Naudé *et al. IZA Journal of Migration* (2017) 6:5
DOI 10.1186/s40176-016-0077-8

IZA Journal of Migration

ORIGINAL ARTICLE Open Access

Migration, entrepreneurship and development: critical questions

Wim Naudé[1], Melissa Siegel[2] and Katrin Marchand[3*]

* Correspondence:
k.marchand@maastrichtuniversity.nl
[3]Maastricht Graduate School of Governance, UNU-MERIT and MACIMIDE, Maastricht University, Boschstraat 24, 6211 AX Maastricht, The Netherlands
Full list of author information is available at the end of the article

Abstract

This paper poses and answers a number of critical questions about the relationship between migration and entrepreneurship in the process of economic development. In doing so, we show that the standard policy response to migrants and migrant entrepreneurs are often based on an inadequate understanding of migrant entrepreneurs. The questions we pose are the following: (i) Are immigrants really more entrepreneurial than natives? (ii) Are migrant remittances likely to fund entrepreneurship in their home countries? (iii) Are return migrants more likely to be entrepreneurial than non-migrants? And finally, based on the answers, (iv) Does migration matter for development? We conclude that one must avoid seeing migrants as super-entrepreneurs and that the (positive) developmental impact of migration is more significant through other channels. Removal of discriminatory barriers against migrants and against migrant entrepreneurs in labour, consumer and financial markets will promote development in both sending and receiving countries, not least through reducing the shares of migrants that are reluctant entrepreneurs.

JEL Classification: J60, L26, O15, F22

Keywords: Migration, Entrepreneurship, Development, Remittances

1 Introduction

Entrepreneurship and migration are at the very top of many national and international agendas. It is easy to see why, globally, there are probably a billion entrepreneurs (measured in terms of self-employment)[1] and more than 232 million cross-border migrants (United Nations 2013). The development impacts of both migrants and entrepreneurs are therefore likely to be substantial. For instance, migrant remittances are estimated to be around US dollar 550 billion annually (more than two times the volume of aid) (World Bank 2013), and they contribute significantly to poverty reduction in some countries (Adams and Page 2005). In the same vein, entrepreneurs invest billions and create substantial numbers of jobs. Both migration and entrepreneurship have therefore attracted attention from policymakers, donors, NGOs and others interested in their possible impacts on poverty reduction and development.

The problem is that entrepreneurship and migration policies often do more harm to the poor and to development, than good. Naudé (2010, 2011) has dealt with the relationship between entrepreneurship and development and growth, and the difficulties that well-meaning but poorly informed policies may cause. Not all entrepreneurs create sustainable or substantial jobs, most do not innovate much and substantial numbers of firms fail after only a few years. In such a context of heterogeneity, policies are often ineffective and often may have undesired outcomes. For example, easing entry restrictions for potential entrepreneurs may result in a large pool of entrepreneurs with insufficient entrepreneurial ability and skills, which in combination with asymmetric information about their skills and ability can result in a general contraction of finance from banks (who do not want to lend to entrepreneurs with poor ability) (de Meza and Webb 1987). Much scarce resources are being spent on providing training and education to prospective entrepreneurs with little, and even opposite than intended, outcomes. Often, participants of such programmes only realize what it means to be an entrepreneur during the course, and as such, their aspirations change because of this additional knowledge, even discouraging some who had initially planned to start their own business (Oosterbeek et al. 2010).

In the case of migration, poorly informed policies have also created and continue to create harm. Stricter border controls to prevent irregular migration from Africa to Europe, for example, have not stopped migration flows but instead led to a diversification of migration routes and to a much more dangerous migration journey (de Haas 2009).

At the same time, the debate on the economic development implications of migration is a long-standing and often emotional one. Recently, there has been more attention in this debate on the role of migrant entrepreneurs. They are often hailed as super-entrepreneurs with consequent high expectations for their role in business start-ups and job creation. The problem is that this may mask and even exacerbate bad immigration policies, for instance, in justifying too much of a focus on attracting certain types of migrant entrepreneurs, or training return migrants to be entrepreneurs, rather than facilitating migrants' access to wage employment and the formal economy.

The debate on the role of migrants in entrepreneurship more broadly is in our view based on an inadequate understanding of migration and migrant entrepreneurs. Therefore, in this paper, we pose and answer three questions in this regard: (i) Are immigrants really more entrepreneurial than natives? (ii) Are migrant remittances likely to fund entrepreneurship in their home countries? (iii) Are return migrants more likely to be entrepreneurial than non-migrants? We do this in Section 2 before we then, given our answers to these three questions, ask in Section 3 whether migration matters at all for development if not through promoting entrepreneurship. And how can "super-entrepreneurs" be nurtured best, given that continued migration is likely to be a demographic fact in many parts of the world, particularly towards Europe. In Section 4, we discuss the policy implications in the latter regard. Section 5 concludes.

