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Growth Aspirations and Financing Choices of Immigrant-Owned New Ventures in Canada

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Abstract

The job-creating growth of new firms depends critically on access to financial capital; however, access to capital can also be limited—and growth constrained—if business owners choose not to apply for funds. External financial capital funds both working capital and fixed asset expansion, both of which are required for growth. New firms founded by recent immigrants contribute disproportionately to growth of small- and medium-sized enterprises (SMEs). Immigration policy lies at the heart of current international debates it is essential to ensure that the policy discussions are well informed. Among key issues in these debates is the extent to which immigrants add to prosperity. Neville et al. (2014) are among those who have shown that growth of young immigrant-owned exporter firms adds disproportionately to job creation and economic welfare, at least in Canada. Because growth requires financing this paper examines, conceptually and empirically, financing choices of young firms with particular emphasis on firms owned by recent immigrants. It finds that immigrant owners of growth-oriented young firms were less likely to apply for financing than growth-oriented firms owned by non-immigrants. This is important because immigration policies often encourage "business immigrants," those immigrants who intend to start a business. Such applicants are often presented with strenuous requirements in order to be granted a visa (including minimum levels of wealth and experience, and a viable business plan with the intention to hire employees). It is therefore essential to determine the extent to which the financial system allows for the provision of the resources that are necessary to fuel growth among young immigrant-owned enterprises. Immigration policy might be compromised if immigrants are discouraged from accessing the forms of financing consistent with realizing growth aspirations. Growth-oriented immigrant owners—precisely those who ought to be seeking capital—are less likely to apply for growth-enabling financing.

Keywords: *Entrepreneurs, risk, leadership, intellectual capital, effectuation, triple loop learning*

INTRODUCTION

The growth of new firms is widely regarded as a key element in the formation of new jobs and economic prosperity (Haltiwanger et al., 2010). It has also been noted that many of the most successful growth-oriented firms have been founded and managed by recent immigrants (Dalziel, 2008, Neville, Orser, Riding, Jung, 2014) and that immigrants appear to be a catalyst for international trade from their host countries (Co, Euzent, & Martin, 2004; Dunlevy & Hutchinson, 1999; Head & Ries, 1998; Mundra, 2005; Neville et al., 2014; Partridge & Furtan, 2008). The widely held belief that immigrants are particularly entrepreneurial has prompted more than 30 countries to adopt policies that encourage and facilitate immigration of entrepreneurs (Ley, 2006) and is further exemplified in the popular media.[1)]

In order to nourish growth, however, external capital is usually required to finance the need for additional working capital and for additions to the asset base (Vos et al., 2007, among many). Accordingly, the growth of immigrant-owned firms—and, indeed, the growth of firms not owned by immigrants—depends critically on access to financial capital. However, recent immigrants tend to lack credit histories, have relatively more limited business networks and are focussed on different market segments compared with those of resident entrepreneurs. Accordingly, immigrants may make different financing choices, some by necessity and some by preference, than non-immigrants. Choices may even self-limit certain financing sources. Therefore, this work compares the financing choices of recent immigrant business owners with those of counterpart non-immigrant business owners.

This is an important issue because access to capital fosters wealth-creation. However, it is has been found "that the most innovative firms are less successful in loan markets than their less innovative peers" (Freel, 2007, p. 23; see also Binks and Ennew, 1996; among others). To the extent that immigrant-owned enterprises are over-represented among high growth SMEs, the financing of immigrant-owned businesses is a research question that also contributes to the discussion regarding owner-level influences on SME financing structures and decisions. The recognition of the need for capital among growing SMEs has prompted virtually all developed countries to intervene in the credit markets through establishing development banks or by means of loan guarantee schemes. Therefore, this paper's focus on the financing choices of young growth-oriented firms, with special reference to immigrant-founded new ventures, lies at the heart of immigration, commercial, banking and trade policies.

Moreover, immigration policy lies at the heart of current debates around the world. One extreme is exemplified, perhaps, by countries such as the United States, those nations that are arguably becoming less friendly to immigration than many. At the other extreme, Germany may be illustrative of countries that are currently more welcoming. A key issue in these debates is the extent to which immigrants either add to prosperity or are economic burdens. To this point, Neville et al. (2014) has shown that, in the Canadian context, the growth of young exporter firms owned by recent immigrants adds disproportionately to job creation and economic welfare. This research, which also lies in the Canadian context, represents a nation in which the vast majority of residents are in fact immigrants. This work therefore examines the extent to which immigrant owners of new firms are able to access the financial capital necessary for job-creating enterprise growth.

To examine these questions, the paper opens with a short review of the salient research literature that leads to a conceptual rationale and to the development of testable research hypotheses. A detailed description of data and empirical methods follow along with the empirical findings. This work reports on secondary analysis of data drawn from a large-scale stratified survey of business owners. The analysis focuses on 2,915 enterprises that had been founded within the five-year period previous to the administration of the survey. Of these, 132 business owners had immigrated during the same five-year period. The survey data include comprehensive information about the business owners, including owners' growth aspirations, demographic information about the firm, and whether the firm had sought external financing (as well as the specific type of financing sought). The paper closes with a summary of results and a discussion of the implications, limitations and future directions of this research.

