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"Wars and Fertility: Evidence from the U.S. Baby Boom"

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Abstract

Do wars affect fertility? Although in the popular view wars are thought to cause swings in fertility, evidence suggests that wars were followed by only short term increases in fertility rates (Ryder, 1980). In this paper I examine the effect of wars on fertility by comparing the fertility response of American women of ancestry belonging to the winners and losers of World War II. The analysis, based on the number of children ever born shows that American women of Axis ancestry have increased their fertility by less than other women in the U.S. between 1940 and 1960. Nevertheless, a more careful analysis shows that only women of Italian origin drives the results while women of German origin show no response. Moreover, falsification tests, comparing 1930 to 1940 show "effects" between 1930 and 1940. I conclude that the setting chosen here cannot teach us much about this interesting question.

1 Introduction

German is the largest ancestry in the U.S. According to the Bureau of the Census more than 15 percent of the U.S. population in 2000 considered themselves to be of German ancestry. During the twentieth century, however, the U.S. and Germany fought against one another in the two World Wars. These wars led to action by the U.S. government against German alien living in the U.S. During WW I, the U.S. government imprisoned thousands of German alien in the U.S. and others were forced to buy government war bonds to show their loyalty. Backlash against U.S. citizens of German ancestry followed. The conductor of the Chicago Symphony Orchestra was suspended, in Cincinnati, the public library was asked to withdraw all German books from its shelves and the town, Berlin, Michigan, changed to Marne, Michigan, to name a few.

Things were similar during WW II. Under the Alien Registration Act of 1940, 300,000 German-born resident aliens who had German citizenship had to register with the Federal government and their travel and property ownership rights were restricted. Similarly, under the Alien Enemy Act of 1798, the U.S. government interned nearly 11,000 German citizens between 1940 and 1948. In addition an unknown number of "voluntary internees" joined their spouses and parents in the camps and were not permitted to leave.

A a similar story can be told about American of Italians origin. They comprise the seventh largest ancestry according to the U.S. Bureau of the Census with 5.6% of the U.S. population in 2000 considered themselves to be of Italian ancestry. While Italy supported Germany and Austria-Hungary before the outbreak of WW I, Italy waited and eventually joined the war in 1915 and fought alongside with Britain and France against Germany and its allies. In WW II, however, Italy was part of the Axis countries, and thereby was in a war with the U.S. Italian Americans who were non U.S. citizens we designated "enemy aliens" and were asked to register with the Federal government. Italian Americans including U.S citizens were removed from designated areas of persons whose removal was necessary in the interests of national security. These restrictions continued

till Italy surrendered in September 1943.[1]

In the two decades that followed WW II, the U.S. experienced a massive increase in fertility. The total fertility rate increased from 2.3 in 1940 to 3.8 in 1957. Similarly, the completed fertility rate increased from 2.4 for women born between 1911-1915 to 3.2 for women born twenty years later. Economists have suggested several explanations for this phenomenon. Easterlin (1961); Greenwood et al. (2005); Doepke et al. (2015); Albanesi and Olivetti (2014). Common to these explanations, however, is the reliance on mechanisms that rely on "purely" economic factors.

Recently, however, scholars have emphasized the role of culture in shaping economic outcomes (Guiso et al., 2006). Giuliano (2007) is the first paper to use second generation immigrants in the U.S. to study the importance of culture by holding constant the economic environment. The paper that comes closest to this paper is Fernández and Fogli (2009). They showed that fertility behavior of second generation American women depends on lagged fertility in the country of ancestry, after controlling for economic and demographic characteristics.

In this paper I examine a possible long term effect of wars on fertility through a psychological or cultural channel. Specifically, I examine the relationship between the *increase* in fertility during the 1940s and 1950s and women's ancestry. The main hypothesis is that World War II had a differential effect on the fertility of women of different ancestries. More specifically, my hypothesis is that descendants of the Allied countries who won the war, increased their fertility by more than any other group of American women, while descendants of the Axis countries experienced the lowest increase in fertility, controlling for other potential explanations. Although in the popular view wars are thought to cause swings in fertility, evidence suggests that wars were followed by only *short term* increases in fertility rates Ryder (1980).

[1] Japan was the third member in the Axis countries, and in fact, Americans of Japanese origin during the War in the U.S. probably suffered more than American of German and Italian origin. Nevertheless, I concentrate on those who are of German and Italian origin because I can detect only a handful of observations in the 1940 and 1950 censuses of Japanese origin.

