Social Capital and Business Performance: Ethnic Enterprises in Canada

Charles Perreault, Gabrielle A. Brenner, Teresa V. Menzies, Louis Jacques Filion, Charles Ramangalahy

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ABSTRACT:

The objective of this research was to identify links between social capital and the performance of ethnic businesses. Descriptive analyses, correlation tests, and discriminant analyses were conducted on social capital variables compared to an ethnic business performance index, using a sample of 573 entrepreneurs from Chinese, Italian, Indian, and Jewish backgrounds. The results point to the existence of a link between business performance and social capital such as membership in ethnic organizations and reliance on a co-ethnic workforce. Analysis was able to predict membership of higher and lower performing businesses from a selection of social capital variables. As an exploratory study, this brings unique results to the ethnic entrepreneurship literature. This research has implications for public policy, teaching, consulting, and theory building in the area of ethnic entrepreneurship.

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Introduction

Ethnic entrepreneurship has come to occupy an increasingly important position in the economy of industrialized nations. A number of academic, theoretical, and practical studies have examined the economic impact of ethnic entrepreneurs and the role they play. Most of these studies were carried out in the United States (Mandel & Farrell, 1992; Waldinger, 1989), but some have taken place in Canada. Head and Ries (1998), for example, reported that immigrant entrepreneurs increased exports to their countries of origin ten times faster than Canadian entrepreneurs, thanks to their knowledge of the markets concerned and their ease of access. Immigrants represent an important potential economic force, especially those who are younger, more innovative, and more entrepreneurially minded (Ehrenhalt, 1993).

Menzies, Brenner, and Filion (2003) reviewed the literature on ethnic entrepreneurship and social capital. They applied Aldrich and Waldinger's (1990) perspective regarding the use of social capital that is most evident in social structures such as the networks used by the ethnic groups. In a previous review, Brenner and Toulouse (1990) suggested that access to ethnic group resources is one of the main factors for the success of an ethnic business. Paradoxically, however, despite the degree of interest in ethnic entrepreneurship, relatively few empirical, quantitative, and theoretical studies have been carried out and there is a clear need for research into the links between the use of social capital and business performance. Thus, a further look at the subject is entirely justified.

Review of the Literature

The Concept of Social Capital[i]

This is not the first time researchers have examined the concept of social capital. Bruni and Sugden (2000) traced the roots of interest in social capital to the 18th century, with Hume (1739, 1740) and Adam Smith (1776), who said personal interest dictates that in order to maintain a good reputation, an individual who is part of a restricted group will not act deviantly in a transaction. Likewise, Paldam and Svendsen (2000) referred to the work of Jean-Jacques Rousseau (1762) on the importance of common values and the social contract, while Fukuyama (1995) pinpointed references to social capital and the concept of trust in the work done by Alexis de Tocqueville[ii] (1840) on the United States.

From a more practical point of view, social capital can be used to enforce contracts in a situation where there is uncertainty, while reducing transaction and control costs in a pragmatic way. As Landa (1994) illustrated, understanding the impact of social capital on ethnic businesses involves looking at how the cost of a transaction between traders in the same ethnic group is reduced by the use of social capital. Indeed, many researchers who have looked at social capital have compared it to the concepts of capitals and values to improve human activities (Bates, 1999; Bourdieu, 1983; Coleman, 1988; Tsai & Ghoshal, 1998; Walker, Kogut, & Shan, 1997; Woolcock, 1998, Field, 2003).

Social capital can be defined in several ways (Adler & Kwon, 2002). Although the definitions appear to vary, they share one point in common, namely, the notion of trust. Studies by Bruni and Sugden (2000); Glaeser, Laibson, Scheinkman, and Soutter (2000); Paldam and Svendsen (2000); Fukuyama (1995); and Coleman (1988) were all linked more or less explicitly to the concept of trust, while Menzies et al. (2003) went even further and identified social capital as one of the specific benefits of belonging to a group. This is in agreement with Sobel's (2002) understanding and presentation of the concept. The concept of social capital can thus be defined as trust put into a relationship with other agents and is derived, as pointed out by Adler and Kwon (2002), from the intuition that the goodwill that others have towards us is a valuable resource. The concept of social capital can also be associated with the concept of the resource-based "view" of the firm, as it also offers "a useful perspective for strategic management research" (Priem & Butler, 2001). In order to properly define the relationship between social capital and business performance, in this paper we have identified operational variables that characterize the use of social capital by ethnic entrepreneurs.

Social Capital and Entrepreneurship

Entrepreneurship is associated with innovation. It can be looked at from many perspectives, but most authors agree that entrepreneurship implies new value creation (Julien & Bruyat, 2000) or improved social wealth (Shane & Venkataraman, 2000). It is therefore consistent to look at social capital as a concept to support entrepreneurship activities. The question that comes to mind here is: Why has there been relatively little empirical research linking entrepreneurship activities with social capital?

