

The Baby Boom and World War II: The Role of Labor Market Experience*

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Abstract

The past century has witnessed major changes in the economic choices of American women. Over the long term, there has been a marked trend towards lower fertility and higher female labor force participation. However, change did not occur in a uniform fashion: during the post-war baby boom, fertility rates increased substantially, until the long-term downward trend reestablished itself in the 1960s. Similarly, the labor market participation of younger women declined for a while during the same period. What can explain these reversals? In this paper, we propose a joint explanation for these changes through a single shock: the demand for female labor during World War II. Many of the women of the war generation continued to work after the war. We argue that this crowded out younger women from the labor market, who chose to have more children instead.

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1 Introduction

For a little over a century, economic growth in the U.S. has been accompanied by major changes in the choices and economic opportunities of women. A key dimension of these changes is fertility decline. In 1900, the average woman in the U.S. had a little less than 4 children over her lifetime; by the year 2000, this number has declined to a little more than two. The flip side of this development is increased participation of women in the labor market. The fraction of women formally employed has increased from 20 percent in 1900 to 57.5 percent by 1990. Among married women, the increase was even larger, from 5.6 percent in 1900 to 50.1 percent in 1980 (Goldin 1990, Blau and Kahn 2000). At the same time, the difference in earnings between men and women, the “gender gap,” has shrunk: in 1900, the average working woman earned a wage equal to 55 percent of the wage of the average working man. By 1999, the relative wage of women had risen to 76 percent of average wages for men (Goldin 1990, Blau and Kahn 2000).

While these developments for the most part occurred gradually over the course of the past century, there is one major episode during which the long-term trends were temporarily reversed. The end of World War II marked the beginning of a baby boom during which fertility increased sharply. The baby boom lasted for about 15 years; after 1960, fertility dropped sharply, and the long-term downward trend reestablished itself. The total fertility rate (TFR) which was 2.3 in 1940, increased to more than 3.7 by 1957, and subsequently returned to its pre-war level by 1970 (see Figure 1). For the most part, the baby boom is accounted for by high birth rates among mothers who turned adult only after the end of the war. As Figure 2 shows, the highest fertility rates are achieved by mothers born between 1925 and 1935, who would have been between 10 and 20 years old at the end of the war. The baby boom was also accompanied by a temporary reversal in the narrowing of the gender gap. Relative female wages declined for about a decade from the mid-1950s, until they started to rise again substantially during the 1970s and 1980s.

The baby boom and the later baby bust had a substantial impact on the age structure of the American population. The effects of that are being felt today, as social

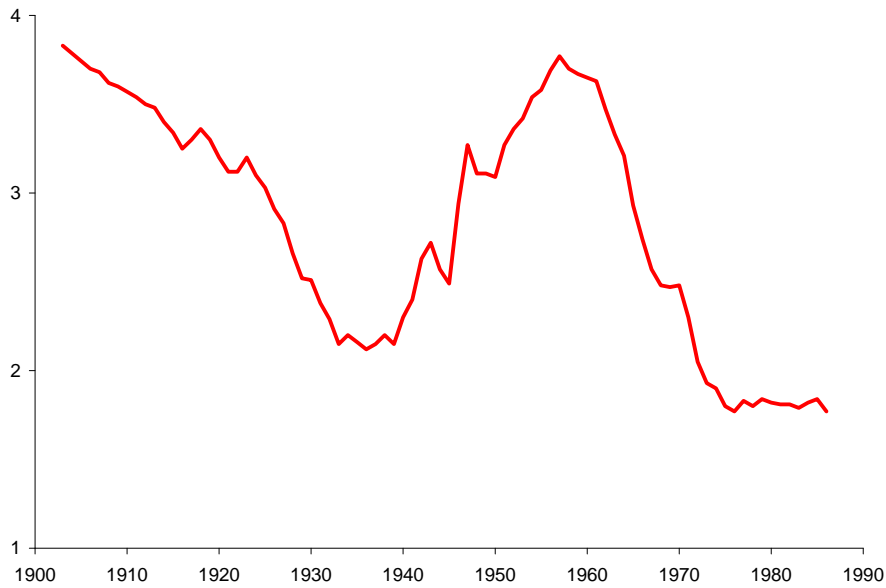


Figure 1: The Total Fertility Rate in the U.S.

insurance systems are expected to be tested to their limits by the impending retirement of the baby boom cohorts. Examining the causes of the boom are one of the key challenges for demographic economics.

Two competing hypotheses for the baby boom have been proposed. Easterlin (1961) advocates the relative income hypothesis. He argues that people growing up in the Great Depression had low material aspirations. Overwhelmed by the prosperity during the post-war years, they increased their demand for children. One of the problems with this explanation is that the timing is not quite right. During the baby boom fertility peaked right before 1960. Most of the baby boom was accounted for by young mothers aged 20–24. These mothers were born between 1936 and 1940, and spent most of their childhood during the prosperous post-war period.

Greenwood, Seshadri, and Vandenbroucke (2005) propose an alternative theory based on improvements in household technology. They argue that the widespread diffusion of appliances such as washers, dishwashers, electric stoves etc. enabled women to run their households in much less time than before. This technological improvement freed up time that became available for raising more children instead. One problem with this theory is that while it may contribute to

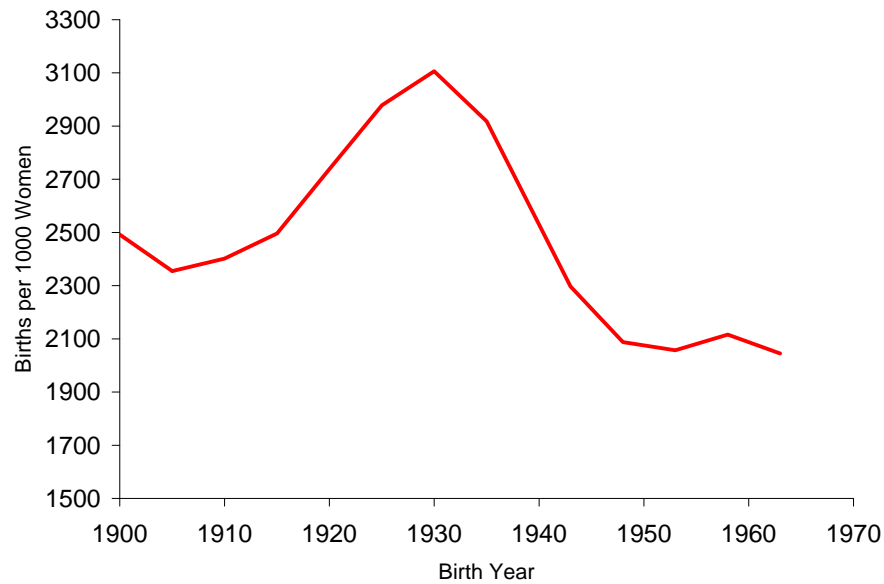


Figure 2: Completed Fertility by Birth Year of Mother in the U.S.

explaining the rise in fertility at the beginning of the baby boom, it has trouble generating the sharp decline of fertility at the end of the baby boom.

