

Who Wants to Be an Entrepreneur?

The Effect of Financial Development on Occupational Choice

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"It's important to distinguish between entrepreneurial zeal and self-employed desperation."

Robert Reich (Former Secretary of Labor), "Entrepreneur or Unemployed?" June 1, 2010; The New York Times.

1. Introduction

Schumpeter (1942) emphasized the important role played by entrepreneurs in facilitating economic growth and contended that well-functioning banks spur technological innovation by identifying those entrepreneurs with the best chance of successfully implementing innovative products and production processes. Consistent with this view, a fast growing literature has documented a positive relationship between access to finance and entrepreneurship (see for example Evans and Jovanovic, 1989, Black and Strahan, 2002, Guiso, Sapienza, and Zingales, 2004, Klapper, Laeven, and Rajan, 2006, Bertrand, Schoar, and Thesmar, 2007, and, Adelino, Schoar, and Severino, 2013). But what are the effects of easing financial constraints when entrepreneurship is a response to the absence of wage employment opportunities in an emerging market such as India?

Micro-enterprises in the informal sector account for a large proportion of economic activity in emerging markets, employing more than 50% of the labor force on average (La Porta and Shleifer, 2008). The conventional view is that these firms are potential sources of income growth that are inhibited by a lack of access to finance and infrastructure (De Soto, 1989, 2000). In line with this view, a growing literature has argued that targeted credit to micro-enterprises is a key policy instrument for facilitating economic growth and reducing poverty (see for example, Bruhn and Love, 2014).

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An alternative view claims that the self-employed are engaged in unproductive endeavors in the absence of regular employment opportunities (Rauch, 1991, Schoar, 2010). For example, La Porta and Shleifer (2008, 2014) show that informal firms on average add just 20% of the value added per worker of formal firms, and that economic growth comes mainly from the formal sector. In fact, randomized trials of microfinance programs have failed to find evidence that microcredit to poor individuals increases the likelihood of starting a new business, and any positive effects on profits appear only for the largest of these enterprises (see for example, Banerjee et al., 2015 and the studies cited within).

Using data from India, we investigate the effect of access to credit on the choice of individuals to engage in entrepreneurship as against seeking formal wage employment. We match data from two rounds of the Employment and Unemployment Surveys conducted in 1999 and 2004. We cover more than 1.2 million randomly selected individuals from the entire nation with district-level bank branching data from 1991.

2. Results

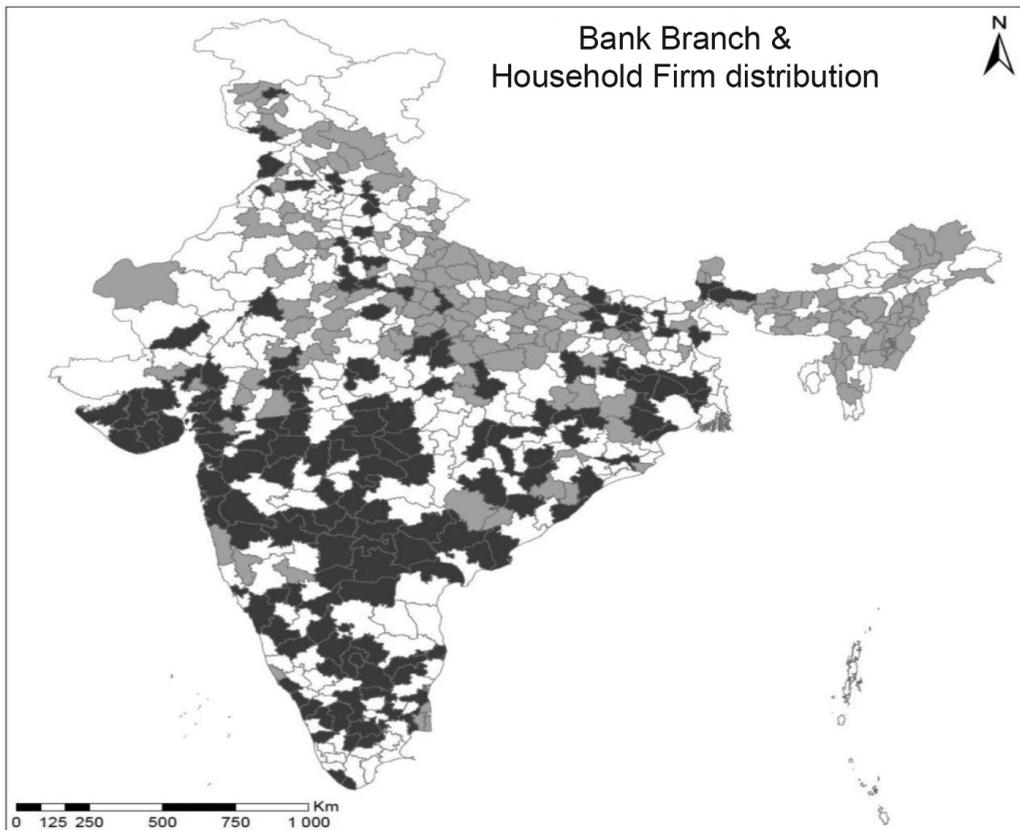
We find that individuals are significantly less likely to be either self-employed, an employer, or an employee in an informal sector enterprise in districts with more bank branches (Figure 1). For example, moving from a district with no banks to a district with the average number of bank branches (about 24.5 branches) lowers the likelihood of being an entrepreneur by about 11.6% relative to the sample mean of 18%. These effects are greater for (a) more educated individuals (moving from a district with no branches to one with an average number of branches lowers the likelihood of entrepreneurship for an individual with middle school and higher education by 21% relative to the sample mean, but no difference for illiterate individuals), and (b) entrepreneurs in larger household firms (21% lower likelihood relative to the sample mean, with no difference for smaller enterprises).

