

Are Men's Attitudes Holding Back Fertility and Women's Careers?

Evidence from Europe

Giulia Briselli* Libertad Gonzalez†

May 19, 2023

Abstract

We propose that men's resistance to increase their contribution to home production is an important factor holding back fertility as well as female employment in developed countries. We document a new stylized fact: a gender divergence in attitudes towards household chores over time. While women give more and more importance to the sharing of childcare and housework, men's views remain unchanged over time, leading to a growing gap in attitudes. This gap is in contrast with views regarding women's participation in the labor market, which have evolved in parallel for men and women over time. We then show that this divergence in attitudes is strongly correlated with fertility rates and with female labor participation rates, in cross-country and cross-cohort regressions. Fertility declines and low female employment are more pronounced in countries and cohorts where men report a stronger reluctance to share childcare and housework. Our results suggest that men's attitudes towards home production may be an important driver of both low fertility rates and persistent child penalties in labor market outcomes for women.

*Universitat Pompeu Fabra - Barcelona, Spain

†Universitat Pompeu Fabra & Barcelona GSE - Barcelona, Spain

1 Motivation

Women’s labor force participation has been rising across countries during the past several decades (Olivetti & Petrongolo 2016). In recent decades, female participation has stagnated, and large gender gaps in labor market outcomes remain (Blau & Kahn 2017, Kunze 2018). A large fraction of those remaining gaps have been shown to emerge after children¹, and many have linked these “child penalties” to women’s predominant role in childcare and household work, possibly linked to social norms (Kleven et al. 2019b, Bertrand 2020).

It is also well-known that European countries have experienced incomplete convergence of women with respect to men in labor market outcomes (Figure1), as well as declining marriage and fertility rates in the past decades (Figure2), leading to what Esping-Andersen (2016) calls “the death of the family”. Many factors can affect fertility rates, such as education, labor force participation and income, which are changing over time (Doepke et al., 2022). Feyrer et al. (2008) suggest that, as women’s labor force participation increases, fertility falls until men increase their contribution to the household, which would drive fertility to increase again. A similar argument is made by Esping-Andersen (2016), who notes that this development is however not “inevitable”. In fact, men’s contribution to childcare and housework has not kept up, and even in the most egalitarian countries, women face stark trade-offs between family and work (Lundborg et al. 2017, Bertrand 2020, Kleven et al. 2019, Angelov et al. 2016).

In this paper, we propose that men’s resistance to increase their contribution to home production is an under-appreciated factor holding back fertility, as well as female employment, in developed countries. We show that, as female labor force participation increased over time, women’s work became more socially acceptable among both men and women. Women also became more and more favorable to men and women sharing childcare and housework more equitably. However, we show that men’s attitudes towards sharing of home production did not change in parallel.

We thus propose that men’s stagnant attitudes regarding the sharing of household work and childcare are holding back women’s labor market outcomes, as well as fertility, as women struggle to balance their goal to have both a career and a family. We proceed as follows.

First, using data from the European Values Survey, we document a new stylized fact: a gender divergence in attitudes towards household chores over time. In particular, while

¹See for example Fernández-Kranz et al. (2014), Angelov et al. (2016), Lundborg et al. (2017), Kleven et al. (2019a), Bertrand (2020), Cortes and Pan (2020).

women give more and more importance to the sharing of childcare and housework, men's views remain essentially unchanged over time, leading to a growing gap in attitudes. This is in contrast with opinions regarding women's participation in the labor market, which have evolved in parallel for men and women over time.

Second, we show that this divergence in attitudes is strongly correlated with fertility rates in cross-country and cross-cohort regressions, where we control for country fixed effects, as well as age and cohort fixed effects. We find that fertility declines are more pronounced in countries and cohorts where men report a stronger reluctance to share childcare and housework. We also show that those same countries and cohorts, report lower rates of female employment. We propose that, when targeting low fertility and child penalties in labor market outcomes for women, changes in men's attitudes towards home production are needed.

We contribute to the literature that documents how gender norms affect economically relevant outcomes (Alesina, Giuliano & Nunn, 2011; Alesina, Giuliano & Nunn, 2013; Bertrand et al., 2015; Bursztyn et al., 2020; Fernández, Fogli & Olivetti, 2004; Giuliano, 2017; Giuliano, 2020). Fernández et al. (2004) show that the wives of men whose mothers worked are significantly more likely to work themselves, and suggest that men with a working mother have attitudes more supportive of working women. This implies that as more and more women work, this would result in positive intergenerational effects via men's attitudes. We argue that, in order for gender gaps in labor market outcomes to continue to decrease, as much as attitudes regarding working women are essential to reducing the gender gap, men's attitudes about sharing home production are also important, in order to alleviate women from the double burden of work and family life.

Bertrand et al. (2015) document that couples try to avoid situations where the wife earns more than the husband: women with high potential earnings work less in the labor market and do more housework, while couples where the wife is earning more are more likely to divorce. This is attributed to an aversion to violating the male-breadwinner norm, to which couples tend to adjust. In this paper, we suggest that those family-related norms may be evolving differently for women and men, and that the difference in the evolution of these norms affects family formation as well as labor market decisions.

We also contribute to the stream of the literature that documents the determinants of gender gaps in labor market outcomes (Blau & Kahn, 2017; Cools, Markussen & Storm, 2017; Gallen et al., 2019; Goldin, 2006; Goldin, 2014; Kunze 2018; Olivetti and Petrongolo, 2016; Markussen & Storm, 2022) and the determinants of changes in fertility (Adsera,

2005; Ahn & Mira, 2002; Becker, 1992; Butz & Ward, 1979; Del Boca, 2002; Doepke & Kindermann, 2014; Doepke et al., 2022; Feyrer et al., 2008; Kearney & Wilson, 2018). Doepke et al. (2022) speak of a new era in the economics of fertility, in which the negative relationship between income and fertility, and the negative relationship between women's labor force participation and fertility, no longer hold universally. They highlight four factors that facilitate combining a career with a family: family policy, cooperative fathers, favorable social norms, and flexible labor markets. In line with this argument, we believe that more attention should be paid to the role of men's contribution to household work, as this may be a key factor influencing fertility decisions for women.

Feyrer et al. (2008) argue that there are three distinct phases generated by the gradual increase in women's workforce opportunities: in the first phase, women earn low wages and are expected to do all the housework and childcare; in the second phase, labor market opportunities of women have improved, but they remain lower compared to those of men and they are still predominantly in charge of childcare and household production; in the third phase, women labor market opportunities equal those of men and there is higher male participation in household production, which lowers women's burden and rises fertility rates. They conclude the paper with an optimistic take, stating that fertility trends in high-income and low-fertility countries will reverse. In contrast to this optimistic view, our analysis suggests that high-income countries may be trapped in the second phase, because of men's reluctance to taking responsibilities for childcare and home production, hence holding back the possibility for fertility trends to reverse.

Arpino et al. (2015) use developed European countries to explore whether attitudes in support of men's and women's equal right to paid work are associated with fertility trends at the country level. They propose that, to be positively associated with fertility, gender-equitable attitudes must not only be strongly present overall, but also similarly diffused among women and men. In line with this argument, we argue that rather than the overall opinion on gender roles, fertility decisions closely relate to how much men's attitudes match with those of women and as a result, fertility rates remain low in countries where the gender gap in attitudes is higher. Differently from Arpino et al. (2015), we show that rather than attitudes towards female employment, it is the gender gap in attitudes towards the division of labor in the household that holds back fertility. Moreover, we document changes in attitudes across cohorts, while controlling for age and year effects, which we argue is more relevant than the country-year correlations shown before.

We thus propose a mechanism that contributes to low marriage and fertility rates as

well as important gender gaps in labor market outcomes in developed countries. Men’s reluctance to sharing housework more equitably has created a growing divergence in attitudes over time between the genders, as women struggle to combine work and family. We argue that this gender divergence in attitudes is driving fertility down, along with female labor market outcomes.

2 The Growing Gap in Attitudes Between Women and Men

In the first part of our analysis, we document a growing gap in attitudes between women and men, related to family responsibilities in the household. To document the gender gap in attitudes, we use data from the European Values Study of 2008. Figures 3 - 5 show the average opinion of respondents on issues related to family and gender roles, by gender and age group. Respondents were divided by gender and into six age groups, from the oldest cohort on the left (people of age 60 or older) to the youngest on the right (people of age 20 or younger).

Figure 3 and 4 are related to views on family roles in the household: Figure 3 plots the average opinion on “How important is sharing housework for a successful marriage” and Figure 4 plots the average opinion on “Men should take the same responsibilities as women for childcare”. Figure 5 plots instead the average opinion on issues related to social norms outside of the household: “A pre-school child is likely to suffer if his/her mother works”.

All three figures were made using data collected by the European Value Survey 2008 and for each statement, a higher value corresponds to a more gender-progressive view. Compared to Figure 5, Figure 3 and 4 have a pattern in common: as generations get younger, women’s opinion becomes more and more progressive, while men’s view remains almost unchanged. This pattern highlights a divergence over generations between genders: women demand more participation in household-related activities such as house chores and childcare, but men are reluctant to accept and address this responsibility. On the other hand, Figure 5 presents a very different situation: both men and women have become more progressive on issues related to the role of women outside of the household and there seems to be no divergence over generations ².

These figures suggest that, while there is general acceptance of women’s participation in

²Figures 9, 10 and 11 in the appendix provide additional evidence of this divergence, using data from the International Social Survey Program (ISSP) of year 2002.

the labor market, women demand that men take more responsibilities in activities related to the household, but men appear to be reluctant to embrace this view.

We propose that men’s resistance to increase their contribution to home production is an under-appreciated factor holding back fertility and marriage, as well as female employment, in developed countries. We have shown that, as female labor force participation increased over time, women’s work became more socially acceptable among both men and women. Women also became more and more favorable to men and women sharing childcare and housework more equitably. However, men’s attitudes towards sharing of home production did not change in parallel.

We propose that men’s stagnant attitudes regarding the sharing of household work and childcare are holding back women’s labor market outcomes, as well as fertility and marriage, as women struggle to balance their goal to have both a career and a family. We probe this hypothesis in the next section.

3 Empirical Strategy

3.1 The Divergence in Attitudes Between Women and Men

To document the divergence between women and men in their views on housework sharing, we estimate the following regression equation:

$$Attitudes_{i,c,t} = \beta_1 Female_i + \sum_{\tau=2}^{\tau} \beta_{\tau} Cohort \times Female_i + \phi X_{i,c,t} + \delta_{\tau} + \delta_c + \gamma_t + \epsilon_{i,c,t} \quad (1)$$

where $Attitudes_{i,c,t}$ measure the gender attitudes for respondent i , in country c and survey year t ; $Female$ is a dummy variable for female respondents, $Cohort$ are indicators for 6 Birth Cohort (1=born in 1950, 2=born in 1950s, 3=born in 1960s, 4=born in 1970s, 5=born in 1980s, 6=born in 1990); $X_{i,c,t}$ controls for Age and Age^2 . δ_{τ} are cohort dummies. δ_c , γ_t are country fixed effects and survey year fixed effects (respectively). $\epsilon_{i,c,t}$ is the error term. We pool together different waves of the survey to separate cohort effect from age effect. The coefficient of interest is β_{τ} , the interaction between the indicator for female respondents and the indicators for the different birth-year cohorts. The omitted category is the oldest cohort of respondents. The cohort dummies alone illustrate how the opinion of men changes over generations, compared to the oldest cohort of men. Hence, the interaction of these cohort indicators with the female dummy tells us whether for each cohort, women’s view differs

from that of men. If the coefficients are positive, women’s views are more progressive than that of men and if they are negative, they are more conservative. In terms of magnitude, if the coefficient of the interaction increases over the different cohorts, then the distance in the opinions between women and men becomes larger over time, and this would indicate a growing divergence in attitudes between genders.

We then use a second specification to document the divergence in attitudes related to home production, between men and women over generations. In this specification, we include a linear variable for year of birth, instead of using the set of dummies for different cohorts:

$$Attitudes_{i,c,t} = \beta_1 F_i + \beta_2 YBirth_{i,c,t} + \beta_3 F_i \times YBirth_{i,c,t} + \phi X_{i,c,t} + \delta_c + \gamma_t + \epsilon_{i,c,t} \quad (2)$$

where $Attitudes_{i,c,t}$ measures the gender attitudes for respondent i , in country c and survey year t , F_i is the indicator for female respondents, $YBirth_{i,c,t}$ refers to the birth year of respondent i , in country c and survey year t , taking value equal to 1 for the earliest year of birth and a value equal to 105 for the latest year of birth. $F \times YBirth_{i,c,t}$ is the interaction of the indicator for female respondents and the linear variable of birth year. $X_{i,c,t}$ controls for Age and Age^2 and δ_c , γ_t = are country fixed effects and survey year fixed effects. The coefficient of interest, which gives information on the gender divergence, is β_3 : a positive coefficient will highlight that women’s views are more progressive than those of men of the same year of birth, while a negative coefficient would indicate that women’s view is more conservative than that of men.

3.2 Linking the Gender Divergence to Fertility and Female Employment

For the second part of the analysis, we document the relation between the divergence in gender roles within the household and fertility, marriage, and labor force participation rates. We aggregate data at the country-age cohort-survey year level and we estimate the following regression:

$$Y_{c,\tau} = \alpha + \beta_1 Gap_{c,t,\tau} + \beta_2 AttitudeW_{c,t,\tau} + \phi X_{c,t,\tau} + \gamma_{c \times t} + \delta_\tau + \epsilon_{c,t,\tau} \quad (3)$$

Where $Y_{c,\tau}$ is fertility rate (or female labor force participation rate) in country c and cohort τ . $Gap_{c,t,\tau}$ is the Gender Gap in attitudes on Housework Sharing for country c ,

survey year t and cohort τ . $AttitudeW_{c,t,\tau}$ is the average attitudes of women on Housework Sharing. $X_{c,t,\tau}$ controls for gender gap and average attitudes of women on women’s paid work. $\gamma_{c \times t}$ is the interaction of country fixed effects and survey year fixed effects. δ_τ are cohort fixed effects. Finally, $\epsilon_{c,t,\tau}$ is the error term. The coefficient of interest is β_1 : a negative coefficient would point at a negative correlation between the gap in attitudes and fertility (or female employment).

