6-9-2007

START-UP AND SUCCESS IN ETHNIC NEW VENTURES

Gerry Kerr  
*University of Windsor, Canada*

Francine Schlosser  
*University of Windsor, Canada, fschloss@uwindsor.ca*

---

**Recommended Citation**


---

This Paper is brought to you for free and open access by the Entrepreneurship at Babson at Digital Knowledge at Babson. It has been accepted for inclusion in Frontiers of Entrepreneurship Research by an authorized administrator of Digital Knowledge at Babson. For more information, please contact digitalknowledge@babson.edu.
START-UP AND SUCCESS IN ETHNIC NEW VENTURES

Gerry Kerr, University of Windsor, Canada  
Francine Schlosser, University of Windsor, Canada

ABSTRACT

Three research questions concerning immigrants were addressed: 1) Are significantly different rates of business start-up connected with very high or low personal and social investments? 2) Do the returns on such investments by the self-employed differ significantly from other immigrants with very low and high investments, and from the average of all immigrants? 3) What types of human and social investment activities are significantly associated with the creation of human and social capital? The responses of 7129 Canadian immigrants indicated that higher rates of self-employment and personal income were found in those very high in human and social investments. However, self-employment was significantly less common for respondents very low in personal and social investments, and no differences exist for the few who balanced low personal investments with more social investments. Investments in education (by respondent and spouse) positively impacted personal income. Yet, surprisingly, social investments in ethnic and sports organizations were the only types favorably associated with income.

INTRODUCTION

Developed countries have experienced a wave of immigrant workers, many of whom strengthen the economy of their adopted countries through entrepreneurial means. For example, most of Canada’s 5.4% average population growth is fuelled by immigration. Immigrant and ethnic entrepreneurship 1) creates job opportunities for individuals who are overlooked by mainstream labor markets, 2) decreases competition with native-born workers, 3) develops entrepreneurial role models, and 4) provides a way for immigrants to increase earnings (Zhou, 2004). Acknowledging the vital economic role played by immigrant entrepreneurs, the goal of our study is to provide a more comprehensive understanding of the human and social investments that shape the personal success of ethnic entrepreneurial owners. We develop and test a theory of ethnic new venture creation that builds on human and social capital theories and contrasts barrier-based with opportunity-based entrepreneurship.

The emerging literature on ethnic entrepreneurship is marked by key gaps in theory application and methods. The research body has grown sporadically, mainly by examining isolated ethnic groups and by identifying a number of different factors significantly affecting venture start-up and performance. The theories used to explain venture creation have been limited, generally focusing on the presence and strength of the social capital which ethnic entrepreneurs can tap and the human capital of the entrepreneur.

Previous research has typically uncovered a correlation between the characteristics of individual ethnic groups and important outcomes, usually within a specific national economy and industry. Findings emanate both from the more deeply developed U.S.-based literature and from the rest of the world. For example, an analysis of Ismaili-Pakistani immigrant entrepreneurs to the U.S. demonstrated a linkage between sponsorship activities and the build-up of critical resources (Greene, 1997). Local social capital also explained the significant relationship between proximity and survival found in Gujarati immigrant entrepreneurs surrounded by branded hotels run by entrepreneurs of the same national origin (Kalnins & Chung, 2006). Social capital also aided start-up by Chinese and Korean immigrant entrepreneurs, but the findings raise important questions about the large-scale use of the funds of family and friends in establishing marginal firms in highly competitive industry niches (Bates, 1997).
Research focused outside the U.S. has usually taken a similar tack. The probability of business ownership in Australia has been significantly connected with levels of both human and social capital (Evans, 1989). Differential levels of social ties (including intra-community heterogeneity) in Indian and Chinese entrepreneurs in Singapore were found to impact the management profiles, organizational structures, and the diversification strategies of organizations, as well as the long-term connections between the entrepreneurs and their communities (Tsui-Auch, 2005). Informal networks heavily influenced success in a study of three groups of ethnic entrepreneurs based in Amsterdam (Masurel, Nijkamp, Tastan, & Vindigni, 2002). In keeping with a common pattern, the vast majority of the sample was established in wholesale, retailing or hotel/restaurant businesses.

Even a brief review of the literature clearly identifies a number of points. First, the emphasis on social capital may have fostered a myopic view of the phenomena through which a reduced set of variables operating regionally and locally blur the importance of influences at the individual and organizational levels. Thus, human capital theory may offer important additional insights to understanding ethnic entrepreneurship (i.e., Evans, 1989; Greene, 1997). Second, a tight focus on a single or small number of industries, ethnic group(s) and nations severely hampers the ability to draw findings from a complex subject matter and generalize them to other contexts. Third, the same point applies to the extensive use of qualitative or quantitative methods with small samples. An emphasis on organizational performance (when it has been considered at all) has neglected individual-level financial success measures of the entrepreneurial founders of small businesses.