2 Re-evaluating the stylized facts: critical questions

2.1 Are immigrants really more entrepreneurial than natives?

Within debates on migration and development, migrants are often expected to be super-entrepreneurs who will benefit development in home and destination countries through their greater prowess as entrepreneurs, their remittances, their trans-national entrepreneurial activity and their business acumen. Proponents of this view have pointed to the successes of migrant entrepreneurs in China and the USA to argue that migrants may not need formal wage jobs. For instance, it has been pointed out that in successful developing countries, such as China, 25 % of migrants are self-employed (Giulietti et al. 2012). Saxenian (2002, 2006) and others have praised the role of immigrants in the development of Silicon

Valley, where close to one third of the technology businesses were operated by immigrant owners by the end of the 1990s.

Why are migrant entrepreneurs seen as super-entrepreneurs? The main argument is based on selection. Migrant entrepreneurs may be less risk averse, as is evident in their decision to migrate, itself a risky activity (Neville et al. 2014). And they have been argued to be more able to spot opportunities for new businesses as they already spotted opportunities for migration (Hart and Acs 2011). Migrants are also seen to have access to supplementary sources of support, training and financing, as often migrants increase their educational level and/or gain new skills, save more money and extend their social network while living abroad (de Haas 2006; OECD 2008).

Despite these a priori reasons for seeing migrant entrepreneurs as super-entrepreneurs, and in fact being more entrepreneurial than natives, the empirical evidence is not strong. For instance, a recent OECD (2010) review finds that migrant entrepreneurship, measured by self-employment rates, is more common than non-migrant entrepreneurship in only 13 out of 25 countries in the OECD. In other words, in about half of these OECD countries, migrants are less likely than natives to be self-employed. Moreover, in the countries with larger immigrant populations, such as Germany, Italy, Spain, Switzerland and The Netherlands, migrants are much less likely than natives to be self-employed (OECD 2010). In the case of migrants in Germany, Brixy et al. (2013) even find that migrants believe less often that they have the necessary skills to run a business and that they were not more risk averse than non-migrants. And in the case of The Netherlands, Jansen et al. (2003) find the rate of entrepreneurship amongst the native Dutch population as well as of the Turkish immigrant population to be almost twice as high as amongst immigrant populations from Morocco, Suriname and the Antilles.

The only study to compare start-up rates (early entrepreneurial activity) amongst migrants and non-migrants across countries is the 2012 Global Entrepreneurship Monitor (GEM). It finds that rates of early entrepreneurial activity (start-up rates) are similar between migrants and non-migrants and that start-up rates of migrants are just as heterogeneous across countries as that of non-migrants. For instance, the GEM finds that only 1.8 % of early entrepreneurial activity in Sub-Saharan Africa is undertaken by first generation migrants, while the corresponding share is 11 and 10 % in the USA and Western Europe, respectively (Vorderwülbecke 2012).

Self-employment per se may, however, be a poor measure of entrepreneurship. Many argue that what fundamentally characterizes entrepreneurs is their innovativeness, their creative destruction to use Schumpeter's term. So how well do migrant entrepreneurs do in terms of innovation? It has been pointed out that migrant entrepreneurs may be disproportionately represented, at least in the USA, amongst high-growth[2] and highly innovative enterprises (OECD 2011; Saxenian 2002; Wadhwa et al. 2007) and biotech firms (Stephan and Levin 2001) as well as public venture-backed US companies (Anderson and Platzer 2006) and high-impact companies (Hart and Acs 2011). In addition, on average, 20 % of migrant-owned enterprises in the 2012 GEM survey expected to create ten or more jobs in the next 5 years, compared to only 14 % of non-migrant-owned enterprises (Vorderwülbecke 2012).

As far as innovation is concerned, around 16 % of high-tech firms in a recent US sample had a migrant owner and, moreover, a migrant owner with skills in science and engineering (Hart and Acs 2011). Hunt and Gauthier-Loiselle (2010), using US patent data, find that "immigrants account for 24 [per cent] of patents, twice their share in the population, and that the skilled immigrant patenting advantage over natives is entirely accounted for by immigrants' disproportionately holding degrees in science and engineering fields" (Hunt and Gauthier-Loiselle 2010: 33). Despite the clear contributions that migrant entrepreneurs have made to innovation in the USA, Hart and Acs (2011) cannot find evidence that migrant owned high-tech firms in the USA are more likely to register patents or spend more on research and development than firms owned by natives. Supporting this point, the survey by Hart and Acs (2011) of high-tech entrepreneurship (the most innovative form of entrepreneurship) in the USA concluded that "most previous studies have overstated the role of immigrants in high-tech entrepreneurship" (Hart and Acs 2011: 116).

The 2012 GEM survey attempted to measure the innovation of enterprises across 69 countries using the number of new products or services they introduced, taking into account whether the enterprises in question were owned by a migrant or non-migrant. Analyses of the survey results could not find significant differences between the innovativeness of migrant and non-migrant entrepreneurs (Vorderwülbecke 2012).

As a final measure of the entrepreneurial prowess of migrants, one may compare the average performance of migrant enterprises to that of non-migrants. Using performance measures such as sales growth and profits from new Canadian start-ups, Neville et al. (2014) find that migrant enterprises are not generally better performing than those of non-migrants and that very often immigrant-owned firms underperformed. Only in the case of migrant firms that export do they find superior performance, suggesting that these migrant firms may have better international networks. The usual suspects in firm performance such as experience, skills, gender, access to finance and growth orientation were found to apply in equal measure to both migrant and non-migrant enterprises. Similarly, Dai and Lui (2009) find that in the case of China's Zhongguancun Science Park (ZSP), return migrants who export more, due to their international networks, performed better than non-migrants.

