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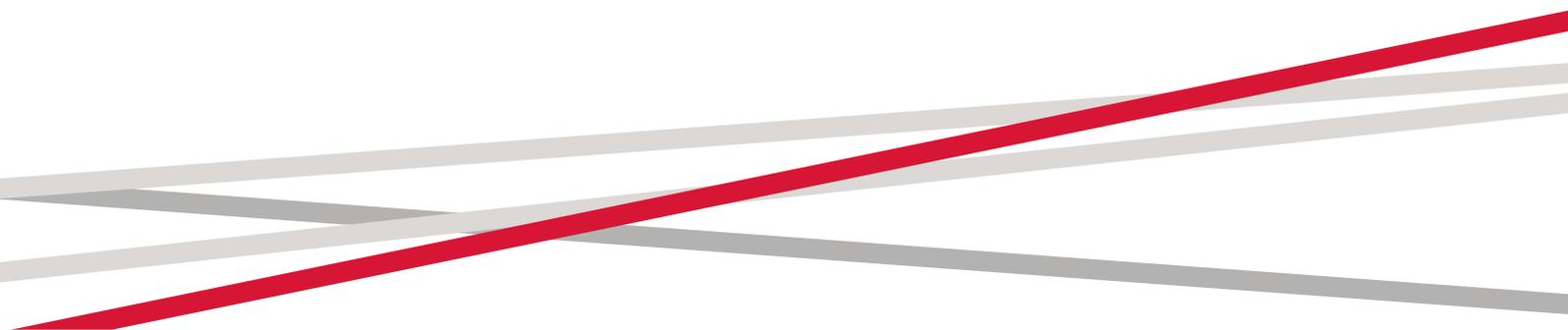
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# **Career Women and the Family – A New Perspective on the Role of Minimum Wage**

This brief finds that whereas in the 1980s richer women had fewer children than women near the middle of income distribution in the US, it is no longer true today. It argues that the rise in inequality is the main driver for this change. Greater income inequality enables high-income families to outsource household production to lower-income people. Changes to minimum wage laws are thus likely to affect the fertility and career decisions of the rich.

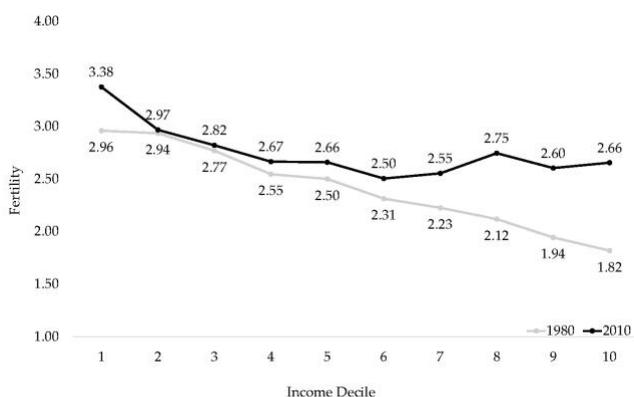


*I have frequently been questioned, especially by women, of how I could reconcile family life with a scientific career. Well, it has not been easy.*

-Marie Curie, 1867-1934

Much has been made of women “leaning in” at work at a cost to their families. Indeed, this discussion has become more prevalent as women have surpassed men in higher education in most developed countries, and have entered prestigious careers en masse, a fact reinforced by public policy. For example, in 2012 the European Commission published a special report on women in decision-making positions, suggesting legislation to achieve balanced representation of women and men on company boards. One natural question to ask is, how high is the cost of a woman’s career to her family? This is a difficult, multifaceted, and even sexist question to ask.

*Figure 1. Fertility rates by income deciles, 1980 and 2010*



*Notes:* Calculated using Census and American Community Survey Data. The sample is restricted to white, non-Hispanic married women. Fertility rates are hybrid fertility rates, constructed by age-specific deciles. Deciles are constructed using total household income.

