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THE EFFECT OF IMMIGRATION POLICY ON FOUNDING LOCATION CHOICE:
EVIDENCE FROM CANADA'S START-UP VISA PROGRAM

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The Effect of Immigration Policy on Founding Location Choice: Evidence from Canada's Start-up Visa Program

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ABSTRACT

To spur entrepreneurship and economic growth, an increasing number of countries have introduced immigration policies that provide visas to skilled entrepreneurs. This paper investigates whether these policies influence the founding location choice of immigrant founders, by leveraging the introduction of Canada's Start-up Visa Program in 2013. We demonstrate that this immigration policy increased the likelihood that U.S.-based immigrants have a start-up in Canada by 69%. Our results show that Asian immigrants (who have a higher representation in Canada than in the U.S.) are disproportionately more likely to migrate to Canada to start their businesses, whereas Hispanic immigrants (who have a smaller representation in Canada than in the U.S.) are less inclined to do so. We also find that this propensity varies with the size of co-ethnic immigrant communities in the origin location. Overall, our study unveils the importance of immigration policies in determining founding location choice and has important implications for countries competing for global talent.

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1 Introduction

One of the important initial decisions that an entrepreneur must make is where to found their start-up. In making this decision, which can have significant implications for their start-up’s survival and eventual performance (Dahl and Sorenson 2012, Kulchina 2015), founders typically consider various potential locations and a wide range of factors across those locations. The literature on start-up location choice has mainly examined three types of factors: a founder’s personal preferences (Dahl and Sorenson 2009, Kulchina 2015), the founder’s social ties and embeddedness in a location (Dahl and Sorenson 2012, Michelacci and Silva 2007, Sorenson 2018, Uzzi 1999), and the location’s economic factors (e.g., access to specialized inputs, human capital, or customers; Bryan and Guzman 2021, Conti and Guzman 2023, Guzman 2019, Kolympiris et al. 2015).

In this paper, we investigate the role of a previously overlooked factor that may influence the founding location choice: immigration policy. Immigration policy has been shown to affect where multinational firms globally locate their skilled workers (Glennon 2023, Kang and Eklund 2023) and where multinational firms locate their foreign affiliates (Glennon 2023). However, less is known about how it might influence the location choice of immigrant founders. Prior research has documented that, in numerous countries, immigrants start firms at higher rates than natives (Fairlie and Lofstrom 2015, Kerr and Kerr 2017, 2020a). For example, in the U.S., immigrants are 80% more likely to start a business than Americans. Furthermore, the businesses that immigrants establish are not limited to a specific category (e.g., necessity-based mom-and-pop stores) but encompass firms of every size in various industries (Azoulay et al. 2022). In fact, a recent study by the National Foundation for American Policy found that “immigrants have started more than half of America’s startup companies valued at \$1 billion or more” (Anderson 2018). Therefore, immigrants constitute a sizeable and important sub-population of entrepreneurs. While these facts about the entrepreneurial propensity and activities of immigrants have been well-established, we know little about where these immigrants choose to found their businesses and whether this choice is affected by immigration policy.

To assess whether immigration policy affects the founding location choices of immigrant would-be founders, we exploit the introduction of Canada’s Start-up Visa Program, which provides permanent residency to eligible immigrant founders and their families. We take a differences-in-differences

approach in which we compare the propensity of immigrants and natives in the U.S. to found a company in Canada before and after the program’s implementation. We expect immigrants living in the U.S. to be more responsive to this policy change than U.S. natives for two main reasons. First, because immigrants are less socially embedded in their host country than natives (Aguilera 2005, Aguilera and Massey 2003, Majerski 2018), they may be less reluctant to leave their current communities. Second, because immigrants typically encounter major challenges in obtaining a work permit for starting a company in the U.S. (Agarwal et al. 2021, Diethorn 2022, Gupta 2023, Kerr and Kerr 2020b, Roach and Skrentny 2019), Canada’s Start-Up Visa Program reduces a significant barrier to entrepreneurial entry. Without the program, they typically face several years (or even decades) of waiting in the U.S. for their visas to transition into permanent residency before they can found a company in the U.S., by which time the entrepreneurial opportunity might have disappeared. Our focus on those living in the U.S. is critical to our research question, which examines whether immigration policy affects the founding location decision. Specifically, immigrants who live in the U.S. in the pre-policy change period have revealed their preference for the U.S. Therefore, by focusing on U.S.-based immigrants, we can observe a *change* in location choice directly attributable to the change in immigration policy: the introduction of the Start-Up Visa Policy.

Next, we examine whether the propensity to start a company in Canada varies by the size of the co-ethnic immigrant communities in the locations in which these immigrants lived prior to the policy change. As noted earlier, immigrants are typically less embedded than natives in the communities of their host country (Aguilera 2005, Aguilera and Massey 2003, Majerski 2018), which can provide a disadvantage to their start-ups since these communities can provide both opportunity identification and access to information, resources, and business networks (Dahl and Sorenson 2012, Sorenson 2018, Uzzi 1999). However, large co-ethnic immigrant communities can increase embeddedness in the host country and mitigate some of the frictions that immigrant entrepreneurs face (Hernandez and Kulchina 2020, Kemeny and Cooke 2017, Kerr and Mandorff 2023, Marinoni 2023). Hence, larger communities of similar immigrants may serve as a counteracting force to the pull of a more relaxed immigration policy for immigrants.

Using a unique dataset from Revelio Labs of 1.2 million U.S.-based individuals who founded a company either in the U.S. or Canada between 2006 and 2021, we show that Canada’s Start-Up Visa Program increased the likelihood that U.S.-based immigrants start a business in Canada by 69%.

Our study also finds that, compared to immigrants of other ethnic groups, Asian immigrants were more responsive to this policy change. Furthermore, our results suggest this responsiveness varies by the presence of Asian immigrants in their prior location. That is, the larger the Asian immigrant enclaves in the origin location, the less likely that U.S.-based Asian immigrants in this location move to Canada to start a business. Taken together, these findings not only imply that immigration policy has a significant impact on the founding location decisions, but also reinforce the idea that this decision entails a complex weighting of multiple location factors—most notably, social ties and embeddedness. Put differently, when choosing their founding location, immigrant would-be founders seem to weigh the presence of co-ethnic immigrant communities against immigration policy.

Our study makes contributions to various streams of literature. First, our work complements extant research on start-up location choice, which has assessed how these choices are influenced by the founders’ personal preferences (Dahl and Sorenson 2009, Kulchina 2015), their social ties and embeddedness (Dahl and Sorenson 2012, Michelacci and Silva 2007, Sorenson 2018, Uzzi 1999), or the location’s economic factors (Bryan and Guzman 2021, Conti and Guzman 2023, Guzman 2019, Kolympiris et al. 2015), by adding immigration policy to the set of relevant factors. In addition, our results also shed light on the founding decision across borders. Prior work has largely focused attention within national borders, or on movement across borders after a start-up has been founded (Conti and Guzman 2023, Shi et al. 2022).

Second, by shedding light on where immigrants choose to found their businesses, it contributes to the literature on immigrant entrepreneurship, which has, thus far, documented important stylized facts on how immigrants and natives vary in their propensity to start a business, what enables or hinders these immigrants’ entrepreneurial entry, and what type of businesses they establish (Agarwal et al. 2021, Azoulay et al. 2022, Kerr and Kerr 2020a).

Third, extending prior work on ethnic immigrant enclaves, which has shown that immigrants tend to prefer to locate near such enclaves and that these co-ethnic immigrant communities help improve their entrepreneurial success (Bartel 1989, Bauer et al. 2005, Cadena et al. 2017, Eckstein and Peri 2018, Edin et al. 2003, Marinoni 2023, Wilson and Portes 1980), our results suggest that the size of co-ethnic immigrant enclaves in both the origin and host locations may moderate the effect of immigration policy on founding location choices.

Fourth, by shedding light on how a more open immigration regime can lower barriers to

entrepreneurial entry for immigrant founders, our paper adds to prior studies on the importance of institutional environments for spurring entrepreneurship. These studies have shown that various institutions and regulations (e.g., non-competes, taxes, bankruptcy protection) have important consequences on the barriers to entrepreneurial entry (Djankov et al. 2002, Eesley 2016, Klapper et al. 2016, Lee et al. 2011, McAfee et al. 2004, Samila and Sorenson 2011). Similarly, by demonstrating that a more open immigration regime results in lower barriers to entry for founders and start-ups, we add immigration policy to the set of drivers of entrepreneurial entry through its ability to change barriers to entry.

Finally, this paper offers important policy implications for competing for global talent. While more than 20 countries (e.g., Australia, Canada, Chile, Ireland, Korea) have introduced immigration policies specifically targeting immigrant would-be founders, most (including the U.S.) have been hesitant to do so. Our findings imply that these policies can be an effective tool for attracting talented immigrant entrepreneurs from other countries.

2 Literature review

2.1 Founding location choice

The prior literature has long been interested in understanding how entrepreneurs choose where to locate their start-ups. As an empirical regularity, this literature has established that entrepreneurs have a strong home bias and geographic inertia. That is, entrepreneurs typically prefer to locate their start-ups where they currently live and work (Figueiredo et al. 2002, Larsson et al. 2017, Michelacci and Silva 2007). In addition to the desire to be close to friends and family (Dahl and Sorenson 2009), staying close to home can allow founders to leverage their current knowledge of the local community or their existing social relationships within this community. Such local knowledge and social ties can help entrepreneurs recruit employees, raise capital investments, secure suppliers, and succeed in their new ventures (Dahl and Sorenson 2012, Sorenson 2018, Uzzi 1999).

If entrepreneurs do move beyond their current locations, extant research suggests that they tend to strategically select a start-up location with significant economic benefits. For instance, founders often locate their start-ups in entrepreneurial ecosystems where they can have direct access to a high-skilled labor pool (Diamond and Simon 1990, Romer 1987) or venture capitalists

(Bernstein et al. 2016, Chen et al. 2010, Kolympiris et al. 2015, Stuart and Sorenson 2003b). This literature also suggests that entrepreneurs value proximity to industry clusters (Guzman 2019, Krugman 1991, Saxenian 1996), where they can gain knowledge spillovers and poach employees from their competitors (Davis and Dingel 2019, Song et al. 2003). In addition to these economic considerations, founders also choose founding locations based on their personal preferences for, e.g., a better education or healthcare system, lower crime rates, or a better climate (Dahl and Sorenson 2009, Kulchina 2015).