REVIEW OF THE RESEARCH LITERATURERE

Financing growth-oriented new ventures

Financing growth-oriented new businesses is an important element with respect to attaining national and regional goals of economic development. It is generally recognized that the development of new firms contributes disproportionately to economic welfare and job creation (Haltiwanger et al., 2010); however, it has also been found that the inability to access financing acts as a constraint to enterprise growth (Demirguc-Kunt, 2006; OECD, 2006). Traditionally, academic literature's consideration of SMEs' access to capital is vested in the presumption of market failures (Stiglitz and Weiss, 1981) or credit rationing (Storey, 1994). The conceptual model that governs most of this research literature presumes that businesses advance loan applications to commercial lenders and then explores the impacts of the asymmetrical information that is understood to permeate the lender-borrower relationship. However, access to capital can be limited for a variety of other reasons. Often, business owners make choices that result in self-limitation of access to financing. Kon and Storey (2003) address a situation whereby some potential borrowers, who they describe as "discouraged borrowers," choose not apply for bank loans because they feel they will be rejected. To this point, Kon and Storey cite Levenson and Willard (2000) to the effect that more than twice as many small firms are "discouraged" as are rejected for loans from financial institutions in the United States. Similarly, Wynant and Hatch (1991) describe a situation they term "informal turndowns" in which loan applications are discouraged on the basis, for example, of a social conversation between a business owner and bank employee: again a formal loan application does not necessarily ensue. While their data is dated, Wynant and Hatch suggest that informal turndowns occur approximately as frequently as formal rejections of loan applications. Furthermore, some business owners—especially owners of innovative firms—may eschew debt financing in favour of equity capital (Freel, 2006). Brierley (2001) describes the converse, where firms that ought to apply for equity financing inappropriately apply for commercial loans. Brierley maintains that commercial lenders may perceive firms seeking growth as relatively informationally opaque (risky) and are best advised to seek equity financing (see also Binks & Ennew, 1996). This paper therefore focuses on the choices business owners make with respect to seeking financing.

Historically, the theory of financing choices and of capital structure, the outcome of such choices, comprises one of the most extensive literatures in finance. In the context of large public firms the classical works of Modigliani and Miller (1958, 1963), amended later by Miller (1977), suggest that there is an optimal capital structure for a given firm, one that reflects trades-offs among the costs and benefits of debt financing, personal and corporate taxation of dividend and interest income, costs of financial distress and agency costs. Myers (1984) and Myers and Majluf (1984) developed an alternative paradigm known as the "pecking order" theory, which argues that internal financing is preferred over external; debt is the preferred source of external finance; and external equity is issued only as a last resort. Both sets of theories provide important insights; however Brealey and Myers (2000) and Graham and Harvey (2001) maintain that neither theory fully explains observed capital structures.

These classical theories were developed in the context of capital markets in which firms have recourse to public markets for debt and equity, where information is widely available and in which markets provide liquidity. However, Romano et al. (2001) indicate that new and small firms do not usually operate in the public equity and debt markets that are typically the paradigm of financial theorists. Uzzi and Gillespie (1999) add that social capital and the inseparability of entrepreneurs from their businesses make obtaining financing a much different proposition than the act of securing capital for major corporations. Accordingly, several researchers have tried to adapt the classical theories to the small business context. For example, Howorth (1999), Berggren, Olofsson and Silver (2000), Berggren (2009), Robb and Robinson (2009) and Beck and his colleagues (2008) all report evidence that the pecking order theory may hold for small firms—but for quite different reasons than those which form the basis of the theories as they apply to large firms.

In examining the capital structure of SMEs across various countries, Psillaki and Daskalakis (2009) concluded that capital structure choice was a result of firm characteristics and not financial or institutional attributes of the country in which the firm operated. While commercial loans appear to be the mainstay of SME external financing Robb and Robinson (2009), Psillaki and Daskalakis (2009) as well as Beck et al. (2008) report that firm size is associated with financial leverage: smaller firms were relatively less likely to be highly levered. This implies that smaller firms may be relatively less likely to seek traditional forms of debt financing from banks and financial institutions. Other research has found that firms operating in certain industries, specifically knowledge-based firms, are relatively more likely to employ equity financing (Baldwin & Johnson, 1995; Ben-Ari & Vonortas, 2007).

An important *caveat* to the empirical literature on SMEs financing structures, however, is that virtually all findings are based on the types of financing actually obtained by firms. The conclusions based on observations of types financing obtained make the tacit assumption that the types of financing obtained are the same as the types of financing that had been sought. This assumption is conceptually inconsistent with capital rationing (borrowers are refused the form of capital they seek) and is at variance with the understanding that financing applications from small firms (and especially new firms) are frequently rejected. For example, new firms typically face high turndown rates of debt financing requests: rejected firms must resort to less preferred alternatives. Hence, the types of financing sought and the types of financing obtained are likely to differ.