We control for the average attitude of women with respect to the sharing of housework, and we also control for both the level and the gender gap in attitudes regarding women’s employment (agreement with the statement “A child is likely to suffer if his/her mother works”). We are thus controlling for aggregate attitudes towards gender (or the degree of “gender progressiveness”), and focusing on the partial correlation between fertility and the gap between men’s and women’s views on housework sharing.

4 Data

To measure the divergence and the gender gap in family values across generations, we use data for a sample of European countries from three waves of the European Value Study (EVS): 1999 (33 countries), 2008 (46 countries) and 2017 (34 countries).

In particular, we use respondents’ opinion to the question “How important is sharing housework for a successful marriage?”. Respondents answer by giving the level of importance, with a value equal to 1 that means “not important”, a value equal to 2 that means “rather important” and a value equal to 3 for “very important”. We also use statements related to women’s paid work, to make sure that the divergence across generations and the gender gap in opinions is related only to the within-household responsibilities, and not also to other views related to gender norms. The statements on women’s paid work that we use, ask respondents to give their opinion on whether “A child is likely to suffer if his/her mother works”, and whether “What women really want is a home and children. For these two statements, respondents have to say whether they 1 “strongly agree”, 2 “agree”, 3 “disagree”, 4 “strongly disagree”. For all cases, a higher value corresponds to a more progressive view and a lower value to a more conservative/gender inegalitarian one.

To investigate whether a higher gap in gender norms is correlated with lower fertility and female employment rates, we use data from the World Bank on Total Fertility Rates (TFR) and on Female Labor Participation Rate (over women of age 15-64), by country and year.

In a preliminary analysis, we use data on fertility and female employment for years 1999, 2008 and 2017, to match the three EVS waves, in order to look at the gender trends in the gender gap in family values at the country level³. Then, to study the correlation at the cohort-country level, we use the fertility rates and female labor force participation rates, which relate to the period in which respondents of each cohort were at age 36-35 (period in which they were more likely to have given birth). Hence, we use TFR in year 1985 of a certain country for respondents from that country, born in years 1950-59; we use TFR in year 1995 for respondents born in years 1960-69, TFR in year 2005 for respondents born in years 1970-79 and TFR in year 2015 for respondents born in years 1980-89. In the same way, we use the data for female labor force participation, with the exception of the cohort born in the 1950s, as the earliest year available for FLFP is 1990 and not 1985.

The variable measuring the gender gap in attitudes, is built by collapsing respondents' attitudes at the country-cohort-wave level and by gender. We obtain our "Gap" variable, by taking the difference in values between women and men at the country-cohort-wave level, for which a positive value corresponds to women having a more progressive view compared to men, while a negative value corresponds to men having a more progressive view than women do.

5 Results

5.1 Gender Divergence in Attitudes

In this paper we study gender gaps in attitudes related to home production, in particular to housework sharing and childcare, and we empirically analyze whether these gaps are negatively correlated with fertility rates and female employment. We first document the divergence in social norms within the household between women and men. Regression (1) regresses respondents' attitudes on a dummy for female respondents, a set of dummies for different birth-year cohorts and the interactions between these two, controlling for age and country fixed effects. The interactions between the female dummy and the cohort dummies are those telling whether there is a gap in gender attitudes between women and men, which are plotted in Figure 6. The figure compares the coefficients obtained from three different regressions, of which only one (in red diamonds) relates to attitudes towards home production: the view on the importance of housework sharing. The other two re-

³For this particular analysis, we do not use the cohort dimension, but only the country-year dimension

gressions (coefficients plotted in dark blue circles and in light blue squares) instead uses attitudes towards women’s paid work as dependent variable. For each cohort, the coefficients are positive and statistically significant only for attitudes on housework, suggesting that compared to men, women demand more equality in housework sharing. Moreover, the magnitude of the coefficients increases as cohorts are younger: this confirms that the gender gap in attitudes increases and becomes stronger over generations.

For the other two regressions, we use the opinion on whether a child suffers if his or her mother works, and the opinion on whether what women really want is a home and children. We use the same specification that was used for the opinion on the importance of sharing housework. If the divergence in attitudes was true also for this issue, the interaction terms between the female dummy and the cohort dummies should be positive, significant and increasing over cohorts. However, the coefficients plotted in Figure 6 for these two specifications, coefficients are negative and not statistically significant for the most part. This confirms that there is no divergence in values between genders when it comes to issues related to women’s paid work, this divergence relates only to the house production dimension.⁴

We then run regression (2), which uses a linear variable for year of birth instead of the set of cohort dummies. Table 1 reports the results. Column (1) presents results from regressing attitudes towards working mothers, column (2) presents results from regressing attitudes towards whether women really want a home and children and, column (3) presents results from regressing attitudes on the importance of sharing housework. The coefficient of interest is given by the interaction between the female dummy and the continuous variable for birth year, which is positive and significant only for column (3). This result confirms that there is a divergence in attitudes related to housework sharing over generations, between females and males. On the other hand, coefficients are much smaller in magnitude or not significant for the two specifications related to women’s paid work. These results confirm that the gender divergence is not related to gender norms in general, but only to norms

⁴Figures 12, 13, 14 in the appendix provide additional results for this analysis. Figure 12 plots coefficients obtained from the same specification as the one used for Figure 6, but respondents are divided into 8 different cohorts, instead of 4 cohorts (the 8 cohorts used in this specifications are: 1950-54; 1955-59; 1960-64; 1965-69; 1970-74; 1975-79; 1980-84, 1985-89). Figure 13 plots coefficients obtained by regressing attitudes coded as dummy variables, which take value equal to 0 for conservative responses and for value equal to 1 for progressive responses (in the case of housework sharing, a value equal to 0 corresponds to answers "not important" and "not very important" and a value equal to 1 for "very important"; for the other two attitudes, the dummies take value equal to 0 if respondents’ answers are either "strongly agree" or "agree" and they take value equal to 1 if respondents "disagree" or "strongly disagree". Figure 14 plots the coefficients obtained by regressing values coded as dummies on the interaction between female respondents and 8 cohorts.

related to the sharing of home production. ⁵

5.2 Gender Gap in Attitudes, Fertility and FLFP

For the second part of the analysis, we test whether the gap in values is correlated with fertility and women’s employments. In Figure 7 we plot the total fertility rate (TFR) of each country included in the EVS waves for each survey year and the gender gap in the importance of housework sharing at the country level for the same years: 1999, 2008 and 2017. Total fertility rate is on the y-axis, and the average gap between females and males in the importance of housework sharing at the country level is on the x-axis. The figure suggests that there is a negative relationship between the gap in attitudes related to housework and fertility. We repeat the same exercise using data on female labor force participation (FLFP), as shown in Figure 8. Also for this case, it appears that there is a negative relationship between the gender gap in attitudes and FLFP, although it seems to be less strong than the one with TFR. However, this exercise does not include the cohort dimension, which is included in the following analysis.

We run regression (3) to better investigate the correlation between the gender gap in family views, fertility and female employment. The dependent variable is the country’s fertility rate (or female labor force participation rate) for the year in which the cohort of the respondents were at age 26-35: for each country, we regress the outcome variable (either TFR or FLFPR) in year 1985 for the cohort born between 1950 and 1959, in year 1995 for the cohort born in years 1960-1969, in year 2005 for the cohort born in years 1970-1979 and finally the in year 2015 for the cohort born between 1980 and 1989. The explanatory variable is the gap in the opinion on the importance of sharing housework for a successful marriage, at the country-cohort-wave level. We include in the regression cohort fixed effects and the fixed effects for the interaction of country and survey year. We also add a control for the average attitude of women with respect to the sharing of housework. Then, in a third and fourth steps we also control for the level and the gender gap in attitudes related to women’s employment (disagreement with the statement “A child is likely to suffer if his/her mother works” and “What women really want is a home and children”).

The results of regression (3) are presented in Table 2 for fertility and in Table 3 for female labor force participation. For both tables, column (1) shows the results without controls.

⁵We repeat the analysis using dummy values for measuring attitudes: results are presented in Table 4 in the appendix. We also provide additional evidence complying with our results, by repeating this analysis using data taken from ISSP (2002) and GSS (2002). Tables 5, 6 and 7 show the results.

In column (2) we add the control for the average opinion of women in terms of importance of sharing housework: the coefficients become negative and significant for both tables, and it remains so after adding the additional controls in columns (3) and (4). The higher the gender gap in the importance of sharing housework, the lower are both fertility and female labor force participation ⁶.

The empirical analysis suggests that there is a negative relationship between the gender gap in views related to house production responsibility and both fertility and female labor force participation rate. The results suggests that countries and cohorts which report higher gender gaps in attitudes for sharing housework, are those experiencing lower fertility and lower employment for women. This is in line with our initial hypothesis and with the present literature studying the importance of cooperative fathers for boosting fertility rates: in the absence of cooperative partners, women respond by keeping fertility rates or employment low.

6 Conclusion

Through the use of survey data, we have shown that in European countries there is an increasing divergence between women and men, in the views on gender norms related to participation within the household. Women demand that men take more responsibility in housework and childcare, but men are reluctant to accept and share gender egalitarian attitudes in these terms. Our analysis shows that this divergence is present only for attitudes related to house production, while the same is not true for perspectives related to women working outside of the home.

We hypothesized that the divergence in attitudes affects outcomes such as fertility and women's career. In order to test this hypothesis, we use data on fertility rates and on female labor force participation rates at the country level, to run cross-country and cross-cohort regressions, where we control for country fixed effects, as well as age and cohort fixed effects. We have found that those countries and cohorts that experience higher gaps in attitudes related to housework sharing, are those that report lower rates of both fertility and women's employment.

Contrarily to what was predicted by Feyrer et al. (2008), we show that as long as

⁶We repeat these estimates using different specifications: 1) we divide the sample in more cohorts; 2) we code attitudes as dummies and 3) we use more cohorts and attitudes as dummies. We present the results in Tables 8, 9 and 10 for results on fertility and in Tables 11, 12 and 13 for results on female labor force participation

men's attitudes related to home production do not match those of women, economically relevant outcomes such as fertility are going to be affected negatively. However important, the general acceptance of women working in the labor market is not sufficient to close the gender gap: men's participation in terms of housework and childcare needs to increase in order to fight deterrents to gender equality such as the gender pay gap and child penalty.

References

Adsera, A., 2005. Vanishing children: From high unemployment to low fertility in developed countries. *American Economic Review*, 95(2), pp.189-193.

Ahn, N. and Mira, P., 2002. A note on the changing relationship between fertility and female employment rates in developed countries. *Journal of population Economics*, 15(4), pp.667-682.

Alesina, A., Giuliano, P. and Nunn, N., 2011. Fertility and the Plough. *American Economic Review*, 101(3), pp.499-503.

Alesina, A., Giuliano, P. and Nunn, N., 2013. On the origins of gender roles: Women and the plough. *The quarterly journal of economics*, 128(2), pp.469-530.

Angelov, N., Johansson, P. and Lindahl, E., 2016. Parenthood and the gender gap in pay. *Journal of labor economics*, 34(3), pp.545-579.

Arpino, B., Esping-Andersen, G. and Pessin, L., 2015. How do changes in gender role attitudes towards female employment influence fertility? A macro-level analysis. *European Sociological Review*, 31(3), pp.370-382.

Becker, G.S., 1992. Fertility and the economy. *Journal of Population Economics*, 5(3), pp.185-201.

Bertrand, M., 2020, May. Gender in the twenty-first century. In *AEA Papers and proceedings* (Vol. 110, pp. 1-24).

Blau, F.D. and Kahn, L.M., 2017. The gender wage gap: Extent, trends, and explanations. *Journal of economic literature*, 55(3), pp.789-865.

Bursztyn, L., González, A.L. and Yanagizawa-Drott, D., 2020. Misperceived social norms: Women working outside the home in Saudi Arabia. *American economic review*, 110(10), pp.2997-3029.

Butz WP, Ward MP (1979) The Emergence of Countercyclical U.S. Fertility. *American Economic Review* 69(3):318–28

Cools, S., Markussen, S. and Strøm, M., 2017. Children and careers: How family size affects parents' labor market outcomes in the long run. *Demography*, 54(5), pp.1773-1793.

Del Boca, D., 2002. The effect of child care and part time opportunities on participation and fertility decisions in Italy. *Journal of population economics*, 15, pp.549-573.

Doepke, M. and Kindermann, F., 2014. Intrahousehold decision making and fertility.

Doepke, M., Hannusch, A., Kindermann, F. and Tertilt, M., 2022. The economics of fertility: A new era (No. w29948). National Bureau of Economic Research.

Esping-Andersen, G., 2016. *Families in the 21st Century* (p. 113). Stockholm: SNS förlag.

Fernández, R., Fogli, A. and Olivetti, C., 2004. Mothers and sons: Preference formation and female labor force dynamics. *The Quarterly Journal of Economics*, 119(4), pp.1249-1299.

Feyrer, J., Sacerdote, B. and Stern, A.D., 2008. Will the stork return to Europe and Japan? Understanding fertility within developed nations. *Journal of Economic Perspectives*, 22(3), pp.3-22.