To respond directly to the gaps in the literature, we analyzed large-scale cross-sectional data collected from ethnic and immigrant entrepreneurs in Canada. The data was used to test a theory of personal success based on human capital theory and social capital theory. We believe that this study makes a number of important contributions. The paper uses multiple theoretical lenses and tests a scenario-based model of ethnic entrepreneurship. The sample permitted deep analysis at a national level that included 15 separate language groups and hundreds of respondents based in one of the most active centers for immigration and entrepreneurship in the world. Finally, the paper is relevant to the ethnic entrepreneurs and to public policy-makers who enhance the critical activities of entrepreneurs.

LITERATURE REVIEW

The Immigrant Entrepreneur, Ethnicity and Success

Immigrant entrepreneurs are those who, upon arrival, create a new venture as a means of economic survival (Ndofor, 2004). Every immigrant entrepreneur brings an aspect of his or her homeland ethnicity to the adoptive country. This context encourages immigrants to create new ventures within an ethnic economy specific to each ethnicity. The ventures are bounded by co-ethnics ownership and an employment network that compensates low social mobility by providing alternative economic opportunities (Zhou, 2004). Accordingly, immigrants are often considered ethnic entrepreneurs because their ethnic identities are strongest when they first arrive in the adopted country.

Waldinger, Aldrich and Ward (1990, p. 5) defined ethnic entrepreneurship as “a set of connections and regular patterns of interaction among people sharing common national background or migration experiences”. The current study considers immigrants who form a part of an ethnic economy that comprises both middleman minorities (those who do business outside of their own ethnic group (Blalock, 1967) and ethnic enclave entrepreneurs (those who primarily serve their own ethnic groups (Zhou, 2004)).

Although immigrant entrepreneurs operate their ventures within a different ethnic context than many native-born entrepreneurs, their entrepreneurial success can be measured in similar ways. Namely, success can be judged by assessing the survival and growth of their businesses or by using individual level income and lifestyle variables. Personal income represents the money withdrawn from the business
by the entrepreneur, or the returns for the individual’s investment in the business (Gimeno, Folta, Cooper, & Woo, 1997).

Researchers have noted, in general terms, that income is lower for immigrants than for those who are native-born. However, the greater the self-employment rate for a given ethnic group, the greater the average income for the group (Fairlie & Meyer, 1996). Researchers have found that the average personal income (using 1993 data) of self-employed immigrants in Canada exceeded that of other immigrants and of native-born, self-employed citizens (Hiebert 2003 in Ley 2006). Using U.S. census data, Lofstrom (2002) concluded that self-employed immigrants appear to close the wage gap between natives and immigrants significantly more quickly than employed immigrants. In contrast, employed immigrants are unlikely to ever reach income parity with native-born Americans.

Researchers are hesitant to study individual level success variables such as personal income, because income tax reporting, spousal support, and pre-venture personal wealth may influence personal income. However, based on the proven lack of sustainability for businesses started under the Business Immigration Programme (a government policy aimed at fast-tracking entry to Canada for immigrants with sufficient capital to start their own ventures), Ley (2006) concluded that financial/investment capital did not predict economic success in Canada. Additionally, it is indisputable that personal income represents a key social-success outcome in a capitalist political system. Even more salient, personal income is important to immigrants because it represents, to a great extent, the success of their businesses and their successful integration and contribution to an adopted country.

Social Capital Theory

Building upon Burt’s (1997, p. 355) view that both the form and content of the social network provide capital, (Neergaard, Shaw, & Carter, 2005, p. 343) noted that “An individual’s social capital is further determined by the size of the relationship network, the sum of its cumulated resources (both cultural and economic), and how quickly the individual can set these in motion.” Measurement of social capital includes the size, composition, and the frequency of contact with the network (Allen, 2000).

Social capital theorists suggest that the social ties and relationships of an individual make it easier to acquire resources by relying upon the goodwill of others to provide information and support (Adler & Kwon, 2002; Seibert, Kraimer, & Liden, 2001). The social capital of entrepreneurs is derived from membership in ethnic, professional, religious or social groups (Kalnins & Chung, 2006). Tsui-Auch (2005) argues that ethnic entrepreneurs’ social capital (measured by assessing the strength of social ties) reflects intra and intercommunity heterogeneity. Seminal researchers have noted that social networks may include many varying contents but they are not conceptually distinct networks (Mitchell 1969), such that interactions in each network might influence other network interactions (e.g., Granovetter, 1985).

The entrepreneur can access informal credit, the labor market as well as a market for goods by using social resources tied to an informal socio-cultural network. However, as ventures grow, extension outside this network is an imperative (Masurel et al., 2002). A study of Portuguese real estate brokers in Canada concluded that southern Mediterranean ethnic groups were likely to rely upon their own ethnic resources, including friends and relatives, when starting up their own businesses (Texeira, 1998). Kalnins and Chung (2006) argued that the least prosperous immigrant entrepreneurs should benefit the most from the social capital of their ethnic group. Using secondary data collected on all lodging establishments in Texas, supplemented by interviews, the researchers concluded that membership in an immigrant entrepreneur group helps low-resource (unbranded) establishments. As well, the low-resource members benefited the most from high resource members of their own ethnic groups. The high resource members generally took pride in helping ethnic associates and did not expect reimbursement.

Although Neergaard et al. (2005) suggested that membership in leisure clubs is not an appropriate source of a business owner’s social capital, other researchers have included leisure clubs as valuable
informal networking opportunities that contribute to trust-based relationships. For example, Putnam (2001) includes membership in leisure clubs among 13 different measures of social capital.