The environmental conditions that entrepreneurs typically prefer do not emerge in a vacuum, but are generated by institutions (Djankov et al. 2002, Easley 2016, Klapper et al. 2016, Lee et al. 2011, McAfee et al. 2004, Samila and Sorenson 2011). For example, prior studies have shown that weak non-compete enforceability (Samila and Sorenson 2011, Starr et al. 2018), entrepreneur-friendly bankruptcy laws (Lee et al. 2011), banking deregulation (Kerr and Nanda 2009), and less bureaucracy (Djankov et al. 2002, Klapper et al. 2006) can encourage entrepreneurial activities and foster the formation of entrepreneurial ecosystems.

Similarly, immigration policy has been shown to affect the rate of entrepreneurship. In particular, Agarwal et al. (2021) find that immigration-related work constraints in the U.S. suppress immigrant entrepreneurship. What is less well understood is whether immigration policy might change a founder’s location decision. In what follows, we elaborate on why immigration policy might have a significant impact on a founder’s location decision. We will also examine how the factors affecting founding location choice (including immigration policy) might differ for immigrants and natives.

2.2 Immigration policy and immigrant would-be entrepreneurs

Immigrants are disproportionately more likely than natives to found a company (Azoulay et al. 2022, Kerr and Kerr 2020a). Like natives, these foreign-born entrepreneurs must choose the location in which to found their start-up. In the previous section, we described the factors that broadly affect this founding location choice, without differentiating between immigrant and native founders. Many of these factors are likely to be equally attractive to immigrant and native founders. For instance, regardless of their nationality, founders are likely to be drawn to locations with strong entrepreneurial ecosystems. In this section, we discuss the location choice of immigrant entrepreneurs, and why the importance they place on different location characteristics might vary.

However, immigrant and native founders are likely to differently value some of these factors—most notably, immigration policy. While immigration policy affects the barriers to entry for all founders considering entering a new country, this effect is likely to vary depending on the immigration status of the founders in their current country. For example, immigrants in the U.S. are much more likely than natives in the U.S. to respond to changes in Canadian immigration policy because of the inherent frictions involved in cross-border movements and the differences between the two types of founders.

Migrating across borders to start a business introduces an important set of challenges. To begin with, the act of crossing borders itself results in large financial and administrative relocation costs (Angelucci 2015, Carrington et al. 1996). Once individuals have migrated and established a firm, they encounter not only the “liability of newness” (Stinchcombe 1965) but also the “liability of foreignness” (Zaheer 1995), which stems from a lack of knowledge about the geographic, cultural, institutional, and economic differences of the new host country and which can thus increase the likelihood of start-up failure. Lastly, as immigrants, these prospective entrepreneurs need to carefully contend with the host country’s immigration policy, which is not typically designed with entrepreneurs in mind.

Although immigration policy that enables immigrants to start a company in a foreign country removes an important barrier (i.e., visa status), it only addresses the third challenge. The relocation costs and the liability of foreignness remain. Thus, would-be founders not currently facing visa challenges (e.g., American would-be founders living in the U.S.) are unlikely to respond to any immigration policy change.

However, immigration policy targeting immigrant would-be founders could have a disproportionate impact on would-be founders who are outside of their home country (e.g., immigrants to the U.S. interested in pursuing entrepreneurship) as compared to natives living in their home country (e.g., Americans living in the U.S. interested in pursuing entrepreneurship). First, they are predisposed toward migrating as individuals who have previously migrated. That is, because these immigrants, by definition, have previously migrated to a foreign country where they are less likely to have deep knowledge of and be socially embedded in the local community (Aguilera 2005, Aguilera and Massey 2003, Majerski 2018), they are unlikely to have the same geographic inertia as their native counterparts and already encounter the liability of foreignness in their current host country

(i.e., the U.S.). But more importantly, if the host country (in our empirical context, the U.S.) limits immigrants from legally starting their own businesses, then the host country's immigration policy acts as an important barrier to entry (Agarwal et al. 2021, Diethorn 2022, Gupta 2023). Hence, if a different host country (e.g., Canada) relaxes the restrictiveness of its immigration policy by introducing a start-up visa, the policy change removes a significant barrier to start-up entry for immigrants willing to move. Thus, for an immigrant would-be founder choosing between two locations, it significantly increases the appeal of this alternate host country.

2.3 The moderating role of ethnic enclaves

In the previous section, we assume that immigrants are predisposed toward migrating due to their lack of social embeddedness and the liability of foreignness in their host country. Prior research has suggested that the extent to which immigrants lack social embeddedness and encounter the liability of foreignness can vary by the presence of co-ethnic immigrant enclaves (Bartel 1989, Bauer et al. 2005, Cadena et al. 2017, Eckstein and Peri 2018, Edin et al. 2003, Marinoni 2023, Wilson and Portes 1980). Sharing a common ethnic background, as such, can foster social support and trust, facilitate collaboration, and cultivate business networks among immigrants in their host country (Kalnins and Chung 2006, Kemeny and Cooke 2017, Kerr and Mandorff 2023, Wilson and Portes 1980). As these social interactions increase knowledge and information flow, co-ethnic immigrant enclaves can help immigrants in mitigating many frictions that they encounter in entrepreneurship (Hernandez and Kulchina 2020, Kalnins and Chung 2006, Kerr and Mandorff 2023, Portes and Shafer 2007) and in pursuing various entrepreneurial opportunities (Borjas 1986, Kerr and Mandorff 2023). Accordingly, as co-ethnic immigrant enclaves offer immigrants such benefits of social embeddedness, numerous studies have documented that immigrants thus prefer to settle in the geographical regions in which their ethnic group is spatially clustered in the host country (Bartel 1989, Bauer et al. 2005, Cadena et al. 2017, Eckstein and Peri 2018, Edin et al. 2003).

Extending this line of reasoning, we expect that co-ethnic immigrant enclaves in the current host location (i.e., the U.S.) will reduce the propensity of immigrants to respond to a change in immigration policy in the focal country by moving and founding a company there (i.e., Canada). In contrast, ethnic enclaves in the focal country may increase the likelihood that the immigrants migrate from their host location to the focal country to start a business.

3 Empirical context

3.1 Canada’s Start-up Visa Program

We assess whether entrepreneurship-focused immigration policy influences founding location choices by leveraging the introduction of Canada’s Start-up Visa Program. The program was announced and launched in January and April 2013, respectively. It ran as a pilot for the first five years, during which the number of applications was limited. After receiving positive reviews, the Canadian government gave this program a permanent status in 2018.¹ The goal of the program is to “enable immigrant entrepreneurs to launch innovative companies that will create jobs in Canada, and eventually, compete globally.”²

The program especially sought to draw potential immigrant founders from the U.S. To do so, Canada’s Minister of Citizenship, Immigration, and Multiculturalism visited Silicon Valley to promote the program just after its launch. In addition, the Canadian government posted a billboard in Silicon Valley that famously read “H-1B problems? Pivot to Canada. New Start-up Visa. Low Taxes” (see Figure 1; Sengupta 2013). Due to such promotion activities, this program became well-known among immigrants to the U.S., particularly those in California.³

[Figure 1 about here.]

The program offers permanent residence status to foreign-born entrepreneurs (and their families) upon approval of the Start-Up Visa.⁴ The visa is approved if these entrepreneurs (up to five per business) satisfy all of the following five requirements. First, they must incorporate, actively manage, and operate the essential parts of their businesses in Canada. Second, they must own at least 10 percent of the voting shares, with no other individuals holding a majority stake. Third, they must be able to communicate and work in English and/or French. Fourth, these entrepreneurs must prove that they can support themselves and their dependents financially (i.e., for one individual,

¹For the review report, see the link: <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/reports-statistics/evaluations/start-visa-pilot.html>.

²For details, see the link: <https://www.canada.ca/en/immigration-refugees-citizenship/news/archives/backgrounders-2013/new-start-visa-program-innovative-approach-economic-immigration.html>.

³A Canadian government official we interviewed mentioned that these promotion activities were later reduced after the Start-up Visa Program started to create backlogs in Canada’s immigration system.

⁴During the pilot years, a Start-up Visa application was typically processed within five months. In the years after the COVID-19 pandemic, the processing time has increased and, in 2023, reached 35 months, due to backlogs in the immigration system.

the required funds are CAD 13,310; for each additional family member, this amount increases by CAD 3,000). Lastly, to ensure newly arrived entrepreneurs have not just investment from a local organization but also a mentor who can help them navigate the Canadian business environment and to thus mitigate the liability of foreignness, these entrepreneurs must receive a letter of support from a Canadian venture capital (VC) fund, angel investor, or business incubator on the government-specified list of designated organizations.⁵ If this letter comes from a VC fund or an angel investor, they need to secure a minimum investment of CAD 200 million or CAD 75 million, respectively. Although receiving a letter from a business incubator does not have such a minimum investment requirement, the incubator must accept the foreign-born entrepreneur into its program.

Obtaining this letter of support from a designated organization is extremely competitive and acts as an important filter for start-up quality. To receive this letter, foreign-born entrepreneurs need to first undergo an application process that includes, for example, presenting their business concept in person or submitting their detailed business plan. During this process, they need to demonstrate that their business idea has strong market validation or recurring scalable revenue. Because the designated organizations receive a large number of these unsolicited business proposals, they selectively choose which ones to support and filter out the low-quality ones. Accordingly, the Canadian government notes in its review of the Start-Up Visa Pilot Program that these organizations play an important role in removing “a significant proportion of unsolicited proposals [that are] not realistic or scalable businesses and likely attempts to circumvent normal immigration procedures by applying under this pilot.”⁶ Due to the lack of availability and reliability of information about foreign-born entrepreneurs during this due diligence process, many of these designated organizations “only review certain proposals referred to them through business networks, which is considered a standard industry practice.”

Canada is not the only country to have implemented a start-up visa program. Over the past decade, more than 20 countries have adopted a version of a start-up visa program (for example, see Figure 2). Although these policies have a similar goal, they significantly vary in terms of the

⁵For the list of the designated organizations, see the link: <https://www.canada.ca/en/immigration-refugees-citizenship/services/immigrate-canada/start-visa/designated-organizations.html>. While this list included only 28 organizations at the beginning of the pilot program, it has expanded 76 entities as of August 2023.