Both existing theories dismiss a link between World War II and the baby boom, despite the fact that the substantial rise in fertility coincides with the end of the war. The data certainly suggests that the baby boom has to be more than just a “catch up” in fertility to make up for “missing babies” that were not born during the war, when many husbands were in the armed forces instead of with their families. Indeed, in the data the drop in fertility during the war is made up for the most part by 1947, whereas fertility continued to rise for an extended period after 1947 and stayed high for 15 years.

Despite this argument, in this paper we argue that World War II was one of the prime causes behind the baby boom. The mechanism in our theory, however, is more subtle than “catch up” fertility, and revolves around the demand for female labor. As documented by Goldin (1991) and Acemoglu, Autor, and Lyle (2004), the war induced a huge positive shock to the demand for female labor. While men were fighting the war in Europe and Asia, many women were drawn into the labor force and replaced men in factories and offices. The women who worked during the war accumulated valuable labor market experience. As a con-

sequence, many of these women continued to work after the war.

At first sight, it might seem that this additional supply of female labor should generate the opposite of a baby boom: women who work have less time to raise children and usually have fewer of them. The key to our argument, however, is that the one-time demand shock for female labor during the war had an *asymmetric* effect on younger and older women. The extra labor market experience gathered during the war obviously benefited only the women who were old enough to work during that period. For younger women who were still in school during the war the effect was a negative one: when they turned adult after the war and had to decide whether to enter the labor market, they faced increased competition. In addition to the men who returned from the war, at that time a large number of women from the war generation were still in the labor force, who also had a lot of work experience. This led to less demand and lower wages for inexperienced young women, who were crowded out of the labor market and chose to have more children instead.

A key advantage of this theory for explaining the baby boom is that it can account not only for the initial rise in fertility, but also for the abrupt end of the baby boom and the accompanying dynamics in the gender gap. The negative effect on the labor market opportunities of young women lasts only as long as the war-generation of women stays in the labor market. When this cohort starts to retire 10 to 15 years after war, effective female labor supply drops sharply, and labor market opportunities for young women improve. The young women in the 1960s did not face competition from experienced older women, since the preceding cohort consisted of the mothers of the baby boom, who worked relatively little. The theory therefore predicts that labor force participation of young women should rise sharply in the 1960s, and fertility should fall, which is exactly what the data shows. This crowding out young women from the labor force after the war affected the average experience of women in the labor force, which generated the narrowing in the gender gap in the post war period. When the experienced war generation retires and is replaced by less experienced, younger women, average female experience falls, which accounts for the fall in relative female wages in the 1960s.

We document that the evidence on the age distribution of fertility and labor force participation after the war is consistent with our theory. In particular, most of the baby boom is accounted for by young women aged 20–24, who were too young to work during the war. The relative labor force participation of younger versus older women after the war evolves as predicted by the theory. Participation by older women rises sharply after the war, while participation of the youngest women falls. After 1960, the rise in participation by older women slows down, while participation by younger women rises sharply.

The remainder of the paper is organized as follows. In the following section, we describe our theoretical framework. In Section 3, the economy is calibrated to U.S. data from the pre-war period. In Section 4, we discuss how the economy reacts to a one-time demand shock for female labor such as World War II. In Section 5, we discuss evidence on fertility, female labor force participation, and the gender gap, and argue that the evidence supports our theory. International evidence is discussed in Section 6. Section 7 concludes.

2 The Model

The model economy is populated by married couples who turn adult at age 20 and live until they are 70 years old. Each model period corresponds to 2.5 years. Men work continuously until retirement at age 60. Women can choose in every period whether or not to participate in the labor market. Working women also retire at age 60. Apart from deciding on labor supply, the main decision facing our couples is the choice of their number of children. All decisions are taken jointly by husbands and wives with the objective of maximizing the utility function:

$$U = \sum_{j=1}^T \beta^{j-1} [\log(c_j) + \sigma_x \log(x_j) - e_j] + \sigma_n \log(n).$$

Here c is consumption x , is female leisure, and n is the number of children. The variable $e_j \in \{0, e\}$ denotes the cost of entering the labor market in utility terms. This cost captures the job search effort as well as any other adjustments that are

required when entering the labor force. The utility cost has to be paid once for every female employment spell. For men, neither this adjustment cost nor leisure appears in the utility function, as they are continuously employed and their leisure is fixed.

The flow budget constraint for a couple is:

$$c_j + a_{j+1} = (1 + r_j)a_j + w_j^M + w_j^F l_j.$$

Here a_j are assets (savings), r_j is the interest rate, w_j^M is the male wage, w_j^F is the female wage, and l_j is female labor supply which can be either zero or one (male labor supply is always assumed to be one). People are born without assets ($a_0 = 0$). For young women who don't have children yet, leisure is given by:

$$x_j = h - l_j,$$

where h is the time endowment. For older women who already have children leisure is:

$$x_j = h - \phi n^\psi - l_j,$$

i.e., there is a time cost for children. The fact that this time cost is only present for older women implies that work is less attractive to them. For women who are giving birth in the present period, leisure is:

$$x_j = h - \phi n^\psi - b,$$

where b is the time cost for the birth (in addition to the time cost for the existing children). For simplicity, and realistically for the period, we assume that women who give birth do not work during the same period. Women can give birth only until age 35, and only one birth per period is possible. Thus, for example, a woman planning to have two children must start giving birth at age 30.

The population is heterogeneous in terms of the appreciation of leisure, i.e., the parameter σ_x in the utility function varies across couples. The distribution of σ_x determines the average female labor force participation rate at different ages. In the model, it is optimal for women to have children as late as possible, i.e.,

women work initially and then have children until they reach 35. Subsequently, only women with a relatively low appreciation for leisure (i.e., a low disutility for work) return to the labor force.

The production technology is given by:

$$Y_t = A_t K_t^\alpha (\theta(L_t^F)^\rho + (1 - \theta)(L_t^M)^\rho)^{\frac{1-\alpha}{\rho}}.$$

As the baseline case, we abstract from productivity growth:

$$A_t = \bar{A}.$$

The production function allows for limited substitutability between male and female labor.

The production technology is operated by perfectly competitive firms, so that all factors are paid their marginal products and profits are equal to zero in equilibrium.