Families also influence entrepreneurial behaviour (Allen, 2000; Carroll & Mosakowski, 1987) and provide an important source of social capital. Familial involvement is a source of voluntary labor that integrates work and family responsibilities (Morrison, 2006). Family-oriented workplace often inspire loyalty, flexible work practices, higher productivity (in family members), better communication through a shared “family language,” lower transaction costs, and informal decision-making (See Habbershon and Williams (1999) in (Morrison, 2006).

The literature connecting marital status to self-employed income is lean. A study of 9,200 British dual-earner couples indicated that spouses often match the degree of income risk associated with self-employed earners. Thus, the self-employed are likely to have spouses that are themselves self-employed, and are also less likely to have household members that are unemployed (Brown, Farrall, & Sessions. 2006). Although a small British study concluded that marital status did not have a clear effect on self-employed earnings (Clark & Drinkwater, 1998), we suggest that a larger, more diverse sample will support the advantage of a wider social net provided by a spouse. Therefore, we suggest that informal networks provided by club membership and marital status create social capital.

**Hypothesis 1: The higher the level of social investment, the greater the personal self-employed income of recent immigrants.**

**Human Capital Theory**

Becker argued that by investing in training and education that is valued in the labor market, the individual will have a return on investment, exemplified by higher income, increased production and better health (Becker, 1993). Employees own their own human capital because it is based on knowledge and cannot be sold like financial capital. Researchers have considered human capital to be a firm resource, because it has the potential to contribute to the core competence or competitive advantage of the firm (Lepak & Snell, 1999). In general, human capital may trump the effect of social capital because venture capitalists rely more upon information about the entrepreneur’s reputation than social ties (Shane & Cable, 2002).

Seminal human capital theorists considered the value of human capital to the employer in competitive labor markets. For example, Becker (1964) describes the importance of providing job- and/or organization-specific training to employees, but having the employees bear the costs of more generalized training. By sharing the costs of acquiring generalizable skills, the organization can minimize the external mobility of a worker who has an extensive accumulation of these resources (Steffy, 1988). In contrast, human capital in a self-employment situation can be built upon both a focused and a general bases because the individual receives the full amount of the return. Therefore, the measurement of human capital in the self-employed should employ generalized indicators such as higher education and linguistic knowledge levels.

Recent British studies indicate that formal schooling and qualifications are associated with higher employment income (Clark & Drinkwater, 1998), higher self-employment rate (Brown et al., 2006) and a greater ability of the self-employed to create jobs (Henley, 2005). U.S. Census data indicated that educational returns were greater for self-employed than employed (Lofstrom, 2002).

Researchers have produced mixed results regarding English language ability. Ley (2006) concluded that higher education and English language ability led to greater economic success in Canada. However, in a larger study across 17 different Western countries, van Tubergen (2005) found no significant advantage in destination-language abilities. The differences might be explained and connected by a related study that suggested the importance of fostering stronger English competency because this allows
entrepreneurs to tap into both English and non-English markets, and (Mora & Davila, 2005) and because English dominates business transactions worldwide. Similarly, general linguistic proficiency in many languages (not tested in the aforementioned studies) may also be seen as a personal investment creating human capital.

**Hypothesis 2: The higher the level of personal investment, the greater the personal self-employed income of recent immigrants.**

**Barrier-based and Opportunity-based New Venture Creation**

Recent research has connected human and social capital theories to typologies of business formation in ethnic/immigrant entrepreneurs. Two prominent types of entrepreneurial types are described. In barrier-based entrepreneurship, impediments to mainstream employment combine to limit the immigrant’s economic choices to self-employment. Barrier-based (or “push”) entrepreneurship reflects new venture creation resulting from negative social and economic factors that block economic mobility (Morrison, 2006) and “push” immigrants into self-employment. Barriers may be present in the destination (adopted) country’s government policy (e.g., Tsui-Auch, 2005) and in the labour market, including discrimination and (Mata & Pendakur, 1999; Mora & Davila, 2005) the unemployment level of the native-born (van Tubergen, 2005). The barriers are more likely to motivate first-generation immigrants than subsequent generations to start their own ventures (Raijiman & Tienda, 2000). Evans and Leighton (1989) suggestion that ‘misfits’ are pushed into self-employment is supported by van Tubergen’s (2005) conclusions that immigrants to Western, Christian-based societies who originate from non-Christian countries have a higher probability of self-employment.

Another factor could support the barrier-based view of new venture creation. Higher human capital gained through extensive formal education may discourage self-employment. For example, immigrants with a college degree are less likely to be self-employed than those with a high school diploma (Toussaint-Comeau, 2005).