This paper is related to Gould and Klor (2015) who looked at the long run effects of backlash against Muslims in the U.S. after the 9/11 attack. They found that Muslims immigrants living in states which experienced the largest increase in hate crime also exhibit (i) larger chances of intra-group marriages, (ii) higher fertility, (iii) lower female labor force participation and lower English proficiency. They concluded that backlash against Muslims in the U.S. has altered the assimilation process of Muslims immigrants to the native population. Likewise, Shayo and Zussman (2011) showed judicial intragroup bias in small claims courts in Israel during the period of the second Intifada.

To do so, I look at U.S. born women and define their ancestry according to the birth place of their parents. Specifically, I will define a respondent as having an "Axis Origin" if at least one of her parents was born in Germany, Italy or Japan. Similarly, I define a respondent as having an "Allied Origin" if at least of her parents was born in one of the Allied countries.[2] This choice of identifying one's ancestry is driven by data availability because direct questions about one's ancestry were only collected since the 1980 Census. Nevertheless, this choice also has a strength in that one cannot easily deny her ancestry.

I then use data on fertility and other characteristics from U.S. census (Ruggles et al., 2010) to estimate Differences-in-Differences (DiD) models. These models compare the change in fertility of American women of Axis Origin to that of other American women between 1940 and 1960. These models suggest that American women of Axis Origin have had a smaller increase in fertility compared to American women of other Origin. Specifically, the increase among women of Axis origin is smaller by about 0.25 kids, relative to the comparison group. I then disentangle the effect by age and find that the decrease in larger among women aged 30-40, compared to women aged 20-29. Moreover, in line with the interpretation that being on the losing side of the war is the cause for this finding, I show that women of Allied Origin have had a larger increase in fertility, compared to all other American women. I also show that the DiD estimates are close to zero when comparing 1950 to 1960, consistent with the hypothesis that the war is

[2]Specifically, I will look at U.S. born whose parents were born in Canada, England, Australia and New-Zealand. I do not include women whose both parents were born in the U.S. because that would leave me with a too small control group.

causing this change.

I then stratified the data by Axis Origin. If indeed the interpretation suggested above is correct, one would expect to have a larger effect on women of German ancestry compared to Italian ancestry. However, I find that the results are driven entirely by American women of Italian ancestry. This seems inconsistent with the hypothesis mentioned above. In addition, controlling for men's mobilization rates to the war (Doepke et al., 2015), the effect on Allied origin completely disappears.

Another potential threat to the results is the examination of pre-existing trends. As is well known, DiD estimators rely on the assumption of no pre-trends. Here I encounter a problem because the the main measure of fertility used, the number of children ever born, is unavailable in 1930 or 1920 and hence a placebo test that estimates Differences-in-Differences models between 1930 and 1940 cannot be performed. To overcome this issue, I use the number of own children living in the household as an alternative measure of fertility. I first replicate the results reported above, namely that there is a negative "effect" between 1940 and 1960 on the interaction between Italian origin and the dummy for 1960 and a positive "effect" between 1940 and 1960 on the interaction between Italian origin and the dummy for 1960. I then estimate a falsification test, comparing 1930 and 1940 where it's assumed that the treatment occurred between 1930 and 1940. Unfortunately, the results, show that the DiD estimates on the interaction between Italian origin and the dummy for 1940 are all negative and statistically significance, while the DiD estimates on the interaction between Allied origin and the dummy for 1940 are all positive and statistically significance. Taken together, the results indicate that the results presented above are not valid and cannot be taken seriously to suggest that the war had any impact on fertility behavior of women of different origin.

The paper is organized as follows. Section 2 presents the data and the empirical strategy. Section 3 presented the results of the paper. Section 4 discusses the limitation of the analysis and Section 5 offers some concluding remarks.

2 Data and Empirical Strategy

Information on the place of births of respondents and the place of birth of their parents as well as measures of fertility is available from U.S. censuses of various years (Ruggles et al., 2010). Since fertility decisions are typically made in early adulthood, the sample is restricted to women between the ages of 20 and 40. As discussed above, I look at all women who were born in the U.S. and assign them ancestry according to the birth of place of their parents. Accordingly, women whose parents were born in Germany, Italy or Japan are treated as women of Axis origin. Similarly, women whose parents were born in Canada, England, Australia and New Zealand are treated as women of Allied origin. All other women act as the control group. This relatively narrow definition of ancestry has the advantage that the individuals themselves, as well as their surrounding society, clearly identify them as descendants of either the Allied or the Axis countries.