2

Relationship between Social Capital and Ethnic Business Performance in the Literature

A review of the literature (Menzies et al., 2003) brought to light several studies of social capital and ethnic entrepreneurs, but very few offered a framework suitable for use in our specific work. We have assembled components found in our review of the literature to create such a framework. Reliance on the ethnic group operates in four specific sectors: manpower, sales, supplies, and financing. Social capital is also reflected in two more general measurements, namely, the number of hours devoted to networking each week and voluntary membership in commercial or other organizations.

The first way in which entrepreneurs rely on their ethnic groups is in the hiring of co-ethnic employees. Iyer and Shapiro (1999) designed a model for the development of ethnic firms indicating that reliance on a co-ethnic workforce is one of the first developmental stages.

Wong and Ng (1998), in a study of immigrant Chinese entrepreneurs in the Vancouver area, found the use of Chinese staff in 81% of cases. Wong (1997) reported an exclusively Chinese workforce in almost 60% of the 284 Chinese businesses surveyed. Lower labour costs appeared to underlie the positive impact cited by both Wong (1997) and Wong and Ng (1998). In contrast, Lee (1999) suggested that some entrepreneurs believe hiring co-ethnic members could lead to the emergence of potential competitors, an undesirable result. Bates (1994) reported a lower rate of success for Vietnamese businesses in the United States that rely on a co-ethnic workforce as compared with businesses with other types of workforces. The four research projects cited in this section worked with samples from different ethnic groups (Wong 1997, Wong & Ng 1998; Chinese: Bates 1994; Vietnamese: Lee 1999; Jews, Koreans, and Africans). The impact appears to be dependent on the ethnic group.

The second way in which ethnic entrepreneurs use social capital is through reliance on the ethnic group as a market (Menzies et al., 2003). Two contradictory viewpoints can be found in the literature concerning the impact on business performance. Portes and Jensen (1989) stated that access to a relatively protected market gives firms a degree of monopolistic power, whereas Iyer and Shapiro (1999) and Lee (1999) suggested that competition within the co-ethnic market is detrimental to the firm. Wong and Ng (1998) suggested that an entrepreneur who, for various reasons, is unable to penetrate the market of the host society will fall back on the co-ethnic market.

The third use of social capital by ethnic entrepreneurs refers to the relationship with suppliers, an important element in the operation of any business, and has a direct impact on business performance. Landa (1994) illustrated the reduction in transaction costs that results from doing business with a person of trust. If a similar logic is followed, trust relationships affect not only transaction costs but also control and contract enforcement costs. Juteau and Paré (1996) and Lee (1999), mentioned the reliance of entrepreneurs on co-ethnic suppliers, but did not attempt to assess the impact on performance. A positive impact on performance could be expected.

Clearly, business development and performance cannot be discussed without addressing monetary issues. After studying the literature, Butler and Greene (1997) observed that the entrepreneur or members of the family unit are the main providers of funds when a business is launched by a member of an ethnic community. These results were corroborated by Brenner,

3

Ramangalahy, Filion, Menzies, and Amit (2000). This practice can perhaps be explained by applying Landa's (1994) transaction cost reduction theory to financing transactions. However, there are other possible explanations, such as the one put forward by Iyer and Shapiro (1999), who noted the difficulty for ethnic entrepreneurs of obtaining financing by traditional means. This problem can be avoided by relying on informal sources of financing and a positive impact on performance can be inferred.

Putnam and Helliwell (1995) used the density of membership in voluntary organizations to quantify social capital. Their work, especially to evaluate the impact of social capital on economic performance in certain areas of Italy, is highly revealing as to the validity of this measurement in representing social capital.

Some of the many different definitions of social capital, and especially those proposed by Woolcock and Narayan (2000) and Rath and Kloosterman (1999), refer directly to the entrepreneur's network as the main source of social capital. We were unable to locate any study in the literature of the time spent developing a network, and so our use of this variable should be considered exploratory.

The literature on the concept of business performance is extensive. The objective here is not to produce an exhaustive overview of the literature, but rather to extract concepts that will allow us to identify variables and use them to gauge the performance of a business created by an ethnic entrepreneur. Venkataraman and Ramanujam (1986) proposed a bi-dimensional approach to characterize the types of measurement used to measure business performance. They state that the use of organizational data from primary sources has two main advantages: the greater ease with which responses can be obtained, given the lesser degree of sensitivity and confidentiality among the respondents; and the ability to take considerations other than financial into account in assessing performance. Chakravarthy (1986) pointed out the limits of using only financial performance measurements, as alone they do not quantify the general performance of a business or represent the process of evolution and transformation that takes place as the business adapts to its environment.