Gallen, Y., Lesner, R.V. and Vejlin, R., 2019. The labor market gender gap in Denmark: Sorting out the past 30 years. *Labour Economics*, 56, pp.58-67.

Giuliano, P., 2017. Gender: An historical perspective.

Giuliano, P., 2020. Gender and culture. *Oxford Review of Economic Policy*, 36(4), pp.944-961.

Goldin, C., 2006. The quiet revolution that transformed women's employment, educa-

tion, and family. *American economic review*, 96(2), pp.1-21.

Goldin, C., 2014. A grand gender convergence: Its last chapter. *American Economic Review*, 104(4), pp.1091-1119.

Kearney, M.S. and Wilson, R., 2018. Male earnings, marriageable men, and nonmarital fertility: Evidence from the fracking boom. *Review of Economics and Statistics*, 100(4), pp.678-690.

Kleven, H., Landais, C., Posch, J., Steinhauer, A. and Zweimuller, J., 2019, May. Child penalties across countries: Evidence and explanations. In *AEA Papers and Proceedings* (Vol. 109, pp. 122-26).

Kunze, A., 2018. The gender wage gap in developed countries. *The Oxford handbook of women and the economy*, pp.369-394.

Lundborg, P., Plug, E. and Rasmussen, A.W., 2017. Can women have children and a career? IV evidence from IVF treatments. *American Economic Review*, 107(6), pp.1611-37

Markussen, S. and Strøm, M., 2022. Children and labor market outcomes: separating the effects of the first three children. *Journal of Population Economics*, 35(1), pp.135-167.

Olivetti, C. and Petrongolo, B., 2016. The evolution of gender gaps in industrialized countries (No. w21887). National Bureau of Economic Research.

Tables

Table 1: Gender Divergence Over Cohorts

	(1) Disagree: Child suffers if mom works	(2) Disagree: Women want H&C	(3) Agree: Sharing housework is important
Fem	0.134*** (0.016)	0.077*** (0.015)	-0.090*** (0.013)
Birth Year	-0.0094 (0.0055)	-0.0050 (0.0054)	0.0203*** (0.0045)
Fem*Birth Year	-0.0004* (0.0002)	0.00008 (0.0002)	0.0022*** (0.0001)
Country FE	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
<i>N</i>	144,145	144,145	144,145
<i>r</i> ²	0.176	0.192	0.059

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the interaction between a dummy for female respondents and a continuous variable for Year of Birth (from 1898 to 2002). The regressions include controls for respondents' age. Data are taken from three waves of the European Value Study: 1999, 2008 and 2017. The sample includes a section of European countries. The 48 European countries included are: Albania, Armenia, Austria, Belarus, Belgium, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Northern Cyprus, Northern Ireland, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine. Robust standard errors in parentheses.

Table 2: Gender Gap in Family Values and Fertility - 4 birth cohorts

<i>Dep. Variable = Total Fertility Rate</i>	(1)	(2)	(3)	(4)	(5)
Gender gap “Sharing Chores”	0.123 (0.143)	-0.350* (0.167)	-0.376* (0.167)	-0.346* (0.168)	-0.377* (0.168)
Women’s attitudes “Sharing Chores”		1.089*** (0.216)	1.117*** (0.215)	1.091*** (0.217)	1.117*** (0.216)
Gender gap “Child suffers if mom works”			0.143 (0.126)		0.142 (0.136)
Women’s attitudes “Child suffers if mom works”			0.198 (0.147)		0.213 (0.175)
Gender gap “Women want h&c”				0.00590 (0.126)	-0.00436 (0.136)
Women’s attitudes “Women want h&c”				0.0829 (0.159)	-0.0261 (0.188)
Country*Survey Year FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
<i>N</i>	422	422	422	422	422
<i>r</i> ²	0.666	0.691	0.697	0.692	0.697

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the difference in attitudes between women and men about the importance of sharing housework in a marriage. The dependent variable is total fertility rate. Controls include (1) women’s average opinion about the importance of sharing housework, (2) the difference in attitudes between women and men about whether a child suffers if his/her mother works, (3) women’s average opinion about whether a child suffers in the presence of a working mothers, (4) the difference in attitudes between women and men about whether what women really want is a home and children and (5) women’s average opinion about whether what women really want is a home and children. Attitudes about family are taken from three waves of the European Value Study: 1999, 2008, 2017. Respondents are aggregated by country and birth-year cohorts. Birth year cohorts are: 1950-59; 1960-69, 1970-79; 1989-89. To each cohort corresponds the country’s total fertility rate of the year in which respondents were 30-35 years old. Total fertility rate (World Bank) from years 1985; 1995; 2005; 2015. All specifications include country*survey year fixed effects and cohort fixed effects. Robust standard errors in parentheses.

Table 3: Gender Gap in Family Values and FLFP - numerical values, 4 cohorts

<i>Dep. Variable = Female Labor Force Participation</i>	(1)	(2)	(3)	(4)	(5)
<i>Mean Dep. Variable = 0.622</i>					
Gender gap “Sharing Chores”	-0.0187 (0.026)	-0.125*** (0.031)	-0.126*** (0.032)	-0.125*** (0.031)	-0.125*** (0.032)
Women’s attitudes “Sharing Chores”		0.227*** (0.040)	0.229*** (0.040)	0.230*** (0.040)	0.229*** (0.040)
Gender gap “Child suffers if mom works”			-0.003 (0.023)		-0.005 (0.025)
Women’s attitudes “Child suffers if mom works”			0.014 (0.026)		0.003 (0.030)
Gender gap “Women want h&c”				0.013 (0.021)	0.015 (0.023)
Women’s attitudes “Women want h&c”				0.022 (0.028)	0.020 (0.033)
Country*Survey Year FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
<i>N</i>	412	412	412	412	412
<i>r</i> ²	0.865	0.877	0.878	0.879	0.879

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the difference in attitudes between women and men about the importance of sharing housework in a marriage. The dependent variable is total fertility rate. Controls include (1) women’s average opinion about the importance of sharing housework, (2) the difference in attitudes between women and men about whether a child suffers if his/her mother works, (3) women’s average opinion about whether a child suffers in the presence of a working mothers, (4) the difference in attitudes between women and men about whether what women really want is a home and children and (5) women’s average opinion about whether what women really want is a home and children. Attitudes about family are taken from three waves of the European Value Study: 1999, 2008, 2017. Respondents are aggregated by country and birth-year cohorts. Birth year cohorts are: 1950-59; 1960-69, 1970-79; 1989-89. To each cohort corresponds the country’s female labor force participation of the year in which respondents were 30-35 years old, with an exception for the cohort born in 1950-59, at 35-40 years old. Female Labor Force Participation rate (World Bank) from years 1990; 1995; 2005; 2015. All specifications include country*survey year fixed effects and cohort fixed effects. Robust standard errors in parentheses.

Figures

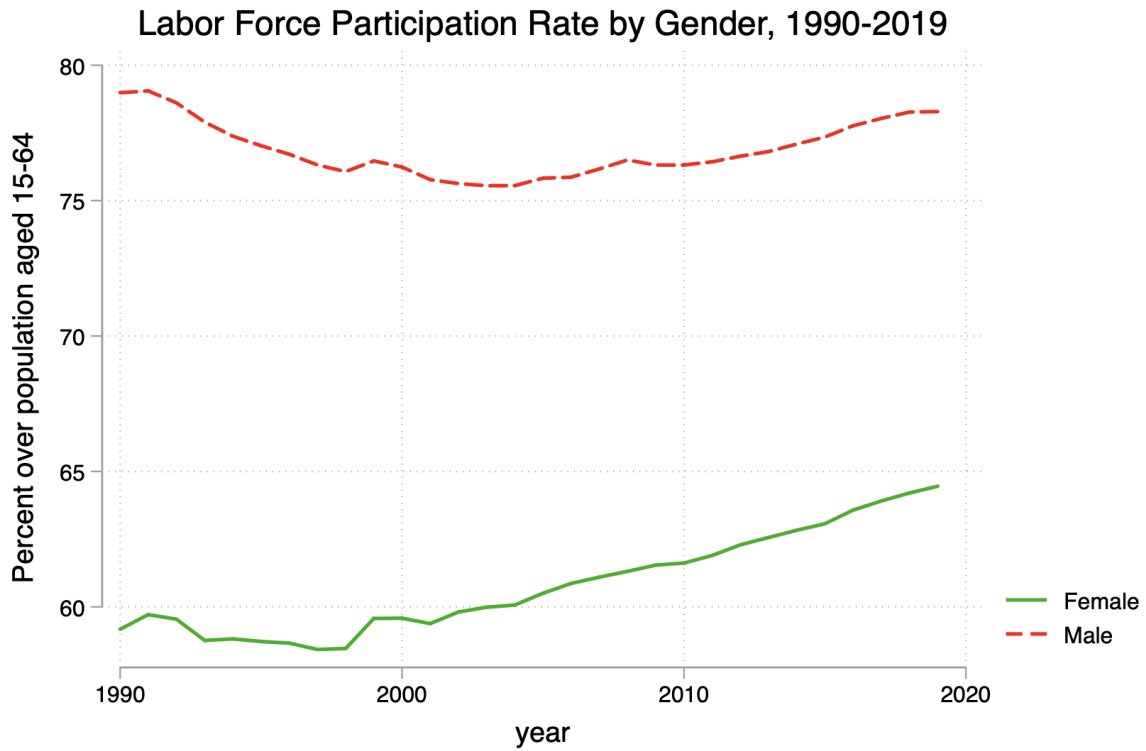


Figure 1: Source: World Bank. The figure plots the mean of labor force participation rate by gender over the period 1960-2019, for 44 European countries: Albania, Armenia, Austria, Belarus, Belgium, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine.

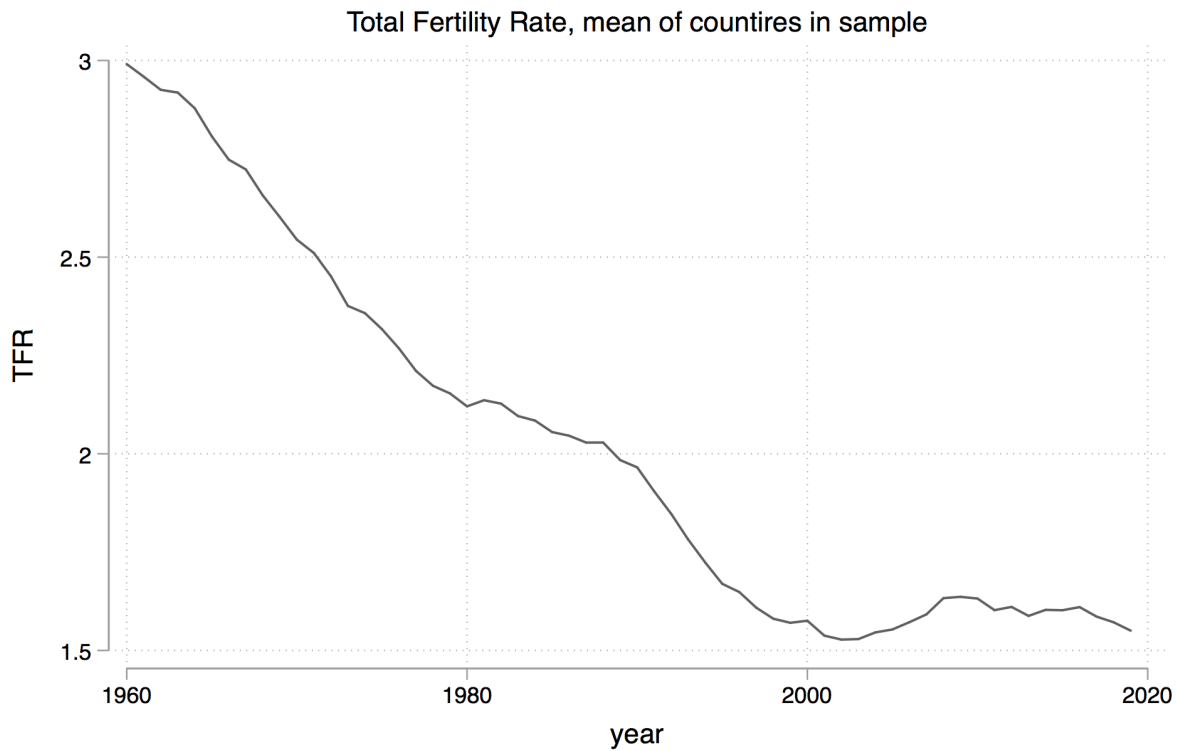


Figure 2: Source: World Bank. The figure plots the mean of Total Fertility Rate (TFR) over the period 1960-2019, for 44 European countries: Albania, Armenia, Austria, Belarus, Belgium, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine.