⁶For this review, see the link: <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/reports-statistics/evaluations/start-visa-pilot.html>. Regarding the increase in low-quality applications for the Start-up Visa Program, a Canadian government official who we interviewed explained that “there was a large influx of applications as more and more people started to realize how successful this program is. This then diluted the quality of applications.”

requirements for eligibility, the offered benefits, and the application process. For instance, unlike Canada’s Start-up Visa Program, Chile’s Start-Up Chile program—one of the most widely known entrepreneurship-focused immigration policies (Applegate et al. 2012)—does not offer permanent residency, but instead provides a temporary visa. However, Chile’s program renders an equity-free grant of USD 40,000, free workspaces, mentoring, classes, and business networks. Despite their differences, immigration policies targeting entrepreneurial human capital from abroad have become more prevalent across the world. Understanding how they influence the founding location choice thus has become increasingly important.

[Figure 2 about here.]

Finally, it is worth commenting briefly on where Canada’s Start-Up Visa fits into its broader immigration system. Canada has had a points-based immigration system since 1967, under which foreign-born individuals can enter Canada if their qualifications (in terms of, for example, skills, education, language proficiency, and work experience) surpassed a certain point threshold.⁷ The Start-up Visa Program complements the existing points-based immigration system by offering a different aperture for entrepreneurs to enter Canada and lowering the barrier of entry for such immigrant entrepreneurs. As a Canadian government official we interviewed explained: “We would like qualified people who want to come to Canada and start a company to apply to the Start-up Visa Program. If you are a skilled talent but have no interest in starting a business, then it makes sense to go with other pathways.”

3.2 The U.S.’s immigration policy

In contrast to Canada and other countries that have introduced immigration policies specifically aimed at foreign-born entrepreneurs, the U.S. has not adopted a start-up visa program (as of August 2023), despite making several attempts to introduce such a policy (including the most recent Start-up Act in February 2019). Furthermore, it does not provide a straightforward, alternative pathway for aspiring immigrant entrepreneurs to legally found a company within its borders (for more details, see Kerr and Kerr 2020b).

⁷For more information on the most recent version of Canada’s points-based system, see the link: <https://www.canada.ca/en/immigration-refugees-citizenship/services/immigrate-canada/express-entry/works.html>.

[Figure 3 about here.]

Figure 3 summarizes the three paths currently available for immigrants to the U.S. who aspire to become an entrepreneur. The first path is the EB-5 Immigrant Investor Program, which requires both (1) investment of more than USD 1 million into a U.S. business and (2) employment of at least 10 permanent, full-time, qualified U.S. workers. If the targeted employment area (TEA) is in a rural area or an area with high unemployment, the minimum investment amount decreases to USD 800,000. For immigrants who do not have the wealth or willingness to invest such a large amount of money, there are two other paths. One is to (1) acquire an O-1 Visa and/or (2) self-petition for permanent residence, both of which are limited to “Individuals with Extraordinary Ability or Achievement” and take a highly uncertain, complex, and time-consuming process. The other (and most common) path is to first obtain an employment-based visa (e.g., H-1B) and then receive an employment-based permanent residence. Immigrants taking this path must wait to start a company until they receive this permanent residency because they cannot lawfully start a company while on an employment-based visa. Because of the 7% per-country cap on employment-based permanent residency each year, this two-step process can take numerous years, depending on the immigrant’s country of origin. In particular, Asians (notably, Chinese and Indians) face the longest waiting period, which is estimated to range from five to 100 years.

In sum, the U.S. system is not designed for aspiring immigrant entrepreneurs, making it very difficult for immigrants without permanent residency or citizenship to found a company within its borders. Accordingly, the Canadian government’s evaluation of the Start-Up Visa Pilot notes that “the American immigration system was viewed by key informants as difficult to navigate, whereas the Canadian system was seen as an alternative means to break into the North American market.”⁸ Similarly, an immigrant entrepreneur who received Canada’s Start-up Visa during its pilot phase explained that: “I wanted to start a company in the U.S. and get access to its VCs and its market. But, at the end of the day, I needed a U.S. visa. That was the major issue. As I couldn’t get a visa, starting a company in the U.S. was impossible. So, I moved to Canada and started my company.” As Canada’s Start-Up Visa Program may alleviate a very significant constraint for would-be immigrant entrepreneurs in the U.S., it may attract them to move across the border to

⁸For more information on this evaluation, see the link: <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/reports-statistics/evaluations/start-visa-pilot.html>.

start their businesses.

4 Data and measurement

4.1 Data

To assess how Canada’s Start-up Visa Program has affected founding location choices, we collected our data from four sources: Revelio Labs, the U.S. Department of Education, the Canadian government, and the U.S. Census Bureau. First, Revelio Labs, a workforce intelligence company established in 2018, offers data on LinkedIn profiles (i.e., online resumes) of more than 850 million individuals in over 200 countries. This dataset includes each individual’s unique identifier, full name, predicted gender, predicted ethnicity, education history, work experience, and location. The distinctive advantage of these data is that we can precisely track the cross-border movements and entrepreneurial activities of those individuals and identify the exact timing of these actions. As other recent papers have laid out in detail (e.g., Gupta 2023, Jeffers 2023, Lee and Kim 2022), LinkedIn is especially well-positioned to capture start-up founding.

However, this dataset is not without limitations. First, we cannot observe the type of visa that individuals received in their cross-border movements (in particular, whether individuals who migrated to Canada after the policy change received a visa through the Start-up Visa Program). Furthermore, this dataset does not provide information on the founded start-up’s product, industry, VC financing, or sales. As a result, our analysis focuses on leveraging the data’s strengths by focusing on the founders themselves. Lastly, although only 10.7% of the global population has an account on LinkedIn, more than half of our target population, the U.S. and Canadian populations (i.e., 174 and 17 million, respectively), have a LinkedIn account. Similarly, our focus on individuals with an undergraduate degree plays to the data’s strengths, since the vast majority of LinkedIn users have at least an undergraduate degree (Auxier and Anderson 2021).

In turn, the U.S. Department of Education provides the Database of Accredited Postsecondary Institutions and Programs. Given our sample of individuals who have at least a bachelor’s degree and lived in the U.S. before founding their company in the U.S. or Canada, we leverage this database to create our primary measure of immigrants (i.e., whether an individual received an undergraduate degree from a U.S. institution).

Similarly, the Canadian government’s List of Designated Educational Institutions contains all the post-secondary educational institutions in Canada. To exclude Canadians—who do not require a visa to found a business in Canada and therefore should not be affected by its Start-up Visa Program—from our sample, we use this list to identify whether an individual received a bachelor’s degree from a Canadian institution.

Lastly, the U.S. Census Bureau’s American Community Survey provides detail on the number of immigrants by region of birth in each metropolitan statistical area (MSA). We use this information to measure ethnic immigrant enclaves in MSAs where individuals lived before Canada’s introduction of the Start-up Visa Program.

In addition to these archival datasets, we gathered qualitative data by conducting several unstructured interviews. To obtain diverse perspectives on Canada’s Start-up Visa Program, we interviewed Canadian government officials, designated Canadian organizations (incubators and VC investors), and immigrant entrepreneurs who received Canada’s Start-up Visa. During each interview, which lasted approximately an hour, we asked a series of questions regarding their experience with Canada’s Start-up Visa Program. Below, we leverage these qualitative observations to complement our empirical findings.

4.2 Sample

For our regression analyses, we restricted our sample to 1,190,798 non-Canadian individuals with at least a bachelor’s degree who founded a company either in the U.S. or Canada between 2006 and 2021 and who lived only in the U.S. before founding their start-up. We purposefully chose this time period to include several years before and after 2013 to examine the pre- and post-treatment trends. Because individuals are of different ages and thus join the labor market at different points in time, our panel dataset is unbalanced in that each panel member has a different number of observations.

Using the four datasets discussed in Section 4.1, we constructed a panel dataset at the individual-by-year level in the following way. First, to focus on the founding location choice (rather than the founding decision itself), we restricted our sample to 4,588,940 individuals who founded a company in the U.S. or Canada between 2006 and 2021. We identified these founders by selecting individuals in either country who have a job title containing a term relevant to entrepreneurship (i.e., “founder,” “founding,” “entrepreneur,” or “enterpriser”). Next, to construct a measure of immigrants (i.e.,

whether the individual completed an undergraduate degree outside of the U.S.; for more detail, see Section 4.3), we focused on 1,201,821 individuals who have at least a bachelor’s degree listed on their profile. Then, to remove potential Canadians from the sample, we excluded 8,403 individuals who received a bachelor’s degree from a Canadian institution. Lastly, we limited the sample to 1,190,798 individuals who lived only in the U.S. or Canada before founding their company. From this sample, we drew a random subset of individuals, found their current public LinkedIn profile, and verified that their information (in particular, on whether they moved from the U.S. and started a business in Canada) in our dataset is accurate.

Given these restrictions, our sample would not include immigrants who do not have a bachelor’s degree or who lived in other countries (e.g., China, India, or Iran) for at least one year before moving to Canada to start a business. However, during our interviews, we found several individuals originally from these other countries who initially tried to start a company in the U.S. but eventually chose Canada as their founding location, after realizing that the U.S. immigration restrictions were too stringent to do so. As our sample excludes these foreign-born entrepreneurs, our regression estimates are likely to only capture a fraction of the Start-up Visa Program’s impact on Canada’s entrepreneurship and thus may be conservative. In Section 5.6, we show that our results are not sensitive to various restrictions that we applied during the sampling process.

4.3 Measurement

Dependent variable. Our outcome of interest is operationalized as a binary variable $Canada_{it}$, which equals one for both the year t in which individual i founded a company in Canada and the continued presence of the founded company in Canada afterward; zero, otherwise.

Treatment period. As Canada announced its Start-up Visa Program in January 2013 and launched this program in April 2013, we create a binary variable $Post_t$, which equals one if year t is 2013 or after; zero, otherwise.