Methodology

Questionnaire and measures

The data used in this research came from questionnaire-based surveys conducted as part of a five-year research program. The surveys targeted a total of about 600 entrepreneurs from four ethnic communities established in Canada in the metropolitan areas of Montreal, Toronto, and Vancouver.

The survey questionnaire was an adapted and improved version of the methodology used experimentally by Brenner and Toulouse (1990) and by Brenner, Toulouse, and Célas (1992). It has two sections and is designed to define the social and demographic profile, business features, and entrepreneurial experience of each respondent. Where justified by the literature, we used closed questions or multiple-choice questions to collect the information we needed. In other cases, we used open questions, but asked the respondents to order their answers. To maximize the response rate and accuracy, instil a climate of confidence, and facilitate the identification of

4

new respondents, the questionnaire was administered at the entrepreneurs' work premises by interviewers from the same ethnic community. This approach also eliminated the language and cultural barriers commonly encountered in research involving immigrants and people from ethnic communities[iii].

From a practical point of view, the social capital variables used refer mainly to percentages, except for the number of hours spent networking and membership in organizations. Membership in a co-ethnic organization (social, commercial, or professional) is used in our analysis as a measurement of social capital. After aggregating the various answers, we constructed a binary variable, 1 in the case of membership in such an organization and 0 in other cases. This measurement differs from that of Putnam and Helliwell (1995) in that it encompasses voluntary and non-voluntary membership (for example, in professional associations), but it should not, in theory, influence the results. The variable used has one advantage over the measurement used by Putnam and Helliwell: the fact that the organizations are not explicitly identified means, if we assume that the respondents are acting in good faith, that we can include in this measurement membership in illegal or secret associations (which also create social capital).

Organizational data from our database are used to measure business performance, mainly because of their availability. The variables selected to isolate business performance are the number of employees (which refers to the size of the business), the number of years in business (which refers to the longevity factor as a measurement of success), and business turnover (the available measurement that is the closest to a financial quantification of a firm's success). In addition, the three variables present a relatively low risk of biased collection. The risk is perhaps slightly higher for the business turnover figure, but the use of response categories (seven) reduces the risk. The three measurements selected are analyzed, and the conclusions of this study take into account the limits inherent in the use of such performance proxies.

To process the data, we used descriptive analyses to isolate the social and demographic characteristics of the respondents, their activities, and their entrepreneurial experience. To test the feasibility of the research hypothesis advanced, that social capital impacts on business performance, we first performed correlation tests to better isolate the links between variables before carrying out the main analysis, that is, a discriminant analysis of social capital variables as compared to ethnic business performance. Although often used to build models to predict membership in groups, discriminant analysis is also useful in identifying the elements of social capital that have a significant impact on the performance of ethnic businesses. Discriminant analysis imposes a number of restrictive conditions, but nevertheless produces satisfying results. The normal multivariate distribution of observations and the equality of the variance-covariance matrices between the groups are the main conditions for the use of discriminant analysis. The results of this procedure are presented as follows. Each variable was assigned a coefficient within a linear model of the relationship. Special attention was paid to Wilk's lambda, which in fact is a test of the significance of the differences between the means of the respective groups. A value close to 1 means there is no difference, whereas a value closer to 0 means there is a difference between the groups. An F test was then carried out to facilitate the interpretation of the degree of significance of the differences between the variables.

Study Sample

The database contains information on four ethnic groups: Chinese, Italian, Sikh, and Jewish. Using a convenience sample, the data were collated across three major Canadian cities: Montreal, Toronto, and Vancouver. The total sample included 573 respondents who were entrepreneurs/owner managers of small businesses, namely, 151 Chinese, 135 Italians, 136 Sikhs, and 151 Jews.

Male entrepreneurs are strongly represented in the sample, constituting three quarters of all respondents. The average age is relatively similar for all groups. The Chinese respondents would more accurately be described as immigrant entrepreneurs rather than ethnic entrepreneurs, since only one respondent was born in Canada; on the other hand, about 40% of the Italian respondents were born in Canada. As shown in Table 1, 27% of all respondents were born in Canada.

Table 1
Social and Demographic Characteristics of Respondents

	Chinese		Italian		Sikh		Jewish		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Sex										
Male	101	66.9	97	71.9	118	86.8	117	77.5	433	75.6
Female	48	31.8	38	28.1	18	13.2	34	22.5	138	24.1
Age										
Mean/*SD*	44.20	9.46	46.81	12.35	42.74	9.45	47.35	13.91	45.29	11.59
Minimum	21		21		23		15		15	
Maximum	69		80		65		81		81	
Born in Canada	1	0.7	50	37.0	22	16.2	84	55.6	157	27.4
City										
Montreal	50	33.1	54	40.0	35	25.7	50	33.1	139	32.9
Toronto	52	34.4	56	41.5	51	37.5	51	33.8	159	37.7
Vancouver	49	32.5	25	18.5	50	36.8	50	33.1	124	29.4
Ethnic origin										
Chinese	151	100.0							151	26.4
Italian			135	100.0					135	23.6
Sikh					136	100.0			136	23.7
Jewish							151	100.0	151	26.4

Note: There were omissions by respondents; therefore totals may not sum up.