Conceptually, it seems reasonable to expect that growth aspirations are central to SME owners' desire for external financing. Growth can only be accomplished by adding to the asset base, the labour base (or both) and growth invariably involves additions to net working capital. Financial resources are required in order to add to the stock of assets or of labour, often prompting the need for external capital. Additions to the left side of the balance sheet either draws down cash or requires additions to the right side of the balance sheet: new financing. Arguably, this is especially true for young firms, the focus of this study, where cash flows are typically insufficient to finance growth. These arguments are to a large extent common sense but have also been confirmed empirically (see, among others, Demirguc-Kunt, 2006; OECD, 2006; Cosh, Cumming and Hughes, 2009; and Neville et al., 2014). Because growth intention is an antecedent of the need for finance, it is important to ensure that growth intention is a precursor for financing in the data to be used in this analysis.

Proposition 1. Growth aspirations are a primary driver of applications for external capital.

Financing immigrant-owned business ventures

Business ownership by immigrants is reportedly higher in developed countries such as the United States, Canada, Australia and the United Kingdom (SBA, 2008). In the United States, the Small Business Administration Office of Advocacy reports that immigrants account for 12.5% of the total population of US business owners and immigrants are also 30% more likely to start a business than non-immigrants (SBA, 2008). Among immigrant-owned firms, 51.6% are service-based (compares with 45.6% of all US businesses). According to Canadian data, 15.3% of immigrant-owned firms are in professional services, 11% in educational and health services, 10% in arts, entertainment and recreation, and 15.3% in other services (Industry Canada, 2009). Immigrants' businesses also appear to be relatively highly oriented towards international trade (Portes et al., 2002) and immigrant-owned firms were found to be significantly more likely to export than counterpart businesses not owned by-immigrants (Orser *et al*., 2008).[2)]

According to previous research, immigrant-owned firms tend to be smaller than non-immigrant owned firms (SBA, 2008; Kushnirovich & Heilbrunn, 2008). This can be linked to the reality that immigrants may be pushed into entrepreneurial endeavours as a form of economic adaptation. Consequently, firm growth may not be as pressing as salary substitution or generating enough income to support family members (Portes et al., 2002). Moreover, initial investments made by immigrants in their start-up ventures were found, on average, to be smaller than those of non-immigrants (Kushnirovich and Heilbrunn, 2008). Bates (1997) also observed that Korean and Chinese immigrants in the US raise less debt than nonminority borrowers. Moreover, immigrants may face particular difficulties accessing external financial capital because, not having resided in their host countries for very long, immigrants are likely to have relatively short banking relationships, relatively inchoate networks and poor credit histories. To this point, Avery, Brevoort, & Canner (2009) report that immigrants receive relatively low credit scores, putting them at a disadvantage in obtaining financial capital. Accordingly, immigrant entrepreneurs may feel constrained with respect to their financing choices and this might compromise the viability and growth of their enterprises.

In summary, it is argued that immigrant business owners may hold preferences for the types of external financing they seek. However, factors such as firm size, firm age, and sector have been cited as factors that may also relate to choice of financing. With respect to these factors, previous research suggests that immigrant-owned firms are smaller, tend to be concentrated in services and knowledge-based industries and are more likely to be export oriented than non-immigrant owned firms. Immigrant firm owners probably demonstrate relatively limited financial track records, given their less established period of residence in their host country. For these reasons, it is expected that immigrant-owned firms would be less likely to seek formal sources of financing than non-immigrant owned firms. Consequently, the following research propositions are advanced.

Proposition 2. Controlling for growth, and other potentially salient factors such as firm size, business age, and sector, immigrant-owned firms are less likely to apply for formal types of financing than non-immigrant-owned firms.

In spite of this discussion, there is virtually no previous research regarding the financing of immigrant-owned enterprises. Previous research regarding immigrant entrepreneurs has predominantly investigated firm and owner characteristics, start-up opportunities, behaviours and management strategies (Waldinger et al., 1990; Portes and Jensen, 1989; Portes et al., 2002; Ram & Smallbone, 2003).

SME financing choices—supply-related factors

For new firms, notions of information asymmetry and credit rationing provide a key conceptual framework underlying the financing process. A related aspect of the financing process is the relationship between borrowers and lenders. Relationships potentially mitigate information asymmetries. Petersen and Rajan (1994) found that stronger banking relationships typically led to increased credit availability for borrowers, less onerous collateral requirements and lower interest rates (see also: Borheim and Herbeck, 1998; Cole, 1998; Voordeckers and Steijvers, 2006). This is consistent with Binks & Ennew (1996) who argued that information asymmetries may be higher in the case of small and growing businesses but that perceptions of trust between these businesses and lenders reduce the extent to which owners of these businesses feel credit constrained. Accordingly, firms with weaker and shorter banking relationships – such as those of immigrant-owned enterprises – seem to be at a distinct disadvantage in terms of acquiring financing. Likewise, firms undergoing high growth may present relatively greater levels of information asymmetry.