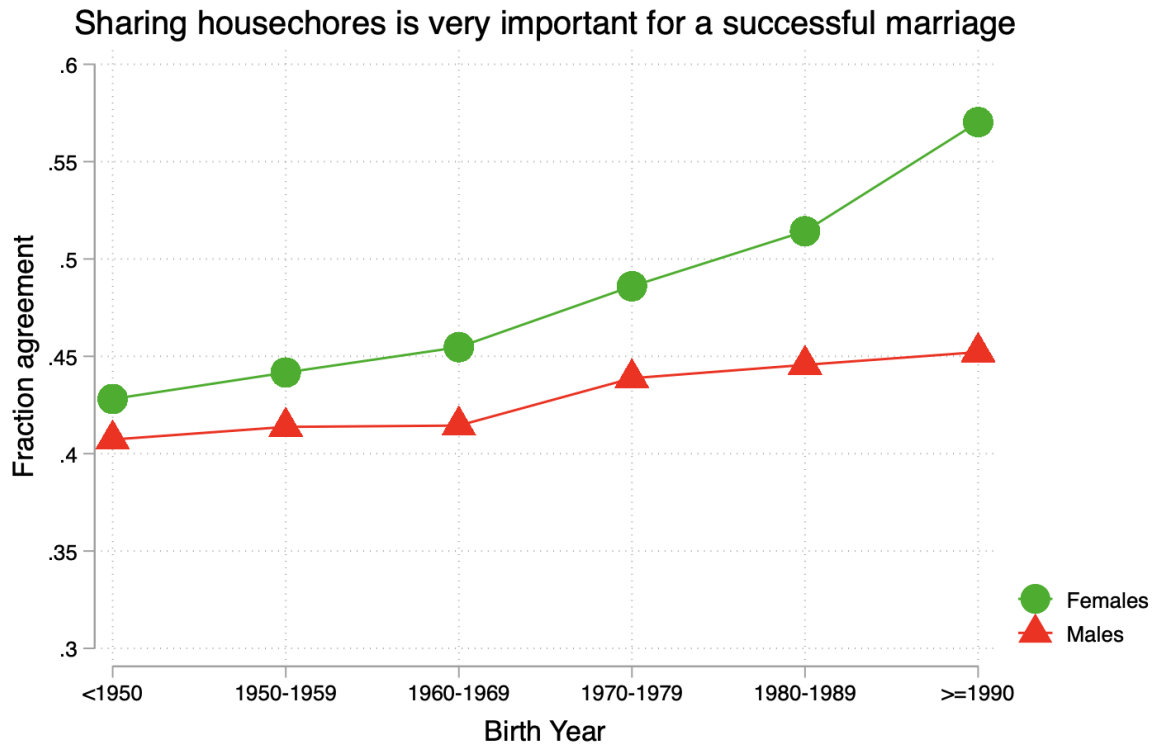


Figure 3: Source: European Value Study, 2008. The figure plots respondents' opinion about the importance of sharing housework for a successful marriage. Respondents are divided by gender and by birth-year cohort. The sample includes a section of 46 European countries: Albania, Armenia, Austria, Belarus, Belgium, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Northern Cyprus, Northern Ireland, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine. The level of importance of sharing housework is based on three levels: 0=not very important; 1=very important.

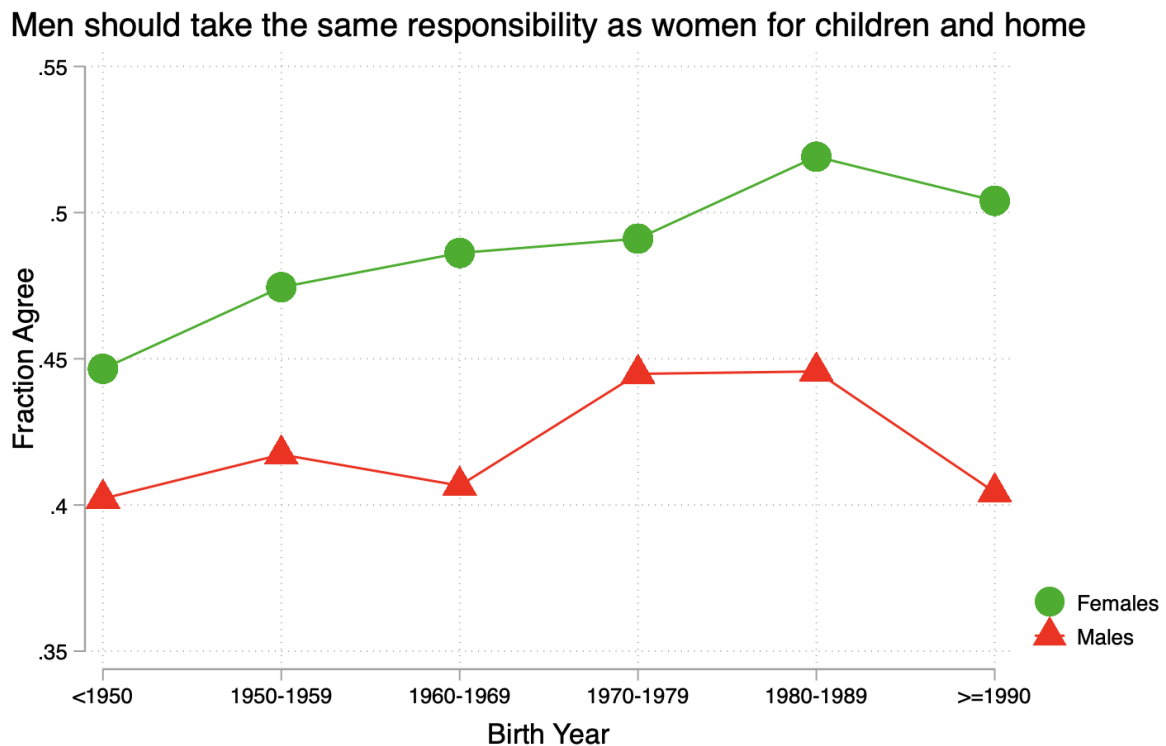


Figure 4: Source: European Value Study, 2008. The figure plots respondents' opinion whether men should take the same responsibility as women for housework and childcare. Respondents are divided by gender and by birth-year cohort. The sample includes a section of 46 European countries: Albania, Armenia, Austria, Belarus, Belgium, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Northern Cyprus, Northern Ireland, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine. The level of agreement is based on four levels: 0=disagree; 1=agree.

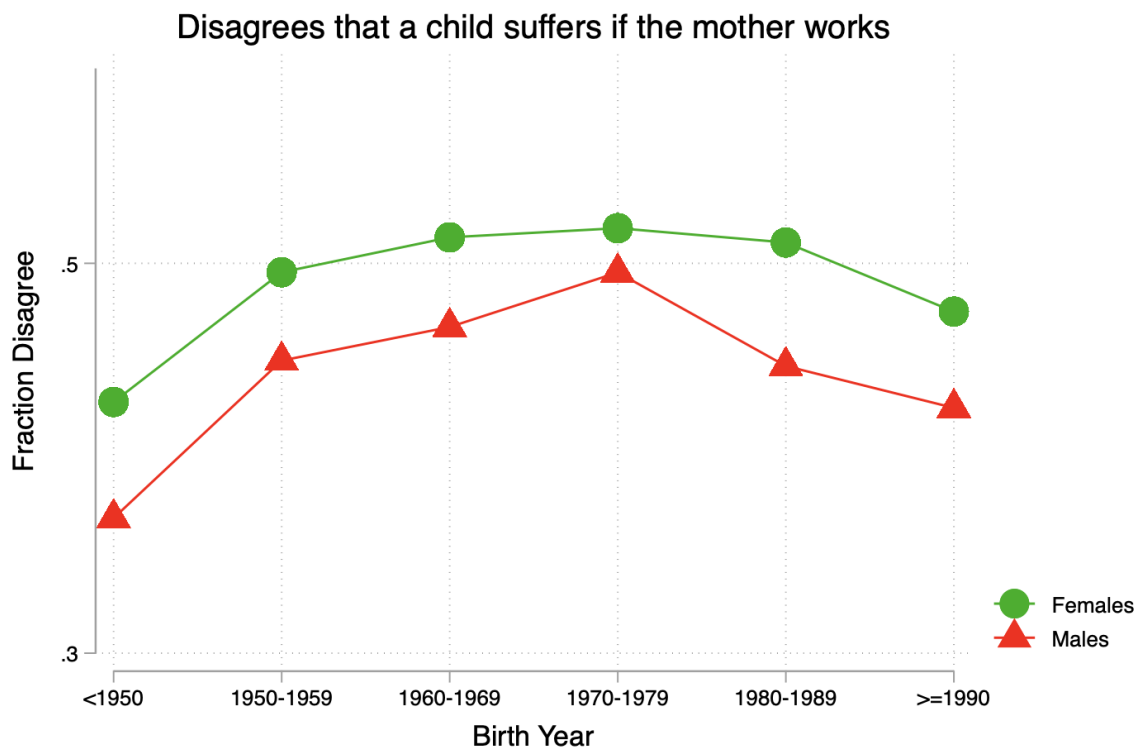


Figure 5: Source: European Value Study, 2008. The figure plots respondents' opinion whether a child suffers if his/her mother works. Respondents are divided by gender and by birth-year cohort. The sample includes a section of 46 European countries: Albania, Armenia, Austria, Belarus, Belgium, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Northern Cyprus, Northern Ireland, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine. The level of disagreement is based on four levels: 0=agree; 1=disagree.

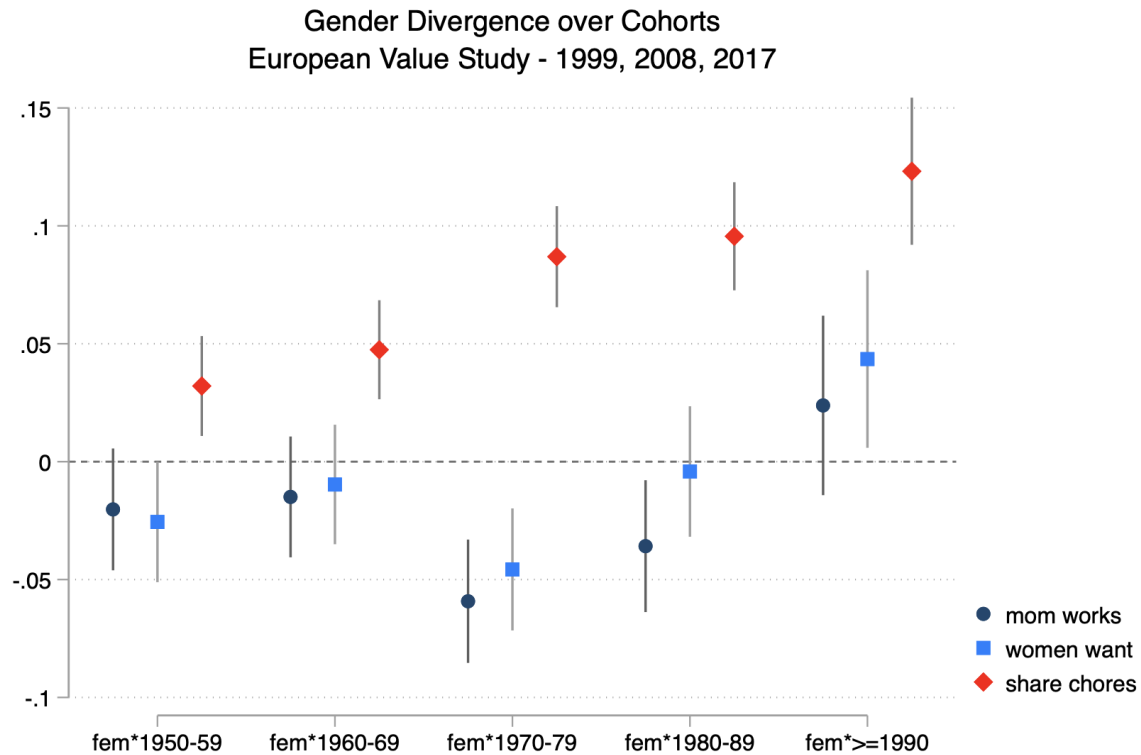


Figure 6: Data source: European Value Study (1999, 2008, 2017). The figure plots the coefficients from three different OLS regressions. The dependent variable is respondents' opinion on gender attitudes. For the coefficients plotted as red diamonds, the dependent variable is the importance of sharing housework for a successful marriage. For the coefficients plotted as light blue squares, the dependent variable is the level of disagreement with the statement "What women really want is a home and children". For the coefficients plotted as dark blue circles, the dependent variable is the level of disagreement with the statement "A child suffers if his/her mother works". The running variables are the interaction between an indicator for female respondents and six indicators for six different birth-year cohorts: < 1950; 1950 – 59; 1960 – 69; 1970 – 79; 1980 – 89; > 1989. The coefficients indicate that female respondents' opinion diverges from that of men over generations, only for gender attitudes related to sharing housework.

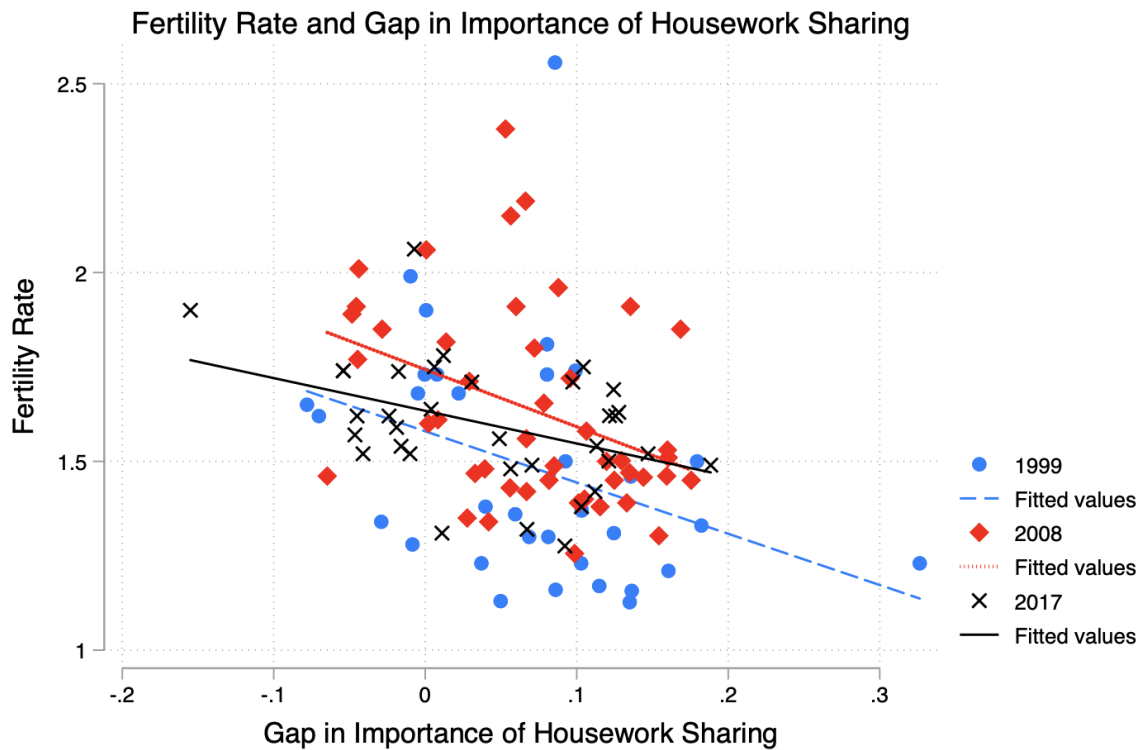


Figure 7: Data source for values on housework sharing: European Value Study (1999, 2008, 2017). Data source for total fertility rates: World Bank (1999, 2008, 2017). The figure plots the country's average difference between women and men on the importance of sharing housework and the country's fertility rate. The graph shows the relation between values and TFR for three different periods: 1999 (33 countries), 2008 (46 countries) and 2017 (34 countries). To each wave of the European Value Study, corresponds the country's fertility rate of that year. The figure shows that the higher is the gap in values between women and men, the lower is fertility rate.