Table 1 shows summary statistics for the main variables of interest by origin and year. My main outcome of interest is the number of children ever born to a woman, called "kids". As can be seen from the table, the average number of kids has increased quite substantially between 1940 and 1960 for all groups. However, women of Axis origin have increased their fertility by only 0.374 kids, compared to 0.66 for women of Allied origin and 0.563 for women of other origin. Note also that between 1940 and 1950, the average number of kids has *declined* by 0.18 for women of Axis origin, while it has increased by 0.07 and 0.065 for women of Allied origin and other origin, respectively. Women of Axis origin comprise 6.6% of the sample in 1940, 5.9% of the sample in 1950 and 4.8% of the sample in 1960. Women of German origin comprise 3.6% of the sample in 1940, 1.8% in 1950 and 1.1% in 1960. Women of Italian origin comprise 3% of the sample in 1940, 4% in 1950 and 3.5% in 1960.

In terms of the characteristics, in all years, women of Axis origin are somewhat less educated, are slightly more likely to be married and more likely to live in urban setting compared to the other two groups.

The empirical strategy is to identify the effect of WW II on fertility of women of Axis and Allied origin using a differences in differences approach. Specifically, I will estimate models of the form:

$$\text{kids}_{ist} = \text{axis}_{ist} + \text{allied}_{ist} + d_{post} + \beta \text{axis}_{ist} \times d_{post} + \gamma \text{allied}_{ist} \times d_{post} + \theta_s + X'_{ist}\pi + \epsilon_{ist}$$

Here kids_{ist} is the number of children ever born to woman i, living in state s in year t, axis_{ist} and allied_{ist} are dummies for Axis and Allied origin, respectively, d_{post} is a dummy for after the war (typically 1950 or 1960), θ_s are state fixed effects and X_{ist} is a vector of individual-level controls such age, education and marital status as well as whether the household's location was urban or rural.

The parameters of interests are β and γ. A negative estimate for β would indicate that fertility increased by less between 1940 and 1960 (or 1950) among women of Axis ancestry compared to all other women. Similarly, a positive estimate for γ would indicate that fertility increased by more between 1940 and 1960 (or 1950) among women of Allied ancestry compared to all other women. Since I control for both state fixed effects and time effect, the identification of β and γ comes from state level changes in fraction of women of axis and allied origin and fertility. This strategy yields consistent estimates if the unobserved state characteristics correlated with fertility and Axis and Allied origin are constant over time.

Doepke et al. (2015) showed that states that has larger mobilization rates to WW II also experienced larger increases in fertility during the 1950s. To account for this, I estimate models of the form:

$$\text{kids}_{ist} = \text{axis}_{ist} + \text{allied}_{ist} + d_{post} + \beta \text{axis}_{ist} \times d_{post} + \gamma \text{allied}_{ist} \times d_{post} + \theta_s + \text{mobilization}_s \times d_{post} + X'_{ist}\pi + \epsilon_{ist}. \quad (1)$$

Notice that since mobilization to WW II, mobilization_s, does not vary over time models of this form can be either estimated with state fixed effect without a main effect for mobilization or with the main effect of mobilization but without state fixed effects.

3 Results

Table 2 presents the basic results. Column (1) is the most parsimonious specification. According to this column, women of Axis origin had an increase in the number of kids by 0.189. Across the columns I add, one by one, marital status dummies, age dummies, educational dummies, state dummies and urban/rural dummy. With the exception of column (3), the coefficients on Axis origin $\times$ 1960 are very stable across the columns and highly significant. The table also shows that women of Axis origin had 0.097 more kids than other women (column 1). The coefficient is very stable across the columns and becomes more significant as I add more controls.

Table 3 repeats the specifications reported in Table 2 but limits the sample to women aged 20-29. As can be seen from Table 3, there is no differential effect by origin, once marital status dummies, age dummies, educational dummies are included (columns 4, 5 and 6). Table 4 does the same but focuses on women aged 30-40. The results are very similar to those reported in Table 2, although the coefficients are quantitatively larger.

Table 5 examines the robustness of the results to the nature of the dependent variable. Specifically, the number of children even born to a woman is a count data. I thus estimate the models using the full sample using negative binomial regression model. As can be seen from the table, the results are in line with those presented in Table 2.

Finally, Table 6 repeats Table 2, but limits the sample to women who gave birth to at least one child (i.e., looking at the intensive margin of fertility). As can be seen, the results are very similar to those reported in Table 2 both in terms of magnitudes and in terms of significance.

