

Abstract:

There is growing belief that countries with better financing environments are associated with higher economic growth because they facilitate entrepreneurship and hence the Schumpeterian process of 'creative destruction'. This dissertation explores this hypothesis in more detail by understanding how the financing environment for new ventures impacts outcomes such as individuals' decision to become entrepreneurs, their sources of financing and the growth and survival of their firms.

Rather than performing cross-country analyses however, the approach used in this dissertation is to perform within-country studies that shed more light on the mechanisms through which the financing environment impacts entrepreneurial activity. The first two essays in the dissertation exploit institutional reforms that changed the financing environment for new businesses to study how they impacted entrepreneurship. The final paper is more descriptive in nature and examines how the variation in entrepreneurs' use of Diaspora networks in developing countries is related to the financing and networking environment of the city in which they are based.

Introduction

There is a growing belief among scholars looking at economic growth that countries with better financing environments are associated with higher economic growth because they facilitate entrepreneurship and hence the Schumpeterian process of ‘Creative Destruction’ (R. G. King and R. Levine, 1993a, 1993b). Although the relationship between finance and growth is well articulated at the cross-country level, the micro-mechanisms through which finance facilitates entrepreneurship and then growth have received much less attention. In this dissertation, I explore the relationship between the provision of finance for new ventures and product market outcomes in greater detail by understanding how the financing environment for new ventures impacts outcomes such as individuals’ decision to become entrepreneurs, their sources of financing and the growth and survival of their firms.

Rather than performing cross-country analyses however, the approach used in this dissertation is to perform within-country studies that shed more light on the mechanisms through which the financing environment impacts entrepreneurial activity. The dissertation is composed of three essays. The first two essays study institutional reforms — one in Denmark and another in the US — that changed the financing environment for new businesses to understand how they impacted individuals’ entry and survival. The final paper is more descriptive in nature and examines how the variation in entrepreneurs’ use of Diaspora networks in India is related to the financing and networking environment of the city in which they are based. All the papers share a common thread of using micro data to shed light on the questions in order to both explore and the refine the mechanisms through which the financing environment impacts entrepreneurial activity.

The first paper in the dissertation, “Financing Constraints and Selection into Entrepreneurship”, studies the link between the financing environment for new ventures and the characteristics of individuals who become entrepreneurs, a question that has received limited attention in the literature to date. This question has particular significance with the growing consensus that entrepreneurship is an important driver of

economic growth since in this case it is not just the rate of entry, but the characteristics of entrants that may be an important factor driving the process of creative destruction.

Although financing constraints have long been seen as an important barrier to the entry and success of potential entrepreneurs (D. S. Evans and B. Jovanovic, 1989, W. Gentry and G. Hubbard, 2000, D. Holtz-Eakin, D. Joulfaian and H. S. Rosen, 1994), understanding whether the ability of those who found new businesses is impacted by changes in the financing environment is much harder. The inferential challenge in studying this question lies in the fact that one needs an exogenous change in the financing environment for new entrepreneurs that is unrelated to both the opportunity cost of funding new projects and the characteristics of potential entrepreneurs. Without such an exogenous change, it is hard to isolate the effect of the financing environment on the characteristics of those who become entrepreneurs from other factors that also affect selection into entrepreneurship.

The approach I use in this paper is to exploit a natural experiment in the form of a tax reform in Denmark that reduced the rate at which some individuals, in certain tax brackets, could expense their interest payments on personal debt. This reduction in the interest tax shield served as a de facto increase in the cost of capital for individuals in those tax brackets. Since new ventures are often financed through personal debt, the reform also affected the cost at which potential entrepreneurs could finance their businesses. Using this natural experiment as the source of exogenous variation in financing environment therefore enables me to directly study how financing constraints affected both the rate of entry and the characteristics of those who selected into entrepreneurship. I find that the rates of entry for individuals who faced an increase in the cost of external finance fell by 40%, while the same probability rose by 10% for those whose cost of external finance was unchanged. Interestingly, the decline in entry did not come from less wealthy individuals as one might expect, but from wealthy individuals with low ability. Personal wealth was thus not the basis for selection into entrepreneurship. This finding provides support for the view that the relationship between individual wealth and entrepreneurship in advanced economies is driven by individual

preferences, rather than an inability to access capital for new ventures. It also has implications for theories for entrepreneurial choice and our understanding of financing constraints in entrepreneurship.

