border crossing intentions. The agents of the Ministry for State Security ('Stasi') were active all over the GDR but very close to the intra-German border their vigilance was even higher (Rottmann, 2008, p.21). Thus living just East of the border was psychically also demanding as people were aware of the higher level of surveillance focused on them.

In spite of all the measures the GDR took to cut communication along the intra-German border, at local level there were several attempts to create some measure of cooperation between villages and towns on the two sides of the fence. However, Schaefer (2011) shows that even low priority partnerships were impossible to create because of the interference of higher political interests in the local level negotiations.[68]

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[68]Schaefer (2011) illustrates the case of the Eichsfeld region which was cut in half by the border and so the everyday cooperation between its parts was broken. There were several attempts to revive this partnership which consisted, for instance, in "returning stray animals, regulation of waterways, and warnings in cases of fire along the border" (Schaefer, 2011, p.524); however, these attempts never succeeded. According to Schaefer the main reason of the failure was that the GDR tried to use these negotiations to force out the recognition of its state from the FRG. As the FRG wanted to avoid this at all cost, the local officials taking part on the meetings were instructed to behave in accordance with the higher political goals of their states which then made the agreement between the parties impossible. This

The closed border also had consequences related to trade. Redding and Sturm (2008) show evidence of a population decline in West German cities close to the intra-German border. The authorities of both German states started to offer some level of compensation to the inhabitants of the border regions (Buchholz, 1994; Redding and Sturm, 2008). In the FRG the subsidy for the border regions was more substantial and was directed to improvements in infrastructure and to revive businesses (Deutscher Bundestag, 1970) while in the GDR it was proportional to income and it was rather small (Buchholz, 1994, p.59).

Overall the localities very close to the intra-German border experienced special circumstances compared to the rest of their corresponding states. This is even more true to the Eastern part where border fortifications made everyday life particularly difficult. The fact that the Restricted Zone itself was accessible with special permits only and thus the population of this area was basically forming a separate entity within the GDR shows how different the life of people living here was from that of the other citizens of East Germany.

A.I.iii Exploiting exogenous spatial variation in the availability of West German TV

East German TV was "a drab mixture of political propaganda and Soviet-produced movies" (Bursztyn and Cantoni, 2015, page 1). Under the assumption that encouragement of women's work was part of the East German TV propaganda, more positive attitudes toward work among women who were more exposed to the East German TV channels would be suggestive that propaganda is a plausible mechanism behind the evidence in Section III.C.i. Unfortunately, we do not have information on heterogeneous reception of the national television in East Germany.[69] We thus develop an indirect measure of heterogeneous exposure to East German TV, based on a notion of "crowding out" from the West German one. We contend that individuals who had access to West German TV were less exposed to the GDR propaganda, since they were reached by alternative sources of information and entertainment, that, arguably, *reduced the time* spent watching the East German TV.

We thus presume that areas that did not receive the West TV were relatively more exposed to East German propaganda. Therefore, comparing these areas to those receiving West TV provides an indirect test of the effect of propaganda on women's attitudes toward work. We estimate the following regression (using the sample of East German women):

$$Y_i = \gamma_0 + \gamma_1 No\ West\ TV_c + \gamma_2 X_i + \varepsilon_i \qquad (9)$$

where the variable *No West TV$_c$* is a dummy for lack of predicted reception of West TV (based on a signal propagation model) in the individual's county of residence. *No West TV* is built starting from the municipality-level measure used in Bursztyn and Cantoni (2015) investigation of the effect of exposure to West German TV on the consumption behavior of East Germans. Bursztyn and Cantoni (2015) use a signal propagation model to predict the availability of West German television in the GDR as follows. First, they measure the TV signal for the whole territory of the former GDR, divided into a 1x1 raster. Based on this raster, they then calculate the level of TV signal strength for each municipality. [70] We first use their data to calculate the weighted (by municipality area) average signal at county level. We then follow their definition of treatment area, by considering as not-receiving West German TV (*No West TV*) the counties whose average TV signal strength

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in turn "worked to weaken cross-border religious, kinship, and economic networks, thus contributing to the process of German division" (Schaefer, 2011, p.534).

[69]Bursztyn and Cantoni (2015, p.6) report data suggesting that access to national TV channels was spatially homogeneous in the GDR.

[70]See their paper for a more detailed description of the measure of TV signal strength.

is lower than or equal to that of the city of Dresden. [71] As a result, the following counties are classified as not receiving West TV during the divided years: Bautzen, Dresden, Görlitz, Sächsische Schweiz-Osterzgebirge, Vorpommern-Greifswald, and Vorpommern-Rügen.

The results of this analysis (available upon request) are as follow. There is a positive and significant coefficient on *No West TV* in a regression where the dependent variable is the measure of East German women's attitudes toward work. However, since the areas that did not receive the West TV signal are in the North-East and South-East regions of the former GDR, the estimated coefficient for *No West TV* in equation (9) is likely biased, due to spurious correlation with distance from the border.[72] Following Bursztyn and Cantoni (2015), we thus augment equation (9), adding $Distance_c$, as defined in Section III.C.i, as a control; the coefficient on *No West TV* is halved, and it is no longer statistically significant. A concern arises from the possibility that, once the control for distance is added, not enough identifying variation is left to estimate the relation between the exposure to West TV and attitudes. In other words, since *Distance* and *No West TV* are highly correlated, if they both have an impact on attitudes, the effect of differential exposure to West TV might be hard to detect, once distance is controlled for, given that the former is more likely to be measured with error than the latter.[73] To explore this possibility, we restrict the analysis to individuals who live at a distance from the border larger than 100 Km. While in the original sample 88% of women receive West TV, and 12% do not, in this restricted sample 72% of women receive West TV, and 28% do not. In practice, although the distance between the "treated" and "control" units is reduced in this sample, there is still a substantial variation in treatment status. Nevertheless, the coefficient on *No West TV* is smaller than that in the baseline sample, and statistically insignificant. This suggests that the relation between exposure to West TV and attitudes is due to spurious correlation with distance from the border.

A.II   Comparison of CEECs and WECs: Further Information

A.II.i   Women's work in Western Europe after 1945

This Section briefly discusses some background to women's work in Western Europe.[74] While in CEECs changes in women's economic status after 1945 have occurred as part of a broader process of directed social change, in WECs these changes have occurred more spontaneously, "largely as the result of non-directed processes of modernization and secularization" (Wolchik, 1981, p.445). State-socialist countries and WECs differed the most in terms of women's opportunities and economic status during the first twenty years following WWII. On one hand females in CEECs contributed to building up their societies by joining the labor force. On the other hand in Western Europe there was a vast agreement that females – in particular those with children – belonged to the home rather than the labor market, and that males had the right to a breadwinner's wage, which could support a wife and dependent children (de Haan, 2012, p.93). In countries such as the Netherlands, UK and West Germany female workers were for the most part young and single (Pott-Buter, 1993; Simonton, 1998).

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[71]Ideally, one wants to classify municipalities based on a dummy variable for receiving or not the signal. However, as Bursztyn and Cantoni (2015) point out, the discontinuity of TV signal strength is fuzzy. They thus use the anecdotal evidence that Dresden was close to the signal discontinuity, and define a municipality as not receiving any West German TV if it had a signal strength weaker than or equal to that in Dresden.

[72]See Bursztyn and Cantoni (2015, page 28) for a map of the predicted West TV signal in East Germany.

[73]That distance from the border might have predictive power is confirmed by the fact that, in a regression of attitudes on distance and control variables in the sample of women who live in the part of East Germany receiving West television, the coefficient of distance is positive and 10% statistically significant.