Treatment group. The primary explanatory variable of interest is the binary dummy $Immigrant_i$, which indicates whether individual i is an immigrant to the U.S. Because individuals typically do not specify their immigration status on their LinkedIn profiles, we proxy for this variable by examining whether the individual received a bachelor’s degree from a non-U.S. and non-Canadian

institution. To identify whether an undergraduate institution is located in the U.S. or Canada, we used a fuzzy string-matching algorithm (i.e., Python’s `fuzzymatcher` with a similarity threshold of -1 to account for minor differences) to find its most accurate match within the U.S. Department of Education’s Database of Accredited Postsecondary Institutions and Programs and the Canadian government’s List of Designated Educational Institutions. Then, these fuzzy-matched observations were verified in two ways. First, we gathered the list of individuals who, according to Revelio Labs’ dataset, have not graduated from these fuzzy-matched institutions and examined whether the majority of these individuals are currently located in the U.S. or Canada. Next, we manually checked to remove false or ambiguous matches. This measure provides a conservative estimate because it excludes individuals who immigrated to the U.S. to pursue a bachelor’s degree (but only about 3% of U.S. undergraduate students are immigrants; Bound et al. 2015) or those who immigrated before enrolling in a bachelor’s degree program.⁹

Ethnicity. The main source of individual variation that we use is ethnicity. We first construct the binary indicators $Asian_i$ and $Hispanic_i$, each of which represents whether individual i was predicted to be Asian or Hispanic, respectively, based on the individual’s full name (according to Revelio Labs). Using these variables, we create the binary dummies $Immigrant_Asian_i$ and $Immigrant_Hispanic_i$, which equal one if subject i is both an immigrant (i.e., $Immigrant_i = 1$) and the respective ethnicity (i.e., $Asian_i = 1$ or $Hispanic_i = 1$, respectively). We apply these two variables to see whether immigrants of these two ethnicities differ in their response to the policy change.

Ethnic enclaves. To examine the hypothesis that ethnic enclaves may moderate the responsiveness of U.S.-based immigrants to Canada’s Start-Up Visa Program, we consider the population of co-ethnic immigrants in the MSAs that individuals lived in as of 2012 (i.e., the year before the introduction of Canada’s Start-up Visa Program). Specifically, we create the variables $MSA_Share_Asian_i$ and $MSA_Share_Hispanic_i$, which measure the share of immigrants from Asia and immigrants from Latin America, respectively, in the MSA that individual i lived in 2012.

Other variables. In terms of individual attributes, we also employ the variable $Woman_i$, which

⁹As our measure based on the location of individuals’ undergraduate institutions may potentially be too conservative, we alternatively measure whether an individual is an immigrant using the individual’s inferred ethnicity based on full name (in Revelio Labs’ dataset). This alternative measure provides bias in the opposite direction because it would include Americans who are descendants of immigrants. In Section 5.6, we show consistent results using this measure.

indicates whether individual i was predicted to be a woman based on the individual’s full name (according to Revelio Labs). For origin location, we consider the MSA or the state in the U.S. where the individual was located.

4.4 Descriptive statistics

Table 1 presents the descriptive statistics, which are based on our unbalanced panel dataset of 1,190,798 individuals from 2006 to 2021.¹⁰ On average, the likelihood that an individual in the U.S. has a start-up business in Canada in a given year is 0.069%.¹¹ Approximately 26.1% of our observations are immigrants (i.e., individuals in the U.S. who received a bachelor’s degree from a non-U.S. institution). 37.5% of the sample are women. Hence, immigrants are over-represented and women are under-represented in our sample relative to their representation in the U.S. population (14% and 50%, respectively). However, these statistics are unsurprising given that immigrants are much more likely to start a company than natives (Azoulay et al. 2022, Kerr and Kerr 2020a), while women are much less likely to start a company than men (Guzman and Kacperczyk 2019). In terms of ethnicity, Asians and Hispanics each represent about 5% of our sample. Unsurprisingly, about one-third of our observations are located in the four U.S. states with the largest population: California, New York, Texas, and Florida.

[Table 1 about here.]

5 Regression analyses

5.1 Empirical strategy

To empirically examine whether entrepreneurship-focused immigration policy affects founding location choice, we leverage the introduction of Canada’s Start-up Visa Program (described in Section 3). Specifically, we employ a difference-in-differences (DiD) specification that compares the change in the likelihood of founding and/or continuing a business in Canada before and after this

¹⁰For the descriptive statistics by treatment group, see Appendix A1.

¹¹49.3% and 36.6% of these start-ups were founded in Ontario (i.e., Toronto and Waterloo) and British Columbia (i.e., Vancouver), respectively. An interviewee pointed out that immigrant entrepreneurs tend to choose these locations because “that’s where other immigrants are.”

immigration policy in 2013 for U.S. immigrants (i.e., the treated group) relative to U.S. natives (i.e., the control group). Formally, the DiD specification is as follows:

$$Canada_{it} = Immigrant_i \times Post_{it} \cdot \delta + Individual_i + Year_t + \epsilon_{it} \quad (1)$$

where i indexes individuals and t indexes years. In this equation, $Canada_{it}$ is a binary indicator for the outcome variable (i.e., whether subject i started or maintained a business in Canada in year t), $Immigrant_i$ is a binary variable for the treated group (i.e., U.S. immigrants), and $Post_{it}$ is a binary dummy for the years after 2013 (i.e., when Canada introduced its Start-up Visa Program). In turn, $Individual_i$, $Year_t$, and ϵ_{it} each denote individual fixed-effects, year fixed-effects, and the residual term, respectively. The individual and year fixed-effects absorb the traditional treatment-group ($Immigrant_i$) and treatment-period ($Post_{it}$) DiD variables. We estimate Equation 1 using ordinary least squares (OLS) with standard errors clustered at the individual level to allow for unspecified correlation in the error terms over time.¹² δ represents the average treatment effect. If Canada's Start-up Visa Program increased the propensity of U.S.-based immigrants to pursue a business in Canada, we would expect δ to be positive.

5.2 Main results

Table 2 reports the regression results. First, Model 1 presents the traditional DiD specification with $Immigrant$ and $Post$ shown separately. In turn, Model 2 adds the individual fixed-effects. Lastly, Model 3 estimates Equation 1 with both the individual and year fixed-effects. All three models show a strongly positive and statistically significant estimate for $Immigrant \times Post$ ($p < .001$), implying that Canada's Start-up Visa Program increased the likelihood that U.S. immigrants moved to and started a business in Canada. Furthermore, the economic magnitudes are large. Given the baseline rate of 0.069% (as shown in Table 1), this coefficient estimate in Model 3 (i.e., 0.048 percentage points) suggests a substantial increase of 69.6%. Thus, these results demonstrate that immigration policy has a significant impact on the choice of start-up founding location.

[Table 2 about here.]

¹²An alternative specification that has been used in prior studies (e.g., Chung and Song 2004, Kulchina and Oxley 2020) is the location choice (conditional logit) model. However, we are unable to apply this specification, as the dependent variable does not change for many of our observations (e.g., those that never moved to Canada).

5.3 Parallel trends and dynamic treatment effects

The validity of our empirical design rests on the parallel trends assumption: that the trends in the propensity to form a start-up in Canada for U.S. immigrants (i.e., the treated group) and U.S. natives (i.e., the control group) would have remained the same in the years after the policy change, were it not for this change. While we cannot directly test this counterfactual, we can examine whether the trends *before* the policy change were the same by conducting an event study with the following equation:

$$Canada_{it} = \sum_{t=2006, t \neq 2012}^{2021} Immigrant_i \times Year_t \cdot \delta_t + Individual_i + Year_t + \epsilon_{it} \quad (2)$$

where the terms are the same as in Equation 1. This event study allows us to not only check whether the two groups had a similar trajectory for the outcome variables before the policy change, but also estimate the persistence—or even growth—of its effect over time. The effect of the immigration policy in year t is captured by δ_t . We expect $\delta_t = 0$ in years prior to the policy change ($t < 2013$), whereas $\delta_t > 0$ in years after this change ($t \geq 2013$).

The results are reported in Table 3. The graphical illustrations of these results are shown in Figure 4, where the point estimates and 95% confidence intervals correspond to the table. Reassuringly, the coefficient estimates for years before the policy change (i.e., 2006 to 2012) are not statistically significant ($p > .1$).

[Table 3 about here.]

[Figure 4 about here.]

Figure 4 also presents interesting details on the effects of Canada’s Start-up Visa Program over time. It indicates that the propensity of U.S. immigrants to start a company in Canada increased exponentially from 2014 to 2021. Even more interesting is the fact that there is no observable plateauing or decline in the almost ten years since the program was initially launched in 2013. Thus, this figure illustrates that the effect of Canada’s Start-up Visa Program is not only persistent nearly ten years later, but actually continues to grow in size.

We further conduct a series of sensitivity analyses of the event-study results in Table 3 using Rambachan and Roth’s (2023) approach with bounds on relative magnitudes (R package `HonestDiD`). The results of these analyses are shown in Figure 5. This figure indicates that the breakdown value for the significant effect on *Canada* is $\overline{M} = 1.5$. These values imply that the results are robust to allowing for violations of parallel trends up to 1.5 times larger than the maximum violation in the pre-treatment period.

[Figure 5 about here.]

5.4 Heterogeneous effects by ethnicity

The results presented thus far focused on the average treatment effects of Canada’s Start-up Visa Program on founding location choice. As discussed earlier, we expect that the propensity to respond to Canada’s Start-Up Visa Program may vary across immigrants depending on their ethnicity. In particular, Asian and Hispanic immigrants may respond differently because of three main reasons: (1) the different challenges that they face in the U.S. immigration system, (2) their ethnic representation in Canada’s designated organizations, and (3) the difference in the ethnic composition of the U.S. and Canada.

First, Asian immigrants (in particular, Chinese and Indians) in the U.S. may be more likely than Hispanics and other ethnic groups to move and start a business in Canada because, as discussed in Section 3.2, they encounter a significantly longer waiting period in receiving a U.S. employment-based permanent residency due to its annual 7% per-country cap (Diethorn 2022, Gupta 2023).

Second, U.S.-based Asian (Hispanic) immigrants may have a higher (lower) propensity to do so because, as shown in panel (a) of Table 4, their fellow Asians (Hispanics) have a significantly large (small) representation in the board members of Canada’s designated organizations.¹³ As noted in Section 3.1, a major challenge that these organizations face in the due diligence process is the lack of available and reliable information about foreign-born entrepreneurs. In line with our arguments

¹³To compute the ethnic composition of these organizations, we first collected information on their board members from their websites. We then applied Namsor.app’s machine learning algorithm to predict each member’s country of origin and ethnicity based on the individual’s full name. According to Namsor.app’s website, its algorithm has been trained based on more than 8.5 billion names in 249 countries and has been used in 287 academic studies (e.g., Hurst et al. 2022). In an independent study using approximately 90,000 researchers who are affiliated with universities or research institutes in 22 different countries and authored at least 1000 medical publications, Sebo (2022) finds that this algorithm is “accurate in determining the continent of origin of individuals from their first and last names.”

in Section 2.3, co-ethnic immigrant ties may play a role in addressing such information asymmetry and in finding which immigrant entrepreneurs to sponsor the Start-up Visas.