Although there is a persuasive argument for barrier-based, a second explanation for new venture creation has also been advanced. Opportunity-based entrepreneurship describes a phenomenon where immigrants with high levels of human and social investment are attracted to self-employment. Education and social contacts facilitate the identification and realization of opportunities, as well as rewarding the risks being shouldered. A similar opportunity-oriented or “pull” perspective on immigrant entrepreneurship is based upon enablers from the country of origin (Tsui-Auch, 2005). The author, in a U.S.-based study of Asian and Hispanic immigrants, concluded that foreign-earned personal investment was more likely to be capitalized in the self-employed (Sanders & Nee, 1996). However, in our study, opportunity-based entrepreneurship focuses on the immigrant’s ability to capitalize both personal and social investment opportunities in the adopted country that enables self-employment. For example, high human investments, such as English-language fluency and a common second language, that create human capital are also expected to increase self-employment (Toussaint-Comeau, 2005). Additionally, small, highly educated immigrant communities with a longer settlement history, and consequently more access to social capital, are anticipated to exhibit high rates of self-employment (van Tubergen, 2005).

Earlier we argued that membership in various clubs and organizations will increase the social capital available to immigrant entrepreneurs. But, membership also helps immigrants to insinuate themselves into the adopted country’s culture without necessarily compromising their original ethnic identities. We suggest that discrimination is less likely to occur as individuals connect and build relationships in various venues. Consequently, such social investments may simultaneously mitigate barriers and present opportunities for self-employment.

Many conceptual papers have focused on barrier-based incentives to self-employment for immigrants. However, an empirical study using Canadian statistical data indicates that the “push” or barrier-based
explanation of immigrant entrepreneurship is no more dominant than opportunity-based or “pull” scenarios for self-employment (Lin, Picot, & Compton, 2000). Thus, we hypothesize that typologies at both extremes may provide significant explanatory power, that very high and low levels of personal and social investment could determine the immigrant decision to be self-employed.

**Hypothesis 3a:** The more extreme the personal investment, the more likely the individual to be self-employed.

**Hypothesis 3b:** The more extreme the social investment, the more likely the individual to be self-employed.

**METHODS**

**Sample**

Data was supplied by Statistics Canada’s “Ethnic Diversity Survey.” It received more than 41,000 responses, representing 15 individual ethnic groups within Canada. Furthermore, the instrument afforded wide geographical representation, closely representing the great cultural, linguistic and religious diversity of the country. At the same time, the contemporary immigration policies of the Government of Canada, with their emphasis on attracting immigrants possessing deep educational and skills training, allowed a rare opportunity to test the effects of large-scale differences in human and social investments on entrepreneurship. The data were collected recently (in 2003), facilitating analysis of the impact of the human and social investments on individual success. Focusing on immigrants to Canada, we analyzed the responses of 7,129 survey participants, all older than 18 years of age.

**Measures and Analysis**

**Human and Social Investment and Self-Employment**

Each of the three research questions required the use of a set of key measures and necessitated different analysis. Addressing the first question (“Are significantly different rates of business start-up connected with very high or low personal and social investments?”) demanded measures for personal and social investments. Respondents with very high, high, very low and low personal and social investments were identified using the parameters listed below. As well, secondary testing was undertaken on the effects of high levels of one type of investment, but low levels of the other.

- **Very High Human and Social Investors:** Attainment of a university Bachelor’s degree or higher; fluency in two or more languages; membership in two or more social groups
- **High Human and Social Investors:** Attainment of a college, trade or vocational school diploma or higher; fluency in two or more languages; membership in one or more social groups
- **Very Low Human and Social Investors:** Schooling of less than a high-school diploma; fluency in one language; no membership in social groups
- **Low Human and Social Investors:** Schooling of a high-school diploma or less; fluency in one or two languages; no membership in social groups
- **High Human and Low Social Investors:** Attainment of a college, trade or vocational school diploma or higher; fluency in two or more languages; no memberships in social groups
- **Low Human and High Social Investors:** Schooling of a high-school diploma or less; fluency in one or two languages; memberships in two or more social groups

Chi-square tests were employed to detect significant differences between the proportion of self-employment in the individual investment categories and that in the remaining group of immigrants to Canada. (Results are reported in Table 1.)
**Human and Social Investment, Self-employment and Personal Income**

The second question (“Do the returns on such investments by the self-employed differ significantly from other immigrants with very low and high investments, and from the average of all immigrants?”) made use of the same investment categories. The analysis, however, consisted of two t-tests (both reported in Table 2). The first compared the personal income means of the self-employed—within each of the six investment categories—with the mean of all immigrants to Canada. The second t-test compared the personal income means of the self-employed within each of the six categories with the means of those within the same category but not self-employed. The analysis provided a two-prong approach to assessing the returns to self-investment and entrepreneurship.

**Human and Social Investment Activities and Personal Income**

The final research question (“What types of human and social investment activities are significantly associated with the creation of human and social capital?”) entailed identifying individual investments that impacted personal income. Like all developed economies, the vast majority of businesses in Canada are privately held. Outside of employing “subjective measures” of firm performance (beginning with Gupta & Govindarajan, 1984), few reliable means exist for gauging performance in privately held firms. The creation of human and social capital must, by definition, impact the personal incomes of respondents. As well, a strong correlation is expected between the returns of the businesses of those self-employed and their personal incomes.