High-income women have historically had fewer kids (Figure 1 for the year 1980). Social scientists’

leading explanations rely on the difficulty of combining children and a career. Under this view of the world, as more women focus on their careers, they have fewer children. On the other hand, the evidence shows that more educated (or wealthier) women produce more educated children. Given these two regularities, the majority of children are born to poorer mothers, and thus receive an inferior education. Moreover, this creates a feedback loop that depresses the average education through time making us question our ability to sustain a satisfactory average level of education.

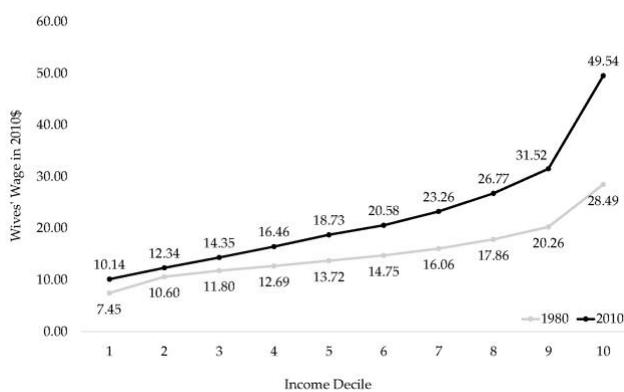
However, the negative relationship between family income and fertility ceases to hold after the 2000s. Figure 1 shows that for the year 2010, the cross-sectional relationship between income and fertility has flattened or even become a U-shape. Today, high-income women have higher fertility rates than those of women near the middle of income distribution. This is a result of a substantial increase in fertility among women in the 9th and 10th decile of family income: they increased their fertility by 0.66 & 0.84 children, respectively. The rise in fertility of high-skilled females was first documented in Hazan and Zoabi (2015), discussed in [a previous FREE Policy Brief](#). The implications are profound; children are more likely to be born to wealthier or more educated mothers than in the past. This has a far-reaching impact on the future composition of the population.

How can we understand the change in fertility patterns over time? We argue that rising wage inequality played an important role. Data for the years 1980 and 2010 show that average real hourly wages, quoted in 2010 \$ grew from \$28 (\$51) to \$50 (\$64) for women (men) in the 10th



decile of the income distribution. This increase was accompanied by stagnant wages for women (men) in the 1st decile, precisely the people who are most likely to provide services that substitute for household chores (Figure 2). Thus, growing wage inequality over the past three decades created both a group of women who can afford to buy services that help them raise their children, and a group who is willing to supply these services cheaply. In a recent paper, we found that the increase in wage inequality from 1980 and 2010 can actually explain the rise in high income fertility (Bar et al. 2017). Moreover, this rise in inequality has resulted in a large increase in college attendance through the changing patterns of fertility. This is because more children are now born to highly educated mothers.

Figure 2. Wives' Wage by Income Decile 1980 & 2010

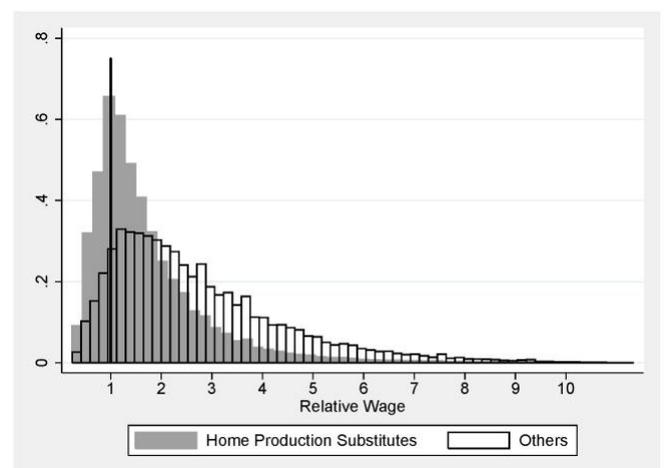


Notes: Calculated using Census and American Community Survey Data. The sample is restricted to white, non-Hispanic married men. Deciles are constructed age-by-age, using total household income. Representative wages for each decile is the average of these decile-specific wages from ages 25 to 50.