Lastly, Asians (Hispanics) may be more (less) likely than other ethnic groups to relocate to and launch a business in Canada, where they represent a larger (smaller) share of the population, rather than in the U.S. (see panel (b) of Table 4). According to the 2021 Canadian Census, Asians make up 20.2% (7 million in total) whereas Hispanics represent only 1.6% (0.6 million) of Canada’s total population (36 million). In contrast, according to the 2021 U.S. Census, Asians constitute 7.2% (24 million) while Hispanics comprise 18.7% (62 million) of the U.S. population (337 million). As described in Section 2.3, prior research has shown that immigrants tend to prefer to locate in such ethnic enclaves and that living in these enclaves boosts their entrepreneurial success (Bartel 1989, Bauer et al. 2005, Cadena et al. 2017, Eckstein and Peri 2018, Edin et al. 2003, Marinoni 2023). Therefore, we might expect that the higher (lower) representation of Asians (Hispanics) in Canada as compared to the U.S. would increase Canada’s attractiveness to co-ethnic (i.e., Asian) immigrants. In short, a higher relative representation in Canada than in the U.S. may “pull” co-ethnic immigrants.

[Table 4 about here.]

To examine this variation by ethnicity, we interact the dummy variables indicating whether the immigrants are ethnically Asian or Hispanic (*Immigrant_Aasian_i*, and *Immigrant_Hispanic_i*) with the dummy variables for the treated group (*Immigrant_i*) and the post-treatment period (*Post_{it}*).¹⁴ The results of these analyses are presented in Table 5. As expected, Model 1 shows that Asian immigrants to the U.S. are significantly more likely than non-Asian immigrants to respond to the policy change ($p < .001$). Also, Model 2 indicates that, relative to other immigrants to the U.S., Hispanic immigrants are significantly less inclined to do so ($p < .05$).

[Table 5 about here.]

¹⁴As shown in Table 10, we find comparable results when interacting the binary indicators for Asians and Hispanics (i.e., *Asian_i*, and *Hispanic_i*), instead of the dummy variables indicating whether the immigrants are ethnically Asian or Hispanic (*Immigrant_Aasian_i*, and *Immigrant_Hispanic_i*).

5.5 Moderating effects of ethnic enclaves

As the above heterogeneous effects by ethnicity allude to the moderating role of ethnic enclaves, we further investigate whether co-ethnic immigrant enclaves in the origin location moderate the likelihood of immigrants migrating to and starting a business in Canada. As a measure of the size of these enclaves, we employ the population share of Asian and Latin American immigrants (i.e., individuals “born in” Asia or Latin America) in the origin MSAs where the immigrants were located as of 2012 (*MSA_Share_Asian* and *MSA_Share_Latin*).

[Table 6 about here.]

The results using these variables are reported in Table 6. In Model 1, the interaction term of interest (i.e., $Immigrant_Asian \times MSA_Share_Asian \times Post$) indicates that the larger the Asian immigrant enclaves in the origin MSA, the less likely that U.S.-based Asian immigrants move to Canada to start and/or maintain a business ($p < .001$). Similarly, the interaction term (i.e., $Immigrant_Hispanic \times MSA_Share_Latin \times Post$) in Model 2 suggests that the U.S.-based Hispanic immigrants’ propensity to start a company in Canada decreases with the size of their ethnic enclaves in their origin MSA, although these coefficient estimates are not statistically significant ($p > .1$). In sum, these results offer suggestive evidence that co-ethnic immigrant enclaves in the origin location where immigrants live before the policy change moderate the impact of the immigration policy on their founding location choice.

5.6 Robustness checks

We conducted a series of robustness checks, all of which show consistent results (for detail, see Appendix A2) and thereby grant more credence to our findings. First, as our measure of the treatment group (i.e., *Immigrant*) could be imprecise, we employed various alternative measures. Rather than excluding from the sample 3,387,119 individuals in the U.S. without information on their bachelor’s degree in their LinkedIn profile, Model 1 in Table 9 includes these individuals and assumed them to be U.S. natives (*Immigrant_Extended_i*).¹⁵ In turn, instead of inferring from the location of the individual’s undergraduate institution, Models 2 and 3 use Revelio Labs’ prediction

¹⁵After applying other sampling restrictions discussed in Section 4.2, Model 1 adds 1,293,868 individuals to its sample.

of ethnicity to more broadly define Asians and/or Hispanics to be immigrants to the U.S. ($Asian_i$ and $Asian/Hispanic_i$, respectively).

Second, rather than using the binary dummies for whether *immigrants* are ethnically Asian or Hispanic (i.e., $Immigrant_Asian_i$, and $Immigrant_Hispanic_i$), we employed the binary indicators of ethnicity for Asians and Hispanics (i.e., $Asian_i$, and $Hispanic_i$). Table 10 presents the results using these dummy variables for the heterogeneous effects by ethnicity, while Table 11 reports the results with four-way interactions for the moderating effects of ethnic enclaves.

Third, we used various alternative measures for the ethnic enclaves (i.e., MSA_Share_Asian and MSA_Share_Latin). Instead of the origin MSA’s population share of individuals born in Asia and Latin America, which may not include naturalized citizens of Asian and Latin American descent, we employed in Table 12 the proportion of individuals that speak an Asian and Pacific Islander language or Spanish (i.e., $MSA_Share_Language_Asian$ and $MSA_Share_Language_Spanish$).

Fourth, to account for potential time-invariant unobserved heterogeneity by location and address the possibility that errors are correlated across years, we considered location fixed-effects and alternative clustered standard errors. Specifically, in Table 13, Models 1 and 2 each include MSA and state fixed-effects, respectively, while Model 3 clusters the standard errors two-way by individual and year.

Fifth, we adjusted our restrictions on the sampling process (for details, see Section 4.2). To mitigate the concern that the results could be driven by (1) Canadians who are not captured by our measure using their undergraduate institution or (2) individuals who previously worked in Canada before founding their company in Canada, Model 1 in Table 14 further limits the sample to 947,371 individuals who lived in the U.S. the year before founding their company. Model 2 additionally excludes 1,287 individuals who lived at least one year in Canada before founding their company. In contrast, instead of sampling those who *only* lived in the U.S. or Canada before founding, Model 3 includes 1,192,005 individuals who *also* lived in other countries (except for the U.S. and Canada) for a short period before founding a company.

Lastly, we explored alternative explanations regarding the geographical proximity to Canada and the entrepreneurial ecosystem in the origin location. As geographical proximity to Canada may significantly reduce the costs of moving across the border to start a business, we coded the variable $Canada_Border_i$ as one if individual i resided in one of the 13 U.S. states that border Canada;

otherwise, zero.¹⁶ In turn, as entrepreneurial opportunities and agglomeration economics in the origin location may decrease the likelihood that individuals leave their states to start a business in Canada, we created the variable *State_New_Employer_Businesses* using the rate of new employer businesses of each state (as of 2012) from the Kauffman Indicators of Entrepreneurship. For the MSA-level data, we gathered information from the Startup Cartography Project to create four variables (as of 2012). According to this project (for more detail, see Guzman and Stern 2015), *MSA_Startup_Formation_Rate* captures the number (quantity) of new business registrants within an MSA, *MSA_Entrepreneurial_Quality_Index* measures the average growth potential (quality) within a group of start-ups within an MSA, *MSA_Regional_Entrepreneurship_Cohort_Potential_Index* counts the number of start-ups within an MSA expected to later achieve a significant growth outcome, and *MSA_Regional_Entrepreneurship_Acceleration_Index* estimates the ability of an MSA to convert entrepreneurial potential into realized growth. In Tables 15 and 16, we find little evidence to suggest that the geographic proximity to Canada and the entrepreneurial ecosystem in the origin location disproportionately affect the likelihood of immigrants migrating to Canada to found a business. This is perhaps not surprising as there is no clear theoretical reason to expect immigrant entrepreneurs to value entrepreneurial ecosystems or geographic proximity more or less than native entrepreneurs.

5.7 Exploratory analyses on start-up quality

Thus far, this study analyzed how Canada’s Start-up Visa program impacted the founding location choice of U.S.-based immigrants. A question that emerges from these analyses may be whether those immigrants established a high-quality start-up that contributes to Canada’s economy. In our interviews, a Canadian investor raised the concern that “it’s too difficult to find good [business] proposals [in the Start-up Visa Program],” whereas a Canadian government official highlighted that many start-up visa recipients went on to establish successful start-ups, such as ApplyBoard and FinAI. Because our dataset, unfortunately, does not include information on start-up performance (e.g., VC financing, sales; as discussed in Section 4.1), we are unable to definitively test this question and adjudicate these opposing perspectives on the efficacy of Canada’s Start-up Visa Program. However, in an attempt to examine this question, we provide a descriptive analysis of the average

¹⁶The 13 states that border Canada include Alaska, Idaho, Maine, Michigan, Minnesota, Montana, New Hampshire, New York, North Dakota, Ohio, Pennsylvania, Vermont, and Washington.

survival rate and the average employment growth of start-ups established in the U.S. and Canada after the introduction of Canada’s Start-up Visa Program in 2013. Given the short time window between 2013 and 2021, we explore these two outcomes in years one and three after the founding.

The results of this descriptive analysis are reported in Table 7. We find that, compared to start-ups founded in the U.S. by natives (i.e., Americans) and by immigrants or in Canada by natives (i.e., Canadians), those founded in Canada by U.S.-based immigrants have a slightly smaller likelihood of survival in the first and third years. However, these start-ups are comparable to their counterparts in terms of employment growth. While these results seemingly suggest that the start-ups that U.S.-based immigrants founded in Canada may not be of higher quality, the results may be considered hardly surprising given that these immigrants incurred relocation costs in moving to Canada and encountered the liability of foreignness in founding a business in their new location. Furthermore, Canada may not have been the optimal location to start their businesses considering that, as discussed in Section 3.2, these immigrants were originally located and aspired to start a business in the U.S.—which arguably has a better entrepreneurial ecosystem than Canada—and Canada was seen as an alternative founding location “to break into the North American market.”¹⁷

[Table 7 about here.]

