On the Social and Human Capital of Entrepreneurs in Taiwan

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Executive Summary

Over the last 20 years a number of different views have been suggested attempting to explain the "East Asian Miracle" (Amsden, 1989; Krugman, 1994; Young, 1995; World Bank 1993; 2001). The question of "how they did it" has been of considerate academic and policy importance. One set of views stresses entrepreneurship, innovation, and learning that occurred in these economies before they could master the new technologies adopted from more advanced industrial nations. To learn to use new technologies was far from a routine matter for East Asian late-comer firms but involved the entrepreneurial process (Hobday, 1995; Nelson and Pack, 1999).

Entrepreneurship has played substantially important roles throughout the process of Taiwan's economic development (Galenson, 1979; Scitovsky, 1986; Hu and Schive, 1997; Ho, 1979; Schive, 1990). The evidence in these studies supports the claim that entrepreneurship and small business have been important drivers of Taiwan's spectacular success. However, existing accounts for Taiwan's entrepreneurship development are questionable, given that such accounts relied on the assumption that throughout the process of Taiwan's development, there has been a constant supply of entrepreneurs ready to pursue entrepreneurial opportunities, when those opportunities appeared. Unfortunately, while emphasizing the role of entrepreneurs in Taiwan's development, the existing accounts offer little help in explaining why and how these entrepreneurs were able to pursue opportunities effectively.

The study of entrepreneurship and small business has become one of the most popular fields of research. In recent years, the research has shifted toward an emphasis on a social embeddedness perspective. Scholars have suggested a number of structural influences on entrepreneurial activity, including the family of origin (Aldrich and Cliff, 2003), work

environment (Freeman, 1986; Dobrev and Barnett, 2005), and the regional cultural and material environment (Saxenian, 1994; Sorenson and Audia, 2000). In explaining entrepreneurship in NICs as well as in Japan and the rest of Asia, the phenomenon of entrepreneurship cannot be fully explained without the reference to contextual effect. The research on Asian entrepreneurship would be much better off if researchers devoted more energy toward taking contextual approach.

The purpose of this dissertation is to offer an empirical framework for Taiwan's entrepreneurship that explores the effects of social contexts on entrepreneurial behaviors at the individual level. In this study, we take an approach consistent with the view that individuals and organizations affects and are affected by their social context. We would expect that social contexts affects social and human capital of entrepreneurs for at least two important reasons. First, the work environment surrounding individuals influences the extent of opportunities for their cognitive learning that is useful for the pursuit of the entrepreneurial opportunities. Second, social context also determines the extent to which the individual is central to and well positioned in a structure of social networks.

In this paper, we focus on two major operational definitions of entrepreneurship that have been used in previous research: self employment and new firm formation. We define self employment as performing work for personal profit rather than for wages paid by others. The second operational definition of entrepreneurship discussed in this dissertation is the founding of a new business, which is defined as the forming of a business venture that previously was not in existence.

Exploring entrepreneurship seems to require an interdisciplinary approach. The domains of psychology and sociology seem to provide insight, but none seem to explain the phenomenon completely. This dissertation follows in the tradition of entrepreneurial research and deliberately takes an interdisciplinary perspective.

Chapter 2 analyzes workplace effects on entrepreneurial entry. Previous studies have revealed that disproportionately large number of people in small firms start their own businesses. However, these studies offer little help for our understanding of the fundamental motivations that lead workers in small firms to become entrepreneurs. The chapter focuses upon the following issues: why people in small firms are more likely to enter entrepreneurship? To address this question, this chapter draws upon a repeated cross-sectional sample of more than 100 thousands individuals from matched employer-employee database from 1995 through 2006 in Taiwan.

Motivation theory is reviewed to identify two factors encouraging some people in small firms to enter entrepreneurship: economic opportunity and job dissatisfaction. Three options for entrepreneurial choice are examined: opportunity-pulled entrepreneurship, dissatisfaction-induced entrepreneurship, and non-transition. To specify the reason for entrepreneurial entry among "dissatisfied" people in small firms, we also analyze the sub sample of individuals who experienced job dissatisfaction.

The results from multinomial regression analysis confirmed that: (1) small firms produce more opportunity-pulled entrepreneurs than larger firms; (2) they also create more dissatisfaction-induced entrepreneurs than larger firms; but (3) small firms are more likely to create more opportunity-pulled entrepreneurs than to produce dissatisfaction-induced entrepreneurs; (4) among dissatisfied individuals, those in small firms are more likely to become entrepreneurs than to engage in turnover; (5) in particular, people in small firms who are dissatisfied with their career prospect are particularly much more likely to enter entrepreneurship.

Results from this chapter will provide policy makers with additional insights into the key work environmental factors associated with opportunity-pulled entrepreneurship. Policy makers seeking to encourage technological change through entrepreneurship in regions or

industries can focus upon the characteristics of social context that surrounds workers to predict the emergence of opportunity-pulled entrepreneurship. Policy makers who want to constrain the generation of dissatisfaction-induced entrepreneurship may prefer to target their resources and assistance to the improvement of worker skills for small firms that influences the likelihood of the worker in small firm to move to other firm rather than to be pushed toward entrepreneurship.