[74]For a longer overview, see de Haan (2012).

Starting from the mid-1960s, independent women's organizations and informal groups started to actively sought change in most of Western Europe (Mazower, 2009; Wolchik, 1981). This in the context of and intertwined with changes in women's opportunities: both educational and employment levels of females started to increase around this period (de Haan, 2012, p.94-95). In certain countries, the debate sparkled by the women's movement has led to "governmental commitments to women's equality, as well as to increased public awareness of the need for gender-role change"(Wolchik, 1981, p.446). For instance, in 1970 the Dutch government did away with the rule that the husband was the head of the married couple, and in 1977 the West German government put an end to the clause which required husband's consent for a wife to work (Mazower, 2009; de Haan, 1998). Around the same time, governments in Nordic countries started to support more actively female employment outside the home with "an extensive array of family benefits, including maternal and paternal paid leaves and a network of municipal and licensed family day care facilities, which fall somewhat short of meeting the needs" (Kahne, 1992, p.285). Such state benefits however remained mainly absent in other WECs.[75]

Overall, while some Western governments, especially starting from the 1970s, have embraced change in women's opportunities and economic status as a formal policy objective, in no case their commitments have been as long-standing as those of the governments in CEECs, a point well-made by Wolchik (1981).

A.II.ii   Female employment, economic development and sex-ratios

In the years after the imposition of the state-socialist regimes, CEECs experienced an increase in female participation in economic activity outside the home (Berent, 1970; Wolchik, 1981; Fodor, 2002; de Haan, 2012). The available information also shows that during this period women generally have comprised higher shares of the labor forces in CEECs than in WECs.[76]

Table A.14 shows the number of women as a percentage of the labor force in CEECs and WECs for the period 1950-1978. It reports values from Table 3 in Wolchik (1981), a thorough study that combines data from both the International Labor Office and individual national institutes of statistics.[77] In her discussion of the available information on female participation during this period Wolchik (1981) reports the following:[78]

> Women's economic activity outside the home has increased greatly since the institution of socialist systems in Eastern Europe and the Soviet Union, and women currently comprise over 30% of the labor force in all socialist countries and above 45% in Czechoslovakia, Bulgaria, the GDR and the Soviet Union (see Table 3). Precise comparison of the participation of women in the labor force of Eastern and Western Europe or within groups of countries is difficult, due to national differences in the methods of reporting labor force statistics. As numerous scholars have noted, there are several sources of bias in the reporting of this information, including differences in the treatment of auxiliary family workers and part-time or seasonal workers; the reliability of

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[75]In the 1970s and 1980s female employment in western Europe kept rising, yet mostly in terms of part-time jobs (Lagrave, 1996, p.481-482).

[76]A similar picture emerges regarding female education. Women's role in the exercise of political power changed instead far less. Therefore, there is less difference in the degree to which females have attained equal representation in political elites in CEECs and WECs during this period (Wolchik, 1981).

[77]Wolchik (1981) sample includes also Albania, Bulgaria, Yugoslavia, Soviet Union and United States, which do not belong to our sample.

[78]The problems involved in the cross-country comparisons of women's labor force participation mentioned in the following passage from Wolchik (1981) are also discussed by the International Labor Office at http://laborsta.ilo.org/applv8/data/c1e.html.

national reporting units also varies (For a discussion of these problems, see Berent, 1970). Nonetheless, several types of information indicate that women in Eastern Europe and the Soviet Union are significantly more likely to be employed outside the home than are women of non-socialist countries considered. Since the labor force statistics presented for the socialist countries in Table 3 include only those persons employed for wages in the socialist sector, they exclude unpaid family workers, most of whom tend to be concentrated in private agriculture.[79] If we compare these figures with the proportions of women in Western labor forces, excluding unpaid auxiliary family workers, we find that women generally have comprised higher proportions of the labor forces in the socialist countries. Differences between the two groups of countries were greatest in the 1950s and 1960s.

Table A.15 shows per capita levels of GDP in CEECs and WECs in our sample for specific years dividing in equal intervals the period before and after 1945 (1900, 1922, 1945, 1967, 1990). A joint look at Table A.14 and Table A.15 suggests that economic development affects women's labor market outcomes in both sets of countries. Within the state-socialist group, the number of women as a percentage of the labor force is generally higher in the more developed nations (such as Czechoslovakia and East Germany) than in Romania. The values of this indicator are also generally higher in the more developed Western countries that in Italy and Spain. Nevertheless, the contrast between countries at different level of economic development is overshadowed by the contrast between state-socialist countries and WECs. Therefore in Romania the number of women as a percentage of the labor force in the mid-1970s is similar to that in such more developed countries as Belgium, West Germany and Norway. Another important differences between CEECs and WECs is that in the former group of countries most women are full-time workers, while in the latter many women work part-time.[80]

Table A.15 also shows GDP growth rates before and after 1945. It is instructive in particular to compare growth rates in 1922-1945 versus 1945-1967 for CEECs and WECs. The data indicate that CEECs did not experience a larger change in growth rates than WECs between the two periods closest (before and after) to the advent of state-socialism in CEECs. Table A.17 further compares CEECs and WECs in terms of sex-ratios. On average the sex-ratio dropped 3 p.p. in CEECs between 1930 and 1951, as opposed to a 2 p.p. increase in WECs. In Poland and Romania the drop is particularly large (5 p.p. and 3 p.p., respectively). As a robustness check, we have estimated the 4 specifications in Table V when dropping individuals from Poland and Romania, in order to check that these two particular countries are not driving the main results. The estimates (available upon request) are very similar to the ones for the full sample of individuals.

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[79]Footnote 4 in Wolchik (1981, p.453):

Information concerning the number of auxiliary family workers in Eastern Europe is not available after the early 1950s for most countries. That information which is available indicates that exclusion of such workers, who form a diminishing proportion of the labor force, does not change the proportion of women in the labor force greatly. If auxiliary family members are excluded, women in Poland, for example, comprised 30.5% of the labor force in 1950 and 39.9% in 1970; the latter figure is virtually identical to their proportion of the socialized labor force (40.0%) [...]

[80]See Wolchik (1981) for a detailed discussion. Table A.1 presents detailed data on trends in part-time and full-time employment in East and West Germany for the period 1950-90.

A.II.iii   Europe after WWII and the imposition of state-socialist regimes in CEECs

This Section briefly discusses some background to Europe after WWII and the imposition of Soviet rule in CEECs.[81] In both West and East Europe we focus mostly on countries in our sample.[82]

WWII brought incomparable levels of destruction and chaos in Europe. Around 40 million people died as a direct effect of the conflict. The share of noncombatants dead – perhaps half of the total – easily outweighed any previous wars (Mazower, 2009, p.213). Between 10 to 20% of the total populations of the Soviet Union, Poland and Yugoslavia died, 4 to 6% of the total populations in Germany, Italy, Austria and Hungary.