6 Discussion

This study investigates whether entrepreneurship-focused immigration policy influences founding location choices. We do so by leveraging the introduction of Canada’s Start-up Visa Program in 2013 and analyzing a unique cross-border, longitudinal dataset of 1.2 million U.S.-based individuals with at least a bachelor’s degree who later started a company in the U.S. or Canada between 2006 and 2021. We find that Canada’s immigration policy increased the likelihood that immigrants to the U.S. hold an active start-up in Canada by 69.6%. Our analyses of individual-level heterogeneity demonstrate that Asian immigrants (who have a higher representation in Canada than in the U.S.) are disproportionately more likely to migrate to Canada to start their businesses. In turn, the analyses of MSA-level variation suggest that the propensity of immigrants migrating to Canada to

¹⁷Because the efficacy of Canada’s Start-up Visa Program requires a more systematic investigation that goes beyond the scope of our study and data, we call for future research on this question in Section 6.3.

start a business varies with the size of co-ethnic immigrant communities. That is, immigrants in MSAs with a larger co-ethnic immigrant population are less inclined to leave and move to Canada to found a business. Below, we discuss the theoretical contributions and policy implications of these findings.

6.1 Theoretical contributions

Our study offers several important contributions. First, this study provides causal empirical evidence that immigration policy has a significant impact on founding location choice. To date, extant research on founding location choice has mainly focused on how entrepreneurs choose their founding locations based on personal preferences (Kulchina 2015), social ties (Dahl and Sorenson 2009, 2012), and/or economic factors (Chen et al. 2010, Guzman 2019, Kolympiris et al. 2015, Krugman 1991, Stuart and Sorenson 2003a). In addition, much of this research has examined these choices within national borders and has shown that entrepreneurs are, in general, more geographically inertial than other workers (Figueiredo et al. 2002, Michelacci and Silva 2007). We extend this stream of research by assessing the cross-border movements in entrepreneurship and demonstrating that these founding location decisions are significantly influenced by immigration policy, a determinant that significantly affects labor market mobility but has largely been overlooked by the existing literature on entrepreneurship.

Second, we contribute to the burgeoning literature on immigrant entrepreneurship, which has established a series of stylized facts about immigrant entrepreneurs. This literature has shown that, despite their visa challenges, immigrants are more likely to start new ventures (Agarwal et al. 2021, Amornsiripanitch et al. 2023, Azoulay et al. 2022, Kerr and Kerr 2017) and that these individuals contribute to start-up success—not only as founders (Azoulay et al. 2022, Fairlie and Lofstrom 2015) but also as managers (Hernandez and Kulchina 2020, Kulchina 2017, 2016) and employees (Dimmock et al. 2022, Li 2020). Our paper complements this literature by considering not just whether immigrants start a new venture but also where they choose to do so.

Third, our work extends prior research on ethnic and immigrant enclaves by highlighting how these enclaves may moderate the effect of immigration policy on the founding location choice. Existing studies have brought scholarly attention to how ethnic and immigrant enclaves provide social capital that immigrants are likely to lack in their host country (Edin et al. 2003, Kalnins

and Chung 2006). Furthermore, these studies have shown that these enclaves play an important role in immigrant entrepreneurship by offering information about entrepreneurial opportunities and by connecting immigrant entrepreneurs to potential employees, suppliers, investors, and customers (Battisti et al. 2021, Borjas 1986, Kerr and Mandorff 2023, Light 1972, Marinoni 2023). In addition to these studies, our results show that ethnic enclaves in the focal country introducing the immigration policy may help attract co-ethnic immigrants in other countries to migrate to the focal country and start a business. In contrast, ethnic enclaves where immigrants are currently located may discourage these immigrants from moving to the focal country.

Finally, we add to extant research that examines the effects of institutions on labor market mobility and entrepreneurship. These studies have demonstrated that institutional frictions, such as non-compete clauses (Samila and Sorenson 2011, Starr et al. 2019), bankruptcy laws (Lee et al. 2011), banking regulations (Kerr and Nanda 2009), and bureaucracy (Djankov et al. 2002, Klapper et al. 2006), and intellectual property rights enforcement (Ganco et al. 2015, Kenney and Patton 2009), affect the mobility and entrepreneurial activities of individuals and the pool of human capital available to employers. This study indicates that immigration systems can also play an important role in labor market mobility and entrepreneurship. In particular, while Agarwal et al. (2021) and Roach and Skrentny (2019) find that stringent immigration policies can reduce the likelihood of immigrants starting or joining new ventures, we show such policies can further force these individuals out of a country’s labor market in their search to start a new firm.

6.2 Policy implications

Entrepreneurial ventures serve as the backbone of the economy (Schumpeter 1934/2012), playing a crucial role in creating jobs (Decker et al. 2014) and spurring innovation (Gans et al. 2002). To boost their economic growth, governments around the world have devised various policies to attract these ventures and establish a strong entrepreneurial ecosystem within their national borders. In particular, since 2010, more than 20 countries (e.g., Australia, Canada, Chile, Ireland, the Netherlands, and South Korea) have competitively introduced start-up visa programs—that is, immigration policies that provide visas to highly-skilled, foreign-born entrepreneurs. However, many countries (including the U.S.) have been hesitant to adopt such immigrant entrepreneur-friendly policies and have raised questions about their efficacy. Our work demonstrates that entrepreneurship

visas (such as the Start-up Visa Program) can be an effective tool for countries competing for global talent to draw immigrants and promote immigrant entrepreneurship within their borders.

Our results are especially striking because they are likely a conservative estimate of the true impact of Canada’s Start-up Visa program on founding location choice. In particular, we only capture the effect on immigrants living in the U.S.; we do not capture those immigrants who lived in their home countries at the time of the program’s implementation, who may change their migration location choice as a result. We also limit our analysis to immigrants who lived in the U.S. prior to 2013, but immigrants who moved to the U.S. after 2013 may also have changed their founding location after realizing that the U.S. immigration system was not conducive to forming start-ups. Furthermore, considering that the U.S. has an exceptionally strong entrepreneurial ecosystem (Conti et al. 2022), it would be relatively difficult to pull aspiring entrepreneurs *away* from the U.S. Thus, immigrant would-be founders in the U.S. might be much less likely than those in other countries with a weaker entrepreneurial ecosystem to move to Canada to start a business.

6.3 Limitations and future research

Our study has some limitations which could be addressed by future work. First, this study focused on establishing the effect of immigration policy on the cross-border founding location decision of entrepreneurs. Future studies could extend our work by investigating how these immigrant entrepreneurs mobilize and organize their resources or whether they succeed in their ventures, given that they encounter not only the liability of newness (Stinchcombe 1965) but also the liability of foreignness (Zaheer 1995). Furthermore, these studies could assess whether these entrepreneurs actually spur economic growth in their new locations and fulfill the goal of the immigration policy of interest. As part of this line of research, future work could investigate whether the immigration policy benefits or hurts local entrepreneurs.

Second, our work examined a specific type of immigration policy (namely, one targeting immigrant would-be founders). Future studies could explore other types of immigration policy (e.g., Canada’s Global Talent Stream) and whether these policies are equally effective in attracting immigrant entrepreneurs. In addition, instead of a friendly immigration policy, these studies could assess the effect of immigration policy restrictions (e.g., the U.S.’s H1-B Visa Ban).

Third, the increase in immigrant entrepreneurship in Canada observed in our study could

have been driven by (1) start-ups that would have otherwise been founded in the U.S. (diversion) and (2) those that may not have been founded in the U.S. (creation). Given our data limitations, we are unable to precisely distinguish between diversion and creation. By teasing out these two processes, future research would provide a better understanding of the immigration policy’s welfare implications.

Fourth, our analyses were carried out within a given empirical context (i.e., Canada and the U.S.). However, Canada has unique characteristics that immigrants may prefer (e.g., it borders the U.S., has a parliamentary democracy and federal system, has a multicultural society, is officially bilingual in English and French, and provides publicly funded health care) and its Start-up Visa Program is one of the most immigrant-friendly policies. Also, the U.S. is attractive to immigrants particularly because it has an especially strong entrepreneurial ecosystem and a highly multicultural society with many immigrants. Hence, future work could test the generalizability of our findings by exploring other contexts (e.g., Australia, Chile, Ireland, or South Korea) or other immigration policies (e.g., the U.S. Citizenship Act of 2021).

Fifth, we limited our sample to individuals living in the U.S. before Canada introduced its Start-up Visa Program in 2013. As this sample excludes those living in other countries (e.g., China or India), our results may only capture a fraction of this immigration policy’s impact on Canada’s entrepreneurship. Future papers could complement our research by analyzing how individuals from these countries responded to this policy.

Lastly, our dataset is based on self-reported information on LinkedIn. This self-reporting (i.e., selection) could affect our results if natives and immigrants vary in their behavior of updating their resumes. Although there is no decisive *a priori* reason to assume that this is the case, future research could revisit this study’s findings by employing an alternative research design or dataset.

6.4 Conclusion

In conclusion, our study unveils the importance of immigration policies in determining founding location choice. Yet, many important insights remain to be uncovered regarding this role. We hope our study serves as a foundation for future exploration of this topic.

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Figure 1: The Canadian government’s advertisement for its Start-up Visa Program.

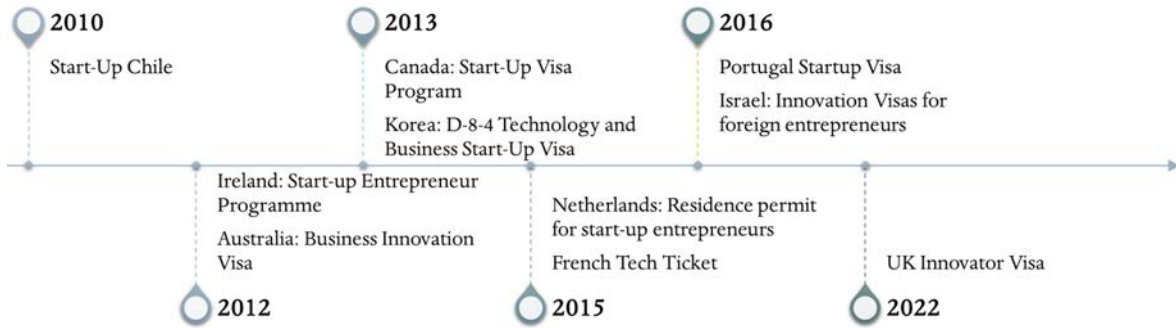


Figure 2: A timeline of a subset of start-up visas around the world.