The second paper in the dissertation, “Banking deregulation, Financing Constraints, and Entrepreneurship” is joint with William Kerr and examines the differential effect of banking deregulation on startups compared to existing firms. One of the mechanisms through which the financing environment can impact entrepreneurial activity is through the structure of the banking industry. A deregulated banking sector where banks do not have local monopolies not only has the potential to lower interests rates for firms but more importantly, is believed to allocate capital to the most profitable projects and “best investments”, regardless of whether the project belongs to existing, incumbent firms or to startups. This allocative efficiency stemming from deregulated banking sector has been hypothesized to be an important factor driving the process of ‘Creative Destruction’ (e.g. Bertrand, Thesmar and Schoar, 2005).

We directly study the entry of newly incorporated businesses in the United States using detailed establishment-level data collected by the U.S. Census Bureau. A particular advantage of our data is that we can separate new establishments into new startups versus additional facilities being opened by existing private and public firms as well as track individual establishments over time. We use this data to study changes in the product market following a series of banking deregulations in the US over the late 1980s and early 1990s. Our data not only allows us to compare how the banking deregulations impacted entry of startups relative to the expansion of existing firms, but also allows us to examine the size at which new establishments were founded and the survival rates of the new ventures.

We find that the deregulations led to substantial increase in the entry rates of startups compared to the expansion of existing firms, particularly among establishments entering with under 20 employees. Interestingly, however, the vast majority of this entry led to “churning” — that is establishments that failed within three years of entry. We did find

some evidence of greater sustained entry among startups relative to existing firms, as well as an increase in size of entry among smaller establishments — highlighting that the successful entrants did indeed face financing constraints. We also find some evidence that this sustained entry among startups led to a reduced market share of the top 5 and top 10 incumbent firms. Although these results support the view that changes in the structure of the banking industry may facilitate the process of creative destruction, our findings suggest that the mechanism through which this takes place is somewhat different from that posited in prior work — it is not necessarily the ex ante allocation of capital to the best projects that leads to the success of the entrepreneurial ventures; rather it is the fact that the banking sector allows several more startups to be founded, some of which seem to survive ex post, while most of them fail along the way.

The third paper in the thesis is entitled “Diasporas and Domestic Entrepreneurs: Evidence from the Indian Software Industry” and is joint work with Tarun Khanna. In this paper, we examine links between the Indian diaspora and entrepreneurs in India’s software industry. Several recent studies have highlighted the important role that cross-border diaspora networks might play in promoting entrepreneurship in developing countries by transferring business contacts as well as capital to the local entrepreneurs (W. Kerr, 2005, J. E. Rauch, 2001, A. Saxenian, 2002). Yet, little is known about the specific individuals in developing countries who rely on the diaspora, and whether these diaspora networks are composed of professional contacts, or family and ethnic ties. We use original survey data collected from CEOs in India’s software industry to study how domestic entrepreneurs’ reliance on the diaspora varies based on their local networking opportunities and access to capital. We find that entrepreneurs located outside software hubs, rely significantly more on expatriate networks for business leads and capital, and that relying on these networks is related to better firm performance. However, it is primarily the entrepreneurs who have previously lived abroad who access these diaspora networks, rather than these networks being composed of family or ethnic ties. Our results suggest that cross-border social networks serve as an important substitute to local institutions in developing countries, but also emphasize that “brain circulation” might be critical for developing countries to successfully tap into their diasporas.

Bibliography

- [1] Bertrand, M, A. Schoar, and D.Thesmar. 2004. "Banking deregulation and industry structure: Evidence from the French banking reforms of 1985." Working Paper.
- [2] Evans, D. S. and Jovanovic, B. "An Estimated Model of Entrepreneurial Choice under Liquidity Constraints." *Journal of Political Economy*, 1989, 97(4), pp. 808-27.
- [3] Gentry, W. M. and Hubbard, R. G. "Entrepreneurship and Household Saving." NBER Working Paper 7894, 2000
- [4] Holtz-Eakin, D.; Joulfaian, D. and Rosen, H. S. "Sticking It out - Entrepreneurial Survival and Liquidity Constraints." *Journal of Political Economy*, 1994, 102(1), pp. 53-75.
- [5] Kerr, W. 2007. "Ethnic Scientific Communities and International Technology Diffusion." Forthcoming in *Review of Economics and Statistics*
- [6] King, R. G. and R. Levine. 1993a. "Finance and growth - Schumpeter might be right." *Quarterly Journal of Economics*, 108:3, pp. 717-37.
- [7] King, R. G. and R. Levine. 1993b. "Finance, entrepreneurship, and growth - Theory and evidence." *Journal of Monetary Economics*, 32:3, pp. 513-42.
- [8] Rauch, J. E. 2001. "Business and social networks in international trade." *Journal of Economic Literature*, 39:4, pp. 1177-203.
- [9] Saxenian, A. 2002. "Local and Global Networks of Immigrant Professionals in Silicon Valley." Public Policy Institute of California.