

# CHAPTER 9

## Immigrant Entrepreneurship: Drivers, Economic Effects, and Policy Implications

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### **Introduction**

Immigrant entrepreneurs are a considerable economic force in many countries, creating innovation, employment, and welfare. Andrew Carnegie, Sergey Brin (Google), Mike Lazardis (RIM), and John Molson (Molson Brewery) are vivid and well-known examples of this phenomenon, but the evidence goes beyond anecdotes. In many countries, immigrants are more likely to become entrepreneurs than the native population, and companies founded by immigrants in the United States, for example, generated \$52 billion in revenue and created 450,000 jobs between 1995 and 2005 (Wadhwa 2009).

The relevance of immigrant entrepreneurship<sup>1</sup> as a topic of discourse has clearly increased in recent years. The first reason is that international migration has become more frequent. In 2015, an estimated 244 million people were living outside their country of birth—more than half of them in G20 countries (OECD, 2017). Net migration added about 10 million people to the total population in G20 countries between 2010 and 2015, with an estimated 3.3 percent of the total G20 population consisting of immigrants. At the same time, public and political opinion on immigration has shifted dramatically towards a more negative assessment of immigrants and their economic and social role in society. In many countries, populist and nativist political parties such as the German AfD party, the French Front National, or the Austrian Freedom Party, and individual politicians such as Netherland’s Geert Wilders, Hungary’s Victor Orban, and the President of the United States, Donald Trump have portrayed immigration as a threat and promoted highly restrictive immigration policies.

Against this background, there is a clear need for an objective and evidence-based analysis of the phenomenon of immigrant entrepreneurship, its drivers and its economic effects. This chapter is our modest attempt to provide such an overview, based on state-of-the-art research into immigrant entrepreneurship. We first discuss the major theories on immigrant entrepreneurship and their reasoning for why immigrants are more inclined to become entrepreneurs than are native-born citizens. These drivers include contextual variables as well as differences in the distribution of individual characteristics (Section 2). Subsequently, we turn our attention to moderators of these relationships, which may help explain varying rates of self-employment among immigrants in different countries (Section 3). Eventually, we discuss the economic and social effects of immigrant entre-

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1 In line with much of the literature, we understand immigrant entrepreneurship as self-employment and business foundations of individuals who have immigrated into a country. The phenomenon has also been discussed under the labels of “ethnic entrepreneurship” and “minority entrepreneurship”, highlighting that many immigrants are also from an ethnic minority (Levie, 2007; Zhou, 2004).

preneurship (Section 4) and policy implications in countries of origin and recipient countries (Section 5).

## 1. The phenomenon of immigrant entrepreneurship

While the integration of immigrants is at times perceived as a cost factor in public discourse, many researchers have made the case for mixed or predominantly positive effects of immigration on host societies and economies. They highlight the role of immigrants as net contributors to the social security system, the favorable demographic effects of immigration in aging societies, and the stimulation of economic growth and innovation (e.g., Eryadin et al., 2010; Kerr and Kerr, 2011; Ottaviano and Peri, 2006). Immigrant entrepreneurs play one particularly positive role. By pursuing careers as entrepreneurs, many immigrants can successfully create income for themselves and their families. In addition, they create novel product and service offers for consumers, and employment opportunities (see Section 4).

One of the reasons for the ongoing scholarly interest in immigrant entrepreneurship is its surprising frequency. Upon arriving in a country, immigrants face many barriers, which would suggest entrepreneurship is a rather unlikely career choice. In comparison with natives, migrants may often lack language skills, resources, and knowledge about the market in which they operate. Under *ceteris paribus* conditions, one might therefore expect that such a clear resource disadvantage against natives would lead to significantly less entrepreneurial engagement.

Evidence has suggested otherwise, however. In many countries, immigrants are as entrepreneurial as natives, or are even overrepresented among entrepreneurs. Self-employment is higher among the foreign-born in many developed economies, such as the United States, Canada, the United Kingdom, and Germany (Borjas, 1986; Clark and Drinkwater, 2000; Hohn, 2012; Fairlie et al., 2010; Levie, 2007; Metzger, 2014; Portes and Zhou, 1996; Schuetze and Antecol, 2006). In the United States, immigrants represented 24.9 percent of all new business owners between 2007

and 2011, but only 15.6 percent of the wage workforce.<sup>2</sup> In 2015, the new business formation rate per month was almost twice as high among immigrants (0.51 percent) as among the population born in the United States (0.28 percent; see Fairlie and Lofstrom, 2015). Similar observations have been made for Canada. For example, data from the 2009 Labour Force Survey indicates that 17.5 percent of immigrants aged 18 to 69 were self-employed, compared to only 14.4 percent of the Canadian-born population (Green et al., 2016).

Insights from the Global Entrepreneurship Monitor (Xavier et al., 2013) further underscore the global scale of this phenomenon: the majority of the countries surveyed report higher entrepreneurial activity among first-generation immigrants than among natives. Self-employment data from the OECD/European Union (2015) paints a similar picture. Across OECD countries and the EU, immigrants are more likely to be self-employed. While their engagement varies strongly, immigrant self-employment reaches largely similar levels as native self-employment in 4, and higher levels in 21 out of 35 surveyed countries (table 1). In nine countries, including Canada, the United Kingdom, Hungary, and Poland, immigrants are more than 20 percent more likely to become self-employed than the native population.

The relatively strong inclination of immigrants to become entrepreneurs is not a new phenomenon. Historians have documented the economic impact of immigrant entrepreneurs in different countries and time periods. Jewish immigrants constituted a significant share of successful entrepreneurs in the United Kingdom between the 1930s and 1950s. These mostly Lithuanian and Polish immigrants have left their mark in many industries, creating household names such as Marks and Spencer or the food retail giant Tesco by introducing product and financial innovation (Godley and Casson, 2010). An analysis of entrepreneurs in New Zealand between 1840 and 1900 suggests that almost 90 percent of all businesses had been

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2 Applying a broader definition, Kerr and Kerr (2016) find that roughly 35 percent of businesses in the United States have at least one immigrant co-founder.

**Table 1: Percent of Workers in Self-Employment**

	Foreign-born	Native-born	Difference
Lithuania	6.1%	6.8%	-0.7%
Iceland	6.1%	11.2%	-5.0%
Norway	6.3%	5.2%	1.1%
Latvia	7.4%	8.3%	-0.9%
Luxembourg	8.0%	6.3%	1.7%
Estonia	8.3%	8.2%	0.2%
Switzerland	9.0%	11.7%	-2.7%
Denmark	9.1%	7.2%	1.9%
Austria	9.3%	8.6%	0.7%
Israel	9.3%	11.9%	-2.6%
Cyprus	9.4%	15.3%	-5.9%
Sweden	9.5%	8.4%	1.1%
Australia	9.6%	8.7%	0.9%
Ireland	10.3%	13.0%	-2.7%
Slovenia	10.4%	9.4%	1.0%
Germany	10.6%	9.7%	0.8%
United States	11.0%	8.7%	2.3%
France	11.0%	9.0%	2.0%
Finland	11.5%	10.3%	1.3%
OECD total (30)	12.0%	11.6%	0.4%
New Zealand	12.1%	12.8%	-0.6%
Greece	12.2%	26.8%	-14.5%
Malta	12.4%	12.5%	-0.1%
EU total (28)	12.9%	12.7%	0.2%
Croatia	13.3%	9.8%	3.5%
Portugal	13.3%	13.4%	0.0%
Hungary	13.7%	9.6%	4.2%
Belgium	14.3%	12.5%	1.8%
Turkey	14.4%	17.3%	-2.9%
Italy	14.6%	22.8%	-8.2%
Netherlands	14.8%	13.6%	1.1%
Spain	14.9%	15.9%	-1.1%
United Kingdom	16.0%	12.7%	3.4%
Canada	16.4%	12.7%	3.7%
Slovak Republic	17.1%	15.3%	1.8%
Czech Republic	26.6%	16.5%	10.1%
Poland	29.0%	12.0%	17.1%

Source: OECD/European Union, 2015; data for foreign-born and native-born self-employed workers aged between 15-64 years. Data collection: 2012-13.

founded by immigrants, while immigrants only represented 54 percent of the population of New Zealand at that time (Hunter and Wilson, 2007).

Over the last five decades, the entrepreneurial activity of immigrants has increasingly raised interest in the research community, leading to inquiries into the degree, reasons, and moderating factors of immigrants' overrepresentation among entrepreneurs, as well as its impact on society. Literature reviews of the field have identified a substantial body of research on the subject. Depending on data source and scope of analysis, estimates range from a few dozen peer-reviewed core papers (Aliaga-Isla and Rialp, 2011; Ilhan-Nas et al., 2011; Ma et al., 2013) to up to 1,700 journal articles, book chapters, and newspaper articles related to the topic (Kloosterman and Rath, 2003). Much of the work on immigrant entrepreneurship can be found in sociology and economics and a smaller share in geographical and small business outlets (Ilhan-Nas et al., 2011; Ma et al., 2013). Interestingly, the topic had been rather absent in the most influential journals in entrepreneurship and management until rather recently, when immigrant entrepreneurship began to be associated with the field of international entrepreneurship (Jones et al., 2011).<sup>3</sup>

## 2. Drivers of immigrant entrepreneurship

One of the major questions that research into immigrant entrepreneurship is trying to answer is why immigrants are more likely than the native-born population to become entrepreneurs. The reasons can be grouped into context-level drivers, i.e., reasons rooted in the characteristics of the host country, and individual-level drivers, i.e., reasons rooted in characteristics of the individual immigrant.

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3 For example, a Google Scholar search in the *Journal of Business Venturing* produces only 19 entries for “immigrant entrepreneurship” or “ethnic entrepreneurship,” of which 17 have been published in the last 10 years.

### **Context-level drivers**

Context-level approaches argue that immigrants' entrepreneurial activity is particularly fostered by discrimination in the labor market and the role of ethnic enclaves and communities.

**Blocked mobility:** In many countries, immigrants are subject to xenophobia and discrimination in the labor market (Aldrich and Waldinger, 1990; Bonacich, 1972; Jones et al., 2014; Kim et al., 1989; Light, 1972; Naudé et al., 2015). Experiments in Canada have demonstrated that applicants with Chinese, Indian, or Pakistani sounding names but otherwise similar education and work experience had to send 40 percent more applications to be invited to a job interview than job seekers with "typical" English names (Oreopoulos and Dechief, 2014). Schneider et al. (2014) identify seventeen studies reporting such forms of racial discrimination in a total of 11 European countries. Immigrants also encounter other barriers to entering the labor market, including a lack of language skills, the non-recognition of overseas credentials, and unfamiliarity with the social, economic, and legal structure of the host society (Bonacich, 1993; Kim et al., 1989).

Setting up a business can thus be a rational reaction to lower chances on the labor market and the thereby blocked upward mobility. It allows immigrants to put their skills and knowledge to adequate use, when they are not recognized or accepted by the labor market (Clark and Drinkwater, 1998; Light et al., 1994; Portes and Zhou, 1996; Sanders and Nee, 1996; Wong, 1988).

This hypothesis has also been referred to as the "middleman minority" paradigm, pointing to the historical discrimination against some minorities who would then take roles as "middlemen" between other market actors. Being excluded from the right to participate in production, land-ownership, or even the right to enter cities, minorities, such as the Jews in Europe or the Chinese in Southeast Asia, turned to self-employment in less well-regarded occupations such as trade or money-lending (Bonacich, 1973; Wong, 1988).

Findings of Constant and Zimmermann (2006) offer empirical support for the blocked mobility hypothesis. In a survey of Turkish immigrants in

Germany, they find that immigrants who felt discriminated against were 46 percent more likely to become self-employed than immigrants who did not feel discriminated against. Beaujot et al. (1994) also found support for the blocked mobility hypothesis in 1986 Canadian census data. Similarly, analyses from Sweden (Hammarstedt, 2006) and the United States (Rajman and Tienda, 2000) confirm this finding.

In sum, this suggests that labor-market discrimination is a considerable push factor into immigrant self-employment.

**Ethnic enclaves:** Another contributor to immigrant entrepreneurship is the residential concentration of co-nationals and co-ethnics in specific urban areas. Early sociological research on immigrant entrepreneurship has emphasized the role of such “enclaves” and communities in fostering entrepreneurship among immigrants (Bonacich, 1973; Light and Bonacich, 1988; Aldrich and Waldinger, 1990; Wilson and Portes, 1980). Ethnic enclaves facilitate access to various resources that can support the development of a business, including financial capital, social capital, and knowledge (Almeida et al., 2014; Portes and Zhou, 1992).

Waldinger and Aldrich (1990) further argue that enclaves create particular opportunity structures that are favorable for immigrant entrepreneurs. First, enclaves provide markets with distinct demands, e.g., for ethnic goods. Opportunities in these markets can be best recognized by individuals with insight into the specific customer needs and preferences of an ethnic or national group (Borjas and Bronars, 1989; Waldinger and Aldrich, 1990). Second, an enclave often also provides access to specialized means of production to exploit these opportunities (e.g., trained labor, raw material, complementary goods). Thus, immigrant entrepreneurs can more easily identify and exploit business opportunities in an area with inhabitants of similar ethnic origin (Waldinger and Aldrich, 1990; Wilson and Portes, 1980).

Language plays an important role in the opportunity structure of enclaves for potential entrepreneurs. The option to speak the language of the country of origin allows newly arrived immigrants to engage in entrepreneurial activity immediately, even if they lack good command of the host

country language. At the same time, the language distance between ethnic enclaves and the majority population can also serve as an entry barrier for non-ethnic businesses, which helps to protect the market from native competition (Evans, 1989; Light, 1972).

Empirical evidence on the effect of ethnic enclaves on self-employment is mixed but predominantly positive. It has been supported by a number of empirical studies in Canada (Razin and Langlois, 1996; Teixeira, 2001), the United States (Borjas, 1986; Fairlie and Woodruff, 2007; Portes and Zhou, 1999; Wilson and Portes, 1980), Australia (Evans, 1989), and Sweden (Andersson and Hammarstedt, 2015). Hum (2001), Min (1988), and Salaff et al. (2003) further support its theoretical underpinnings by showing that entrepreneurs in an ethnic enclave indeed tend to hire co-ethnics. More recently, Almeida et al. (2014) also found a positive effect of moderate community engagement of Indian immigrant inventors in the Californian semiconductor industry on their innovation output.

