

# **Immigrant Entrepreneurship: The Role of Formal Corporate Governance Arrangement and Social Capital in Community and Family**

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## **ABSTRACT**

We empirically test the relation between immigrant's venture creation decision and governance mechanism under a unified framework of governance in both sociology and finance. We find that corporate governance arrangements are more valued by entrepreneurs with better education attainment and higher household income, such as immigrant entrepreneurs. This type of entrepreneurs tends to be more reluctant to create a venture due to the high opportunity costs. In addition, social capital embedded in community significantly and positively affects the new venture creation decision. At the same time, an inverted U shape relationship is observed between social capital in family and new venture creation. This paper answers how relational governance and corporate governance are related to new venture creation in immigrant entrepreneurship, especially in emerging phase. The key argument is that the efficacy of corporate governance and relational governance mechanisms in immigrant entrepreneurship are contingent on different types of social capital which immigrant entrepreneurs possess and on the formal corporate governance arrangement, the adoption of which is influenced by immigrant entrepreneurs' characteristics.

**Key Words: Immigrant Entrepreneurship Corporate Governance Social Capital**

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## INTRODUCTION

Recent industry studies addressed and highlighted the positive role of immigrant entrepreneurs in the U.S. economy and competitiveness. For example, in their study, Stuart and Platzer (2008) reported that 25% of U.S. venture-backed public firms were started by immigrant entrepreneurs from 1995 to 2008. Between 2006 and 2012, 33% of U.S. venture-backed companies that became public traded were initiated by immigrant entrepreneurs (Stuart, 2013). In addition, the market capitalization of immigrant entrepreneurship which is venture-backed, jumped from \$500 million in 2008 to \$900 billion as of June, 2013, and most of these companies were concentrated in cutting edge sectors and absorbed high percentage of U.S. employment (Stuart and Platzer, 2008; Stuart 2013). Some popular immigrant-founded names, such as Intel, Google, Yahoo!, Facebook, LinkedIn, Zipcar, Sun Microsystems, eBay and so on, emerged and contributed to the competitiveness and power of the U.S. Thus, the research on immigrant entrepreneurship should deserve its foothold in current entrepreneurship studies.

Moreover, self-employment has been an important factor in the economic advancement of immigrants (Sander and Nee, 1996). In his study of New York garment industry, Waldinger (1986) observed that immigrant entrepreneurs started businesses because the incumbent labor market discriminated against alien workers and shut down the door for upward social mobility in professional career for those immigrants, thus self-employment or new venture creation possibly became the only avenue for the upward social mobility for immigrant entrepreneurs. Light and Bonacich (1988) also derived the similar conclusion in their study for Korean immigrant entrepreneurs in Los Angeles. Through the survey of garment industry in seven cities of both U.S. and Europe, Rath (2002) further observed that self-employment has become a major pathway for immigrants to chase their own economic and political pursuits when they settle down in a new

country. Given the strong motivation and great achievement of immigrant in venture creation, in this paper, we would like to move a step further and explore the decision making process of immigrants, that is, whether the governance mechanism may influence immigrant entrepreneurs on their new venture creation decision in the U.S. This is the area, to our best knowledge, that has not been extensively explored.

The United States has one of the best corporate governance systems in the world (Shleifer and Vishny 1997). However, for new ventures, the classical corporate governance mechanisms, such as independent board, takeover market, executive compensation package, and large debt holders, could not be applied due to their small size, simple business structure and high uncertainty about future prospects. Because of the importance of corporate governance in the long run, a common approach by start-ups is to hire an accountant so that information could be shared among shareholders or even stakeholders. This approach, which is the bottom line for seasoned firms, could largely reduce the information asymmetry and potential agency problems for start-ups. In our study, we find that those with better education and higher household income tend to hire accountants in their venture, which we believe is because they may have a clearer image about the importance of corporate governance. They may also tend to be more reluctant to take the entrepreneurship opportunity due to the relatively higher opportunity costs, suggesting that entrepreneurs who plan to adopt corporate governance in the venture may be less likely to create venture. This negative relation is more apparent for immigrant entrepreneurs as they may have higher education level and opportunity costs on average.

Another source of governance is relational governance, while social capital is embedded in certain social relations (Coleman, 1988), of which social connections constitute the veins of economic corpus (Granovetter, 1985) and it lubricates the function of those social relations, such

as providing mutual monitoring mechanism to ensure the efficacy of business transactions (Waldinger, 1986; Light and Bonacich, 1988). Social capital generally refers to trust, concern for one's associates, a willingness to live by the norms of one's community and to punish those who do not (Bowles and Gintis, 2002). The earlier research in sociology and entrepreneurship argued that social capital in co-ethnic community and family perpetuates the prosperity of immigrant entrepreneurship through the easy access to financial and human capital and risk sharing mechanisms in community (Waldinger, 1986; Light and Bonacich, 1988; Evans, 1989; Sanders and Nee, 1996; Rath, 2002; Green, 2002; Kalnins and Chung, 2006). Thus network analysis tends to regard those social connections as a form of governance in economic exchanges, and such a relational mechanism in governance could increase organization performance (Ingram and Lifschitz, 2006).

However, current economic models could not necessitate an influential overhaul but simply added "relational governance" to the corporate and market governance forms (Ingram and Lifschitz, 2006). Such an arrangement may not produce a satisfying integrated analytical framework. For example, Ingram and Lifschitz (2006) argued that relational governance may not be compatible with corporate governance in influencing organizational performance and there is a tension between horizontal relations and corporate governance. Therefore, the discussion for the roles of social capital in community and family and formal corporate governance arrangement bears its own value, because such a discussion addresses the issues regarding why relational governance may be offset by formal corporate governance arrangement in light of the decomposition of social capital, especially in immigrant emerging organizations. We find that social capital residing in community is positively related to new venture creation among immigrants and social capital embedded in family exerts an inverted U shape effect on

immigrants' new venture creation. Our core claim in this paper is that the efficacy of corporate governance and relational governance mechanisms in immigrant entrepreneurship are contingent on different types of social capital which immigrant entrepreneurs possess and on the formal corporate governance arrangement, the adoption of which is influenced by immigrant entrepreneurs' characteristics.

The paper is structured as follows. We first develop our theory and corresponding hypotheses, and then introduce methods and test hypotheses. Subsequently, we discuss the findings, our contributions to theory and practice and avenues for future research. At last, we conclude this research.

## **THEORY AND HYPOTHESES DEVELOPMENT**

### **Corporate Governance Arrangement and New Venture Creation**

Corporate governance is designed to deal with the potential agency problem stemming from the separation of ownership and control. Large shareholders (Grossman and Hart 1980, Shleifer and Vishny 1986), large creditors (Jensen 1986, 1989), independent board (Weisbach 1988), takeover market (Scharfstein 1988), and executive compensation package (Jensen and Meckling 1976) are widely taken as effective corporate governance mechanism to ensure that managers work in the interest of fund suppliers.

Previous literature suggests that good governance is actually associated with better stock performance for seasoned firms. For instance, Gompers, Ishii, and Metrick (2003) build a governance index (G-index) by aggregating 24 provisions followed by the Investor Responsibility Research Center (IRRC). Using G-index to proxy for external governance mechanism, they find that the decile of firms with the strongest takeover defenses (G-index of 14

or higher) have lower share prices, value and operating performance than the decile with the weakest defenses (G-index of 5 or less) in 1990s. Cremers and Nair (2005) test the interaction between internal and external governance, and suggest a mutual complementary relation in being associated with profitability and long-run abnormal returns.

As start-up ventures are typically small in size and simple in ownership structure, it is very rare that a start-up firm may have an independent board, and carefully designed executive compensation package, which are very expensive for start-ups. They may not be influenced by takeover market as they are in the progress of building products, service, brand and reputation. They do not have any tracking records, so it is very hard for them to get loans from creditors. Therefore, almost all of the classical governance mechanism that works well in seasoned companies could not be applied within start-up ventures.

However, it does not necessarily mean that corporate governance is not important for start-ups. The agency problem remains because if it is organized in the form of partnership or corporation, a venture may have many founders and there may be a conflict of interests between founders and top managers. Even for sole proprietorship, governance may be important as it may reduce the future finance costs if the venture could provide some tracking records to influence of risk evaluation process of creditors or private equity investors.

As an approach to deal with information asymmetry and agency problem, to hire an accountant is the bottom line of corporate government mechanism for seasoned companies. For start-up ventures, however, it is optional as it depends on whether entrepreneurs value transparency information sharing among entrepreneurs in an organized and formalized business format. We argue that those entrepreneurs who are better educated and are more successful in their career may more highly value corporate governance as they may have a clearer image about

how important corporate governance is to the success of a company in the long run or even take education as a kind of class resources to attract partners with the similar genes or with financial capital to support start-up decision (Saxenian, 2006; Wong, 2006). On the contrary, good education and successful career suggest a higher opportunity costs if the decision to become an entrepreneur is made, meaning that those entrepreneurs will be more reluctant when facing an entrepreneurship opportunity. Simply put, they will not start a new venture until the opportunity is good enough so that the opportunity costs of losing the current job is acceptable.

