# HEC MONTREAL

Institut d'économie appliquée



TRANSNATIONAL NETWORKING AND BUSINESS SUCCESS: ETHNIC ENTREPRENEURS IN CANADA

par KARIV, Dafna, Teresa V. MENZIES, Gabrielle A. BRENNER et Louis Jacques FILION

Cahier de recherche nº IEA-06-18

### **ABSTRACT**

It is agreed that transnational networking plays an important role in the effectiveness of ethnic entrepreneurial firms. Yet, distinctions between the different types of transnational networking and their effects on business effectiveness have received scant attention in the literature, probably because ethnicity has been considered the main actor in the networking-effectiveness relationship. This paper argues that one of the reasons business effectiveness differs across ethnic entrepreneurial firms is that ethnic entrepreneurs engage in dissimilar types of transnational networking. Analyses of the data generated by 720 ethnic entrepreneurs in Canada, revealed that ethnicity, human capital and push-pull factors play a central role in the engagement of different types of transitional networking; and the different types of transnational networking affect the business turnover (sales) and the business survival (age). Push-pull factors were found to play a marginal role in the business effectiveness. These results highlight the competitive market immigrants and members of ethnic minority groups encounter in the hosting economy and stress the value of transnational networking.

**Key words**: Transnational Entrepreneurship, Networks, Immigrant Entrepreneurs, Ethnic Entrepreneur, Push and Pull Factors, Business Success, Business Outcomes

### 1 Introduction

In the present era of globalization, transnational networking is becoming more the rule than the exception (Levitt, 2001). It is strongly associated with business effectiveness, and has a great impact on ethnic entrepreneurship (Aldrich & Waldinger, 1990; Menzies, Brenner & Filion, 2003; Robinson, 2005; Wong & Ho, 2004; Zimmer & Aldrich, 1987). Most studies concur that, other than differences between the business effectiveness of indigenous and recent newcomer entrepreneurs, variations in effectiveness occur across different ethnic groups and in a wide range of businesses, in niches that function largely in and for the entrepreneurs' particular ethnic communities (Ghosh & Wang, 2003; Nolin, 2004; Waters, 2003; Wong & NG, 2002) and also in businesses with a full range of economic activities that serve broader markets and mixed clienteles in the host countries (Mata, 1996; Preston & Giles 1997). Such diversity in entrepreneurs' ethnicity and in their business activities has important bearings on both the manner of transnational networking and their business effectiveness.

Business effectiveness is generally gauged by a firm's outcomes which is based on the widely used goal-oriented, or outcome approach that measures progress toward the attainment of organizational goals. This approach focuses on assessments of the changes and growth of such business measures as profitability, revenues, number of salaried employees, annual sales, and so on.

Transnational networking is identified by several key issues, such as the globalization, technological development and amplification of social networks that encourage cross-border business activities migration (Guarnizo & Smith, 1998). It refers to activities that bridge national borders, are carried out by ethnic entrepreneurs mainly with their homeland (Salaff, Greve, Wong & Li Ping, 2003; Saxenian, 2002), and are destined to create mutually shareable assets such as information, contacts, and trust. Considered a strategy that enhances economic and social mobility in the host country, transnational networking encompasses a broad range of diverse activities, such as visiting the country of origin, maintaining social networks with family, friends and associates in the country of origin, facilitating co-ethnic

newcomers' adaptation and assimilation into the host country (by dispatching remittances, information and other resources to prospective emigrant kin and acquaintances), providing financial support, obtaining and disseminating information, recruitment of labor force, blending knowledge, and so on (Aldrich & Cliff, 2003; Portes, Haller & Guarnizo, 2002; Saxenian, 2002; Robinson, 2005). Such activities may act as platforms for, or spring-boards to, better business effectiveness through access into markets beyond those of the host country and support of fellow transmigrants from the entrepreneurs' homelands in starting or maintaining a business in the host country, as well as a path for providing financial support to kin in the homeland (Aldrich & Cliff, 2003; Portes, Haller & Guarnizo, 2002). Migration to the host country of additional family members and associates is also encouraged and, through this, co-ethnic employment evolves, a practice that reduces risks associated with manpower and financial investments (Min, 2005; Salaff, Greve, Waldinger, 1994; Wong & Ping, 2003).

# 2 Background Literature

A considerable number of studies that focus on transnational networking in respect to both ethnic entrepreneurs and business effectiveness treat it as an equal, cohesive, one-dimensional activity. However, transnational activity is not always comparable amongst different entities (Portes, Haller & Guarnizo, 2002; Robinson, 2005) and it is definitely more than a mere 'term'. By applying the concept of transnational networking to ethnically-characterized entrepreneurship alone, most scholars have limited themselves to a single-faceted concept and have thus failed to take full advantage of the analytical usefulness that the concept may offer to entrepreneurial business effectiveness. Engagement in different 'types' of transnational networking by ethnically dissimilar entrepreneurs may result in different outcomes of their business effectiveness and thus explain the variations found between ethnically differentiated business effectiveness and success. In fact, studies show that some immigrant groups engage in transnational networking activities more than others, while some do not engage in them at all, and there are also wide variations in the form and intensity of transnational activities across ethnic groups (Bagwell, 2006; Dodd & Patra, 2002; Ghosh & Wang, 2003; Hiebert & Ley, 2003; Nolin, 2004, Wong & NG, 2002).

The well-established relationship between ethnic businesses and effectiveness measures should be reconsidered; a number of studies stress the role of ethnicity in explaining the disparities in the effectiveness of different ethnic entrepreneurial firms (Aldrich & Waldinger, 1990; Rath & Kloosterman, 2002; Waldinger, 1994), even though educational and professional attainments are considered the significant determinants in entrepreneurial business effectiveness (Robinson, 2005). Accepting as fact that entrepreneurs' ethnicity is a

primary factor governing their performance, and thus their business effectiveness, means assuming that certain ethnic groups of entrepreneurs, due to the unique constraints related to their ethnicity, are more frequently limited to business opportunities of a lower-quality and hence prone to poorer business effectiveness than others. However, incorporating different types of transnational networking into the set of determinants associated with business effectiveness may present, and explain, a different scenario, one where ethnically different entrepreneurs engage in different types of networking, which subsequently affects the measures of effectiveness of their respective businesses.

It is therefore essential to treat transnational networking as a multi-faceted activity characterized by different types of activities, and to explore the effects of transnational networking on entrepreneurial business effectiveness according to ethnic-group identities.

# Ethnic entrepreneurs and transnational networking

There are, in Canada, the U.S.A and in several other affluent countries, large numbers of immigrants who have opted for integration into the economic and social mainstream of their host country, but have done so without completely abandoning their ties with their homelands (visits, phone and electronic contact, business ties, etc.). This can explain, at least partly, how transnational networking evolved. The multiplicity of entrepreneurial firms whose business activities span national and geographic borders and the volume of businessoriented networking of ethnic entrepreneurs across these borders illustrate the magnitude of this transnational networking. However, although the activities of transnational networking are numerous and varied, they are linked to and constitute an integral part of the ethnic entrepreneurs' attempts to adjust to and integrate within the host country (Bagchi, 2003; Min, 2005). In addition, not all networking ties are of similar composition, or of equal importance to the different ethnic groups of entrepreneurs. There is a broad range of networking, from single-dimensional, intra-ethnic networking among entrepreneurs in localized, selfemployment markets, which serves as a model path to better business effectiveness for some, to networking perceived as a wide-reaching web of cross-country ties, and as an alternative path to business success (Renaud et al., 2002; Owusu, 2003; Waters, 2003).

The literature on ethnic entrepreneurship describes the 'push' and 'pull' factors<sup>1</sup> that have been shown to play a prominent role in ethnic groups' engagement in transnational

\_

Push factors include negative home conditions that impel the decision to migrate, e.g., loss of job, lack of professional opportunities, overcrowding, famine, war, pestilence. Pull factors include positive attributes perceived to exist at the new location, e.g., jobs, better climate, low taxes, more room, professional opportunities.

networking. This type of networking is generally concerned with obtaining the necessary resources to migrate, and incorporates such related factors as measures of human capital, i.e., educational and professional qualifications and relevant business experience, and the intended length of stay in the host country (Portes, Haller & Guarnizo, 2001; Robinson, 2005). While transnational networking is used by all ethnic groups with emigrant populations in target countries, it is used differently across national identities, depending both on the nature of the push/pull factors leading to migration and the relevant human capital of the potential immigrants. Broadly speaking, transnational networking can be classified into three different types: co-ethnic enclave networking with associates of the origin country; world-wide professional and business networking; and transnational networking characterized mainly by the search for business and/or employment opportunities.