Saxenian (2002, 2006) and others have argued that the development of high-tech sectors and innovation clusters in countries such as China, India and Taiwan resulted due to the return migration of entrepreneurs (transnational entrepreneurs) from places like Silicon Valley and elsewhere in the USA. More recently, Kenney et al. (2012) challenged this interpretation, concluding from a historical overview of the creation and establishment of ICT industries in these countries that return migrants were not critical in their establishment. They conclude that the roles of native entrepreneurs and governments were more essential for the emergence and establishment of these industries than return migrants and that "[t]he importance of the returnees is more likely in […] deepening home country industrial development and connections to the U.S. economy" (Kenney et al. 2012: 395).

2.2 Are migrant remittances likely to fund entrepreneurship in their home countries?

In the new economics of labour migration (NELM), the decision to migrate is seen as not only a decision an individual makes but also a decision that is taken at the household level to deal with risks, market imperfections and obstacles in their environment.

If, for instance, a lack of liquidity and/or poorly functioning financial markets obstruct households to establish business enterprises, migration of some family members and their remittances may be a way of overcoming these financial constraints, making it possible for them to invest in agricultural innovations, land and housing, or small businesses (Lucas and Stark 1985).

The literature on the impact of remittances on development contains controversial findings. On the one hand, there exists a somewhat pessimistic view of the role of remittances, recognizing negative effects such as moral hazard (Chami et al. 2005) as well as exchange rate appreciation and reduced export competitiveness (Amuedo-Dorantes and Pozo 2004; Bourdet and Falck 2006). On the other hand, a more optimistic view emphasizes that remittances can contribute to poverty reduction, consumption smoothing and household expenditures (Acosta et al. 2007; Adams 2006). Remittances can also raise household spending on education (Acosta et al. 2007; Cox Edwards and Ureta 2003) and health services (Hildebrandt and McKenzie 2005; Mansuri 2007). In addition, part of remittances that are received by households may be used for savings or investments (de Haas 2005). Giuliano and Ruiz-Arranz (2009) show that in some countries with underdeveloped financial systems, remittances are used to overcome credit and liquidity constraints and are invested into small business development. They find that when the development of the financial sectors is lower, the contribution of remittances to economic growth is stronger (Giuliano and Ruiz-Arranz 2009).

The empirical evidence on the effectiveness of remittances to encourage entrepreneurship in migrant sending countries is, however, also mixed. For instance, Amuedo-Dorantes and Pozo (2004) show that in the case of the Dominican Republic, receiving remittances does not lead to an increased likelihood of owning a business, but rather the opposite. Remittance receipt is associated with a reduced likelihood of business operations. It has also been observed that households, who already operate a business, are more likely to receive remittances from abroad (Amuedo-Dorantes and Pozo 2004). Vasco (2013), studying migration and remittances in the case of rural Ecuador finds that "neither migration nor remittances have any effect on the odds of a household owning a rural business" (Vasco 2013: 37). Ang et al. (2009) also do not find a significant effect of remittances on productive investments in the Philippines.

In the case of Mexico, on the other hand, remittances have been found to be a significant source of capital for microenterprises (López-Córdova and Olmedo 2006). Investments in businesses are increasingly seen in Mexican households and communities receiving remittances from the USA (Massey and Parado 1998). Woodruff and Zenteno (2007) also find that small and medium enterprises in Mexico benefit financially from having links to migrant networks in the USA and that in the case of high-tech firms, they grow faster as a result, suggesting that migrant networks can alleviate financial constraints. In the case of Nicaragua, Funkhouser (1992) establishes that remittances have a small positive effect on self-employment in receiving households. In El Salvador, in contrast, remittances did not seem to impact self-employment activities in a household survey conducted in 2000. International remittances were, however, significantly and positively associated with business ownership. These effects were particularly strong in rural areas and amongst females (Acosta 2007).

Yang (2008) estimates the responses of Filipino households to economic shocks in the destination country of migrated household members. He shows that a positive shock leads to increased levels of investment in entrepreneurship in the origin households. Vaaler (2011) finds evidence that remittances support venture capital funds and firm start-ups in home countries, especially when they come from migrants living in migrant communities abroad. The effects decrease when the remittances are sent by highly educated migrants (Vaaler 2011).

Besides the direct use of remittances for business investments, remittances might also indirectly contribute to the ability of a recipient household to engage in business activities. A stable remittance income may be considered a positive attribute in the evaluation of creditworthiness of a household when it comes to accessing microloans or small business loans (Ratha 2007). Especially in contexts where households face high-income volatility and shocks otherwise, remittances can also favour income smoothing and as such make households more attractive borrowers (Mohapatra et al. 2011).