Therefore, for the relationship between corporate governance and new venture creation, we have the following hypotheses:

*Hypothesis 1a: Entrepreneurs who plan to adopt corporate governance in the venture tend to be more highly educated and have higher household income.*

*Hypothesis 1b: Entrepreneurs who plan to adopt corporate governance in the venture tend to be less likely to create venture.*

Moreover, immigrant entrepreneurs faced the similar or more serious challenges than general start-ups did. Previous literature shows that the opportunity structure and market regulations in open market further restrain the geographic distribution, governance structures, size, and increase the opportunity cost of new venture creation among immigrant entrepreneurs (Waldinger, 1986; Evans, 1989; Light and Bonacich, 1991; Rath, 2002; Saxenian, 2006; Wong, 2006). Therefore, we expect a stronger negative relation between corporate governance and venture creation for immigrant entrepreneurs:

*Hypothesis 1c: Immigrant entrepreneurs who plan to adopt corporate governance in the venture tend to be less likely to create venture.*

### **Social Capital in Community and Family**

Social capital has been well accepted as a fruitful theoretical perspective to explain norms and social relations (Narayan and Cassidy, 2001). Different perspectives to construct social structure

also reflect the variation in the definition of social capital. For example, De Carolis et al. (2009) classified social capital into collective and individual levels and examined how relational capital and personal networks influence new venture creation. To measure social capital, Narayan and Cassidy (2001) further decomposed social capital into seven dimensions. Their investigation of social capital measurement offers a systematic way for defining social capital. High level of trust and cooperation in community are nurtured due to social capital born in community culture, which could grant members convenient accesses to necessary resources and influence immigrant entrepreneurial activities.

Furthermore, family also embodies social capital for entrepreneurial activities. For instance, in their discussion of immigrant entrepreneurship, Sanders and Nee (1996) argued that social capital embedded in family relations facilitates immigrant self-employed activities. Family, as a unit of individual ties, acts as a social basis for entrepreneurship though limiting itself to a threshold. Next, we will move on to examine how those two forms of social capital influence immigrant entrepreneurial activities.

### **Community Culture and Immigrant Entrepreneurship**

The impacts of culture on behaviors have long been discussed among sociologists and management scholars. For example, institutional scholar regard culture as one of three pillars of institution theory (Scott, 2001), which influences how people construct social relations (DiMaggio & Powell, 1983; Friedland and Alford, 1991). Triandis (1972) distinguished two types of cultures: collectivist and individualist. Collective culture indicates that group interest is over self interest and the group is responsible for the individual. While individualist culture refers to one where members typically focus on self interest over group interest and each



individual is responsible for himself or herself. Tiessen (1997) further pointed out that individualism reflects the tendencies to orient values and actions towards competition, while competition embodies the symbolic meaning of success. The earlier research suggests that culture emphasizing on individualism fosters trust and cooperation. For example, Chen et al. (1998) proposed that accountability could enhance individual's self image of internal focus of control and strengthen the instrumental motivation for self-interest. Mitchell et al. (2000) also argued that individualist society indirectly encourages new venture creation because of the opportunities that are out of trust and thereof could be taken advantage of with low cost. For instance, in their analysis, Berigan and Irwin (2011) proposed that individualist culture facilitates weaker and more densely ties than collective culture, the cliquish nature of social ties makes it easier to monitor each other's behaviors, thus actor's behaviors are disciplined due to the expectation of potential punishment and the willingness to keep group harmony. As a result, individualist culture is conducive to the formation of trust and frequent cooperation. At the same time, high trust and cooperative relations in community also produce rich social capital (Narayan and Cassidy, 2001), thus strong community culture emphasizing on individualism will spawn rich social capital residing in community networks, which in turn facilitates the formation of new ventures (De Carolis, D. M., & Saporito, 2006; De Carolis et al., 2009). At the same time, immigrant entrepreneurs tend to cluster geographically because of their unfamiliarity with new markets, while kinship, friendship or ethnicity ties could provide them fastest and easiest access to resources and thus increase survival chances (Light and Bonacich, 1991; Rath, 2002). Ethnic entrepreneurs also enjoy an advantage over potential competitors outside the bounded community of entrepreneurs due to shared culture and language (Waldinger, 1986; Evans, 1989; Light and Bonacich, 1991; Rath, 2002). Thus the community which emphasizes on individualism

could strengthen the bonding in ethnicity and attract more immigrant entrepreneurs to cluster (Waldinger, 1986; Evans, 1989; Light and Bonacich, 1991; Kalnins and Chung, 2006). And the common ethnic background also produces rich social capital due to the shared values and enforced trust (Kalnins and Chung, 2006). Specifically, in a community emphasizing on individualism, the effects of social capital by ethnicity could be further strengthened by community networks (Waldinger, 1986; Evans, 1989; Light and Bonacich, 1991; Rath, 2002). Therefore, immigrant entrepreneurship is nourished and flourished (Kalnins and Chung, 2006). To sum up, we derive the following hypothesis,

*Hypothesis 2: Community culture emphasizing on individualism positively related to immigrant entrepreneurs' new venture creation of entrepreneurs.*

### **The Role of Structural Embeddedness in Family in Immigrant Entrepreneurship**

Embeddedness argument was first brought out since Granovetter's work to explain the phenomenon that economic actions are embedded in social relations (Granovetter, 1985). Embeddedness refers to the process by which social relations shape economic actions and the degree to which commercial transactions occur through social relations (Uzzi, 1996; 1999). Uzzi (1996) further investigated the core embeddedness argument by using structural embeddedness methods. His continuous research on the effects of embeddedness on economic actions all supported the core embeddedness argument that embedded ties in cohesive networks sometimes facilitate economic transactions and sometimes derail exchanges (Uzzi, 1996; 1997; 1999).

This inverted U shape effects subsequently incurred extensive attentions from different scholars. For example, Newbert and Tornikoski (2013) examined the role of embeddedness in resource acquisition for emerging organizations, they found that positive effects of strong ties on resource acquisition and specificity are robust and defended the role of strong ties compared with

traditional advocates of sparse networks or weak ties (Granovetter, 1985; Burt, 1992). At the same time, Newbert et al. (2013) found that networks evolved from cohesive networks to diversified ties as firms emerged, which also supports embeddedness argument. In addition, in their commentaries, Hite and Hesterly (2001) proposed that firms respond to resource acquisition challenges by developing networks from identity based networks to calculative networks in their early growth. However, most immigrant entrepreneurship literatures sidestep the embeddedness arguments and implicitly assume social capital benefits immigrant entrepreneurs without limitations. In terms of social capital in family, internal conflicts within family have been minimized by optimists, if dramatized by pessimists. For instance, Sanders and Nee (1996) argued that family is an institution that involves mutual obligations and trust characteristics of solidaristic small groups, this feature embodies an important form of social capital which family members draw on in their pursuit of economic advancement. Thus family acts as a supportive agent for immigrant self-employed by furnishing labor and facilitating the pooling of financial resources (Waldinger, 1986; Light and Bonacich, 1991; Green, 2002). Following this logic, the high degree of structural embeddedness in family will facilitate the immigrant entrepreneurs' new venture creation. On the other hand, Waldinger (1986) observed that hiring family members may hinder the business efficacy and incur higher operation cost because of immigrant entrepreneurs' reluctance to fire unqualified family employees. Bates (1994) also argued that the heavy use of social support networks characterizes the less profitable, more-failure prone small business of Asian immigrants. For nascent entrepreneurs, social support networks are mainly composed of family members, thus too much social capital residing in family actually derails economic exchange (Granovetter 1985). As a result, new venture creation is hindered. On the contrary, if immigrant entrepreneurs are residing in pure arm's length ties, lower trust, the lack of

timely trustworthy information channels and the risk sharing joint arrangement also incur frequent frictions and produce less social capital in economic exchanges, thus reduce the likelihood of new venture creation (Uzzi, 1996;1997;1999). It is also possible that arm's length ties could avoid vicious conflicts unique to family and the deviation from family connections might relieve immigrant entrepreneurs from emotional burdens in their obligations for unqualified family members (Green, 2002), thus arm's length ties may also facilitate new venture creation. Taken together, we suspect that there might exist an optimal arrangement (Uzzi, 1996;1997;1999) or a worst arrangement for new venture creation of immigrant entrepreneurs in the structural embeddedness in family and thus two competing hypotheses are derived as follows (see Figure 1 for our conceptual model).