Push factors and lower human capital

Push factors and lower levels of relevant human capital of the potential transmigrants are more commonly associated with certain specific ethnic groups and with an enclave mode of assimilation in the host country. Characteristic of these groups is ongoing co-ethnic enclave networking, both within the host country and with their respective communities in their homeland, and is typical of Vietnamese, Italian and Chinese entrepreneurs, as several studies have shown (Ghosh & Wang, 2003; Hibert & Ley, 2003; Wong & NG, 2002). Vietnamese transmigrants, who have left their country because of poverty, scarcity of opportunities, and an overall lack of relevant human capital, as well as the more recent arrivals from other Asian countries, tend to maintain networking connections that are more tightly restricted to smaller groups, usually of family and friends; their networking is characterized by remittances to relatives in the homeland and by assisting newcomers from their countries of origin (Bagwell, 2006). Italians also typify ethnicity-bound networking, especially of the earlier immigrants, among whom the push factors were more significant than the pull factors. Studies on Italian business networks have found large, ethnicity-bound networking, characterized by closure to outsiders and access mainly through family referrals, as kinship plays a major role (Barbieri, 1997; Greve &. Salaff, 2003; Kelly, 2003). Italian entrepreneurs lacking easy entrance through family and kinship ties have had to expend a lot of time and considerable effort to broaden their networks. The maintenance of Italian immigrants' ties with their home communities are well known, as are the patterns of reception of new Italian immigrants to the United States and Canada. Studies on Hispanic immigrant entrepreneurs (Borajas, 1986; McNanus, 1990) and on Mexican immigrant entrepreneurs (Reijchman & Tiende, 2000) have yielded similar findings.

Studies on those Chinese immigrant entrepreneurs who possess low levels of education, frequently cite them as exemplifying immigrant groups dependent on their ethnic communities for recruitment of labor and for exchange of services and goods for their entrepreneurial firms (Chan & Cheung, 1985; Ma 1999; Chu, 1996; Light, 2002; Marger & Hoffman, 1992) both within and outside of the host country's borders (Douw, Cen & David, 2001). Such groups maintain close ties with their co-ethnic associates in their places of origin, upon whom they frequently depend for purchasing merchandise, and they are also more likely to be actively affiliated, socially and communally, with places of worship (e.g. church, temple) (Landolt, 2001; Min, 2005; Robinson, 2005; Tseng 1995). They are usually comprised of more recently arrived immigrants, who may be entrepreneurs, unskilled labourers or refugees<sup>2</sup> most of whom have immigrated to affluent host countries from poor

\_

A discussion on refugees is beyond the framework of the present study.

countries (Robinson, 2005). While they are still newcomers in the host country, the transmigrants often receive assistance in the form of information and financial aid from family or community members in their home country (Leung, 2003; Light, 2006), in addition to the assistance in business, financial, social and civil official matters proffered by their coethnic predecessors, already integrated in the host country (Rath & Kloosterman, 2002; Robinson, 2005).

Push factors and higher human capital

Push factors and a higher level of human capital are associated with world-wide professional and business networking. It is usually characterized by periodic visits to the immigrants' country of origin to reconnect with sources of financial support and to ensure business success (Portes, Haller & Guarnizo, 2002; Renzulli, Aldrich & Moody, 2000).

Here, too, the transmigrants from poor countries migrate to more affluent countries, but their higher education and capabilities pave the way to new networks through schools, financial investment connections and various non-ethnic organizations. Studies on highly-educated and/or highly-skilled Vietnamese entrepreneurs (Bui, 2001), and on Chinese and Indian entrepreneurs illustrate the way in which social and professional networks are constructed through the formal organizations in which these experienced or professionally trained immigrants are involved. Along with the global shift to out-sourcing, some of them return permanently to their native countries to become home-based transnational entrepreneurs. This is especially true for Indians, for whom such networking facilitates the accumulation of experience and learning for use in the home country (Walton-Roberts, 2003). Chinese entrepreneurs seem to be more intensively engaged in transnational business and professional networking than their counterparts in the other nations noted (Douw, Cen & David, 2001; Saxenian, 2002), while Vietnamese entrepreneurs do not associate socially and, overall, highly-educated members of this community remain disengaged and isolated (Bui, 2001). The global ties of highly-educated and highly-skilled professional entrepreneurs facilitate trade and provide important competitive advantages for all these ethnic groups. Jewish immigrant entrepreneurs, usually from Eastern Europe, and no longer recent arrivals in either Canada or the U.S.A, but otherwise fitting the push factor and the high human capital category, tend to engage in several kinds of transnational networking (i.e., co-ethnic enclave networking; world-wide professional and business networking; and transnational business-oriented networking). Since, in general, they possess more useful human capital; self-employment is more common among Jewish immigrants than among any other ethnic group; they are somewhat less dependent on information from their co-ethnic communities in the host country, in addition to which they are both capable and strongly motivated to achieve their entrepreneurial goals (Diner, 2004; Levine, 2005; Lewin-Epstein, Semyonov, Kogan & Wanner, 2003; Soyer, 2001). Most of the Jewish-owned businesses passed from fathers to their sons, and they are more likely to employ co-ethnic workers (Reitz, 1990) and, thus most of the Jewish-owned businesses are clustered in a few business niches, develop a well-established enclave economy in Canada (Thompson 1989; Marger & Hoffman 1992)

and maintain co-ethnic networking. Jewish entrepreneurs do not rely exclusively on local

customers but instead engage a wider clientele base (Lee, 1999) and developed a business-oriented networking type (Lewin-Epstein, Semyonov, Kogan & Wanner, 2003).

# Pull factors and lower human capital

Pull factors and a lower level of human capital are considered to underlie 'chain-migration' situations, in which co-ethnic members from the country of origin migrate to a host country where a significant number of their countrymen have already settled, and where they assume they will find more earning opportunities in a cost-efficient and risk-minimizing way (Light, 2002; Massey, 1988). A characteristic of chain-migration is assistance to newcomers by coethnic migrants who already live in and are integrated, at least to some degree, in the host country and who provide information, money for basic expenses, a place to stay upon arrival, emotional support, and perhaps a job. Several studies have shown that in a large number of countries, families decide to use some of their money in order to finance the migration of one of their adult members to an affluent country, from which he or she will send remittances to support those who have remained (O'Neil, 2003; Robinson, 2005). In these cases, transnational networking of ethnic entrepreneurs is both outwards, in remittances to families in the homeland, and inwards, in facilitating the settlement of newcomers from the country of origin.

#### Pull factors and higher human capital

Pull factors and a higher level of human capital are also associated with 'brain circulation,' (Robinson, 2005; Saxenian, 2005) a multi-directional networking process that spans borders that are not necessarily those of the immigrants' homelands and host countries alone, both while they are working and active in the host country and then by creating new promising opportunities when they return to their own countries and develop new economies there (Li, 2000; Saxenian, 2002). This type of transnational networking differs from that motivated by the push factors, where highly educated ethnic entrepreneurs immigrate to a more attractive country for specific opportunities relevant to their training and the transnational networking is characterized mainly by the search for such opportunities. Recently, for example, highly-educated immigrants from China, Korea and other East Asian countries, usually fluent in English, have taken advantage of diverse forms of transnational networking (Chiswick & Miller, 2002; Robinson, 2005) in order to immigrate to countries where there are suitable and attractive conditions in the labor market; Some of them have already returned to their native countries permanently in order to start new technologically advanced companies or to work for established firms (Hiebert & Ley, 2003; Robinson, 2005; Saxenian, 2002; Whyte,

1996). Newcomer Israeli entrepreneurs, mostly highly-educated and professional establish a world-wide business networking<sup>3</sup> (Heenan, 2005) as well.

We propose that there is a relationship between the different types of transnational networking described above and the ethnic-based attributes of entrepreneurs; along with the push-pull and human capital indicators, and that this relationship affects the effectiveness of ethnic business enterprises. Few inclusive investigations have been conducted on ethnic engagement of the multiple measures of transnational networking. The predominance of each one of the indicators, (i.e., push-pull factors, human capital and ethnicity) in the engagement of such transnational networking has not yet been determined, thus a more conclusive exploration of these relationships should be conducted.

## Measures of effectiveness in entrepreneurial businesses

Business effectiveness is a multi-faceted matter and is difficult to measure (Haber & Reichel, 2005; Kallenberg & Leicht, 1991; Shane & Venkataraman, 2000). In addition, most studies that address business determinants and their results have examined only the direct relationship between sets of practices and outcomes. Very few attempts have been made to ascertain, and to examine, possible outcomes that cannot by definition be designated 'business outcomes', and, further, to discover if these 'outcomes' are carried out via transnational networking of one kind or another. Such transnational activities may be remittances to families that have remained in the places of origin, visits to the homeland, membership in transnational professional or social associations. These, as well as business effectiveness among ethnic entrepreneurs, have not been sufficiently investigated. Moreover, while there are a few studies that prove that transnational networking is implicated in several business measures, in general, we were unable to locate any studies that specifically examined this factor in ethnic entrepreneurship businesses.

