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From Entry to Expansion: The Macroeconomic Impacts of Female Entrepreneurship

Featuring a paper by Gaurav Chiplunkar and Pinelopi K. Goldberg

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BACKGROUND

Over the past few decades, India has achieved remarkable progress across many development indicators, including rising GDP per capita, rapid urbanization, and significant gains in education and health for both men and women. For example, there is now gender parity in primary and tertiary education, fertility rates have declined, and social norms are slowing changing. Yet, despite this socio-economic transformation, the low participation of women in India's workforce (of over 600 million) continues to remain a significant challenge.

A closely related concern is the strikingly low rate of female entrepreneurship, as shown in Figure 1. Excluding self-employment, there is less than 1 female entrepreneur for every 10 male entrepreneurs in India. Adjusting for gender differences in labor force participation only marginally improves this ratio to 1.4:10. Moreover, this pattern is true across Indian states, irrespective of their level of economic development. This suggests that while limited labor market entry plays some role, it cannot fully explain the scarcity of women-led firms.

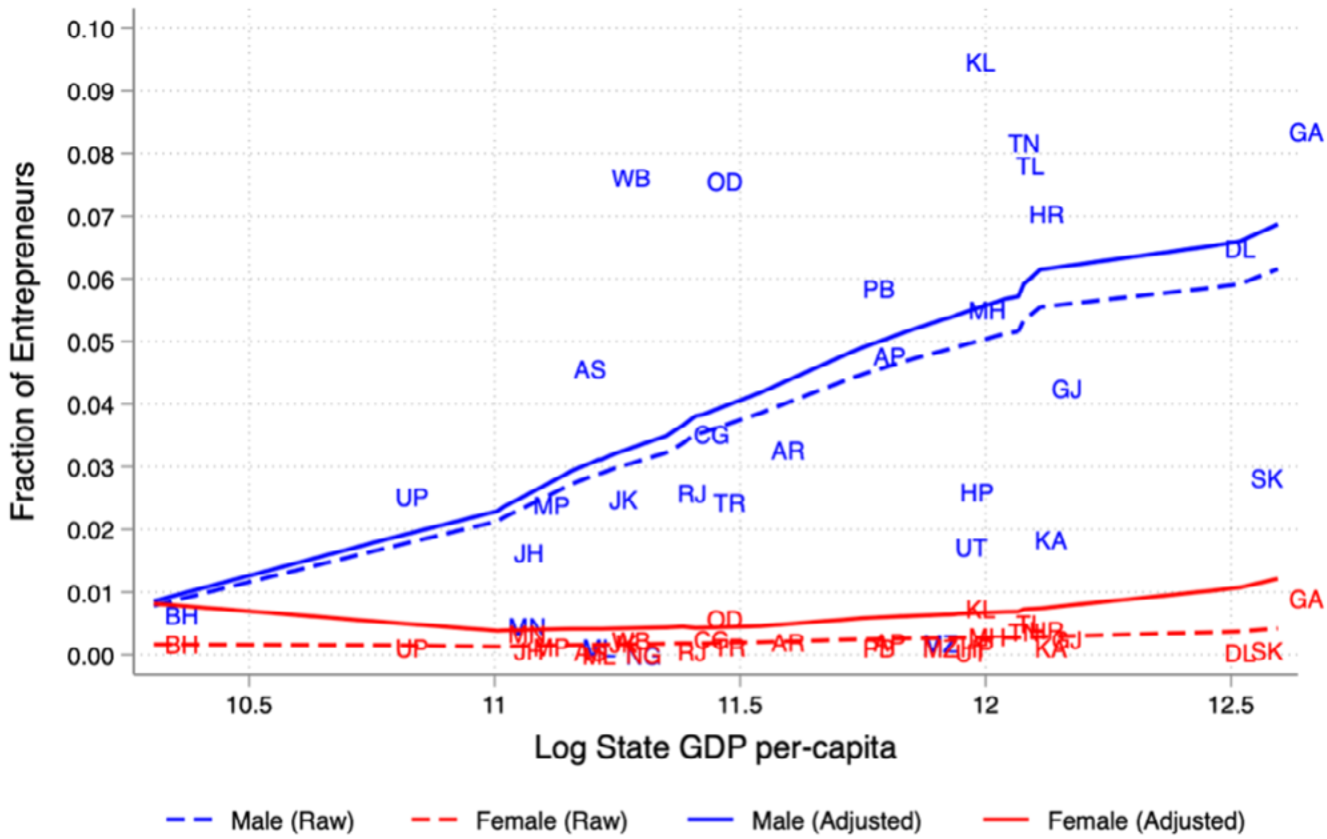
KEY RESULTS

Compared to policies that reduce the constraints to firm entry, policies that support the growth of women-owned businesses can have a far greater impact.