Female Labor Force Participation Rate and Gap in Importance of Housework Sharing

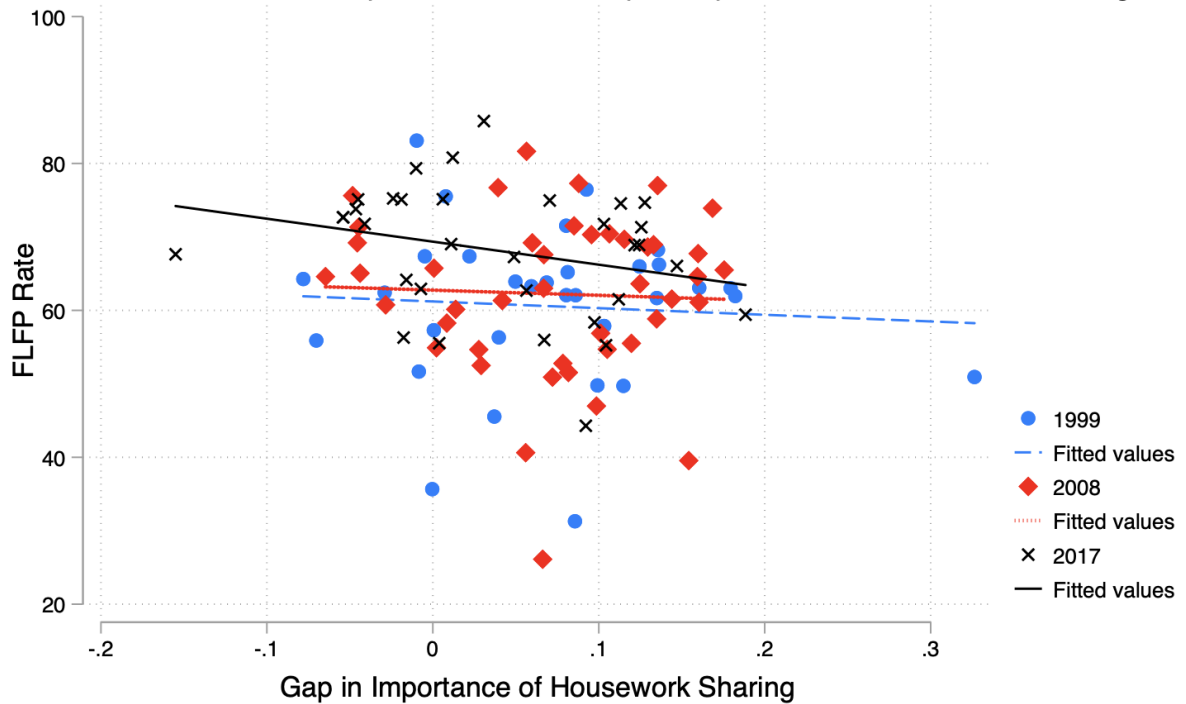


Figure 8: Data source for values on housework sharing: European Value Study (1999, 2008, 2017). Data source for total fertility rates: World Bank (1999, 2008, 2017). The figure plots the country's average difference between women and men on the importance of sharing housework and the country's fertility rate. The graph show the relation between values and female labor force participation for three different periods: 1999 (33 countries), 2008 (46 countries) and 2017 (34 countries). To each wave of the European Value Study, corresponds the country's FLFP rate of that year. The figure shows that the higher is the gap in values between women and men, the lower is women's employment rate.

Appendix

Table 4: Gender Divergence Over Cohorts, EVS - dummies (baseline)

	(1) Child suffers if mom works	(2) Women want H&C	(3) Sharing housework is important
Fem	0.081*** (0.009)	0.057*** (0.008)	-0.041*** (0.009)
Birth Year	-0.003 (0.003)	-0.001 (0.003)	0.016*** (0.003)
Fem*Birth Year	-0.0003** (0.0001)	-0.00008 (0.0001)	0.001*** (0.0001)
Country FE	Yes	Yes	Yes
Survey Year FE	Yes	Yes	Yes
<i>N</i>	144,145	144,145	144,145
<i>r</i> ²	0.154	0.166	0.047

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the interaction between a dummy for female respondents and a continuous variable for Year of Birth (from 1900 to 2002). "Chores dummy" equal to 1 only if answer is "very important". "Child suffers if mom works dummy" equal to 1 if answer is either "strongly agree" or "agree". "Women want home and children dummy" equal to 1 if answer is either "strongly agree" or "agree". Data are taken from three waves of the European Value Study: 1999, 2008 and 2017. The sample includes a section of European countries: 33 countries for the 1999 wave, 48 countries for the 2008 wave and 34 countries for the 2017 wave. The countries included are: Albania, Armenia, Austria, Belarus, Belgium, Bosnia Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Great Britain, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Montenegro, Netherlands, Northern Cyprus, Northern Ireland, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine. Robust standard errors in parentheses.

Table 5: Gender Divergence Over Cohorts, ISSP 2002

	(1) [Working Mom]	(2)	(3) [Men More ChCare]	(4)	(5) [Men More HhWork]	(6)
Fem	0.204*** (0.036)	0.068*** (0.014)	0.146*** (0.028)	0.064*** (0.014)	0.062* (0.031)	0.020 (0.014)
Birth Year	0.012*** (0.0004)	0.004*** (0.0001)	-0.0001 (0.0003)	-0.0005** (0.0001)	-0.002*** (0.0004)	-0.001*** (0.0002)
Fem*Birth Year	-0.0008 (0.0006)	-0.0001 (0.0002)	0.001** (0.0005)	0.0005* (0.0002)	0.004*** (0.0005)	0.001*** (0.0002)
_cons	-21.28*** (0.977)	-7.732*** (0.384)	3.968*** (0.776)	1.783*** (0.379)	7.960*** (0.839)	3.498*** (0.395)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Norm as Dummy	No	Yes	No	Yes	No	Yes
<i>N</i>	41991	41991	41991	41991	41991	41991
r2	0.178	0.101	0.111	0.088	0.091	0.081

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the interaction between a dummy for female respondents and a continuous variable for Year of Birth (from 1900 to 2002). Data are taken from the ISSP (2002). The sample includes a section of 34 countries: Australia, Germany, Great Britain, Ireland, United States, Austria, Hungary, Netherlands, Norway, Sweden, Czech Republic, Slovenia, Poland, Bulgaria, Russia, New Zealand, Philippines, Israel, Japan, Spain, Latvia, Slovak Republic, France, Cyprus, Portugal, Chile, Denmark, Switzerland, Belgium, Brazil, Finland, Mexico, Taiwan. Robust standard errors in parentheses.

Table 6: Gender Divergence Over Cohorts - GSS, 2002

	(1)	(2)	(3)	(4)	(5)	(6)
	[Working Mom]		[Men More ChCare]		[Men More HhWork]	
Fem	0.484** (0.163)	0.523** (0.191)	-0.105 (0.149)	-0.111 (0.173)	-0.002 (0.157)	-0.164 (0.180)
Birth Year	0.008*** (0.002)	0.010** (0.003)	-0.005* (0.002)	-0.006* (0.002)	-0.005* (0.002)	-0.007* (0.002)
Fem*Birth Year	-0.002 (0.003)	-0.003 (0.004)	0.005 (0.003)	0.005 (0.003)	0.005 (0.003)	0.009* (0.003)
_cons	-14.61** (5.158)	-17.55** (6.123)	13.92** (4.772)	16.47** (5.615)	12.75* (5.043)	17.37** (5.863)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Fam Ethnicity FE	No	Yes	No	Yes	No	Yes
<i>N</i>	894	668	1149	901	1144	896
r2	0.0704	0.134	0.0194	0.0665	0.0248	0.0890

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the interaction between a dummy for female respondents and a continuous variable for Year of Birth (from 1900 to 2002). Data are taken from the General Social Survey (2002). Robust standard errors in parentheses.

Table 7: Gender Divergence Over Cohorts, Values as Dummies - GSS, 2002

	(1)	(2)	(3)	(4)	(5)	(6)
	[Working Mom]		[Men More ChCare]		[Men More HhWork]	
Fem	0.283** (0.086)	0.326** (0.101)	-0.038 (0.078)	-0.041 (0.090)	-0.079 (0.084)	-0.119 (0.096)
Birth Year	0.005*** (0.001)	0.006*** (0.001)	-0.003* (0.001)	-0.003* (0.001)	-0.004** (0.001)	-0.004** (0.001)
Fem*Birth Year	-0.003 (0.001)	-0.003 (0.002)	0.002 (0.001)	0.002 (0.001)	0.004* (0.001)	0.005** (0.002)
_cons	-10.57*** (2.723)	-12.91*** (3.230)	6.652** (2.528)	8.003** (2.944)	8.495** (2.711)	9.499** (3.150)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Fam Ethnicity FE	No	Yes	No	Yes	No	Yes
<i>N</i>	894	668	1149	901	1144	896
r2	0.058	0.131	0.019	0.068	0.024	0.082

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the interaction between a dummy for female respondents and a continuous variable for Year of Birth (from 1900 to 2002). Data are taken from the General Social Survey (2002). Robust standard errors in parentheses.

Table 8: Gender Gap in Family Values and Fertility - 8 birth cohorts

<i>Dep. Variable = Total Fertility Rate</i>	(1)	(2)	(3)	(4)	(5)
Gender gap “Sharing Chores”	0.0547 (0.0641)	-0.173* (0.0782)	-0.171* (0.0779)	-0.169* (0.0782)	-0.166* (0.0780)
Women’s attitudes “Sharing Chores”		0.529*** (0.107)	0.529*** (0.107)	0.523*** (0.107)	0.523*** (0.107)
Gender gap “Child suffers if mom works”			0.0659 (0.0617)		0.110 (0.0681)
Women’s attitudes “Child suffers if mom works”			0.126 (0.0779)		0.0548 (0.0896)
Gender gap “Women want h&c”				-0.0629 (0.0605)	-0.0937 (0.0669)
Women’s attitudes “Women want h&c”				0.168* (0.0826)	0.151 (0.0949)
Country*Survey Year FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
<i>N</i>	815	815	815	815	815
<i>r</i> ²	0.669	0.680	0.684	0.682	0.685

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the difference in attitudes between women and men about the importance of sharing housework in a marriage. The dependent variable is total fertility rate. Controls include (1) women’s average opinion about the importance of sharing housework, (2) the difference in attitudes between women and men about whether a child suffers if his/her mother works, (3) women’s average opinion about whether a child suffers in the presence of a working mothers, (4) the difference in attitudes between women and men about whether what women really want is a home and children and (5) women’s average opinion about whether what women really want is a home and children. Attitudes about family are taken from three waves of the European Value Study: 1999, 2008, 2017. Respondents are aggregated by country and birth-year cohorts. Birth year cohorts are: 1950-54; 1955-59; 1960-64; 1965-69; 1970-74; 1975-79; 1980-84, 1985-89. To each cohort corresponds the country’s total fertility rate of the year in which respondents were 30-35 years old. Total fertility rate (World Bank) from years 1985; 1995; 2005; 2015. All specifications include country*survey year fixed effects and cohort fixed effects. Robust standard errors in parentheses.

Table 9: Gender Gap in Family Values and Fertility - 4 birth cohorts, values as dummies

<i>Dep. Variable = Total Fertility Rate</i>	(1)	(2)	(3)	(4)	(5)
Gender gap "Sharing Chores"	0.0322 (0.0371)	-0.0292 (0.0384)	-0.0322 (0.0381)	-0.0295 (0.0385)	-0.0323 (0.0382)
Women's attitudes "Sharing Chores"		0.883*** (0.192)	0.909*** (0.191)	0.891*** (0.192)	0.910*** (0.191)
Gender gap "Child suffers if mom works"			0.0578 (0.0412)		0.0587 (0.0415)
Women's attitudes "Child suffers if mom works"			0.239 (0.132)		0.246 (0.152)
Gender gap "Women want h&c"				-0.0173 (0.0443)	-0.0129 (0.0446)
Women's attitudes "Women want h&c"				0.113 (0.129)	-0.0114 (0.147)
Country*Survey Year FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
<i>N</i>	422	422	422	422	422
<i>r</i> ²	0.666	0.687	0.694	0.688	0.694

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the difference in attitudes between women and men about the importance of sharing housework in a marriage. The dependent variable is total fertility rate. "Chores dummy" equal to 1 only if answer is "very important". "Child suffers if mom works dummy" equal to 1 if answer is either "strongly agree" or "agree". "Women want home and children dummy" equal to 1 if answer is either "strongly agree" or "agree". Controls include (1) women's average opinion about the importance of sharing housework, (2) the difference in attitudes between women and men about whether a child suffers if his/her mother works, (3) women's average opinion about whether a child suffers in the presence of a working mothers, (4) the difference in attitudes between women and men about whether what women really want is a home and children and (5) women's average opinion about whether what women really want is a home and children. Attitudes about family are taken from three waves of the European Value Study: 1999, 2008, 2017. Respondents are aggregated by country and birth-year cohorts. Birth year cohorts are: 1950-59; 1960-69, 1970-79; 1989-89. To each cohort corresponds the country's total fertility rate of the year in which respondents were 30-35 years old. Total fertility rate (World Bank) from years 1985; 1995; 2005; 2015. All specifications include country*survey year fixed effects and cohort fixed effects. Robust standard errors in parentheses.