Overall, however, most of the literature on development and migration seems to concur that remittances are largely used to fund consumption (de Haas 2010), which is not necessarily a bad thing for households in the poorest countries (Yang 2011). Whether remittances are used for business investments and self-employment activities is highly dependent on the context as is shown by the mixed evidence on the relationship between the two. It seems that it matters where the remittances come from, where they go and who is then responsible for the way they are used in the receiving household. As such, more research is necessary in order to really understand the interactions between remittances and entrepreneurship and to establish under what conditions migrant remittances are likely to fund entrepreneurship in their home countries.

2.3 Are return migrants more likely to be entrepreneurial than non-migrants?

While there is a growing literature on the development impacts of the rising flows of remittances to poorer countries, it is only fairy recently that attention has been paid to the potential of return migrants to start up enterprises in their home countries. This reflects the greater awareness of the fact that most migration is not permanent, but temporary (Mesnard 2004). Hence, migrants may learn while away from their home country or region, as well as gather savings and build foreign networks, all of which may alleviate constraints on starting a new enterprise upon return (Marchetta 2012; Rapoport 2002). However, while abroad, migrants may lose contact with their networks at home and hence experience a depreciation of their social capital, which may make it more difficult to establish a new enterprise upon return. Accordingly, to the extent that credit constraints and a lack of skills and experience are obstacles to entrepreneurship in developing countries, and social capital is not as crucial, one may expect return migrants to be more likely to be able to start up new firms than non-migrants (Wahba and Zenou 2012).

How valid is this expectation? Black and Costaldo (2009) report that the literature is not unambiguously supporting this expectation and, moreover, that the types of businesses started up by return migrants most often do not have a significant development impact. Gibson and McKenzie (2012) find microeconomic evidence from five developing countries that return migration is common and that although return migrants share gained knowledge, they are not more productive as entrepreneurs or in wage labour back home than non-migrants.

There are several studies investigating differences in entrepreneurial activities between return migrants and non-migrants. The most common finding relates to financial capital, and more specifically, the role of savings accumulated abroad in the launch of a small business upon return. For instance, both Arif and Irfan (1997) and Piracha and Vadean (2010) find strong indication that return migrants are more likely to be self-employed in business in comparison to non-migrants in Pakistan and Albania, respectively. Using data from Ghana and Côte d'Ivoire, Black and Costaldo (2009) find that return migrants are more likely to start a new enterprise if they had accumulated savings and stayed abroad longer. This trend was found to be stronger amongst poorer migrants. They also find any formal education received by migrants while abroad to be insignificant for the entrepreneurship decision once they have returned. Similar results were obtained for Bosnia-Herzegovina, Bulgaria, Georgia, the Kyrgyz Republic, Romania and Tajikistan by Lianos and Pseiridis (2009) and by McCormick and Wahba (2001) for Egypt. Ilahi (1999), Dustmann and Kirchkamp (2002) and Mesnard (2004) arrive at a similar conclusion showing return migrants are particularly prone to invest savings from abroad in business ventures back home, suggesting temporary migration may at times be employed as a strategy to overcome credit constraints faced in the country of origin.

In the case of rural to urban migration in China, Démurger and Xu (2011) find that return migrants were more likely than non-migrants to start up an enterprise and that the likelihood of this was enhanced by the amount of savings accumulated and the experience gained as measured by the frequency of job changes. Also for China, Giulietti et al. (2013) find that not only return migrants are more likely than non-migrants to start up a business but also they promote entrepreneurship amongst family members who did not migrate, suggesting that knowledge and experience may be skills required in China's rural areas to stimulate entrepreneurship.

Wahba and Zenou (2012), using migration data from Egypt, also find that experience, savings and duration abroad matter and that the loss of social capital due to being out of the country does not outweigh the benefits of finance and experiences in starting up a firm. Their evidence indicates that return migrants could indeed be more likely to become self-employed; however, they do recognize that the decision of a migrant to return could be a decision made simultaneously to that of becoming an entrepreneur, which would upwardly bias the propensity of return migrants to be found in entrepreneurship; they find evidence of such an upward bias in their data (Wahba and Zenou 2012). Similar evidence of bias, and of the simultaneity in the decisions to migrate and become entrepreneurial, is found by Batista et al. (2014) in the case of return migration in Mozambique.

Problems faced by studies into the occupational choice of return migrants and the probability that they enter into entrepreneurship are often caused by endogeneity and simultaneity in the decisions to migrate and to start a new enterprise and due to the fact that the total population of return migrants is not available. Little has been done in the way of controlled (or natural) experiments, and properly matched panel data is still scarce, although a number of studies have used bivariate probit models and instrumental variable methods to deal with endogeneity issues. As a result of these shortcomings and given the relatively few studies on the topic, a recent survey on migration and development concluded that there is still much scope for further research on the determinants and impacts of return migration and entrepreneurship (Gurgand et al. 2012).