As reported by McMahon (2003, p.2)

> At war's end, much of the European continent lay in ruins. British Prime Minister Winston S. Churchill, in characteristically vivid prose, described postwar Europe as 'a rubble heap, a charnel house, a breeding ground of pestilence and hate'. Berlin was 'an utter wasteland', observed correspondent William Shirer, 'I don't think there has ever been such destruction on such a scale'. In fact, many of the largest cities of central and eastern Europe, suffered comparable levels of devastation; 90% of the buildings in Cologne, Dusseldorf, and Hamburg were gutted by Allied bombing, 70% of those in the center of Vienna. In Warsaw, reported John Hershey, the Germans had 'destroyed, systematically, street by street, alley by alley, house by house. Nothing is left except a mockery of architecture'. US Ambassador Arthur Bliss Lane, upon entering that war-ravaged city in July 1945, wrote: 'The sickening sweet odor of burned human flesh was a grim warning that we were entering a city of the dead'. In France, fully one-fifth of the nation's buildings were damaged or destroyed; in Greece, one-quarter. Even never-occupied Great Britain suffered extensive damage, principally from Nazi bombing, while losing an estimated one-quarter of its total national wealth in the course of the conflict. [...] Across Europe, an estimated 50 million of the war's survivors had been uprooted by the war, some 16 million of them euphemistically termed 'displaced persons' by the victorious Allies

The war not only devastated much of Europe, but the old international order as well. As pointed out by McMahon (2003, p.3)

> The Eurocentric international system that had dominated world affairs for the past 500 years had, virtually overnight, vanished. Two continent-sized military behemoths - already being dubbed superpowers - had risen in its stead, each intent upon forging a new order consonant with its particular needs and values. As the war moved into its final phase, even the most casual observer of world politics could see that the United States and the Soviet Union held most of the military, economic and diplomatic cards.

Towards the end of the war Britain and US were prepared to accept the fact that Soviet Union would exercise a major influence in CEECs. In November 1944 the 'percentages agreement' dividing the Central and Eastern European region and the Balkans into territories of predominant British or Soviet influence was tentatively ratified by Churchill and Stalin (McMahon, 2003, p.20). Lithuania had already been incorporated into the Soviet Union. In Poland and Romania the Soviets imposed

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[81]For a longer overview, see McMahon (2003) and Mazower (2009).

[82]Recall that the CEECs in our data are Czechoslovakia, Hungary, Lithuania, Poland and Romania (plus the GDR for the analysis exploiting German separation); the WECs are Austria, Belgium, Denmark, Finland, France, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, the UK (plus the FGR).

obedient governments. In Czechoslovakia and Hungary instead fairly open elections were initially permitted (McMahon, 2003, p.26). However, in February 1948, a Soviet-sponsored coup took place in Czechoslovakia. Around the same time, non-communist opposition was crushed in Hungary (McMahon, 2003, p.32). In May 1955 the Soviet Union consolidated the hold over the region with the formation of the Warsaw Pact. The alliance included Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland and Romania (McMahon, 2003, p.61).[83]

A.II.iv   Selection of countries in the GSS sample

The CEECs in the GSS used for the comparison with WECs include Czechoslovakia, Hungary, Lithuania, Poland and Romania. We now explain why our sample does not include other countries located in the Central and Eastern European region. We drop Germany, because immigrants in the GSS who report Germany as their country of origin may come from East or West Germany, and therefore they may or may not be "treated". For what concerns the remaining Soviet allies under the Warsaw Pact (Bulgaria) or other countries incorporated into the Soviet Union (Estonia and Latvia), there is no separate category for them in the GSS question "From what countries or part of the world did your ancestors come?". Descendants of immigrants from these countries are likely to end up in the residual GSS category other European", making it unfeasible for us to use their attitudes. We drop Yugoslavia from our sample for two reasons. First, because the Warsaw Pact did not include this country, due to the Tito-Stalin split in 1948, which "essentially came about because the Yugoslav would not accept the kind of Soviet domination of their internal affair which was becoming routine throughout the region" (Mazower, 2009, p.263). The second reason is the country's "early move towards a market socialist system" (Wolchik, 1992, p.120).

A.II.v   East-West Migration

This Section briefly discusses some background to East-West migration patterns, with a focus on flows from CEECs to the United States during the period 1945-1990. [84]

Overview   It is important to start by considering general patterns of East-West migration, since it is possible that before entering the United States, people leaving the CEECs that we use in our analysis migrated to a third country. Fassmann and Münz (1994a) describe three major factors explaining East-West migration before the Cold War. One is the Industrial Revolution, that began in the West and only later spread, slowly, to the East. The emergence of democratic systems in Great Britain, France and US, which were based on the principle of civil rights and a liberal attitude, was another decisive factor. The rise of violent nationalism in Eastern Europe, which forced religious and other minorities to emigrate also played an important role. Wallace (2002) notes that, traditionally, CEECs were places of emigration; since the nineteenth century, many millions left for new lives in the New World or in Western Europe, escaping poverty or persecution. Dietz (2004) also asserts that political repressions and ethnic persecutions contributed heavily to the mass emigration from Eastern Europe. Roughly 20 million people migrated from East to West Europe in 1945-50 (Table 1, Fassmann and Münz (1994a)). These include ethnic Germans, prisoners of war, and other displaced persons.

The Cold War and the Iron Curtain significantly reduced East-West migration, but did not bring it to a complete halt. The period 1950-1990 was characterized by distinct waves of migration, directly linked to political events or political bargaining between countries, as discussed in more

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[83]Albania would leave the Warsaw Pact in 1968.

[84]For a detailed survey, see Fassmann and Münz (1994a) and Fassmann and Münz (1994b).

detail below. Fassmann and Münz (1994a) report that an estimated 14 million people migrated in this period from East to West. The authors also note that the actual number must have been higher because cumulated data are only available for regular "emigrants".

Migration to the United States   Dietz (2004) notes that the major migration flow from Eastern Europe to the US began in mid-19th century. This was mainly driven by poverty and unemployment in the home countries, while there was a high demand for labor overseas. It is estimated that around 2.4 million people in 1851-1900 and 7 million in 1901-15 migrated to the US and Canada from Eastern Europe[85]. In contrast, the migration flows after World War I was mainly due to political and ethno-national reasons and was largely intra-European[86]. In general, the migrants fluxes from Eastern Europe to the United states slowed down considerably after War World I. With the new Immigration Act of 1924, the United States reduced the admission quotas for Eastern Europeans considerably. Only 1.7 million Eastern Europeans migrated overseas in 1919-39 (Dietz (2004)). The US experienced, in this period, a decline in immigration fluxes from pretty much all over Europe. Chiswick and Sullivan (1995) look at the administrative records of Immigration and Naturalization Services (INS) (United States), and notice that immigration greatly declined after World War I and was followed by low immigration during the 1930s and 40s. The difficulties of leaving Europe and the dangers of ocean transport during World War I, the restrictive legislation enacted in 1924, the Great Depression of the 1930s, and World War II all contribute to explain the decline in immigration from Europe to the United States.

Following World War II, and particularly following relaxation of immigration barriers in 1965 against Eastern and Southern Europeans, immigration in the US has increased. In the period 1950-92, about 700,000 East Europeans were admitted by the United States, which constituted 5% of all East-West migration in that period (including both political refugees and "regular" immigrants) (Fassmann and Münz, 1994a). [87]

Table A.16 shows the level and growth rates of the number of immigrants into the US from the CEECs and WECs that we use in our analysis, for 10 years intervals between 1930 and 1990. The years during and after World War II saw a decline in immigration to the US from CEECs (compared to the previous decade), whereas migration from WECs increased substantially. The minimum decline from the CEECs is for Czechoslovakia at 42%. This is consistent with the fact that most East-West migration in this period was intra-European. Conversely, the later decades saw a rise in the immigrants from the CEECs (except in the decade 1971-1980), and a continuing increase of those from the WECs, before their number started to decline in the 70s.

Countries of Origin (CEECs)

Poland   Between 1950 and 1992 about 15% of all European East-West migrants were from Poland (about 2.1 million). Most were ethnic Germans and others who could claim West German citizenship. As can be seen in Table A.16, Poland also had the largest number of migrants to the US among the CEEC countries that we use in our analysis, with the largest outflow being in 1980-90.[88]

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[85]These numbers include people migrating from the Russian Empire.