However, the findings of Boyd (1990), Borjas (1986), Fairchild (2009), Clark and Drinkwater (2000), and Razin and Langlois (1996) show that the effect of enclaves on immigrant entrepreneurship may differ between ethnic groups, or may in some cases not come into effect at all. Aldrich and Waldinger (1990), Yuengert (1995), and Bager and Rezaei (2001) find no effect of ethnic enclaves on entrepreneurial activity, and Clark and Drinkwater (2002) even identify a negative effect of living in ethnic enclaves in England and Wales. This suggests that, in spite of the benefits, there may also be some barriers to starting a business in ethnic enclaves.

Waldinger and Aldrich (1990) point out that opportunities in ethnic markets tend to be limited in scale and often lack long-term growth potential. In addition, the opportunity structure in enclaves forces entrepreneurs to choose from a rather restricted set of business ideas and industries, which can create “cannibalistic competition” between immigrant entrepreneurs (Light and Gold, 2000: 127). The findings of Andersson and Hammarstedt (2015) on self-employment of immigrants from the Middle East in Sweden support that notion. While finding positive effects of the presence of enclaves on the likelihood of self-employment, the authors found a negative effect of ethnic network size, suggesting that a density of

entrepreneurs from one country of origin may create too much competition for a limited opportunity space (Ram et al., 2008).

In sum, this suggests that ethnic enclaves explain some specific forms of immigrant self-employment but may not always contribute to the development of entrepreneurship with long-term growth potential.

**Ethnic social networks:** Many authors emphasize that immigrant entrepreneurs benefit from being embedded in networks of ethnicity and kinship (Greene and Butler, 1996; Sanders and Nee, 1996; Portes and Sensenbrenner, 1993). These networks provide access to valuable resources, including cheap labor from co-ethnic and family sources or funding from family members and rotating credit associations (Bird and Wennberg, 2016; Portes and Bach 1985; Portes and Sensenbrenner, 1993). In fact, as Greene and Butler (1996) have pointed out, ethnic social networks often serve as “natural business incubators” for immigrant entrepreneurs by providing training, assistance in the identification of entrepreneurial opportunities, business intelligence, and seed funding (Granovetter, 2010; Greene and Butler, 1996; Ley, 2006).

While the social networks of immigrants are often analyzed within the context of enclaves, they do not necessarily need to be co-located in one physical area. In fact, the social networks of immigrant entrepreneurs can be dispersed across a country (Hum, 2001; Waldinger, 1990). Moreover, many immigrants have access to valuable transnational networks in their country of origin, which facilitates doing business on an international scale (Rusinovic, 2008; Neville et al., 2014). In the case of the Netherlands, Rusinovic (2008) shows that a considerable number of immigrant entrepreneurs makes use of transnational networks as resources in their businesses.

The social networks of immigrants are argued to be particularly strong within minority groups and are supported by what Portes and Zhou (1992) describe as “bounded solidarity” and “enforceable trust.” As expressions of solidarity, many immigrants develop a consistent preference for goods and services associated with their country of origin, both for their intrinsic utility and as symbolic representations. Likewise, workers and investors might prefer to work among and with “their own”

(Portes and Zhou, 1992). This solidarity is intertwined with what Portes and Zhou (1992) call “enforceable trust,” describing the power structures in communities. The tight social structures of immigrant communities allow for controlling and sanctioning violators of commonly accepted norms and community interests.<sup>4</sup>

Empirical evidence for the potential benefits of social networks in entrepreneurship is abundant (e.g., Brüderl and Preisendörfer, 1998; Greve and Salaff, 2003; Ozgen and Baron, 2007). It has also been found in the context of immigrant entrepreneurs within enclaves, as well as in dispersed social networks (Ram et al., 2008) and families (Bates, 2011; Bird and Wennberg, 2016; Ley, 2006; Sanders and Nee, 1996). For example, Bird and Wennberg’s (2016) analysis of Swedish immigrant entrepreneurs showed that having family members in geographical proximity and access to the families’ financial capital increases immigrant entrepreneurs’ likelihood of remaining in entrepreneurship and exiting paid employment.

**Broader institutional conditions:** Finally, it is also worth remembering that immigrant entrepreneurship is embedded in the larger economic and political context of a country or city (Kloosterman et al., 1999; Kloosterman, 2003). Many institutions that influence the overall business climate for entrepreneurs also exert an influence on immigrants’ new businesses. A wide range of institutions has been associated with enabling entrepreneurship, including the existence of stable property rights and rule of law (Acemoglu and Johnson, 2005; Estrin et al., 2013; Levie and Autio, 2011; Sobel, 2008), economic freedom (Sobel et al., 2010), the absence of corruption, and many others (Dutta and Sobel, 2016). Sobel et al. (2010) even argue that the institutional environment (and in particular economic freedom) of the host country is a key moderator between cultural diversity and

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4 Portes and Zhou (1992: 514) quote the “smooth operation of rotating credit associations among Asian immigrant communities and the flexible transactions among Jewish diamond merchants in New York” as examples of transactions under enforceable trust. In both cases, a substantial number of transactions have taken place with hardly any written contracting within the ethnic community.

**Table 2: Context-Level Drivers of Immigrant Entrepreneurship**

**Core rationale: Immigrants are more likely to become entrepreneurs because of barriers (e.g., discriminations) and opportunities (e.g., ethnic markets) that they find in the host country.**

<b>Name of driver</b>	<b>Main argument</b>	<b>Key articles</b>
<b>Blocked mobility</b>	Labor markets in the host country discriminate against immigrants. This increases the attractiveness of entrepreneurship as alternative to salary work.	Bonacich, 1973; Light et al., 1972
<b>Ethnic enclaves</b>	Geographically concentrated ethnic communities provide easily accessible opportunities and means of production for immigrant entrepreneurs, but less so for natives.	Aldrich and Waldinger, 1990; Wilson and Portes, 1980
<b>Social networks</b>	Local and transnational ethnic social networks ease the access to key resources and fulfil the role of business incubators.	Greene and Butler, 1996; Sanders and Nee, 1996
<b>Institutional conditions</b>	General political and economic institutions (e.g. rule of law, economic freedom) influence the ease of starting and succeeding with a business for immigrant entrepreneurs.	Dutta and Sobel, 2016; Estrin et al., 2013; Kloosterman et al., 1999

the economic performance in a country. They suggest that while cultural diversity leads to conflict and expropriation in a bad institutional environment, it stimulates entrepreneurship in an environment marked by high levels of economic freedom.

A positive climate for foreign trade can be particularly helpful for immigrant entrepreneurs who often concentrate in industries with a high degree of foreign trade (Morgan et al., 2018; Neville et al., 2014). Another area with indirect but important effects is social security, as Olds (2016) showed in an analysis of immigrant self-employment in the United States. Comparing states that provided health insurance to immigrant children

with states that did so only after a 5-year waiting period, Olds (2016) found a significant positive effect of social security on the likelihood to engage in entrepreneurship. The availability of health insurance was associated with a 20 percent higher likelihood of self-employment and a 28 percent higher likelihood of owning an incorporated business. This suggests that access to public health benefits can encourage immigrants to take the risk of starting a business by reducing the risks of unforeseen health care costs in their family.

In summary, evidence suggests that access to co-ethnic networks and communities in the host country and internationally contributes positively to immigrants' engagement in entrepreneurship, as well as to their success in these endeavors (table 2).

### ***Individual-level drivers***

Some drivers of immigrant entrepreneurship also reside at the level of the individual. Research has pointed to variables such as human and financial capital, demographic variables, and cultural heritage.<sup>5</sup> In addition, demographic and psychological differences between immigrants and natives can also play an important role.

The mechanisms leading to such differences vary. In many cases, differences between immigrants and natives are created by systematic processes, such as selective migration policies (e.g., favoring immigrants with high levels of human capital), self-selection of immigrants (e.g., immigrants with an entrepreneurial personality) or the transformation of characteristics through the migration process itself (e.g., when relocation induces learning).

**Human capital:** Education and work experience allow people to build up a multitude of capabilities that benefit entrepreneurial action, including communication skills, analytical competencies, and more specific capa-

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5 As Kloosterman and Rath (2003) point out, the different levels of analysis also reflect disciplinary differences, with sociologists being more concerned with the influence of the context and economists putting a stronger emphasis on factors residing within the individual.

bilities, such as entrepreneurial alertness and planning. While the relationship between human capital and entrepreneurial intent is complex,<sup>6</sup> the majority of entrepreneurship research suggests an overall positive relationship between human capital and the propensity to start a successful business (Davidsson and Honig, 2003; Rauch and Frese, 2000; Unger et al., 2011). These relationships are particularly strong for task-related forms of human capital, such as knowledge of customers, suppliers, products, and services, and entrepreneurial skills (Unger et al., 2011).

The human capital of immigrants may differ from natives due to both selection and self-selection. Many contemporary immigration policies clearly favor immigrants with high education, work experience and sought-after skills. At the same time, neoclassical human capital theory predicts that individuals with high levels of education and skill are more likely to emigrate in order to maximize potential returns on human capital (Haug, 2000; Massey, 1987).<sup>7</sup> Empirical research has repeatedly supported this notion, e.g., for the case of Germany (Brücker and Trübswetter, 2004), the United States (Basu, 1997; Hughes and McCormick, 1985), and the Netherlands (Van Dalen and Henkens, 2007). Probably the largest piece of evidence for self-selection was provided by a detailed investigation of the willingness to emigrate in 23 OECD countries by Drinkwater (2003), showing a robust positive effect of education on emigration propensity.

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6 For example, higher levels of human capital typically increase employability and revenue prospects on the labor market and thus increase the opportunity costs for entrepreneurship (Cassar, 2006; Gimeno et al., 1997).

7 Some researchers have argued for a more complex relationship between human capital and migration, most prominently George Borjas (1987). Borjas argues that individuals opt for migration when their expected return on human capital is higher abroad than in the country of origin and that the return on human capital depends largely on the distribution of income in these countries. Therefore, lower-skilled migrants would have a higher incentive to emigrate from countries with high income disparity to places with a more even income distribution and vice versa. However, empirical results on the Borjas model are mixed (Brücker and Trübswetter, 2004).

In addition to selection and self-selection, entrepreneurial skills can also increase through the migration experience itself. As Maddux and Galinsky (2009) and Fee and Gray (2014) have shown, extensive cross-cultural experience increases creative cognition by providing novel cues for creative expansion. Similarly, Vandor and Franke (2016) find that cross-cultural experience significantly increases the ability to identify profitable business opportunities. Through living abroad, individuals build a valuable stock of knowledge about products, services, and customer needs, which they can juxtapose with previous experience. Such comparisons facilitate the transfer of business ideas between countries (e.g., importing an idea from country A to country B) as well as creatively recombining ideas to create something completely new in a Schumpeterian sense.

In addition, the process of adjusting to the new environment can contribute to the development of skills related to opportunity exploitation. Upon arrival, immigrants usually face numerous non-routine challenges that render habitual ways of behaving ineffective. Coping with such challenges has been associated with increases in self-esteem, tolerance for ambiguity, and stress management (Allen, 2006; Matsumoto, 2006)—skills that are critical in the field of entrepreneurship (e.g., Ward, 2001).

Against this background, it appears plausible that immigrants in many countries possess high levels of human capital and that this contributes to their inclination to start businesses. This idea has been repeatedly echoed in the immigrant entrepreneurship literature (e.g., Portes and Sensenbrenner, 1993; Valdez, 2008) and has found some empirical backing: Differences in human capital have been successfully used to explain variance of business entry rates between different immigrants groups from different countries of origin (Fairlie and Woodruff, 2007; Lofstrom and Wang, 2009; Sanders and Nee, 1996). The evidence is less conclusive but also predominantly positive for human capital as a predictor of differences between individual immigrants and natives, with some positive and some inconclusive findings for general types of human capital (Borjas, 1990; Clark and Drinkwater, 2000; Fairlie and Meyer, 1996; Kanas et al., 2003; Li, 2000; Portes and Zhou, 1996; Shinnar and Young, 2008; Vinogradov and Kolvereid, 2007).

More human capital has also been associated with higher economic success of immigrant enterprises (Ley, 2006; Marger, 2001; Valdez, 2008). This relationship can be partially attributed to the effect of human capital on what type of entrepreneurial opportunities are exploited by immigrants. Achidi Ndofor and Priem (2011) find that immigrants with higher endowments of human capital are more likely to start businesses serving the mainstream market, rather than smaller ethnic markets, which is associated with higher venture performance.

**Demographic variables:** A number of demographic variables can exert a more indirect but nonetheless powerful effect on immigrants' inclination to start a business. Amongst others, these variables include gender and age. In many countries, men are still overrepresented among entrepreneurs (Kelley et al., 2016). While recent data from the Global Entrepreneurship Monitor suggests that the share of female business founders has strongly increased in recent years, the majority of surveyed countries still reports a gender gap in entrepreneurship (Kelley et al., 2016). The debate about the reasons behind this gap is ongoing, with explanations including differences in motivation, industry choice, access to resources, and differences in education and work experience (Davidsson, 2006; Vossenberg, 2013).

At the same time, the female-male ratio of immigrants varies between countries. While, on a global scale, women migrate about as often as men (Husa et al., 2000; Menzies et al., 2004), men tend to be overrepresented amongst immigrants in some OECD countries, such as Austria, Germany, and Australia (Brücker and Trübswetter, 2004; Drinkwater, 2003; Van Dalen and Henkens, 2007). In these countries, the overrepresentation of men among immigrants might contribute to a higher share of immigrants among entrepreneurs in general.