Figure 3: Pathways in the U.S. for aspiring immigrant entrepreneurs.

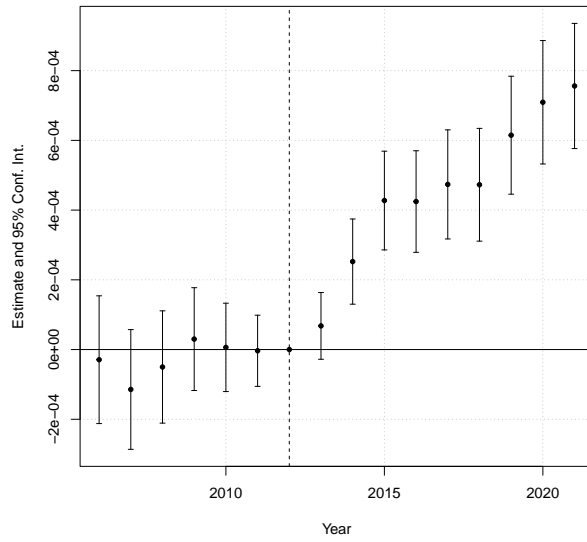


Figure 4: Event-study plot for testing the parallel trends assumption. The plot illustrates the point estimates and 95% confidence intervals.

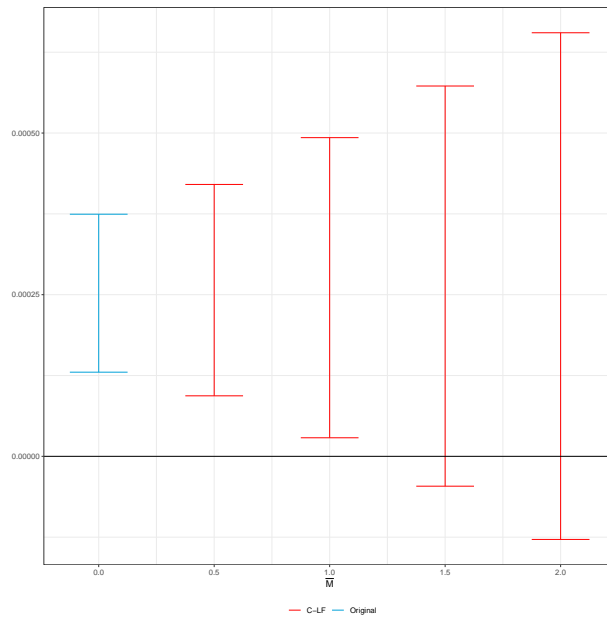


Figure 5: The results of Rambachan and Roth's (2023) approach to test the sensitivity of the event-study results in Table 3.

Variables	No. Observations	Mean	St. Dev.	Min	Max
Dependent					
<i>Canada</i>	15,910,679	0.00069	0.02634	0	1
Independent					
<i>Immigrant</i>	15,910,679	0.26133	0.43936	0	1
Individual					
<i>Woman</i>	15,910,679	0.37504	0.48413	0	1
<i>Asian</i>	15,910,679	0.04697	0.21158	0	1
<i>Hispanic</i>	15,910,679	0.04956	0.21704	0	1
<i>Immigrant_Asian</i>	15,910,679	0.02359	0.15178	0	1
<i>Immigrant_Hispanic</i>	15,910,679	0.01678	0.12845	0	1
Location					
<i>CA</i>	15,093,953	0.13566	0.34243	0	1
<i>NY</i>	15,093,953	0.08061	0.27223	0	1
<i>TX</i>	15,093,953	0.05834	0.23438	0	1
<i>FL</i>	15,093,953	0.08284	0.27564	0	1
Year	15,910,679	2,013.95300	4.48587	2,006	2,021

Table 1: Descriptive statistics for the regression sample.

Dependent	<i>Canada</i>		
	(1)	(2)	(3)
Model			
Independent			
<i>Immigrant</i>	0.00068*** (0.00005)		
<i>Post</i>	0.00024*** (0.00002)	0.00025*** (0.00002)	
<i>Immigrant</i> × <i>Post</i>	0.00054*** (0.00006)	0.00048*** (0.00006)	0.00048*** (0.00006)
Fixed-effects			
<i>Individual</i>		Yes	Yes
<i>Year</i>			Yes
No. observations	15,910,679	15,910,679	15,910,679
R ²	0.00035	0.51064	0.51067

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 2: Main results.

Dependent	<i>Canada</i>
Model	(1)
Independent	
<i>Immigrant</i> × <i>Year</i> = 2006	−0.00003 (0.00009)
<i>Immigrant</i> × <i>Year</i> = 2007	−0.00011 (0.00009)
<i>Immigrant</i> × <i>Year</i> = 2008	−0.00005 (0.00008)
<i>Immigrant</i> × <i>Year</i> = 2009	0.00003 (0.00008)
<i>Immigrant</i> × <i>Year</i> = 2010	0.00001 (0.00006)
<i>Immigrant</i> × <i>Year</i> = 2011	0.00000 (0.00005)
<i>Immigrant</i> × <i>Year</i> = 2013	0.00007 (0.00005)
<i>Immigrant</i> × <i>Year</i> = 2014	0.00025*** (0.00006)
<i>Immigrant</i> × <i>Year</i> = 2015	0.00043*** (0.00007)
<i>Immigrant</i> × <i>Year</i> = 2016	0.00042*** (0.00007)
<i>Immigrant</i> × <i>Year</i> = 2017	0.00047*** (0.00008)
<i>Immigrant</i> × <i>Year</i> = 2018	0.00047*** (0.00008)
<i>Immigrant</i> × <i>Year</i> = 2019	0.00061*** (0.00009)
<i>Immigrant</i> × <i>Year</i> = 2020	0.00071*** (0.00009)
<i>Immigrant</i> × <i>Year</i> = 2021	0.00076*** (0.00009)
Fixed-effects	
<i>Individual</i>	Yes
<i>Year</i>	Yes
No. observations	15,910,679
R ²	0.51067

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 3: Results for testing the parallel trends assumption.

	No. individuals	Share
Asian	171	29.28%
Hispanic	3	0.51%
Total	584	

(a) The board members of Canada’s designated organizations.

	Canada	U.S.
Asian	20.2%	7.2%
Hispanic	1.6%	18.7%

(b) Canada and the U.S. according to the 2021 Canadian and U.S. Census.

Table 4: Asian and Hispanic representation.

Dependent Model	<i>Canada</i>	
	(1)	(2)
Independent		
<i>Immigrant</i> × <i>Post</i>	0.00031*** (0.00006)	0.00051*** (0.00006)
<i>Immigrant_Asian</i> × <i>Post</i>	0.00199*** (0.00029)	
<i>Immigrant_Hispanic</i> × <i>Post</i>		−0.00033* (0.00017)
Fixed-effects		
<i>Individual</i>	Yes	Yes
<i>Year</i>	Yes	Yes
No. observations	15,910,679	15,910,679
R ²	0.51069	0.51067

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 5: Results for the heterogeneous effects by ethnicity.

Dependent Model	<i>Canada</i>	
	(1)	(2)
Independent		
<i>Immigrant</i> × <i>Post</i>	0.00017* (0.00008)	0.00014 [†] (0.00008)
<i>Immigrant_Asian</i> × <i>Post</i>	0.00177*** (0.00038)	
<i>MSA_Share_Asian</i> × <i>Post</i>	0.00108** (0.00038)	
<i>Immigrant</i> × <i>MSA_Share_Asian</i> × <i>Post</i>	−0.00034 (0.00125)	
<i>Immigrant_Asian</i> × <i>MSA_Share_Asian</i> × <i>Post</i>	−0.01119*** (0.00263)	
<i>Immigrant_Hispanic</i> × <i>Post</i>		−0.00004 (0.00025)
<i>MSA_Share_Latin</i> × <i>Post</i>		0.00015 (0.00026)
<i>Immigrant</i> × <i>MSA_Share_Latin</i> × <i>Post</i>		0.00112 (0.00079)
<i>Immigrant_Hispanic</i> × <i>MSA_Share_Latin</i> × <i>Post</i>		−0.00178 (0.00147)
Fixed-effects		
<i>Individual</i>	Yes	Yes
<i>Year</i>	Yes	Yes
No. observations	10,851,324	10,851,324
R ²	0.37522	0.37521

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, [†] $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 6: Results for testing the mechanism regarding ethnic enclaves.

Founding location	Status	Survival rate		No. employees	
		Year 1	Year 3	Year 1	Year 3
U.S.	Natives	95.380%	84.718%	1.13039	1.14108
	Immigrants	95.981%	86.669%	1.09431	1.09690
Canada	Natives	95.062%	85.829%	1.05128	1.09184
	Immigrants from the U.S.	92.316%	73.538%	1.07539	1.08815

Table 7: A exploratory analysis of the survival rate and the employment growth of start-ups in the U.S. and Canada established by natives and immigrants before and after the introduction of Canada’s Start-up Visa Program.

Appendices

A1 Descriptive statistics by treatment group

Variables	U.S. natives (<i>Immigrant</i> = 0)			U.S. immigrants (<i>Immigrant</i> = 1)		
	No. Obs.	Mean	St. Dev.	No. Obs.	Mean	St. Dev.
Dependent						
<i>Canada</i>	11,752,692	0.00043	0.02076	4,157,987	0.00144	0.03790
Independent						
<i>Immigrant</i>	11,752,692	0	0	4,157,987	1	0
Individual						
<i>Woman</i>	11,752,692	0.38248	0.48599	4,157,987	0.35401	0.47821
<i>Asian</i>	11,752,692	0.03165	0.17508	4,157,987	0.09028	0.28658
<i>Hispanic</i>	11,752,692	0.04438	0.20594	4,157,987	0.06421	0.24512
<i>Immigrant_Asian</i>	11,752,692	0	0	4,157,987	0.09028	0.28658
<i>Immigrant_Hispanic</i>	11,752,692	0	0	4,157,987	0.06421	0.24512
Location						
<i>CA</i>	11,182,328	0.13114	0.33755	3,911,625	0.14860	0.35569
<i>NY</i>	11,182,328	0.07254	0.25938	3,911,625	0.10367	0.30484
<i>TX</i>	11,182,328	0.05618	0.23028	3,911,625	0.06450	0.24564
<i>FL</i>	11,182,328	0.08526	0.27927	3,911,625	0.07591	0.26485
Year	11,752,692	2,013.96400	4.48314	4,157,987	2,013.92200	4.49346

Table 8: Descriptive statistics for U.S. natives and U.S. immigrants.