Result

Descriptive Results

The following descriptive results (see Table 2) help define the extent to which social capital is used by the entrepreneurs. In general, the Chinese entrepreneurs seem to rely more on the ethnic group for co-ethnic employees (ETHEMP), customers (SALES), suppliers (PURCH), and financing (STAFIN, CURFIN). As shown in Table 2, the Chinese businesses are younger (YEARS), have fewer employees (TOTEMP), and, in over 40% of cases, have a business turnover (TURNOV) of $100,000 or less. These observations concord with the development

6

model for ethnic businesses presented by Iyer and Shapiro (1999), who identify greater reliance on the ethnic group during the initial developmental phases of ethnic businesses. The Italian entrepreneurs seem to network more, in organizations and measured as weekly hours of networking (NETWOR), than other entrepreneurs from our sample. The Sikh entrepreneurs seem to be the median group, since their averages lie close to the averages for the sample as a whole. Finally, Jewish entrepreneurs tend to have more employees and a larger turnover; moreover, they seem to rely less on social capital than the other entrepreneurs.

There seem to be limited differences in the membership rate in ethnic associations (MEMB) between the four groups, with membership varying between 27% and 37%. One unexpected result was the fact that, on average, only 14% of start-up financing was obtained from co-ethnic sources. Given the already noted difficulty of obtaining financing, this result gives food for thought. One explanation can perhaps be found in the fact that more than 60% of the start-up financing was provided by the entrepreneurs themselves.

Table 2
Empirically Modeled Variables

		Chinese	Italian	Sikh	Jewish	Total
		Mean	Mean	Mean	Mean	Mean
		(*SD*)	(*SD*)	(*SD*)	(*SD*)	(*SD*)
Social capital variables						
% of total number of employees from ethnic group	**ETHEMP**	0.85 (0.29)	0.63 (0.39)	0.67 (0.36)	0.25 (0.31)	0.60 (0.40)
% of sales made within ethnic group	**SALES**	0.61 (0.36)	0.45 (0.32)	0.49 (0.37)	0.25 (0.26)	0.45 (0.36)
% of purchases made within ethnic group	**PURCH**	0.61 (0.45)	0.39 (0.39)	0.38 (0.42)	0.25 (0.35)	0.41 (0.43)
% of start-up financing from co-ethnic sources	**STAFIN**	0.17 (0.27)	0.10 (0.23)	0.16 (0.26)	0.14 (0.27)	0.14 (0.26)
% of current financing from co-ethnic sources	**CURFIN**	0.08 (0.22)	0.002 (0.02)	0.03 (0.13)	0.04 (0.15)	0.04 (0.15)
Membership in organizations[a]	**MEMB**	43 (28.5%)	49 (36.6%)	42 (30.9%)	40 (26.5%)	174 (30.4%)
Number of hours per week spent networking	**NETWOR**	18.5 (22.4)	21.9 (20.6)	13.3 (18.8)	6.5 (10.7)	14.8 (19.4)

		Chinese		Italian		Sikh		Jewish		Total	
		Mean (*SD*)		Mean (*SD*)		Mean (*SD*)		Mean (*SD*)		Mean (*SD*)	
Performance variables											
Number of employees											
Mean/*SD*	**TOTEMP**	6.5	10.5	13.5	31.3	8.1	16.0	24.5	78.9	13.4	45.2
Minimum		0		0		0		0		0	
Maximum		60		230		150		600		600	
Number of years in business											
Mean/*SD*	**YEARS**	11.5	6.8	18.6	11.7	13.1	7.5	18.1	13.9	15.3	10.8
Minimum		4		4		4		2		2	
Maximum		54		46		41		75		75	
Business Turnover		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
$0 to $100,000		65	43.0	30	22.4	42	30.9	31	20.5	168	29.4
$100,001 to $250,000		27	17.9	20	14.9	23	16.9	18	11.9	88	15.4
$250,001 to $500,000		23	15.2	16	11.9	24	17.6	22	14.6	85	14.9
$500,001 to $1,000,000	**TURNOV**	8	5.3	11	8.2	14	10.3	22	14.6	55	9.6
$1,000,001 to $2.5 M		11	7.3	8	6.0	16	11.8	23	15.2	58	10.1
$2.51M to $10 M		4	2.6	14	10.4	11	8.1	13	8.6	42	7.3
Over $10 M		1	0.7	6	4.5	2	1.5	11	7.3	20	3.5

[a] The reported values for this variable are frequencies and percentages.