Hierarchical regression was employed (results are reported in Table 3) to assess the overall and individual effects of investment activities in two different categories, human investment and social investment. The survey allowed analysis of 14 different investment activities. A description of the variables is listed below:

- **Dependent Variable:**
  - Personal Income (6-point scale; $20,000 increments)

- **Independent Variables:**
  - Human Investment Activities
    - Formal Education (7-point scale)
    - Canadian Education (dichotomous variable)
    - Languages Spoken (4-point scale)
  - Social Investment Activities
    - Spouse’s Education (8-point scale)
    - Spouse’s Languages Spoken (5-point scale)
    - Arts/Cultural Group Membership (dichotomous variable)
    - Community Group Membership (dichotomous variable)
    - Ethnic Group Membership (dichotomous variable)
    - Hobby/Social Group Membership (dichotomous variable)
    - Job-Related Group Membership (dichotomous variable)
    - Religious Group Membership (dichotomous variable)
    - Service Group Membership (dichotomous variable)
    - Sports Group Membership (dichotomous variable)
    - Youth/Children’s Group Membership (dichotomous variable)

- **Control Variables:**
  - Gender (dichotomous variable)
  - Recent Arrival (dichotomous variable)
  - Ethnic Distance (5-point scale)
Control variables were loaded in first. Human capital variables were then added to make up the second model. The third model contained only those social variables related to a spouse. Finally, the set of variables pertaining to group memberships were added in Model 4.

RESULTS

In the broadest terms, the results underscored the effects of human and social investments on both self-employment and personal income. However, some key results were not anticipated. Namely, the significant dampening effect of low human and social investments on self-employment was not foreseen. As well, the connection of only a handful of social activities and personal income in the self-employed was a surprise.

Human and Social Investment and Self-Employment

The anticipated relationship between high levels of human and social investment and self-employment was supported by the chi-square tests. As expected, a larger proportion (almost double, in percentage terms) of high-investment immigrants reported being self-employed, as compared to the remaining group of immigrant respondents. Also, as anticipated, the proportion was larger (and statistically significant), but not as pronounced, when relaxed standards for high investment standing were employed. By comparison, survey participants with very low human and social investments had significantly fewer self-employed respondents. The effect was pronounced and highly significant, with less than half the proportion of lowest investors self-employed, when compared to all immigrant respondents. Again, the effect remained significant, but was slightly reduced, under less stringent standards for low human and social investment.

Follow-up tests were aimed at isolating the effects of strongly divergent investment profiles. The findings point out the influence of human investment. However, those few respondents who were able to balance low human investments with high social investments were not significantly less self-employed than the rest of the responding immigrants.

Human and Social Investment, Self-employment and Personal Income

The results of the t-tests resoundingly supported the higher income means that were hypothesized. Indeed, self-employed immigrants reported significantly higher incomes than those within their human and social investment categories as well as the entire group of immigrants. The findings were stable and significant, with only one exception. Although the small group of very low investment, self-employed immigrants posted higher incomes than remaining immigrants, the small number of respondents in the category almost certainly affected the results.

Human and Social Investment Activities and Personal Income

Regression analysis was applied to the 755 immigrants to Canada who responded to the survey and were self-employed. The objective was to identify investment activities significantly associated with personal income. Results again pointed to the telling effects of human and social investments, but exhibited an unexpected narrowness as well.

First, the significance of each of the control variables should be noted. Little surprise should surround the findings, given that gender, the length of time in the destination country, and the self-perceived ethnic “distance” of the respondent have received much research attention in the past. By comparison, the significance of only formal education levels was not projected. The same findings were also uncovered in Model 3, relating to the formal education of the spouse. In neither the case of the respondent, nor his or her spouse, was the extent of language fluency associated with personal income. The geographic source of the formal education, inside or outside Canada, also did not have a significant effect. The greatest
surprise, however, was that only two group-related investments were linked significantly with personal income for self-employed immigrants. The effects of belonging to an ethnic association and to a sports club were large, positive and significantly (highly so in the case of the sports groups) connected with personal income. No other group-related activities were significantly linked with personal incomes.

DISCUSSION

Our findings add important understanding to the three research questions. First we considered whether new venture creation rates for immigrant ethnic entrepreneurs vary with very high or low personal and social investments. Data support new venture creation’s link to high personal and social investment. Thus, responding to the opportunities presented to them, immigrants possessing substantial capital are more likely to be self-employed. In contrast, those lacking such investments were more likely to work for other people, at a lower rate of pay. However, high levels of one type of investment were shown to compensate for low levels of the other investment, significantly affecting both self-employment rates and personal income. Even more specifically, findings seem to support immigration policies based upon academic credentials as opposed to language proficiency, and indicate that refugees who are generally allowed to immigrate under more relaxed personal investment standards must undergo training to increase their human investments.

We contribute an understanding of social capital related to languages by testing proficiency in multiple languages, instead of just in the adopted country’s language. As noted earlier, previous literature is mixed regarding the value of linguistic abilities, and is inconclusive regarding the value of adopted-country language. The only studies that have found value in multiple languages have included and isolated English. Our results suggest that a general linguistic proficiency does not shape personal success for self-employed immigrants. This leaves the possibility that English alone is important to business success in any country, perhaps because it allows immigrants to function as “bridges” to larger English markets. Furthermore, perhaps the ethnic enclave economy provides unique opportunities to immigrant entrepreneurs that minimize the need for linguistic ability.