Similar remarks can be made for age. As Drinkwater (2003) points out, migrants in OECD countries tend to be "young and single." For example, immigrants in the European Union are on average overrepresented in the age groups of 16 to 30 years and underrepresented in all other groups. While the median age of the total population of the EU-28 was 42.6 years in 2015, the median age of immigrants to the EU-28 that year was just 27.5 years (Euro-

stat, 2017). The latter lies in the age group in which people have been found to start businesses most frequently (25 to 34 years; Kelley et al., 2016).

Thus, while age and gender are rarely explicitly discussed in research on immigrant entrepreneurship, some support can be found for the argument that the specific composition of immigrant populations in regard to gender and age may also contribute to their above average tendency to engage in entrepreneurship (e.g., Li, 2000; Hammarstedt, 2006; Rajiman and Tienda, 2000).

**Personality traits:** From a psychological perspective, immigrants may be favorably self-selected for traits that are associated with an increased likelihood of becoming entrepreneurs. As Jonathan Levie (2007: 147) notes, “migrants have taken a bold decision to move a long distance, [therefore] they may be less risk-averse than their stay-at-home peers. Second, they may be more confident of their own human capital and ability to succeed in a new, uncertain environment.” Similar arguments are made by Constant et al. (2003), Davidsson (2006), and others. Indeed, one might argue that the decisions to emigrate and to start a business share similar characteristics. Both tend to involve ambiguity and risk, and they also entail the hope for a better life, i.e., higher financial returns (Vandor, 2009).

Thus, it appears plausible that individuals who perceive emigration as an attractive path and follow it through will also be more attracted by the risk-reward-profile of an entrepreneurial career. A number of personality traits can favor such a disposition, including achievement orientation (McClelland, 1985), risk propensity (Brockhaus, 1980), ambiguity tolerance (Begley and Boyd, 1987), and self-efficacy (Bandura, 1977).

While the effect of personality on entrepreneurial action has been discussed critically (e.g., Gardner, 1988), recent empirical studies and meta-studies have isolated robust positive effects of many personality traits (Brandstätter, 1997; Rauch and Frese, 2007; Zhao and Seibert, 2006; Zhao et al., 2010). For example, a meta-analysis of 116 independent samples from 104 different articles found that the likelihood of business creation and business success correlates with a number of traits, including need for achievement, generalized self-efficacy, innovativeness, stress tolerance, need for autonomy, and proactive personality (Rauch and Frese, 2007).

**Table 3: Individual-Level Drivers of Immigrant Entrepreneurship**

**Core rationale: Immigrants are (self-) selected for or develop specific characteristics that make them more entrepreneurial than natives.**

<b>Name of driver</b>	<b>Main argument</b>	<b>Key articles</b>
<b>Human capital</b>	Immigrants are (self-) selected for higher levels of human capital which increase their affinity towards entrepreneurial action as well as their success.  In addition, migration can be a transformative process which increases the level of entrepreneurial skills.	Haug, 2000; Massey, 1987; Sanders and Nee, 1996; Li, 2000; Vandor and Franke, 2016
<b>Demographic variables</b>	Immigrants are overrepresented in age and gender groups that have a higher affinity towards entrepreneurship.	— *
<b>Personality traits</b>	Immigrants are self-selected for entrepreneurial personality traits like risk-propensity and achievement orientation.	Boneva and Frieze, 2001; Vandor, 2009

\* No explicit key articles

Some of these personality traits have also been found to positively influence emigration intentions. Empirical studies have confirmed the existence of what Boneva and Frieze (2001) call a “migrant personality,” showing positive effects of need for achievement (Boneva et al., 1997; Chew and Zhu, 2002; Li et al., 2013), innovativeness (Chew and Zhu, 2002), risk-taking (Van Dalen and Henkens, 2007), openness (Jokela, 2009; Li et al., 2013), and self-efficacy (Van Dalen and Henkens, 2007) on the propensity for international migration.

To the best of our knowledge, there are no studies that directly measure differences in personality traits between immigrants and natives and their power to explain immigrant entrepreneurship. A few studies, however, provide hints that such a relationship exists, including Raijman and Tien-

da's (2000) analysis of the personality traits of active and latent Mexican entrepreneurs in Chicago, and Vandor's (2009) study of emigration intentions, entrepreneurship intentions, and personality traits among Austrian business students.

Summing up, there is evidence suggesting that individual-level factors explain the increased level of immigrant entrepreneurship (table 3).

### **3. Moderators of the immigration-entrepreneurship link**

Of course, the forces described in Section 2 do not make every individual immigrant an entrepreneur. The applicability and explanatory power of the individual and context variables varies. This is already visible in the different levels of entrepreneurial activity of immigrants across countries. The 2012 Global Entrepreneurship Monitor found the share of immigrants among entrepreneurs to range from 6.1 percent in Western Europe to 28.8 percent in Sub-Saharan Africa (Xavier et al., 2013). Variance is also high within OECD countries, in particular when compared to the entrepreneurship rates of the native population (see OECD/European Union statistics in Section 1, table 1). For example, in 2012 and 2013, immigrants were less than half as likely to be entrepreneurs as the native-born population in Greece, but immigrants in Poland were more than twice as often entrepreneurs as the Polish native population (OECD/European Union, 2015). This suggests that the above-mentioned patterns are moderated by characteristics of the host countries, countries of origin, type of migration, and the type of entrepreneurship in question.

#### ***Characteristics of the host countries***

Many of the context-level drivers of immigrant entrepreneurship discussed in Section 2 vary between countries.

**Level of discrimination:** Blocked mobility and labor market discrimination are often context- and time-specific. For example, the analysis of labor market discrimination in 11 countries conducted by Schneider et al. (2014)

showed that the rates of discrimination vary strongly between countries. These differences can stem from different levels of prejudice, information about the true skill levels of immigrants, and anti-discrimination policies. The predominant languages in a country and its immigrant population also influence discrimination. Immigrant groups with high levels of proficiency in the language of the host country or a similar mother tongue are naturally in a better position to engage in business than others (Becker and Blumberg, 2013; Mora and Davila, 2005).

**Geographical concentration:** The effect of ethnic enclaves also varies between countries. On one hand, their prevalence depends on different macro-level factors, such as the geographical conditions in a country, or the housing market conditions, and policy decisions. On the other hand, not all enclaves are alike. The beneficial effects of co-ethnic social networks for entrepreneurs will only occur when the share of their particular ethnic groups is large enough to enable meaningful exchanges and when there is a sufficient level of mutual trust (Evans, 1989). At the same time, large enclaves with a very high concentration of one ethnicity may also have adverse effects by creating strong competition among immigrant entrepreneurs (Andersson and Hammarstedt, 2015; Light and Gold, 2000; Ram et al., 2008).

**Immigration policy:** Furthermore, the economic capabilities of immigrants in a country are strongly influenced by immigration policy (see Section 5). Throughout history, migration has often been a “pull phenomenon” that has been created by active recruiting of governments and employers of receiving countries (Piore, 1979).<sup>8</sup> Today, many countries employ selective immigration policies, favoring characteristics that are beneficial for entrepreneurship, such as business experience and high levels of education (Mahroum, 2001; Wadhwa et al., 2007). These policies influence the

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8 E.g., the recruitment of “guest workers” (“Gastarbeiter”) from Central and Eastern Europe and Asia in the 1960s and 1970s by Austria and Germany.

selection as well as self-selection of immigrants with particular skills, goals, and resources to particular countries.

Overall, this suggests that the context-level drivers of immigrants' engagement in entrepreneurship are not similarly important in all countries and regions, but are contingent on local socio-economic parameters such as the predominant language, geographic concentration, and immigration policy.

### ***Characteristics of the countries of origin***

In addition to host-country differences, many researchers have pointed out differences in the level of entrepreneurial activity of immigrant groups depending on their country of origin. For example, Fairlie and Lofstrom (2015) find large heterogeneity in an analysis of business ownership rates in the United States. The share of business ownership among immigrants from a specific country in the overall immigrant population varies between 5.1 percent (Philippines) and 7.8 percent (Jamaica) on one end of the spectrum, and 23.1 percent (Korea) and 24.4 percent (Iran) on the other end. Similar levels of heterogeneity have been reported in the Netherlands (Sahin et al., 2007), Canada (Razin and Langlois, 1996), and other countries.

**Access to resources:** Some of the differences in entrepreneurial activity between immigrants of different countries of origin can be attributed to their unequal access to resources such as human and financial capital. For example, Fairlie and Woodruff (2007) find that education differences account for about a third of the gap in the business ownership rate between Mexicans and Americans in the United States. Access to financial capital accounts for another quarter of the variance. Similar findings have been made in a number of studies (Cobb-Clark and Hildebrand, 2004; Lofstrom and Wang, 2009; Sanders and Nee, 1996). These papers suggest that differences in resource endowment particularly enable immigrants from some specific countries to start businesses.

**Culture and tradition:** Another school of thought within immigrant entrepreneurship research emphasizes the role of culture. This perspective

argues that higher self-employment rates of immigrants and the heterogeneity of self-employment across groups with different countries of origin can be attributed to differences in traditions and values of entrepreneurship (Clark and Drinkwater, 2000; Light, 1984). According to this approach, some ethnic groups are endowed with cultural characteristics that provide advantages when engaging in entrepreneurship or emphasize the attractiveness of entrepreneurship as an appropriate career choice.

Research proposes several ways in which culture can influence entrepreneurial action. Goldscheider (1986) argues that the Jewish value of occupational independence as a mechanism of self-protection was carried over from Europe to the United States and contributed to the particular concentration of Jews in self-employment over generations (Zhou, 2004). Vinogradov and Kolvereid (2007) remark that, in many countries, it is particularly immigrants from Asian countries who engage in entrepreneurship. They attribute this to cultural attributes such as low power distance. Basu and Altinay (2002) find a strong influence of cultural attributes and family traditions on business entry motives but conclude that the role of culture and tradition differs between ethnic groups. For some groups, the continuation of a family tradition as business entrepreneurs serves as the most important motive to start a business, whereas others prioritize wealth creation as motive for building a business.

Some authors also draw a connection to religious practices. Rafiq (1992) argues that some religions present self-employment in a positive light. For example, in the Muslim and Sikh communities, entrepreneurship is looked upon favorably because of prominent entrepreneurial figures in both of these religions. Positive effects of culture and religion on entrepreneurial propensities have also been claimed for Western capitalist societies and values that emphasize risk, individualism, competitiveness, and wealth generation (Morris et al., 2002; Weber, 1904).

A related perspective on the “culture and tradition” argument has been provided by works that focus on the entrepreneurial activity in the country of origin (Akee et al., 2013; Yuengert, 1995). The central argument is that the exposure to concepts of self-employment and an increased availability of entrepreneurial role models in the country of origin can provide addi-

tional positive influences on the attractiveness of entrepreneurial career choices (Ilhan-Nas et al., 2011). Empirical support for this hypothesis is mixed. While Akee et al. (2013) and Yuengert (1995) find that immigrants from countries with high self-employment rates are more likely to become self-employed in the United States, Fairlie and Meyer (1996) find no such correlation.

In summary, existing research has provided some evidence for the influence of country-of-origin variables, such as resource composition and cultural imprinting, on the likelihood of immigrants to engage in entrepreneurship.

### ***Different types of migration***

Another noteworthy influence on immigrant entrepreneurship is the type of migration experience in question. Migration can take place within and across international borders, can take temporary and permanent forms, and can be made more or less voluntarily. These parameters influence how selective and transformative the immigration process can be and thus might impact the prevalence of the individual-level and context-level drivers discussed in Section 2.

**Internal and international migration:** While the focus of most immigrant entrepreneurship research is on international migration, it has been noted that within-country migration might also be a worthwhile field of inquiry for entrepreneurship scholars (Levie, 2007). In fact, within-country migration is a far more common phenomenon than international migration with an annual 5–20 percent of a country’s population migrating every year, depending on country, time, and definitions (Greenwood, 1989).

Conceptually, the case is somewhat ambiguous. On the one hand, one can make the argument that internal migrants, just like international migrants, are likely to have more entrepreneurial personalities than individuals who never move outside of their habitual environment. Also, internal migration might act as a self-selection mechanism for younger members of the population, who are typically more likely to start businesses. On the other hand, migration within a country is less costly than internation-

al migration in terms of financial relocation expenses and psychological strains, since the new environment is less unfamiliar. Thus, self-selection and transformation effects should be weaker than for international immigrants. Furthermore, selective immigration policies tend not to be an issue for internal migration.

While empirical evidence is rare, Levie (2007) has demonstrated for the case of the United Kingdom that internal migrants are indeed more likely to become entrepreneurs than life-long residents. This suggests that internal immigrants are also affected by some of the above-described drivers of entrepreneurial action.

**Temporary and permanent migration:** While public perception is dominated by images of permanent immigration, an increasing share of immigration in OECD countries is temporary. The most frequent purposes of temporary migration are time-restricted work assignments and education. In 2015 alone, OECD countries issued roughly 1.5 million study permits and 600,000 seasonal work permits. Furthermore, they saw 600,000 working holidaymakers and trainees, and 150,000 international within-company transfers (OECD, 2017). Compared to the 4.7 million counted as permanent immigrants in that year, this amounts to a considerable portion of migration (OECD, 2017).

Empirical studies have shown that temporary migrants are more inclined to start businesses than non-migrants. A disproportionately large number of individuals who have studied or worked abroad choose an entrepreneurial career path once they return to their country of origin (Ammassari, 2004; Black and Costaldo, 2009; Demurger and Xu, 2011; European Commission, 2014; McCormick and Wahba, 2001; Saxenian, 2005).

Returning migrant entrepreneurs can benefit from having lived abroad in various ways. Extended stays in other countries allow them to build stocks of financial capital in the form of accumulated savings (Black and Costaldo, 2009; Demurger and Xu, 2011). It further facilitates building up human capital in form of education and work-experience (Wahba and Zenou, 2009), as well as knowledge about new products, services, and customer needs which can be applied to identify novel entrepreneurial op-

portunities (Vandor and Franke, 2016), as well as creating transnational networks that facilitate international trade (Neville et al., 2014). Thus, we can expect that it is particularly the individual-level effects that contribute to the positive effect on entrepreneurial activities upon return. At the same time, context-level effects such as discrimination and language barriers are less likely to play a role in the decision of returning immigrants to start a business.