3 Does migration matter for development?

With the focus of this paper on the linkages between migration, entrepreneurship and development, it is important to take a step back and look at the linkages between migration and development more generally because (migrant) entrepreneurship is but one possible channel. De Haas (2010) provides a critical overview of the literature on migration and development and shows that this body of work has vacillated between pessimism and optimism over time. Based on the neoclassical theory of migration, opinion in the 1950s and 1960s was that migration had a generally positive impact on development reflecting a virtuous circle of labour mobility that would eventually even-off in the long term (Castles 2008). The Lewis and Harris-Todaro models, for example, assume out-migration from low productivity areas to be essential for rising productivity (Harris and Todaro 1970; Lewis 1954). This view changed in the 1970s and 1980s, when migration became more widely seen as being part of a vicious circle of under-development, which widened the gap between core and periphery countries. Migration was blamed for maintaining economic dependencies between rich and poor countries by causing a brain-drain from poor to rich economies. However, before the recent (2013–2016) rise in immigration to Europe (mainly as a result of conflict in the Middle East and Eastern Africa), the pendulum had started to swing back towards a more positive assessment of the development impact of migration, with notions of a brain gain being modified to account for brain circulation (Mountford 1997; Saxenian 2006; Docquier and Rapoport 2012).

Recent theorizing on migration and development is based on the New Economics of Labour Migration (NELM) and livelihood approaches (de Haas 2010) which take a more holistic view of migration and development. Different aspects of migration, such as the role of diasporas,[3] have surfaced, and migrants are seen as agents of development, leading to more nuanced research. For instance, migration has been established to have brain-drain effects only for some of the poorest countries (Di Maria and Stryszowski 2009; Beine et al. 2008). In addition, new evidence suggests that out-migration of highly skilled individuals has substantial benefits, mainly for "the migrants themselves, who benefit through massive gains in income and through greater human capital" (Gibson and McKenzie 2012: 371). Migration has also been found to contribute to raising living standards of those left behind (Acosta et al. 2007; Adams 1991, 2004, 2006; Adams and Page 2003, 2005; Itzigsohn 1995; Taylor et al. 2005) as well as increased human capital, brain gain and better return to human capital investments (Mountford 1997; Stark and Wang 2002).

The role of remittances has been the subject of special scrutiny given their sheer volume. Remittances have significant welfare impacts on countries with large out-migration, for example, Jamaica and El Salvador (Di Giovanni et al. 2015), although this is more the case when low-skilled individuals migrate than in the case of higher-skilled migrants, who tend to remit less in per capita terms (Adams 2009).[4] Remittances can also facilitate increases in household spending on education (Acosta et al. 2007; Cox Edwards and Ureta 2003), health services (Hildebrandt and McKenzie 2005; Mansuri 2007) and savings or investments (de Haas 2005). There is, however, no conclusive evidence that remittances unambiguously promote macroeconomic growth (Yang 2011).

Others have argued that out-migration does not only lead to higher levels of trade (Egger et al. 2012; Fairlie and Lofstrom 2013; Rauch and Trindade 2002) and FDI (Kugler and Rapoport 2011) to developing countries but also contributes to development through "social remittances." "Social remittances are the ideas, behaviours, identities, and social capital that flow from receiving- to sending-country communities" (Levitt 1998: 927). They can be transferred to the origin country through modern communication methods such as telephone, internet and mail, through migrants' temporary return visits to their origin country or through permanent return. Migrants transfer their know-how and skills to family members or friends living in the origin country, and this knowledge can then be utilized by individuals or households in the home country.

In this context, Docquier et al. (2016) and Spilimbergo (2009) show that the level of emigration is related to political developments in the home country. Migrants can contribute to the diffusion of democratic values and norms either directly upon return or through contacts with relatives or indirectly through social networks connecting the diasporas with groups in the origin country (Docquier et al. 2016). Some have even argued that return migrants can increase the demand for political accountability and so improve governance in their home countries (Batista and Vincente 2011). However, the opposite can also hold; Stel (2013) for instance finds that in the case of the Lebanese diaspora, migrants often play an active role in entrenching political power in their home country.

We can conclude this section by stating that even though migrant entrepreneurs are not super-entrepreneurs, migration as a process can positively impact development in both sending and receiving countries through many other channels. The entrepreneurial behaviour of migrants and migrant households is only one of the channels through which migration may affect economic growth. Because economic growth and development in itself affect entrepreneurship (entrepreneurship is endogenous to development), this has to be taken into account in policies that aim to maximize the potential of migrant entrepreneurs. In the following section, we discuss how policies for migration and migrant entrepreneurship may be improved.

4 Policy implications: can migrant super-entrepreneurs be created?

Migration has the potential to contribute to development. But not all individuals and all countries benefit automatically from migration: There is much country and individual heterogeneity in migration-development outcomes. In this respect, de Haas (2010) has cautioned against simplified assumptions about the relationship between migration and development. He points out that there "is no automatic mechanism by which international migration leads to development" (de Haas 2010: 240). This means that policies may matter very much in migration and, moreover, that migration policies may do much harm to development by distorting outcomes. Because of the nature of the public and policy debates on migration (characterized very often by a high degree of subjectivity), the need for an automatic mechanism of development through migration has concentrated attention in recent years on the role on migrants as entrepreneurs and facilitators of entrepreneurship.