Our new understanding of the interrelation between income inequality, the relative cost of home production substitutes, fertility pattern and

educational choice induces us to rethink some typical economic debates. For instance, consider the minimum wage. The typical debate about the minimum wage is focused on how it affects lower wage individuals in terms of income and their ability to find work. However, if people who earn the minimum wage are disproportionately also those who help raise wealthier families' children, or simply make running a household easier, then a higher minimum wage can make home production substitutes more expensive for high wage women, making it harder for them to afford both a family and a career. While indirect, this effect can be significant. Figure 3 shows the distribution of the real wage, relative to the minimum wage, both for the industries of the economy associated with home production substitutes and other sectors of the economy. The figure clearly shows that workers in industries associated with home production substitutes are concentrated around the minimum wage and thus are much more likely to earn wages that are close to the minimum wage.

Figure 3. The distribution of real wages, relative to the effective real minimum wage in each state and year, by sector of the economy



Notes: Data from Current Population Survey, 1980-2010, using all workers.



Interestingly, we calculate a change in the cost of home production substitutes following an increase of the Federal minimum wage from \$7.25 to \$15/hour, as suggested by Bernie Sanders during the 2016 presidential election. It turns out that this increase in the minimum wage would increase the cost of market services that substitute for household chores by about 21.1%. Indeed, the minimum wage has a strong impact on the average wages of workers producing home production substitutes. However, how does this increase affect the economy?

According to our theory, higher costs of home production substitutes would affect women's choice of how to allocate their time between labor force participation and home production, including raising children. The higher cost of these substitutes induces women to buy less of them and spend more of their time producing home production goods. Indeed, we find that the increase in the minimum wage decreases fertility and increases mothers' time at home, and more so for higher income households. The magnitudes are large. A 10<sup>th</sup> (5<sup>th</sup>) decile household decreases fertility by 12.8% (9.4%), while the mother spends 9.7% (2.5%) more time at home. Notice that these numbers are calculated under the assumption that women can adjust fertility. What about those who are "locked in" their fertility choice? We recalculate changes in mother's time at home for these mothers using the model's fertility in 2010 with the increased cost of market services that substitute for household chores. A 10<sup>th</sup> decile mother increases time at home by 25.9%, while a 5<sup>th</sup> decile mother increases it by 13.1%. These numbers are larger as the family has not had a chance to scale back fertility. The short run effect on labor supply is also very large. The average reduction in labor supply by women in the 9<sup>th</sup> and 10<sup>th</sup> deciles is 3.5%.

Whether an increase in the minimum wage is good or bad for the society is a big question. Not only does it lie beyond the scope of our theory, but also beyond the scope of social sciences. However, the one modest contribution we try to make is in observing that an increase in the minimum wage heightens the rivalry between a woman's career and family. As such, it forces women to forgo one in order to opt for the other.

The sexist nature of our question lay in the implicit assumption that it is the mother's responsibility to look after the children or home production in general, rather than the father's. While once this was a nearly universal attitude, it is now increasingly common for fathers to take a more central role in childcare rather than leave everything to the mother. How does this change in gender roles affect our analysis? In modern times, both spouses' careers are potentially affected by children, as both parents take a role in child care. Fathers are now facing the same tradeoffs as mothers did in the traditional gender role story: children vs. careers. As a result, marketization is more important than ever for career oriented parents.

Talk to a high wage family and no doubt that they'll readily tell you how important their ability to purchase daycare, prepared food, or other help at home is to their success as parents. Perhaps parents don't realize that the price of these goods are so intricately linked to inequality or the minimum wage, but the policy maker should bear in mind that these are key factors for career women and the family.

## References

Hazan and Zoabi (2015), "Do Highly Educated Women Have Smaller Families" *The Economic Journal*



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