Second, we considered whether the returns on investments by the self-employed significantly differ from other immigrants with very low and high investments, and from the average of all immigrants. Self-employed immigrants with high personal and social investments consistently earned higher incomes than other immigrants employed by others or making lower investments. We support a previous Canadian study using 1993 employment income (Hiebert 2003 in Ley 2006), extending the finding to a context involving the creation of capital, and demonstrate its robustness over a period of 10 years (to 2003).

Our study provides insights that government and businesses can use to create coordinated policies that help increasingly diverse immigrant populations. Consider the Business Immigration Programme described by Ley (2006), which involves business start-up investment in return for immigration. Analysis revealed both a very low success rate beyond the first year and the common practice of setting up ghost companies. Based on our results, a preferable alternative would include mentoring support for highly skilled immigrants that would help them to develop social capital related to ethnic and sports groups. This might occur through business and social leadership and mentoring programs jointly offered by university business schools and by social institutions.

Finally we examined the types of activities linked to higher incomes in those managing ethnic new ventures. Different ethnic groups display varying types and rates of self-employment (Clark & Drinkwater, 1998) and many researchers have focused upon these differences, likely because the country of origin has a demonstrated link with success (e.g., Ley, 2006). In comparison, our research identifies specific human and social investment activities practiced by a diverse group of ethnic entrepreneurs, behaviors associated with human and social capital. They include membership in non-ethnic organizations. Social capital appears to be created in completely different ways, by networking with a slice of the population sharing an ethnic identity and by the more universal connections of sports.
Contributions

The contributions of this research rest on the fact it is based on a very large and diverse sample of immigrants. Broad-based comparisons were permitted, based upon employment status, income and personal and social investments. We provide academic value by offering a rare quantitative analysis of new ventures originated by individuals across many ethnicities, instead of the more common comparison of two or three ethnicities. The findings are also valuable to practitioners because government policies toward immigrants do not target only one or two groups. Instead, sweeping policies provide consistency and fairness among immigrants. Furthermore, our research provides information about capital-producing activities across multiple ethnicities and can be used to develop helpful government policies.

Limitations and Implications for Future Research

Our conclusions are limited by the secondary nature of the database. For example, we consider the self-employed immigrant of many different ethnicities. However, some researchers will take exception to our assumption that all immigrants are essentially ethnic entrepreneurs. Immigration to Canada from other westernized countries has dropped, reflecting an immigrant base arriving mainly from non-western cultures. We suggest that ethnic identity, regardless of its nature, is still strongest upon immigration, causing even "Western" immigrants to search out ethnic organizations.

Additionally, the nature of the data limits our ability to measure entrepreneurial success variables related to the business created, such as its growth or nature of the innovation. Thus although we measure income, which is certainly related to the personal success of the self-employed, there are no assurances that entrepreneurial success is being captured. Mitigating this concern, our database allows us to understand the employment activity of immigrants who have been in Canada for less than 10 years, and this reflects by necessity, data surrounding new ventures that are relatively recent.

Male respondents dominated the current study, perhaps leading to the significance of sports and ethnic organizations and the lack of significance of the other social groups. For example, Allen (2000) concluded that women respond to social influences differently than men, finding the presence of entrepreneurs in social circles significant only for women, for example. The same dynamic may be at work in explaining the insignificance of professional and business club membership in our study.

This study’s findings are based on cross-sectional data from a large government database of Canadian immigrant respondents. Future research should include longitudinal assessment of human and social capital and their impact on ethnic/immigrant entrepreneurs. A recent literature review of longitudinal research involving the self-employed concluded that wealthier people are more likely to become self-employed (Georgellis, Sessions, & Tsitsianis, 2005) and that those with low incomes are also more likely to become self-employed (Johansson 2000a in Georgellis et al., 2005). Their conclusions point to a curvilinear relationship between income and self-employment for self-employed individuals in general, and contrasts with data collected on immigrant entrepreneurs (e.g., Ley, 2006). Consequently future research should identify how the profile of ethnic new venture creators compares with other self-employed with respect to the relevance of pre-venture income levels. Future studies should also attempt to measure the income changes before and after startup.

CONTACT: Francine Schlosser; fschloss@uwindsor.ca; (T): 519-253-3000 (X3107); University of Windsor, Windsor, ON N9G 2Z3.

