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UNIVERSITY OF CALIFORNIA, SAN DIEGO

Essays in Entrepreneurship

A dissertation submitted in partial satisfaction of the
requirements for the degree
Doctor of Philosophy

in

Economics

by

Sarada

Committee in charge:

Professor Roger H. Gordon, Chair
Professor Prashant Bharadwaj
Professor Silke Forbes
Professor Craig McIntosh
Professor David Miller
Professor Christopher Woodruff

2011

Abstract

This dissertation studies who becomes an entrepreneur and why he or she does so, what factors influence the success of an entrepreneurial venture, and what types of institutions best facilitate entrepreneurial activity. The first chapter shows that contrary to the standard result that most self-employed individuals report earning less, they in fact consume more without any observable offsetting (financial) costs. The second chapter studies how the relationship amongst individuals in terms of prior employment influences the success of a new business. Finally, the third chapter presents a theoretical discussion of the emergence of not-for-profit, entrepreneurial organizations.

Category: Economics, Finance, Industrial Organization, Labor, Public

Keywords: Entrepreneurship, Consumption, Tax, Employment, Networks, Organizations, Firm Formation

Dissertation Summary

Chapter 1

In this chapter, I seek to understand the returns to self-employment. This analysis is motivated by the longstanding empirical puzzle that most entrepreneurs enter and persist in self-employment, despite lower initial earnings and earnings growth than what is seemingly available in the wage alternative. In this chapter, I propose a new hypothesis to make sense of this observation. In particular, reported income is unlikely to be a good measure of the return to self-employment given the underreporting incentive, and opportunities available to business owners. To circumvent the measurement issues that plague reported income for the self-employed, I instead use reported consumption to measure the returns to self-employment. The first measurement issue that affects the self-employed is income underreporting. As evidence for the potential importance of such understating, Slemrod (2007) reports that the evasion rate amongst non-farm proprietorships varies between 18 and 57 percent depending on industry, while that amongst the wage-employed is 1 percent. Moreover, business owners also have access to multiple avenues for compensating themselves and their employees that do not easily appear as either personal or business income. For example, a business owner can pay himself in firm shares and declare a very low value for these shares, thereby understating his earned income, be it personal or business. Business owners have the incentive to pay themselves in this fashion for tax purposes given the vast difference between income and capital gains taxes. In addition, business owners may be compensated via royalties or dividends, which are not as obviously classified as labor income and may instead appear as asset income in survey data. Furthermore, the returns to owning a business are rarely

realized instantaneous. As such, any survey of business owners will face great difficulties in capturing the many ways in which business income can be received. In this paper, I make use of 38 years of longitudinal data from the Panel Study of Income Dynamics to test my hypothesis; that reported income is a poor measure of the returns to self-employment. My estimation strategy relies on the presumption that unlike reported income, reported consumption by the self-employed will not be systematically misreported. Results from fixed effects estimations indicate that individuals report earning 27 percent less but appear to consume 5 percent more in self-employment. This implies a 32 percent differential between reported wage and consumption for the self-employed, indicating that the former measure is not a good barometer of the financial returns to self-employment. In decomposing this increase in consumption, I find that it does not instantaneously coincide with entry into self-employment. In fact, upon initial entry, individuals experience no increase in consumption, but with each additional year in self-employment consumption grows an additional 1.15 percent as compared to that in wage employment. Those who persist in self-employment (and this is a small percentage of those who ever make the attempt since 68 percent fail within the first three years), continue to become increasingly better off in remaining so. The self-employed also appear to save more which would indicate that they are not simply trading off higher consumption for lower savings. Since one's financial state can be captured by the combination of consumption and savings, my findings indicate that the self-employed are making an easily rationalizable choice as evidenced by their finances alone. This is an important observation since up until this point, most of the literature has alluded almost exclusively to non-financial motivations, such as the preference for working for oneself,

to rationalize the decision to remain self-employed. While these motivations likely propel individuals into self-employment, my results show that being financially motivated is also perfectly consistent with the choice to become and remain self-employed. Furthermore, I find that this increased consumption is not offset by higher uncertainty as evidenced by my finding, that the variance in consumption while self- employed is not significantly different than that in wage employment. This is to say that the self-employed are not trading off this higher mean in consumption for higher variability which is a factor worth considering since business ownership is traditionally seen to be more volatile than being a wage worker. Since economists ultimately care about overall welfare, individual utility, it is important to not only look at changes in means, but to also consider other factors, such as variability. Given then importance of change it then becomes vital to understand how attempting self-employment affects those who fail, especially given that over 70 percent leave self-employment within the first 4 years. I find that these individuals do not incur any observable losses in lifetime consumption, where consumption after leaving self-employment returns to the level that it was prior to ever having tried. Finally, I find that despite all the positive news on the consumption front, the self-employed work (slightly) longer hours. However, given that each hour worked for oneself is, as the previous literature has argued, probably less unpleasant than that worked for someone else, one could argue that the self-employed are financially better off with little if any non-financial costs!