3 Calibration

Our ultimate objective is to use the model to analyze the evolution of fertility and female labor supply after World War II. Consistent with this objective, our calibration strategy is to match certain statistics of the model economy to observations from the United States in 1940, just before the country got involved in the war.

Given our exercise, we are particularly interested in matching fertility behavior as well as female labor supply in the pre-war period. Holding constant the remaining parameters, these choices are pinned down by the distribution of the leisure weight σ_x in utility, the fertility weight σ_n in utility, as well as the fixed cost e of entering the labor market. We chose these parameters to deliver a fertility rate of 2.4 in steady state, as well as a labor-force participation rate of 14 percent for women above the age of 35. The latter statistic matches the labor force participation rate of married women above 35 in the 1940 U.S. census. The

| Parameter | Value |
|------------|--------------|
| β | $0.95^{2.5}$ |
| σ_n | 1.325 |
| σ_x | U(0.3,0.4) |
| e | 1 |
| ϕ | 0.9 |
| ψ | 0.3 |
| b | 0.45 |
| h | 3 |
| α | 0.3 |
| θ | 0.28 |
| ρ | 0.65 |

Table 1: Parameter Values

fertility rate of 2.4 matches the completed fertility rate of women born between 1911 and 1915, who were in their prime fertility years (average age 27.5) in 1940. We choose to match a completed fertility rate rather than the total fertility rate because total fertility rates are highly sensitive to changes in the timing of births. Given this parametrization, all women work initially when turning adult, and then stop working once they have their first child, most of them permanently. All families have either 2 or 3 children.

The capital share α in the production function is set to 0.3, which approximates the share of capital in U.S. GDP in 1940. The parameters ρ and θ govern the substitutability between male and female labor, as well as relative wages. The share parameter θ is chosen to match a ratio of female to male wages of 0.6 in 1940 (see O’Neil and Polachek 1993). The elasticity parameter ρ has been estimated by Acemoglu, Autor, and Lyle (2004) using census data. They suggest a range of 0.583 to 0.762 for ρ ; following this estimate, we set $\rho = 0.65$. The implied elasticity of substitution between male and female labor is about 2.9.

The calibrated parameter values are summarized in Table 1.

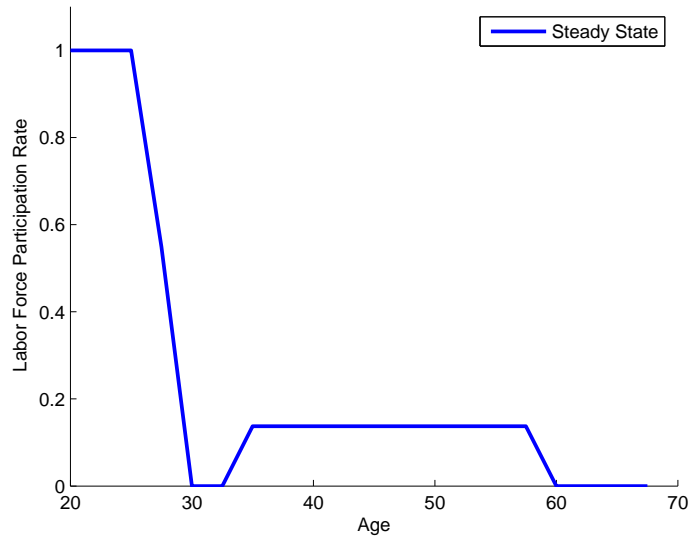


Figure 3: Average Labor Force Participation in the Steady State

As an illustration of individuals' behavior in the calibrated steady state, Figure 3 displays the cross-section of female labor force participation rates in the steady state by age (or, equivalently, the profile of a given cohort over time). At young ages, all women work, so that the labor force participation rate is 100 percent. At 27.5 years, the women who plan to have three children drop out of the labor force and give birth to their first child. At age 30, all women are giving birth (since in the calibration all families have at least two children), so that participation drops to zero. After the childbearing period, a small fraction of women (14 percent) return to work and continue until retirement at age 60.

4 World War II and the Baby Boom

We now want to demonstrate how a one-time demand shock for female labor affects fertility and labor-force participation rates in our model. The economy is in steady state when World War II arrives. We model the war as a decline in the availability of male labor as well as a decline in the fixed cost of entering the labor market. The decline in male labor is matched to the actual decline in

male labor supply due to mobilization during the final years of the war. This drop amounts to about 20 percent relative to the male labor force in 1940. We also want to match the actual increase in female labor force participation after the war. In the model, the wage increase triggered by a one-time decline in male labor supply is not sufficient to increase female participation by the amount that was actually observed in the war. Indeed, Mulligan (1998) argues that in the war-time U.S. after-tax real wages actually fell during the war, so that other factors (such as patriotism) are required to explain the large increase in female labor force participation. Following this argument, we feed a one-time decline in the fixed cost e in the model that is chosen to match the increase in the labor force participation of married women over the age of 35 in the decade after the war. The resulting war-time value of the fixed cost is $e = 0.33$.

Both changes (the decline in male labor supply and the decline in the fixed cost of entering the labor market) last only one period, and subsequently all parameter values return to the steady state. However, the one-shock still has long-term effects, mainly because of persistence in female labor supply. For the most part, the war draws older women into the labor force (the youngest women are working anyway). Once these women have paid the fixed cost of entering the labor market, many of them choose to stay on working after the war. This increases the ratio of female to male labor supply, and depresses female wages. It is this decline in the female wage after the war which is responsible for most of the long-term effects of the shock.

Figure 4 displays the response of the total fertility rate in the model after the shock. The fertility rate rises steeply in the years after the war, and reaches a plateau of 3.0 in 1947.5. The fertility rate stays at this level for about a decade, declines throughout the 1960s, and ultimately returns to the steady state value of 2.4 in the 1970s. The reason for the increase is that young women no longer find it worthwhile to participate in the labor market given the increased labor market competition. In essence, the experienced war generation crowds out the younger women from the labor market. The young women stay at home and have more children instead. This effects fades in the 1960s as the older cohorts of women that worked during the war start to retire.