REFERENCES


<table>
<thead>
<tr>
<th>Grouping Variables</th>
<th>Expected Relationship</th>
<th>Category N</th>
<th>Category %</th>
<th>Chi-Sq. Results</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely High Human and Social Investment AND Self-Employment</td>
<td>Positive</td>
<td>36/210</td>
<td>17.1%</td>
<td>9.864 ** (0.002)</td>
<td>YES</td>
</tr>
<tr>
<td>High Human and Social Investment AND Self-Employment</td>
<td>Positive</td>
<td>177/1271</td>
<td>13.9%</td>
<td>18.348*** (0.000)</td>
<td>YES</td>
</tr>
<tr>
<td>Extremely low Human and Social Investment AND Self-Employment (NO SPOUSE)</td>
<td>Positive</td>
<td>11/213</td>
<td>5.2%</td>
<td>6.800** (0.009)</td>
<td>NO - Significantly fewer self-employed</td>
</tr>
<tr>
<td>Low Human and Social Investment AND Self-Employment</td>
<td>Positive</td>
<td>92/1277</td>
<td>7.2%</td>
<td>18.704*** (0.000)</td>
<td>NO - Significantly fewer self-employed</td>
</tr>
<tr>
<td>High Human and Low Social Investment AND Self-Employment (NO SPOUSE)</td>
<td>Positive</td>
<td>191/1596</td>
<td>12.0%</td>
<td>4.206* (0.040)</td>
<td>YES</td>
</tr>
<tr>
<td>Low Human and High Social Investment AND Self-Employment (NO SPOUSE)</td>
<td>Positive</td>
<td>1499</td>
<td>14.1%</td>
<td>1.349 (0.245)</td>
<td>NO significant difference from immigrant population</td>
</tr>
</tbody>
</table>

Significance *** <0.001; **<0.01; *<0.05; †<0.10
Table 2: Income Differences for the Self-employed within Investment Categories

<table>
<thead>
<tr>
<th>Grouping Variables</th>
<th>Expected Relationship</th>
<th>Category</th>
<th>N</th>
<th>Personal Income Means</th>
<th>T-test Results</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremly High Human and Social Investment</td>
<td>self-employed with very high investment make significantly higher income than those in their investment group and higher than all immigrants</td>
<td>self-employed</td>
<td>36</td>
<td>4.44</td>
<td>self-employed and all other immigrants</td>
<td>t: 5.983   sig: 0.000***</td>
</tr>
<tr>
<td></td>
<td>high investment not self-employed</td>
<td>174</td>
<td>3.71</td>
<td></td>
<td>high investment, self-employed and not self-employed</td>
<td>t: 2.706   sig: 0.007**</td>
</tr>
<tr>
<td></td>
<td>not high investment and self-employed</td>
<td>7093</td>
<td>3.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Human and Social Investment</td>
<td>self-employed with high investment make significantly higher income than the other two groups</td>
<td>self-employed</td>
<td>177</td>
<td>4.33</td>
<td>self-employed high investment and all other immigrants</td>
<td>t: 11.877 sig: 0.000***</td>
</tr>
<tr>
<td></td>
<td>high investment not self-employed</td>
<td>1094</td>
<td>3.47</td>
<td></td>
<td>high investment, self-employed and not self-employed</td>
<td>t: 7.451 sig: 0.000***</td>
</tr>
<tr>
<td></td>
<td>not high investment and self-employed</td>
<td>6952</td>
<td>3.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extremely Low Human and Social Investment</td>
<td>self-employed with extremely low investment make significantly lower income than the other two groups</td>
<td>self-employed</td>
<td>11</td>
<td>3.64</td>
<td>self-employed and all other immigrants</td>
<td>t: 1.309 sig: 0.191</td>
</tr>
<tr>
<td></td>
<td>extremely low investment not self-employed</td>
<td>202</td>
<td>2.37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>not extremely low investment and self-employed</td>
<td>7118</td>
<td>3.10</td>
<td></td>
<td>self-employed and not self-employed, extremely low investment, not self-employed</td>
<td>t: 7.238 sig: 0.008**</td>
</tr>
<tr>
<td>Low Human and Social Investment</td>
<td>self-employment with low investment make significantly lower income than the other two groups</td>
<td>self-employed</td>
<td>92</td>
<td>3.54</td>
<td>self-employed, low investment and all other immigrants</td>
<td>t: 3.145 sig: 0.002**</td>
</tr>
<tr>
<td></td>
<td>low investment not self-employed</td>
<td>1185</td>
<td>2.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>not low investment and self-employed</td>
<td>7037</td>
<td>3.10</td>
<td></td>
<td>self-employed and not self-employed, low investment</td>
<td>t: 6.791 sig: 0.000***</td>
</tr>
<tr>
<td>High Human and High Social Investment</td>
<td>self-employment with high human but low social investment make significantly higher income than the other two groups</td>
<td>self-employed</td>
<td>191</td>
<td>3.66</td>
<td>self-employed, split investment intensity and all other immigrants</td>
<td>t: 5.325 sig: 0.000***</td>
</tr>
<tr>
<td></td>
<td>low human/high social investment, not self-employed</td>
<td>1405</td>
<td>3.23</td>
<td></td>
<td>self-employed and not self-employed, split investment intensity</td>
<td>t: 3.883 sig: 0.000***</td>
</tr>
<tr>
<td></td>
<td>not split investment and self-employed</td>
<td>6938</td>
<td>3.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Human and High Social Investment</td>
<td>self-employment with low human but high social investment make significantly higher income than the other two groups</td>
<td>self-employed</td>
<td>14</td>
<td>3.71</td>
<td>self-employed, split investment intensity and all other immigrants</td>
<td>t: 3.389 sig: 0.001**</td>
</tr>
<tr>
<td></td>
<td>low human/high social investment, not self-employed</td>
<td>85</td>
<td>2.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>not split investment and self-employed</td>
<td>7115</td>
<td>3.10</td>
<td></td>
<td>self-employed and not self-employed, split investment intensity</td>
<td>t: 1.899 sig: 0.0801</td>
</tr>
</tbody>
</table>