For relatively small loans, maintaining a relationship with a commercial lender is onerous from the lenders' perspective. Consequently, credit scoring is now in widespread use throughout financial industries because it creates efficiencies for lenders by shortening (or even eliminating) due diligence for certain types of loans.[3)] Credit scoring lowers the likelihood of loan defaults (DeYoung, Glennon, & Nigro, 2008) and Frame et al. (2001) argued that credit scoring increases credit availability for small businesses and pushes banks to focus of small business loans. Berger and Frame (2007) found that most banks in the US made use of credit scoring for small business loans: that 100% of banks scored loans under $100,000 and that 74.2% of banks scored loans between $100,000 and $250,000. In addition, 87.1% of banks used scoring models from an external vendor. Consequently, almost all small business loans are being assessed using a statistical algorithm with a common root that is vested in the accumulation of historical data; however, immigrants' present short histories. Credit scores are based on measures that include: payment history (ability to maintain healthy credit), amount of credit owed, utilization of credit (proximity of balances to credit limits), length of time credit is established, searches for acquisition of new credit, and types of credit established. Consequently, a good credit score is largely contingent on having established a considerable and arguably flawless financial track record. For recent immigrants, generating a sufficient credit history could be a challenge, an expectation confirmed empirically by Avery et al. (2009). Therefore, the following hypotheses are advanced:

Proposition 3. Immigrant-owned firms are less likely to apply for debt financing than non-immigrant owned firms.

Proposition 4: Immigrant-owned firms are less likely to apply for equity financing than non-immigrant owned firms.

As a result of the influence of the lending relationship and the usage of credit scoring, owner-managers of young firms may also be more likely to believe that financing requests will be turned down. According to Kon and Storey (2003), information availability impacts screening errors by lenders and the potential for discouraged borrowers is at a maximum when the availability of information is at an intermediate level for both the borrower and lender. Therefore, new firms led by an owner who is relatively young and less experienced, less educated, potentially hindered by language and cultural barriers, and with a relatively limited financial track record (maximizing intermediate levels of information) would arguably be at higher risk of assuming that their financing request would be turned down. Consequently, it would seem that these firms would be relatively likely to be discouraged from seeking financing.

Han, Fraser and Storey (2009) found that in concentrated markets higher risk borrowers—such as those undergoing rapid growth or those whose owners have short credit histories—are particularly likely to be discouraged. Other potential factors in discouragement include certain industries and firm types: larger firms are at a distinct advantage over smaller firms (Zambaldi et al., 2009; Voordeckers and Steijvers, 2006). In summary, it seems reasonable to expect that immigrant-owned firms are at a relative disadvantage in terms of financing accessibility and terms and that the owners are aware of this disadvantage. It follows that they are more likely to be discouraged, and may therefore be more likely to use trade credit as a substitute for formal sources of capital. Therefore, the final two research propositions are advanced.

Proposition 5. Immigrant-owned firms are more likely to believe that their requests for external financing will be denied.

Proposition 6. Immigrant-owned firms are more likely to apply for trade credit than non-immigrant-owned firms.

The following section describes the data and methodology to be employed in testing the hypotheses advanced above.

DATA AND METHODOLOGY

Data

Data for this work were drawn from the "Survey on Financing of Small and Medium Enterprises" conducted by Statistics Canada between September 2004 and March 2005 on behalf of Industry Canada (Industry Canada, 2006). The population of interest comprised 1.3 million Canadian enterprises listed on the Business Register maintained by Statistics Canada (mandatory for all Canadian firms reporting a minimum of $30,000 in revenues during any 12-month period) from which a sampling frame of 34,509 firms were randomly drawn. Eligible firms had fewer than 500 full-time-equivalent employees and annual gross revenues of less than $50 million. Data collection was undertaken in two phases. First, computer-assisted telephone interviews collected extensive firm demographic data along with

Table 1: Population Estimates of Salient Attributes of Sample Firms

	Immigrant-Owned (N=104)	Benchmark new firms (N=2,057)	Chi-Square p-value
Size distribution of firm			0.642
< 5 employees	0.825	0.858	
5 to 9.9 employees	0.087	0.083	
10 to 19.9 employees	0.039	0.031	
20 or more employees	0.049	0.029	
Sectoral distribution			0.775
Goods	0.214	0.223	
Services	0.709	0.681	
Knowledge-based	0.078	0.096	
Export Propensity	24.3%	8.0%	0.000
Growth-oriented	68.9%	56.2%	0.000
Start-ups (< 2 years old)	58.3%	40.0%	0.000
Majority male-ownership	44.2%	63.4%	0.002
Urban location	88.3%	76.9%	0.007
Conducts R&D	57.3%	32.6%	0.000

attributes of the primary owners of the firms (the key respondents). Subsequently, financial statement data were collected using a fax-back questionnaire. Telephone follow-up was used to increase response rates and reduce non-response bias. Valid responses were received from 12,047 SMEs, a response rate of 47 percent of in-scope potential respondents.