*Hypothesis 3a: Embeddedness in family positively influences immigrant entrepreneurs on new venture creation. However, such facilitating effect limits itself to a certain threshold. That is, the moderation effect of embeddedness shows an inverted U shape influence.*

*Hypothesis 3b: Embeddedness in family negatively influences immigrant entrepreneurs on new venture creation. However, such hampering effect limits itself to a certain threshold. That is, the moderation effect of embeddedness shows a U shape influence.*

“Insert Figure 1 Here”

## METHODS

### Sample

The dataset used in this paper is Panel Study of Entrepreneurial Dynamics II (PSED II), PSED II offered a nationally representative and longitudinal database for the United States, the purpose of this database was to offer systematic, reliable, and generalizable data on the business formation process (Reynolds and Curtin,2007). Like PSED I, PSED II also contained

information on the proportion and characteristics of the adult population attempting to start new businesses, the kinds of activities which nascent entrepreneurs undertake during the venture creation process and the proportion and characteristics of the start-up efforts that become infant firms. In addition, PSED II covered more comprehensive topics compared to PSED I. For example, community and agency support information were collected. PSED II followed a cohort of nascent entrepreneurs for three years with five waves of surveys beginning in 2005 and was conducted in three stages. First, to identify the sample, digit- dialing sample of 31,845 U.S. households were randomly selected and screened with landline phones to identify nascent entrepreneurs active in start-up phase and their demographic data. Second, 1,214 nascent entrepreneurs were identified and requested to complete sixty-minute phone interviews on the details of their start-up initiative. Third, the start-up effort outcomes were collected in follow-up interviews completed twelve and twenty-four months after the initial interview<sup>1</sup>.

Despite the multiple waves of data were conducted in PSED II, this study only used wave A for two reasons. First of all, all independent variables were collected in wave A and outcome variable was collected at the same period of wave A, but the majority of them are not available for the subsequent waves. For example, respondents were requested to provide information up to three supporters, which represent 100% of supporters' information for all five waves. And this is the foundation for our calculation of embeddedness. Second, given those variables which are available for subsequent waves, wave A represents the biggest proportion of database. Take variable high-tech for example, respondents were asked to indicate whether their new venture is high tech company or not, wave A represents 53% of the total five waves, wave B, C,D,E,F takes 5.5%, 6.1%, 5.7%, 16.3% and 13.8%. Thus it best represents the population of the responses.

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<sup>1</sup> The detailed description of PSED II could be referred to Reynolds and Curtin (2007).

Taken together, relying on the circumscribed data in key information in wave B, C, D, E, and F would severely limit the explanation and generalization ability of our analysis and combining all waves would lose substantial observations for certain variables while focusing on wave A could provide us more information without substantial omission of observations. The similar logics could also be found in the earlier research (Newbert & Tornikoski, 2009).

Although all data in PSED II were collected from the same survey instrument, we believe the common method bias will not distort the results of our analysis. First, at the beginning of the survey, the respondents were guaranteed by the survey designers for their anonymity in this research, which the earlier research (Podsakoff et al., 2003) suggested reduces the probability of social desirable responses. Second, we investigated common method biases by conducting a Harman's single factor test, which was also routinely used in the earlier literature (Christmann, 2004; Kirkman & Shapiro, 2001; Steensma et al., 2005; Newbert & Tornikoski, 2013). The unrotated factor produced twenty one factors, the first eight factors account for 60.89% of cumulative variance, the proportions of each nine factors are 12.64%, 8.49%, 8.26%, 7.08%, 7.01%, 6.12%, 5.85% and 5.45% respectively. Because no single factor emerged to explain more than 12.64% and accounted for a substantial majority of the total variance, thus no artificial response bias is assumed to exist in the data (Podsakoff & Organ, 1985; Newbert & Tornikoski, 2013). Third, though Podsakoff et al. (2003) argued that potential limitations in Harman's single factor test rendered this method not perfectly reliable, Meade et al. (2007) found that even when common method variances is present, it does not necessarily cause common method bias that might invalid the results of any subsequent statistical tests. They also noted that common method bias out of common method variance in organization research tends to be trivially small. In this study, three theoretical questions were investigated, for the questions exploring the moderating

effects of community culture and the effects of founder's identity alone, we excluded missing value and made a usable sample with 1,211 observations. As for the question studying embeddedness as a moderator, we excluded those observations with missing values and got a final usable sample of 338 observations.

### **Dependent Variable**

The earliest work on new venture creation could probably be dated back to the work of Coase (1937). In his article, Coase (1937) defined three key elements for a firm as covenants, resources and entrepreneurs and argued that the role of entrepreneurs is to organize covenants and resources to make a firm function. Following this tradition, Weick (1979) further suggested,

*"To organize is to assemble ongoing interdependent actions into sensible sequences that generate sensible outcomes" (Weick, 1979, p.3).*

In Weick's sense, new venture creation refers to the organizing of new organizations. In addition, Gartner (1985) also argued that individual characteristics, environment, process and organization should be necessary considerations in new venture creation definition. Therefore, new venture creation is a multidimensional phenomenon (Gartner, 1985) and it should be difficult to measure in a single dimension. However, Edelman and Yli-Renko (2010) argued that the intensity of entrepreneurial efforts is positively related to new venture creation. Thus we used the question *"You are, alone or with others, currently trying to start a new business, including any self-employment or selling any goods or services to others. Does this apply to you?"* to measure the efforts of new venture creation. If the answer is yes, then we code 1 and 0 otherwise. It should be noted that 0 stands for the group of person who are active in start-up phase but have not decided to start a new business yet.

## **Independent Variables**

*Corporate Governance:* To measure this construct, we use whether nascent entrepreneurs would like to hire an accountant to approximate the existence of corporate governance structure. In PSEDII, respondents were asked “*Has an accountant been retained for your new business, will an accountant be retained in the future, or is this not relevant for this new business?*” (yes=1, not yet or not relevant are set to 0) .

*Immigrant:* Immigrant entrepreneurship refers to self-employment within the immigrant group at a rate much in excess of the general rate. It turns into ethnic entrepreneurship when the second generations continue the business (Light and Bonacich, 1988). In addition, Wadhwa et al. (2012) defined immigrants as a person who was born in another country and subsequently moved to the USA at some points in his or her life time, thus immigrant founder in this study is defined as someone who was not born in USA but moved to the USA to start his or her business. In PSED II, respondents were asked to identify whether they were born in the USA or not (yes=1, no=0).

*Community Culture:* Individualist culture refers one where members typically focus on self interest over group interest and each individual is responsible for himself or herself (Triandis, 1973). Tiessen (1997) further pointed out that individualism reflects the tendencies to orient values and actions towards competition. While competition cannot avoid the outcome of win or lose, thus the success in the pursuit of economic advancement represents community culture emphasizing on individualism. On the other hand, community culture which emphasizes on individualism encourages strong self management and discipline. Though self interest is put over group interest, increased ties also frighten away free riding behaviors and function as mutual monitoring and sanctioning mechanisms (Berigan and Irwin, 2011). As a result, an expectation for benign behaviors facilitates high degree of trust and reciprocity of exhibiting the same



behaviors. In terms of cooperation, high trust encourages more frequent cooperation. In a word, high trust and frequent cooperation are built up due to the locus of self management and competition. Therefore, *Community Culture emphasizing on individualism* was measured by the degree to which how supportive of success community culture is. In PSED II, respondents were asked “*to what extent the social norms and culture of the community where you live are highly supportive of success achieved through one’s own personal efforts (from strongly disagree to strongly agree)*”.

*Structural Embeddedness in Family:* Uzzi (1996; 1999) adopted structural embeddedness approach to study the impact of embeddedness on entrepreneurial economic performance and financial seeking results. He constructed embeddedness as the percentage of transactions between focal actors and their exchange partners in the total transactions portfolio of focal actors. Following this tradition, Newbert and Tornikoski (2013) used social attachments as structural embedded ties to investigate the effects of embeddedness on the cost of resource and resource specificity. Similar to PSED I, PSED II characterizes the relationship between founders and their helpers as spouse, relatives in the same/different household, partners sharing the same/different household, friends/acquaintance and strangers, respondents were asked to provide the relationship data up to three helpers, thus this is still an egocentric network like PSED I (Newbert et al., 2013; Newbert & Tornikoski, 2013). Because our interest is to investigate the impacts of family embedded ties on the new venture creation, though the earlier research treated the percentage of spouse, friends and partners as structural embeddedness indicator (Newbert & Tornikoski, 2013), we, however, only regarded spouse and relatives as our family unit. Following the previous exchange relationship logics (Uzzi 1996, 1999; Newbert & Tornikoski, 2013), we calculated the percentage of spouses and relatives as the structural embeddedness to

represent nascent entrepreneurs' structural embedded ties within family. To detect the curvilinear effects, we also calculated the quadratic term of structural embeddedness in family (Uzzi 1996, 1999).