Results of the Correlation Analyses

Our first analysis was based on correlation tests. We expected the test results to be significant as implicitly stated in the underlying hypothesis of a relationship between social capital and business performance, although the expected signs could not be clearly specified.

With regard to the number of years in business, there was a significant positive correlation with MEMB and SALES and a significant negative correlation with PURCH and ETHEMP. No other significant correlation was observed. The performance measurement representing the total number of employees was significantly and negatively correlated with only one variable, prompting questions about its usefulness as an illustration of business performance. On the other hand, TURNOV was significantly correlated with all but one social capital variable, highlighting it as a relatively good proxy of business performance. The fact that the significant correlation coefficients were mostly negative for all the performance measurements for the manpower variable was consistent with the results achieved by Bates (1994). The results are also consistent with the hypotheses of Iyer and Shapiro (1999) and Lee (1999) with regard to the impact of the co-ethnic clientele. In contrast, the positive and significant correlation for the performance measurements with the membership in organizations variable is close to the results reported by Putnam and Helliwell (1995) and Portes and Jensen (1989). The main analyses should produce results to clarify this situation, along with explanations for non-significant results.

Following the rather scattered results obtained through correlation tests, a factor analysis in principal components was carried out on the original performance variables TOTEMP, YEARS, and TURNOV, producing a performance index (INDEX) representing the aspects underlying the available performance measurements. Apart from theoretical indications in the literature, the first indication of a latent causality postulate between these variables was the correlation found

between them. Significant and relatively strong correlation coefficients between those three variables encouraged us to continue the procedure. In addition, Bartlett's test of sphericity, which gave a value of 48.0 for a significant chi-square distribution with a confidence level of over 99%, confirmed that the correlation matrix is not an identity matrix.

The KMO (Kaiser-Meyer-Olkin) statistic was 0.573, which indicated that the use of factor analysis in this case was relatively adequate. Given the available sample, the restrictions on the sample, and the significant correlation between variables, the performance index is judged adequate as a performance measurement and thus will be submitted to the main analyses. Therefore, there is a significant correlation between INDEX and the membership in ethnic organizations and the share of co-ethnic employees (Table 3).

Table 3
Coefficients of Correlation between Social Capital Variables and Performance Variables

Pearson coefficients	Turnover TURNOV	Total number of employees TOTEMP	Number of years in business YEARS	Performance index INDEX
ETHEMP	-0.34**	-0.10*	-0.15**	-0.16**
MEMB	0.09*	-0.003	0.11**	0.20**
SALES	0.21**	0.04	0.09*	0.06
PURCH	-0.11*	-0.04	-0.10*	-0.03
CURFIN	-0.10*	-0.02	-0.07	-0.10*
NETWOR	0.09*	-0.02	0.06	0.05
STAFIN	-0.06	-0.03	-0.02	-0.02

* $p < .05$, ** $p < .01$

Results of the Discriminant Analyses

Discriminant analysis allows the development of a model to predict membership in a group (i.e., the higher performing versus the lower performing firms). However, the analysis in this research was used to identify explanatory variables discriminating the dependent variable. The performance index constructed earlier was transformed into a dichotomous variable, 0 corresponding to firms with the lowest performance and 1 to firms with the highest performance. The thresholds were set at centiles 33 and 66. The sample was divided into three parts, but in order to highlight the differences, only the outer two groups were used. A significant difference was expected between Group 1 and Group 2 of the performance index for all the social capital variables.

All the explanatory variables listed in the Questionnaire and measures section were used, and various tests were conducted. A Box M test was carried out for the original matrices and for the matrices of the canonical discriminant functions. The condition of equality for the original variance-covariance matrices was not met, so to continue the analysis, we used as classification criteria the variance-covariance matrix for the canonical discriminant function. The Box M test did not allow for rejection of the hypothesis of equal population covariance matrices of canonical

discriminant functions. Consequently, separate (for each group) covariance matrices were used to classify the observations. This approach allowed us to provide a more adequate interpretation of the results of the discriminant analysis. Similarly, the discriminant analysis procedure required a normal multivariate distribution of the observations. Since the number of respondents in each group was over 30, normality was presumed. Since this type of assumption is generally accepted by researchers, there was no need for non-parametric equivalents of the tests.

Table 4 shows the results of the discriminant analysis of social capital variables as compared to the performance index. A single function was tested, which caused no problems for the use of the canonical discriminant function matrices, and the function had a Wilk's lambda of 0.791 with a confidence level of over 99%. The discriminant function derived from this classification procedure allowed the observations to be classified in the right groups with a general success rate of 69.5%. Interestingly, the function predicts membership of the higher performing group (76.4%) better than membership of the lower performing group (61.3%).