Chapter 3 analyzes new venture startup activities undertaken by 815 nascent entrepreneurs and the effects of work environment on the activities. Nascent entrepreneurs are individuals who were identified as those who left a firm to found a new firm but have not became business owners. Repeated cross-sectional data for the study comes from the same database as used in Chapter 2. Individuals who have the experience of engaging in startup activities were asked to describe previous workplace; then, we tracked them forward, and examined whether they successfully became business owners.

In the interview, 85 percent of individuals who had the experience of engaging in startup activities reported they had become business owners. Remaining 15 percent of the individuals had returned to paid work, and were less active than before in trying to establish a firm. The results from multivariate analyses suggest that nascent entrepreneurs who have worked for small firms start a business in relatively short-term. The robustness to alternative earnings specification was tested, but this did not change results significantly. In addition, industry differences of workplace effects were examined, and results of the analysis suggested that people in small firms are much more successful in completing startup activities when the firms engaged in more knowledge-intensive and less capital-intensive production.

This chapter suggests that work environment has a significant influence on the ability of workers to successfully create new organization in short-term. This chapter suggests

that the behaviors of nascent entrepreneurs who left small firms can be differentiated from those of nascent entrepreneurs who left larger firms.

Chapter 4 assesses local social capital that influences female entrepreneurs to makes their businesses more profitable. In this study, local social capital is used in a sense that includes social ties with adjacent neighbors and favorable reputation in the neighborhood community. Relying on this definition, this chapter tests the effect of local social capital on self-employment earnings that self-employed females received. Cross-sectional data for the chapter comes from a secondary data analysis of representative sample of adult females and their families surveyed in late 1980s.

An economic theory of community governance is reviewed to identify the role of local social capital in female entrepreneurship. Two broad categories of local social capital are examined: experience of making personal contribution to community activities and the experience of offering emotional support to adjacent neighbors.

Endogenous treatment effect analysis confirmed that with the correction for self-selection of female entrepreneurs into local networks, previous experience of making personal contribution to community activities and that of offering emotional support to neighbors have significant influences that enhance the ability of female entrepreneurs to make business profitable.

Results from this chapter provide policy makers with important insights into the principal community factors that influence the capacity of female entrepreneurs to obtain profit. Policy makers seeking to encourage female entrepreneurship can focus upon the characteristics of community activities and neighborhood networks to predict the supportive environment for female business owners.

Chapter 5 explores the difference between entrepreneurs and managers. However, rather than focusing on previously examined individual differences, this study examined

differences in the process of social capital creation between entrepreneurs and managers. Building on the economic approach to social capital, we asserted that entrepreneurs are more active in accumulating social capital than are managers.

In recent years, research focusing on entrepreneurial social capital has shown that social capital is an important predictor of success in entrepreneurial activity (Davidsson and Honig, 2003; Bosma, van Praag, Thurik, and de Wit, 2004). Unfortunately, this work focusing only on entrepreneurs has been unable to completely explore entrepreneurial social capital, because the social capital may also be important for non-entrepreneurs.

We examined differences between entrepreneurs and managers with respect to two broad classes of social capital, such as network and status. In this study, entrepreneurs are those who have founded their own firms. The analysis for this study involved responses from 95 entrepreneurs and 143 managers in Taiwan. We used the frequency of personal attendance at the activities of trade associations to measure the intensity of participation of entrepreneurs and managers in business networks. To differentiate network and status, we adopted two indicators measuring the participation in the governance activities and that in the networking activities of Taiwanese trade associations.

The results from multivariate analysis showed three facts that support the predictions:

(1) network and status is higher among entrepreneurs, (2) the network and status of entrepreneurs rises with firm age, while such behavior is not observed for managers (3) entrepreneurs who invest in human capital also accumulate status, while such correlation is not observed for managers.

There are several practical implications that emerge from this study as well. In many industries, policy makers are interested in the level of new firm entry. The results of this study suggest that new firm entry may result in higher level of networking activities at the industry level. The formation of social capital may also help explain why the entrepreneur has

persistent influence over the entire history of the organization. This suggests the important role of entrepreneurs in creating societal foundation of organization.

To conclude, each of the chapters of this dissertation provides empirical evidence supporting contextual effects on the different dimensions of the entrepreneurial process. These evidences offer important policy implications as well. Policy makers in Asian countries seem to be interested in removing obstacles for entrepreneurship by creating entrepreneurial infrastructure. For example, Taiwan's policy programs designed for entrepreneurship starting in 2002 emphasize the provision of consulting services, startup finance, and dissemination of entrepreneurship-related information in regions or industries. In Japan, policy makers have also begun to emphasize entrepreneurship-promoting policies, and started policy schemes designed specifically for providing entrepreneurial infrastructure such as startup finance. consulting, and business matching. Nevertheless, such programs seem to rely on an implicit assumption that there has been a supply of entrepreneurs ready to pursue the opportunities once policy programs have disable effects and the barriers to doing so are removed. However, the evidence of this dissertation suggests contextual constraints on the supply of entrepreneurs. Policy makers in NICs, Japan, and the rest of Asia seeking to encourage entrepreneurship need to be aware of indirect effects of creating social contexts that surrounds entrepreneurs.