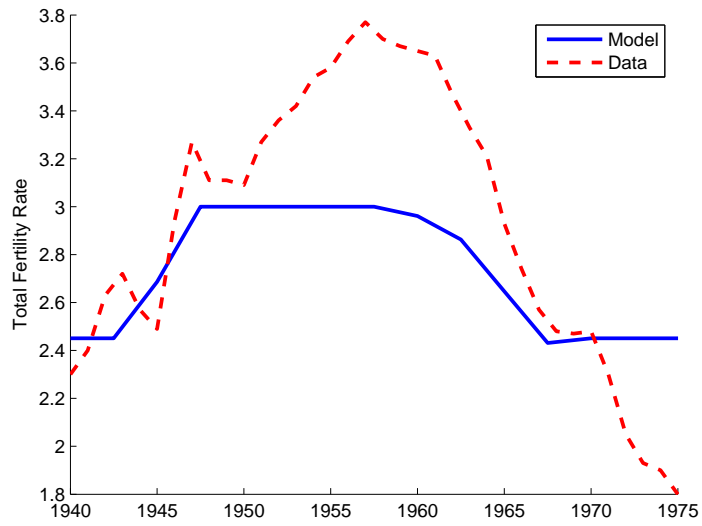


Figure 4: Total Fertility Rate: Model and Data

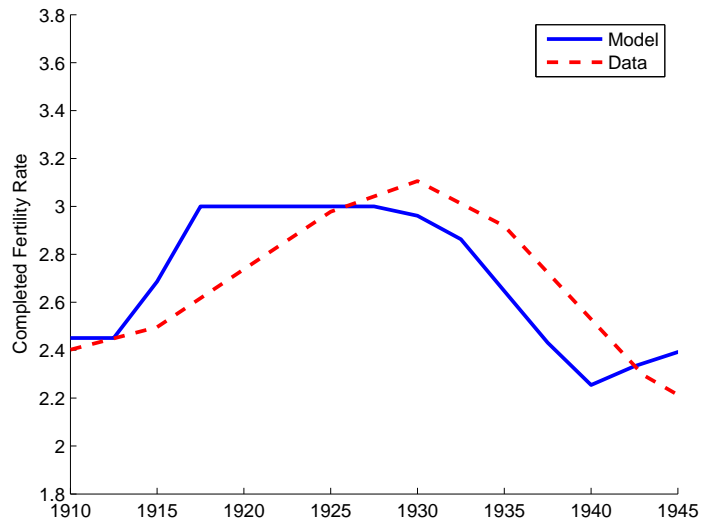


Figure 5: Completed Fertility Rate: Model and Data

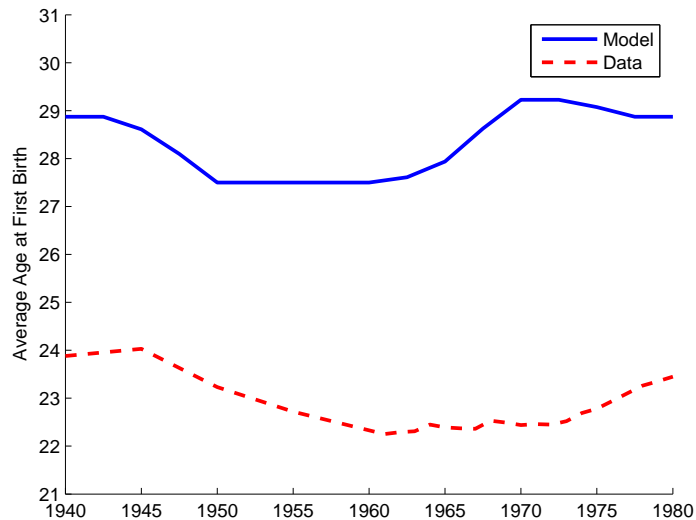


Figure 6: Average Age at First Birth: Model and Data

Figure 4 suggests that the model explains about half of the overall increase in fertility during the baby boom period. However, the total fertility data for the U.S. are a somewhat unreliable guide to fertility behavior, because the measure is highly sensitive to changes in the timing of births. This effect can be gauged by comparing the model with data on completed fertility rates, which is done in Figure 5 (here the horizontal axis denotes the birth year of the mother). The figure shows that in terms of completed fertility, the model actually explains most of increase during the baby boom.

In the model, all women complete their fertility at age 35. The increase in fertility during the baby boom is entirely accounted for by an earlier start of the fertility period. Figure 6 displays the average age at first birth in the model and in U.S. data. In both cases, the baby boom leads to a decline in the age at first birth by about 1.5 years. However, in the data women commence childbearing earlier than in the model.

Figures 7 and 8 provide some more detail on the changes in labor supply induced by the war change. Figure 7 compares the average labor supply profile of women born in 1900 with the steady-state profile. The women follow the steady state profile until the war shock arrives. At that time, more than 40 percent of the

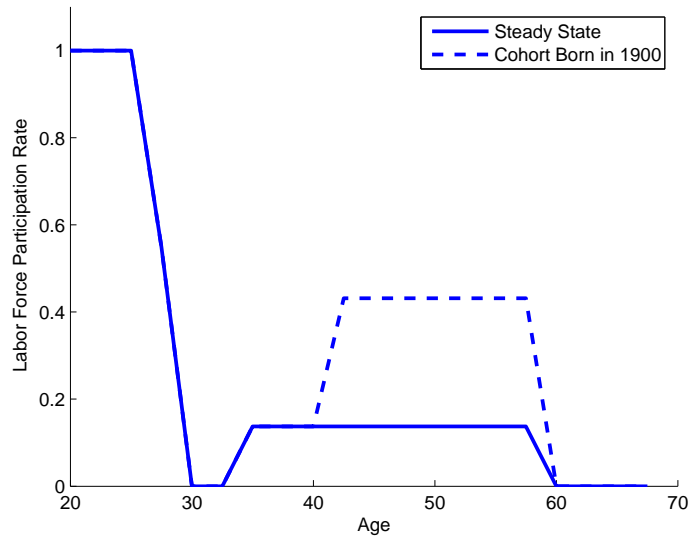


Figure 7: Average Labor Force Participation of Women born in 1900 (Model)

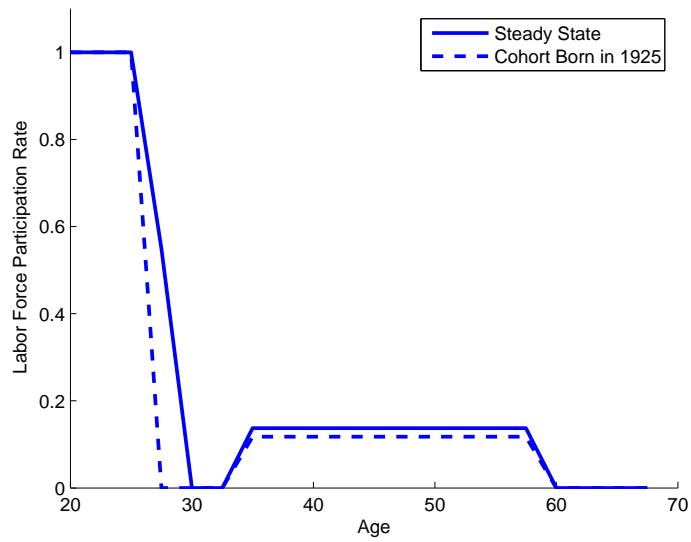


Figure 8: Average Labor Force Participation of Women born in 1925 (Model)