[86]These migrations were either organized by governments in order to avoid potential ethnic conflicts, or the results of ethnic groups migrating to their (former) homelands to escape discrimination Dietz (2004)

[87]In the census of 1970, more than 1.6 million first generational immigrants declared a birth place in Eastern Europe, many of whom had entered the US before 1950. This number dropped to just over 1 million in 1990. Also, many first emigrated to Israel or another third country before moving to the US.

[88]For a detailed overview of emigration from Poland see Fassmann and Münz (1994a), Korcelli (1994) and Stola (2001).

Hungary   Hungary's emigration can be divided into three major periods: before World War I, 1920-1948, and the Cold War years. The massive migration to the US during the first period was greatly reduced in the second one.[89] In the last period emigration was minimal except during the few months when the borders were open during the Hungarian Revolution of 1956 (Dövényi and Vukovich, 1994). This pattern can be seen in Table A.16, specifically with respect to migration to the US.[90]

Czechoslovakia   Similar to the other CEECs, emigration from Czechoslovakia declined after World War I. Post World War II, about 3.2 million ethnic Germans were ordered to leave the country (Fassmann and Münz, 1994a). During the 1948-89 period, major political changes in the country were followed by waves of emigration - the rise to power of the communists in 1948 and the Soviet army's occupation in 1968 (Drbohlav et al., 2009). Table A.16 shows a decline in the postwar period and a steady increase after 1960 of migrants to the US.[91]

Romania   Between 1960 and 1992, around 500,000 Jews emigrated to Israel and the US (Fassmann and Münz, 1994a). Though Romania, among the CEECs that belong to our sample, had the lowest emigration to the US in 1930-1970, towards the later decades of the century it sent the second highest number of migrants after Poland (Table A.16).[92]

Typology of migration   Fassmann and Münz (1994a) categorizes migration from Eastern Europe to the West in 1950-91 into three broad categories, which have emerged as well in the documentation that we have reported in the previous paragraphs.

Ethnic migration   More than 75% of East-West migrants are classified as ethnic migrants. However, this number is not necessarily precise, as many "ethnic" migrants were taking the opportunity to leave their home country for economic or political reasons. In many cases, their movement was the result of political negotiations and relations between sending and receiving countries. The most important groups are Jewish and ethnic German emigrants.[93]

Political Refugees and Asylum-Seekers   Political refugees and asylum-seekers constituted about 10% of the migrants. This type of migration was mostly observed in waves that were directly linked to political crises and conflicts. Reestablishment of the Iron Curtain between Hungary and Austria in 1956-57 (194,000 Hungarians), "Prague spring" in Czechoslovakia and subsequent military intervention by the Soviet Union and other Warsaw Pact countries in 1968-69 (160,000 Czechs), imposition of martial law and political persecution of the Solidarnosc movement in Poland in 1980-81 (250,000 Polish) are some examples.

Labor Migration   Only about 15% of all European East-West migrants can be classified as (regular or irregular) labor migrants (including dependent family members). Migration for economic

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[89]This was due to immigration restrictions in the US and to the troubled history of postwar central Europe.

[90]For a detailed overview of Hungarian migration refer to Dövényi and Vukovich (1994) and Hárs, Sik and Tóth (2001).

[91]For a detailed history of migration in Czechoslovakia see Drbohlav et al. (2009).

[92]For a detailed overview of emigration from Romania see Fassmann and Münz (1994a).

[93]In 1950-93, some 3 million ethnic Germans migrated to the FRG (mainly motivated by its Basic Constitutional Law which gave migrants of German origin privileged treatment). Of these 51.4% were from Poland and 17.5% from Romania.

reasons was very low due to the split between Eastern and Western Europe, that heavily reduced the flow of capital and labor between the two regions.[94]

A.III   Additional Figures and Tables

Figure A.1
East German political poster

Source Freier Deutscher Gewerkschaftrsbund (1954).

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[94]About 500,000 East European workers, followed by an unknown number of dependents were recruited by FGR and Austria. This number decreased in the following decades as a result of economic recession and restrictive measures.

Figure A.2
Germany's east-west border and counties centroids
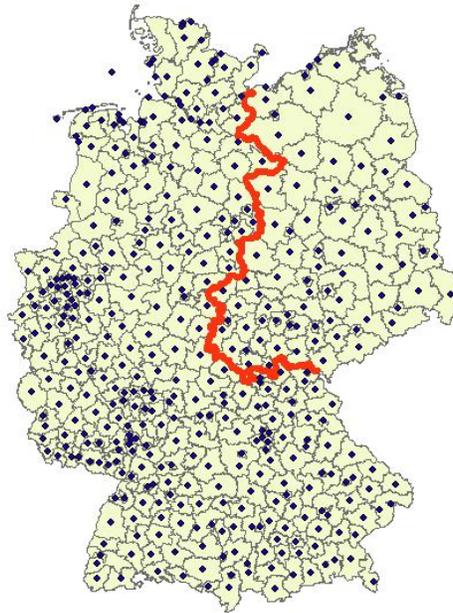
Note: This figure shows the east-west German border and the centroids of each of Germany's counties. We match GSOEP data, which report the county of residence of the respondent in 1990, to this map in order to calculate our measure of distance from the border.

Figure A.3
Job Success Important: men
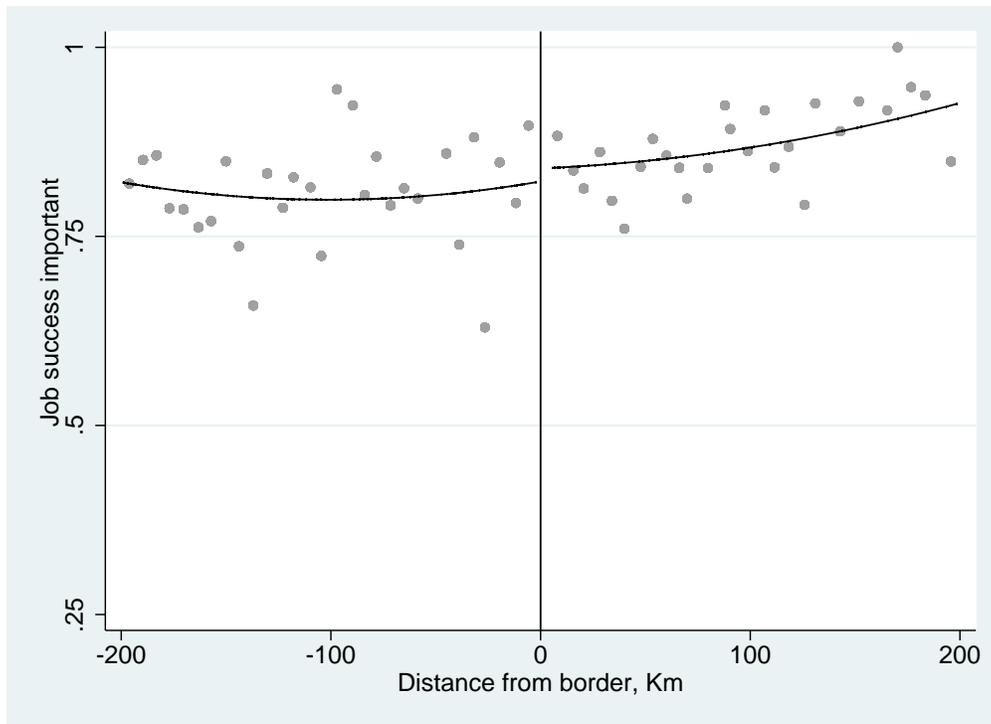
Note: the Figure shows bin-averages and second order polynomial fit for the men in GSOEP. See Figure I for more details.