Table 4
Discriminant Analysis of Social Capital Variables Compared to Performance Index

Variables	Mean of total sample	Mean		F df1=1 df2=270	Wilk's lambdas
		Group 1 1/3: lowest performing	Group 2 3/3: highest performing		
ETHEMP	0.59	0.71	0.48	22.2***	0.924
MEMB	0.28	0.15	0.39	20.8***	0.928
CURFIN	0.03	0.06	0.01	8.6***	0.969
PURCH	0.41	0.49	0.35	8.3***	0.970
NETWOR	0.18	0.15	0.21	4.45**	0.984
STAFIN	0.16	0.18	0.15	1.2	0.996
SALES	0.75	0.64	0.83	0.81	0.997
	N = 272	*N* = 124	*N* = 148		

** p < .05, *** p < .01

Five out of seven social capital variables allowed us to discriminate between high-performing firms and low-performing firms. The most significant variable was the share of co-ethnic employees, with a Wilk's lambda of 0.924, followed closely by membership in ethnic organizations (Wilk's lambda of 0.928). The two associated coefficients have opposite signs, so as the share of co-ethnic employees is higher in lower performing firms, the higher performing entrepreneurs tend to engage more in ethnic organizations. Those outcomes are similar to results obtained with correlation, while the latter is similar to the conclusions of Putnam and Helliwell (1995).

The share of current financing and the share of purchases from co-ethnic suppliers are also significant discriminant variables, with a confidence level over 95%. The results indicate that lower performing ethnic businesses tend to rely more on co-ethnic suppliers and co-ethnic financial sources. In short, they rely more on their network when they are considered as lower

performing, or perhaps they are lower performing because they have remained too closely linked to the original ethnic network. Furthermore, our results show that high-performing entrepreneurs spend more time (on a weekly basis) developing their network of contacts, we assume gradually outside the original ethnic network. On the other hand, the co-ethnic share of start-up funding and the share of sales to co-ethnic clients did not produce significant results, which is not surprising in the case of start-up funding considering the poor non-significant correlation with any of the performance measurements.

Summary and Conclusion

The main objective of this research was to identify links between business performance and social capital, in its various forms, for ethnic entrepreneurs. We hypothesized, based on a survey of the literature on social capital and ethnic entrepreneurship, that there is a link between business performance and social capital. We empirically tested this hypothesis utilizing four ethnic groups—Chinese, Italian, Sikh, and Jewish—in three Canadian cities— Montreal, Toronto, and Vancouver. To test the validity of the research hypotheses, we used two methods of statistical analysis: correlation and discriminant analysis. Social capital was measured using seven variables, and business performance was measured using three individual variables and an index incorporating them. Table 5 summarizes the results of the various analyses.

Table 5
Overview of Results

	Social capital variables						
	ETHEMP	SALES	PURCH	STAFIN	CURFIN	NETWOR	MEMB
Mean	0.60	0.45	0.41	0.14	0.04	174 freq.	14.8
(*SD*)	(0.40)	(0.36)	(0.43)	(0.26)	(0.15)	(30.4%)	(19.4)
Correlation							
TURNOV	-	+	-	NS	-	+	+
TOTEMP	-	NS	NS	NS	NS	NS	NS
YEARS	-	+	-	NS	NS	NS	+
INDEX	-	NS	NS	NS	-	NS	+
Discriminant analysis							
INDEX	-	NS	-	NS	-	+	+

+ : Significant positive impact, - : Significant negative impact,   NS : Non-significant

It appears that two of the variables studied are most relevant for testing our research hypothesis. Business performance was negatively related to percentage of ethnic employees, and positively related to membership in co-ethnic organizations. This can be interpreted to mean a higher reliance by lower performing firms on co-ethnic employees. However, it is impossible to determine empirically whether the use of social capital hampers performance, or whether poor performance leads to the use of social capital. Recruiting from the ethnic network could cause

recruiting less productive employees thus impacting on business performance. On the other hand a poorly performing business may not be able to afford hiring at market wages and thus must hire lower performing employees.

On the other hand, membership in organizations has a positive impact on the performance of ethnic businesses, as higher performing entrepreneurs tend to be members of co-ethnic organizations, suggesting more networking on their part. We must note that membership in co-ethnic organizations is a more reliable proxy for networking than hours spent networking in a week due to potential response error. This finding is similar to that of Putnam and Helliwell (1995).

The overview of the results suggests that the other proxy for social capital used (percentage of sales and purchases made within the ethnic group, share of current financing from co-ethnic sources and hours per week spent networking) could also be deemed appropriate in identifying a significant link between social capital, but on a somewhat lower level. However, the share of co-ethnic sources of funding showed non-significant results. We dismissed it as an inappropriate social capital variable.