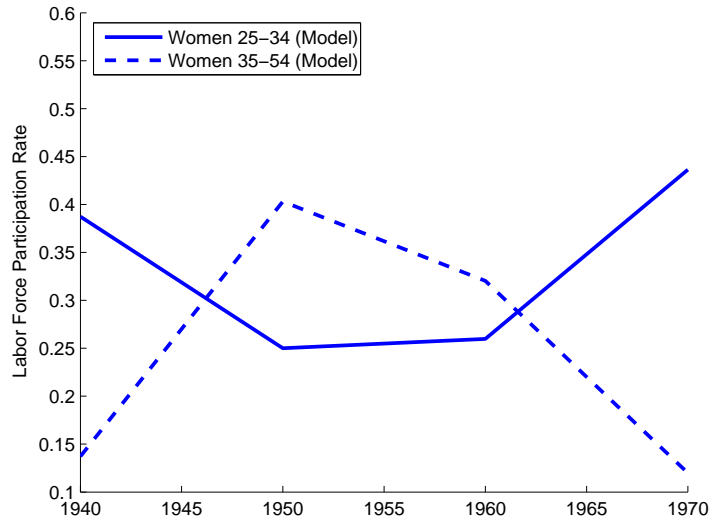


Figure 9: Average Labor Force Participation over Time (Model)

women of this cohort enter the labor market, and continue to work until they retire at age 60 (i.e., in the year 1960).

This can be compared with Figure 8, which displays the same profile for women born in 1925. These women turn adult in 1945, right at the end of the war. They are thus not directly affected by the war shock, but they do face the increased competition in the labor market provided, for instance, by the 1900 cohort. These women react to the worsened labor market conditions by leaving the labor market early, which allows them to have a third child. This higher fertility rate also increases their opportunity cost of time, which accounts for the relatively low labor force participation after the child-bearing period.

The aggregate effects of these labor-supply changes are displayed in Figure 9. We display separate labor-force participation rates for women aged 25–34 (the prime child-bearing years) and 35–54. The figure shows the stark asymmetry of the impact on younger and older women. Older women are drawn into the labor force, which accounts for a large increase in participation until the war cohorts retire. In contrast, the younger women lower their labor market participation due to the increased competition from older women.

In summary, we see that our simple model can generate a baby boom, including the ultimate reversal to lower fertility, as a result of a single demand shock for female labor. In the following section, we assess whether the qualitative predictions of the model are in line with empirical evidence from the U.S. from the baby boom period.

5 Empirical Evidence

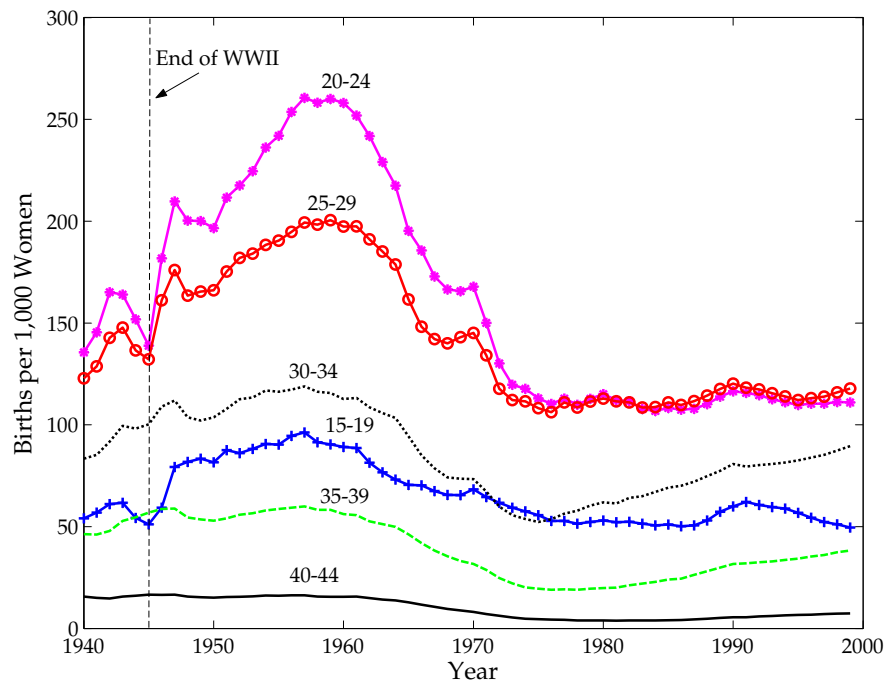


Figure 10: Fertility by Age in the U.S.

One of the key assumptions of our theory is that the World War II shock had asymmetric effects on younger and older women. In our theory, it is the younger women who did not work during the war who are crowded out of the labor market and decide to have more children. Figure 10 shows that this implication is in line with evidence on fertility by age for the U.S. The figure shows that the substantial increase in post-war fertility was mostly due to young women. The group from 20–24 years of age has by far the largest increase in fertility. Most mothers in this group were too young to work during the war. In particular, for

the two age groups 20–24 and 25–29 fertility peaks in 1960. These mothers were aged between 5 and 15 at the end of the war.

As figure 10 shows, the increase in fertility was not uniform across the different age groups. Older women aged 30 years or older show hardly any increase in fertility during the baby boom. This pattern is consistent with our theory, but not with a theory in which the baby boom is due to improvements in household technology alone. If children became cheaper due to better appliances, the change in fertility should have been more uniformly distributed across the different age groups.

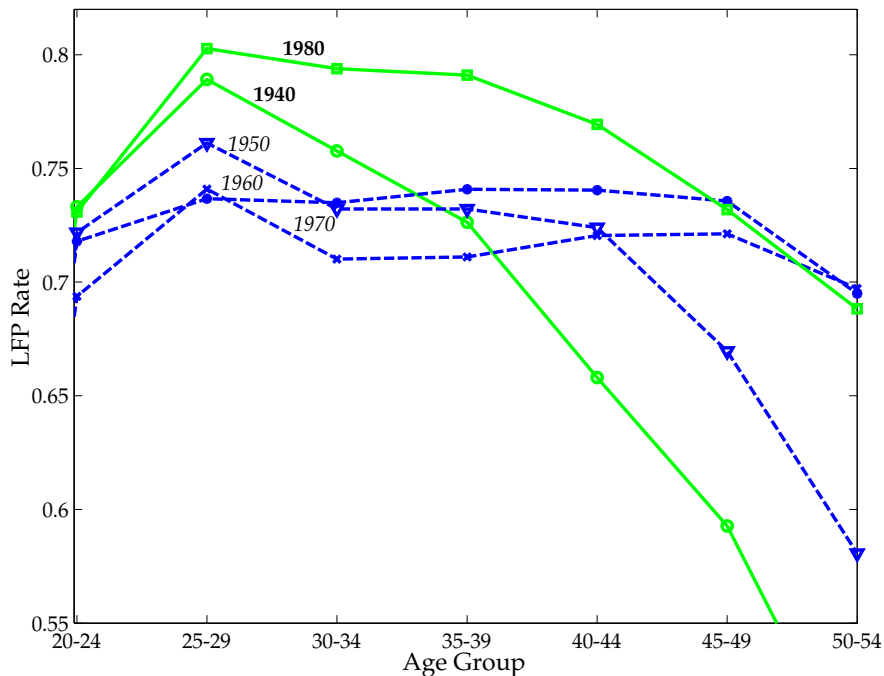


Figure 11: Labor Force Participation of Single Women in the U.S.