Table 10: Gender Gap in Family Values and Fertility - 8 birth cohorts, values as dummies

<i>Dep. Variable = Total Fertility Rate</i>	(1)	(2)	(3)	(4)	(5)
Gender gap "Sharing Chores"	0.0234 (0.0195)	-0.0170 (0.0213)	-0.0190 (0.0212)	-0.0173 (0.0213)	-0.0188 (0.0213)
Women's attitudes "Sharing Chores"		0.422*** (0.0962)	0.430*** (0.0959)	0.420*** (0.0962)	0.429*** (0.0960)
Gender gap "Child suffers if mom works"			0.0248 (0.0237)		0.0258 (0.0239)
Women's attitudes "Child suffers if mom works"			0.163* (0.0670)		0.138 (0.0738)
Gender gap "Women want h&c"				-0.00826 (0.0241)	-0.00565 (0.0242)
Women's attitudes "Women want h&c"				0.122 (0.0683)	0.0611 (0.0750)
Country*Survey Year FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
<i>N</i>	815	815	815	815	815
<i>r</i> ²	0.669	0.678	0.682	0.680	0.682

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the difference in attitudes between women and men about the importance of sharing housework in a marriage. The dependent variable is total fertility rate. "Chores dummy" equal to 1 only if answer is "very important". "Child suffers if mom works dummy" equal to 1 if answer is either "strongly agree" or "agree". "Women want home and children dummy" equal to 1 if answer is either "strongly agree" or "agree". Controls include (1) women's average opinion about the importance of sharing housework, (2) the difference in attitudes between women and men about whether a child suffers if his/her mother works, (3) women's average opinion about whether a child suffers in the presence of a working mothers, (4) the difference in attitudes between women and men about whether what women really want is a home and children and (5) women's average opinion about whether what women really want is a home and children. Attitudes about family are taken from three waves of the European Value Study: 1999, 2008, 2017. Respondents are aggregated by country and birth-year cohorts. Birth year cohorts are: 1950-54; 1955-59; 1960-64; 1965-69; 1970-74; 1975-79; 1980-84, 1985-89. To each cohort corresponds the country's total fertility rate of the year in which respondents were 30-35 years old. Total fertility rate (World Bank) from years 1985; 1995; 2005; 2015. All specifications include country*survey year fixed effects and cohort fixed effects. Robust standard errors in parentheses.

Table 11: Gender Gap in Family Values and FLFP - numerical values, 7 cohorts

<i>Dep. Variable = Female Labor Force Participation</i>	(1)	(2)	(3)	(4)	(5)
<i>Mean Dep. Variable = 0.629</i>					
Gender gap “Sharing Chores”	-0.007 (0.012)	-0.052*** (0.015)	-0.052*** (0.015)	-0.052*** (0.015)	-0.052*** (0.015)
Women’s attitudes “Sharing Chores”		0.105*** (0.021)	0.105*** (0.021)	0.105*** (0.021)	0.104*** (0.021)
Gender gap “Child suffers if mom works”			-0.016 (0.012)		-0.019 (0.0133)
Women’s attitudes “Child suffers if mom works”			0.004 (0.015)		0.001 (0.017)
Gender gap “Women want h&c”				0.003 (0.012)	0.010 (0.013)
Women’s attitudes “Women want h&c”				0.009 (0.017)	0.006 (0.019)
Country*Survey Year FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
<i>N</i>	692	692	692	692	692
<i>r</i> ²	0.873	0.878	0.878	0.878	0.879

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the difference in attitudes between women and men about the importance of sharing housework in a marriage. The dependent variable is total fertility rate. Controls include (1) women’s average opinion about the importance of sharing housework, (2) the difference in attitudes between women and men about whether a child suffers if his/her mother works, (3) women’s average opinion about whether a child suffers in the presence of a working mothers, (4) the difference in attitudes between women and men about whether what women really want is a home and children and (5) women’s average opinion about whether what women really want is a home and children. Attitudes about family are taken from three waves of the European Value Study: 1999, 2008, 2017. Respondents are aggregated by country and birth-year cohorts. Birth year cohorts are: 1955-59; 1960-64; 1965-69; 1970-74; 1975-79; 1980-84, 1985-89. To each cohort corresponds the country’s female labor force participation of the year in which respondents were 30-35 years old, with an exception for the cohort born in 1950-59, at 35-40 years old. Female Labor Force Participation rate (World Bank) from years 1990; 1995; 2005; 2015. All specifications include country*survey year fixed effects and cohort fixed effects. Robust standard errors in parentheses.

Table 12: Gender Gap in Family Values and FLFP - values as dummies, 4 cohorts

<i>Dep. Variable = Female Labor Force Participation</i>	(1)	(2)	(3)	(4)	(5)
<i>Mean Dep. Variable = 0.622</i>					
Gender gap “Sharing Chores”	-0.003 (0.006)	-0.013* (0.006)	-0.013* (0.006)	-0.013* (0.006)	-0.013* (0.006)
Women’s attitudes “Sharing Chores”		0.157*** (0.035)	0.157*** (0.035)	0.158*** (0.035)	0.157*** (0.035)
Gender gap “Child suffers if mom works”			0.008 (0.008)		0.009 (0.008)
Women’s attitudes “Child suffers if mom works”			-0.001 (0.0245)		-0.020 (0.0271)
Gender gap “Women want h&c”				0.004 (0.007)	0.004 (0.007)
Women’s attitudes “Women want h&c”				0.033 (0.023)	0.040 (0.026)
Country*Survey Year FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
<i>N</i>	412	412	412	412	412
<i>r</i> ²	0.865	0.873	0.873	0.874	0.875

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the difference in attitudes between women and men about the importance of sharing housework in a marriage. The dependent variable is total fertility rate. Controls include (1) women’s average opinion about the importance of sharing housework, (2) the difference in attitudes between women and men about whether a child suffers if his/her mother works, (3) women’s average opinion about whether a child suffers in the presence of a working mothers, (4) the difference in attitudes between women and men about whether what women really want is a home and children and (5) women’s average opinion about whether what women really want is a home and children. Attitudes about family are taken from three waves of the European Value Study: 1999, 2008, 2017. Respondents are aggregated by country and birth-year cohorts. Birth year cohorts are: 1950-59; 1960-69, 1970-79; 1989-89. To each cohort corresponds the country’s female labor force participation of the year in which respondents were 30-35 years old, with an exception for the cohort born in 1950-59, at 35-40 years old. Female Labor Force Participation rate (World Bank) from years 1990; 1995; 2005; 2015. All specifications include country*survey year fixed effects and cohort fixed effects. Robust standard errors in parentheses.

Table 13: Gender Gap in Family Values and FLFP - values as dummies, 7 cohorts

<i>Dep. Variable = Female Labor Force Participation</i>	(1)	(2)	(3)	(4)	(5)
<i>Mean Dep. Variable = 0.629</i>					
Gender gap “Sharing Chores”	-0.004 (0.003)	-0.011** (0.004)	-0.010* (0.004)	-0.011** (0.004)	-0.010* (0.004)
Women’s attitudes “Sharing Chores”		0.081*** (0.019)	0.080*** (0.019)	0.080*** (0.019)	0.079*** (0.019)
Gender gap “Child suffers if mom works”			0.002 (0.004)		0.001 (0.004)
Women’s attitudes “Child suffers if mom works”			-0.006 (0.013)		-0.012 (0.014)
Gender gap “Women want h&c”				0.003 (0.004)	0.002 (0.004)
Women’s attitudes “Women want h&c”				0.009 (0.014)	0.014 (0.015)
Country*Survey Year FE	Yes	Yes	Yes	Yes	Yes
Cohort FE	Yes	Yes	Yes	Yes	Yes
<i>N</i>	692	692	692	692	692
<i>r2</i>	0.873	0.877	0.877	0.877	0.877

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. The table presents OLS regressions results. The main explanatory variable is the difference in attitudes between women and men about the importance of sharing housework in a marriage. The dependent variable is total fertility rate. Controls include (1) women’s average opinion about the importance of sharing housework, (2) the difference in attitudes between women and men about whether a child suffers if his/her mother works, (3) women’s average opinion about whether a child suffers in the presence of a working mothers, (4) the difference in attitudes between women and men about whether what women really want is a home and children and (5) women’s average opinion about whether what women really want is a home and children. Attitudes about family are taken from three waves of the European Value Study: 1999, 2008, 2017. Respondents are aggregated by country and birth-year cohorts. Birth year cohorts are: 1955-59; 1960-64; 1965-69; 1970-74; 1975-79; 1980-84, 1985-89. To each cohort corresponds the country’s female labor force participation of the year in which respondents were 30-35 years old, with an exception for the cohort born in 1950-59, at 35-40 years old. Female Labor Force Participation rate (World Bank) from years 1990; 1995; 2005; 2015. All specifications include country*survey year fixed effects and cohort fixed effects. Robust standard errors in parentheses.

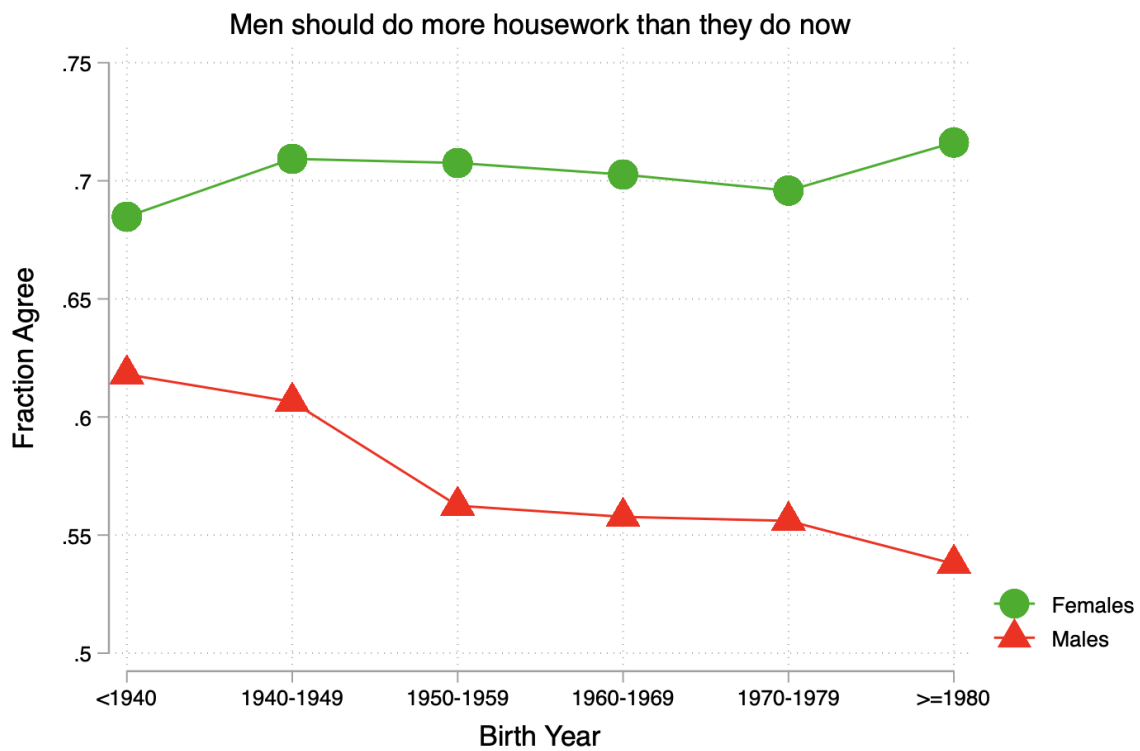


Figure 9: Source: International Social Survey Program, 2002. The figure plots respondents' opinion about the importance of sharing housework for a successful marriage. Respondents are divided by gender and by birth-year cohort. The sample includes a section of 34 countries: Australia, Germany, Great Britain, Ireland, United States, Austria, Hungary, Netherlands, Norway, Sweden, Czech Republic, Slovenia, Poland, Bulgaria, Russia, New Zealand, Philippines, Israel, Japan, Spain, Latvia, Slovak Republic, France, Cyprus, Portugal, Chile, Denmark, Switzerland, Belgium, Brazil, Finland, Mexico, Taiwan. The attitudes on whether men should do more housework are measured as follows: 0=disagree; 1=agree.