Table A.1

Trends in part-time and full-time employment in East and West Germany: 1950-1989/90

	West Germany					East Germany[a]				
	Activity rate of women aged 16-60 (%)	Part-time workers as % of employees			Female full-time work-ers (%)	Activity rate of women aged 16-60 (%)	Part-time workers as % of employees			Female full-time work-ers (%)
		M	F	Total			M	F	Total	
1950	45	1	6	3		45				
1960	49	2	9	4	32	62				
1965/67		2	16	7	30		3	29	16	42
1970	50	2	24	9	28	66	3	33	18	43
1975		2	29	12	29	71	3	33	19	44
1980	53	1	29	12	30	73	3	29	17	46
1985		2	31	13	30	76	2	27	16	46
1990/89	60	2	33	14	33	78	2	27	15	45

Source: Schenk (2003). *a*. Excluding Employees of the so called 'x' sector (military, police etc.)

Table A.2
GSOEP, Main Estimation Sample

Variable	Mean	(Std. Dev.)	Min.	Max.	N
Job Success Important	0.695	(0.46)	0	1	3853
East	0.471	(0.499)	0	1	3853
Distance from Border	100.194	(58.106)	2.475	199.241	3853
Age	43.798	(17.547)	16	95	3853
Education (yrs)	11.202	(2.14)	7	18	3833
Satisfaction with HH Income	6.152	(2.408)	0	10	3810
Married	0.635	(0.482)	0	1	3852
Full Time Empl.	0.389	(0.488)	0	1	3853
Children in HH	0.614	(0.907)	0	5	3853
Catholic	0.209	(0.407)	0	1	3853
Protestant	0.456	(0.498)	0	1	3852
Other Christian	0.015	(0.122)	0	1	3852
Other Religion	0.001	(0.023)	0	1	3853
No Religion	0.32	(0.466)	0	1	3852
Satisfaction with Democracy	2.35	(0.696)	1	4	1811
Party Support	0.027	(0.163)	0	1	1540

Observations within a bandwidth of 200 km from the border. Sample for the variables "Satisfaction with Democracy" and "Party Support" is restricted to the East.

Table A.3
Successful at work important. Men

	(1) <= 200 km	(2) <= 150 km	(3) <= 100 km	(4) <= 50 km
East	0.022	0.030	0.040	0.048
	(0.028)	(0.033)	(0.041)	(0.058)
	(0.033)	(0.039)	(0.048)	(0.068)
Observations	3,689	2,732	1,840	956
Adjusted R-squared	0.004	0.002	-0.000	0.005
Mean y	0.832	0.832	0.830	0.833

Robust standard errors in parentheses (below: clustered, allowing for arbitrary correlations within counties).

Table A.4

Successful at work important. Donut Spatial RD

	(1) <= 200 km	(2) <= 150 km	(3) <= 100 km	(4) <= 50 km
East	0.075	0.088	0.118	0.210
	(0.037)**	(0.044)**	(0.059)**	(0.097)**
	(0.044)*	(0.052)*	(0.070)*	(0.127)
Observations	3,735	2,752	1,797	860
Adjusted R-squared	0.019	0.015	0.012	0.018
Mean y	0.703	0.705	0.701	0.687

In this Table we show estimates of Equation (1) excluding any observations located within 10 km from the border, in the spirit of a Donut RDD (Barreca et al., 2011) applied to our Spatial RD framework. Robust standard errors in parentheses (below: clustered, allowing for arbitrary correlations within counties).

Table A.5

Changes in observables: Coefficient estimates on the dummy East, listed by dependent variable

	(1)	(2)	(3)	(4)
	$<= 200km$	$<= 150km$	$<= 100km$	$<= 50km$
Age	-2.766	-2.888	-3.073	-4.637
	(1.312)**	(1.541)*	(1.960)	(2.885)
	(1.509)*	(1.672)*	(1.824)*	(2.265)**
Education	0.490	0.574	0.605	0.497
	(0.152)***	(0.178)***	(0.226)***	(0.331)
	(0.182)***	(0.205)***	(0.240)**	(0.326)
Satisfaction with HH Income	-1.544	-1.504	-1.467	-1.521
	(0.170)***	(0.198)***	(0.248)***	(0.363)***
	(0.170)***	(0.184)***	(0.209)***	(0.256)***
Married	0.071	0.075	0.086	0.106
	(0.034)**	(0.040)*	(0.052)*	(0.077)
	(0.038)*	(0.041)*	(0.047)*	(0.068)
Full Time Empl.	0.191	0.189	0.169	0.168
	(0.034)***	(0.039)***	(0.050)***	(0.076)**
	(0.037)***	(0.041)***	(0.049)***	(0.070)**
Children	0.277	0.346	0.393	0.396
	(0.064)***	(0.074)***	(0.096)***	(0.146)***
	(0.072)***	(0.075)***	(0.082)***	(0.117)***
Catholic	-0.132	-0.129	-0.104	-0.077
	(0.028)***	(0.033)***	(0.042)**	(0.067)
	(0.070)*	(0.081)	(0.100)	(0.173)
Protestant	-0.229	-0.214	-0.226	-0.239
	(0.035)***	(0.041)***	(0.052)***	(0.077)***
	(0.063)***	(0.071)***	(0.085)***	(0.128)*
Other Christian	-0.003	0.004	-0.000	-0.007
	(0.006)	(0.007)	(0.008)	(0.010)
	(0.006)	(0.007)	(0.008)	(0.010)
Other religion	0.001	0.002	0.001	-0.003
	(0.001)	(0.001)	(0.001)	(0.003)
	(0.001)	(0.002)	(0.001)	(0.003)

In this Table we estimate Equation (1) with the relevant demographic characteristics as dependent variables, thus studying directly whether there is any discontinuous change in them at the East-West border. The estimates are for the coefficient on the dummy East, listed by dependent variable. Robust standard errors in parentheses (below: clustered, allowing for arbitrary correlations within counties). The variable *Full time* takes value one for individuals who report to be in full-time employment. Summary statistics for all the variables are provided in Table A.2.

Table A.6

GSS Sample: Source Countries of US Immigrants

Country of family origin	Freq.	Percent
Belgium	58	0.350
Czechoslovakia	396	2.390
Denmark	235	1.420
Finland	147	0.890
France	659	3.970
Greece	120	0.720
Hungary	162	0.980
Ireland	4,207	25.36
Italy	1,734	10.45
Lithuania	89	0.540
Netherlands	505	3.040
Norway	599	3.610
Poland	883	5.320
Portugal	94	0.570
Romania	36	0.220
Spain	261	1.570
Sweden	565	3.410
UK	5,689	34.29
Total	16,592	100

This table reports the count of immigrants from each country. The GSS question on the country of origin reads: "From what countries or part of the world did your ancestors come?". The individual can list up to three countries by order of preference. We select the country of origin which the individual feels the closest to. The CEECs in our sample are in red.