**Voluntary and forced migration:** Finally, the effects of migration on entrepreneurial intent and skill are also influenced by whether the decision to migrate is made voluntarily. In situations of forced migration (e.g., because of natural disaster or war), self-selection (e.g., due to an entrepreneurial personality or in order to seek higher returns on human capital) is less likely to play a role in shaping the emigration decision than when migration is a freely made lifestyle choice. Likewise, policies tend to be less selective in cases of forced migration than for voluntary migration. This suggests that involuntary immigrants may not have some of the selection advantages discussed above, i.e. a more entrepreneurial personality or higher levels of resources.

Overall, we conclude that the international nature and permanence of migration, as well as the degrees of freedom in the migration decision, exert an influence on how selective and transformative the migration process will be. International, permanent, and voluntary migration are probably more affected by selection and self-selection than internal, temporary and forced migration. At the same time, context-level factors likely play a more important role for international and permanent migration than for internal and temporary migrants.

### ***Different types of entrepreneurship***

Of course, not all types of entrepreneurship are alike. Arguably, there is a difference between self-employed entrepreneurs who earn just enough to sustain their living (necessity-motivated entrepreneurs), and innovative growth-oriented company builders (opportunity-motivated entrepreneurs). Much of the literature has focused on the first type and found

evidence that immigrants are overrepresented among self-sustaining entrepreneurs who start a business because of the lack of a viable alternative. More recently, research from the United States and Canada has suggested, however, that immigrants are sometimes also more likely to become innovative and growth-oriented founders than the native population (Chaganti et al., 2008; Green et al., 2016; Saxenian, 2002; see Section 4). For example, a large-scale longitudinal analysis of entrepreneurs in 11 states in the United States found that immigrants were not only overrepresented among entrepreneurs in general but also among entrepreneurs that had received venture capital funding: immigrants constituted 27 percent of VC-backed entrepreneurs, while representing only 19 percent of the workforce (Kerr and Kerr, 2016).

The distinction between necessity-oriented and opportunity-driven entrepreneurship is important. Depending on the type of entrepreneurial activity, the importance of individual-level and context-level drivers of immigrant entrepreneurship can vary. Blocked mobility and ethnic enclaves tend to be associated with necessity-motivated entrepreneurship. Ethnic enclaves provide particularly high benefits for immigrants who are excluded from the labor market due to discrimination and a lack of language skills. For them, ethnic communities can provide protected markets in which their stock of knowledge and experience can be utilized through self-employment. At the same time, ethnic markets offer limited potential for growth due to their relatively small size and purchasing power (Anderson and Hammarstedt, 2015; Waldinger and Aldrich, 1990). Furthermore, as Sequeira and Rasheed (2006) argue, strong networks within the enclave can lead immigrant entrepreneurs to focus only on ethnic resources and opportunities. The interaction with the ethnic community and other immigrant entrepreneurs can create isomorphic pressure to “simply replicate and reproduce old forms [...] rather than break new ground in products, process, or administrative form” (Aldrich and Waldinger 1990: 112).

In contrast, immigrants with lower involvement in ethnic enclaves are more likely to pursue mainstream market strategies that are associated with higher venture performance and opportunity entrepreneurship (Achidi Ndofor and Priem, 2011). At the same time, higher levels of human

**Table 4: Moderators of the Immigration-Entrepreneurship Link**

Name of moderator	Main argument	Key articles
<b>Host country differences</b>	Host countries have different levels of labor market discrimination, prevalence and density of enclaves and immigrant networks.  Furthermore, immigration policies moderate selection and self-selection effects.	Mahroum, 2001; Kloosterman and Rath, 2001
<b>Country-of-origin effects</b>	Immigrant groups differ in their propensity for entrepreneurial actions due to cultural, economic and political characteristics of their country of origin.	Basu and Altinay, 2002; Borjas, 1987; Fairlie and Lofstrom, 2015
<b>Type of migration</b>	Selection, self-selection and transformation effects vary depending on the type of migration (international vs. within-country, temporary vs. permanent, voluntary vs. forced).	— *
<b>Type of entrepreneurship</b>	Blocked mobility and ethnic enclave arguments are associated with necessity entrepreneurship, while high levels of human capital and an entrepreneurial personality are more common drivers of opportunity entrepreneurship.	— *

\* No explicit key articles

capital and entrepreneurial personality have been associated with more profitable and innovative types of immigrant entrepreneurship (Kerr and Kerr, 2011; Ley, 2006; Marger, 2001; Valdez, 2008; Zhao et al., 2010).

In sum, this suggests that some of the context-level drivers, such as blocked mobility and ethnic enclaves, are more likely to be drivers of necessity entrepreneurship. Individual-level drivers, such as human capital and personalities, appear to be more relevant stimulants of opportunity-driven entrepreneurship (table 4).

## 4. The consequences of immigrant entrepreneurship

Much of the research in the field is concerned with the economic and social consequences of immigrant entrepreneurship for founders and their host societies. While the debate is controversial (Zhou, 2004), immigrant entrepreneurship is in general associated with many positive economic and social contributions.

### *Economic integration of immigrants*

Self-employment may benefit immigrants by creating income and facilitating economic integration for them and their families.

**Employment and income:** First and foremost, self-employment is chosen by many founders in order to avoid unemployment, create income, and increase social participation (Zhou, 2004). Empirical findings show that entrepreneurship is an effective means of achieving these goals. Historical analysis suggests that low rates of Chinese and Japanese unemployment during the Great Depression of the 1930s were due to the ethnic community's efforts in helping co-ethnic workers become self-employed (Light, 1972). The studies of Miami's Cuban enclave and New York's Chinatown offered consistent evidence to support this argument (Portes, 1987; Zhou, 1992). In many cases, self-employment also enables entrepreneur immigrants to achieve higher incomes than immigrants in the labor market (Constant, 1998; Constant and Schultz-Nielsen, 2004; Fairlie and Meyer, 1996; Portes and Zhou, 1996; Lofstrom, 1999) and similar or only somewhat lower earning levels than native-born citizens (Fairlie and Lofstrom, 2015; Lofstrom, 2015).

**Economic integration:** As Fairlie and Lofstrom (2015) point out, the earnings of self-employed immigrants also tend to increase over time and approach the level of the native population. As Lofstrom (1999; 2002) finds in 1980 and 1990 United States Census data, self-employed immigrants reach earnings parity with observationally similar entrepreneurs born in the United States after about 25 years in the country. In the case of Canada,

Antecol and Schuetze (2006), Li (2000), and Green et al. (2016) confirm this finding on a number of dimensions: the likelihood of founding a business, its revenues, and associated jobs all increase with time spent in the country. Some studies find evidence of even higher income among immigrant entrepreneurs than among natives: For the case of Canada, Hiebert (2003) reports that self-employed immigrants had higher average incomes than the native-born self-employed in 1995 and also exceeded the average income of the overall immigrant population.

Eryadin et al. (2010) also note that immigrant entrepreneurs tend to operate increasingly like native entrepreneurs after some time. In an analysis of Turkish entrepreneurs in the Belgian city of Antwerp, they find that many founders start their businesses in ethnic neighborhoods, but later move to other locations where they perceive market opportunities in serving the general population. Analyses of second-generation immigrant entrepreneurs in Amsterdam show a similar pattern (Baycan-Levent et al., 2009). Second-generation entrepreneurs are more likely to build human capital and to choose more heterogeneous, non-traditional, and promising industries than first-generation immigrants (Baycan-Levent, 2009; Beckers and Blumfeld, 2011). Also, they pursue less “ethnic” opportunities and focus more on industries with higher density of opportunities in general, e.g., in technology (Baycan-Levent et al., 2009).

**Intergenerational benefits:** As Sanders and Nee (1996) and Zhou (2004) argue, the economic benefits of business ownership enable families to invest in their children’s futures. Having the financial resources to pay for higher education promotes the acquisition of valuable human capital by the second generation. In addition, income can be used to finance “rounding out” experiences like private tutoring, travel, and music lessons, enabling young people to interact in a variety of social settings. As a result, there is an intergenerational benefit to self-employment beyond that revealed by analyses of current income (Sanders and Nee, 1996).

Overall, this implies that entrepreneurship is an effective means for the economic and social integration of immigrants, in some cases even more effective than employment on the labor market.

### ***Economic effects for the overall society***

In addition to the economic and social benefits that immigrants themselves receive, migrant enterprises bring benefits to the wider society.

**Job and wealth creation:** In many countries, immigrant entrepreneurs play a considerable role in the domestic economy. As stated in the introduction, immigrants in the United States are estimated to have created 450,000 jobs and US\$52 billion in revenues between 1995 and 2005 (Wadhwa, 2009).

Empirical analyses suggest that immigrant-founded firms do not need to shy away from comparison with native-founded firms. In the United States, immigrant-founded businesses appear to be about as likely to create jobs as businesses founded by entrepreneurs born in country. They also provide roughly similar average salaries (\$31,740 in immigrant-founded enterprises, \$35,880 in businesses founded by natives; Fairlie and Lofstrom, 2015; Fairlie, 2013). Some studies have found immigrants to be even overrepresented among growth-oriented businesses in the United States (Chaganti et al., 2008), Germany (Metzger, 2014), and in the average of the 69 countries surveyed in the Global Entrepreneurship Monitor (Xavier et al., 2013). However, other research has found contradicting or inconclusive evidence, showing that immigrant-founded businesses create significantly fewer jobs than businesses founded by natives (Fairlie, 2013; Kerr and Kerr, 2016).

Interestingly, Kerr and Kerr (2016) find evidence for higher volatility of performance outcomes of immigrant entrepreneurs in the United States. They are more likely to fail than native-born entrepreneurs, but those who succeed create higher employment growth than natives. The authors argue that sorting immigrant entrepreneurs into geographic locations and industries with higher associated risks and returns might explain these patterns. It appears that the immigrant-founded ventures under study were more prone to exploit risky business opportunities than the native entrepreneurs. Neville et al. (2014) provide a complementary perspective: in an analysis of Canadian survey and taxation data, they find that immigrant-owned companies have higher revenues and profits than natives, but only when operating in export-driven industries. In industries that concentrate

on the Canadian market, their business performance is worse. Morgan et al. (2018) confirm this notion and add the finding that the revenue gains realized through immigrants' high export orientation are diminished by a tendency to engage in excessively risky and thus less profitable business opportunities.

Either way, these findings suggest that immigrant businesses do not only contribute through creating employment for themselves and others, but also as buyers, suppliers, employers, and taxpayers.

**Innovation:** Recent work has highlighted the contribution of immigrants in the fields of innovation and high technology entrepreneurship (Wadhwa et al., 2007; Hart and Ács, 2011; Kerr and Kerr, 2016). In the 2000 United States census, immigrants represented 24 percent and 47 percent of the science and engineering workforce with bachelor and doctorate degrees, respectively. This contribution was significantly higher than the 12 percent share of immigrants in the working population (Kerr and Kerr, 2011).

Against this background, it is no surprise that immigrants are also over-represented as founders in a number of industries that are typically associated with innovation, such as biotechnology (Monti et al., 2007; Saxenian, 2002) and VC-backed firms (Kerr and Kerr, 2016). Wadhwa et al. (2007) find that a quarter of engineering and technology companies in the United States were started by immigrants, with this number reaching 40 percent and more in specific dense areas, such as the California Bay Area. At the same time, immigrants were also found to be more likely to engage in other innovation-related activities, such as conducting Nobel-prize-winning research (Peri, 2007) and applying for patents in the United States (Hunt and Gauthier-Loiselle, 2010; Kerr and Lincoln, 2010).

**Vitalizing streets and neighborhoods:** High cultural diversity is often considered as beneficial for the development of cities and has been associated with an increase of consumption choices (Quigley, 1998) and attraction of creative talent (Florida, 2002). On a smaller scale, migrant entrepreneurs can also help to develop streets and neighborhoods. As owners of local businesses, they have a stake in the prosperity, accessibility, and

safety of the street or neighborhood (Kloosterman and Rath, 2003). As Kloosterman and van der Leun (1999) argue, immigrant entrepreneurs can thus serve as transforming agents in ethnic communities and improve the neighborhood.

**Role models:** Immigrant entrepreneurs also serve as entrepreneurial role models to other immigrants (Kloosterman and der Leun, 1999; Zhou, 2004). The availability of such role models is important to inspire self-confidence and entrepreneurial action by displaying the feasibility and benefits of immigrant entrepreneurship. As Shinnar and Young (2008) argue, role models can be particularly important within families and act as a pull-factor for immigrants. At the same time, immigrant role models can also break stereotypes amongst natives in the entrepreneurship ecosystem who might discriminate against immigrant founders. As Saxenian (2002) notes in her investigation of immigrant entrepreneurs in the California Bay Area, the lack of role models was perceived as contributing to a “glass ceiling” that prevented Indian and Chinese professionals from entering higher-level positions.

**Remittances:** Another noteworthy economic effect of immigrant entrepreneurship is created through remittances of entrepreneurs to their country of origin. Many immigrant entrepreneurs support their family and kin in the countries of origin through remittances, which are used for consumption, investment, and, in some cases, even as venture capital for entrepreneurs in the countries of origin (Martinez et al., 2015). Overall, remittances have been estimated to reach around US\$429 billion annually, which is about four times the volume of foreign aid (World Bank, 2016). These money flows are associated with positive effects for the country of origin in terms of its economic development, poverty and the accessibility of financial infrastructure (De Haas, 2005; Martinez et al., 2015). Some authors have argued for remittances being a better and more market-driven form of foreign aid which is less susceptible to corruption and inefficiency, whereas others have pointed out that remittances can cause harm by creat-

**Table 5: Economic Effects of Immigrant Entrepreneurship**

Name of effect	Main argument	Key articles
<b>Economic integration of immigrants</b>	Immigrant entrepreneurship allows entry to paid employment, higher income and intergenerational upwards mobility.	Fairlie and Lofstrom, 2015; Portes and Zhou, 1996
<b>Positive spillover effects</b>	Immigrant entrepreneurs benefit the public by creating jobs, wealth, welfare and innovation. They also act as entrepreneurial role models and can benefit urban development.	Hunt and Gauthier-Loiselle, 2010; Kerr and Kerr, 2011; 2016; Kloosterman and van der Leun, 1999; Saxenian, 2002
<b>Remittances</b>	Money transfers into countries of origin enable consumption and investments and contribute to the development of the country. At the same time, they lower consumption and investment in the host country.	Baas and Melzer, 2012; de Haas, 2005; Martinez et al., 2015
<b>Crowding out of native business</b>	Immigrant entrepreneurs can create additional competition and thereby crowd out native businesses.	Fairlie and Meyer, 1997; 2003; Nathan, 2014

ing dependence and incentivizing the permanent emigration of talent (see DeHaas (2005) for a thorough discussion).