3.1 Disaggregated Results

Do women of German origin and women of Italian origin behaved in a similar manner? If indeed the smaller increase in fertility between 1940 to 1960 is related to WW II,

one would expect to find a smaller increase in fertility between 1940 to 1960 for both women of German and Italian origin. Table 7 repeats Table 2 but compares women of German origin to women of Allied origin and other origin.[3] As can be seen from all the specifications, in contrast to my hypothesis, there is no difference between women of German origin and women of other origin.[4]

Table 8 shows the results of a similar analysis when I compare women of German origin to women of Allied origin and other origin.[5] As can be seen from the Table, Italian women have had a much smaller increase in the number of children ever born, compare to other women. Notice that the size of the coefficient in column (6) is larger by more than 50%, compared to the coefficient in column (6) in Table 2. An analysis that follows Tables 3 – 6, reveals the same pattern with the exception that even women age 20-29 have had a smaller increase in fertility.

Finally, I have done the entire analysis presented in Tables 2 – 8 comparing 1940 to 1950, instead of 1960. The results are very similar, both in terms of significance and in terms of size of the coefficients.[6]

3.2 Mobilization of Men to WW II

Doepke et al. (2015) hypothesized that the size of the baby boom is related to the mobilization rates of men to WW II. Specifically, Doepke et al. (2015) argued that in states that mobilized more men to the war, there was a larger crowding out of women who were too young to work during the war from the labor market after the war. As a results, these women had more kids. Their empirical analysis (Tables 2 & 3) confirm this hypothesis.

Table 9 presents results from specifications that follow equation (1). The table show few

[3] Women of Italian and Japanese origin are omitted from the analysis.

[4] Although not reported in the paper, these results hold if I replicate Tables 3 – 6 with German origin instead of Axis origin.

[5] Women of German and Japanese origin are omitted from the analysis.

[6] These results are not reported.

interesting results. First, the coefficient on the interaction between mobilization rate and the year dummy for 1960, is positive and large, highly significant and very stable across the columns, confirming the hypothesis of Doepke et al. (2015). Second, the the coefficient on the interaction between Allied origin and the year dummy for 1960 is always significant, quite stable and similar in size to the coefficients reported in Table 2. Finally, the coefficient on the interaction between Allied origin and the year dummy for 1960 is never significant, in contrast to all the specifications presented in Tables 2 – 8.

A final check repeats the analysis conducted in Table 9 when the sample is limited to compare women of Italian origin and women of other origin. The results are very similar to those reported in Table 9, only that the coefficients on the interaction between Italian origin and the year dummy for 1960 are quantitatively larger than those on the interaction between Axis origin and the year dummy for 1960, reported in Table 9.

4 Limitation of the Analysis

The results presented above rely on DiD estimators. For DiD estimators to be valid, it is required that there is no pre-trend, that is, one should check that such an analysis comparing 1930 to 1940 would show DiD estimates of 0. However, data on the number of children ever born is unavailable for 1930 or even 1920.

One way to account for that is to use data on other variables that measure fertility and are available from the census both for periods before (1930 vs 1940) and for the "treated" period, 1940 to 1960.

Two variables can be used. In theory, the variable that comes closest to the number of children ever born is the number of own children in the household. These can differ if children have left the household or not survived. Indeed, the two variable have similar average in the sample of years 1940-1960. The average number of children ever born is

2.02 while the average number of own children in the household is 1.88. Similarly, the two variables are highly correlated with a correlation of 0.90.

Hence, I repeat the analysis conducted above (Tables 2 – 5) using the number of own children in the household as the dependent variable. Specifically, Table 11 is analogous to Table 8 only that the dependent variable the number of own children in the household instead of number of children ever born. As can be seem, the results are very similar in terms of magnitude and significance.

Next, I conduct the falsification test, that is, I repeat the analysis and estimate the DiD between 1930 and 1940. The analysis above would be valid if the DiD would be zero. Table 12 presents the results. As can be seen from the Table, all the coefficients on the interaction between Italian origin and a dummy variable for the year 1940 are all negative and highly significance. Similarly, all the coefficients on the interaction between Allied origin and a dummy variable for the year 1940 are all positive and highly significance. These results seem to suggest that the results presented above are not valid and cannot be taken seriously to suggest that the war had any impact on fertility behavior of women of different origin.

5 Concluding Remarks

Do wars affect fertility? Although in the popular view wars are thought to cause swings in fertility, evidence suggests that wars were followed by only *short term* increases in fertility rates (Ryder, 1980). In this paper I examined the effect of wars on fertility by comparing the fertility response of American women of ancestry belonging to the winners and losers of World War II. The analysis, based on the number of children ever born shows that American women of Axis ancestry have increased their fertility by less than other women in the U.S. between 1940 and 1960. Nevertheless, a more careful analysis shows that only women of Italian origin drives the results while women of German origin show no response. This is clearly at odds with the hypothesis. If anything, one

would expect to find a larger effect on Germans.