### **Control Variables**

We first controlled demographics characteristics of immigrant nascent entrepreneurs such as gender, education, marital status, ethnicity and age (Evans, 1989; Sanders and Nee, 1996; Hannan and Freeman, 1984; Rath, 2002; Newbert et al. 2013; Newbert & Tornikoski, 2013). Because of the ties and support from government, community and financial institutions could provide necessary informational and physical resources for start-ups (Khavul, 2009; Rath, 2002), thus we also controlled those three variables to investigate the effects of social capital on new venture creation (Hypothesis 2, Hypothesis 3a and 3b). PSED II characterizes those information by asking respondents *“Government/Community/ Bankers and Other Investors in your community provide resources for the new business creation, would you say strongly agree/ agree/neither agree nor disagree/disagree/strongly disagree?”*. Moreover, geographic distribution of immigrant entrepreneurs might also influence the probability of new venture creation. For instance, Sorenson and Stuart (2001) suggested that low status venture capitalists were restricted by their geographic distribution and difficult to overcome this limitation to form syndication ties. Rath (2002) also argued that local characteristics and regulation differences shape the garment immigrant entrepreneurship. In their analysis of founding rates for biotech firms, Stuart and Sorenson (2003) argued that spatial proximity offers networks, financial capital and informational benefits to entrepreneurs and increased founding rates. The same logic was confirmed from the experience of immigrant entrepreneurs in the U.S. lodging industry (Kalnins and Chung, 2006). In fact, our empirical analysis also shows that region distribution is indeed

negatively related to new venture creation though this connection is insignificant. Thus we controlled region as the location where immigrant entrepreneurs started their business (PSED II asked respondents to provide information on their business locations as east, west, north and south). Following the earlier research (Edelman and Yli-Renko, 2010; Newbert et al. 2013; Newbert & Tornikoski, 2013), we also controlled perceived market uncertainty, household income and prior industry experience. At last, we controlled business type of new venture creation. Podolny (1993) proposed that market hierarchy were based on status ordering process. At the same time, the high-tech image represents certain symbolic meanings for investors, thus high-tech label could grant start-ups with easier access to key financial, social and human capital (Stuart and Sorenson, 2003). For example, according to the National Venture Capital Association Year Book 2013, 3,298 deals, which represented 88.58% of US venture capital deals, were invested into high-tech start-ups as of year 2012. In PSED II survey, respondents were asked to indicate whether they consider their business to be high-tech (yes=1).

## **ANALYSIS**

The descriptive statistics and correlations are presented in Table 1. The means and standard deviation, including Pearson correlations are outlined with their significance. In our sample, 12.77% of respondents in our sample ranging from 40-44 years old and 13.92% are 45-49 and 50-54 years old. Of the whole sample 62.77% are males and 37.23% are female with a mean household income \$89,900,000. In addition, 21.99% of respondents possessed high school diploma and 24.14% completed college degree. Of the sample 75.37% are White and 11.53% are Black. In addition, 5.35% are immigrant entrepreneurs and the rest are non-immigrant

entrepreneurs. In terms of multicollinearity test, we calculated VIF score for each variable. The largest VIF is 1.37 which is far less than 10, thus we are confident that multicollinearity will not affect our results.

“Insert Table 1 Here”

Panel 1 of Table 2 shows the frequency table for the sample from two-dimensional sorts on accountant dummy and education ranking variable. The result is shown in the two rows of each education category: frequency is shown in the first row and the percentage of frequency in each education category is shown in the second row. When the education level is “up to eighth grade” (Education = 1), none of the interviewed entrepreneurs would like to hire an accountant. However, the percentage increases monotonically from 0 to 32.14% with the increase of education level, suggesting that those entrepreneurs who have received higher level education tend to hire an accountant when they have a new venture. We further explore the relation between accountant employment and household income of entrepreneurs. We separate our sample into 7 deciles by household income, and build a two-dimensional frequency table based on education dummy and the deciles of household income, which is shown in Panel 2 of Table 2. The percentage of entrepreneurs who would like to hire an accountant increases from 8.52% of the lowest household income group to 31.79% from the richest category. To interpret, those entrepreneurs with higher household income more likely tend to hire accountant in their venture.

Overall, our results lend support to hypothesis 1a: If we take the employment of an accountant as the corporate governance approach by start-ups, then the result in Table 2 shows that entrepreneurs who plan to adopt corporate governance in the venture tend to be more highly educated and have higher household income.

Since our results support hypothesis 1a. This implies that those entrepreneurs who receive better education and have higher household income are more likely to realize the importance of corporate governance, and therefore more likely to hire accountants in their venture. However, those entrepreneurs may have their own limitation in terms of venture creation: as their opportunity costs are higher than average, they may tend to be more reluctant to start a new venture when facing an entrepreneurship opportunity. Thus they may start to move when the opportunity is lucrative enough to override their high opportunity costs. Now we would start from the test of this hypothesis (H1b) and see whether it is consistent with our empirical result.

Since our interest is to investigate the factors influencing new venture creation and our dependent variable is binary data, in order to test our hypotheses, we use logit model to analyze the data. In addition, because least squares estimation is not capable of producing minimum variance unbiased estimators for the actual parameters in logistic regression, thus we adopt maximum likelihood logit model to solve for the parameters that best fit the data and all parameters will also be standardized (Wooldridge, 2010).

“Insert Table 3 Here”

Table 3 reports the major results of our hypotheses tests. Model 1 shows the effect of all our control variables on venture creation. It suggests that gender, bank support, government support, community support and age are important factors on entrepreneurs’ venture creation decision. We test our hypothesis 1b in Model 2. Consistent with our expectation, there is a significant negative relation between accountant employment (corporate governance dummy) and venture creation decision. If an accountant is to be employed, the probability of venture creation will be reduced by 73.4%. The result is significant at 0.1% level. Next, we would like to see whether this effect is stronger for immigrant entrepreneurs as they tend to be more educated and have higher

opportunity costs. The result is shown in Model 3 of Table 3. We build an interaction variable by multiplying immigrant dummy and corporate governance dummy. The result is consistent with hypothesis 1c as the coefficient is negatively significant at 5% confidence level (See Figure 2).

“Insert Figure 2 Here”

With regarding to the moderation role of community culture (Hypothesis 2, model 4-5 in Table 3), we find that interaction term between community culture and immigrant is positively significant at 0.779 ( $p < 0.10$ ). Hypothesis 2 states that strong community culture emphasizing on individualism has positive effect on immigrant entrepreneurs’ new venture creation, thus hypothesis 2 is supported (See Figure 3).

“Insert Figure 3 Here”

To test hypotheses 3a and 3b, we run model 6-7 in Table 3. The results show that the inverted U shape moderating effect of embeddedness exists for immigrant entrepreneurs’ new venture creation (embeddedness = 3.2,  $t = -1.45$ ;  $\text{emsqrt} = -3.497$ ,  $t = -1.60$ ) but no significant effects are observed (95.78,  $t = 0.01$ ). Thus both hypothesis 3a and 3b are found not to be supported. We summarize our major findings in Table 4.

“Insert Table 4 Here”

## **DISCUSSIONS**

Our research provides interesting findings regarding heterogeneity of social capital acquisitions and the adoption of formal corporate governance arrangement among immigrant entrepreneurs in the U.S. Social capital embedded in community positively facilitates the formation of immigrant entrepreneurs’ new venture creation, while the adoption of formal corporate governance arrangement reduces the probability of new venture creation among

immigrant entrepreneurs. Despite the fact that our results do not support embeddedness arguments of the earlier research (Granovetter, 1985; Uzzi, 1996; 1997; 1999), yet numerous previous research conducted under different contexts already confirm the validity of embeddedness argument (Uzzi, 1996; 1997; 1999; Uzzi and Spiro, 2005; Newbert and Tornikoski, 2013; Newbert et al., 2013). Thus we still argue that embeddedness argument should hold among immigrant entrepreneurs. The possible reason for the insignificant inverted U shape effects of structural embeddedness in family might be attributed to our data quality. PSED II only reports 5.35% immigrant entrepreneurs in their database, larger sample might generate more convincing and interesting results.

Our research contributes to theory in the following directions. First of all, our result suggests that corporate governance is taken as an important factor to the success of a venture, even though almost all of the widely used governance mechanism malfunctions for start-ups. This opinion is more widely shared for those have higher education background and higher household income, such as immigrants. While we find a negative relation between our corporate governance measure and venture creation decision, it is because those who value corporate governance have higher opportunity costs, that is, it is the characteristics of this type of entrepreneurs features less venture creation probability, rather than that corporate governance deters entrepreneurship.