An individual's decision to become an entrepreneur or not has been studied by economists as an occupational choice. In empirically studying this occupational choice, the evidence tends to suggest that the occupational choices of migrants are not significantly different from those of non-migrants. Both migrants and non-migrants would be more or less likely to be entrepreneurs as a result of their individual characteristics (schooling, experience), household or community level factors (size of household, cultural background), institutional determinants (access to finance) and the business environment. Based on existing evidence, it therefore does not seem like migrant entrepreneurs face significant other challenges than non-migrants—apart from discrimination.

Migrant entrepreneurs, like migrants in general, suffer from various forms of discrimination (Jansen et al. 2003; Zhou 2004). Bruder and Räthke-Döppner (2008) mention that migrants often face discrimination in formal labour markets, which then drives them into (necessity) self-employment. This can be due to structural discrimination (the need for a visa for example); taste discrimination (when employers prefer not to employ workers of a certain ethnicity due to, amongst others, racial or ethnic stereotyping and language barriers) and statistical discrimination (when employers and job seekers have asymmetrical information about their quality) (Bruder and Räthke-Döppner, 2008). Rising xenophobia has been found to push disproportionate numbers of migrants with limited English proficiency into self-employment in the USA (Mora and Davila 2007). That discrimination and xenophobia foster self-employment amongst migrants is thus acknowledged. Hence, entrepreneurship can be used as a way to circumvent these obstacles (OECD 2010) and for migrants to overcome social exclusion and integrate better with their host community (Constant et al. 2007) as well as a way to improve their socioeconomic mobility (Zhou 2004).

A number of studies have attempted to quantify the impact of labour market discrimination on the occupational choices of migrants in China, where legal discrimination, through for instance the Hukou system,[5] is well known. Frijters et al. (2011) find that if there would be no discrimination against migrants in urban China, the number of self-employed migrants would fall by 16 %, a significant proportion. Thus, when they have a choice, migrants may often prefer wage employment to being self-employed. This conclusion is supported by the empirical patterns of migrant self-employment in the OECD (OECD 2010) as well as studies from, e.g., Germany which find that it is more likely for less educated migrants to be self-employed than for higher educated migrants (Constant and Zimmermann 2006).

Migrants also face discrimination in consumer markets, which in turn creates a demand for the goods and services migrant entrepreneurs can provide, often in ethnic enclaves (Jansen et al. 2003). Hence, ethnic enclaves often act as a pull factor for migrants to enter into self-employment (Price and Chacko 2009). Finally, migrant entrepreneurs themselves do face discrimination, especially when trying to gain access to finance (Zhang 2008).

As a result, migrant entrepreneurs may be very vulnerable to external shocks because they are often in entrepreneurship due to a lack access to wage employment (Brixy et al. 2013). In other words, they are necessity entrepreneurs (Constant and Zimmermann 2006). Moreover, they often have access only to types of businesses, e.g. in trade and services, which are more exposed to external economic shocks (OECD 2010). The GEM study could not find evidence across 69 countries that migrants are more likely to be necessity entrepreneurs than non-migrants (Vorderwülbecke 2012). This does, however, not mean that it is not the case; certainly, the finding that migrant entrepreneurs often perform worse than non-migrants may suggest they indeed face more difficulties (Neville et al. 2014).

It should be stressed that a selection of migrant entrepreneurs occurs before migrants even enter the host country. As the link between migration and entrepreneurship receives more attention by policymakers, a growing number of countries are introducing specific policy measures for this group. As immigrant entrepreneurs are a heterogeneous group running different types of businesses, policies should ideally be equally diverse in order not to exclude potential future entrepreneurs (Collins 2003). However, considering policies currently implemented, it is evident that the diversity of this population is not addressed. While overall, the share of immigrants entering a country on an entrepreneur visa is relatively small, the bulk of immigrant entrepreneurs does not qualify for this type of visa, likely due to a lack of capital and experience, and usually enters the country through another channel. Some of these migrants might still come with the intention of starting their own business.

Particularly amongst highly skilled immigrants, there may also be people with high entrepreneurial ability. In some cases, however, policy hinders the implementation of entrepreneurial activities. Migrants entering on a work visa, for example, may not be allowed to start a business while on this specific visa. This may be a waste of their potential contribution to the local economy. An example from The Netherlands is that of "knowledge migrants" who are only allowed to work for their current employer. They are not allowed to start their own business next to this employment while on a knowledge migrant visa. At the same time, it is common for academics to start their own (consultancy) business next to their university work; this type of entrepreneurship is, however, restricted in the case of The Netherlands (Marchand and Siegel 2015).

When looking at return migrants and entrepreneurship, it can be observed that policies and programmes are also sometimes developed based on overly positive assumptions. An example of this is the fact that increasingly voluntary return programmes contain entrepreneurship components of different format. Some simply provide in-kind or financial support, while others also offer training. The fact that this support is often given to people with no prior experience in running a business and may be even no interest in doing so can in this context be seen as a form of positive discrimination. It is, however, the case that evaluations of such programmes are largely lacking. In order to increase the efficiency and effectiveness of such programmes, more evidence is therefore needed.