Chapter 2

My second chapter (joint work with Oana Hirakawa), looks at how new firm performance is associated with the manner in which founding members are previously

related. As researchers in entrepreneurship we not only want to understand why individuals become entrepreneurs but also what determines entrepreneurial success. This paper addresses the latter issue and hypothesizes that there is a relationship between the way individuals are related and the performance of the firms they found. The simplest thought exercise that underlies this hypothesis is as follows: Individuals who know each other well are likely to have a good understanding of how they work together and what each others' strengths and weaknesses are. In addition, the sheer act of choosing to work with someone one knows well shows (reciprocal) trust his or her abilities. Therefore, when closely related individuals work together to form a new business, they get around the uncertainties posed by working with strangers and are therefore more likely to succeed. On the other hand, individuals who are less well acquainted and are "weakly" linked (Granovetter 1983), are more likely to be from different social/ business circles and may therefore have access to more information on opportunities and may possess very different (and complementary) skills. In addition, the sheer act of incurring the inconvenience (or "search cost") of reaching beyond what is immediately available to find the perfect partner (or to "increase match quality") may be a signal that the quality of the business idea is sufficiently high that it is worth doing so. By this logic, weakly related individuals are more likely to succeed by working together. Given the logic presented here, it is then natural to ask which effect dominates; the resolution of informational asymmetries and uncertainties or access to a variety of information and opportunities coupled with potentially higher match quality?

In this paper we define the strength of relationships by how individuals are related through prior employment. Those who worked together prior to starting a new business

jointly are defined as closely related while those who did not work together previously are defined as weakly related.

We use a large employee-employer linked panel data set from Brazil that allows us to track workers across jobs and establish whether new firm employees have prior joint work experience. We use this information to construct a quantifier for network concentration (which captures the strength of relationships) using the Herfindahl Hirschman Index (HHI), and test the impact of network concentration on new firm performance as measured by survival, employment, and wages. We find that new firms with higher network concentrations, i.e. wherein initial employees have worked together previously, are on average larger, have higher wages and survive longer (controlling for industry fixed effects and employees' human capital as measured by education, demographic characteristics, formal sector experience, and size of the firms in which they were previously employed). This association increases with the initial size of the newly founded firm. This is to say that when success is measured by new firm survival and new firm size (as proxied for by the number of employees and the total wage bill), closer relationships (or stronger ties) amongst founding members are more positively associated with success. By the logic of the theory outlined above, this would imply that resolving uncertainties and being better acquainted with one's business partners is beneficial for firm survival and size.[1]

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[1] Note that this relationship is not causal, but is just a correlation for now. Due to the nature of the question and what is and isn't observable, our estimation techniques do not account other possible explanations for this pattern. Refer to the full version of the paper for a further discussion. The authors continue to work on resolving these issues, so feel free to contact the authors for updated information.

However, we find a negative relationship between network concentration and initial firm growth. This implies that access to more information and a higher match quality matter for success as measured by growth. Ultimately, the paper propels the reader to think about how entrepreneurial success is defined and what matters for success. If we think of entrepreneurs as generating employment and innovation, should growth matter more? On the other hand, survival is a hurdle that most new ventures fail to cross, so is this the more valuable feature? The answer to this question remains at large.

Finally, we look at how the size of the firm an individual worked in prior to starting the new business affects the success of her new entrepreneurial venture. We find that small firm experience correlates with better survival rates, but lower employment and average wages at the new firm. This is to say that those individuals working in smaller firms previously start smaller businesses, but are for some reason, either through gaining different skills or from being different to begin with and thereby working as a smaller firm, better able to survive the tumultuous initial years in a new business.

The literature on entrepreneurial networks is a fairly thin one, and this paper provides at least a sliver of insight into the types of links that contribute to entrepreneurial success. While we use the most basic of measures to estimate network ties, we are able to point to startling and significant trends that have yet to be fully explored in the empirical literature. In pointing to these trends this paper guides readers to thinking more carefully about what being a successful entrepreneur means, how this should be measured and what characteristics lead to successful outcomes.

Chapter 3

This paper (joint with David Miller) examines the conditions under which an informal network may decide to formalize into an entrepreneurial organization. Entrepreneurial organizations are networking entities that are legally recognized and primarily exist as a platform to facilitate interactions between current and potential entrepreneurs. These organizations tend to be incorporated along ethnic, professional or regional commonalities and often involve some combination of the three. Examples of these organizations include trade associations like, the Silicon Valley Association of Startup Entrepreneurs, The Indus Entrepreneur, the Silicon Valley Chinese Engineers Association, the Caribbean American Chamber of Commerce of Florida and the Singapore Indian Chamber of Commerce, to name a few. These organizations are not for profit and do not posses any intrinsic monetary value in and of themselves. They are generally non-exclusive and the admissions requirements are transparent and non-discriminatory. The size across these entities varies greatly as well, but a common feature is that most of these organizations tend to start smaller and some grow to become vast entities. For example, TIE states that it started with a few entrepreneurs and professionals meeting for lunch in 1992, and has now grown to become a 12, 000 member body. The Singapore Indian Chamber of Commerce was founded by a small number of Indian merchants in 1924 and now has a membership of over 700. It is this particular feature of entrepreneurial organizations that motivates the question this paper addresses. It is apparent that there is some value to having a larger potential partner set. More partners to choose from could ensure a higher match quality and a greater scope of economic activity. Hence, growth in group size alone could prove to be a desirable property, which could encourage the formation of these organizations. However, it seems intuitive that

partnering with low ability members would not necessarily enhance the choice set and could conceivably detract from the quality of the network. Herein lies the puzzle as to why we observe so many organizations with open admissions policies and little screening beyond an affordable initial entry fee. We posit that even with low-ability members diluting the average group quality, the benefits from group growth far outweigh the alternative, which is to remain a closed network under certain conditions. The above examples are ones that provide evidence for the existence of these formal entrepreneurial organizations. These organizations however, did not spontaneously appear. There exist trading networks from which the class of organizations described above germinate, however not all of these networks necessarily choose to formalize. It is this decision to formalize based off expected network growth, and resulting payoffs that we model in this paper where we set the stage for an analysis of the tradeoffs between them.