It is important to bear in mind that the results can be interpreted in different ways. Our survey provided static information, whereas business performance and the impact of social capital on performance are elements of a more dynamic relationship. To properly isolate the relationship between social capital and business performance using discriminant analysis, we must examine the meaning of the relationship itself. Although this is a theoretical consideration, the problem arises when interpreting the results of the discriminant analysis. Does social capital affect business performance or vice versa? It is important to refer to theoretical works to determine the endogenous or exogenous nature of the explanatory variables with regard to the performance measurements. For example, Iyer and Shapiro (1999) identified reliance on the ethnic group (in general) as belonging to the early stages in the development of an ethnic business, which is, in our view, an explanation that fits well with our results for the variable representing the percentage of co-ethnic employees.

Nevertheless we were able to predict membership of higher and lower performing businesses from a selection of social capital variables. Field (2003), based on generally accepted views, states that social capital contributes positively to organizational performance. Our exploratory study provides empirical results to substantiate the generally held views regarding social capital and business performance. Future research should build on our methodology to examine other forms of social capital and utilizing additional measures of business performance.

Finally, it is important to bear in mind that our analysis was restricted methodologically by the limitations of the database used.

References

Adler, P.S., & Kwon, S.-W. (2002), "Social capital: Prospects for a new concept", *Academy of Management Review,* Vol. *27*, p. 17–40.

Aldrich, H.E., & Waldinger, R. (1990), "Ethnicity and entrepreneurship", *Annual Review of Sociology,* Vol. 16*,* p. 111–135.

Bates, R. (1999), *Ethnicity, capital formation, and conflict* (Working Paper n° 12). New York: World Bank Social Capital Initiative.

Bates, T. (1994), "An analysis of Korean-immigrant-owned small-business start-ups with comparisons to African-American and non-minority-owned firms", *Urban Affairs Quarterly,* Vol. 30, n° 2, p. 227–248.

Bourdieu, P. (1983), "The forms of capital", in J.G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (p. 241–258). New York: Greenwood Press.

Brenner, G.A., Ramangalahy, C., Filion, L.J., Menzies, T.V., & Amit, R.H. (2000), "Problems encountered by ethnic Chinese entrepreneurs: A comparative analysis in three major Canadian cities", in D. Deschoolmeester, D. De Steur, K. Gillis, & T. Schamp (Eds.), *Entrepreneurship under difficult circumstances* (pp. 369–383) (Proceedings of the 30th European Small Business Seminar). Ghent, Belgium.

Brenner, G.A., & Toulouse, J.M. (1990), *Immigrants as entrepreneurs: Developing a research model* (Working Paper n° 90-03). Montreal, Canada: HEC Montréal, Maclean Hunter Chair of Entrepreneurship.

Brenner, G.A., Toulouse, J.M., & Célas, G. (1992), *Haitian entrepreneurs in Montreal: New lives, new businesses* (Working Paper n° 92-09). Montreal, Canada: HEC Montréal, Maclean Hunter Chair of Entrepreneurship.

Bruni, L., & Sugden, R. (2000), "Moral canals: Trust and social capital in the work of Hume, Smith and Genovesi", *Economics and Philosophy,* Vol. 16*,* p. 21–45.

Butler, J.S., & Greene, P.G. (1997), "Ethnic entrepreneurship: The continuous rebirth of American enterprise", in D.L. Sexton & R.W. Smilor (Eds.), *Entrepreneurship 2000* (p. 267–289). Chicago: Upstart.

Chakravarthy, B.S. (1986), "Measuring strategic performance", *Strategic Management Journal*, Vol. 7, p. 437–458.

Coleman, J.S. (1988), "Social capital in the creation of human capital", *American Journal of Sociology,* Vol. 94(Suppl.), p. S95–S120.

Ehrenhalt, S.M. (1993), "Economic and demographic change: The case of New York City". *Monthly Labor Review,* Vol. 116, n° 2, p. 40–51.

Field, J. (2003), *Social Capital*, London: Routledge.

Fukuyama, F. (1995), "Social capital and the global economy", *Foreign Affairs,* Vol. 75, n° 5, p. 89–104.

Glaeser, E., Laibson, D., Scheinkman, J., & Soutter, C. (2000), "Measuring trust", *Quarterly Journal of Economics,* Vol. 115, n° 3, p. 811–846.

Head, K., & Ries, J. (1998), "Immigration and trade creation: Econometric evidence from Canada", *The Canadian Journal of Economics,* Vol. 31, n° 1, p. 47–62.

Hume, D. (1739), *A treatise of human nature: Being an attempt to introduce the experimental method of reasoning into moral subjects* (Vols. 1-2), London: John Noon.

Hume, D. (1740), *A treatise of human nature: Being an attempt to introduce the experimental method of reasoning into moral subjects* (Vol. 3), London: Thomas Longman.

Iyer, G.R., & Shapiro, J.M. (1999), "Ethnic entrepreneurial and marketing systems: Implications for the global economy", *Journal of International Marketing,* Vol. 7, n° 4, p. 83–110.