Overall, it can be seen that there are several factors that on the one hand drive migrants into entrepreneurship, such as the discrimination on the labour market, while on the other hand, access to finance and policies often hinder potential entrepreneurs to put their plans into action and play the role that many expect of them. Other policies and programmes drive migrants into entrepreneurship that are not necessarily suited for this.

5 Conclusions

Migration can be an important mechanism for raising the welfare of individuals and households in both sending and receiving countries. One way is through the entrepreneurial activities of migrants and their families. Based on the theoretical notion that migrants, like entrepreneurs, tend to be less risk averse, they are often seen as super-entrepreneurs. We argued in this paper that the discussion on the linkages between migration and entrepreneurship need however to be more nuanced. We cast doubt on three stylized facts or beliefs on migration and entrepreneurship namely that (i) migrants are more entrepreneurial than natives, (ii) migrant remittances can fund start-ups in the countries of origin and (iii) return migration can bring valuable entrepreneurial skills to developing home countries. Considering the empirical evidence, none of these are robust beliefs.

In fact, the evidence is mixed on the question whether immigrants are more likely to be self-employed than natives as well as whether immigrant entrepreneurs outperform their native counterparts. For policies to indeed support the promotion of migrant super-entrepreneurs, policymakers and scholars need to first better understand the broader relationship between migration and development, and entrepreneurship and development, as this indicates that migrants often make a more substantial impact on development not as entrepreneurs, but as employees, and that the success of those who do select into entrepreneurship does critically depend on the state of the economy (-ies) in which they are embedded.

In this respect, it needs to be reiterated that immigrants most often face discrimination in their destination country. This may either prevent potential entrepreneurs from actively pursuing business activities or drive immigrants into necessity entrepreneurship that may otherwise prefer wage employment. Non-discrimination policies, addressing stereotyping and prejudging of immigrants would be beneficial in order to ensure maximization of productivity and the contributions of migrants to the local economy. Not all discrimination stems from active resistance against foreigners. Typically, immigrants face more difficulties in obtaining credit than their native counterparts, especially forced migrants who have left all their assets and networks behind. This type of bias against migrant entrepreneurship is more difficult, although not impossible, to address with policy. Such policies should for instance take into account that if migrants need to rebuild their collateral and assets, and invest in the local economy, a long-term vision and commitment to the host country is needed. Without longer-term residence permits and integration measures, it is unlikely to happen though.

Given that migrant entrepreneurs have not been proven to be super-entrepreneurs in this paper and given that there is a significant demand for low-skilled workers in most advanced economies, particularly in Europe (de Haas 2009) (including a structural demand for more workers in general, given declines in population growth[6]), imposing policies based on the view of migrants as super-entrepreneurs is likely to be sub-optimal. The costs of misunderstanding the potential of migrant entrepreneurs, or raising immigration barriers, and of not doing more to allow their integration into wage employment, is thus likely to be costly.

In conclusion, the message is that not all migrants are entrepreneurs and that different kinds of migrants are much more likely to end up in entrepreneurship, with different success rates. More research along these lines is therefore necessary, so that the dialogue is not so much on migration and entrepreneurship, but rather on, for example, highly skilled migrants and entrepreneurship, forced return migrants and entrepreneurship, or immigrants and necessity versus opportunity entrepreneurship. Different kinds of migration as well as different kinds of entrepreneurship ultimately also have different implications for development. Further research along these lines is therefore needed in order to fully understand the dynamics guiding the interactions between migration, entrepreneurship and development.

Endnotes

[1]In 2012, the Global Entrepreneurship Monitor (GEM) estimated that there were 400 million entrepreneurs in the 54 countries that were surveyed alone, less than half the number of countries in the world (Kelley et al. 2012).

[2]A high-growth enterprise is defined as an enterprise whose sales grow by at least 20 % annually for 3 years and employs at least ten workers (OECD, 2010).

[3]Diasporas are "groups of emigrants who leave their countries of origin for a prolonged period of time but still demonstrate a strong link with their migration history and a sense of co-ethnicity with others of a similar background" (Kotabe et al. 2013:3).

[4]It is also the case that middle-income countries receive more remittances per capita than low-income countries (Adams 2009), and the countries with the most sizable amount of remittances are the most populous emerging economies namely India, China, Mexico, the Philippines and Nigeria (Yang 2011).

[5]China uses the Hukou system (Household Registration System) to regulate internal migration in the country. Introduced in 1958, Hukou requires every citizen seeking a change in residence to obtain permission from the public security bureau. Public benefits as well as access to schools, health care and attractive employment opportunities are only available to those who are registered (Bao et al. 2011).

[6]Some regions, such as Europe, will have to enter into a "global race for talent" (Münz 2014). Chamie (2013) has mentioned that in 76 countries, populations will go into decline without immigration. They face the choice of "more immigrants or fewer citizens" and include countries such as Germany, Japan and Russia who need, respectively, 200,000, 230,000 and 350,000 immigrants every year to maintain their population sizes, much more than the current inflows.

Acknowledgements
We are grateful to the participants of the Maastricht Centre for Citizenship, Migration and Development Kick-off Conference on 4 April 2014 in Maastricht, The Netherlands, for their comments and discussion, as well as to an anonymous referee and the editor for helpful suggestions on an earlier draft. The usual disclaimer applies.
Responsible editor: Denis Fougère

Competing interests
The IZA Journal of Migration is committed to the IZA Guiding Principles of Research Integrity. The authors declare that they have observed these principles.