The main factor examined in measurements of business effectiveness is outcome. This is frequently assessed through an objective assessment, based on 'hard data' measures of the business, and a goal-oriented approach, which evaluates the progress toward attainment of business objectives; (Pfeffer & Salancik, 1978). Since small and/or new businesses are not usually expected to be profitable during their first years of existence, and changes may not emerge in the number of salaried employees or in annual sales growth during those years, the goal-oriented approach in assessing effectiveness is likely to be less indicative for evaluating new enterprises. Such evaluations therefore have to be based on *existing* business

\_

The Maryland/Israel Development Center <a href="http://www.marylandisrael.org/programs\_services/devel\_init.html">http://www.marylandisrael.org/programs\_services/devel\_init.html</a>

indicators, that is, on turnover, number of salaried full- and part- time workers, and the age of the business, rather than on the *changes* in these indicators.

Most of the studies in the entrepreneurship literature make the assumption that networks are beneficial for entrepreneurial businesses. Through accessing and utilizing external resources in the network, these ventures can overcome some of the assumed disadvantages of their limited size or resources; as networks supply resources which otherwise would not have been available to the firm (Dubini & Aldrich, 1991; Johannisson et al., 1994; Light, 2006). Although the relationships of networking and effectiveness are well-established, the investigations on transnational networking and business' effectiveness are scarcely explored. Most of the studies on transnational networking to date are of a descriptive nature and based on case studies, mainly on Chinese and Indians (Ghosh & Wang, 2003; Nolin, 2004; Walton-Roberts, 2003; Waters, 2003). Additionally, the focus is on immigration communities and their pathway to economic adjustment into the hosting labor market rather than focusing on ethnic entrepreneurs as a unique model. A further notable feature in transnational models is that they mainly concentrate on high skill immigrants overlooking the low skilled immigrants; the impact of their transnational network though, could be related to their educational level, experience or business type (Portes, Haller & Guarnizo, 2002) and thus requires to be more widely studied.

Moreover the impact of transnational networking on business effectiveness is described in general terms, disregarding the specific measures of business effectiveness that might be affected by transnational networking, such as business profitability, survival rates, point of financial breakeven, growth in customer, sales, and so on. The role and function of the different types of transnational networking on the business effectiveness measures remains insufficiently studied.

The importance in elevating to the academic and public debate the topic of ethnic entrepreneurs, especially immigrants' businesses effectiveness comes from the constraints they face in constructing beneficial networks in the hosting country (Ley, 2000; Owusu, 2003; Zimmer & Aldrich, 1987). Although not comprised of a one-way model of flow of people from the poorer to the richer countries, most immigrant communities are not engaged in the networked organizational systems of the hosting countries, at least not during the first years of residency in the hosting country; thus they may construct networking in their ethnic communities in the hosting countries or construct transnational networks with homeland counterparts. The last may act as a more responsive or even rewarding mechanism than either ethnic-bound networking or attempts to pass through the hosting countries' barriers for networking inside the hosting labor market, as these immigrants may mobilize and transfer

business-oriented determinants (financial resources, knowledge, technology) from- and back- to their homelands.

Taken together, the aforementioned review, which is partially summarized in Figure 1, suggests that the importance of the relationship between types of transnational networking and business effectiveness within co-ethnic groups of entrepreneurs has been underestimated. A reflective investigation of the types of transnational networking engaged in by different ethnic groups of entrepreneurs in Canada is, therefore, the purpose of the present study. We posit three main hypotheses for investigation, based on the background literature discussed previously. The first hypothesis deals with an experimental attempt to identify the main transnational networking types used by each specific ethnic group; the second hypothesis aims to decipher the role of ethnicity in the relationship of both push and pull and human capital factors and transnational networking; and the third hypothesis attempts to examine the effects of ethnicity, push and pull factors, human capital and types of transnational networking on specific measures of business effectiveness.

- H<sup>1</sup> Entrepreneurs of different ethnic groups are engaged in different types of transnational networking.
- H<sup>2</sup> Ethnicity, push-pull indicators and educational level will have an impact on the engagement into the different types of transnational networking
- H<sup>3</sup> The types of transnational networking, ethnicity, push-pull factors, human capital and personal (age and gender) determinants have different roles in each measure of immigrants' entrepreneurial business effectiveness, i.e., turnover (sales), business age and business size.

FIGURE 1

Theoretical Background – Push-Pull and Human Capital Factors and Transnational Networking among Ethnic Groups

	PUSH FACTOR FOR IMMIGRATION	PULL FACTORS FOR IMMIGRATION
LOWER HUMAN CAPITAL	Vietnamese engage in enclave, ethnicity-bound networking within the host country; mostly restricted to smaller groups, especially family; send remittances to relatives in homeland; assist newcomers of their ethnic group.  (Bagwell, 2006; Ghosh & Wang, 2003; Hibert & Ley, 2003; Wong & NG, 2002).  Italians engage large enclave, ethnicity-bound networking within the host country; a networking closure mechanism to outsiders exists; assist newcomers of their ethnic group (Barbieri, 1997; Greve & Salaff, 2003; Kelly, 2003).  Chinese maintain close ties with co-ethnic associates and associations; affiliated with worship and temples; engage ethnic exchange of labor, merchandise, goods and services; obtain informative, financial and business aid from their homeland community (Bagwell, 2006; Chan & Cheung, 1985; Douw, Cen & David, 2001; Chu, 1996; Ghosh & Wang, 2003; Hibert & Ley, 2003; Light, 2002; Ma 1999; Marger & Hoffman, 1992; Wong & NG, 2002).	Such combination underlines chainmigration, with both inwards transnational networking, e.g., assistance to newcomers with information, money, support and jobs; and outward with members in homeland financing the migration of their adult member(s); and immigrants dispatch remittances after being settled to their families in homeland (no specific ethnic group). (Light, 2002; Massey, 1988; O'Neil, 2003; Robinson, 2005).
HIGHER HUMAN CAPITAL	Vietnamese, Chinese and Indian/Sikh construct professional networks through formal organization (schools, work), business connections (conferences, investment cooperation) and non-ethnic organization; Vietnamese associate less socially (Bui, 2001); Chinese are most intensively engaged in business/professional networking (Douw, Cen & David, 2001; Saxenian, 2002).  Jews engage to several kinds of networking formal and informal: co-ethnic enclave; world-wide professional/business; and transnational business-oriented (Lee, 1999; Lewin-Epstein, Semyonov, Kogan & Wanner, 2003; Marger & Hoffman 1992; Thompson 1989).	Asian ethnic groups, especially Chinese fluent in English engage diverse forms of transnational networking; visit their homeland frequently for business reasons and return to their homeland and start new technology advanced companies (Chiswick & Miller, 2002; Li, 2000; Robinson, 2005; Saxenian, 2002).  Jews/Israelis establish world-wide business networks (Heenan, 2005)

#### 3 Method

# Sample and Procedures

The study sample consists of 750 lead entrepreneurs from five ethnic groups (Chinese, Italian, Jewish, Sikh and Vietnamese) chosen according to prevalence within the three largest cities in Canada (Toronto, Montreal, Vancouver). Approximately 50 lead entrepreneurs were interviewed from each ethnic group in each of the three cities. We also interviewed 750 non entrepreneurs and professionals from each ethnic group but these interviews are not reported in this study. Interviews were conducted most often, not in English, but in the language of the different ethnicities. Graduate students from the various ethnic groups were trained to assist with our study and conducted most of the interviews. Interviews took about one to two hours to complete and were conducted over a four-year period, starting in 2000. We adopted a snowball sampling strategy beginning with recommendations from ethnic community groups and community leaders, and then from the various lead entrepreneurs who had been interviewed.

#### Instrument

Interviews followed a standard format, utilizing a questionnaire that had closed, semi and open-ended questions. The questions related to the human, financial, and social capital factors, as well as networks of immigrant and ethnic entrepreneurs. (For a copy of the questionnaire, please contact one of the authors). During the analysis stage, respondents with missing data were omitted.

# Dependent variable: Business effectiveness

This variable is represented by three measures; business turnover (sales) in Canadian dollars (Kalleberg & Leicht, 1991); business survival, using the business's age as proxy (Kalleberg & Leicht, 1991; Robb, 2002); and business growth, using the number of full-time employees in the business as an indicator.