For the host country, remittances constitute negative economic consequences as they reduce domestic consumption and savings. Baas and Melzer (2012) however argue that remittances also influence the real exchange rate and can contribute to the depreciation of the currency of the sending country, thereby promoting export.

**Crowding out:** Another potentially negative effect for the host country is that immigrant businesses can increase competition and thereby crowd

out extant native businesses (Fairlie and Lofstrom, 2015). Unfortunately, empirical research into these issues is intricate, rare, and rather inconclusive.<sup>9</sup> In the United States, Fairlie and Meyer (2003) indeed find some evidence for crowding out of native businesses by immigrant businesses. At the same time, they also infer that average earnings of native businesses increase through the entrepreneurial activity of immigrants. This might be interpreted as crowding out, but it could also be a sign of upward mobility among natives (Fairlie and Lofstrom, 2015). A comparable analysis of effects of immigration on native black and female self-employment found no signs of crowding-out effects (Fairlie and Meyer, 1997). Conceptually, Nathan (2014) argues that increased competition from immigrant entrepreneurs could provide incentives for innovation among native entrepreneurs rather than produce crowding-out effects. Furthermore, to the extent that (skilled) migrants identify new opportunities, the net effect of their ventures on firm entries can be expected to be positive (Nathan, 2014).

In summary, prior research suggests that immigrant entrepreneurship produces beneficial effects for the immigrants themselves as well as for the general public; the latter by providing employment, welfare, and innovation, as well as positive role models to other immigrants. However, there are also negative effects (table 5).

## **5. Policy implications**

In light of its many positive economic effects, immigrant entrepreneurship is a natural target for policymaking. Policies on immigrant entrepreneurship typically aim to increase the share of entrepreneurs amongst extant immigrants (and thereby counteract high rates of immigrant unemployment) or to increase the chances of survival and success of their businesses. In addition, policy makers often aim to attract new immigrant entrepreneurs.

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9 See e.g., Kerr (2013) on crowding-out and crowding-in effects for high-skilled labor.

Therefore, most policies focus on the promotion of entrepreneurial intent and capacity among immigrants or the attraction of entrepreneurial talent amongst potential immigrants and return migrants.

### ***Entrepreneurship policy***

**Training and resources:** The provision of training is a very common policy intervention for promoting immigrant entrepreneurship. As Van Niekerk et al. (2008) found in an analysis of 146 European policy interventions promoting immigrant entrepreneurship, 83 percent contained measures designed to inform, consult, or train entrepreneurs. The training curricula often put an emphasis on encouraging entrepreneurs to cater to mainstream rather than to ethnic markets, e.g., by changing location, business sector, and marketing strategy or by building collaborations with other businesses. Some training interventions also make an effort to activate transnational social networks that offer access to personnel, strategic information, or supplies of inexpensive or ethnically unique goods (Rath and Swagerman, 2016).

Many policies also facilitate networking as well as the provision of financial resources. In the analysis of Van Niekerk et al. (2008), 54 percent of policies also involved direct funding or providing access to funding instruments. Such instruments often include micro-credits, bank guarantees and subsidies, and bridging allowances or individual-level stipends (Kontos, 2003; Rath and Swagerman, 2016). While public authorities provide many such measures, in particular at local and city levels, there are also numerous private (often non-profit) institutions that engage in training and funding, such as immigrant associations, business associations, and support agencies (Rath and Swagerman, 2016).

Evidence on the effectiveness of training and resource provision is scarce and mixed. In a review of support instruments in five cities in the United Kingdom, Deakins et al. (2003) find that support services offered to immigrants were only accessed by 7 percent of the target group. While the overall influence of services was deemed positive, the authors identified a number of challenges in the support ecosystem. In addition to its fragmentation and complexity, Deakins et al., (2003) criticized the mis-

alignment of incentives between different support agencies, as well as a lack of robust intelligence on the support needs of their constituents. Rath and Swagerman (2016) also raise the question whether distinct support instruments are needed for immigrant entrepreneurs or whether there are circumstances in which immigrants should access mainstream business support instead. Based on their analysis of European policies, they find that distinct support programs are effective for the “most difficult to reach groups and vulnerable groups” (Rath and Swagerman, 2016: 157) as they can focus on particular needs and overcome language barriers. For others, Rath and Swagerman conclude that participation in mainstream programs might be more effective because it allows participants to build a larger and more diverse set of business contacts.

**Spatial policy:** Kloosterman and van der Leun (1999) argue that immigrant entrepreneurs can also be supported via instruments of urban and regional development. These can include providing cheap and accessible commercial spaces in neighborhoods with many immigrants, applying flexible rental policies, and providing attractive opportunities for ownership. Such policies reduce the costs of starting a business and facilitate entrepreneurship for immigrants with limited access to financial capital. As Kloosterman and van der Leun note, the intended side effect of such interventions is that successful immigrant entrepreneurs are incentivized to stay in their neighborhoods and help transform them through commercial gentrification, rather than moving to socio-economically more attractive parts of town (Kloosterman and van der Leun, 1999).

In practice, the use of space policy as means of immigrant entrepreneurship policy is still rare. Rath and Swagerman (2016) did not find evidence for specific attention to immigrant entrepreneurship in any zoning plan of European cities. A few cities, however, provide targeted information on business locations to migrants, including Vienna, Stuttgart, and Zagreb. A number of cities also provide business space to immigrant entrepreneurs through business incubators (Rath and Swagerman, 2016).

**Communications:** Collins (2003) argues that public authorities need to improve their communication with immigrant communities. This concerns business support interventions, but, more importantly, the many administrative interactions between businesses and public authorities, from registering a business to filing tax reports. Effective communication strategies can include providing translated versions of documents, hiring multilingual administrative staff, and actively marketing public services through communication channels of ethnic communities (Collins, 2003).

Unfortunately, as Rath and Swagerman (2016) find in an analysis of policies in 28 European cities, such measures are rarely implemented. Many bureaucratic rules and regulations—which often are already difficult to grasp and need “translation” into non-technical language for native entrepreneurs—are thus even more difficult to understand for immigrant entrepreneurs and require an additional level of translation. In this context, it is unsurprising that a Viennese study, for example, showed that 46 percent of migrant entrepreneurs were not aware of any public support service or financial benefits for entrepreneurs (Enzenhofer et al., 2007).

**Indirect policy interventions:** In addition to dedicated immigrant entrepreneurship policies, the creation of immigrant businesses can also be stimulated by indirect measures that are part of broader policy frameworks. As discussed in Section 2, a range of institutions can influence the likelihood and success of immigrant entrepreneurship and can thus be a subject of policy. These areas can include the promotion of export and trade as well as economic freedom, for example through a reduction of regulations, stable property rights, or reduced corruption (Collins, 2003; Dutta and Sobel, 2016; Estrin et al., 2013; Kloosterman, 2003). Similarly, a fast integration of immigrants into the social security system of the host country has been associated with higher levels of entrepreneurship (Olds, 2016). Public agencies can also integrate immigrant policy directives into their public purchasing practices, for example by making it mandatory to make some public purchases from immigrant entrepreneurs (Kloosterman, 2003).

In summary, we can see that there are many different policy instruments that can be used to specifically support immigrant entrepreneurship. Policies that create training, funding, space, or additional demand for immigrant businesses can help overcome particular challenges, for example due to language, access to resources, or lack of information, as well as help leverage their strengths. Furthermore, a number of policies that are not explicitly targeted at immigrants can also impact on their entrepreneurial engagement, including trade policy, public procurement, and social security.

### ***Immigration policy***

The above-discussed policy interventions pursue the goal of facilitating entrepreneurship among immigrants who are already in the country. In contrast, a number of countries also employ policies that aim to select for entrepreneurs already in the immigration process.

**Start-up immigration programs:** In an attempt to attract immigrant entrepreneurs, many developed countries have created special visa categories and entry options for potential business founders and owners (Mahroum, 2001). Ley (2003) estimates that at least 30 countries run some type of business immigration program. Their main purpose is to “entice entrepreneurs with a proven track record and substantial economic capital to relocate from their countries of origin, with citizenship being the prize for moving their families and commercial activities to new lands” (Ley, 2003: 426–27).

One of the largest and most active programs of this type is the Canadian Business Immigration Program, which has attracted over 300,000 immigrants between 1983 and 2001 (Wong, 2003).<sup>10</sup> During this period, its main focus has been geared towards entrepreneurs and required applicants making a capital investment in a business, being active in its ownership, and creating at least one job for a non-family member. Applicants also had to demonstrate business experience, financial assets, and a busi-

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10 In comparison, Wong (2003) finds that similar instruments in the United States and Australia have benefited 91,000 and 6,000 individuals over that time period.

ness plan that was evaluated by Canadian immigration officers. The development of the business was later closely monitored by government agencies (Ley, 2006).

While the program has been generally perceived as an effective policy which attracted a large number of entrepreneurs (Ley, 2006; Lofstrom, 2014; Wong, 2003), it has also been criticized for the comparatively low economic performance of participating entrepreneurs (Ley, 2003, 2006). Against this background, the entrepreneurial stream of the program has been adapted many times over the years and, most recently, started to put a stronger emphasis on risk and risk sharing with the private sector. Instead of individual entrepreneurs, the focus lies now on start-ups. Rather than being expected to hire one Canadian citizen within two years, applicants for a start-up visa are required to have secured support and an investment from a Canadian business angel (\$75,000) or venture capital fund (\$200,000), and to be part of an incubation or acceleration program. The program also offers additional streams for self-employed immigrants and investors (Government of Canada, 2017). Comparable policies have been implemented in other places as well, including the United Kingdom, Australia, and several European countries. In the United States, for example, immigrants who invest \$1 million in businesses and create or preserve at least 10 full-time jobs for domestic workers are given special preference (Fairlie and Lofstrom, 2015).

The jury is still out on whether these new types of start-up focused visa-programs are more effective than their predecessors (Lofstrom, 2014). Entrepreneurship visa programs run the risk of being overly selective by focusing on individuals with high wealth and already existing enterprises, while missing out on talented entrepreneurs in earlier development stages and from countries with more difficult access to risk capital. Studies in the United States suggest that many of today's immigrant entrepreneurs initially entered the country with a work or study visa and only decided to start up a business later (Kerr, 2013; Wadhwa, 2007). In fact, Wadhwa et al. (2007) found in a study of immigrant start-up founders that over 52 percent had immigrated with the motive of pursuing higher education, while only 1.6 percent had already come with the initial motive of starting a busi-

ness. Unfortunately, most immigration policies are not very open to such changes of heart. As Naudé et al. (2015) note, migrants entering on a work visa in many cases may not be allowed to start a business while on this specific visa. Overall, this suggests that a large part of the entrepreneurial potential of immigrants may not be currently realized.

**Return migration policy instruments:** Immigration is not a one-way road. As highlighted before, a disproportionately large number of individuals who have studied or worked abroad choose an entrepreneurial career path once they return to their country of origin (Ammassari, 2004; Black and Costaldo, 2009; Demurger and Xu, 2011; McCormick and Wahba, 2001; Saxenian, 2002, 2005; Wahba and Zenou, 2009). Return or repatriation is thus often associated with higher levels of entrepreneurship and positive economic and social effects such as revitalizing rural economies and poverty alleviation (Demurger and Xu, 2011).

The economic and political climate of a country plays a significant role in the attraction of highly skilled migrants, as has been witnessed with the Brexit vote and the election of president Trump in 2016. Even before any concrete policy measures had been implemented, the public perception of these events had already triggered a measurable decrease in graduate student applications for universities in the United Kingdom and the United States (Farrugia and Andrejko, 2017). At the same time, universities in countries associated with more open policies, such as Canada and Australia, saw a significant increase in applications in the aftermath of these events, suggesting a redirection of mobile international talent in their direction (Gewin, 2017).

An increasing number of countries also employs policies to promote return migrant entrepreneurship, including India, Taiwan, Romania, and the Philippines (Grosu, 2015). China, one of the most cited examples of a country with ambitious return entrepreneurship policies, is “aggressively courting” return entrepreneurs (Saxenian, 2002: 184). Chinese policies encourage return entrepreneurship through an array of incentives, including tax reductions, subsidized housing and rents, support for spouses, and other benefits for returnees that start a business. Furthermore, returnee

**Table 6: Policy Instruments for Promoting Immigrant Entrepreneurship**

<b>Name of policy</b>	<b>Description of policy</b>	<b>Key articles</b>	<b>Examples</b>
<b>Training and resources</b>	Providing training, access to networks and funding.	Deakins et al., 2003; Rath and Swagermann, 2016; Van Niekerk et al., 2008	Nuoret Yrittajat Projekti (Young Entrepreneurs Project in Helsinki)*
<b>Spatial policy</b>	Assisting immigrant entrepreneurs to gain access to (subsidized) business locations.  Including areas for immigrant entrepreneurship in urban zoning plans.	Kloosterman and Van der Leun, 1999	Stuttgart's Economic Development Department*
<b>Communications</b>	Providing information related to founding a business and support instruments in different languages and communication channels.	Collins, 2003	Vienna Business Agency*
<b>Indirect policy interventions</b>	Fostering immigrant entrepreneurship through promoting economic freedom, export and trade, reliable social security, and a business friendly environment.	Kloosterman, 2003; Olds, 2016	Dutch "Entrepreneurial Society" program*
<b>Start-up immigration programs</b>	Granting visa to entrepreneurs and start-ups with backing from entrepreneurship ecosystem.	Ley, 2006; Wong, 2003	Canadian Business Immigration Program*
<b>Return migration policy instruments</b>	Offering financial incentives and support for immigrants who return into their country of origin and start a business.	Saxenian, 2002, 2005; Zweig and Wang, 2013	Chinese "1,000 talents program"*

\*Examples from Kloosterman (2003), Ley (2006), Saxenian (2002), Rath and Swagerman (2016), and Zweig and Wang (2013)

entrepreneurs are offered places in dedicated “return student venture parks” (Zweig et al., 2006; Saxenian, 2002).