Due to data limitations, I was not able to show that there are no pre-trend in the number of children ever born. Instead, I conduct falsification tests, comparing 1930 to 1940, using a variable that measure the number of own children in the household. The falsification test shows "effects" between 1930 and 1940. I thus conclude that the setting chosen here cannot teach us much about this interesting question.

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Table 1
Summary Statistics: Mean and Standard Deviation (in Parentheses)

Variable	Axis Origin			Allied Origin			Others		
	1940	1950	1960	1940	1950	1960	1940	1950	1960
Fraction	0.066	0.059	0.048	0.032	0.023	0.022	0.901	0.918	0.930
	(0.249)	(0.236)	(0.214)	(0.177)	(0.151)	(0.147)	(0.298)	(0.275)	(0.256)
Kids	1.732	1.552	2.106	1.675	1.745	2.335	1.713	1.778	2.276
	(1.655)	(1.323)	(1.437)	(1.670)	(1.463)	(1.597)	(1.677)	(1.545)	(1.600)
Age	31.2	31.4	32.8	31.6	31.3	31.6	30.3	30.3	30.8
	(5.61)	(5.43)	(5.22)	(5.61)	(5.75)	(5.63)	(5.76)	(5.75)	(5.87)
High School dropout	0.762	0.585	0.408	0.561	0.409	0.335	0.628	0.481	0.378
	(0.426)	(0.493)	(0.491)	(0.496)	(0.492)	(0.472)	(0.483)	(0.500)	(0.485)
High School graduates	0.181	0.346	0.487	0.308	0.400	0.467	0.255	0.371	0.446
	(0.385)	(0.476)	(0.500)	(0.462)	(0.490)	(0.499)	(0.436)	(0.483)	(0.497)
More than High School	0.058	0.070	0.105	0.131	0.191	0.199	0.117	0.147	0.175
	(0.233)	(0.254)	(0.307)	(0.337)	(0.393)	(0.399)	(0.321)	(0.355)	(0.380)
Fraction Married	0.923	0.927	0.939	0.891	0.920	0.922	0.913	0.920	0.921
	(0.267)	(0.260)	(0.240)	(0.311)	(0.271)	(0.268)	(0.281)	(0.271)	(0.270)
Fraction Urban	0.721	–	0.850	0.66	–	0.747	0.541	–	0.675
	(0.449)	–	(0.357)	(0.474)	–	(0.435)	(0.498)	–	(0.468)

Table 2

OLS regressions. Dependent variable is kids, 1960 vs 1940, Women aged 20-40

	(1)	(2)	(3)	(4)	(5)	(6)
Axis Origin×1960	-0.189***	-0.196***	-0.282***	-0.226***	-0.187***	-0.195***
	(0.057)	(0.057)	(0.057)	(0.049)	(0.060)	(0.071)
Allied Origin×1960	0.097*	0.093*	0.119**	0.106**	0.118***	0.112***
	(0.051)	(0.051)	(0.059)	(0.053)	(0.042)	(0.039)
Axis Origin	0.019	0.017	-0.061	-0.147**	-0.067	-0.021
	(0.091)	(0.091)	(0.043)	(0.059)	(0.045)	(0.053)
Allied Origin	-0.038	-0.034	-0.133*	-0.090	-0.065	-0.043
	(0.062)	(0.063)	(0.070)	(0.065)	(0.056)	(0.053)
1960 Dummy	0.563***	0.563***	0.530***	0.683***	0.691***	0.736***
	(0.031)	(0.032)	(0.043)	(0.033)	(0.021)	(0.020)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	222,284	222,284	222,284	222,284	222,284	222,284
R^2	0.028	0.033	0.116	0.150	0.161	0.172

NOTE. Standard errors, clustered at the father place of birth in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 3

OLS regressions. Dependent variable is kids, 1960 vs 1940, Women aged 20-29

	(1)	(2)	(3)	(4)	(5)	(6)
Axis Origin×1960	-0.092***	-0.097***	-0.167***	-0.047	-0.026	-0.044
	(0.034)	(0.034)	(0.040)	(0.036)	(0.033)	(0.035)
Allied Origin×1960	0.066	0.064	0.048	0.053	0.053	0.059
	(0.056)	(0.055)	(0.055)	(0.050)	(0.046)	(0.046)
Axis Origin	-0.071*	-0.073*	-0.121***	-0.227***	-0.136***	-0.095**
	(0.042)	(0.042)	(0.041)	(0.067)	(0.047)	(0.043)
Allied Origin	-0.069	-0.068	-0.104	-0.067	-0.026	-0.023
	(0.063)	(0.065)	(0.071)	(0.064)	(0.060)	(0.055)
1960 Dummy	0.586***	0.584***	0.606***	0.776***	0.780***	0.811***
	(0.027)	(0.027)	(0.033)	(0.028)	(0.018)	(0.016)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	94,268	94,268	94,268	94,268	94,268	94,268
R^2	0.046	0.049	0.123	0.187	0.197	0.205