Our theory is also consistent with patterns of labor market participation after the war. Figures 11 and 12 show labor force participation rates by age for different decades from 1940 to 1980. In each case, the long-term trend (comparing 1940 and 1980) is towards higher participation. In the post-war period (comparing 1940, 1950, and 1960), however, we observe a very rapid increase among older women (35 and above), and only a slow increase or even decline among the younger women. In 1940, the female labor force consisted mostly of young single women

who were working for a few years before getting married. In 1950 and 1960, participation by young single women is sharply lower, while participation of older women is much higher.

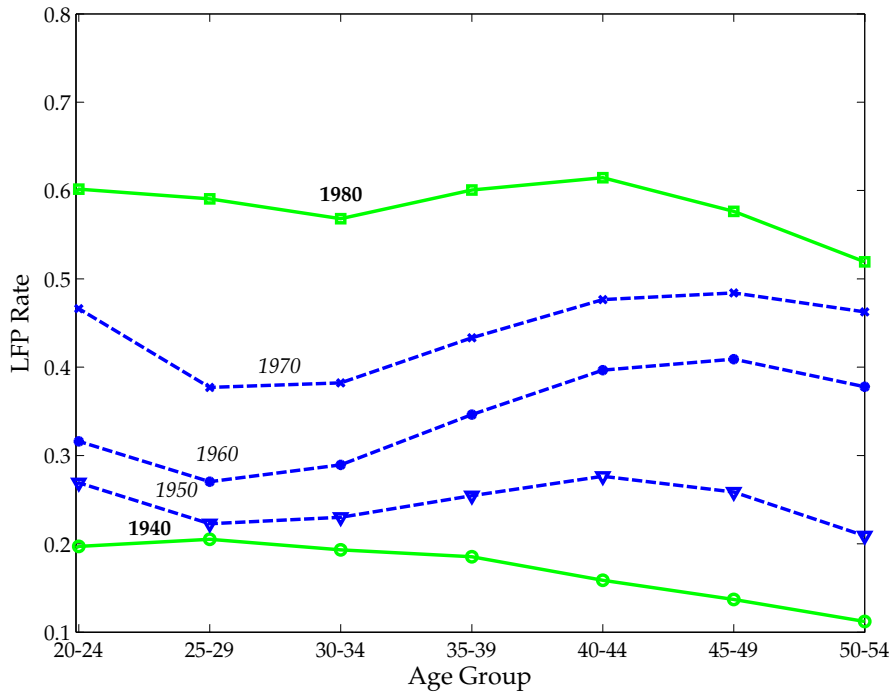


Figure 12: Labor Force Participation of Married Women in the U.S.

Figure 13 provides a different way of looking at this data. The figure plots the change in labor-force participation decade-by-decade for young and old women. This time, the series is for all women, i.e., both married and single. As our theory predicts, the two series move in opposite directions. After the war, participation of older women rises, while participation of young women declines. After 1960, the series are reversed, and participation among younger women rises much faster than that of older women.

We next turn to the gender gap. As mentioned before, the long-term trend is one of rising relative female wages. After the war, however, the trend was temporarily reversed. Figure 14 shows that the gender gap closed quickly after 1945. During the 1950s, however, the gap starts to widen again, and it only starts to close again after 1970 (which is explained by rising female education during this later period). The dynamics after the war are consistent with rising average fe-

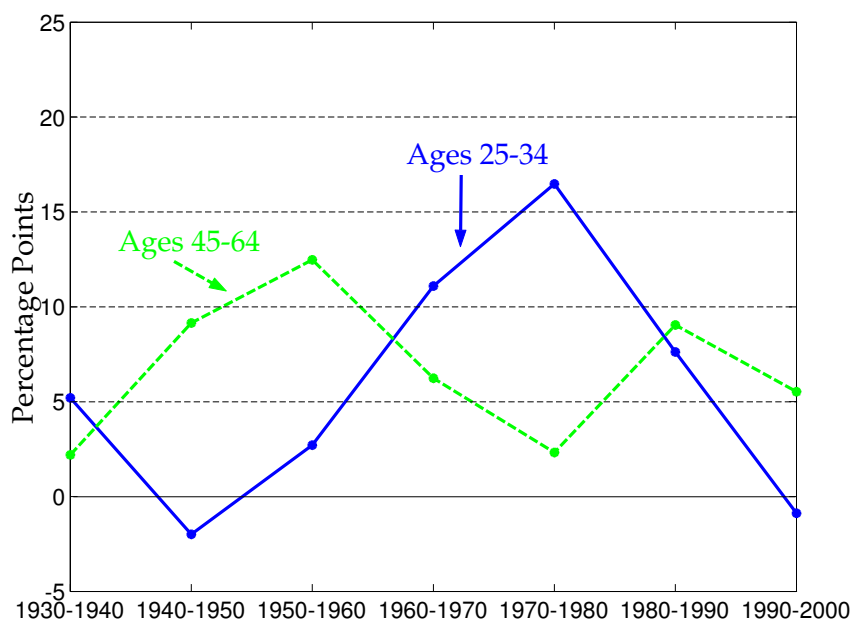


Figure 13: Change in Labor Force Participation by Age in the U.S.

male experience after the war (when inexperienced young women choose not to enter the labor force), and declining average experience later on when experienced older women of the war generation are replaced by inexperienced young women.

As a final test of our theory, we turn to state level data. During the war, mobilization rates differed from state to state. In our theory, it is the war-time demand for female labor due to the mobilization of men that ultimately causes the baby boom. We would therefore expect our mechanism to lead to particularly pronounced effects in states where relatively more men were mobilized.