Significance *** < 0.001; ** < 0.01; * < 0.05; † < 0.10
Table 3: Human and Social Investment Effects on Personal Income for Immigrant Entrepreneurs

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (SEX)</td>
<td>.663***</td>
<td>.711***</td>
<td>.677***</td>
</tr>
<tr>
<td></td>
<td>(5.873)</td>
<td>(6.446)</td>
<td>(6.163)</td>
</tr>
<tr>
<td>Recent Arrival (GENYARR)</td>
<td>-.684 ***</td>
<td>-.715***</td>
<td>-.717***</td>
</tr>
<tr>
<td></td>
<td>(-5.183)</td>
<td>(-5.240)</td>
<td>(-5.293)</td>
</tr>
<tr>
<td>Ethnic Distance (IS_Q030)</td>
<td>-.206**</td>
<td>-.240***</td>
<td>-.245***</td>
</tr>
<tr>
<td></td>
<td>(-3.222)</td>
<td>(-3.822)</td>
<td>(-3.936)</td>
</tr>
<tr>
<td>Formal Education (HLOS)</td>
<td>.144***</td>
<td>.120***</td>
<td>.109***</td>
</tr>
<tr>
<td></td>
<td>(6.160)</td>
<td>(4.618)</td>
<td>(4.203)</td>
</tr>
<tr>
<td>Canadian Education (HLOSCAN)</td>
<td>.095 (9.02)</td>
<td>.125 (1.198)</td>
<td>.086 (1.209)</td>
</tr>
<tr>
<td>Languages Spoken (LGSNU)</td>
<td>.034 (.609)</td>
<td>.024 (.436)</td>
<td>.020 (.164)</td>
</tr>
<tr>
<td>Spouse's Education (S_HLOSD)</td>
<td>.070**</td>
<td>.070**</td>
<td>.070**</td>
</tr>
<tr>
<td></td>
<td>(2.602)</td>
<td>(2.613)</td>
<td>(2.613)</td>
</tr>
<tr>
<td>Spouse's Languages (S_LGFSO)</td>
<td>.134 (1.004)</td>
<td>.115 (1.064)</td>
<td>.115 (1.064)</td>
</tr>
<tr>
<td>Arts/Cultural Group (PC_ART)</td>
<td>.094 (.419)</td>
<td>.094 (.419)</td>
<td>.094 (.419)</td>
</tr>
<tr>
<td>Community Group (PC_COMM)</td>
<td>-0.04 (-0.24)</td>
<td>-0.04 (-0.24)</td>
<td>-0.04 (-0.24)</td>
</tr>
<tr>
<td>Ethnic Group (PC_ETHN)</td>
<td>.410*</td>
<td>.410*</td>
<td>.410*</td>
</tr>
<tr>
<td></td>
<td>(2.413)</td>
<td>(2.413)</td>
<td>(2.413)</td>
</tr>
<tr>
<td>Hobby/Social Group (PC_HBSOS)</td>
<td>-0.083</td>
<td>-0.083</td>
<td>-0.083</td>
</tr>
<tr>
<td></td>
<td>(-.321)</td>
<td>(-.321)</td>
<td>(-.321)</td>
</tr>
<tr>
<td>Job-related Group (PC_JOBRE)</td>
<td>.299 (1.428)</td>
<td>.299 (1.428)</td>
<td>.299 (1.428)</td>
</tr>
<tr>
<td>Religious Group (PC_RELIG)</td>
<td>.077 (.393)</td>
<td>.077 (.393)</td>
<td>.077 (.393)</td>
</tr>
<tr>
<td>Service Group (PC_SERCH)</td>
<td>.118 (.569)</td>
<td>.118 (.569)</td>
<td>.118 (.569)</td>
</tr>
<tr>
<td>Sports Group (PC_SPORT)</td>
<td>.502***</td>
<td>.502***</td>
<td>.502***</td>
</tr>
<tr>
<td></td>
<td>(3.800)</td>
<td>(3.800)</td>
<td>(3.800)</td>
</tr>
<tr>
<td>Youth/Children's Group (PC_YTCH)</td>
<td>-0.059</td>
<td>-0.059</td>
<td>-0.059</td>
</tr>
<tr>
<td></td>
<td>(-.163)</td>
<td>(-.163)</td>
<td>(-.163)</td>
</tr>
<tr>
<td>R²</td>
<td>.095</td>
<td>.143</td>
<td>.162</td>
</tr>
<tr>
<td>R² Adj</td>
<td>-.091</td>
<td>.136</td>
<td>.153</td>
</tr>
<tr>
<td>∆ R²</td>
<td>.095***</td>
<td>.048***</td>
<td>.019***</td>
</tr>
<tr>
<td>Model F</td>
<td>26.197***</td>
<td>20.725***</td>
<td>18.033***</td>
</tr>
</tbody>
</table>

The number of observations is 755. t-values are in parentheses. ***p<0.01; **p<0.05; *p<0.10.