Second, immigrant entrepreneurship literatures generally regard ethnic resources, family, individual and cultural characteristics as important theoretical constructs for immigrant self-employment. This study incorporates corporate governance literatures in line with immigrant entrepreneurship theories to generate a comprehensive framework in the discussions of immigrant entrepreneurship phenomenon. This incorporation resolves the issue regarding the role of administrative innovations or corporate governance in emerging organizations. We find

that the adoption of formal corporate governance mechanisms is still taken as beneficial for emerging organizations as for established organizations, given the additional governance costs, which is not negligible for start-ups. Thus our study draws an image about how entrepreneurs take the appropriation of corporate management and informal control mechanisms for emerging organizations.

Third, this study offers a possible avenue to explain the question whether relational governance could be compatible with corporate governance arrangement (Ingram and Lifschitz, 2006). Our results suggest that social ties embody different forms of social capital. Each form of social capital exerts unique influence on new venture creation. For instance, social capital in family influence new venture creation among immigrant entrepreneurs in a parabolic way while social capital embedded in community directly increases the probability of new venture creation. Thus the interaction between formal corporate governance arrangement and different forms of social capital might help us to find its roots for the relative effects of relational governance and corporate governance, while the inquiry for the mechanisms of the relative effects is out of the scope of this research.

### **Limitations and Avenues for Future Research**

This research bears many limitations despite its contributions. First of all, our sample was drawn from cross-sectional data. This design potentially limited our explanation power in causality relationship. Future longitudinal analysis would generate better causal inference. Second, the small data on immigrant entrepreneurs might limit our generalizability of results. Future larger sample specifically designed for immigrant entrepreneurs might be more convincing. Third, though this research suggests the direction for the mechanisms influencing the relative weight of social ties and corporate governance, the specific and direct examination might



produce more insightful conclusions. Thus future design for such an inquiry is highly encouraged and we believe such an exploration should be very promising for the generation of new theoretical implications.

## **CONCLUSION**

We anchor our theory on two of the most fruitful areas of social sciences, the role social capital (Narayan and Cassidy, 2001) and corporate governance, suggesting that the efficacy of corporate governance and relational governance mechanisms in immigrant entrepreneurship are contingent on different types of social capital which immigrant entrepreneurs possess and on the formal corporate governance arrangement, the adoption of which is influenced by immigrant entrepreneurs' characteristics. We highlight the classification of social capital in community and family dimensions. We believe that the decomposition of social capital could better explain the interactive mechanism between corporate governance and relational governance presented in the earlier research (Ingram and Lifschitz, 2006), and we hope that future researchers could join us to navigate and advance the understanding in this line of inquiry.

## REFERENCES

- Alvarez, S., Barney, J., & Anderson, P. (2013). Forming and Exploiting Opportunities: The Implications of Discovery and Creation Processes for Entrepreneurial and Organizational Research. *Organization Science*, 24(1), 301–317.
- Burt, R. (1992). *Structural Holes: The Social Structure of Competition*. Cambridge, MA: Harvard University Press.
- Bates, T. (1994). Social Resources Generated by Group Support Networks May Not be Beneficial to Asian Immigrant-Owned Small Businesses. *Social Forces*, 72(3), 671-689
- Berigan, N and Irwin, K. (2011). Culture, Cooperation, and the General Welfare. *Socio Psychology Quarterly*, 74(4), 341-360
- Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. (2009). The Nature and Experience of Entrepreneurial Passion. *Academy of Management Review*, 34(3), 511-532.
- Coase, R.H. (1937). The Nature of the Firm. *Economica*, 4(16), 386-405.
- Coleman, J. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94, 95-120.
- Chen, C.C., Chen, Xiao-Ping, Meindl, J.R. (1998). How can Cooperation be Fostered? The Cultural Effects of Individualism-Collectivism. *Academy of Management Review*, 23(2), 285-304.
- Christmann, P. (2004). Multinational Companies and the Natural Environment: Determinants of Global Environmental Policy Standardization. *Academy of Management Journal*, 47(5), 747–760.
- Cremers, M., & Nair, V. B. (2005). Governance Mechanisms and Equity Prices. *Journal of Finance*, 60, 2859-2894.
- DiMaggio, P., & Powell, W. (1983). The Iron Cage Revisted: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147-160.
- De Carolis, D. M., & Saporito, P. (2006). Social Capital, Cognition, and Entrepreneurial Opportunities: A Theoretical Framework. *Entrepreneurship Theory and Practice*, 41-56.
- De Carolis, D.M., Litzky, B., & Eddleston, K. (2009). Why Networks Enhance the Progress of New Venture Creation: The Influence of Social Capital and Cognition. *Entrepreneurship Theory and Practice*, 527-545.

- Evans, M.D. (1989). Immigrant Entrepreneurship: Effects of Ethnic Market Size and Isolated Labor Pool. *American Sociological Review*, 54(6), 950-962.
- Friedland, R., & Alford, R. (1991). Bringing Society Back in: Symbols, Practices, and Institutional Contradictions. In W. Powell, & P. DiMaggio, In *The New Institutionalism in Organizational Analysis* (pp. 232-263). Chicago: University of Chicago Press.
- Gartner, W. (1985). A Conceptual Framework for Describing the Phenomenon of New Venture Creation. *The Academy of Management Review*, 10(4), 696-706.
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate Governance and Equity Prices. *Quarterly Journal of Economics*, 118, 107-156.
- Granovetter, M. (1985). Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91, 481-510.
- Green, N.L. (2002). Paris: A Historical View. In Rath, J., *Unravelling the Rag Trade* (pp. 29-47). United Kingdom: Berg.
- Grossman, S. J., & Hart, O. D. (1980). Takeover Bids, the Free-rider Problem, and the Theory of the Corporation. *The Bell Journal of Economics*, 42-64.
- Hannan, M. T., & Freeman, J. (1984). Structural inertia and Organizational Change. *American Sociological Review*, 49(2), 149-164.
- Hite, J.M. and Hesterly, W.S. (2001). The Evolution of Firm Networks: From Emergence to Early Growth of the Firm. *Strategic Management Journal*, 22(3), 275-286.
- Hoang, H., & Gimeno, J. (2010). Becoming a founder: How founder role identity affects entrepreneurial transitions and persistence in founding. *Journal of Business Venturing*, 25(1), 41-53.
- Ingram, P. and Lifschitz, Arik. (2006). Kinship in the Shadow of the Corporation: The Interbuilder Network in Clyde River Shipbuilding, 1711-1990. *American Sociological Review*, 71, 334-352.
- Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, 76(2), 323-329.
- Jensen, M. (1997). Eclipse of the Public Corporation. *Harvard Business Review* (Sept.-Oct. 1989), revised.

- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of financial economics*, 3(4), 305-360.
- Kirkman, B.L. & Shapiro, D.L. (2001). The Impact of Cultural Values on Job Satisfaction and Organizational Commitment in Self-managing Work Teams: The Mediating Role of Employee Resistance. *Academy of Management Journal*, 44(3), 557 -569.
- Kalnins, A. and Chung, W. (2006). Social Capital, Geography, and Survival: Gujarati Immigrant Entrepreneurs in the U.S. Lodging Industry. *Management Science*, 52(2), 233-247.
- Light, I. and Bonacich, E. (1988). Immigrant Entrepreneurs: Koreans in Los Angeles, 1965- 1982. Berkeley, CA: University of California Press.
- Meyer, J., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceramony . *American Journal of Sociology*, 83, 340-363.
- Mitchell, R.K., Seawright, K.W. and Morse, E.A. (2000). Cross-Cultural Cognitions and the Venture Creation Decision. *Academy of Management Journal*, 43(5), 974-993
- McMullen, J. S., & Shepherd, D. (2006). Entrepreneurial Action and the Role of Uncertainty in the Theory of the Entrepreneur. *Academy of Management Review*, 31(1), 132–152.
- Meade, A.W., Watson, A.M., & Kroustalis, C.M. (2007). Assessing common methods bias in organizational research. The 22nd Annual Meeting of the Society for Industrial and Organizational Psychology, New York.
- Narayan, D. and Cassidy, M.F. (2001). A Dimensional Approach to Measuring Social Capital: Development and Validation of a Social Capital Inventory. *Current Sociology*, 49(2), 59-102
- Newbert, S.L. and Tornikoski,E. (2013). Resource Acquisition in the Emergence Phase: Considering the Effects of Embeddedness and Resource Dependence. *Entrepreneurship Theory and Practice*, 37(2), 249-280.
- Newbert, S.L., Tornikoski, E. and Quigley, N.R. (2013). Exploring the Evolution of Supporter Networks in the Creation of New Organizations. *Journal of Business Venturing*, 28(2), 281-298.
- National Venture Capital Association Year Book 2013. National Venture Capital Association (2013), Available at: [http://www.nvca.org/index.php?option=com\\_content&view=article&id=257&Itemid=103](http://www.nvca.org/index.php?option=com_content&view=article&id=257&Itemid=103)