As noted, the focus of this work is on young firms. Accordingly, of the 12,047 respondents, this unit of analysis for this work concentrates exclusively on the 2,915 firms that had been started between 2000 and 2004 (the five-year period preceding administration of the survey). Fewer than 10 per cent of Canadian business owners have more than one primary business; moreover, fewer than 18 per cent of Canadian SMEs report more than two owners. This period was chosen because the survey had asked all respondents whether they had immigrated to Canada during this five-year period. Therefore immigrant status is known for the young firms as defined here.[4)] Of these, 132 primary owner respondents reported having immigrated to Canada within the five-year interim. Responses were weighted according to region (the ten Canadian provinces are each defined as a region with the Northern Territories—the Yukon Territory, the Northwest Territories and Nunavut—collectively defined as an eleventh region), size, and sector to best represent the underlying population while ensuring minimum data counts for particular cells. Employing sample weights, Table 1 provides a comparison of population estimates of salient attributes based on 104 young firms owned by immigrants and 2,057 young firms that serve as a basis of comparison (because of skip patterns intentionally built into the data to ease respondent burden, some results may be based on fewer than 132 observations).

First, it is seen that, firms owned by immigrants were significantly more likely to be growth-oriented, to conduct R&D and to be exporters. Compared to other new firms, immigrant-owned new businesses were also more likely to be situated in urban locations and to be owned by women. It is also notable that, contrary to the literature, firm size did not differ significantly between immigrant-owned firms and counterparts even though a relatively higher proportion of immigrant-owned firms were start-ups (defined here as firms trading for less than two years as of date of survey administration). In addition, the sectoral mix did not differ significantly between immigrant-owned and counterpart firms. This again is at variance with the literature that contends that immigrant-owned firms tend to be concentrated in the services sector. However, previous research has generally not been based on as large a sample as is employed here.

Business owner respondents were asked: *"During the past 12 months … did the business or its owners approach any type of credit supplier to request new or additional credit for business purposes?"* Firms not seeking external capital were asked why they chose not to apply and firms that did seek external financing were asked detailed questions about the source of financing they had sought. Employing sample weights, it was found that:

- 66.0 percent of firms did not apply for external financing because they did not require it;
- 5.8 percent of firms did not apply for external financing because they thought that they would be turned down (that is, were discouraged);
- 26.5 percent of owners sought some form of financing. The vast majority of these sought debt financing (commercial loans or leasing); 1.6 percent of owners sought external equity capital.

Firms that reported applying for capital but which sought government grants were excluded from analysis. Multinomial and binary logistic regressions were employed to explore the systematic differences among these groups.

EMPIRICAL FINDINGS

As noted, three categories of firms are of interest for this analysis: those firms that did not need financing (these serve as the base case for analysis); those firms that applied for financing; and those firms that did not apply because they perceived that their applications would have been turned down (discouraged borrowers, six percent of respondents). These three categories comprised the dependent variable in a multinomial regression model. Control variables included:

- size of firm (natural log of the number of employees, including the owner);
- sector (a binary variable according to whether the firm was in the goods (=1) or services (=0) sector;
- age of firm (binary variable =1 if the firm had been founded in the previous two years, 0 otherwise); and,
- A binary variable according to whether (=1) or not (=0) the firm had invested in R&D.

As a first stage, the multinomial model was estimated with these control variables only. In the second stage, the model was augmented by adding the two variables of interest: owners' growth intention and immigrant status of the owners. Growth intention was measured as a binary variable connoting whether (=1) or not (=0) the owner had expressed growth aspirations according to his or her answer to the question: *"Do you intend to expand the size or scope of your business within the next two years?"* Immigrant status was based on the owners' response to the question: *"Did the primary owner of the firm immigrate to Canada within the last five years?"* These binary variables were added to the base case multinomial model by means of a categorical variable comprising:

- Immigrant owners with growth intentions (N=93);
- Immigrant owners without growth intentions (N=38);
- Non-immigrant owners with growth intentions (N=1630);
- Non-immigrant owners without growth intentions (N=1121).

The results of the hierarchical estimation are reported in Table 2, which shows systematic ways in which firms that did not need financing differ from financing applicants and from discouraged borrowers. Discouraged borrowers did not differ as to size from firms that did not need financing *(p-value=0.786)* but were significantly smaller than firms that did seek financing *(p-value=0.000)*. Compared with firms that did not need financing, discouraged borrowers were relatively more likely to be start-ups *(p-value=0.004)*. In addition, owners with growth aspirations were also more likely to be discouraged borrowers than owners who did not seek growth. This was particularly true of immigrant owners with growth intentions who were relatively likely to be among discouraged borrowers