## Independent variables

#### (a)Transnational networking types

Within the extant literature on the types of transnational networking, apart from Robinson's (2005) classification, there are only vaguely and incoherently distinguished factors. Several indicators, however, comprise transnational networking. Since this study aims to typify

transnational networking through an exploratory technique, the following variables are included: (1) facilitation of contacts for newcomers from the entrepreneur's country of origin (Yes/No), and two dummy variables on the kind of assistance offered (Saxenian, 2002); through (2) financial support and (3) contacts and ties; (4) the frequency of visits to the country of origin; and three dummy variables of the reasons for homeland visits; for (5) business only, (6) family only, (7) both business and family (Bui, 2001; Pendakur & Pendakur, 1998); three variables representing membership in associations<sup>4</sup> composed of members of the ethnic groups; in orientation to (8) business, (9) profession or trade, and (10) social, i.e., sport clubs, churches, temples, and so on. (Hiebert, 2002; Light, 2002; Wheeler, McKague, Thomson, Davies, Medalye & Prada, 2005); for sources of financing the business differentiated by the start-up stage, and the current business stage; two indicators were chosen for the start-up stage: (11) loans from family and (12) loans from co-ethnic group in and/or outside Canada; and for currently meeting the financial needs, represented by two variables (13) loans from the family and (14) from the ethnic group in and/or outside homeland (Bagchi, 2003; Greve & Salaff, 2003; Kasinits & Vickerman, 2001; Renzuilli, Aldrich & Moody, 2000).

# (b) Ethnicity

Five ethnic groups are included in the study; Chinese, Italian, Vietnamese, Indian and Jewish, and all are immigrant or ethnic minority entrepreneurs residing in Canada. Ethnic affiliation was established through self-reports.

#### (c) Push and pull factors

Four groups of variables represented the push and pull factors of the reasons to immigrate to Canada. Push factors (negative home conditions) were represented by the following two – economic (instability, poor life conditions, no future prospective, economy collapse, etc.) and political (refugees, terror, instability, topics of human rights, communism, etc.) reasons referring to homeland; while pull factors were represented by entrepreneurial (searching for entrepreneurial opportunities, investments, creating a business, etc.) and familial (joining relative(s) and family already settled in Canada, marriage with Canadian citizen, developing the well-being of the family, etc.) reasons referring to the hosting country.

-

We considered membership in associations as transnational networking since these associations consist of people of the ethnic groups residing in Canada as well as newcomers and visitors from their homeland; most of these associations maintain ties with professional associations at home (Bagchi, 2003; Kasinitz, 1991).

# (d) Socioeconomic status

The main variable representing human capital here is (a) level of education (Greene, 2000); since work experience of ethnic groups might bias the results. (b) Length of stay (Hiebert & Ley, 2003; Portes, Haller & Guarinizo, 2002; Robinson, 2005); (c) gender (1-men, 2-women) (Greene & Cohen, 1995; Shane, 2000); (d) age; (e) residence in predominantly coethnic neighborhood, representing the co-ethnicity and, mainly, location-bounded self-employment (Kloosterman, van der Leun & Rath, 1999; Salaff, Greve, Wong & Ping, 2003); and (f) sector of the entrepreneurial business – industry, services or commerce (Lo, Preston, Wang, Reil, Harvey & Siu, 2001; Menzies, Brenner, & Filion, 2003) are also included as all are important indicators for both transnational networking and business effectiveness.

#### 4 Results

The sample consists of 530 (73.8%) immigrants and 188 (26.2%) Canadian-born ethnic entrepreneurs; the majority of the Asian ethnic groups are immigrants – of the Chinese 149 (98.3%) are immigrants, the Vietnamese consist of 140 (96.6%) immigrants and the Indian/Sikh include 112 (82.4%) immigrants. The Italian group includes 62 (45.9%) immigrants and of the Jewish entrepreneurs 67 (44.4%) are immigrants.

To determine if entrepreneurs of ethnic groups are engaged in different types of transnational networking, as posited in the first research hypothesis, two procedures were employed. Since the literature addresses ethnic entrepreneurs' engagement in different types of transnational networking only partially, an exploratory analysis was needed. A Factor Analysis was executed for the variables included as measures of the transnational networking. The factor analysis was employed here to enable classification of the variables comprising it, and to thus facilitate the detection of structures in the relationships between the variables (Pedhazur & Schmelkin, 1991); it can simultaneously deal with multiple variables, compensate for random error and invalidity, and disentangle complex interrelationships and classify them into their major and distinct regularities.<sup>5</sup> All included variables were transferred to z-scores in order to create standard scores for variables of different categories.

The results of the Factor analysis show that while extracting factors with eigenvalues of 1.0 or higher, six factors explaining approximately 61% of the total variance emerged; however, since the total percentage of variance explained by the three first factors contributed more meaningfully than the others, and because the later factors (fourth to the sixth) might be harder to interpret, a procedure was executed that limited the number of factors to three. These three factors explain about 35% of the overall variance, with the first factor explaining approximately 13% of the variance, the second approximately 11%, and the third approximately 10.5% of the total variance.

Looking into the rotated matrix, the first factor has high loadings<sup>6</sup> in three variables associated with being a member in affiliations within the ethnic community: (a) business, (b) professional and (c) social (MEMBERSHIP). Visiting the country of origin (3 variables) for (a) family only, (b) business only and (c) both family and business is strongly associated to

.

The Principal Components method was chosen since it allows for combining two or more variables, which could be correlated, into one factor and the Varimax rotation was used to maximize the variance of the 'new' factors. Introducing all the included variables into a Principal Components Factor Analysis, so that each common factor will be represented by at least three or four variables (Fabrigar, Wegener, MacCallum & Strahan, 1999) in oblique rotation,<sup>5</sup> and using the comprehensibility rule in limiting the number of factors to those whose dimension of meaning is readily comprehensible.

<sup>&</sup>lt;sup>6</sup> For all factors we included only variables emerged with loadings above 6.

the second factor (VISITING); and the third factor is strongly associated with receiving financial assistance (loans) from family and members of the ethnic community in and/or outside the host country at the start-up stage and at present (3 variables) (ASSISTANCE). Alphas of Reliability tests were satisfactory for the factors.

The loadings of each of the factors were computed and the Factors then were employed in a one-way ANOVA analysis in order to differentiate between the engagements in different types of transnational networking according to the different ethnicities of the entrepreneurs. The one-way ANOVA analysis was chosen as it provides comparisons of the means of each type of transnational networking, among the five ethnic groups noted above. The analysis (Table 1) indicates significant differences between the ethnic groups' engagement in each of the types of transnational networking. The descriptive figures show that Chinese and Italian entrepreneurs are more likely to engage in MEMBERSHIP in associations of their respective ethnic communities, both in and outside of Canada, while Jewish entrepreneurs are the less likely to be members of such associations. VISITING characterizes the transnational networking of Vietnamese entrepreneurs, indicating the greater likelihood of them traveling to their country of origin for business reasons, visiting family or both, while for Indian/Sikh and Italian entrepreneurs, negative measures of this factor emerge. The means of each ethnic group in engaging ASSISTANCE appear higher than those for the previous factors: the means for Vietnamese and Chinese entrepreneurs were the highest, indicating receipt of remittances from members of their families and/or communities inside and outside Canada, while those for Italians and Indian/Sikhs were negative, indicating that they are less likely to accept remittances from their communities.

TABLE 1

One-way Anova, F, Means and Standard Deviation<sup>1</sup> for the types of transnational networking and the ethnic group of entrepreneurs (alphabetic order)

	MEMBERSHIP N= 707		VISI	TING	ASSISTANCE N=639		
			N=	: 717			
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
CHINESE	.126	1.459	.091	1.574	.215	1.218	
INDIAN/SIKH	.006	1.198	181	1.052	250	.566	
ITALIAN	.160	1.396	147	1.270	292	.472	
JEWISH	232	.857	.087	.928	076	.926	
VIETNAMES	038	1.229	.128	1.118	.309	1.525	
	F = 2.268; df =4, p <.05*		F = 4.143; df =4, $p$ <0.01*		F = 8.745; df =4, $p$ <<.00**		

<sup>&</sup>lt;sup>1</sup> transferred to z-scores

These results prompted us to explore whether engagement in one or another specific type of transnational networking is due to the ethnicity of the given entrepreneur (Hiebert & Ley, 2003) or is affected by push-pull indicators or educational level, which represents the human capital parameters.