- Podsakoff, P.M. & Organ, D.W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531–544.
- Podolny. (1993). A Status-based Model of Market Competition. *American Journal of Sociology*, 98, 829-872.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Rath, J. (2002). Sewing Up Seven Cities. In Rath, J., Unravelling the Rag Trade (pp. 169-191). United Kingdom: Berg.
- Reynolds, Paul D., and Richard T. Curtin (2007). Business Creation in the United States in 2006: Panel Study of Entrepreneurial Dynamics II Initial Report. Boston, Mass. nowPublications (in press).
- Sanders, J.M. and Nee, V. (1996). Immigrant Self-Employment: The Family as Social Capital and the Value of Human Capital. *American Sociological Review*, 61(2), 231-249.
- Scharfstein, D. (1988). The Disciplinary Role of Takeovers. *The Review of Economic Studies*, 55(2), 185-199.
- Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *The Academy of Management Review*, 25(1), 217-226.
- Shleifer, A., & Vishny, R. W. (1986). Large Shareholders and Corporate Control. *Journal of Political Economy*, 461-488.
- Shleifer, A., & Vishny, R. W. (1997). A survey of Corporate Governance. *journal of finance*, 52(2), 737-783.
- Sorenson, O., & Stuart, T. (2001). Syndication Networks and the Spatial Distribution of Venture Capital Investments. *American Journal of Sociology*, 106(6), 1546-1588.
- Scott, W. R. (2001). Institutions and organizations (2nd ed.). Thousand Oaks, CA: Sage.
- Stuart, T.E. and Sorenson, O. (2003). The Geography of Opportunity: Spatial Heterogeneity in Founding Rates and the Performance of Biotechnology Firms. *Research Policy*, 32(2), 229-253.

- Steensma, H.K., Tihanyi, L., Lyles, M.A., & Dhanaraj, C. (2005). The Evolving Value of Foreign Partnerships in Transitioning Economies. *Academy of Management Journal*, 48(2), 213–235.
- Saxenian, AL. (2006). *The new Argonauts: Regional Advantage in a Global Economy*. Harvard University Press, Cambridge.
- Stuart, A. and Platzer, M. (2008). American Made: The Impact of Immigrant Entrepreneurs and Professionals on U.S. Competitiveness. National Venture Capital Association, available at [http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=2&ved=0CDoQFjAB&url=http%3A%2F%2Fwww.nvca.org%2Findex.php%3Foption%3Dcom\\_docman%26task%3Ddoc\\_download%26gid%3D331%26ItemId%3D93&ei=d6\\_UcmYOo3k8gTC2YAY&usg=AFQjCNGx7Q12II1BXGRn8vAbcFYuF7EW2Q&sig2=e\\_p3DpQK1QLNOzMb90sEyA&bvm=bv.50165853,d.b2l](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=2&ved=0CDoQFjAB&url=http%3A%2F%2Fwww.nvca.org%2Findex.php%3Foption%3Dcom_docman%26task%3Ddoc_download%26gid%3D331%26ItemId%3D93&ei=d6_UcmYOo3k8gTC2YAY&usg=AFQjCNGx7Q12II1BXGRn8vAbcFYuF7EW2Q&sig2=e_p3DpQK1QLNOzMb90sEyA&bvm=bv.50165853,d.b2l)
- Stuart, A. (2013). American Made 2.0: How Immigrant Entrepreneurs Continue to Contribute to the U.S. Economy. National Venture Capital Association, available at [http://www.nvca.org/index.php?option=com\\_content&view=article&id=254&Itemid=103](http://www.nvca.org/index.php?option=com_content&view=article&id=254&Itemid=103)
- Triandis, Harry C. (1972). *The Analysis of Subjective Culture*. New York: John Wiley.
- Tiessen, J. H. (1997). Individualism, Collectivism, and Entrepreneurship: A Framework for International Comparative Research. *Journal of Business Venturing*, 12, 367-384.
- Uzzi, B. (1996). The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect. *American Sociological Review*, 61(4), 674-698.
- Uzzi, B. (1997). Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness. *Administrative Science Quarterly*, 42(1), 35-67.
- Uzzi, B. (1999). Embeddedness in the Making of Financial Capital: How Social Relations and Networks Benefit Firms Seeking Financing. *American Sociological Review*, 64, 481-505.
- Uzzi, B. and Spiro, J. (2005). Collaboration and Creativity: The Small World Problem.” *American Journal of Sociology*, 111 (2), 447–504.
- Vedres, B. and Stark, D. (2010). Structural Folds: Generative Disruption in Overlapping Groups. *American Journal of Sociology*, 115(4), 1150-1190.
- Waldinger, R. (1986). *Through the Eye of the Needle: Immigrants and Enterprise in New York's Garment Trades*. New York: New York University Press.

Weisbach, M. S. (1988). Outside Directors and CEO Turnover. *Journal of financial Economics*, 20, 431-460.

Wong, B.P. (2006). *The Chinese in Silicon Valley: Globalization, Social Networks, and Ethnic Identity*. Rowan & Littlefield Publishers, Inc., Maryland.

Wooldridge, J.M. (2010). *Econometric analysis of cross section and panel data*, 2nd edition. The MIT Press, Cambridge.

Wadhwa, V., Saxenian AL. and Siciliano, F.D. (2012). *America's New Immigrant Entrepreneurs: Then and Now, Part VII*. Ewing Marion Kauffman Foundation.

Table 1: Descriptive Statistics and Correlations

|    |                   | Mean        | Std. dev.    | 1          | 2         | 3          | 4          | 5          | 6          | 7         |
|----|-------------------|-------------|--------------|------------|-----------|------------|------------|------------|------------|-----------|
| 1  | NVC               | 0.82        | 0.39         | 1          |           |            |            |            |            |           |
| 2  | Immigrant         | 0.05        | 0.23         | 0.0278     | 1         |            |            |            |            |           |
| 3  | Accountant        | 0.20        | 0.40         | -0.1266*** | 0.0192    | 1          |            |            |            |           |
| 4  | Community Culture | 2.18        | 1.02         | 0.0066     | 0.0360    | -0.0781*** | 1          |            |            |           |
| 5  | Embeddedness      | 0.38        | 0.43         | -0.0517    | -0.0202   | -0.0856    | -0.0092    | 1          |            |           |
| 6  | Age               | 2.65        | 1.21         | -0.1096*** | -0.0662** | 0.0435     | -0.1010**  | 0.0510     | 1          |           |
| 7  | Region            | 6.18        | 2.70         | -0.0176    | 0.0394    | -0.0165    | 0.0116     | -0.0669    | -0.0601**  | 1         |
| 8  | Gender            | 0.63        | 0.48         | -0.0661**  | -0.0060   | 0.0117     | 0.0241     | -0.1107**  | -0.0229    | 0.0154    |
| 9  | Marital Status    | 2.81        | 2.13         | 0.0227     | 0.0593**  | -0.1355*** | 0.1090***  | -0.0663    | -0.2195*** | -0.0095   |
| 10 | Education         | 4.59        | 1.60         | -0.0121    | 0.0196    | 0.1685***  | -0.1446*** | -0.1440*** | 0.2059***  | -0.0718** |
| 11 | Race              | 1.57        | 1.48         | 0.0216     | 0.0749*** | -0.0170    | 0.0922***  | 0.0118     | -0.1175*** | 0.0129    |
| 12 | GSupport          | 2.86        | 1.10         | -0.0532*   | -0.0362   | 0.0602**   | 0.2244***  | -0.0420    | -0.0130    | 0.0003    |
| 13 | CommunitySupport  | 2.65        | 0.98         | 0.0328     | -0.0037   | 0.0855***  | 0.2480***  | -0.0417    | -0.0408    | -0.0030   |
| 14 | BankerSupport     | 2.99        | 1.17         | 0.0591**   | 0.0264    | -0.0413    | 0.2254***  | -0.0366    | -0.1486*** | 0.0443    |
| 15 | Hightech          | 0.24        | 0.43         | 0.0036     | 0.0055    | -0.0242    | 0.0134     | -0.0087    | 0.0011     | -0.0278   |
| 16 | MarketCompetition | 3.84        | 2.06         | 0.0291     | -0.0614** | -0.0644**  | 0.0275     | 0.0872     | 0.0581**   | -0.0324   |
| 17 | HouseIncome       | 89900000.00 | 286000000.00 | 0.0374     | 0.0021    | 0.0244     | 0.0421     | -0.0763    | -0.0350    | 0.0396    |
| 18 | PriorExp          | 1.61        | 0.82         | 0.0081     | 0.0104    | -0.0255    | 0.0784***  | -0.0327    | -0.1017*** | 0.0154    |