The “1,000 talents” program, which has been implemented since 2008, has been deemed particularly successful (Zweig and Wang, 2013). Like previous programs, it granted far-reaching privileges and rights to returning technology entrepreneurs and additionally promoted a very active recruitment process of potential returnees by public officials on city and province level. Chinese universities were also involved and financially incentivized to take part in recruitment. Between 2011 and 2013, the overall program (which also caters to non-entrepreneurs, such as scientists and engineers) has generated over 6,000 applications and 1,500 selected grantees, of which 16 percent are estimated to be entrepreneurs (Zweig and Wang, 2013).

In sum, there is a number of policy measures that allow a country to promote and increase the positive effects of immigrant entrepreneurship (table 6).

## **6. Conclusion**

Immigration has become a topic of heated political and public debate. Even in traditionally migration-friendly countries, such as the United States and Australia, the positive economic and social impact of immigration has been questioned. The findings of our literature review suggest that, at least in the area of immigrant entrepreneurship, positive assessments of migration are still warranted. In spite of significant barriers to starting a business (language difficulties, discrimination, and lack of resources, amongst others) many immigrants decide to become entrepreneurs. In the majority of countries, they even do so more often than the native population. Their businesses contribute to the creation of jobs for both immigrants and natives alike, promote innovation, and improve economic welfare. While evidence for the crowding out of native-run businesses is limited and the effect of remittances on host countries is mixed, a number of studies suggest that immigrant entrepreneurs create positive spillover effects for the

broader society through additional tax revenues, employment opportunities, and innovation.

Of course, the inconvenient question remains whether such gains for host countries come at the expense of countries of origin. In fact, it has been argued that immigrant entrepreneurs are part of a brain drain, producing a loss of some of the most talented and productive individuals for the societies they chose to leave (Saxenian, 2002). Real entrepreneurial talent is often scarce, and so its permanent departure is likely to have a retarding effect on the development of the country of origin (Solimano, 2008). Such arguments certainly seem justified, and they are supported by some empirical evidence (Beine et al., 2008; Saxenian, 2002). Nevertheless, there are a few alternative perspectives that challenge the interpretation of high-skilled migration as a zero-sum game.

First, many emigrants remain connected to their countries of origin and contribute to their development through remittances and international trade (De Haas, 2005; Martinez et al., 2015). They are therefore an important source of income and contributor to development, savings, and private investment. At the same time, the tendency of immigrant entrepreneurs to engage in trade relationships with their country of origin also contributes to its economic development (Fairlie and Lofstrom, 2015). Second, some authors have argued that the “brain drain” of highly skilled talent has become a “brain circulation”, at least for some countries (De Haas, 2005; Saxenian, 2002; 2005; Solimano, 2008; Wadhwa, 2009; Zweig and Wang, 2013). As Wadhwa (2009) and Zweig and Wang (2013) note, around the time of the 2008 financial crisis, many immigrant entrepreneurs in the United States returned to their countries of origin, e.g., China and India. Upon return, migrants often contribute to the economic development of the country of origin through entrepreneurship and investment (Saxenian, 2005; Wadhwa, 2009; Demurger and Xu, 2011). Third, migration should not be understood solely as a vehicle for transporting entrepreneurial talent between countries. Instead, migration itself can also help nurture entrepreneurial abilities by building cognitive skills and more diverse international social networks, and by introducing immigrants to

new business ideas and market needs (Leung and Maddux, 2008; Vandor and Franke, 2016).

Thus, there is reason to believe that increased international migration may not only lead to a geographical redistribution of entrepreneurs, but also result in an overall gain in entrepreneurial activity. This suggests that public money may be better spent on building business incubators for immigrant entrepreneurs than on building border walls.

## References

- Acemoglu, D., and Johnson, S. (2005). Unbundling Institutions. *Journal of Political Economy* 113, 5: 949–95.
- Achidi Ndofor, H., and Priem, R. L. (2011). Immigrant Entrepreneurs, the Ethnic Enclave Strategy, and Venture Performance. *Journal of Management* 37, 3: 790–818.
- Akee, R. K., Jaeger, D. A., and Tatsiramos, K. (2013). The Persistence of Self-Employment Across Borders: New Evidence on Legal Immigrants to the United States. *Economics Bulletin* 33, 1: 126-137.
- Aldrich, H. E., and Waldinger, R. (1990). Ethnicity and Entrepreneurship. *Annual Review of Sociology* 16, 1: 111–35.
- Aliaga-Isla, R., and Rialp, A. (2010). *How does Information and Experiences Play a Role in the Discovery Process of Entrepreneurial Opportunities? The Case of Latin-American Immigrants in Barcelona*. SSRN Scholarly Paper No. ID 1804990. Social Science Research Network.
- Allen, D. G. (2006). Do Organizational Socialization Tactics Influence Newcomer Embeddedness and Turnover? *Journal of Management* 32, 2: 237–56.
- Almeida, P. I. L., Ahmetoglu, G., and Chamorro-Premuzic, T. (2014). Who Wants to Be an Entrepreneur? The Relationship Between Vocational Interests and Individual Differences in Entrepreneurship. *Journal of Career Assessment* 22, 1: 102–12.
- Ammassari, S. (2004). From Nation-Building to Entrepreneurship: The Impact of Elite Return Migrants in Côte d'Ivoire and Ghana. *Population, Space and Place* 10: 133–54.

- Andersson, L., and Hammarstedt, M. (2015). Ethnic Enclaves, Networks and Self-Employment among Middle Eastern Immigrants in Sweden. *International Migration* 53, 6: 27–40.
- Audretsch, D. B., and Thurik, A. R. (2001). What's New about the New Economy? Sources of Growth in the Managed and Entrepreneurial Economies. *Industrial and Corporate Change* 10, 1: 267–315.
- Baas, T., and Melzer, S. M. (2012). The Macroeconomic Impact of Remittances: A Sending Country Perspective. Norface Migration. Bager, T., and Rezaei, P. D. S. S. (2001). *Immigrant Businesses in Denmark: Captured in Marginal Business Fields?* Centre for Small Business Research.
- Bandura, A. (1977). Self-Efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review* 84, 2: 191–215.
- Basu, D. A., and Altinay, E. (2002). The Interaction Between Culture and Entrepreneurship in London's Immigrant Businesses. *International Small Business Journal* 20, 4: 371–393.
- Basu, S. (1997). The Conservatism Principle and the Asymmetric Timeliness of Earnings. *Journal of Accounting and Economics* 24, 1: 3–37.
- Bates, T. (2011). Minority Entrepreneurship. *Foundations and Trends® in Entrepreneurship* 7, 3–4: 151–311.
- Baycan-Levent, T., Nijkamp, P., and Sahin, M. (2007). New Orientations in Ethnic Entrepreneurship: Motivation, Goals and Strategies of New Generation Ethnic Entrepreneurs. *Serie Research Memoranda*, 12. VU University Amsterdam, Faculty of Economics, Business Administration and Econometrics.
- Bean, F. D., and Bell-Rose, S. (1999). *Immigration and Opportunity: Race, Ethnicity, and Employment in the United States*. Russell Sage Foundation.

Beaujot, R., Maxim, P. S., and Zhao, J. Z. (1994). Self-Employment Among Immigrants: A Test of the Blocked Mobility Hypothesis. *Canadian Studies in Population* 21, 2: 81–96.

Beckers, P., and Blumberg, B. F. (2013). Immigrant Entrepreneurship on the Move: A Longitudinal Analysis of First and Second Generation Immigrant Entrepreneurship in the Netherlands. *Entrepreneurship and Regional Development* 25, 7-8: 654-91.

Begley, T. M., and Boyd, D. P. (1987). Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses. *Journal of Business Venturing* 2, 1: 79–93.

Beine, M., Docquier, F., and Rapoport, H. (2008). Brain Drain and Human Capital Formation in Developing Countries: Winners and Losers. *The Economic Journal* 118, 528: 631–52.

Bird, M., and Wennberg, K. (2016). Why Family Matters: The Impact of Family Resources on Immigrant Entrepreneurs' Exit from Entrepreneurship. *Journal of Business Venturing* 31, 6: 687–704.

Black, R., and Castaldo, A. (2009). Return Migration and Entrepreneurship in Ghana and Côte d'Ivoire: The Role of Capital Transfers. *Tijdschrift Voor Economische En Sociale Geografie* 100, 1: 44–58.

Bohn, S., Lofstrom, M., and Raphael, S. (2015). *Do E-Verify Mandates Improve Labor Market Outcomes of Low-Skilled Native and Legal Immigrant Workers?*. IZA Discussion Papers No. 9420. Institute for the Study of Labor (IZA).

Bonacich, E. (1973). A Theory of Middleman Minorities. *American Sociological Review* 38, 5: 583–94.

Bonacich, E. (1993). The Other Side of Ethnic Entrepreneurship: A Dialogue with Waldinger, Aldrich, Ward and Associates. *The International Migration Review* 27, 3: 685–92.

Boneva, B., Frieze, I. H., Ferligoj, A., Jarošová, E., Pauknerová, D., and Orgocka, A. (1997). East-West European Migration and the Role of Motivation in Emigration Desires. *Migracijske i Etničke Teme* 13, 4: 335–61.

Boneva, B. S., and Frieze, I. H. (2001). Toward a Concept of a Migrant Personality. *Journal of Social Issues* 57, 3: 477–91.

Borjas, G. J. (1986). *The Self-Employment Experience of Immigrants*. Working Paper No. 1942. National Bureau of Economic Research.

Borjas, G. J. (1990). *Friends or Strangers: The Impact of Immigrants on the US Economy*. Basic Books.

Borjas, G. J. (1994). *The Economic Benefits from Immigration*. Working Paper No. 4955. National Bureau of Economic Research.

Borjas, G. J. (1995). Assimilation and Changes in Cohort Quality Revisited: What Happened to Immigrant Earnings in the 1980s? *Journal of Labor Economics*, 13(2), 201–245.

Borjas, G. J., and Bronars, S. G. (1989). Consumer Discrimination and Self-Employment. *Journal of Political Economy* 97, 3: 581–605.

Boyd, R. L. (1990). Black and Asian Self-Employment in Large Metropolitan Areas: A Comparative Analysis. *Social Problems* 37, 2: 258–74.

Brandstätter, H. (1997). Becoming an Entrepreneur — A Question of Personality Structure? *Journal of Economic Psychology* 18, 2: 157–77.

Brockhaus, R. H. (1980). Risk Taking Propensity of Entrepreneurs. *Academy of Management Journal* 23, 3: 509–20.

Brücker, H., and Trübswetter, P. (2007). Do the Best Go West? An Analysis of the Self-selection of Employed East-West Migrants in Germany. *Empirica* 34, 4: 371–95.

Brüderl, J., and Preisendörfer, P. (1998). Network Support and the Success of Newly Founded Businesses. *Small Business Economics* 10, 3: 213–25.

Cassar, G. (2006). Entrepreneur Opportunity Costs and Intended Venture Growth. *Journal of Business Venturing* 21, 5: 610–32.

Chaganti, R. (Raj) S., Watts, A. D., Chaganti, R., and Zimmerman-Treichel, M. (2008). Ethnic-immigrants in Founding Teams: Effects on Prospector Strategy and Performance in New Internet Ventures. *Journal of Business Venturing* 23, 1: 113–39.

Chew, I. K., and Zhu, W. (2002). Factors Influencing Singapore Managers' Career Aspiration in International Assignments. *Career Development International* 7, 2: 96–108.

Clark, K., and Drinkwater, S. (1998). Ethnicity and Self-Employment in Britain. *Oxford Bulletin of Economics and Statistics* 60,3: 383–407.

Clark, K., and Drinkwater, S. (2000). Pushed Out or Pulled In? Self-Employment Among Ethnic Minorities in England and Wales. *Labour Economics* 7, 5: 603–28.

Clark, K., and Drinkwater, S. (2002). Enclaves, Neighbourhood Effects and Employment Outcomes: Ethnic Minorities in England and Wales. *Journal of Population Economics* 15, 1: 5–29.

Cobb-Clark, Deborah A., and Hildebrand, V. (2004). The Wealth of Mexican Americans. *IZA Discussion paper*, No. 1150. Institute for the Study of Labor (IZA).

Collins, J. (2003). Cultural Diversity and Entrepreneurship: Policy Responses to Immigrant Entrepreneurs in Australia. *Entrepreneurship and Regional Development* 15, 2: 137–49.

Constant, A. (1998). The Earnings of Male and Female Guestworkers and their Assimilation into the West German Labor Market. *Demographie Aktuell* 14: 123–43.

Constant, A., and Schultz-Nielsen, M. L. (2004). Immigrant Selection and Earnings. In *Migrants, Work and the Welfare State* (University Press of Southern Denmark and Rockwool Foundation): 187–211.

Constant, A., Shachmurove, Y., and Zimmermann, K. (2004). What Makes an Entrepreneur and Does it Pay? Native Men, Turks and Other Migrants in Germany. *CEPR Discussion Paper*, No. 4207.

Constant, A., and Zimmermann, K. F. (2006). The Making of Entrepreneurs in Germany: Are Native Men and Immigrants Alike? *Small Business Economics* 26, 3: 279–300.

Dalen, H. P. van, and Henkens, K. (2007). Longing for the Good Life: Understanding Emigration from a High-Income Country. *Population and Development Review* 33, 1: 37–66.