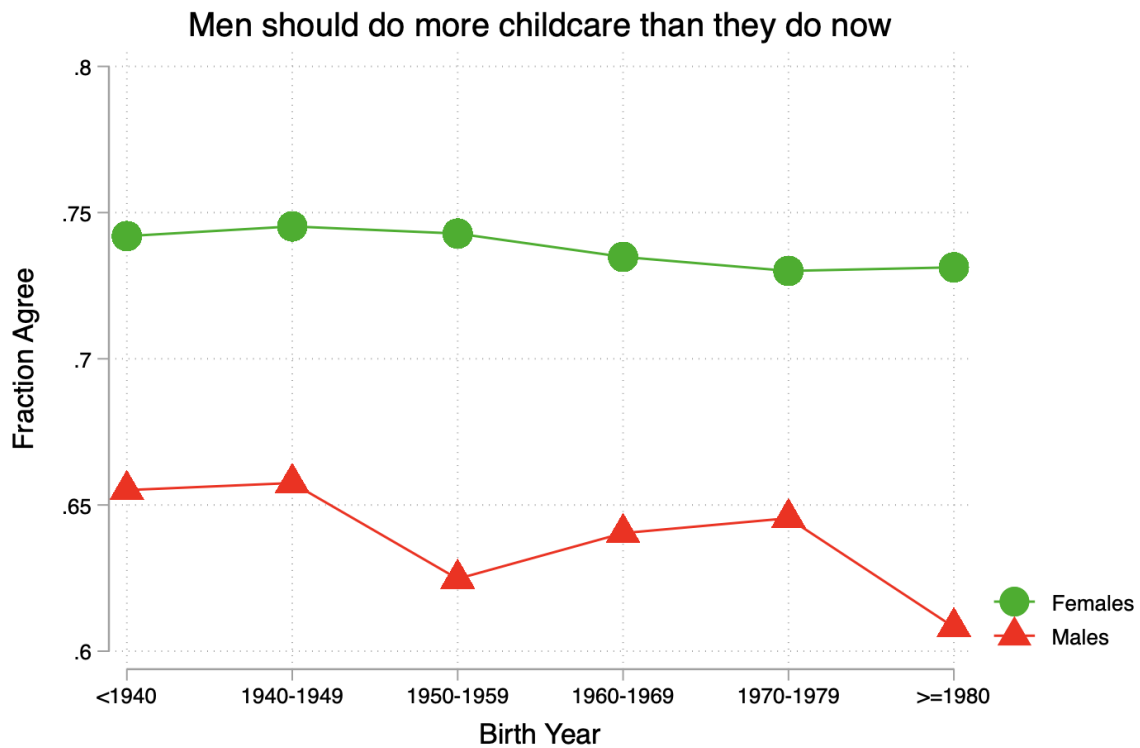


Figure 10: Source: International Social Survey Program, 2002. The figure plots respondents' opinion whether men should take the same responsibility as women for housework and childcare. Respondents are divided by gender and by birth-year cohort. The sample includes a section of 34 countries: Australia, Germany, Great Britain, Ireland, United States, Austria, Hungary, Netherlands, Norway, Sweden, Czech Republic, Slovenia, Poland, Bulgaria, Russia, New Zealand, Philippines, Israel, Japan, Spain, Latvia, Slovak Republic, France, Cyprus, Portugal, Chile, Denmark, Switzerland, Belgium, Brazil, Finland, Mexico, Taiwan. The attitudes on whether men should do more childcare are measured as follows: 0=disagree; 1=agree.

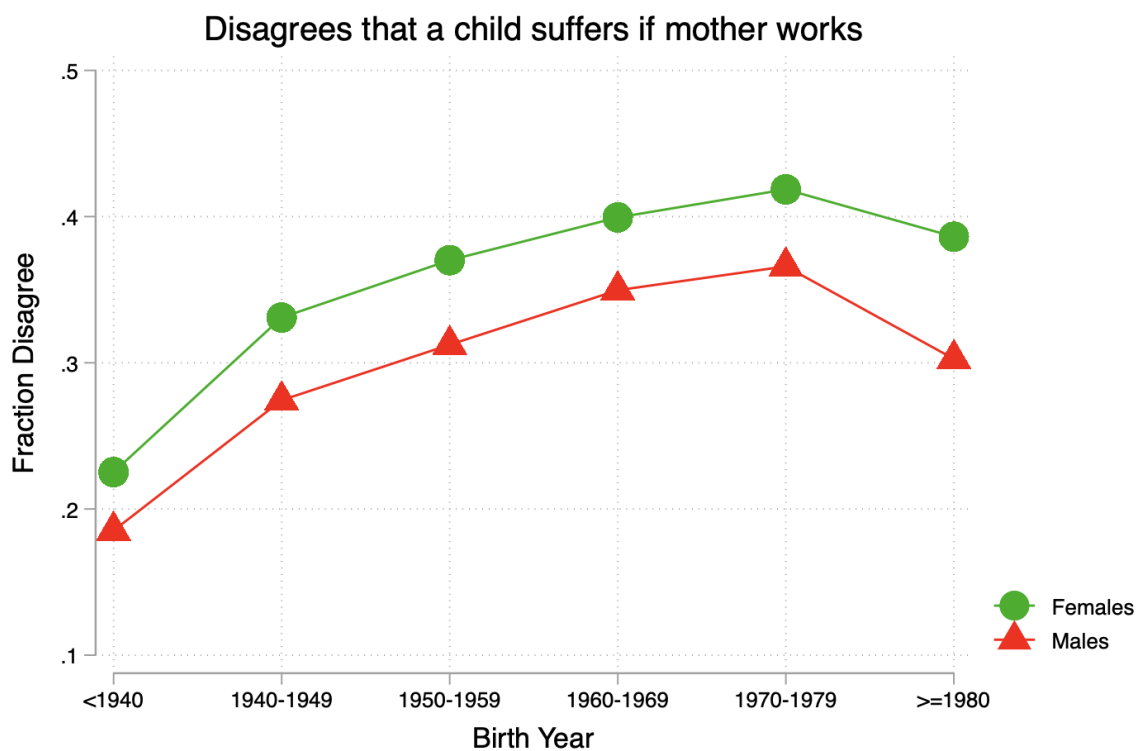


Figure 11: Source: International Social Survey Program, 2002. The figure plots respondents' opinion whether a child suffers if his/her mother works. Respondents are divided by gender and by birth-year cohort. The sample includes a section of 34 countries: Australia, Germany, Great Britain, Ireland, United States, Austria, Hungary, Netherlands, Norway, Sweden, Czech Republic, Slovenia, Poland, Bulgaria, Russia, New Zealand, Philippines, Israel, Japan, Spain, Latvia, Slovak Republic, France, Cyprus, Portugal, Chile, Denmark, Switzerland, Belgium, Brazil, Finland, Mexico, Taiwan. The attitudes on whether a child suffers if the mother works are measured as follows: 0=agree; 1=disagree.

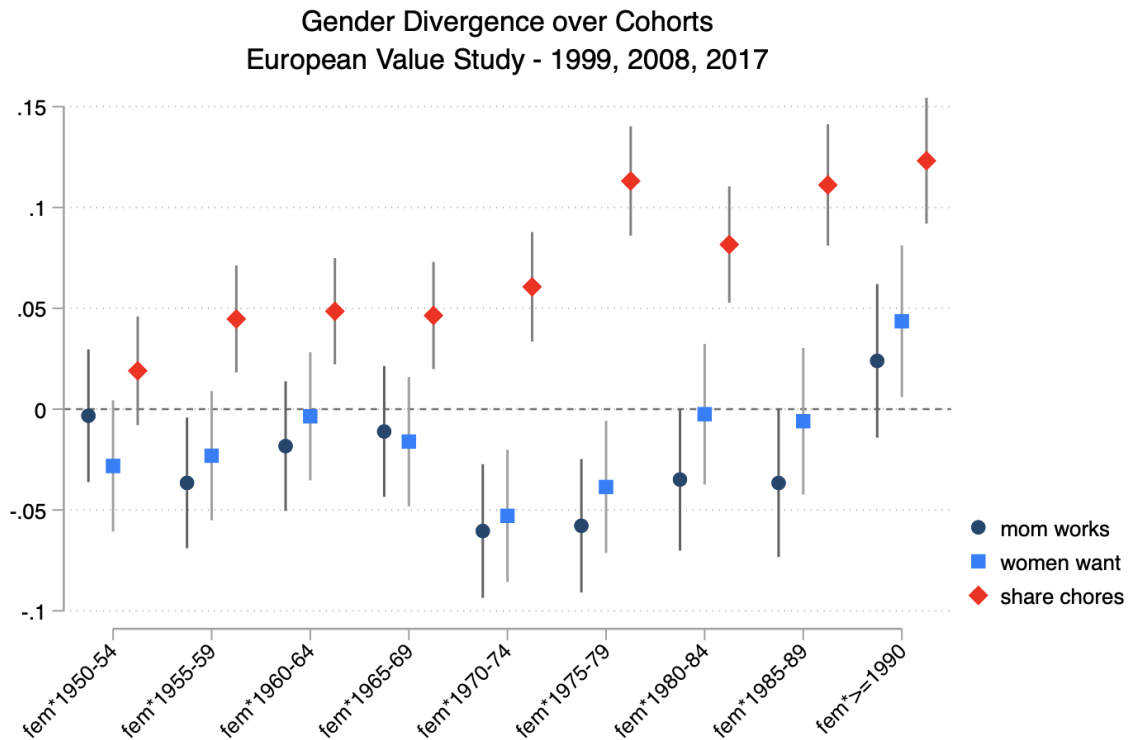


Figure 12: Data source: European Value Study (1999, 2008, 2017). The figure plots the coefficients from three different OLS regressions. The dependent variable is respondents' opinion on gender attitudes. For the coefficients plotted as red diamonds, the dependent variable is the importance of sharing housework for a successful marriage. For the coefficients plotted as light blue squares, the dependent variable is the level of disagreement with the statement "What women really want is a home and children". For the coefficients plotted as dark blue circles, the dependent variable is the level of disagreement with the statement "A child suffers if his/her mother works". The running variables are the interaction between an indicator for female respondents and six indicators for six different birth-year cohorts: < 1950; 1950 – 59; 1960 – 69; 1970 – 79; 1980 – 89; > 1989. The coefficients indicate that female respondents' opinion diverges from that of men over generations, only for gender attitudes related to sharing housework.

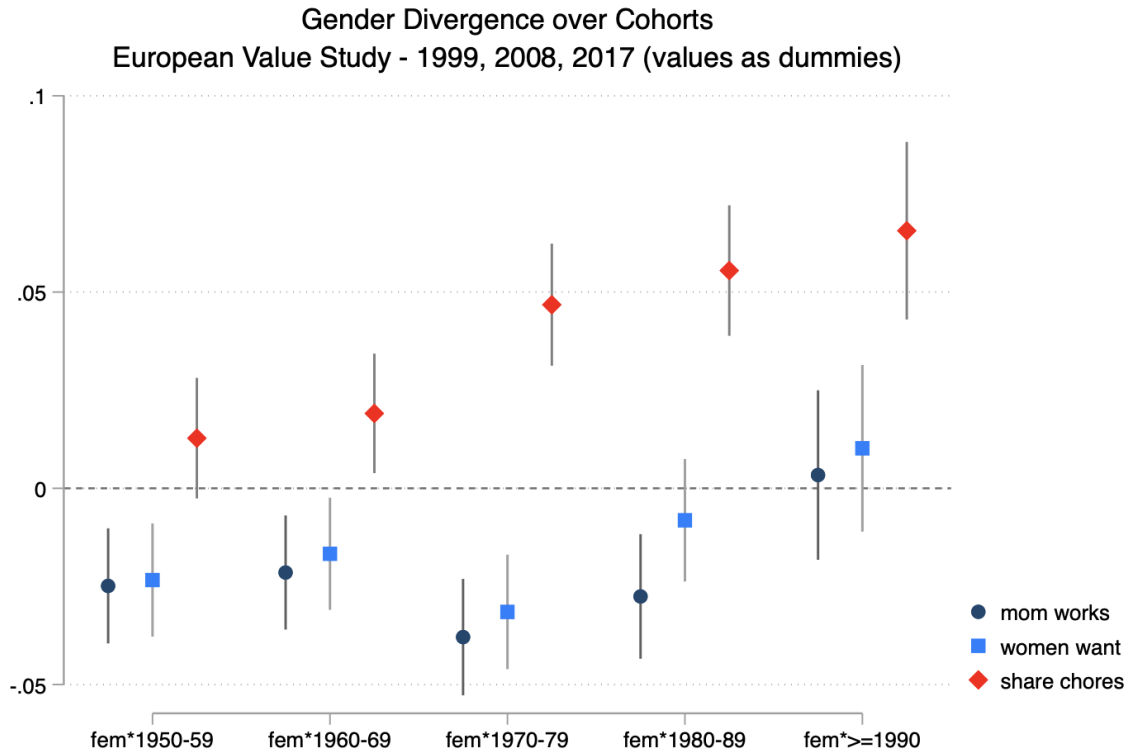


Figure 13: Data source: European Value Study (1999, 2008, 2017). The figure plots the coefficients from three different OLS regressions. The dependent variable is respondents' opinion on gender attitudes. For the coefficients plotted as red diamonds, the dependent variable is the importance of sharing housework for a successful marriage. For the coefficients plotted as light blue squares, the dependent variable is the level of disagreement with the statement "What women really want is a home and children". For the coefficients plotted as dark blue circles, the dependent variable is the level of disagreement with the statement "A child suffers if his/her mother works". The running variables are the interaction between an indicator for female respondents and six indicators for six different birth-year cohorts: < 1950; 1950 – 59; 1960 – 69; 1970 – 79; 1980 – 89; > 1989. The coefficients indicate that female respondents' opinion diverges from that of men over generations, only for gender attitudes related to sharing housework.