Note: \* p<0.10, \*\*p<0.05, \*\*\*p<0.01



Table 1 Continued

|                      | 8         | 9          | 10         | 11       | 12        | 13        | 14         | 15        | 16      | 17     | 18 |
|----------------------|-----------|------------|------------|----------|-----------|-----------|------------|-----------|---------|--------|----|
| 1 NVC                |           |            |            |          |           |           |            |           |         |        |    |
| 2 Immigrant          |           |            |            |          |           |           |            |           |         |        |    |
| 3 Accountant         |           |            |            |          |           |           |            |           |         |        |    |
| 4 Community Culture  |           |            |            |          |           |           |            |           |         |        |    |
| 5 Embeddedness       |           |            |            |          |           |           |            |           |         |        |    |
| 6 Age                |           |            |            |          |           |           |            |           |         |        |    |
| 7 Region             |           |            |            |          |           |           |            |           |         |        |    |
| 8 Gender             | 1         |            |            |          |           |           |            |           |         |        |    |
| 9 Martial Status     | 0.0750*** | 1          |            |          |           |           |            |           |         |        |    |
| 10 Education         | -0.0625** | -0.0930*** | 1          |          |           |           |            |           |         |        |    |
| 11 Race              | -0.0041   | 0.0671**   | -0.0542*   | 1        |           |           |            |           |         |        |    |
| 12 GSupport          | 0.0052    | -0.0208    | 0.0095     | 0.0729** | 1         |           |            |           |         |        |    |
| 13 CommunitySupport  | 0.0837*** | 0.0357     | 0.0276     | -0.0029  | 0.4335*** | 1         |            |           |         |        |    |
| 14 BankerSupport     | 0.0452    | 0.0543*    | -0.0437    | 0.0597** | 0.3666*** | 0.3475*** | 1          |           |         |        |    |
| 15 Hightech          | 0.0836*** | -0.0063    | -0.0130    | 0.0522*  | -0.0063   | -0.0464   | -0.0234    | 1         |         |        |    |
| 16 MarketCompetition | -0.0030   | -0.0234    | 0.0108     | 0.0236   | 0.0104    | -0.0140   | -0.0985*** | 0.0979*** | 1       |        |    |
| 17 HouseIncome       | -0.0322   | 0.0388     | 0.0335     | -0.0051  | 0.0273    | 0.0432    | 0.0166     | -0.0051   | 0.0496* | 1      |    |
| 18 PriorExp          | -0.0418   | 0.0595**   | -0.0907*** | 0.0070   | 0.0196    | 0.0706**  | -0.0121    | -0.0217   | -0.0302 | 0.0192 | 1  |

Note: \* p<0.10, \*\*p<0.05, \*\*\*p<0.01

Table 2: Accountant Employment, Education Level and Household Income

| Panel 1: Accountant and Education |                       |       | Panel 1: Accountant and Household Income |                       |       |
|-----------------------------------|-----------------------|-------|--|-----------------------|-------|
| Education Level                   | To hire an Accountant |       | Household Income                         | To hire an Accountant |       |
|                                   | Yes                   | No    |  | Yes                   | No    |
| 1                                 | 0                     | 7     | 1  | 15                    | 161   |
|                                   | 0                     | 100   |  | 8.52                  | 91.48 |
| 2                                 | 8                     | 67    | 2  | 28                    | 187   |
|                                   | 10.67                 | 89.33 |  | 13.02                 | 86.98 |
| 3                                 | 39                    | 228   | 3  | 19                    | 115   |
|                                   | 14.61                 | 85.39 |  | 14.18                 | 85.82 |
| 4                                 | 44                    | 249   | 4  | 38                    | 141   |
|                                   | 15.02                 | 84.98 |  | 21.23                 | 78.77 |
| 5                                 | 26                    | 82    | 5  | 37                    | 127   |
|                                   | 24.07                 | 75.93 |  | 22.56                 | 77.44 |
| 6                                 | 70                    | 218   | 6  | 49                    | 124   |
|                                   | 24.31                 | 75.69 |  | 28.32                 | 71.68 |
| 7                                 | 54                    | 114   | 7  | 55                    | 118   |
|                                   | 32.14                 | 67.86 |  | 31.79                 | 68.21 |
| Total                             | 241                   | 965   | Total                                    | 241                   | 973   |
|                                   | 19.98                 | 80.02 |  | 19.85                 | 80.15 |

Table 3: Maximum Likelihood Logit Model Results: New Venture Creation

| Control Variables  | Moderation Role of Corporate Governance |                      |                      | Moderation Role of Community Culture |                      | Moderation Role of Embeddedness |                     |
|--------------------|---|----------------------|----------------------|--------------------------------------|----------------------|---------------------------------|---------------------|
|                    | Model 1                                 | Model 2              | Model 3              | Model 4                              | Model 5              | Model 6                         | Model 7             |
| Gender             | -0.414*<br>(-2.54)                      | -0.405*<br>(-2.45)   | -0.412*<br>(-2.49)   | -0.417*<br>(-2.54)                   | -0.421*<br>(-2.56)   | -0.556<br>(-1.53)               | -0.556<br>(-1.53)   |
| Race               | 0.0249<br>(0.46)                        | 0.0204<br>(-0.38)    | 0.0291<br>(-0.54)    | 0.0233<br>(0.43)                     | 0.0257<br>(0.47)     | 0.119<br>(-0.88)                | 0.115<br>(-0.85)    |
| Education          | 0.0104<br>(0.21)                        | 0.0392<br>(-0.79)    | 0.0433<br>(-0.87)    | 0.00653<br>(0.13)                    | 0.00547<br>(0.11)    | 0.212+<br>(-1.95)               | 0.213*<br>(-1.96)   |
| Region             | -0.0553<br>(-0.88)                      | -0.0574<br>(-0.91)   | -0.0593<br>(-0.94)   | -0.0557<br>(-0.89)                   | -0.0556<br>(-0.88)   | -0.171<br>(-1.21)               | -0.173<br>(-1.22)   |
| BankerSupport      | 0.166*<br>(2.33)                        | 0.144*<br>(-2.01)    | 0.147*<br>(-2.05)    | 0.168*<br>(2.35)                     | 0.167*<br>(2.33)     | 0.365*<br>(-2.27)               | 0.357*<br>(-2.23)   |
| GSupport           | -0.258**<br>(-3.26)                     | -0.245**<br>(-3.07)  | -0.251**<br>(-3.13)  | -0.254**<br>(-3.18)                  | -0.259**<br>(-3.24)  | -0.268<br>(-1.53)               | -0.263<br>(-1.51)   |
| CommunitySupport   | 0.152+<br>(1.69)                        | 0.183*<br>(-2.02)    | 0.182*<br>(-2)       | 0.157+<br>(1.73)                     | 0.163+<br>(1.79)     | 0.125<br>(-0.6)                 | 0.114<br>(-0.55)    |
| MarketCompetition  | 0.0560<br>(1.53)                        | 0.0447<br>(-1.2)     | 0.0417<br>(-1.12)    | 0.0569<br>(1.55)                     | 0.0573<br>(1.55)     | -0.00909<br>(-0.11)             | -0.0101<br>(-0.12)  |
| HouseIncome        | 3.36e-10<br>(1.14)                      | 3.87E-10<br>(-1.29)  | 3.84E-10<br>(-1.28)  | 3.43e-10<br>(1.16)                   | 3.54e-10<br>(1.20)   | 1.45E-09<br>(-1.36)             | 1.44E-09<br>(-1.36) |
| Hightech           | 0.0496<br>(0.28)                        | 0.0382<br>(-0.21)    | 0.0277<br>(-0.15)    | 0.0503<br>(0.28)                     | 0.0615<br>(0.34)     | 0.74+<br>(-1.77)                | 0.735+<br>(-1.76)   |
| PriorExp           | -0.00876<br>(-0.09)                     | -0.0206<br>(-0.21)   | -0.0187<br>(-0.19)   | -0.00638<br>(-0.07)                  | -0.0108<br>(-0.11)   | 0.164<br>(-0.7)                 | 0.163<br>(-0.7)     |
| Age                | -0.103***<br>(-3.44)                    | -0.106***<br>(-3.51) | -0.104***<br>(-3.45) | -0.103***<br>(-3.42)                 | -0.101***<br>(-3.36) | -0.156*<br>(-2.31)              | -0.159*<br>(-2.35)  |
| Martial status     | -0.00297<br>(-0.08)                     | -0.0227<br>(-0.60)   | -0.0207<br>(-0.55)   | -0.00245<br>(-0.07)                  | -0.00381<br>(-0.10)  | -0.0216<br>(-0.27)              | -0.0205<br>(-0.25)  |
| Log-likelihood     |   | -550.72529           | -548.33999           | -558.82658                           | -557.12457           | -125.6471                       | -125.24093          |
| Degrees of freedom |   | 14                   | 15                   | 14                                   | 15                   | 16                              | 17                  |
| N                  |   | 1211                 | 1211                 | 1211                                 | 1211                 | 338                             | 338                 |