For the investigation of the second research hypothesis, again two procedures have been taken. First, a one-way ANOVA analysis was conducted in order to differentiate between the ethnic groups and their push-pull factors and educational level (Table 2). The results indicate that all included variables, i.e. the four included variables representing push-pull measures and educational level significantly differentiate between the ethnic groups. Specifically, Means and Standard Deviations show that Jews, Indian/Sikhs and Chinese acquired a higher educational level, Indian/Sikhs and Chinese report more frequently, compared to the other ethnic groups, immigrating due to pull-oriented entrepreneurial reasons; Indian/Sikhs and Chinese immigrants report pull-familial reasons; Vietnamese indicate more frequently relatively push-oriented political reasons; and Indian/Sikhs, Italians and Chinese report more frequently push-economic reasons for immigration. The second step was a Multivariate analysis of variance (MANOVA) with the three types of transnational networking as

dependent variables and the four push-pull factors; with educational level and ethnicity as covariates. The purpose here was to decipher the most predominant measures that relate to the types of transnational networking. The overall multivariate test emerged significant only for educational level (Wilks  $\lambda$  =.808, F (6,554) = 43.165, p < 0.050\*\*) but the push-pull factors did not appear significant. It appears that engagement in the three types of transnational networking differs significantly only by educational level and by ethnicity. The tests for Between-Subjects Effects show that educational level (F (1, 436) =13.231, P < 0.00\*\*), has significant values for VISITING, indicating that entrepreneurs of different educational levels are differentiated in their engagement of this type of transnational networking. Ethnicity emerged as significant in all transnational networking, ASSISTANCE (F (1,554) =7.487, P < 0.05\*); MEMBERSHIP (F (1, 436) =29.974, P < 0.00\*\*); and VISITING (F (1,554) =8.808, P < 0.05\*); supporting the previous results of the first hypothesis presented.

TABLE 2

One-way Anova, F, Means and Standard Deviation<sup>1</sup> for the push and pull factors (dummy variables) and educational level (1-5 levels) and the ethnic group of entrepreneurs<sup>1</sup>

		TIONAL VEL	ENTREPE	ULL RENEURIAL ASONS	PULL F REAS		PU POLIT REAS	TICAL	PU ECON REAS	OMIC
	N=	665	N=	701	N=7	717	N='	717	N=	717
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
CHINESE	3.236	1.352	.089	.287	.298	.459	.331	.472	.126	.333
Indian/Sikh	3.421	1.247	.111	.315	.360	.482	.096	.295	.228	.421
ITALIAN	2.496	1.290	.015	.123	.304	.462	.044	.207	.148	.357
JEWISH	3.544	1.310	.060	.239	.192	.395	.080	.271	.073	.261
VIETNAMESE	2.993	1.372	.007	.084	.269	.445	.510	.502	.069	.254
	F=12.1	01; df	F=5.40	2; df =4,	F = 2.7	12; df	F = 42	.330; df	F = 5.49	97; df
	=4, <i>p</i> <.	00**	p <.00*	*	=4, <i>p</i> <	.05*	=4, <i>p</i> <	.00**	=4, <i>p</i> <	.00**

<sup>&</sup>lt;sup>1</sup> By alphabetic order

These overall results show that ethnicity as well as educational level play a significant role in the engagement of ethnic entrepreneurs in the different types of transnational networking. The question arises regarding the importance of transnational networking in explaining business effectiveness while ethnicity, push-pull determinants and educational level are included.

For this purpose three regression analyses were performed (Table 3) for each one of the included measures of business effectiveness (i.e., turnover [sales], business age and the number of full-time and part-time employees in the business [dependent variables]). The independent variables included in these analyses are transnational networking (three factors); ethnicity (four dummy variables: Chinese, Indian/Sikh, Italians and Vietnamese. Jews were the omitted groups for reference<sup>7</sup>); push-pull determinants (four dummy variables),

In order to avoid problems with collinearity in the model, the general rule for creating dummy variables is: that the number of dummy variables included in the regression model is the number of modalities minus 1, which will turn as the reference group. The coefficients for the included dummy variables represent how much the means of the included dummy variables are above or below the mean for the reference group which turn to zero (Hardy, 1993). The choice of the reference group is arbitrary; it is usually the last variable entered in the equation that automatically turns to a reference group; in our case, it was the group of Jewish entrepreneurs.

educational level representing the human capital and personal characteristics (i.e., length of stay in Canada, age and gender). All equations appeared significant, however, while the higher percentage of the explained variance in the age of the business is about 45% according to the adj. R<sup>2</sup> and in the business turnover (sales) is around 23%, the percentage of the explained variance, for the number of full and part-time employees is lower (about 3.5%); raising doubts on its applicability for predicting the business size (employees) using the included variables.

From the first analysis of the business turnover (sales) it emerged that transnational networking, educational level and being a Chinese immigrant have a significant impact on the entrepreneurial business turnover (sales); while the push-pull variables emerged as insignificant in affecting the business turnover (sales). ASSISTANCE, MEMBERSHIP and VISITING significantly and positively affect the business turnover (sales); suggesting that entrepreneurs that are engaged in any transnational networking of the types included are more probable to increase their rates of turnover (sales). As regards the ethnicity, being Chinese emerged as significant with a negative relationship to the business turnover (sales), indicating that as compared to being Jewish (the omitted group for reference) being Chinese is associated with lower turnover (sales) rates. Educational level, representing the human capital category emerged significantly and positively related to turnover (sales) indicating that higher educated entrepreneurs are more apt to have higher turnover (sales) rates; and of the personal determinants length of residency in Canada is significantly and positively related to business turnover (sales). Gender appeared significant and negatively related to turnover, indicating that the earlier arrival entrepreneurs were more probable to increase the turnover (sales) of their businesses, while men were more likely than women to higher turnover (sales) rates.

The second equation with business age as dependent variable shows a different picture, one in which only one of the transnational networking measures, i.e., MEMBERSHIP and being Italian and Vietnamese are significantly affecting the business age. Educational level and push-pull indicators appear insignificant in the context of the business age. It appears that engagement in MEMBERSHIP is significantly and positively related to the business age suggesting that the longer time in business, the more the owner is associated with formal associations. Of the ethnicity variables being Italians or Vietnamese, is significantly and negatively associated with the business age, proposing that businesses owned by Italians and Vietnamese as compared to Jewish-owned businesses are less likely to survive a long time. The personal determinants emerged as significant in the length of stay in Canada and respondent's age, both significantly and positively related to the business age. Not

unexpectedly, older respondents had businesses that had been in existence for longer, as had those who had lived in Canada for longer periods of time.

Finally the third equation, with the number of full and part-time workers as dependent variable, emerged with disappointing results, as the included variables explain the total variance of the business size (employees) only marginally. Yet, it is important to notice that as opposed to the previous effectiveness measures introduced, delving into the independent variables one of the push-pull measures, pull-oriented family, is significantly and positively affecting the business size (employees). Length of residency in Canada has a significant and positive impact on the business size (employees) as well.

TABLE 3

Regression Analyses for the Three Measures of Business Effectiveness (Turnover, Business Age and Number of Full-Time Employees) as Dependent Variables with Types of Transnational Networking, Ethnicity<sup>8</sup>, Push-Pull Indicators, Educational Level, and Personal Measures

Variables Turnover (sales)	<u>B</u>	<u>B</u>	<u>T (p)</u>	
Types of transnational networking				
MEMBERSHIP	.732	.112	2.208*	
VISITING	.475	.138	2.601**	
ASSISTANCE	.098	.116	2.249*	
Ethnicity (alphabetic order)				
Chinese	724	182	-2.474*	
Indian/Sikh	241	057	809	
Italian	044	008	120	
Vietnamese	337	103	-1.298	
Human capital				
Educational level	.161	.135	2.719*	
Push-pull factors				
Pull entrepreneurial reasons	071	009	185	
Pull Family reasons	072	019	368	
Push Political reasons	130	034	622	
Push Economic reasons	289	289054		
Personal				
Length of stay in Canada	.023	.152	2.360*	
Respondent's age	.007	.039	.689	
Respondent's gender	634	163	-3.386**	

Turnover (sales): R = .403;  $R^2 = .263$ ; Adj  $R^2 = .231$ ; F(12, 407) = 5.067; p < .00\*\*.

As required, Jews were the ethnic group temporarily omitted from this analyses, while categories from the same variable were transformed to different dummy variables.

- continued -

Variables Business age	В	β	T (p)	
Types of transnational networking				
MEMBERSHIP	3.122	.092	2.350*	
VISITING	1.060	.058	1.414	
ASSISTANCE	.036	.008	.211	
Ethnicity (alphabetic order)				
Chinese	-1.433	069	1.191	
Indian/Sikh	-1.253	056	-1.015	
Italian	-2.796	101	-1.940*	
Vietnamese	-3.206	164	-2.650*	
Human capital				
Educational level	433	069	-1.796	
Push-pull factors				
Pull entrepreneurial reasons	.067	.002	.042	
Pull Family reasons	.464	.023	.586	
Push Political reasons	143	007	167	
Push Economic reasons	-1.166	043	-1.096	
Personal				
Length of stay in Canada	.291	.395	7.299**	
Respondent's age	.338	.380	8.835**	
Respondent's gender	653	032	859	

Business age: R = .686;  $R^2 = .470$ ; Adj  $R^2 = .451$ ; F(12, 427) = 24.289; p < .00\*\*.