A2 Results for the robustness checks

Dependent Model	Canada		
	(1)	(2)	(3)
Independent			
<i>Immigrant_Extended</i> × <i>Post</i>	0.00034*** (0.00006)		
<i>Asian</i> × <i>Post</i>		0.00140*** (0.00013)	
<i>Asian/Hispanic</i> × <i>Post</i>			0.00057*** (0.00007)
Fixed-effects			
<i>Individual</i>	Yes	Yes	Yes
<i>Year</i>	Yes	Yes	Yes
No. observations	32,764,282	32,764,282	32,764,282
R ²	0.50839	0.50841	0.50840

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 9: Robustness check: (1) Using alternative measures of the treatment group. Model 1 includes 1,293,868 individuals in the U.S. without information on their bachelor's degree in their LinkedIn profile and assumes these individuals to be U.S. natives (*Immigrant_Extended_i*). In turn, Models 2 and 3 use Revelio Labs' prediction of ethnicity to more broadly define Asians and/or Hispanics to be immigrants to the U.S. (*Asian_i* and *Asian/Hispanic_i*).

Dependent	<i>Canada</i>	
	(1)	(2)
Model		
Independent		
<i>Immigrant</i> × <i>Post</i>	0.00032*** (0.00006)	0.00050*** (0.00006)
<i>Asian</i> × <i>Post</i>	0.00038* (0.00016)	
<i>Immigrant</i> × <i>Asian</i> × <i>Post</i>	0.00161*** (0.00033)	
<i>Hispanic</i> × <i>Post</i>		-0.00009 (0.00008)
<i>Immigrant</i> × <i>Hispanic</i> × <i>Post</i>		-0.00024 (0.00018)
Fixed-effects		
<i>Individual</i>	Yes	Yes
<i>Year</i>	Yes	Yes
No. observations	15,910,679	15,910,679
R ²	0.51069	0.51067

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 10: Robustness check: (2) Using alternative measures of ethnicity for the heterogeneous effects by ethnicity.

Dependent Model	<i>Canada</i>	
	(1)	(2)
Independent		
<i>Immigrant</i> × <i>Post</i>	0.00017* (0.00008)	0.00015 [†] (0.00008)
<i>Asian</i> × <i>Post</i>	0.00030 (0.00026)	
<i>MSA_Share_Asian</i> × <i>Post</i>	0.00108** (0.00040)	
<i>Immigrant</i> × <i>Asian</i> × <i>Post</i>	0.00148** (0.00046)	
<i>Immigrant</i> × <i>MSA_Share_Asian</i> × <i>Post</i>	−0.00034 (0.00126)	
<i>Asian</i> × <i>MSA_Share_Asian</i> × <i>Post</i>	−0.00171 (0.00208)	
<i>Immigrant</i> × <i>Asian</i> × <i>MSA_Share_Asian</i> × <i>Post</i>	−0.00948** (0.00335)	
<i>Hispanic</i> × <i>Post</i>		−0.00005 (0.00011)
<i>MSA_Share_Latin</i> × <i>Post</i>		0.00026 (0.00029)
<i>Immigrant</i> × <i>Hispanic</i> × <i>Post</i>		0.00000 (0.00028)
<i>Immigrant</i> × <i>MSA_Share_Latin</i> × <i>Post</i>		0.00100 (0.00080)
<i>Hispanic</i> × <i>MSA_Share_Latin</i> × <i>Post</i>		−0.00054 (0.00061)
<i>Immigrant</i> × <i>Hispanic</i> × <i>MSA_Share_Latin</i> × <i>Post</i>		−0.00124 (0.00159)
Fixed-effects		
<i>Individual</i>	Yes	Yes
<i>Year</i>	Yes	Yes
No. observations	10,851,324	10,851,324
R ²	0.37523	0.37521

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, [†] $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 11: Robustness check: (2) Using alternative measures of ethnicity for the moderating effects of ethnic enclaves.

Dependent	<i>Canada</i>	
	(1)	(2)
Model		
Independent		
<i>Immigrant</i> × <i>Post</i>	0.00014* (0.00006)	0.00016* (0.00007)
<i>Immigrant_Asian</i> × <i>Post</i>	0.00154*** (0.00033)	
<i>MSA_Share_Language_Asian</i> × <i>Post</i>	0.00111** (0.00038)	
<i>Immigrant</i> × <i>MSA_Share_Language_Asian</i> × <i>Post</i>	-0.00018 (0.00128)	
<i>Immigrant_Asian</i> × <i>MSA_Share_Language_Asian</i> × <i>Post</i>	-0.01012*** (0.00239)	
<i>Immigrant_Hispanic</i> × <i>Post</i>		-0.00003 (0.00025)
<i>MSA_Share_Language_Spanish</i> × <i>Post</i>		-0.00006 (0.00015)
<i>Immigrant</i> × <i>MSA_Share_Language_Spanish</i> × <i>Post</i>		0.00044 (0.00042)
<i>Immigrant_Hispanic</i> × <i>MSA_Share_Language_Spanish</i> × <i>Post</i>		-0.00094 (0.00086)
Fixed-effects		
<i>Individual</i>	Yes	Yes
<i>Year</i>	Yes	Yes
No. observations	12,268,393	12,268,393
R ²	0.37617	0.37615

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 12: Robustness check: (3) Using alternative measures of ethnic enclaves.

Dependent	<i>Canada</i>		
Model	(1)	(2)	(3)
Independent			
<i>Immigrant</i> × <i>Post</i>	0.00004** (0.00001)	0.00004*** (0.00001)	0.00048*** (0.00008)
Fixed-effects			
<i>Individual</i>	Yes	Yes	Yes
<i>Year</i>	Yes	Yes	Yes
<i>MSA</i>	Yes		
<i>State</i>		Yes	
Standard errors clustered by	Individual	Individual	Individual + Year
No. observations	14,588,785	15,093,953	15,910,679
R ²	0.25892	0.25014	0.51067

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

Table 13: Robustness check: (4) Adding location fixed-effects and using alternative clustered standard errors. Models 1 and 2 each add MSA and state fixed-effects, respectively. Model 3 clusters the standard errors two-way by individual and year.

Dependent	<i>Canada</i>		
Model	(1)	(2)	(3)
Independent			
<i>Immigrant</i> × <i>Post</i>	0.00022*** (0.00005)	0.00011* (0.00004)	0.00056*** (0.00006)
Fixed-effects			
<i>Individual</i>	Yes	Yes	Yes
<i>Year</i>	Yes	Yes	Yes
No. observations	13,095,085	13,077,913	16,426,440
R ²	0.56013	0.57411	0.49389

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 14: Robustness check: (5) Using alternative samples. In addition to the sampling restrictions discussed in Section 4.2, Model 1 additionally limits the sample to 947,371 individuals who lived in the U.S. the year before founding their company. Then, Model 2 further excludes 1,287 individuals who lived at least one year in Canada before founding their company. In contrast, Model 3 relaxes the restrictions in Section 4.2 by including 1,192,005 individuals who also lived in other countries (except for the U.S. and Canada) for a short period before founding a company.

Dependent	<i>Canada</i>	
	(1)	(2)
Model		
Independent		
<i>Immigrant</i> × <i>Post</i>	0.00017*** (0.00005)	0.00025*** (0.00005)
<i>State_Canada_Border</i> × <i>Post</i>	0.00008* (0.00004)	
<i>Immigrant</i> × <i>State_Canada_Border</i> × <i>Post</i>	0.00011 (0.00010)	
<i>State_New_Employer_Businesses</i> × <i>Post</i>		-0.00004 (0.00003)
<i>Immigrant</i> × <i>State_New_Employer_Businesses</i> × <i>Post</i>		-0.00015† (0.00009)
Fixed-effects		
<i>Individual</i>	Yes	Yes
<i>Year</i>	Yes	Yes
No. observations	13,981,471	13,981,471
R ²	0.37931	0.37931

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, † $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 15: Robustness check: (6) Exploring alternative explanations of geographical proximity and entrepreneurial ecosystem at the state level.

Dependent Model	Canada			
	(1)	(2)	(3)	(4)
Independent				
<i>Immigrant</i> × <i>Post</i>	0.00010 [†] (0.00005)	0.00021*** (0.00005)	0.00020*** (0.00005)	0.00018*** (0.00005)
<i>MSA_Startup_Formation_Rate</i> × <i>Post</i>	0.00000 [†] (0.00000)			
<i>Immigrant</i> × <i>MSA_Startup_Formation_Rate</i> × <i>Post</i>	0.00000* (0.00000)			
<i>MSA_Entrepreneurial_Quality_Index</i> × <i>Post</i>		0.01695 (0.01608)		
<i>Immigrant</i> × <i>MSA_Entrepreneurial_Quality_Index</i> × <i>Post</i>		-0.03199 (0.04534)		
<i>MSA_Regional_Entrepreneurship_Cohort_Potential_Index</i> × <i>Post</i>			0.00000* (0.00000)	
<i>Immigrant</i> × <i>MSA_Regional_Entrepreneurship_Cohort_Potential_Index</i> × <i>Post</i>			0.00000 (0.00000)	
<i>MSA_Regional_Entrepreneurship_Acceleration_Index</i> × <i>Post</i>				-0.00002 (0.00002)
<i>Immigrant</i> × <i>MSA_Regional_Entrepreneurship_Acceleration_Index</i> × <i>Post</i>				0.00000 (0.00004)
Fixed-effects				
<i>Individual</i>	Yes	Yes	Yes	Yes
<i>Year</i>	Yes	Yes	Yes	Yes
No. observations	12,683,738	12,683,738	12,683,738	12,683,738
R ²	0.37726	0.37726	0.37726	0.37726

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, [†] $p < 0.1$

Note. Standard-errors clustered by individual in parentheses.

Table 16: Robustness check: (6) Exploring alternative explanations of entrepreneurial ecosystem at the MSA level.