Table A.7

GSS Sample Description

| | Panel A: Count of Immigrants | | | |
	CEECs, Bef	*CEECs, Aft*	*WECs, Bef*	*WECs, Aft*
Count of Immigrants	1463	81	14459	477
- 1st gen	3	27	15	178
- 2nd gen	359	39	883	164
- 3rd gen	661	14	2803	132
- 4th gen	440	1	10794	3
Respondents to:				
Better for Man to Work, Woman Tend Home	769	41	7772	264

| | Panel B: Summary Statistics | | | |
	Mean	*Std. Dev.*	*Min.*	*Max.*
Better for Man to Work, Woman Tend Home	2.7	0.84	1	4

The attitudinal variable is coded in such a way that increasing values denote less traditional attitudes about the appropriateness of a segregation of male and female roles, i.e. disagreement with the statement in the question. Specifically, gender-role attitudes are measured by the following question: *"Please tell me whether you strongly agree, agree, disagree, or strongly disagree with the following statement. It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of home and family"*. We recode the answers to this question, *"Strongly Agree"*, *"Agree"*, *"Don't Know"*, *"Disagree"*, and *"Strongly Disagree"* as, respectively, 1, 2, 2.5, 3, and 4. The analysis on the selection of immigrants uses the full sample. The analysis on the effect of state-socialism on attitudes uses the sample of respondent to the question Better for Man to Work, Woman Tend Home. Unfortunately, not all of the immigrants answered the question Better for Man to Work, Woman Tend Home, because it is only asked in certain years.

Table A.8

Inherited Gender-role Attitudes in 1945: Disagreement with "Better for Man to Work, Woman Tend Home"

Country of origin	(1)	(2)
UK ancestors: Reference		
Austria	0.063**	-0.058*
	(0.027)	(0.031)
Belgium	-0.107***	-0.454***
	(0.008)	(0.014)
Czechoslovakia	0.049**	0.138***
	(0.017)	(0.010)
Denmark	0.018***	0.000
	(0.005)	(0.007)
Finland	-0.124***	-0.020
	(0.018)	(0.015)
France	0.030***	-0.035***
	(0.003)	(0.004)
Greece	-0.063***	-0.152***
	(0.016)	(0.030)
Hungary	-0.007	-0.100*
	(0.027)	(0.051)
Ireland	0.073***	0.054***
	(0.004)	(0.006)
Italy	0.027	0.017
	(0.029)	(0.033)
Lithuania	0.250***	0.160***
	(0.037)	(0.050)
Netherlands	-0.034***	0.026***
	(0.005)	(0.006)
Norway	-0.001	0.029**
	(0.008)	(0.011)
Poland	0.094***	0.098***
	(0.026)	(0.025)
Portugal	0.027	0.048*
	(0.024)	(0.023)
Romania	0.199***	-0.017
	(0.024)	(0.067)
Spain	-0.005	0.023
	(0.006)	(0.014)
Sweden	-0.005	0.009
	(0.011)	(0.012)
Observations	8,503	5,885
Adjusted R-squared	0.193	0.233
Regional Dummies	YES	YES
Generation Dummies	YES	YES
Baseline Controls	YES	YES
Additional Controls	NO	YES

The dependent variable is the gender-role attitudes inherited by US immigrants from the period 1945. Gender-role attitudes are measured using the answers to the GSS question "Better for Man to Work, Woman Tend Home". Baseline controls (available for the full sample): male, age, education, marital status, satisfaction with the financial situation of the household, employment status, number of kids. Additional controls: income, mother's and father's education, religion and political views. OLS regressions with robust standard errors clustered at the country level. *** p<0.01, ** p<0.05, * p<0.1. Source: General Social Survey 1977-2014.

Table A.9

Selection of immigrants on observables: difference in changes between CEECs and WECs. OLS Estimates

DEP. VARIABLES	Male	Age	Education (Cat.)	Married	Household Income (Cat.)	Satisfied with financial situation	Employed	Children
CEEC x post-1945	0.056	3.127	0.586	0.076	0.010	-0.137*	0.015	-0.097
	(0.035)	(1.882)	(0.382)	(0.069)	(0.252)	(0.068)	(0.052)	(0.182)
Observations	16,516	16,516	16,504	16,514	15,091	15,632	16,515	16,487
Adjusted R-squared	0.001	0.143	0.035	0.005	0.017	0.005	0.036	0.029
Mean y	0.447	48.24	13.53	0.563	10.61	2.094	0.611	1.859

DEP. VARIABLES	Mother's Education	Father's Education	Catholic	Protestant	Jew	Orthodox	Other Religion	Politically Conservative
CEEC x post-1945	1.312**	0.814	-0.155	0.068	0.100***	-0.015	-0.011	-0.318*
	(0.581)	(0.844)	(0.155)	(0.119)	(0.031)	(0.016)	(0.029)	(0.170)
Observations	14,726	13,122	16,474	16,474	16,474	16,474	16,476	15,278
Adjusted R-squared	0.140	0.088	0.169	0.160	0.047	0.006	0.006	0.014
Mean y	11.43	11.33	0.283	0.565	0.0117	0.00170	0.0291	4.181

In this table we investigate the extent of differential selection on a rich set of observable variables. The Table shows coefficients and standard errors from OLS regressions of each individual characteristic on CEEC, post-1945, CEEC x post-1945, regional dummies and generation dummies. Standard Errors clustered by country-period (38). Results are very similar when clustering by country.

Table A.10

Selection of immigrants on observables: difference in changes between state-socialist and non state-socialist group. Within estimates.

DEP. VARIABLES	Male	Age	Education (Cat.)	Married	Household Income (Cat.)	Satisfied with financial situation	Employed	Children
CEEC x post-1945	0.066	1.639	0.320	0.070	-0.029	-0.137**	0.022	-0.095
	(0.040)	(2.366)	(0.401)	(0.072)	(0.261)	(0.059)	(0.057)	(0.224)
Observations	16,516	16,516	16,504	16,514	15,091	15,632	16,515	16,487
Adjusted R-squared	0.003	0.177	0.046	0.005	0.018	0.011	0.041	0.038
Mean y	0.447	48.24	13.53	0.563	10.61	2.094	0.611	1.859

DEP. VARIABLES	Mother's Education	Father's Education	Catholic	Protestant	Jew	Orthodox	Other Religion	Politically Conservative
CEEC x post-1945	0.982	0.344	-0.017	-0.029	0.053	-0.009	-0.002	-0.302**
	(0.595)	(0.766)	(0.056)	(0.052)	(0.054)	(0.007)	(0.015)	(0.147)
Observations	14,726	13,122	16,474	16,474	16,474	16,474	16,476	15,278
Adjusted R-squared	0.147	0.095	0.284	0.263	0.091	0.088	0.027	0.020
Mean y	11.43	11.33	0.283	0.565	0.0117	0.00170	0.0291	4.181

In this table we investigate the extent of differential selection on a rich set of observable variables. The Table shows coefficients and standard errors from within-country regressions of each individual characteristic on post-1945, CEEC x post-1945, regional dummies and generation dummies. Standard Errors clustered by country-period (38). Results are very similar when clustering by country.