NOTE. Standard errors, clustered at the father place of birth in parentheses. $^{*}\ p < 0.10$, $^{**}\ p < 0.05$, $^{***}\ p < 0.01$.

Table 4
OLS regressions. Dependent variable is kids, 1960 vs 1940, Women aged 30-40

	(1)	(2)	(3)	(4)	(5)	(6)
Axis Origin×1960	-0.315***	-0.319***	-0.322***	-0.290***	-0.236**	-0.229**
	(0.086)	(0.083)	(0.093)	(0.087)	(0.100)	(0.102)
Allied Origin×1960	0.178**	0.168**	0.176**	0.158**	0.176***	0.151**
	(0.077)	(0.077)	(0.078)	(0.075)	(0.062)	(0.059)
Axis Origin	-0.014	-0.019	-0.029	-0.101*	-0.030	0.024
	(0.058)	(0.056)	(0.059)	(0.058)	(0.069)	(0.079)
Allied Origin	-0.159**	-0.149*	-0.161**	-0.117	-0.103	-0.053
	(0.079)	(0.078)	(0.079)	(0.075)	(0.068)	(0.071)
1960 Dummy	0.479***	0.478***	0.468***	0.612***	0.623***	0.689***
	(0.050)	(0.051)	(0.054)	(0.041)	(0.029)	(0.034)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	128,016	128,016	128,016	128,016	128,016	128,016
R^2	0.018	0.026	0.030	0.055	0.069	0.080

NOTE. Standard errors, clustered at the father place of birth in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5

Negative Binomial regressions. Dependent variable is kids, 1960 vs 1940, Women aged 20-40

	(1)	(2)	(3)	(4)	(5)	(6)
Axis Origin×1960	-0.089**	-0.093***	-0.131***	-0.108***	-0.086***	-0.088***
	(0.036)	(0.036)	(0.025)	(0.023)	(0.026)	(0.030)
Allied Origin×1960	0.048	0.046	0.059*	0.054*	0.061**	0.059**
	(0.029)	(0.029)	(0.033)	(0.032)	(0.028)	(0.026)
Axis Origin	0.011	0.011	-0.029	-0.068*	-0.029	-0.007
	(0.052)	(0.052)	(0.027)	(0.037)	(0.023)	(0.026)
Allied Origin	-0.023	-0.021	-0.069*	-0.048	-0.037	-0.025
	(0.037)	(0.037)	(0.041)	(0.038)	(0.034)	(0.033)
1960 Dummy	0.284***	0.284***	0.270***	0.347***	0.351***	0.373***
	(0.018)	(0.018)	(0.023)	(0.017)	(0.014)	(0.018)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	222,284	222,284	222,284	222,284	222,284	222,284

NOTE. Standard errors, clustered at the father place of birth in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 6

OLS regressions. Dependent variable is kids, 1960 vs 1940, Women aged 20-40 with at least one kid

	(1)	(2)	(3)	(4)	(5)	(6)
Axis Origin×1960	-0.194***	-0.199***	-0.270***	-0.229***	-0.189***	-0.198***
	(0.049)	(0.049)	(0.047)	(0.042)	(0.054)	(0.065)
Allied Origin×1960	0.091*	0.085	0.117*	0.107**	0.119***	0.110***
	(0.052)	(0.052)	(0.062)	(0.051)	(0.039)	(0.039)
Axis Origin	0.006	0.005	-0.062	-0.127*	-0.060	-0.016
	(0.099)	(0.100)	(0.054)	(0.074)	(0.048)	(0.048)
Allied Origin	-0.032	-0.027	-0.120**	-0.083	-0.068	-0.045
	(0.050)	(0.050)	(0.055)	(0.053)	(0.050)	(0.046)
1960 Dummy	0.318***	0.319***	0.305***	0.453***	0.461***	0.505***
	(0.029)	(0.028)	(0.039)	(0.030)	(0.020)	(0.019)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	183,719	183,719	183,719	183,719	183,719	183,719
R^2	0.011	0.014	0.089	0.119	0.130	0.140

NOTE. Standard errors, clustered at the father place of birth in parentheses. $^{*}\ p < 0.10$, $^{**}\ p < 0.05$, $^{***}\ p < 0.01$.