Julien, P.-A., & Bruyat, C. (2000), "Defining the field of research in entrepreneurship", *Journal of Business Venturing*, Vol. 16, p. 165–180.

Juteau, D., & Paré, S. (1996), « L'entrepreneurship ethnique », *Interfaces,* Vol. 17, n° 1, p. 18–28.

Landa, J.T. (1994), *Trust, ethnicity, and identity: Beyond the new institutional economics of ethnic trading networks, contract law, and gift-exchange*. Ann Arbor, MI: University of Michigan Press.

Lee, J. (1999), "Retail niche domination among African-American, Jewish and Korean entrepreneurs", *American Behavioral Scientist,* Vol. 42, n° 9, p. 1398–1417.

Mandel, M.J., & Farrell, C. (1992, July 13), "The immigrants: How they're helping to revitalize the US economy", *Business Week*, p. 114–122.

Menzies, T.V., Brenner, G.A., & Filion, L.J. (2003), "Social capital, networks and ethnic minority entrepreneurs: Transnational entrepreneurship and bootstrap capitalism", in H. Etemad & R. Wright (Eds.), *Globalization and entrepreneurship: Policy and strategy perspectives* (p. 125–151), Cheltenham, UK, Northampton, MA: Edward Elgar (McGill International Entrepreneurship Series).

Paldam, M., & Svendsen, G.T. (2000), "An essay on social capital: Looking for the fire behind the smoke", *European Journal of Political Economy,* Vol. 16, p. 339–366.

Portes, A., & Jensen, L. (1989), "The enclave and the entrants", *American Sociological Review,* Vol. 54, n° 6, p. 929–949.

Priem, R.L., & Butler, J.E. (2001), "Is the resource-based "view" a useful perspective for strategic management research?", *Academy of Management Review*, Vol. 26, n° 1, p. 22–40.

Putnam, R.D., & Helliwell, J.F. (1995), "Economic growth and social capital in Italy", *Eastern Economic Journal,* Vol. 21, n° 3, p. 295–307.

Rath, J., & Kloosterman, R. (1999), "Outsider's business: A critical review of research on immigrant entrepreneurship", *International Migration Review*.

Rousseau, J.-J. (1762), *Du contrat social ou principes du droit politique*.

Shane, S., & Venkataraman, S. (2000), "The promise of entrepreneurship as a field of research", *Academy of Management Review*, Vol. *25*, p. 217–226.

Smith, A. (1776), *An inquiry into the nature and causes of the wealth of nations*. Oxford: Oxford University Press.

Sobel, J. (2002), "Can we trust social capital?", *Journal of Economic Literature,* Vol. 40*,* p. 139–154.

Tocqueville, A. de (1831), *Democracy in America*.

Tsai, W., & Ghoshal, S. (1998), "Social capital and value creation: The role of intrafirm networks", *Academy of Management Journal*, Vol. 41*,* p. 464–478.

Venkataraman N., & Ramanujam, V. (1986), "Measurement of business performance in strategy research: A comparison of approaches", *Academy of Management Review,* Vol. 11, n° 4, p. 801–814.

Waldinger, R. (1989), "Structural opportunity or ethnic advantage? Immigrant business development in New York", *Migration Review*, Vol. 23, n° 1, p. 48–72.

Walker, G., Kogut, B., & Shan, W. (1997), "Social capital, structural holes and the formation of an industry network", *Organization Science*, Vol. 8, p. 109–125.

Wong, L.L. (1997), "Globalization and transnational migration: A study of recent Chinese capitalist migration from the Asian Pacific to Canada", *International Sociology,* Vol. 2, n° 3, p. 329–351.

Wong, L.L., & Ng, M. (1998), "Chinese immigrant entrepreneurs in Vancouver: A case study of ethnic business development", *Canadian Ethnic Studies,* Vol. 30, n° 1, p. 64–85.

Woolcock, M. (1998), "Social capital and economic development: Toward a theoretical synthesis and policy framework", *Theory and Society*, Vol. *27*, n° 2, p. 151–208.

Woolcock, M., & Narayan, D. (2000), "Social capital: Implications for development theory, research, and policy", *The World Bank Research Observer,* Vol. 15, n° 2, p. 225–249.

Endnotes

[i] For an extensive literature review on that topic, see the bibliography on the following site: http://www.worldbank.org/poverty/scapital/.

[ii] Alexis-Charles-Henri-Maurice Clerel de Tocqueville (1805–1859), historian and French political leader, visited the United States (1835–1840) and wrote an extensive report of what he saw. His report became a classical text in understanding the way society and the political system worked in the US.It can be found at http://xroads.virginia.edu/~HYPER/DETOC/toc_indx.html

[iii] Integration of immigrants seems faster in the US than in Canada, where ethnic groups often continue to use their original language many generations after the original immigration. This is why Canada is often referred to as a "mosaic" instead of a "melting pot."