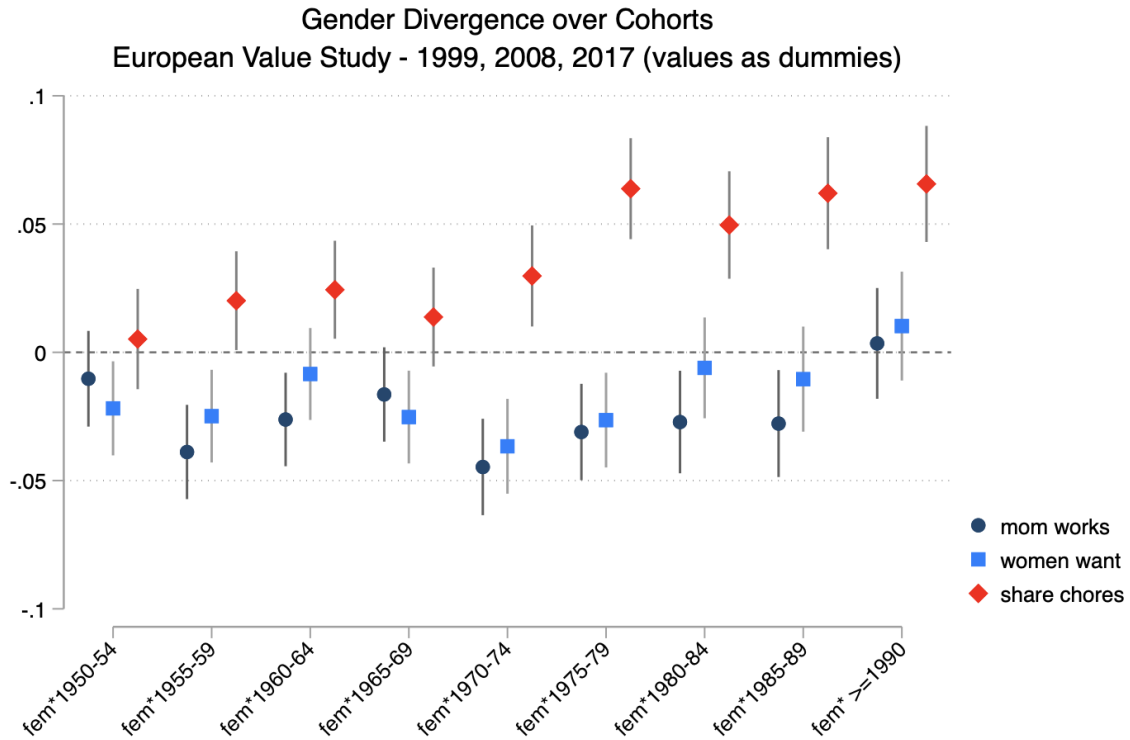


Figure 14: Data source: European Value Study (1999, 2008, 2017). The figure plots the coefficients from three different OLS regressions. The dependent variable is respondents' opinion on gender attitudes. For the coefficients plotted as red diamonds, the dependent variable is the importance of sharing housework for a successful marriage. For the coefficients plotted as light blue squares, the dependent variable is the level of disagreement with the statement "What women really want is a home and children". For the coefficients plotted as dark blue circles, the dependent variable is the level of disagreement with the statement "A child suffers if his/her mother works". The running variables are the interaction between an indicator for female respondents and six indicators for six different birth-year cohorts: < 1950; 1950 – 59; 1960 – 69; 1970 – 79; 1980 – 89; > 1989. The coefficients indicate that female respondents' opinion diverges from that of men over generations, only for gender attitudes related to sharing housework.

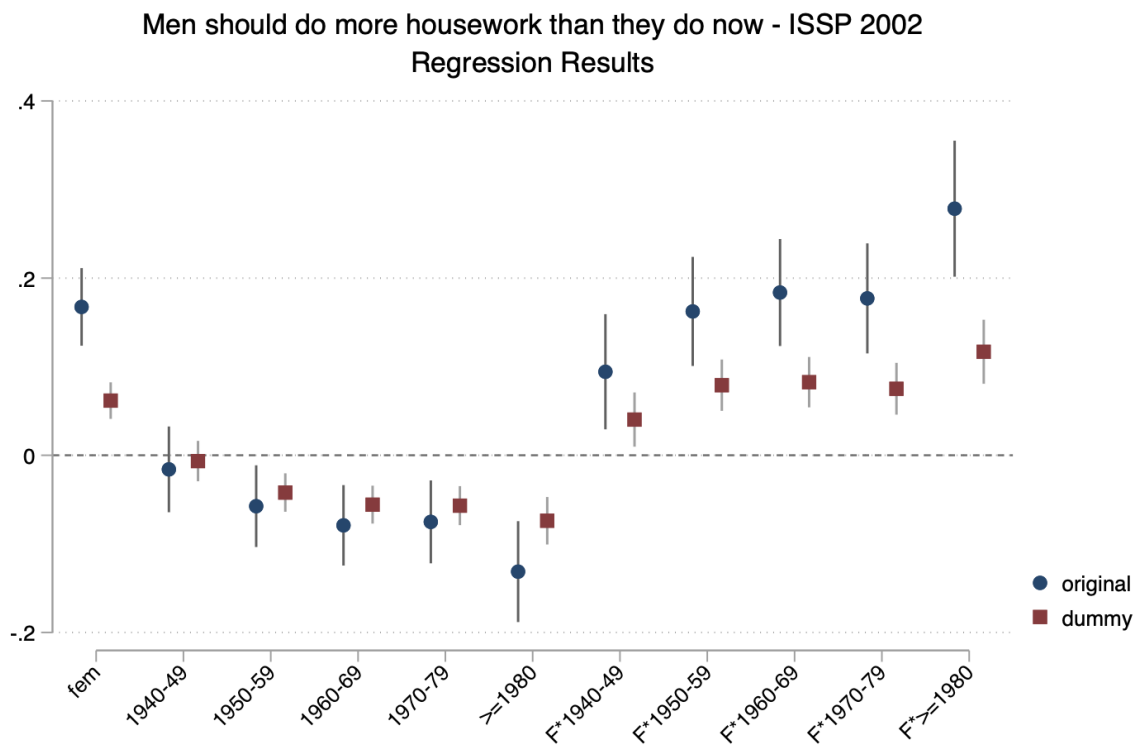


Figure 15: Increasing Divergence over Generations, ISSP 2002 - Men and Housework. The figure plots the coefficients from a OLS regressions. The dependent variable is respondents' opinion on whether men should do more housework than they do now. The running variables are the interaction between an indicator for female respondents and six indicators for six different birth-year cohorts: < 1940; 1940 – 49; 1950 – 59; 1960 – 69; 1970 – 89; > 1979. The sample includes a section of 34 countries: Australia, Germany, Great Britain, Ireland, United States, Austria, Hungary, Netherlands, Norway, Sweden, Czech Republic, Slovenia, Poland, Bulgaria, Russia, New Zealand, Philippines, Israel, Japan, Spain, Latvia, Slovak Republic, France, Cyprus, Portugal, Chile, Denmark, Switzerland, Belgium, Brazil, Finland, Mexico, Taiwan.

Men should do more childcare than they do now
ISSP 2002

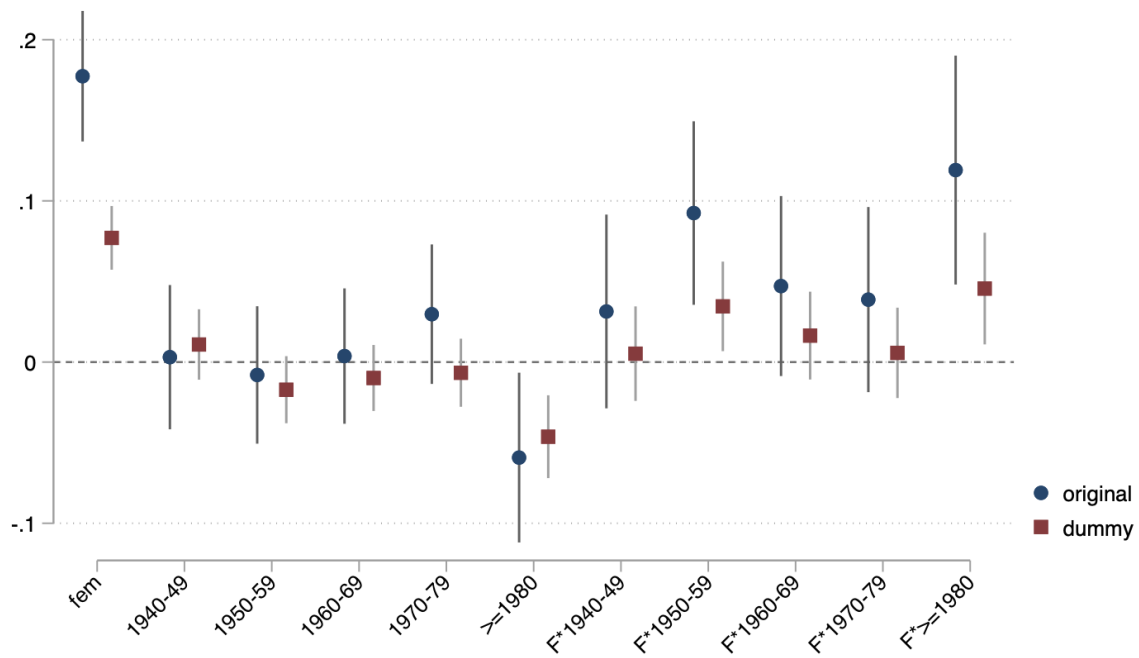


Figure 16: Increasing Divergence over Generations, ISSP 2002 - Men and Childcare. The figure plots the coefficients from a OLS regressions. The dependent variable is respondents' opinion on whether men should do more childcare than they do now. The running variables are the interaction between an indicator for female respondents and six indicators for six different birth-year cohorts: < 1940; 1940 – 49; 1950 – 59; 1960 – 69; 1970 – 89; > 1979. The sample includes a section of 34 countries: Australia, Germany, Great Britain, Ireland, United States, Austria, Hungary, Netherlands, Norway, Sweden, Czech Republic, Slovenia, Poland, Bulgaria, Russia, New Zealand, Philippines, Israel, Japan, Spain, Latvia, Slovak Republic, France, Cyprus, Portugal, Chile, Denmark, Switzerland, Belgium, Brazil, Finland, Mexico, Taiwan.

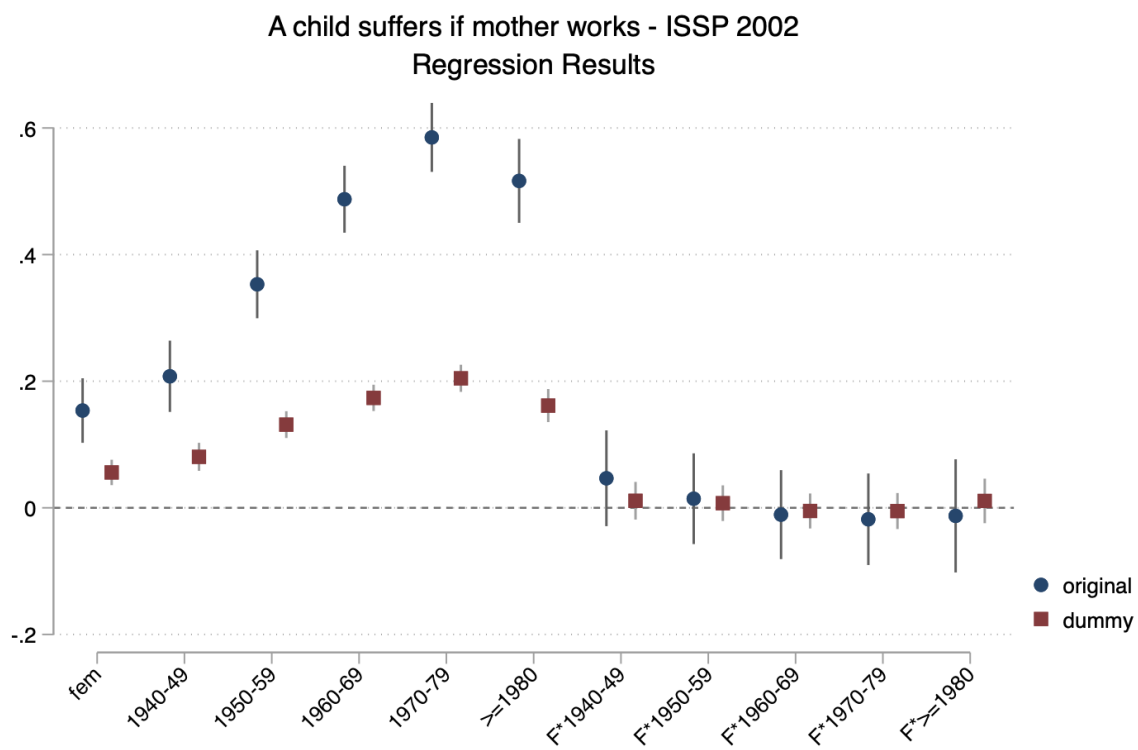


Figure 17: No Divergence over Generations, ISSP 2002 - Mom Work. The figure plots the coefficients from a OLS regressions. The dependent variable is respondents' opinion on whether it is fine for children if the mother works. The running variables are the interaction between an indicator for female respondents and six indicators for six different birth-year cohorts: < 1940; 1940–49; 1950–59; 1960–69; 1970–89; > 1979. The sample includes a section of 34 countries: Australia, Germany, Great Britain, Ireland, United States, Austria, Hungary, Netherlands, Norway, Sweden, Czech Republic, Slovenia, Poland, Bulgaria, Russia, New Zealand, Philippines, Israel, Japan, Spain, Latvia, Slovak Republic, France, Cyprus, Portugal, Chile, Denmark, Switzerland, Belgium, Brazil, Finland, Mexico, Taiwan.