Table 7

OLS regressions. Dependent variable is kids, 1960 vs 1940, Women aged 20-40: German Origin

	(1)	(2)	(3)	(4)	(5)	(6)
German Origin×1960	-0.114	-0.121	-0.077	-0.008	0.010	-0.001
	(0.074)	(0.074)	(0.068)	(0.065)	(0.057)	(0.055)
Allied Origin×1960	0.097*	0.093*	0.119**	0.106**	0.118***	0.112***
	(0.051)	(0.051)	(0.060)	(0.053)	(0.042)	(0.039)
German Origin	0.110*	0.111*	-0.075	-0.114*	-0.109*	-0.095
	(0.066)	(0.064)	(0.065)	(0.061)	(0.059)	(0.058)
Allied Origin	-0.038	-0.035	-0.133*	-0.089	-0.064	-0.042
	(0.062)	(0.063)	(0.071)	(0.065)	(0.057)	(0.054)
1960 Dummy	0.563***	0.563***	0.530***	0.686***	0.694***	0.739***
	(0.031)	(0.032)	(0.043)	(0.032)	(0.020)	(0.020)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	214,386	214,386	214,386	214,386	214,386	214,386
R^2	0.028	0.033	0.116	0.151	0.162	0.174

NOTE. Standard errors, clustered at the father place of birth in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 8

OLS regressions. Dependent variable is kids, 1960 vs 1940, Women aged 20-40: Italian Origin

	(1)	(2)	(3)	(4)	(5)	(6)
Italian Origin×1960	-0.128***	-0.132***	-0.351***	-0.260***	-0.279***	-0.315***
	(0.035)	(0.035)	(0.038)	(0.037)	(0.023)	(0.024)
Allied Origin×1960	0.097*	0.093*	0.119**	0.106**	0.118***	0.112***
	(0.051)	(0.051)	(0.059)	(0.053)	(0.042)	(0.039)
Italian Origin	-0.094***	-0.098***	-0.048	-0.196***	-0.027	0.061
	(0.031)	(0.031)	(0.037)	(0.037)	(0.051)	(0.053)
Allied Origin	-0.038	-0.034	-0.133*	-0.089	-0.065	-0.043
	(0.062)	(0.063)	(0.071)	(0.065)	(0.056)	(0.053)
1960 Dummy	0.563***	0.564***	0.530***	0.685***	0.692***	0.737***
	(0.031)	(0.032)	(0.043)	(0.032)	(0.020)	(0.020)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	218,514	218,514	218,514	218,514	218,514	218,514
R^2	0.029	0.033	0.117	0.151	0.162	0.173

NOTE. Standard errors, clustered at the father place of birth in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 9

OLS regressions. Dependent variable is kids, 1960 vs 1940, Women aged 20-40: Mobilization to WW II

	(1)	(2)	(3)	(4)	(5)	(6)
Axis Origin×1960	-0.212***	-0.218***	-0.302***	-0.253***	-0.221***	-0.226***
	(0.042)	(0.043)	(0.073)	(0.062)	(0.072)	(0.082)
Allied Origin×1960	0.035	0.032	0.059	0.042	0.061	0.060
	(0.056)	(0.056)	(0.065)	(0.059)	(0.051)	(0.047)
Axis Origin	0.056	0.053	-0.022	-0.112**	-0.052	-0.008
	(0.070)	(0.071)	(0.041)	(0.043)	(0.042)	(0.054)
Allied Origin	0.044	0.045	-0.047	-0.015	-0.030	-0.012
	(0.065)	(0.066)	(0.072)	(0.066)	(0.052)	(0.049)
1960 Dummy	-0.730*	-0.694	-0.692	-0.657	-0.571	-0.431
	(0.423)	(0.420)	(0.477)	(0.431)	(0.390)	(0.384)
Mobilization Rates×1960	2.737***	2.662***	2.588**	2.831***	2.664***	2.464***
	(0.897)	(0.891)	(1.027)	(0.931)	(0.832)	(0.808)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
Mobilization Rates	Yes	Yes	Yes	Yes	No	No
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	222,284	222,284	222,284	222,284	222,284	222,284
R^2	0.029	0.033	0.117	0.151	0.162	0.173

NOTE. Standard errors, clustered at the father place of birth in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 10

OLS regressions. Dependent variable is kids, 1960 vs 1940, Women aged 20-40: Mobilization to WW II and Italian Origin

