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The Labor Market Returns to Delaying Pregnancy

Based on BFI Working Paper No. 2023-113 [*"The Labor Market Returns to Delaying Pregnancy,"*](#) by Yana Gallen, Chicago Harris; Juanna Schrøter Joensen, UChicago; Eva Rye Johansen, Aarhus University; and Gregory F. Veramendi, University of London

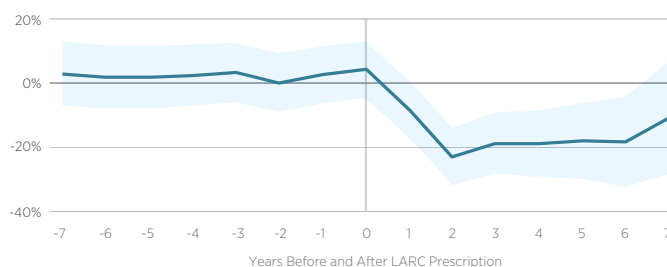
Unplanned pregnancies halt women's career progression and result in income losses of 20% five years after an initial contraceptive failure. The detrimental effects of unplanned children are larger for younger women and women enrolled in education. In contrast, planned children have minimal impacts on women's labor market outcomes.

It is well-documented that women have lower incomes after having children. However, access to birth control has allowed women to delay pregnancy, granting them time to find better partners, and increase their educational attainment and labor market attachment before becoming parents. Between 1970 and 2020, the average age at which women in the United States had their first child rose from 21 to 27 years old. In this paper, the authors study the extent to which delaying pregnancy mitigates the impact of children on women's careers, and how this varies with the circumstances in which children are born.

Studying the tradeoffs that women face in deciding when to have children is challenging because women may avoid pregnancy at times in their lives when it would be especially disruptive. To overcome this challenge, the authors use health and labor market data from Sweden to study the labor market outcomes of childless Swedish women who become pregnant while using long-acting reversible contraceptives (LARCs).

These methods of birth control are effective, but not perfect: about 1% of women using a LARC will get pregnant in a year, resulting in a natural experiment in which women who had planned to delay childbirth

Figure 1 • Impact of Unplanned Pregnancy on Earnings



Note: This figure displays the impact of unplanned pregnancy on earnings including paid leave by time since long-acting reversible contraceptives (LARC) prescription. Income is measured in hundred thousands of real 2010 SEK. The shaded area shows the 95% confidence interval.

become pregnant earlier than they desired. The authors compare career paths of women who experience an unplanned pregnancy to those who do not but who receive a LARC in the same year and at the same age.

They find the following:

- Unplanned pregnancies have substantial, negative, and lasting consequences on the careers of previously childless women. By six years after the

initial contraceptive failure, women experience income losses of 20% and the probability of working in an occupation requiring medium, high, or managerial skills is almost 20 percentage points lower than if their unplanned pregnancy had not occurred.

- There is substantial heterogeneity in the impacts of unplanned pregnancy, with larger effects for younger women and for women who are enrolled in education at the time of their unplanned pregnancy.

Can planning mitigate these effects? To address this question, the authors also study women at the other end of the planning spectrum: childless women who would like to become pregnant and are undergoing in vitro fertilization procedures (IVF) to do so. In this setting, the authors use quasi-random success of fertilization procedures to estimate the impact of a planned pregnancy. They find the following:

- In stark contrast to the results on unplanned pregnancy, women experience no long-term labor market consequences from becoming pregnant through IVF (compared to women who use IVF and do not become pregnant in their first attempt).

Building on these results, the authors causally identify the impact of shifting the timing of first childbirth. Their approach accounts for the fact that the differences documented above may be due to differences in the rate of abortion versus birth between women in the IVF group versus the LARC group. It also accounts for later planned pregnancies among women who do not have unplanned pregnancies in the LARC group and among women who do not get pregnant in the first IVF attempt in the IVF group. The authors identify the impacts of having children (versus becoming pregnant) in each year after birth, and find the following:

- Unplanned births have large and lasting effects on earnings. The trajectory of the impact is relatively flat, with year-to-year estimates between 30% and 20% of women's counterfactual earnings. The short-term impact seems to be driven by non-employment and a reduced probability of

promotion, especially in the first two years after birth. By four years after an unplanned birth, employment and the probability of a promotion recover but the occupational trajectories and earnings deviate substantially. At five years after an unplanned birth, women are 25 percentage points less likely to be in an occupation requiring medium, high, or managerial skills.

- Planned births have about half the earnings impact of unplanned births and similar employment and promotion impacts. In contrast to unplanned births, planned births have no impact on occupational progression.
- Like the impacts of unplanned pregnancies, the impacts of unplanned children on women's careers vary greatly with the circumstances in which the children are born. For women ages 22-27, the average decline in earnings 1-6 years after an unplanned birth is 33% of counterfactual earnings. This is more than twice the size of the impact of unplanned birth for women ages 28 and above. These estimates imply that a one-year delay in an unplanned birth is associated with a 2.5 percentage point smaller earnings loss.
- Women who have unplanned children while enrolled in education programs have average earnings losses that are twice as high compared with women who are no longer enrolled. These results imply that some moments in women's labor market paths are particularly sensitive to the presence of children, and delaying pregnancy to avoid these crucial moments may substantially reduce the child penalty.
- The upshot is that unplanned pregnancies have large impacts on labor market outcomes, especially when women are young or enrolled in education. These negative impacts of unplanned pregnancy strengthen the case for ensuring access to high-quality contraceptives. In addition, variation in the impact of childbirth depending on the circumstances surrounding birth has important implications for how researchers model fertility decisions.

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