Note: t statistics are in parentheses. + P<0.10, \* p<0.05, \*\*p<0.01, \*\*\* p<0.001

Table 3 Continued

| Independent Variables              | The Moderation Role of Corporate Governance |                      |                      | The Moderation Role of Community Culture |                    | The Moderation Role of Embeddedness |                   |
|------------------------------------|---|----------------------|----------------------|--|--------------------|-------------------------------------|-------------------|
|                                    | Model 1                                     | Model 2              | Model 3              | Model 4                                  | Model 5            | Model 6                             | Model 7           |
| Immigrant                          |   | 0.269<br>(-0.71)     | 1.014+<br>(-1.67)    | 0.238<br>(0.63)                          | -1.375<br>(-1.47)  | 1.116<br>(-1.03)                    | 0.658<br>(-0.58)  |
| Community Culture                  |   |                      |                      | -0.0323<br>(-0.40)                       | -0.0584<br>(-0.72) |                                     |                   |
| Accountant                         |   | -0.734***<br>(-4.13) | -0.648***<br>(-3.54) |  |                    |                                     |                   |
| Embeddedness                       |   |                      |                      |  |                    | 3.281<br>(-1.49)                    | 3.2<br>(-1.45)    |
| Embsqrt                            |   |                      |                      |  |                    | -3.543<br>(-1.62)                   | -3.497<br>(-1.60) |
| Immigrant × Community Culture      |   |                      |                      |  | 0.779+<br>(1.71)   |                                     |                   |
| Immigrant × Accountant             |   |                      | -1.751*<br>(-2.11)   |  |                    |                                     |                   |
| Immigrant × Embeddedness × Embsqrt |   |                      |                      |  |                    |                                     | 95.78<br>(-0.01)  |
| _cons                              | 2.124***<br>(4.03)                          | 2.231***<br>(-4.19)  | 2.194***<br>(-4.11)  | 2.154***<br>(4.03)                       | 2.216***<br>(4.13) | 1.345<br>(-1.14)                    | 1.42<br>(-1.2)    |
| Log-likelihood                     | -559.111                                    | -550.725             | -548.340             | -558.827                                 | -557.125           | -125.647                            | -125.241          |
| Degrees of freedom                 | 12  | 14                   | 15                   | 14                                       | 15                 | 16                                  | 17                |
| N                                  | 1211  | 1211                 | 1211                 | 1211                                     | 1211               | 338                                 | 338               |

Note: t statistics are in parentheses. + P<0.10, \* p<0.05, \*\*p<0.01, \*\*\* p<0.001

Table 4: Hypotheses Test Results

| Hypotheses  | Major Results |
|---|---------------|
| H1a: Entrepreneurs with higher education and household income tend to take corporate governance | Supported     |
| H1b: Start-ups with corporate governance tend to have lower probability of new venture creation | Supported     |
| H1c: The negative impact of corporate governance  | Supported     |
| H2: The positive impact of community culture  | Supported     |
| H3a-b: The U shape effect of embeddedness   | Not Supported |

Figure 1: The Conceptual Model of Immigrant Entrepreneurs and New Venture Creation

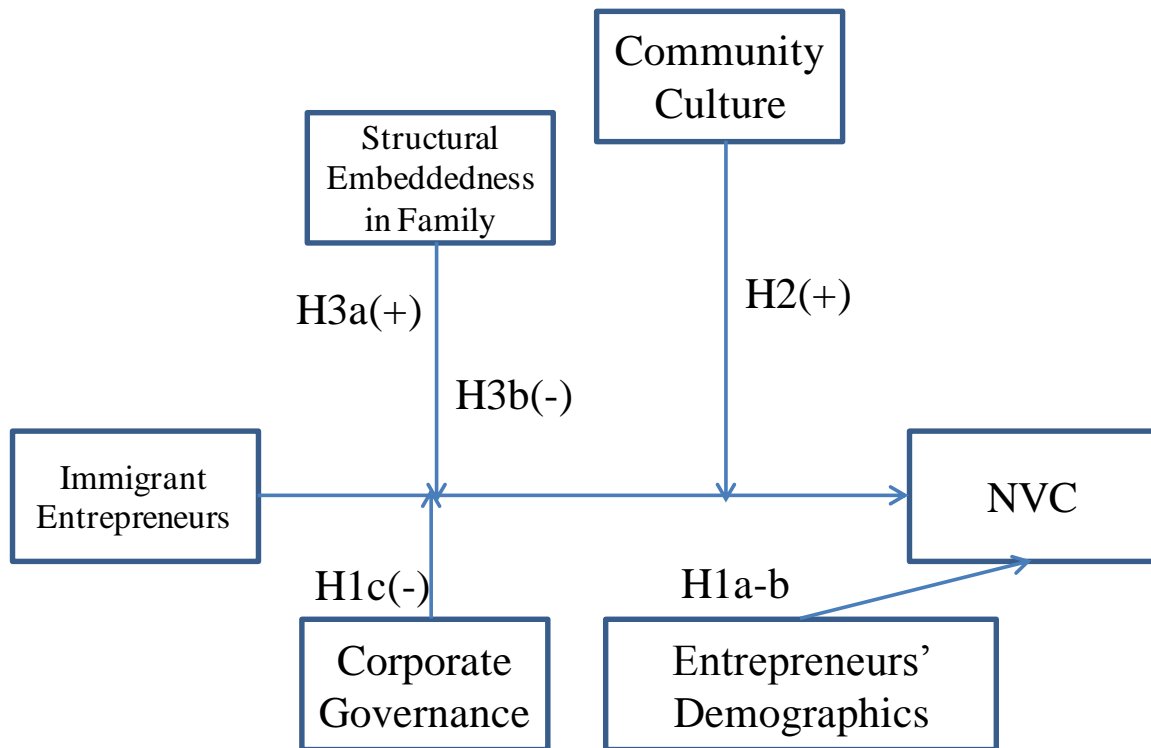


Figure 2 Interactive Effects between Immigrant and Corporate Governance

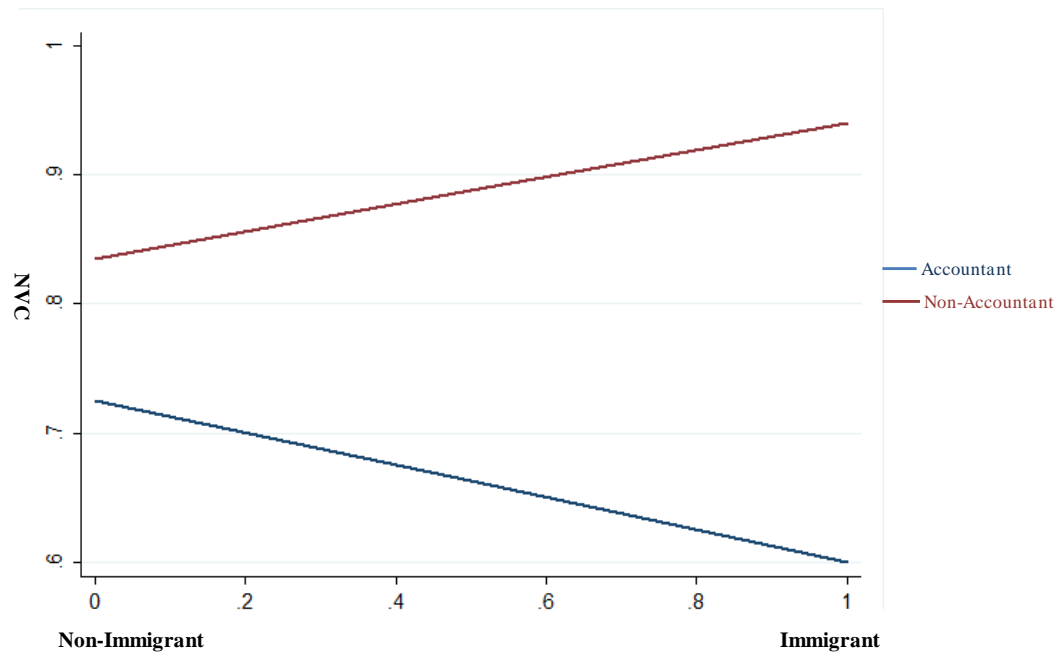


Figure 3 Interactive Effects between Immigrant and Community Culture

