

Work and Motherhood

Female Employment does not Reduce Fertility

Andreas Kotsadam (Frisch Centre)

Janneke Pieters (Wageningen University)

Espen Villanger (CMI)

Do factory jobs reduce fertility? Evidence

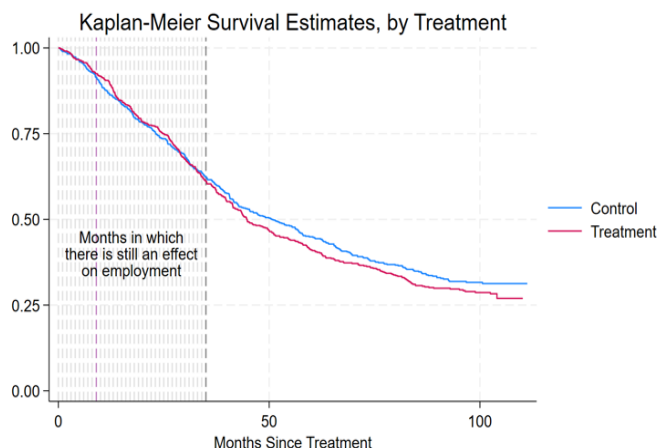
from Ethiopia suggests otherwise.



Follow us on Twitter! Find @glmlic

Topic at a Glance

Understanding how women's access to formal employment shapes fertility is central to debates on demographic change and economic development. A longstanding assumption in both academic and policy circles is that expanding women's work opportunities leads to fertility decline. This view draws on broad historical correlations between female labor force participation and falling birth rates. Yet causal evidence, particularly from Sub-Saharan Africa, remains limited. Ethiopia offers a critical setting in which to revisit these assumptions, as the country has rapidly expanded its manufacturing sector while maintaining comparatively high fertility levels. This brief summarizes findings from a long-term randomized controlled trial in Ethiopia that examined how access to factory jobs influences fertility trajectories. Over 9 years, the study followed 1,464 married women who initially applied for jobs in 27 garment and shoe factories located across five industrializing regions.



Caption: The effects on fertility starts after treated women stop working. The first dashed line is 9 months after baseline and the second line at 35 months correspond to the average number of months after baseline in wave 5 after which the first stage effect on employment disappears.

New Insights

The central finding is that access to a formal wage job increased fertility over the long run. Women who were offered employment had more children than those who were not, amounting to a roughly five percent rise in total births. Childlessness declined substantially, and among women who were childless at baseline, the likelihood of becoming a mother increased by fifteen percentage points. These findings directly contradict the conventional expectation that wage employment suppresses fertility.

Importantly, the fertility response did not appear immediately. During the first three years—when employment differences between treatment and control women were largest—the study found no divergence in birth rates. Instead, fertility increased only after treated women had largely exited factory jobs, by which time employment rates across groups had converged. This temporal pattern suggests that women postponed childbearing while working in factory jobs due to binding time constraints, but subsequently increased fertility once they had accrued income and savings and no longer faced the rigid work schedules characteristic of manufacturing. The sequential nature of this response is consistent with households delaying births until they reach a minimum level of financial security, particularly for the first child.

The study found no evidence that the fertility increase stemmed from changes in marital status, partner switching, fertility preferences, or bargaining power within the household. Women's desired number of children, views on ideal timing, and perceptions of decision-making authority did not differ between treatment and control groups. Marriage rates and partner continuity were also unaffected, as were migration patterns and child survival. These results help rule out many common explanations for fertility change and underscore that the increased fertility is a response to the job and increased income, rather than other factors.

We find that women who received job offers accumulated more savings and had higher household income both during and after the period of factory employment. These gains persisted even after most women exited wage jobs, suggesting that the addi-

tional resources enhanced household economic security in ways that enabled families to realize their pre-existing fertility goals. In this sense, the long-term income effect ultimately outweighed the short-term opportunity cost of time associated with factory work.

The findings carry significant implications for policymakers in Ethiopia and across Sub-Saharan Africa. First, they caution against the expectation that industrialization—through the expansion of formal wage jobs for women—will automatically accelerate fertility decline. In this setting, formal employment raised fertility instead of reducing it, and did so precisely because women combined short periods of intense work with later increases in household resources. Second, the study highlights the importance constraints for disadvantaged families. Factory jobs in Ethiopia are difficult to combine with pregnancy and newborn care, prompting postponement but not prevention of childbearing. Policymakers aiming to influence women's labor supply and family formation patterns may therefore need to consider complementary measures, such as improving access to childcare or designing employment policies that better accommodate family responsibilities.

Policy Recommendations

1. Design family-compatible industrial jobs

Improve flexibility, maternity protection, and working conditions so women can combine formal employment with pregnancy and early childcare.

2. Expand affordable childcare near workplaces

Invest in accessible childcare services around industrial zones to reduce time constraints that force women to postpone or exit employment.

3. Rethink fertility assumptions in policy planning

Avoid assuming female employment automatically reduces fertility when designing labor, population, and development strategies.

4. Support women's income and savings accumulation

Strengthen financial inclusion, wage stability, and savings mechanisms that help households achieve planned family goals.

5. Integrate labor, gender, and population policies

Coordinate employment and family policies to reflect sequential decisions between work, income accumulation, and childbearing.

Limitations

These are the findings of one study in one particular setting and may not be representative for other populations in other places under different circumstances.

Read more → g2lm-lic.iza.org/projects/fertility/long-run-impacts-of-factory-jobs-labour-market-outcomes-wellbeing-and-fertility-in-ethiopia/

G²LM|LIC is a joint program by IZA and the UK Foreign, Commonwealth & Development Office (FCDO) – improving worldwide knowledge on labor market issues in low-income countries (LICs) and providing a solid basis for capacity building and development of future labor market policies.