Table A.11

GSS, Main Estimation Sample, Summary Statistics

Variable	Mean	(Std. Dev.)	Min.	Max.	N
Better for Man to Work, Woman Tend Home	2.703	(0.84)	1	4	8770
First Generation Immigrant	0.01	(0.101)	0	1	8770
Second Generation Immigrant	0.085	(0.279)	0	1	8770
Third Generation Immigrant	0.234	(0.424)	0	1	8770
Fourth Generation Immigrant	0.67	(0.47)	0	1	8770
Age	47.609	(17.473)	18	89	8770
Male	0.446	(0.497)	0	1	8770
Education (yrs)	13.615	(2.822)	0	20	8762
Married	0.54	(0.498)	0	1	8768
Household Income (Cat.)	10.73	(2.263)	1	12	7954
Satisfied with financial situation	2.093	(0.745)	1	3	8757
Employed	0.615	(0.487)	0	1	8769
Children	1.829	(1.668)	0	8	8752
Mother's Education	11.559	(3.272)	0	20	7842
Father's Education	11.529	(4.036)	0	20	6969
Catholic	0.286	(0.452)	0	1	8747
Protestant	0.553	(0.497)	0	1	8747
Jew	0.013	(0.113)	0	1	8747
Orthodox	0.002	(0.043)	0	1	8747
Other Religion	0.031	(0.174)	0	1	8748
Politically Conservative	4.172	(1.362)	1	7	8749

Table A.12

Disagreement with "Better for Man to Work, Woman Tend Home", Within Estimates

	(1)	(2)	Post-1945: 1945-1967 (3)	(4)
Post-1945	0.466***	-0.086	0.495***	-0.066
	(0.070)	(0.054)	(0.066)	(0.046)
CEEC x Post-1945	0.167	0.348**	0.236**	0.384***
	(0.107)	(0.129)	(0.106)	(0.126)
Male	-0.154***	-0.219***	-0.154***	-0.220***
	(0.014)	(0.018)	(0.014)	(0.018)
Observations	8,846	6,083	8,707	6,002
Adjusted R-squared	0.050	0.229	0.051	0.230
Regional Dummies	YES	YES	YES	YES
Generation Dummies	YES	YES	YES	YES
Additional Controls	NO	YES	NO	YES
Number of Countries	19	19	19	19
Mean y	2.699	2.762	2.700	2.763

SE clustered at country-period level in parentheses. In column 3-4 the "Post-1945" period is restricted to 1945-1967. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.13

State-socialism and Attitudes Toward gender-role, Diff-in-Diff Placebo Regressions: Disagreement with "Better for Man to Work, Woman Tend Home"

	(1)	(2)
CEEC	-0.107	0.163
	(0.186)	(0.150)
Post-1900	0.656***	0.204***
	(0.026)	(0.058)
CEEC x Post-1900	0.164	-0.082
	(0.204)	(0.161)
Male	-0.183***	-0.229***
	(0.016)	(0.019)
Observations	7,230	4,967
Adjusted R-squared	0.151	0.241
Regional Dummies	YES	YES
Generation Dummies	YES	YES
Additional Controls	NO	YES
Number of Countries	19	19
Mean y	2.697	2.759

In this table we run placebo regressions where we estimate our main equation using 1900 as the date of the imposition of state-socialist regimes in CEECs rather than the true date of 1945. SE clustered at country-period level in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.14
Women as a Percentage of the Labor Force

				Central and Eastern Europe						
Year			Chzecosl.	GDR	Hungary	Poland	Romania			
1950			38.4	38.4		33^c				
1960			42.8	44.3	32.5	32.8	27.1			
1970			46.7	47.7	40.6	40	30.1			
1974			47.8	49.4	42.6	42.1	34.0			
1978			45.3	50.1		43.8	36.2			

					Western Europe					
Year	Aust	Belg	Den	Finl	W.Ger	Italy	Norway	Spain	Sweden	UK
1950	31.7	22.5^a	27.4^c	32.5	28.6	23.1	24.1	14.2	26.7	30.8^b
1960	34.9^d	25.3	29.3	34.1	31.6^d	23.4	21.1	16.7	29.5	35.4
1970	35.8^e	28.4	33.8	39.7	32.3	26.1	26.2	18.8	36.7	37.0
1974	37.2	32.4	38.3	45.6^f	34.3	25.6	35.0^g		40.8	
1978	38.7	34.7	40.5	42.8^h	35.7	30.3	38.9	26.0	44.0	

This table shows the number of women as a percentage of the labor force in the state-socialist countries in our sample and other European countries, for the period 1950-1978. Source: Table 3 p.452 in Wolchik (1981), that is produced by the author combining data from both the International Labor Office and individual national institutes of statistics. Data for France, Greece, Ireland, Lithuania, Portugal, Netherlands are not reported in Wolchik (1981). West European figures exclude auxiliary family workers. East and Central European figures are for the socialized sectors of the economies only. a.1947 b.1951 c.1955 d.1961 e.1971 f.1973 g.1975 h.1976.

Table A.15

GDP per capita before and after 1945

Central and Eastern Europe						
Year	Chzecosl.	Hungary	Poland	Romania		Average
1900	1729	1682	1536	1415		1590.50
1922	2006	1811[a]	2117[b]	1258[c]		1797.88
	(16%)	(8%)	(38%)	(-11%)		(13%)
1945	3088[d]	1721[e]	2447[f]	816[g]		2018.00
	(54%)	(-5%)	(16%)	(-35%)		(12%)
1967	5964	4894	4103	2743		4426.00
	(93%)	(184%)	(68%)	(236%)		(119%)
1990	8513	6459	5113	3511		5899.00
	(43%)	(32%)	(25%)	(28%)		(33%)

Western Europe							
Year	Aust	Belg	Den	Finl	France	Greece	Ireland
1900	2882	3731	3017	1668	2876	1237	2736[h]
1922	2877	4413	4166	2058	3610	1963	2598
	(-0%)	(18%)	(38%)	(23%)	(26%)	(59%)	(-5%)
1945	1725	4333	5066	3450	2573	938	3019
	(-40%)	(-2%)	(22%)	(68%)	(-29%)	(-52%)	(16%)
1967	8297	9072	11437	7947	9907	4951	5352
	(381%)	(109%)	(126%)	(130%)	(285%)	(428%)	(77%)
1990	16859	17197	18452	16866	17647	10015	11818
	(103%)	(90%)	(61%)	(112%)	(78%)	(102%)	(121%)

Western Europe							
Year	Italy	Netherld	Norway	Portugal	Spain	Sweden	UK	Average
1900	1855	3329	1877	1302	1786	2083	4492	2490.79
1922	2231	4599	2678	1430	2284	3054	4637	3042.71
	(20%)	(38%)	(43%)	(10%)	(28%)	(47%)	(3%)	(22%)
1945	1609	2686	3980	1804	2102	5145	7056	3249.00
	(-28%)	(-42%)	(49%)	(26%)	(-8%)	(68%)	(52%)	(7%)
1967	7872	10341	9423	4481	5334	11219	10049	8263.00
	(389%)	(285%)	(137%)	(148%)	(154%)	(118%)	(42%)	(154%)
1990	16313	17262	18466	10826	12055	17609	16430	15558.21
	(107%)	(67%)	(96%)	(142%)	(126%)	(57%)	(63%)	(88%)

This table shows the GDP per capita levels (in 1990 Int. Geary-Khamis $) of CEECs and WECs in our sample for specific years before and after 1945. Growth rates from the immediately previous specified year is shown in parenthesis. Source: The Maddison-Project, http://www.ggdc.net/maddison/maddison-project/home.htm, 2013 version. Data for Lithuania and data for East and West Germany separately is not reported in the data source. The GDP value of the closest year available is reported here. *a*. avg(1919,1924) *b*. 1929 *c*. 1926 *d*. 1948 *e*. 1946 *f*. 1950 *g*. 1948 *h*. 1913.