As Figures 15 and 16 show, there is no clear relationship between mobilization rates and birth rates until 1950. At this time, many women of the war generation were still in child bearing age. If those who chose to keep on working after the war have lower fertility levels, this would counteract higher fertility among younger women. Turning to the change between 1950 and 1960, we now observe a clear positive relationship between mobilization rates and the increase in fertility. During this period, fertility rates are driven by mothers who were children during the war, so that the effect emphasized in this paper should come out

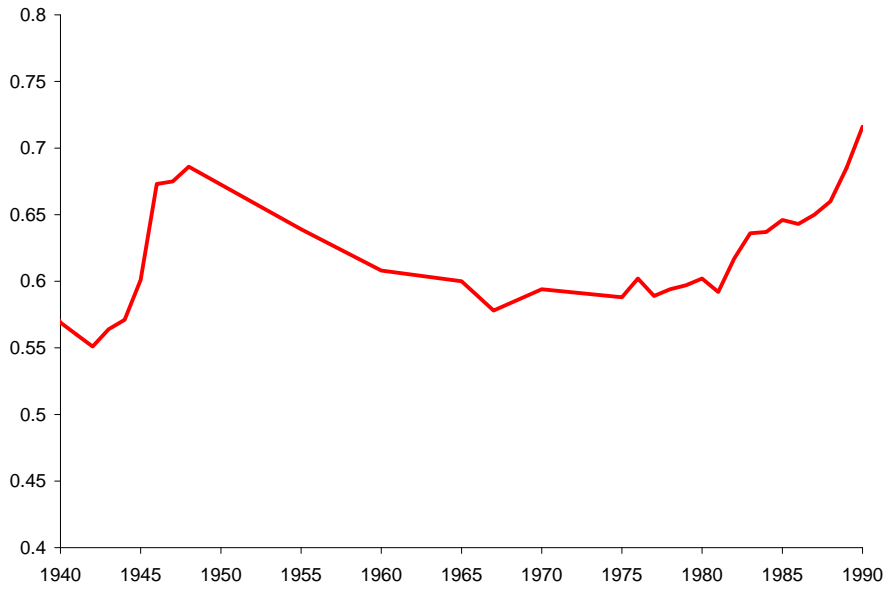


Figure 14: The Gender Gap in the U.S.

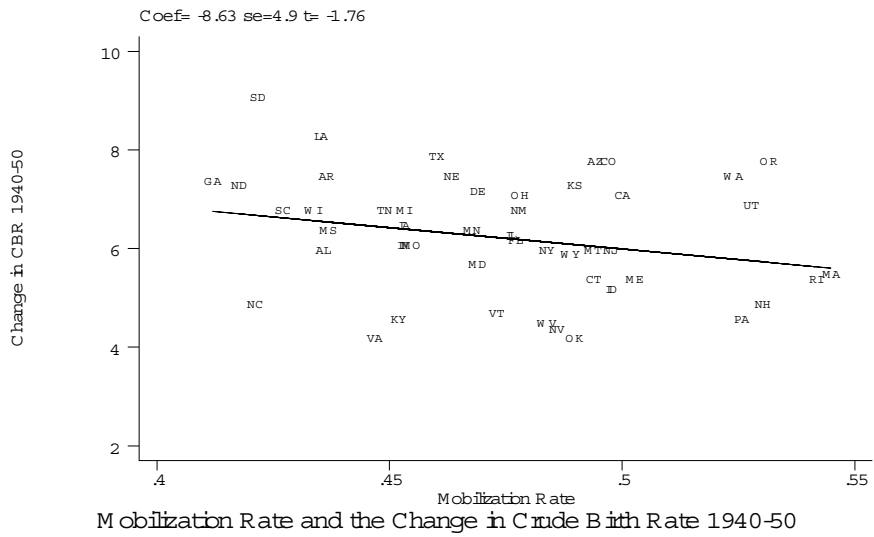


Figure 15: Change in the Birth Rate from 1940 to 1950 vs. Mobilization Rates

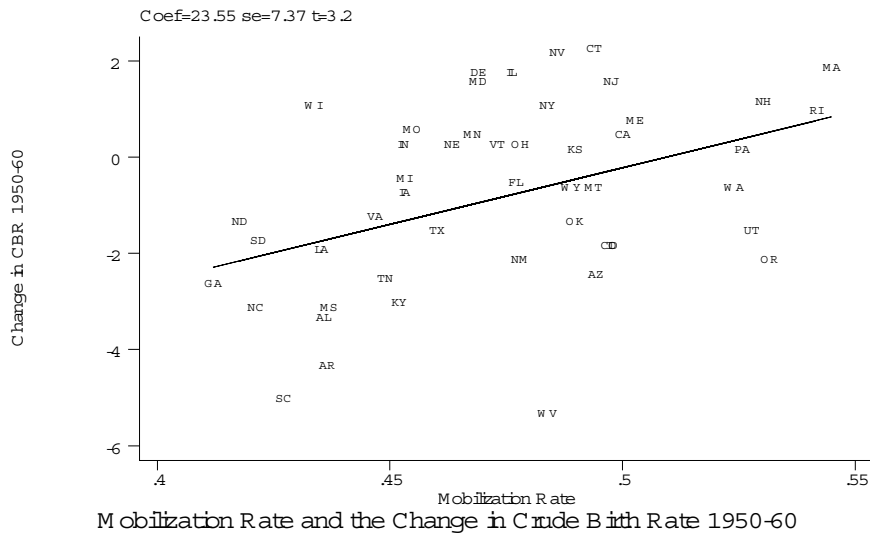


Figure 16: Change in the Birth Rate from 1950 to 1960 vs. Mobilization Rates

clearly. And indeed, the observed correlation is in line with the predictions of our theory.

6 International Evidence

The baby boom followed by the baby bust was not unique to the U.S. In this section we review the fertility experience in other countries and provide evidence in support of our mechanism. We look at two sets of countries. The first set comprises countries that had similar experiences to that of the U.S., i.e., countries which mobilized a substantial fraction of men for the war and which did not fight on their own soil. The second set comprises neutral countries. We expect to find that post-war fertility rates in the first set resemble those of the U.S. while the fertility rates in the second set of countries do not.

6.1 Countries with Similar War Experience to that of the U.S.

Three countries share the same “war experience” with the U.S.: Canada, Australia, and New Zealand. In what follows we begin by describing the war effort of these countries and then present their fertility experience.

Canada joined the war on September 10, 1939. While in December 1939, only 58,000 men were enlisted, by 1942, 250,000 Canadian soldiers were overseas (the Canadian War Museum)¹ During the war, a total of 1.1 millions were enlisted, representing about 40 percent of men aged 18 to 45 (Wikipedia).²

The experience of Australia resembles that of Canada. Australia joined the war on September 3, 1939, the same day that Britain and France declared war on Germany. Somewhat less than 930,000 Australian men (and about 66,000 women) served in the Australian armed forces as of 1946 (Australian Bureau of Statistics, Yearbook Australia 1945), representing nearly two-thirds of the male population aged 20 to 44 (Australian Historical Population Statistics 2006, Table 19).