Table 2: Multinomial Logistic Model of Financing Choices

		Base Model				Expanded Model			
		Coefficient estimate	Std. Error	p-value	Exp(B)	Coefficient estimate	Std. Error	p-value	Exp(B)
Financing Applicants	Intercept	-2.117	0.098	0.000		-2.535	0.122	0.000	
	LN(employees)	0.277	0.053	0.000	1.32	0.280	0.055	0.000	1.32
	Goods sector	0.410	0.129	0.001	1.51	0.329	0.131	0.012	1.39
	Startups (< 2 years old)	0.295	0.116	0.011	1.34	0.323	0.119	0.007	1.38
	Invests in R&D	0.281	0.113	0.013	1.32	0.063	0.119	0.596	1.07
	Immigrants owners with Growth aspiration					0.388	0.346	0.261	1.48
	Non-immigrant owner with growth aspirations					0.841	0.120	0.000	2.32
Discouraged borrowers	Intercept	-4.102	0.266	0.000		-4.301	0.309	0.000	
	LN(employees)	0.007	0.170	0.969	1.01	-0.048	0.176	0.786	0.95
	Goods sector	-0.289	0.418	0.489	0.75	-0.366	0.419	0.382	0.69
	Startups (< 2 years old)	0.940	0.293	0.001	2.56	0.865	0.298	0.004	2.38
	Invests in R&D	-0.064	0.319	0.842	0.94	-0.253	0.329	0.442	0.78
	Immigrants owners with Growth aspiration					1.563	0.556	0.005	4.77
	Non-immigrant owner with growth aspirations					0.509	0.320	0.112	1.66
Pseudo R-Square									
	Cox & Snell	0.020				0.042			
	Nagelkerke	0.030				0.064			
p-values									
	Step	0.000				0.000			
	Model	0.000				0.000			

Notes: Reference category comprises firms not needing external capital. Base case is non-immigrants that do not have growth aspirations. The category corresponding to immigrant owners who were also discouraged borrowers comprised no respondents and is therefore suppressed in the above.

(p-value=0.005).

Table 2 also shows that financing applicants differed from firms that did not need financing in several systematic ways. Firms in the goods-producing sectors, larger firms, and firms founded within the last two years were relatively more likely to seek formal sources of capital *(p-values < 0.05 in each case)*. The most important factor, however, appears to be the owners' growth aspirations: firms whose non-immigrant owners had expressed an intention to expand the firm were more than twice as likely to apply for capital than counterpart firms that did not espouse growth intentions *(p-value=0.001)*.

Because of the relatively small number of discouraged borrowers who were also immigrants, the above analysis does not provide information about the relative propensity of immigrants to seek formal

Table 3: Binary Logistic Model of Financing Choices

		Base Model				Expanded Model			
Variable	N	Coefficient estimate	Std. Error	p-value	Exp(B)	Coefficient estimate	Std. Error	p-value	Exp(B)
NAIC Category				0.000				0.000	
Primary	133	0.743	0.222	0.001	2.10	0.689	0.225	0.002	1.99
Construction	256	-0.170	0.175	0.330	0.84	-0.341	0.179	0.056	0.71
Manufacturing	163	0.039	0.239	0.870	1.04	-0.114	0.243	0.639	0.89
Wholesale & Retail	364	-0.247	0.170	0.147	0.78	-0.352	0.173	0.043	0.70
Finance, Insurance, etc.	83	-1.764	0.364	0.000	0.17	-1.732	0.368	0.000	0.18
Professional Services	540	-0.955	0.174	0.000	0.39	-1.064	0.178	0.000	0.35
Accommodation & Food Services	264	-0.667	0.205	0.001	0.51	-0.672	0.207	0.001	0.51
Other Services	335	-0.303	0.159	0.056	0.74	-0.461	0.163	0.005	0.63
LN (Number of employees)		0.312	0.047	0.000	1.37	0.303	0.048	0.000	1.36
Invests in R&D		0.399	0.092	0.000	1.49	0.242	0.096	0.011	1.27
Startup (< 2 years old)		0.312	0.095	0.001	1.37	0.300	0.097	0.002	1.35
Immigrant/growth status								0.000	
Immigrants, growth intentions	79					0.288	0.267	0.281	1.33
Immigrants, no growth intentions	33					1.093	0.331	0.001	2.98
Non-Immigrants, growth intentions	1166					0.682	0.095	0.000	1.98
Constant		-1.132	0.136	0.000	0.32	-1.375	0.144	0.000	0.25
Goodness of fit measures									
Cox & Snell R-squared		0.057				0.074			
Nagelkerke R-squares		0.083				0.108			
p-values									
Step		0.000				0.000			
Model		0.000				0.000			

Table 4: Frequencies of Financing Applications

	Sought supplier financing*	Sought debt financing	Sought equity financing
Immigrant Owner	14.2%	21.5%	0.1%
Non-Immigrant Owner	13.1%	20.0%	1.6%
p-value of difference	*0.360*	*0.348*	*0.000*
Growth aspirations	15.9%	12.1%	0.2%
No growth aspirations	9.8%	26.8%	2.7%
p-value of difference	*0.000*	*0.000*	*0.000*
All firms	13.1%	20.1%	1.6%

*Some firms may have sought both trade credit as well as institutional finance.

financing. Specifically, the dependent variable was a binary variable corresponding to the primary owner's response to the question: *"During the past 12 months … did the business or its owners approach any type of credit supplier to request new or additional credit for business purposes?"* (=1 if the firm had applied, =0 if the firm had not needed financing; discouraged borrowers were omitted from this portion of the analysis). This approach, because it is not limited by the relatively small number of discouraged borrowers, also allows more detailed specifications of the control variables which included: size of firm (log of the number of full-time-equivalent employees, including the owner); sector (a categorical variable corresponding to one-digit NAICS classifications); a categorical variable corresponding to whether (=1) or not (=0) the firm had been founded within the last two years; and a binary variable equal to 1 if the firm had invested in R&D (=0 if not). In the second stage of the model estimation the sequence of dummy variables, described above, that which corresponds to growth intentions of immigrant and non-immigrant owners, was added to the model. The results are presented in Table 3.