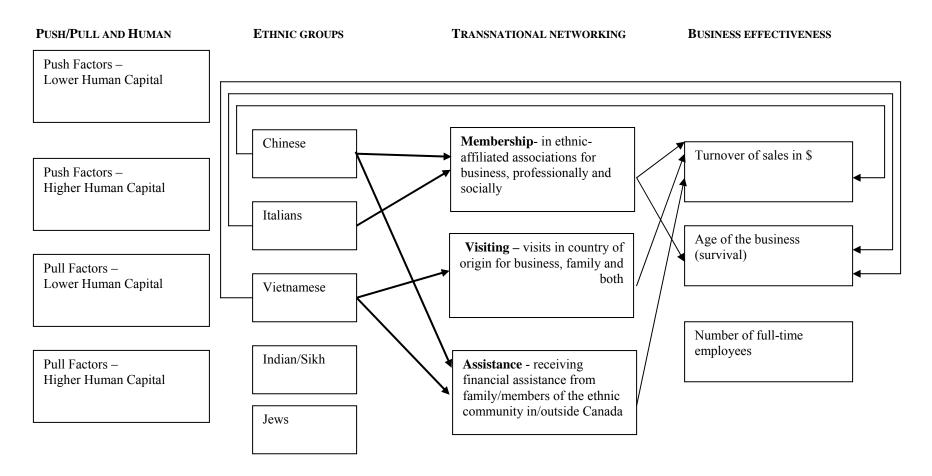
The results of this analysis support, at least partially, our hypotheses in stressing the role of the types of transnational networking, human capital and ethnicity in the business' effectiveness of entrepreneurial ethnic ventures. The insignificant results regarding the push-pull determinants in most of the business effectiveness measures introduced should be reflected on.

#### 5 Conclusion

This paper has explored the close and complementary relationships between transnational networking and business effectiveness' measures among ethnic minority entrepreneurs, many of whom were immigrants in Canada. Transnational networking does not comprise a one-faceted construct but rather integration of multiple actions of a cross-border nature, where the interests of these lines of activities are the same. Two major lines of empirical investigations on ethnic entrepreneurs' pathways for business success appear, both, associated to theories of ethnic enclave economies versus cross-border business activities (Itzigsohn & Cabral, 1999). The first focuses on human capital, especially on educational level and professional experience a well as the ability to master the language of the majority of the residents in the hosting country (Gould, 1994); while the second considers the predominance of push and pull factors for incorporation in the hosting labor market. Relatively few studies include transnational networking in these inquiries, specifically of transnational networking effects on ethnic entrepreneurial business effectiveness.

Figure 2 presents the main results investigated in this study. We first compared the transnational networking engagement of Chinese, Italians, Vietnamese, Indian/Sikhs and Jews lead entrepreneurs, from Montreal, Toronto and Vancouver. The results indicate, as hypothesized, that ethnic entrepreneurs were differently engaged in the activities of transnational networking; Chinese and Italians were mainly involved in formal, business and professional ethnic associations as well as at ethnic social clubs, supporting the relatively few studies found in the literature on this (Ghosh & Wang, 2003; Hibert & Ley, 2003; Leung, 2003; Wong & NG, 2002). Vietnamese were found to maintain the strongest business and family links with their homeland by visiting their homeland more frequently; these findings are consistent with the patterns reported in the research literature on immigrants from the Asian countries especially the highly-educated, and those immigrating for pull-oriented reasons (Chiswick & Miller, 2002; Saxenian, 2002). Our results also show that both Chinese and Vietnamese are relatively more frequently remittance receivers from their ethnic communities in and outside Canada; these finding support previous ones on Chinese entrepreneurs (Light, 2006), however contradict other results on Vietnamese (Bagwell, 2006) where they are presented as remittance transferors to their homeland and more dedicated to assist ethnic newcomers, rather then remittance receivers.

FIGURE 2
Research results of main relationships tested



We conceive the relationship of ethnicity and transnational networking as part of an inclusive entity where the push-pull factors along with human capital indicators influence entrepreneurs from different ethnic groups to engage in different transnational activities. Our second hypothesis, that inquired about these topics produced results that stress the significant differentiation between ethnic groups in educational level, part of human capital, and for the push-pull indicators. For educational level we found that Jews, Indian/Sikhs and Chinese, in this order, were relatively exceeded the Italians and Vietnamese; for the pull-originated factors, Indian/Sikhs, Italians and Chinese reported immigration for family reasons, and Indian/Sikhs for entrepreneurial reasons. Of the push factors Vietnamese and Chinese stated more frequently political and economic reasons for immigration, and Italians stated economic reasons.

Our results underline the relationship between ethnicity, push and pull factors, human capital and transnational networking, and suggest that transnational networking may not be an ethnic-related phenomenon but fluctuate across the push/pull and human capital measures of entrepreneurs as well. These findings seem to reinforce, only partly, previous studies showing that transnational networking varies across ethnic communities of immigrants (Hiebert & Ley, 2003; Walton-Roberts, 2003), though the previous studies are limited to remittance flows only. On the other hand, our findings indicate the significance of human capital and push-pull factors in engaging in the different types of transnational networking; and by forcing the predominance of human capital and push-pull factors, our finding may somewhat weaken the role of ethnicity in the engagement of transnational networking; thus partially conflicting with previous studies.

The results for our third hypothesis, as shown in Figure 2, reveal the significant role of transnational networking on the business effectiveness measures, especially on business turnover (sales) and business age (survival). Additionally, the results stress the minor role of the push-pull factors on the business effectiveness. Ethnicity and educational level emerged as significant with educational level having a moderated effect and ethnicity, especially being Chinese, Vietnamese and Italians having an intense effect on business effectiveness measures. The limited significant levels we observed in one of the business effectiveness measures, the business size (employees) could be explained by the differences in the types of the businesses and their potential growth ability; moreover the results may be biased as outsourcing personnel which has widely been implemented in entrepreneurial firms and SMEs, and that to a certain degree represent the business size, could not be included as employees.

This study is the first step in investigating ethnic entrepreneurs' business effectiveness driven from an inclusive research framework including push-pull factors, human capital, ethnicity

and transnational networking. The predominance of transnational networking and the marginal role of the push-pull factors in ethnic entrepreneurs' business effectiveness may be interpreted either by underlining the structural market processes ethnic immigrants meet in the host country, where performance is the 'name of the game'; and performance is represented by educational level and by the quality of transnational networking that the ethnic entrepreneurs possess, as well as other parameters. Broadly speaking, ethnic entrepreneurs meet a transparent market where the pathway for success and effectiveness are apparent and open for everybody, regardless their ethnicity or push-pull factors. These same results alternatively may reflect, based on the conflict theories, hidden process in the hosting market in which barriers are faced by ethnic immigrants and entrepreneurs, and thus the push-pull factors, i.e, the reasons for immigration, are disregarded; therefore we observed a marginal role of the push-pull factors in our analyses. This aspect of interpretation might imply on the limited opportunities the hosting labor market provides to immigrants entrepreneurs to realize their basic reasons for immigrating. Both interpretations of our results might reflect the competitive market ethnic immigrant encounter; one in which the race for the valuable resources such as transnational networking, starts immediately by arrival. Our results show that the length of stay in the hosting country plays an important role in their businesses effectiveness, implying on the relatively satisfactory adjustment of ethnic entrepreneurs in the hosting labor market.

Transnational networking should be studied more deeply in the context of ethnic entrepreneurship as its implications for policymakers are essential; establishment and management of stable, enduring transnational networks of the different types should lead to a successful incorporation of immigrants and ethnic minority entrepreneurs into the mainstream of host countries.

Future investigations might build on this study by investigating the relationship of transnational networking with different measures of business effectiveness; as well as broadening the study to other ethnic groups in Canada.