Female entrepreneurs employ more female workers, so increasing female entrepreneurship has a 'multiplier effect' on female labor force participation (FLFP): as more women become entrepreneurs, even more women enter the labor force.

Supporting women entrepreneurs can also drive low-productivity male entrepreneurs out of business, improving the allocation of resources and talent in the economy and thus, aggregate productivity and income.

Figure 1: Fraction of Entrepreneurs Across Indian States



Notes: Data Source: Periodic Labor Force Survey of India 2023. The figure plots a non-parametric correlation between entrepreneurship across Indian states. 'Raw' (solid lines) and 'Adjusted' (dotted lines) are the fraction of entrepreneurs in the working-age population and labor force respectively.

What then are the barriers to female entrepreneurship? Are women more constrained in starting businesses, or in growing them? Can supporting female entrepreneurship bring more women into India's workforce and what are its aggregate implications for the broader Indian economy? In a new study published in Econometrica, EGC affiliate Pinelopi (Penny) Koujianou Goldberg and her coauthor Gaurav Chiplunkar (University of Virginia), a Yale graduate, explore these questions.

METHOD

Using rich microdata from India's 2005 Economic Census, which covers all non-farm establishments in India, Chiplunkar and Goldberg document detailed gender differences along various dimensions: the type and sector of operation, how large these firms are, and the gender composition of its workers, among other factors. A key advantage of this dataset is that it covers owner-operated firms and those in the informal sector, thus capturing a large share of women-owned firms typically missed by formal enterprise surveys.

In the absence of any large-scale policy changes, the authors take a more theoretical approach to build an economic model of occupational choice that incorporates gender-specific distortions. This framework allows them to quantify the barriers faced by women entrepreneurs and run counterfactual ("what-if") scenarios to estimate the economy-wide effects of reducing these barriers, after taking into account changes in sectoral sorting, wages, and prices, for both men and women in general equilibrium.

RESULTS

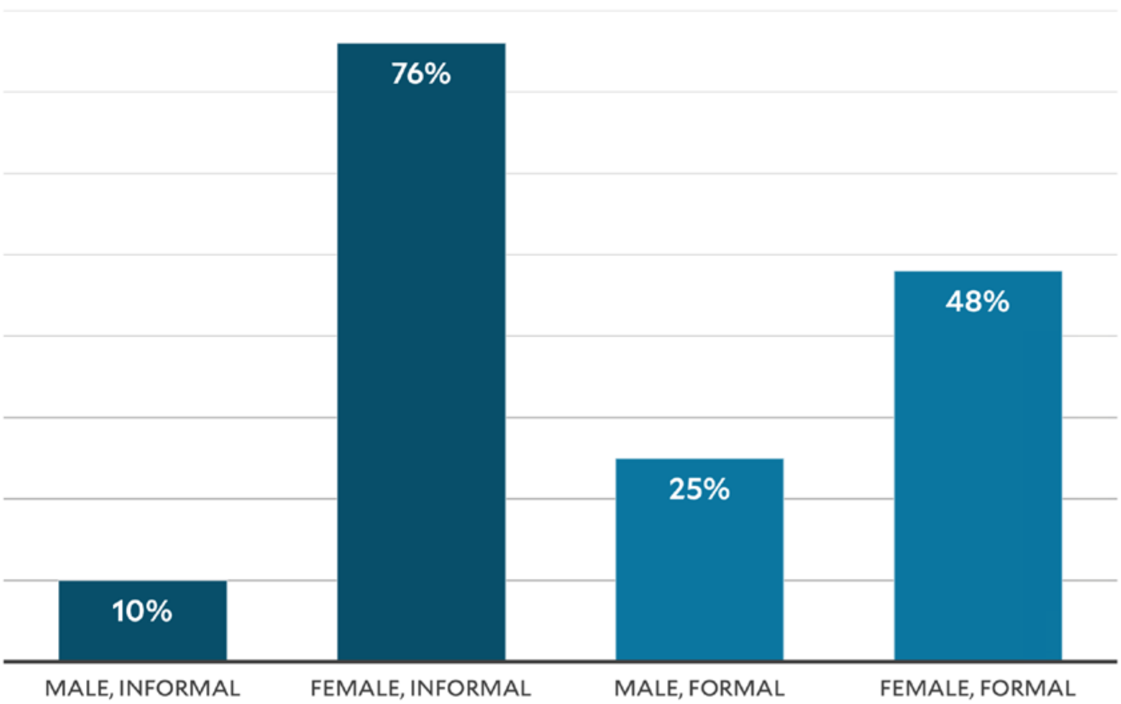
RESULT 1: WOMEN ARE NOT CONSTRAINED IN STARTING FIRMS, BUT RATHER IN EXPANDING THEM