Table 3 confirms that larger firms, firms that invest in R&D, firms in goods-producing sectors and new firms are relatively more likely to apply for formal financing *(p-values all < 0.05)*. It also shows that non-immigrant owners who seek growth of their firms are also significantly *(p-values all < 0.000)* more likely to seek financing than counterpart owners who do not seek growth. It also shows that non-immigrant owners who hold growth aspirations are approximately 48% more likely to apply for finance than immigrant owners with growth intentions (=1.98/1.33), although this result is only weakly significant *(p-value < 0.10, calculated from Table 3)*. The table also shows that immigrant owners without growth intentions are significantly more likely to seek financing than counterpart non-immigrant owners.

The results listed in Tables 2 and 3 strongly support Hypothesis 1, that growth aspiration is a key determinant of firms' needs for external finance. They partially support and partially refute Hypothesis 2, that immigrant owners are less likely to seek formal financing in that immigrant owners who seek growth are less likely to seek capital but those who do not seek growth are more likely to apply for formal sources of financing. The results are also consistent with Hypothesis 5, that immigrant owners are relatively likely to be among discouraged borrowers. To test the remaining hypotheses, Table 4 presents a breakdown of the specific forms of financing according to immigrant status and growth orientation.

Table 4 again confirms that growth aspirations are strongly linked to applications for all forms of financing (Hypothesis 1). While it is also seen that immigrant owners are relatively less likely to apply for equity financing (consistent with Hypothesis 4) they are neither more nor less likely to seek debt (Hypothesis 3) or trade credit (Hypothesis 6).

SUMMARY, DISCUSSION AND IMPLICATIONS

Immigration, commercial, banking and trade policies of many developed and less developed nations now recognize that the growth of young firms contributes disproportionately to economic welfare

Table 5. Summary of Research Findings

	Hypothesis	Findings
1	Growth aspirations are a primary driver of applications for external capital.	Supported for non-immigrant owners. Growth intentions and applications for financial capital were strongly correlated.
2	Controlling for growth, and other potentially salient factors such as firm size, business age, and sector, immigrant-owned firms are less likely to apply for formal types of financing than non-immigrant-owned firms.	Supported for immigrant owners with growth intentions and refuted for immigrant owners without growth intentions, the latter being more likely to seek financing.
3	Immigrant-owned firms are less likely to apply for debt financing than non-immigrant owned firms.	Not supported. Overall, immigrant owners were neither more nor less likely to seek debt financing than non-immigrant-owned firms.
4	Immigrant-owned firms are less likely to apply for equity financing than non-immigrant owned firms.	Supported. Immigrant-owned firms were significantly less likely to seek equity financing than firms owned by non-immigrants.
5	Immigrant-owned firms are more likely to believe that their requests for external financing will be denied.	Supported for the case of immigrant owners with growth aspirations.
6	Immigrant-owned firms are more likely to apply for trade credit than non-immigrant-owned firms.	Not supported. Overall, immigrant owners were neither more nor less likely to seek supplier financing than non-immigrant-owned firms.

and job creation. However, the growth of new firms, those owned by immigrants and non-immigrants alike, depends critically on access to financial capital. Much of the literature views financial constraints in terms of market failures or credit rationing; however, access to capital can also be limited if business owners choose not to apply, either because they are discouraged or had been informally dissuaded from applying or because they sought other forms of capital. Therefore, this paper examined, conceptually and empirically, financing choices of young firms with particular emphasis on firms owned by recent immigrants. On the basis of a review of literature and a conceptual argument, six research hypotheses were advanced. These, along with the related empirical findings, are summarized in Table 5.

An important finding of this work is that growth aspirations are strongly correlated with the need for financing. Additional financial capital funds both working capital and fixed asset expansion, both of which are required for growth and confirming previous research findings (for example, Demirguc-Kunt, 2006; OECD, 2006; and Cosh, Cumming and Hughes, 2009). This work found that, overall, applications for trade credit, debt and equity capital were significantly higher for growth-oriented businesses (Table 4). While evidence of market failure and credit rationing remains a topic of considerable debate (Parker, 2002; Cressy, 2002) immigrant-owners and owners of growth-oriented young businesses may be discouraged from seeking capital, whether or not capital rationing might apply. This is an important finding because immigration policies often encourage “business immigrants,” those immigrants who intend to start a business. Such applicants are often presented with strenuous requirements in order to be granted a visa (including minimum levels of wealth and experience, and a viable business plan with the intention to hire employees). However, this type of policy may be compromised if immigrants are discouraged from seeking the forms of financing consistent with achieving their growth aspirations. Perhaps this explains why Ley (2006) found that immigrant business owners admitted to Canada under the terms of the immigrant entrepreneur policy were less than satisfied with the development of their businesses.