Table A.16
US immigration data by country of last residence before and after 1945

Central and Eastern Europe								
Period		Chzecosl.	Hungary	Poland	Romania			**Total**
1931-1940		14393	7861	17026	3871			43151
1941-1950		8347	3469	7571	1076			20463
		(-42%)	(-56%)	(-56%)	(-72%)			(-53%)
1951-1960		918	36637	9985	1039			48579
		(-89%)	(956%)	(32%)	(-3%)			(137%)
1961-1970		3273	5401	53539	2531			64744
		(257%)	(-85%)	(436%)	(144%)			(33%)
1971-1980		6023	6550	37234	12393			62200
		(84%)	(21%)	(-30%)	(390%)			(-4%)
1981-1990		7227	6545	83252	30857			127881
		(20%)	(-0%)	(124%)	(149%)			(106%)

Western Europe								
Period		Aust	Belg	Den	France	Greece	Ireland	
1931-1940		3563	4817	2559	12623	9119	10973	
1941-1950		24860	12189	5393	38809	8973	19789	
		(598%)	(153%)	(111%)	(207%)	(-2%)	(80%)	
1951-1960		67106	18575	10984	51121	47608	48362	
		(170%)	(52%)	(104%)	(32%)	(431%)	(144%)	
1961-1970		20621	9192	9201	45237	85969	32966	
		(-69%)	(-51%)	(-16%)	(-12%)	(81%)	(-32%)	
1971-1980		9478	5329	4439	25069	92369	11490	
		(-54%)	(-42%)	(-52%)	(-45%)	(7%)	(-65%)	
1981-1990		18340	7066	5370	32353	38377	31969	
		(94%)	(33%)	(21%)	(29%)	(-58%)	(178%)	

Western Europe								
Period	Italy	Netherld	Norway	Portugal	Spain	Sweden	UK	**Total**
1931-1940	68028	7150	4740	3329	3258	3960	31572	165691
1941-1950	57661	14860	10100	7423	2898	10665	139306	352926
	(-15%)	(108%)	(113%)	(123%)	(-11%)	(169%)	(341%)	(113%)
1951-1960	185491	52277	22935	19588	7894	21697	202824	756462
	(222%)	(252%)	(127%)	(164%)	(172%)	(103%)	(46%)	(114%)
1961-1970	214111	30606	15484	76065	44659	17116	213822	815049
	(15%)	(-41%)	(-32%)	(288%)	(466%)	(-21%)	(5%)	(8%)
1971-1980	129368	10492	3941	101710	39141	6531	137374	576731
	(-40%)	(-66%)	(-75%)	(34%)	(-12%)	(-62%)	(-36%)	(-29%)
1981-1990	67254	12238	4164	40431	20433	11018	159173	448186
	(-48%)	(17%)	(6%)	(-60%)	(-48%)	(69%)	(16%)	(-22%)

This table shows the number of immigrants into the US from CEECs and WECs in our sample for specific intervals before and after 1945. Growth rates from the immediately previous specified period is shown in parenthesis. Source: Table 2 in Statistical Yearbook of the Naturalization Sevice, 2001. Data for Lithuania, Finland and data for East and West Germany separately is not reported in the data source.

Table A.17

Sex ratio for the age group of 25-54 before and after WW II

Central and Eastern Europe								
Year	Czecosl.[b]	Hungary[c]	Poland	Romania[f]				Average
1930	94.2	91.0	89.3	94.2				91.5
1951	97.6	90.0[d]	85.2[a,e]	91.5[a,e]				88.9
	(4%)	(-1%)	(-5%)	(-3%)				(-3%)

Western Europe							
Year	Aust	Belg	Den[h]	Finl[i]	France	Greece	Ireland[m]
1930	88.9[g]	98.6	93.0	92.3	91.8[j]	92.9[l]	105.7[j]
1951	81.9	100.0[a]	97.3	88.4	99.8[a,e,k]	92.6	103.7
	(-8%)	(1%)	(5%)	(-4%)	(9%)	(-2%)	(-2%)

Western Europe							
Year	Italy	Netherld	Norway	Portugal	Spain	Sweden[q]	UK[r]	Average
1930	88.6[n]	96.4	92.0	84.7[o]	93.3[p]	95.3	88.1	93.0
1951	94.9	96.3[a,k]	99.0[a,e]	90.7[a,e]	90.1[a,e]	100.6	96.6[k,s]	95.1
	(7%)	(0%)	(8%)	(7%)	(-3%)	(6%)	(10%)	(2%)

This table shows the sex ratio for the age group of 25-54 of CEECs and WECs in our sample for specific years before and after WW II. Growth rates from the immediately previous specified year is shown in parenthesis. Source when not indicated otherwise: United Nations, Demographic Yearbook 1949-50, p.137-159, Table 4., *a*: Source: UNSD Demographic Statistics, `http://data.un.org/Data.aspx?d=POP&f=tableCode%3A22`, *b*: The results are for the age group of 15-49 due to data restrictions, source: Czech Statistical Office, Czech Demographic Handbook - 2011,Table 1-10 Population by main age group: 1920 - 2011, 1 July, `https://www.czso.cz/csu/czso/czech-demographic-handbook-2011-ze6l5mbr32` *c*: Hungarian Central Statistical Office, Table 1.1.2.1 `http://www.ksh.hu/nepszamlalas/tables_regional_00`, *d*: 1949, *e*: 1950, *f*: The results are for the age group of 15-44 due to data restrictions, *g*: 1934, Statistics Austria, `http://www.statistik.at/web_de/downloads/webkarto/bevoelkerungspyramide_1869_2011/`, *h*: Statistics Denmark, Population and elections, Table HISB5: Mid-year population by sex and age (5 years age groups) (DISCONTINUED) `http://www.statbank.dk/statbank5a/default.asp?w=1366`, *i*: Statistic Finland's PX-Web Databases, Population according to age (5-year) and sex in the whole country 1865 - 2014, `http://pxnet2.stat.fi/PXWeb/pxweb/en/StatFin/StatFin__vrm__vaerak/120_vaerak_tau_105.px/?rxid= 28b33b93-cad2-4c81-a782-9ce39890f76e`, *j*: 1936, *k*: Estimate, *l*: 1928; Ministry of National Economy, General Statistical Service of Greece.(1935)Resultats statistiques du ecensement de la population de la Grece du 15-16 Mai 1928, p.ıζ, Table 7. `http://dlib.statistics.gr/portal/page/portal/ESYE/showdetails?p_id=10095547&p_derive=book&p_topic=10007862`, *m*: Central Statistics Office, Table CNA15: Population by Age Group, Sex, Year and Statistic, `http: //www.cso.ie/px/pxeirestat/statire/SelectVarVal/Define.asp?Maintable=CNA15&PLanguage=0`, *n*: 1931 from Istat, Table 2.2.1, `http://search.istat.it/search?q=census+1910+gender+age&submit.x=0&submit.y=0&output= xml_no_dtd&client=istat_fe_en&proxystylesheet=istat_fe_en&sort=date%253AD%253AL%253Ad1&oe=UTF-8&ie= UTF-8&ud=1&site=istat_en&ulang=hu&entqrm=0&entsp=a__istat_policy&wc=200&wc_mc=1&exclude_apps=1`, *o*: Statistisc Portugal, Censos - População de facto agrupada por idades - 1930, Vol. 2. p.4, Table 1. `https: //www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=72364315&PUBLICACOESmodo=2`, *p*: Insituto Nacional de Estadistica: Censo de 1930/ Tomo II. Resúmenes generales de la nación, Clasificación de los habitantes inscritos en la población de HECHO, por edades ano por ano, combinado con el sexo y estado civil, Resumen general de la Nación `http://www.ine.es/inebaseweb/pdfDispacher.do?td=194349&ext=.pdf`, *q*: Statistics Sweden, Swedish Population (in one-year groups) 1860–2014, `http://www.scb.se/en_/Finding-statistics/Statistics-by-subject-area/ Population/Population-composition/Population-statistics/Aktuell-Pong/25795/`, *r*: Due to data restrictions only England and Wales are included, *s*: United Nations, Demographic Yearbook 1952, p.146, Tale 4.,