	(1)	(2)	(3)	(4)	(5)	(6)
Italian Origin×1960	-0.189***	-0.192***	-0.413***	-0.326***	-0.337***	-0.369***
	(0.041)	(0.041)	(0.043)	(0.041)	(0.028)	(0.026)
Allied Origin×1960	0.034	0.031	0.057	0.040	0.057	0.057
	(0.055)	(0.056)	(0.065)	(0.058)	(0.051)	(0.047)
Italian Origin	-0.015	-0.022	0.037	-0.121***	0.008	0.092**
	(0.035)	(0.035)	(0.038)	(0.036)	(0.038)	(0.041)
Allied Origin	0.043	0.044	-0.046	-0.014	-0.028	-0.009
	(0.065)	(0.066)	(0.072)	(0.066)	(0.052)	(0.049)
1960 Dummy	-0.748*	-0.711*	-0.752	-0.703	-0.653*	-0.521
	(0.430)	(0.426)	(0.480)	(0.427)	(0.392)	(0.386)
Mobilization Rates×1960	2.774***	2.698***	2.715***	2.931***	2.838***	2.655***
	(0.911)	(0.904)	(1.034)	(0.920)	(0.836)	(0.815)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
Mobilization Rates	Yes	Yes	Yes	Yes	No	No
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	218,514	218,514	218,514	218,514	218,514	218,514
R^2	0.031	0.035	0.119	0.153	0.162	0.174

NOTE. Standard errors, clustered at the father place of birth in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 11

OLS regressions. Dependent variable is number of own children in the household, 1960 vs 1940, Women aged 20-40: Italian Origin

	(1)	(2)	(3)	(4)	(5)	(6)
Italian Origin×1960	0.133***	-0.163***	-0.356***	-0.289***	-0.294***	-0.317***
	(0.037)	(0.033)	(0.031)	(0.034)	(0.023)	(0.018)
Allied Origin×1960	0.121**	0.073	0.102*	0.098**	0.109***	0.104***
	(0.051)	(0.044)	(0.053)	(0.041)	(0.037)	(0.036)
Italian Origin	-0.334***	-0.003	0.055**	-0.054*	0.053***	0.114***
	(0.036)	(0.028)	(0.023)	(0.029)	(0.017)	(0.015)
Allied Origin	-0.068	-0.015	-0.097***	-0.073**	-0.066**	-0.048*
	(0.051)	(0.034)	(0.036)	(0.031)	(0.029)	(0.027)
1960 Dummy	0.694***	0.459***	0.430***	0.532***	0.539***	0.574***
	(0.034)	(0.029)	(0.027)	(0.023)	(0.020)	(0.024)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	250,207	250,207	250,207	250,207	250,207	250,207
R^2	0.048	0.221	0.272	0.289	0.296	0.304

NOTE. Standard errors, clustered at the father place of birth in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 12

OLS regressions. Dependent variable is number of own children in the household, 1940 vs 1930, Women aged 20-40: Italian Origin

	(1)	(2)	(3)	(4)	(5)	(6)
Italian Origin×1940	-0.151***	-0.006	-0.096***	-0.201***	-0.209***	-0.220***
	(0.024)	(0.022)	(0.018)	(0.022)	(0.021)	(0.020)
Allied Origin×1940	0.115***	0.102***	0.092***	0.120***	0.114***	0.074**
	(0.039)	(0.028)	(0.029)	(0.032)	(0.032)	(0.033)
Italian Origin	-0.183***	-0.016	0.153***	0.144***	0.321***	0.397***
	(0.045)	(0.031)	(0.029)	(0.029)	(0.012)	(0.015)
Allied Origin	-0.184***	-0.119***	-0.200***	-0.201***	-0.115***	-0.070**
	(0.045)	(0.036)	(0.047)	(0.047)	(0.028)	(0.030)
1940 Dummy	-0.174***	-0.180***	-0.182***	-0.568***	-0.564***	-0.548***
	(0.022)	(0.019)	(0.020)	(0.039)	(0.037)	(0.032)
Marital Status	No	Yes	Yes	Yes	Yes	Yes
Age Dummies	No	No	Yes	Yes	Yes	Yes
Education Dummies	No	No	No	Yes	Yes	Yes
State Dummies	No	No	No	No	Yes	Yes
Urban/Rural Dummy	No	No	No	No	No	Yes
Obs.	189,348	189,348	189,348	189,348	189,348	189,348
R^2	0.004	0.209	0.269	0.282	0.298	0.313

NOTE. Standard errors, clustered at the father place of birth in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.