Similar to Canada and Australia, New Zealand took an important part in the war. In total, around 140,000 New Zealand personnel served overseas in the Allied war effort, and an additional 100,000 men were armed for Home Guard duty. At its peak in July 1942, New Zealand had 154,549 men and women under arms (excluding the Home Guard) and by the end of the war, a total of 194,000 men and 10,000 women had served in the armed forces at home and overseas. To get a sense of relative importance of these numbers, note that the entire male population in 1941 was equal to 813,800 and in 1946 to 855,600 (Statistics, New Zealand).

Was the fertility experience in these countries similar to that of the U.S.? Figure 17 shows the total fertility rate in Canada, Australia, New Zealand and the US. As can be seen, the fertility dynamics of these four countries look remarkably

¹Few battles between Germany and Canada took place in the Atlantic close to the shores of Nova Scotia, and some German soldiers landed in Canada in 1942. However, the fights on Canadian soil cannot be compared with the fights experienced in Europe.

²About half of Canada’s army and three-quarters of its air-force personnel never left the country, compared to the overseas deployment of approximately three-quarters of the forces of Australia, New Zealand, and the United States.

similar. The TFR increases in all countries till 1947-9, then it decelerates for 2-3 years and resumes the increase till the late 1950s when it starts its rapid decline.

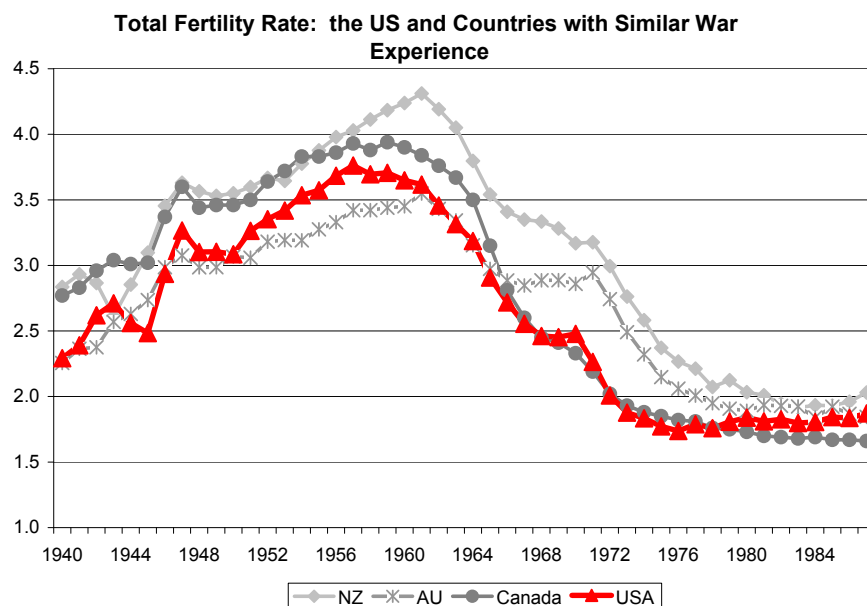


Figure 17: Total Fertility Rate in Canada, Australia, New Zealand and the U.S.

6.2 The Neutral Countries

Four European countries were officially neutral in WW II: Portugal, Spain, Sweden, and Switzerland. Our hypothesis suggests that the fertility rate in these countries should not be affected by the war. Figure 18 shows the total fertility rate in these four countries as well as the U.S. As can be seen from the figure, Portugal and Spain did not experience a baby boom while Sweden and Switzerland experienced a much smaller baby boom than the U.S.

In sum, the international evidence is consistent with our hypothesis: countries which mobilized a large fraction of their men for the war experienced a larger increase in their fertility rate following the war than the neutral countries.

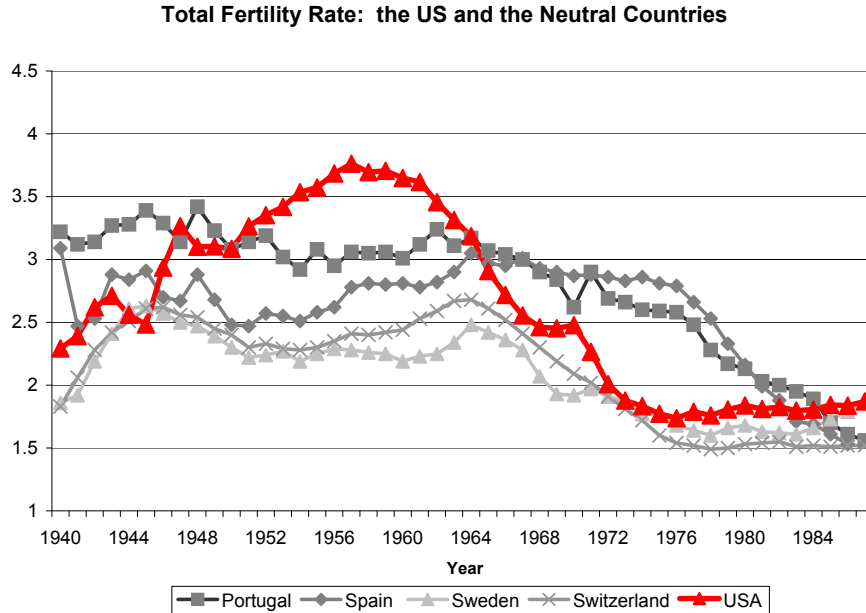


Figure 18: Total Fertility Rate in Portugal, Spain, Sweden, Switzerland and the U.S.

7 Conclusions

In this paper, we have proposed a simple theory that links the post-war baby boom to demand for female labor during World War II. Existing theories of the baby boom have dismissed a causal link between the war and increased fertility, mainly because the baby boom extended for 15 years after the war and is too large to be explained solely by “catch up fertility.” Our theory, however, does not rely on “catch up” fertility, but on the demand for female labor.

We show that if labor market experience is valuable, a one-time demand shock for female labor leads to persistent, asymmetric effects on the labor supply of younger and older women. World War II was a huge demand shock for female labor: average female participation jumped from 16 to 22 percent between 1941 and 1944, and among women whose husbands served in the armed forces participation rates exceeded 50 percent. We show that such a demand shock should lead to a temporary baby boom and an asymmetric evolution of the labor force participation of older and younger women in the decades after the shock. We

find, indeed, that age-specific fertility and labor force participation rates after the war behave just as predicted by this theory. We therefore believe that the mechanism outlined in this paper can contribute a great deal to our understanding of the post-war baby boom, as well as the later decline in fertility.

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