Davidsson, P. (2006). Nascent Entrepreneurship: Empirical Studies and Developments. *Foundations and Trends® in Entrepreneurship* 2, 1: 1–76.

Davidsson, P., and Honig, B. (2003). The Role of Social and Human Capital Among Nascent Entrepreneurs. *Journal of Business Venturing* 18, 3: 301–31.

Deakins, D., Ram, M., and Smallbone, D. (2003). Addressing the Business Support Needs of Ethnic Minority Firms in the United Kingdom. *Environment and Planning C: Government and Policy* 21: 843–59.

De Haas, H. (2005). International Migration, Remittances and Development: Myths and Facts. *Third World Quarterly* 26, 8: 1269–84.

Démurger, S., and Xu, H. (2011). Return Migrants: The Rise of New Entrepreneurs in Rural China. *World Development* 39, 10: 1847– 61.

Drinkwater, S. (2003). *Go West? Assessing the Willingness to Move from Central and Eastern European Countries*. School of Economics Discussion Paper No. 0503. School of Economics, University of Surrey.

Dutta, N., and Sobel, R. (2016). Does Corruption Ever Help Entrepreneurship?. *Small Business Economics* 47, 1: 179–99.

Edin, P.-A., Fredriksson, P., and Åslund, O. (2003). Ethnic Enclaves and the Economic Success of Immigrants—Evidence from a Natural Experiment. *The Quarterly Journal of Economics* 118, 1: 329–57.

Enzenhofer, E., Kessler, I., Lechner, F., Riesenfelder A., Reiter, W., and Wetzl, P. (2007). *Ethnische Ökonomien—Bestand und Chancen in Wien*. Working Document, LR Research.

Eraydin, A., Tasan-Kok, T., and Vranken, J. (2009). Diversity Matters: Immigrant Entrepreneurship and Contribution of Different Forms of Social Integration in Economic Performance of Cities. *European Planning Studies* 18, 4: 521–43.

Eraydin, A., Tasan-Kok, T., and Vranken, J. (2010). Diversity Matters: Immigrant Entrepreneurship and Contribution of Different Forms of Social Integration in Economic Performance Of Cities. *European Planning Studies* 18, 4: 521–43.

Evans, M. D. R. (1989). Immigrant Entrepreneurship: Effects of Ethnic Market Size and Isolated Labor Pool. *American Sociological Review* 54, 6: 950–62.

Fairchild, G. B. (2009). Residential Segregation Influences on the Likelihood of Ethnic Self-Employment. *Entrepreneurship Theory and Practice* 33, 2: 373–95.

Fairlie, R. W. (2013). Entrepreneurship, Economic Conditions, and the Great Recession. *Journal of Economics and Management Strategy* 22, 2: 207–31.

Fairlie, R. W., and Lofstrom, M. (2015). *Immigration and Entrepreneurship*. CESifo Working Paper Series No. 5298.

Fairlie, R. W., and Meyer, B. D. (1996). Ethnic and Racial Self-Employment Differences and Possible Explanations. *The Journal of Human Resources* 31, 4: 757–93.

Fairlie, R. W., and Meyer, B. D. (2003). The Effect of Immigration on Native Self-employment. *Journal of Labor Economics* 21, 3: 619–650.

Fairlie, R. W., and Woodruff, C. (2006). *Mexican Entrepreneurship: A Comparison of Self-Employment in Mexico and the United States*. IZA Discussion Papers No. 2039. Institute for the Study of Labor (IZA).

Fairlie, R. W., Zissimopoulos, J., and Krashinsky, H. (2010). The International Asian Business Success Story? A Comparison of Chinese, Indian and Other Asian Businesses in the United States, Canada and United Kingdom. In *International Differences in Entrepreneurship* (University of Chicago Press): 179–208.

Farrugia, C., and Andrejko, N. (2017). *Shifting Tides? Understanding International Student Yield for Fall 2017*. IIE Center for Academic Mobility Research and Impact.

Fee, A., and Gray, S. J. (2012). The Expatriate-Creativity Hypothesis: A Longitudinal Field Test. *Human Relations* 65, 12: 1515–38.

Florida, R. (2002). The Economic Geography of Talent. *Annals of the Association of American Geographers* 92, 4: 743–55.

Gardner, H. (1988). Creativity: An Interdisciplinary Perspective. *Creativity Research Journal* 1: 8–26.

Gewin, V. (2017). Student Immigration: The Gamble of Going Abroad. *Nature* 548, 7667: 361–63.

Gimeno, J., Folta, T. B., Cooper, A. C., and Woo, C. Y. (1997). Survival of the Fittest? Entrepreneurial Human Capital and the Persistence of Underperforming Firms. *Administrative Science Quarterly*: 750–83.

Godley, A., and Casson, M. (2010). History of Entrepreneurship: Britain, 1900–2000. In *The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times* (Princeton University Press): 243.

Goldscheider, C. (1986). *Jewish Continuity and Change: Emerging Patterns in America*. Indiana University Press.

Government of Canada (2012). Business Immigration Program. <<http://www.cic.gc.ca>>

Green, D. A., Liu, H., Ostrovsky, Y., and Picot, G. (2016). *Immigration, Business Ownership and Employment in Canada*. Statistics Canada, Analytical Studies Branch.

Greene, P. G., and Butler, J. S. (1996). The Minority Community as a Natural Business Incubator. *Journal of Business Research* 36, 1: 51–58.

Greenwood, M. J. (1997). Internal Migration in Developed Countries. *Handbook of Population and Family Economics* 1: 647–720.

Greve, A., and Salaff, J. W. (2003). Social Networks and Entrepreneurship. *Entrepreneurship Theory and Practice* 28, 1: 1–22.

Grosu, R. M. (2015). Best Practices in the Field of Returnee Entrepreneurship. *Amfiteatru Economic* 17, 39: 799.

Hammarstedt, M. (2006). The Predicted Earnings Differential and Immigrant Self-employment in Sweden. *Applied Economics* 38, 6: 619–30.

Hart, D. M., and Ács, Z. J. (2015). High-Tech Immigrant Entrepreneurship in the United States. In *Chapters* (Edward Elgar Publishing): 604–617.

- Haug, S. (2000). Soziales Kapital. In *Soziales Kapital und Kettenmigration* (VS Verlag für Sozialwissenschaften, Wiesbaden): 61–106.
- Hiebert, D. (2003). Canada: A False Consensus. *Immigrant Entrepreneurs: Venturing Abroad in the Age of Globalization*, 39–60.
- Hohn, M. (2012). *Immigrant Entrepreneurs: Creating Jobs and Strengthening the Economy*. US Chamber of Commerce.
- Hughes, G. A., and McCormick, B. (1985). Migration Intentions in the U.K. Which Households Want to Migrate and Which Succeed? *The Economic Journal* 95: 113–23.
- Hum, T. (2001). The Promises and Dilemmas of Immigrant Ethnic Economies. In *Asian and Latin Immigrants in a Restructuring Economy: The Metamorphosis of Southern California*: 77–101.
- Hunt, J. (2010). *Which Immigrants Are Most Innovative and Entrepreneurial: Distinctions by Entry Visa*. CEPR Discussion Papers No. 7699.
- Hunt, J., and Gauthier-Loiselle, M. (2010). How Much Does Immigration Boost Innovation? *American Economic Journal: Macroeconomics* 2, 2: 31–56.
- Hunter, I., and Wilson, M. (2007). Origins and Opportunity: 150 Years of New Zealand Entrepreneurship. *Journal of Management and Organization* 13, 4: 295–311.
- Husa, K., Parnreiter, C., and Stacher, I. (2000). *Internationale Migration: die globale Herausforderung des 21. Jahrhunderts*. Brandes and Apsel.
- Ilhan-Nas, T., Sahin, K., and Cilingir, Z. (2011). International Ethnic Entrepreneurship: Antecedents, Outcomes and Environmental Context. *International Business Review* 20, 6: 614–26.

Jokela, M. (2009). Personality Predicts Migration Within and Between U.S. states. *Journal of Research in Personality* 43, 1: 79–83.

Jones, M. V., Coviello, N., and Tang, Y. K. (2011). International Entrepreneurship Research (1989–2009): A Domain Ontology and Thematic Analysis. *Journal of Business Venturing* 26, 6: 632–59.

Jones, T., Ram, M., Edwards, P., Kiselincev, A., and Muchenje, L. (2014). Mixed Embeddedness and New Migrant Enterprise in the UK. *Entrepreneurship and Regional Development* 26, 5–6: 500–20.

Kanas, A. M., Tubergen, F. A. van, and Lippe, A. G. van der. (2009). Immigrant Self-employment: Testing Hypotheses About the Role of Origin- and Host-Country Human Capital and Bonding and Bridging Social Capital. *Work and Occupations* 36, 3: 181-208.

Kelley, D., Singer, S., and Herrington, M. (2016). 2015/16 Global Report. *GEM Global Entrepreneurship Monitor*. Babson College, Universidad del Desarrollo, Universiti Tun Abdul Razak, Tecnológico de Monterrey, London Business School.

Kerr, S. P., and Kerr, W. R. (2016). *Immigrant Entrepreneurship*. National Bureau of Economic Research.

Kerr, W. R. (2013). *US High-Skilled Immigration, Innovation, and Entrepreneurship: Empirical Approaches and Evidence*. National Bureau of Economic Research.

Kerr, W. R., and Lincoln, W. F. (2010). The Supply Side of Innovation: H-1B Visa Reforms and US Ethnic Invention. *Journal of Labor Economics* 28, 3: 473–508.

Kim, K. C., Hurh, W. M., and Fernandez, M. (1989). Intra-Group Differences in Business Participation: Three Asian Immigrant Groups. *The International Migration Review*, 23(1), 73–95.

- Kloosterman, R. (1999). Mixed Embeddedness: (In)formal Economic Activities and Immigrant Businesses in the Netherlands. *International Journal of Urban and Regional Research* 23, 2: 252–66.
- Kloosterman, R. (2000). Immigrant Entrepreneurship and the Institutional Context: A Theoretical Exploration. In *Immigrant Businesses* (Palgrave Macmillan): 90–106.
- Kloosterman, R. C. (2003). Creating Opportunities. Policies Aimed at Increasing Openings for Immigrant Entrepreneurs in the Netherlands. *Entrepreneurship and Regional Development* 15, 2: 167–81.
- Kloosterman, R. C., and Leun, J. P. V. D. (1999). Just for Starters: Commercial Gentrification by Immigrant Entrepreneurs in Amsterdam and Rotterdam Neighbourhoods. *Housing Studies* 14, 5: 659–77.
- Kloosterman, R., and Rath, J. (2001). Immigrant Entrepreneurs in Advanced Economies: Mixed Embeddedness Further Explored. *Journal of Ethnic and Migration Studies* 27, 2: 189–201.
- Kloosterman, R., Rath, J., et al. (2003). *Immigrant Entrepreneurs: Venturing Abroad in the Age of Globalization*. Berg/University of New York Press.
- Leung, A. K., Maddux, W. W., Galinsky, A. D., and Chiu, C. (2008). Multicultural Experience Enhances Creativity: The When and How. *American Psychologist* 63, 3: 169–81.
- Levie, J. (2007). Immigration, In-Migration, Ethnicity and Entrepreneurship in the United Kingdom. *Small Business Economics* 28, 2: 143–69.
- Ley, D. (2003). Seeking Homo Economicus: The Canadian State and the Strange Story of the Business Immigration Program. *Annals of the Association of American Geographers* 93, 2: 426–41.

Ley, D. (2006). Explaining Variations in Business Performance Among Immigrant Entrepreneurs in Canada. *Journal of Ethnic and Migration Studies* 32, 5: 743–64.

Li, P. S. (2000). Economic Returns of Immigrants' Self-Employment. *The Canadian Journal of Sociology / Cahiers Canadiens de Sociologie* 25, 1: 1–34.

Li, M., Olson, J. E., and Frieze, I. H. (2013). Students' Study Abroad Plans: The Influence of Motivational and Personality Factors. *Frontiers: The Interdisciplinary Journal of Study Abroad* 23: 73–89.

Light, I. (1984). Immigrant and Ethnic Enterprise in North America. *Ethnic and Racial Studies* 7, 2: 195–216.

Light, I. H., and Bonacich, E. (1988). *Immigrant Entrepreneurs: Koreans in Los Angeles, 1965–1982*. University of California Press.

Light, I., and Gold, S. J. (2000). *Ethnic Economies*. SSRN Scholarly Paper No. ID 2761931. Social Science Research Network.

Light, I. H. (1972). *Ethnic Enterprise in America: Business and Welfare Among Chinese, Japanese, and Blacks*. University of California Press.

Lofstrom, M. (2000). *Self-Employment and Earnings among High-Skilled Immigrants in the United States*. SSRN Scholarly Paper No. ID 250117. Social Science Research Network.

Lofstrom, M. (2002). Labor Market Assimilation and the Self-Employment Decision of Immigrant Entrepreneurs. *Journal of Population Economics* 15, 1: 83–114.

Lofstrom, M., and Wang, C. (2009). Mexican-American Self-Employment: A Dynamic Analysis of Business Ownership. In *Ethnicity and Labor Market Outcomes* (Emerald Group Publishing Limited): 197–227.

Lofstrom, M. (2014). Immigrants and Entrepreneurship. *IZA World of Labor* 85. Institute for the Study of Labor (IZA).

Ma, Z., Zhao, S., Wang, T., and Lee, Y. (2013). An Overview of Contemporary Ethnic Entrepreneurship Studies: Themes and Relationships. *International Journal of Entrepreneurial Behavior and Research* 19, 1: 32–52.

Maddux, W. W., and Galinsky, A. D. (2009). Cultural Borders and Mental Barriers: The Relationship Between Living Abroad and Creativity. *Journal of Personality and Social Psychology* 96, 5: 1047–61.

Mahroum, S. (2001). Europe and the Immigration of Highly Skilled Labour. *International Migration* 39, 5: 27–43.

Marger, M. N. (2001). The Use of Social and Human Capital Among Canadian Business Immigrants. *Journal of Ethnic and Migration Studies* 27, 3: 439–53.