Chiplunkar and Goldberg's analysis finds that while Indian women face substantial barriers to entering the workforce, they do not face significantly higher costs (relative to men) in starting a business once in the labor force. Rather, the challenges are in sustaining, expanding, and formalizing their businesses. This insight advocates for shifting the policy focus from 'start-up support' to 'growth support' i.e., policies that can help women scale their businesses as opposed to those solely focused on encouraging entry.

RESULT 2: GROWTH IN FEMALE ENTREPRENEURSHIP BOOSTS FEMALE LABOR FORCE PARTICIPATION, AS WOMEN EMPLOY MORE WOMEN

A key finding of the study is the 'multiplier effect' of female entrepreneurship on broader female labor force participation. As shown in Figure 2, women-owned firms (in both the informal and formal sectors) hire significantly more women workers. Moreover, this pattern holds robustly both within states as well as narrowly defined industries. Therefore, as more women become entrepreneurs, the demand for female workers increases, counteracting any downward pressure on wages from increased labor supply. This virtuous cycle implies that boosting female entrepreneurship can be a powerful driver of inclusive labor market policies.

Figure 2: Share of Female Employees by Gender of Firm-Owner



Notes: Data Source: Economic Census of India 2005. The figure reports the average share of workers in a firm who are women for male-owned and female-owned firms in the informal and formal sectors.

RESULT 3: BOOSTING FEMALE ENTREPRENEURSHIP IMPROVES ECONOMIC EFFICIENCY AND AGGREGATE PRODUCTIVITY

Perhaps the most consequential result lies in the macroeconomic implications of enabling female entrepreneurship. Chiplunkar and Goldberg find that large, formal female-owned firms are, on average, more productive than male-owned firms. However, due to prevailing barriers, most women are confined to small, informal enterprises. Removing these barriers would allow productive female-owned firms to scale, replacing low-productivity male-owned firms that currently face little competition. Such a reallocation of talent and resources would not only close gender gaps but also reduce inefficiencies in the economy. In simulations, the authors show that reducing distortions for women leads to higher aggregate output, productivity, and real incomes for the entire economy, not just for women.

In other words, Chiplunkar and Goldberg's findings lay an emphasis on complementing the reduction of entry barriers for women entrepreneurs with supporting the expansion and formalization of women-owned firms as well. Boosting female entrepreneurship goes well beyond the goal of addressing gender inequalities; it can be a powerful strategy to achieve broader economic development.

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Chiplunkar, Gaurav and Pinelopi K. Goldberg. 2024. "Aggregate Implications of Barriers to Female Entrepreneurship." Econometrica, 92: 1801-1835.
Available at: **https://www.econometricsociety.org/publications/econometrica/2024/11/01/Aggregate-Implications-of-Barriers-to-Female-Entrepreneurship**

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The Economic Growth Center (EGC) is Yale's hub for economics research and teaching on issues relating to lower-income economies and the advancement of their populations. It was established in 1961 with funding from the Ford Foundation as the first research center at a major US university devoted to the quantitative analysis of lower-income economies. It quickly became the home of Yale's master's program in International and Development Economics (IDE), which continues to educate development researchers and policymakers. EGC is housed in the Yale Economics Department and hosts multiple research initiatives and programs. It also supports policy outreach through communications and events. EGC researchers investigate the links between economic growth, structural transformation, public policy, and individual outcomes, with a focus on how inequality and a changing climate affect individuals, especially those from marginalized groups.