Therefore, this work informs commercial and trade and lending policies of governments as well as lending policies of financial institutions. It appears that current lending practices discourage applications for growth financing from young firms. Perhaps borrowing criteria for young immigrant-owned firms might need to be modified in order to stimulate more business creation in what is often described as an industrious segment of the entrepreneurial population. For financial institutions, it would seem that they might benefit, over the longer term, from initiatives that encourage more growth-oriented immigrant business owners to seek financing. This is especially true if, as is often thought (Dalziel, 2008) that immigrant-owned firms go on to achieve superior performance.

The work also shows that personal factors such as immigrant status and growth orientation figure prominently in SME owners' financing choices. This is consistent with Uzzi and Gillespie (1999) who point out that the inseparability of entrepreneurs from their businesses affects financing decisions among SMEs. This is a step towards achieving a yet better understanding of the factors that lie behind financing decisions. It was interesting to find that overall, immigrant owners were neither more nor less likely to apply for formal sources of capital. This would appear to be an "averaging out" of the two groups of immigrant owners: immigrant owners with growth intentions who were less likely to seek financing and immigrant owners without growth intentions, the latter being more likely to seek financing. What is important is that it is the growth-oriented immigrant owners—precisely those who ought to be seeking capital—are not those who, like non-immigrant growth firms, are applying for capital most often.

Finally, the work documents financing patterns among early-stage entrepreneurial ventures. Consistent with previous findings, the work shows that only a minority of businesses seek financing in a given year and that external debt capital is by far the most frequently sought form of capital. Only a small minority of enterprises seeks external financing, although growth-oriented firms are relatively more likely to seek equity.

Limitations and future directions

The work is limited in that, in spite of a large-scale carefully weighted stratified sample, the small number of immigrant business owners precludes certain breakdowns that could be yet more informative (for example, across finer gradations of sector and in terms of immigrant owners' ability to access the financing they sought relative to non-immigrant owners). As with interpretation of many survey results, the work can only speak to associations among variables and causation can only be imputed. On the other hand, the work is based on a large carefully representative sample of businesses. Response rates were high so as to mitigate non-response biases and, unlike many previous studies, the analysis examines the types of finance for which firms actually applied (as opposed to the types of financing they eventually obtained).

For future research, it should be noted that the unit of analysis is the firm, not the ownership. Immigrant status used here reflects responses to the question: "*Was the majority ownership of the business held by someone who had resided in Canada for less than five years?*" There is no information about the likelihood of other firms being owned by the same owner. This is a potentially important distinction because business owner(s) may have more than one business and other companies he or she owns could underestimate the available financial, social, etc. resources. In addition, this work focusses on new firms and on immigrants defined as those who have resided in Canada for less than five years. The research literature on immigrants uses a wide variety of definitions, including analyses of second and even third generation immigrants. This work employs a five-year criterion for three reasons. First, long term residents would be less likely to lack the track records and credit history that facilitates access to capital while recent immigrants would arguably be more likely to lack the track records that facilitate access to capital. Second, this work focusses on new firms: those that began trading within the most recent five years. Third, Neville et al (2014) show that recent immigrants whose firms trade internationally add disproportionately to job creation and economic welfare and it is these firms that are most likely to need financing.

Finally, because immigration policy lies at the heart of current international debates it is essential to ensure that the policy discussions are well informed. Among key issues in these debates is the extent to which immigrants add to prosperity. Neville et al. (2014) are among those who have shown that growth of young immigrant-owned exporter firms adds disproportionately to job creation and economic welfare. It is therefore essential to determine the extent to which the financial system allows for the provision of the resources that are necessary to fuel such growth. This work examines this question.

NOTES

1) See, for example, Geoffrey Cameron and Ian Goldin (2011), More immigrants are in Canada's national interest, *The Globe and Mail*, August 4, 2011, http://www.theglobeandmail.com/news/opinions/opinion/more-immigrants-are-in-canadas-national-interest/article2118755. This is true in many countries, but it is especially true in Canada. Immigration policy in Canada is closely connected to economic welfare policies. Immigration policy in Canada is selective; those who seek entry into Canada typically have to meet criteria related to economic welfare.
2) In Canada, Industry Canada identifies recent immigrant-owned SMEs as representing roughly 2.6% of the entrepreneurial population in Canada (Industry Canada, 2009). In the UK, the Household Survey of Entrepreneurship (2007) reports some causality between entrepreneurial intentions and London's concentrated immigrant and ethnically diverse population.
3) In North America, two of the predominant credit scoring specialists, TransUnion and Equifax, characterize credit scores as a three-digit number, derived from a statistical formula, which helps lenders make decisions (Equifax Consumer Services Canada; TransUnion Canada.). Interestingly, both also use the same model pioneered by Fair, Isaac & Co. This credit scoring model (FICO Score), is deployed in 21 countries (including the US, Canada, the UK, and South Africa), but is also used by approximately 90% of the largest lenders worldwide (Fair, Isaac & Co.).
4) Of course, people who had immigrated at some point in their lives start some firms. Dalziel (2008) chronicles several case studies of successful immigrant entrepreneurs; however, in many cases startup and subsequent success (or failure) occurs many years after immigration.

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