#### REFERENCES

- Aldrich, H. E., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship: toward a family embeddedness perspective, *Journal of Business Venturing*, **18(5)**, p. 573-596.
- Aldrich, H. E., & Waldinger, R. (1990). Ethnicity and entrepreneurship, *Annual Review of Sociology*, **16**: 111-135.
- Bagchi, A. D. (2003). *Making Connections: A Study of Networking Among Immigrant Professionals* (New York: LFB Scholarly Publishing).
- Bagwell, S. (2006). UK Vietnamese businesses: cultural influences and intracultural differences, *Environment and Planning C: Government and Policy* **24(1)**: 51–69
- Barbieri, P. (1997). The hidden treasure, a map of social capital in metropolitan area, *Ressegna Italiana di Sociologia*, **38(3)**: 343-370.
- Bui, T. (2001). Limited networking within the Vietnamese high-technology community in Silicon Valley, *The Berkeley McNair Research Journal*, **9**: 137-152.
- Chan, J. B. L., & Cheung, Y. W. (1985). Ethnic Resources and Business Enterprise: A Study of Chinese Businesses in Toronto, *Human Organization*, **44(2)**: 142-154.
- Chu, P. (1996). Ocial network models of overseas Chinese entrepreneurship: The experience of Hong Kong and Canada, *Canadian Journal of Administrative Sciences*, **13(4)**: 358-365.
- Chiswick, B. R., & Miller, P. W. (2002). Immigrant earnings: Language skills, linguistic concentrations and the business cycle, *Journal of Population Economics*, **15**(1): 31–57.
- Diner, H. R. (2004). *The Jews of the United States, 1654 to 2000* (California: University of California Press).
- Douw, L., Cen H., & David I. (2001) Rethinking Chinese Transnational Enterprises: Cultural Affinity and Business Strategies (London: Curzon Press, 2001).
- Dodd, S. D., & Patra, E. (2002). National differences in entrepreneurial networking, *Entrepreneurship and Regional Development*, **14**: 117-134.
- Dubini, P., & Aldrich, H. (1991). Personal and extended networks are central to the entrepreneurial process, *Journal of Business Venturing*, **6**: 305-313.
- Ghosh, S., & Wang, L. (2003). Transnationalism and Identity. A Tale of Two Faces and Multiple Lives, *The Canadian Geographer*, **47(3)**: 269-282.
- Gould, D. M. (1994). Immigrant links to the home country: Empirical implication for U.S. bilateral trade flows, *The Review of Economics and Statistics*, **76(2)**: 302-316.
- Greene, P. G. (2000). Self-employment as an economic behavior: An analysis of self-employed women's human and social capital, *National Journal of Sociology*, **12(1)**: 1-55.

- Green, E., & Cohen, L. (1995). Women's business are women entrepreneurs breaking new ground or simply balancing the demands of women's work in a new way? *Journal of Gender Studies*, **4(3)**: 297-314.
- Greve, A., & Salaff, J. W. (2003). Social networks and entrepreneurship, *Entrepreneurship Theory and Practice*, **28(1)**: 1-22.
- Guarnizo, L. & Smith, M. (1998). The Locations of Transnationalism, in Smith, M., & Guarnizo, L. *Transnationalism From Below: Comparative Urban and Community Research* (New Brunswick (USA): Transaction Publishers), 6: 3-35.
- Haber, S., & Reichel, A. (2005). Identifying performance measures of small ventures The case of the tourism industry, *Journal of Small Business Management*, **43(3)**: 257-287.
- Hardi, M.A. (1993). Regression with Dummy Variables Quantitative Applications in the Social Sciences (London: Sage Publications).
- Heenan, D. (2005). Flight Capital: The Alarming Exodus of America's Best and Brightest (Moutain View, CA: Davies-Black Publishing).
- Hiebert, D. (2002). Economic associations of immigrant self-employment in Canada, *International Journal of Entrepreneurship Behavior & Research*, **8(1/2)**: 93-112.
- Hiebert, D., & Ley, D. (2003). Assimilation, cultural pluralism and social exclusion among ethnocultural groups in Vancouver, *Urban Geography*, **24(1)**: 16-44.
- Itzigsohn, J., & Cabral, C. (1999). Mapping Dominican Transnationalism: Narrow and Broad Transnational practices, *Ethnic and Racial Studies*, **22**(2): 316-339.
- Johannisson, B., Alexanderson, O., Nowicki, K., & Senneseth, K. (1994). Beyond Anarchy and Organization Entrepreneurs in Contextual Networks, *Entrepreneurship and Regional Development*, **6**: 329-356.
- Kalleberg, A. L., & Leicht, K. T. (1991). Gender and Organizational Performance: Determinants of Small Business Survival and Success, *Academy of Management Journal*, **34**: 136-161.
- Kelly, P. (2003). Canadian Asian Transnationalism, *The Canadian Geographer*, **47(3)**: 209-218.
- Kloosterman, R., van der Leun, J., & Rath, J. (1999). Mixed embeddedness: (In)formal economic activities and immigrants businesses in the Netherlands, *International Journal of Urban and regional Research*, **23**(2): 253-267.
- Landolt, P. (2001). Salvadoran Economic Transnationalism: Embedded Strategies for Household Maintenance, Immigrant Incorporation, and Entrepreneurial Expansion, *Global Networks; A Journal of Transnational Affairs*, **1(3)**: 217-241.
- Levine, R. A. (2005). Assimilation, past and present, *Public Interest*, **159**: 93-110.
- Levitt, P. (2001). Transnational Migration: Taking Stock and Future Directions, *Global Networks: A Journal of Transnational Affairs*, **1(3)**: 195-216.

- Leung, M. W. H. (2003). Beyond Chinese, beyond food: unpacking the regulated Chinese restaurant business in Germany, *Entrepreneurship and regional Development*, **15(2)**: 103-118.
- Lewin-Epstein, N. Semyonov, M., Kogan, I., & Wanner, R. A. (2003). Institutional structure and immigrant integration: A comparative study of immigrants' labor market attainment in Canada and Israel, *The International Migration Review*, **37(2**): 389-420.
- Ley, D. (2000). Explaining variations in business performance among immigrant entrepreneurs in Canada, *Journal of Ethnic and Migration Studies*, **32(5)**: 743-764.
- Li, P. S. (2000). Earnings disparities between immigrants and native-born Canadians, *Canadian Review of Sociology and Anthropology*, **37**: 289-311.
- Light, I. (2006). *Deflecting Immigration: Networks, Markets, and Regulation in Los Angeles.* (New York: Russell Sage Foundation).
- Light, I. (2002). Immigrant place entrepreneurs in Los Angeles, 1970-1999, *International Journal of Urban and Regional Research*, **26**: 215-228
- Lo, L., Preston, V., Wang, S., Reil, K., Harvey, E., & Sui, B. (2001). Immigrants' economic status in Toronto: Rethinking settlement and integration strategies, in *Integrating Diversity*, (Toronto: The Centre of Excellence for Research on Settlement and Immigration (CERIS).
- Mata, F. (1996). Birthplace and economic similarities in the labour force: An analysis of Toronto's census microdata, in Lapierre, A., Lindstrom V., & Seiler, T. P., *Immigration and ethnicity in Canada* (Montreal: Association for Ethnic Studies), 85-112.
- Marger, N. M., & Hoffman, C. A. (1992). Ethnic Enterprise in Ontario: Immigrant Participation in the Small Business Sector, *International Migration Review*, **26**: 968-981.
- Massey, D. S. (1988). Economic Development and International Migration in Comparative Perspective, *Population and Development Review*, **14:** 383-413.
- McNanus, W. S. (1990). Labor Market Effects of Enclaves: Hispanic Men in the United States, *Journal of Human Resources*, **25**: 228-252.
- Menzies, T. V., Brenner, G. A., & Filion, L. J. (2003). Social capital networks and ethnic minority entrepreneurs: Transnational entrepreneurship and bootstrap capitalism, in Etemad, E., & Wright, R. W. *Globalization and Entrepreneurship: Policy and strategy Perspectives* (Northampton, MA: Edward Elgar Publishing), 125-151.
- Min, P. G. (2005). *Asian Americans: Contemporary Trends and Issues* (Thousand Oaks, CA: SAGE Publication).
- Nolin, C. (2004). Spatializing the Immobility of Guatemalan Transnationalism in Canada, *Canadian Journal of Latin American and Caribbean Studies*, **29** (57/58): 267-288.
- O'Neil, K. (2003). *Remittances from the United States in Context* (Washington D.C.: MPI, Washington D.C. institute).
- Owusu, T. Y. (2003). Transnationalism Among African Immigrants in North America: The Case of Ghanaians in Canada, *Journal of International Migration and Integration*, **4(3)**: 395-415.

- Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, Design, and Analysis: An Integrated Approach* (Hillsdale, NJ: Lawrence Erlbaum Associates).
- Pendakur, K., & Pendakur, R. (1998). The colour of money: earnings differentials among ethnic groups in Canada, *Canadian Journal of Economics*, **31**: 518-548.
- Pfeffer, J., & Salancik, G. R. (1978). *The External Control of Organization* (New York: Harper & Row Publishers).
- Portes, A., Haller W., & Guarnizo, L. (2002). Transnational Entrepreneurs: An Alternative Form of Immigrant Economic Adaptation, *American Sociological Review*, **67(2)**: 278-298.
- Preston, V., & Giles, W. (1997). Ethnicity, gender, and labour markets in Canada: A case study of immigrant women in Toronto, *Canadian Journal of Urban Research*, **6**: 135-159.
- Rath, J., & Kloosterman, R. (2002). The economic context, embeddedness and immigrant entrepreneurs, *International Journal of Entrepreneurial Behavior and Research*, **8(1-2)**: 162-167.
- Reijchman, R., & Tiende, M. (2000). Immigrants' pathways to business ownership: A comparative ethnic perspective, *The International Migration review*, **34(3)**: 82-705
- Reitz, J. G. (1990). Ethnic concentrations in labour markets and their implications for ethnic inequality, in Breton, R., Isajiw, W. W., Kalbach, W. E., & Reitz J. G. (eds.) *Ethnic identity and equality: Varieties of experiences in a Canadian city* (Toronto: University of Toronto Press).
- Renaud, J. (2002). What a Difference Ten Years Can Make? The Settlement Experience of Immigrants admitted to Quebec in 1989 (Saint-Foy: Les Publications due Québec).
- Renzulli, L. A., Aldrich, H. & Moody, J. (2000). Family matters: Gender, family, and entrepreneurial outcomes, *Social Forces*, **79(2)**: 523-546.
- Robb, A. M. (2002). Entrepreneurial performance by women and minorities: The case of new firms, *Journal of Developmental Entrepreneurship*, 7(4): 383-398.
- Robinson, R. (2005). Behind the State-Bounded Immigrant Incorporation Regime: Transnational Migrant Communities: Their Potential Contribution to Canada's leadership Role and Influence in a globalized World, Ottawa: The North-South Institute, prepared for the Walter and Duncan Gordon Foundation, at: <a href="http://www.nsiins.ca/english/pdf/transmigration\_document\_july\_22.pdf">http://www.nsiins.ca/english/pdf/transmigration\_document\_july\_22.pdf</a>
- Salaff, J. W., Greve, A., Wong, S-L., & Li Ping, L. X. (2003). Ethnic entrepreneurship, social networks, and the enclave, in Yeoh, B., Kiong, T. C., & Charney M. W. (eds.) *Approaching Transnationalism: Transnational Societies, Multicultural Contacts, and Imaginings of Home* (Boston: Kluwer Academic Publishers): 61-82.
- Saxenian, A. (2002). Transnational Communities and the Evolution of Global Production Networks: Taiwan, China and India, *Industry and Innovation*, **9(3)**: 183-202.

- Saxenian, A. (2005). From Brain Drain to Brain Circulation: Transnational Communities and Regional Upgrading in India and China, *Studies in Comparative International Development*, **40(2)**: 35-61.
- Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities, *Organization Science*, **11**: 448-469
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research, *Academy of Management Review*, **25(1)**: 217-226.
- Soyer, D. (2001). Class conscious workers as immigrant entrepreneurs: The ambiguity of class among Eastern European Jewish immigrants to the United States at the turn of the twentieth century, *Labor History*, **42(1)**: 45-59.
- Thompson, R. H. (1989). *Theories of Ethnicity: A Critical Appraisal* (New York: Greenwood Press).
- Tseng, Y. F. (1995). Beyond Little Taipei: Taiwanese Immigrant Businesses in Los Angeles, *International Migration Review*, **29**: 33-58.
- Waldinger, R. (1994). The Making of an Immigrant Niche, *International Migration Review* **28**: 3-30.
- Waters, J. (2003). Flexible Citizens? Transnationalism and Citizenship amongst Economic Immigrants in Vancouver, *The Canadian Geographer*, **47(3)**: 219-234.
- Walton-Roberts, M. (2003). Transnational geographies: Indian immigration to Canada, *The Canadian Geographer*, **47(3)**: 235-250.
- Wheeler, D., McKague, K., Thomson, J., Davies, R., Medalye, J., & Prada, M. (2005). Creating sustainable local enterprise networks, *MIT Sloan Management Review*, **47(1)**: 33-41.
- Whyte, M. K. (1996). The Chinese family and economic development: Obstacle or engine? *Economic Development and Cultural Change*, **45(1)**: 1-30.
- Wong, L. L., & NG, M. (2002). The emergence of small transnational enterprise in Vancouver: the case of Chinese entrepreneur immigrants, *International Journal of Urban and Regional Research*, **26(3)**: 508–530.
- Wong, P. K., & Ho, Y. P. (2004). Entrepreneurship, innovation and economic growth: Evidence from GEM data, *Special Issue of Small Business Economics*, **24(3)**: 335-350.
- Zimmer, C., & Aldrich, H. (1987). Resource mobilization through ethnic networks: Kinship and friendship ties of shopkeepers in England, *Sociological Perspectives*, **30**:422-446.

# Liste des cahiers de recherche publiés par les professeurs 2005-2006

# Institut d'économie appliquée

IEA-05-01	DÉSIRÉ VENCATACHALLUM ET BRUNO VERSAEVEL. « R&D Delegation in a Duopoly with Spillovers », 57 pages.
IEA-05-02	MICHEL NORMANDIN ET PASCAL ST-AMOUR « An Empirical Analysis of U.S. Aggregate Portfolio Allocations », 33 pages.
IEA-05-03	MARTIN BOILEAU ET MICHEL NORMANDIN. « Closing International Real Business Cycle Models with Restricted Financial Markets », 36 pages.
IEA-05-04	GEORGES DIONNE ET BENOIT DOSTIE. « New Evidence on the Determinants of Absenteeism Using Linked Employer-Employee Data », 35 pages.
IEA-05-05	MAURICE N. MARCHON. « Perspectives économiques canadiennes dans un contexte international », 27 pages.
IEA-05-06	RAYNAULD, JACQUES. « L'efficacité de l'apprentissage en ligne : le cas d'un cours d'économie à HEC Montréal », 10 pages
IEA-05-07	MICHEL NORMANDIN ET BRUNO POWO FOSSO. «Global versus Country-Specific Shocks and International Business Cycles», 44 pages.
IEA-05-08	RAYNAULD, JACQUES. « Le programme Virtuose : les ordinateurs portatifs et l'intégration des TIC à HEC Montréal - 1996-2001 », 88 pages

- IEA-06-01 DOSTIE, BENOIT ET LÉGER PIERRE THOMAS. « Self-selection in migration and returns to unobservable skills », 88 pages
- IEA-06-02 JÉRÉMY LAURENT-LUCCHETTI AND ANDREW LEACH. « Induced innovation in a decentralized model of climate change », 34 pages.
- IEA-06-03 BENOIT DOSTIE, RAJSHRI JAYARAMAN AND MATHIEU TRÉPANIER. « The Returns to Computer Use Revisited, Again », 27 pages.
- IEA-06-04 MICHEL NORMANDIN. « The Effects of Monetary-Policy Shocks on Real Wages: A Multi-Country Investigation », 38 pages.
- IEA-06-05 MICHEL NORMANDIN. « Fiscal Policies, External Deficits, and Budget Deficits », 50 pages.
- IEA-06-06

  J. DAVID CUMMINS, GEORGES DIONNE, ROBERT GAGNÉ AND ADBELHAKIM NOUIRA. « Efficiency of Insurance Firms with Endogenous Risk Management and Financial Intermediation Activities », 41 pages.
- IEA-06-07 LUC BAUWENS AND JEROEN V.K. ROMBOUTS. « Bayesian Inference for the Mixed Conditional Heteroskedasticity Model », 25 pages.
- IEA-06-08 LUC BAUWENS ARIE PREMINGER AND JEROEN V.K. ROMBOUTS. « Regime Switching Garch Models », 25 pages.
- IEA-06-09 JEROEN V.K. ROMBOUTS AND TAOUFIK BOUEZMARNI. « Nonparametric Density Estimation for Positive Time Series », 32 pages.
- IEA-06-10 JUSTIN LEROUX. « Cooperative production under diminishing marginal returns: Interpreting fixed-path methods », 25 pages.
- IEA-06-11 JUSTIN LEROUX. « Profit sharing in unique Nash equilibrium characterization in the two-agent case », 16 pages.
- IEA-06-12 ROBERT GAGNÉ, SIMON VAN NORDEN ET BRUNO VERSAEVEL. « Testing Optimal Punishment Mechnanisms under Price Regulation: the Case of the Retail Market for Gasoline », 27 pages.
- IEA-06-13 JUSTIN LEROUX. « A discussion of the consistency axiom in cost-allocation problems », 11 pages.
- IEA-06-14 MAURICE N. MARCHON. « Perspectives économiques canadiennes dans un contexte international », 29 pages.
- IEA-06-15 BENOIT DOSTIE. « Wages, Productivity and Aging », 30 pages.
- IEA-06-16 TAOUFIK BOUEZMARNI; JEROEN V.K. ROMBOUTS. « Density and Hazard Rate Estimation for Censored and α-mixing Data Using Gamma Kernels », 22 pages.