These results suggest that educated workers have better outside employment opportunities in more financially developed districts. For larger enterprises, access to credit either facilitates the transition to becoming a formal firm, or entrepreneurs of larger firms also have better employment opportunities in more financially developed districts. We control for individual characteristics including age, gender,

district population, year, industry and state fixed-effects which would address the concern that banks may be more likely to locate in wealthier states that also have more employment opportunities.

Figure 1: Bivariate District-level Distribution of Entrepreneurs and Government-owned Bank Branches

The bivariate map shows the distribution of government-owned bank branches and the likelihood of being an entrepreneur in a micro-enterprise across districts, where we denote district with above median (below median) number of bank branches and below median (above median) likelihood of entrepreneurship.



Legend	Distribution of Districts	
	Household Enterprise Employer	
Bank Branches	Above Median	Below Median
Above Median	22.6%	29.3%
Below Median	27.4%	20.7%

In emerging markets where most firms are likely to be credit constrained, individuals may engage in entrepreneurship in the informal sector due to a lack of wage employment opportunities, and the average micro-enterprise may not be very productive (see for example, Schoar, 2010 and La Porta and Shleifer, 2008, 2014). For example, just 0.6% of entrepreneurs and employees of household firms are paid wages in our data. Our results thus describe a mechanism by which financial development may facilitate economic growth: by allowing productive, financially constrained firms to expand employment and pay higher wages thereby shifting workers out of unproductive activities.

To investigate this further, we use two rounds of a randomized survey of service sector firms in 2001 and 2006 covering over 400,000 randomly selected service sector firms in a broad range of activities, again linked with district level bank branching data. The results show that service sector firms located in districts with more government-owned bank branches have more bank loans on average, and this effect is concentrated among formal sector firms, firms in urban areas, and larger enterprises with more than 5 workers. For instance, compared to a district with no government-owned bank branches, a formal sector firm located in a district with the mean number of bank branches (39 branches) borrows 10% more on average relative to the sample mean of INR 700,000 (about \$15,000 at 2001 exchange rates). Informal firms, in contrast do not borrow more in districts with more bank access. Note that we control for district population, year, industry, and state fixed-effects.

Greater access to finance in a district is also associated with more employment, greater productivity and higher wages for workers. For example, compared to a firm located in a district with no government bank branches, a firm located in a district with the mean number of bank branches (about 31 branches) hires 14% more workers on average relative to the sample mean of 3 workers. The results are stronger for larger firms, those located in urban areas and formal sector firms.

The service sector firm results demonstrate that in this high growth sector, which was the driver of economic growth following the economic reforms, increased access to finance is associated with a significant increase in bank loans, employment, wages, and productivity in formal sector firms. These results provide firm-level evidence corroborating our finding that access to finance is associated with a shift in occupational

choice from micro-enterprises in the informal sector into wage employment in the formal sector.

3. Implications

While the literature has focused on the benefits of easing financial constraints for entrepreneurs to emerge, for example through micro-credit programs, we find evidence suggesting that entrepreneurship may be a response to the absence of employment opportunities, particularly in emerging markets. Our results highlight a mechanism by which financial development facilitates economic growth: Increased access to finance through formal lending channels eases financial constraints for more productive firms, and facilitates a shift from entrepreneurship in unproductive enterprises to productive employment in the formal sector. Firm-level evidence support our hypothesis. Increasing access to finance is associated with an increase in bank loans, productivity, employment, and wages in formal sector firms.