Massey, D. S. (1987). Understanding Mexican Migration to the United States. *American Journal of Sociology* 92, 6: 1372–1403.

Matsumoto, D. (2006). Culture and Nonverbal Behavior. *Handbook of Nonverbal Communication*: 219–235.

McClelland, C., D. (1985). How Motives, Skills, and Values Determine What People Do. *American Psychologist* 40: 812–25.

McCormick, B., and Wahba, J. (2001). Overseas Work Experience, Savings and Entrepreneurship amongst Return Migrants to LDCs. *Scottish Journal of Political Economy* 48, 2: 164–78.

Menzies, T. V., Diochon, M., and Gasse, Y. (2004). Examining Venture-related Myths Concerning Women Entrepreneurs. *Journal of Developmental Entrepreneurship* 9, 2: 89–107.

Metzger, G. (2014). Existenzgründungen durch Migranten: Gründungslust belebt das Geschehen. *KfW Economic Research* 67.

Min, P. G. (1987). *Ethnic Business Enterprise: Korean Small Business in Atlanta*. Center Migration Studies.

Monti, D. J., Smith-Doerr, L., and McQuaid, J. (2007). *Immigrant Entrepreneurs in the Massachusetts Biotechnology Industry*. Immigrant Learning Center.

Mora, M. T., and Dávila, A. (2005). Ethnic Group Size, Linguistic Isolation, and Immigrant Entrepreneurship in the USA. *Entrepreneurship and Regional Development* 17, 5: 389–404.

Morgan, H.M., Sui, S., and Baum, M. (2018). Are SMEs with Immigrant Owners Exceptional Exporters? *Journal of Business Venturing*.

Morris, M. H., Schindehutte, M., Walton, J., and Allen, J. (2002). The Ethical Context of Entrepreneurship: Proposing and Testing a Developmental Framework. *Journal of Business Ethics* 40, 4: 331–61.

Naude, W., Siegel, M., and Marchand, K. (2015). *Migration, Entrepreneurship and Development: A Critical Review*. SSRN Scholarly Paper No. ID 2655324. Social Science Research Network.

Neville, F., Orser, B., Riding, A., and Jung, O. (2014). Do Young Firms Owned by Recent Immigrants Outperform Other Young Firms? *Journal of Business Venturing* 29, 1: 55–71.

OECD/European Union (2015). *Indicators of Immigrant Integration 2015: Settling In*. OECD Publishing.

OECD (2017). *International Migration Outlook 2017*. OECD Publishing.

Olds, G. (2016). *Entrepreneurship and Public Health Insurance*. Harvard Business School.

Oreopoulos, P., and Dechief, D. (2012). *Why Do Some Employers Prefer to Interview Matthew, But Not Samir? New Evidence from Toronto, Montreal, and Vancouver*. SSRN Working Paper.

Ottaviano, G. I., and Peri, G. (2006). The Economic Value of Cultural Diversity: Evidence from US Cities. *Journal of Economic Geography* 6, 1: 9–44.

Ozgen, E., and Baron, R. A. (2007). Social Sources of Information in Opportunity Recognition: Effects of Mentors, Industry Networks, and Professional Forums. *Journal of Business Venturing* 22, 2: 174–92.

Peri, G. (2007). *Immigrants' Complementarities and Native Wages: Evidence from California*. National Bureau of Economic Research Working Paper No. 12956.

Piore, M. J. (1979). *Birds of Passage: Migrant Labor and Industrial Societies*. Cambridge University Press.

Portes, A. (1987). The Social Origins of the Cuban Enclave Economy of Miami. *Sociological Perspectives* 30, 4: 340–72.

Portes, A., and Bach, R. L. (1985). *Latin Journey: Cuban and Mexican Immigrants in the United States*. University of California Press.

Portes, A., and Jensen, L. (1987). What's An Ethnic Enclave? The Case for Conceptual Clarity. *American Sociological Review* 52: 768–71.

Portes, A., and Sensenbrenner, J. (1993). Embeddedness and Immigration: Notes on the Social Determinants of Economic Action. *American Journal of Sociology* 98, 6: 1320–50.

- Portes, A., and Zhou, M. (1992). Gaining the Upper Hand: Economic Mobility Among Immigrant and Domestic Minorities. *Ethnic and Racial Studies* 15, 4: 491–522.
- Portes, A., and Zhou, M. (1996). Self-Employment and the Earnings of Immigrants. *American Sociological Review* 61, 2: 219–30.
- Quigley, J. M. (1998). Urban Diversity and Economic Growth. *The Journal of Economic Perspectives* 12, 2: 127–38.
- Rafiq, M. (1992). Ethnicity and Enterprise: A Comparison of Muslim and Non-Muslim Owned Asian Businesses in Britain. *New Community* 19, 1: 43–60.
- Raijman, R., and Tienda, M. (2000). Immigrants' Pathways to Business Ownership: A Comparative Ethnic Perspective. *The International Migration Review* 34, 3: 682–706.
- Ram, M., and Jones, T. (2008). Ethnic-Minority Businesses in the UK: A Review of Research and Policy Developments. *Environment and Planning C: Government and Policy* 26, 2: 352–74.
- Ram, M., Theodorakopoulos, N., and Jones, T. (2008). Forms of Capital, Mixed Embeddedness and Somali Enterprise. *Work, Employment and Society* 22, 3: 427–46.
- Rath, J., and Swagerman, A. (2016). Promoting Ethnic Entrepreneurship in European Cities: Sometimes Ambitious, Mostly Absent, Rarely Addressing Structural Features. *International Migration* 54, 1: 152–66.
- Rauch, A., and Frese, M. (2000). Psychological Approaches to Entrepreneurial Success: A General Model and an Overview of Findings. *International Review of Industrial and Organizational Psychology* 15: 101–42.

Rauch, A., and Frese, M. (2007). Let's Put the Person Back into Entrepreneurship Research: A Meta-Analysis on the Relationship Between Business Owners' Personality Traits, Business Creation, and Success. *European Journal of Work and Organizational Psychology* 16, 4: 353–85.

Razin, E., and Langlois, A. (1996a). Metropolitan Characteristics and Entrepreneurship among Immigrants and Ethnic Groups in Canada. *The International Migration Review* 30, 3: 703–27.

Reynolds, R. R. (2006). Professional Nigerian Women, Household Economy, and Immigration Decisions. *International Migration* 44, 5: 167–88.

Rusinovic, K. (2008). Moving Between Markets? Immigrant Entrepreneurs in Different Markets. *International Journal of Entrepreneurial Behavior and Research* 14, 6: 440–54.

Sahin, M., Nijkamp, P., and Baycan-Levent, T. (2006). *Migrant Entrepreneurship from the Perspective of Cultural Diversity*. Serie Research Memoranda No. 0016. VU University Amsterdam.

Salaff, J. W., Greve, A., Siu-Lun, W., and Ping, L. X. L. (2003). Ethnic Entrepreneurship, Social Networks, and the Enclave. In *Approaching Transnationalisms* (Springer): 61–82.

Sanders, J. M., and Nee, V. (1996). Immigrant Self-Employment: The Family as Social Capital and the Value of Human Capital. *American Sociological Review* 61, 2: 231–49.

Saxenian, A. (2002). Silicon Valley's New Immigrant High-Growth Entrepreneurs. *Economic Development Quarterly* 16, 1: 20–31.

Saxenian, A. (2005). From Brain Drain to Brain Circulation: Transnational Communities and Regional Upgrading in India and China. *Studies in Comparative International Development* 40, 2: 35–61.

Schneider, J., Yemane, R., and Weinmann, M. (2014). *Diskriminierung am Ausbildungsmarkt: Ausmaß, Ursachen und Handlungsperspektiven*. Berlin: Sachverständigenrat deutscher Stiftungen für Integration und Migration GmbH (SVR).

Schuetze, H. J., and Antecol, H. (2006). Immigration, Entrepreneurship and the Venture Start-up Process. In *The Life Cycle of Entrepreneurial Ventures* (Springer): 107–135.

Sequeira, J. M., and Rasheed, A. A. (2006). Start-Up and Growth of Immigrant Small Business: The Impact of Social and Human Capital. *Journal of Developmental Entrepreneurship* 11, 4: 357–75.

Shinnar, R. S., and Young, C. A. (2008). Hispanic Immigrant Entrepreneurs in the Las Vegas Metropolitan Area: Motivations for Entry into and Outcomes of Self-Employment. *Journal of Small Business Management* 46, 2: 242–62.

Smelser, N. J., and Swedberg, R. (2010). *The Handbook of Economic Sociology: Second Edition*. Princeton University Press.

Solimano, A. (Ed.). (2008). *The International Mobility of Talent: Types, Causes, and Development Impact*. Oxford University Press.

Teixeira, C. (2001). Community Resources and Opportunities in Ethnic Economies: A Case Study of Portuguese and Black Entrepreneurs in Toronto. *Urban Studies* 38, 11: 2055–78.

Unger, J. M., Rauch, A., Frese, M., and Rosenbusch, N. (2011). Human Capital and Entrepreneurial Success: A Meta-Analytical Review. *Journal of Business Venturing* 26, 3: 341–58.

Valdez, Z. (2008). The Effect of Social Capital on White, Korean, Mexican and Black Business Owners' Earnings in the US. *Journal of Ethnic and Migration Studies* 34, 6: 955–73.

Van Niekerk, M. and J. Rath et al. (2008). *Entrepreneurial Diversity in a Unified Europe. Ethnic Minority Entrepreneurship/Migrant Entrepreneurship*. European Commission, DG Enterprise and Industry.

Vandor, P. (2009). The Bond Between International Mobility and Entrepreneurship: Examining the Role of Personality. In *Annual Meeting of the Academy of Management, Chicago, IL*.

Vandor, P., and Franke, N. (2016). See Paris and ... Found a Business? The Impact of Cross-Cultural Experience on Opportunity Recognition Capabilities. *Journal of Business Venturing* 31, 4: 388–407.

Vinogradov, E., and Kolvereid, L. (2007). Cultural Background, Human Capital and Self-Employment Rates Among Immigrants in Norway. *Entrepreneurship and Regional Development* 19, 4: 359–76.

Vossenbergh, S. (2013). *Women Entrepreneurship Promotion in Developing Countries: What Explains the Gender Gap in Entrepreneurship and How to Close It?* Maastricht School of Management, Working Paper No. 2013/08.

Wadhwa, Vivek (2009). A Reverse Brain Drain. *Issues in Science and Technology* (Spring). SSRN Working Paper.

Wadhwa, V., Saxenian, A., Freeman, R. B., and Gereffi, G. (2009). *America's Loss is the World's Gain: America's New Immigrant Entrepreneurs: Part 4*. SSRN Scholarly Paper No. ID 1348616. Social Science Research Network.

Wadhwa, V., Saxenian, A., Rissing, B. A., and Gereffi, G. (2007). *America's New Immigrant Entrepreneurs: Part I*. SSRN Scholarly Paper No. ID 990152. Social Science Research Network.

Wahba, J., and Zenou, Y. (2012). Out of Sight, Out of Mind: Migration, Entrepreneurship and Social Capital. *Regional Science and Urban Economics* 42, 5: 890–903.

- Waldinger, R. (1996). From Ellis Island to LAX: Immigrant Prospects in the American City. *The International Migration Review* 30, 4: 1078–86.
- Ward, T. B. (2004). Cognition, Creativity, and Entrepreneurship. *Journal of Business Venturing* 19, 2: 173–88.
- Weber, M. (1904). *Die protestantische Ethik und der Geist des Kapitalismus*. Archiv für Sozialwissenschaften und Sozialpolitik, Bd. XX.
- Williams, A. M., Balaz, V., and Wallace, C. (2004). International Labour Mobility and Uneven Regional Development in Europe. Human Capital, Knowledge and Entrepreneurship. *European Urban and Regional Studies* 11, 1: 27–46.
- Wilson, K. L., and Portes, A. (1980). Immigrant Enclaves: An Analysis of the Labor Market Experiences of Cubans in Miami. *American Journal of Sociology* 86, 2: 295–319.
- Wong, B. P. (1974). *Patronage, Brokerage, Entrepreneurship, and the Chinese Community of New York*. University of Wisconsin-Madison.
- Wong, L. L. (2003). Chinese Business Migration to Australia, Canada and the United States: State Policy and the Global Immigration Marketplace. *Asian and Pacific Migration Journal* 12, 3: 301–36.
- World Bank (2016). *Migration and Remittances Factbook 2016*. World Bank.
- Wright, M., Liu, X., Buck, T., and Filatotchev, I. (2008). Returnee Entrepreneurs, Science Park Location Choice and Performance: An Analysis of High-Technology SMEs in China. *Entrepreneurship Theory and Practice* 32, 1: 131–55.
- Xavier, S. R., Kelley, D., Herrington, M., and Vorderwulbecke, A. (2013). *Global Entrepreneurship Monitor (GEM) 2012 Global Report*.

Yuengert, A. M. (1995). Testing Hypotheses of Immigrant Self-Employment. *The Journal of Human Resources* 30, 1: 194–204.

Zhao, H., and Seibert, S. E. (2006). The Big Five Personality Dimensions and Entrepreneurial Status: A Meta-Analytical Review. *Journal of Applied Psychology* 91, 2: 259–71.

Zhao, H., Seibert, S. E., and Lumpkin, G. T. (2010). The Relationship of Personality to Entrepreneurial Intentions and Performance: A Meta-Analytic Review. *Journal of Management* 36, 2: 381–404.

Zhou, M. (1992). *Chinatown: The Socioeconomic Potential of an Urban Enclave*. Temple University Press.

Zhou, M. (2004). Revisiting Ethnic Entrepreneurship: Convergencies, Controversies, and Conceptual Advancements. *International Migration Review* 38, 3: 1040–74.

Zweig, D., Chung, S. F., and Vanhonacker, W. (2006). Rewards of Technology: Explaining China's Reverse Migration. *Journal of International Migration and Integration* 7, 4: 449–71.

Zweig, D., and Wang, H. (2013). Can China Bring Back the Best? The Communist Party Organizes China's Search for Talent. *The China Quarterly* 215: 590–615.