Author details
[1]Maastricht School of Management, Maastricht Graduate School of Governance and MACIMIDE, Maastricht University, PO Box 12036201 BE Maastricht, The Netherlands. [2]Maastricht Graduate School of Governance, UNU-MERIT and MACIMIDE, Maastricht University, Boschstraat 24, 6211 AX Maastricht, The Netherlands. [3]Maastricht Graduate School of Governance, UNU-MERIT and MACIMIDE, Maastricht University, Boschstraat 24, 6211 AX Maastricht, The Netherlands.

Received: 27 April 2016 Accepted: 2 September 2016
Published online: 09 March 2017

References

Acosta P. Entrepreneurship, labour market and international remittances: evidence from El Salvador. In: Özden Ç, Schiff M, editors. International migration, economic development and policy, vol. Chapter 4. Washington, DC: World Bank and Palgrave Macmillan; 2007. p. 141–59.

Acosta P, Fajnzylber P, Lopéz JH. The impact of remittances on poverty and human capital: evidence from Latin American household surveys. In: Özden Ç, Schiff M, editors. International migration, economic development and policy, vol. Chapter 2. Washington, DC: World Bank and Palgrave Macmillan; 2007. p. 59–98.

Adams RH. The effects of international remittances on poverty, inequality, and development in rural Egypt. Washington, DC: International Food Policy Research Institute Research Report 86, International Food Policy Research Institute; 1991.

Adams RH. Remittances and poverty in Guatemala. Washington, DC: World Bank Policy Research Working Paper 3418, World Bank; 2004.

Adams RH. Remittances and poverty in Ghana. Washington, DC: World Bank Policy Research Working Paper 3838, World Bank; 2006.

Adams RH. The determinants of international remittances in developing countries. World Dev. 2009;37(1):93–103.

Adams RH, Page J. International migration, remittances and poverty in developing countries. Washington, DC: World Bank Policy Research Working Paper 3179, World Bank; 2003.

Adams RH, Page J. Do international migration and remittances reduce poverty in developing countries? World Dev. 2005;33(10):1645–69.

Amuedo-Dorantes C, Pozo S. Workers' remittances and the real exchange rate: a paradox of gifts. World Dev. 2004;32(8):1407–17.
Anderson S, Platzer M. American made: the impact of immigrant entrepreneurs and professionals on U.S. competitiveness. Arlington: National Venture Capital Association; 2006.
Ang AP, Sugiyarto G, Jha S. Remittances and household behavior in the Philippines. Manila: ADB Economics Working Paper Series No. 188, Asian Development Bank; 2009.
Arif GM, Irfan M. Return migration and occupational change: the case of Pakistani migrants returned from the Middle East. Pakistan Dev Rev. 1997;36(1):1–37.
Bao S, Bodvarsson ÖB, Hou JW, Zhao Y. The regulation of migration in a transition economy: China's Hukou system. Contemp Econ Policy. 2011;29(4):564–79.
Batista C, McIndoe-Calder T, Vincente PC. Return migration, self-selection and entrepreneurship in Mozambique. Bonn: IZA Discussion Paper No. 8195, Institute for the Study of Labor; 2014.
Batista C, Vincente PC. Do migrants improve governance at home? Evidence from a voting experiment. World Bank Econ Rev. 2011;25(1):77–104.
Beine M, Docquier F, Rapoport H. Brain drain and LDCs growth: winners and losers. Econ J. 2008;118:631–52.
Black R, Costaldo A. Return migration and entrepreneurship in Ghana and Côte D'Ivoire: the role of capital transfers. Tijdschr Econ Soc Ge. 2009;100(1):44–58.
Bourdet Y, Falck H. Emigrants' remittances and Dutch disease in Cape Verde. Int Econ J. 2006;20(3):267–84.
Brixy U, Sternberg R, Vorderwülbecke A. Business start-ups by migrants. Nürnberg: IAB Brief Report 25, Institute for Employment Research; 2013.
Bruder J, Räthke-Döppner S. Ethnic minority self-employment in Germany: geographical distribution and determinants of regional variation. Rostock: Thünen-Series of Applied Economic Theory No. 100, Institute of Economics, University of Rostock; 2008.
Castles S. Development and migration—migration and development: what comes first? New York: Paper Prepared for the Social Science Research Council Conference Migration and Development: Future Directions for Research and Policy; 2008. 28 February – 1 March 2008.
Chami R, Fullenkamp C, Jahjah S. Are immigrant remittance flows a source of capital for development? IMF Staff Papers. 2005;52(1):55–81.
Chamie J. The choice: more immigrants or fewer citizens? 2013. YaleGlobal Online Magazine, 4 March, Yale Center for the Study of Globalization. Available via, http://yaleglobal.yale.edu/content/choice-more-immigrants-or-fewer-citizens. Accessed March 2016.
Collins J. Cultural diversity and entrepreneurship: policy responses to immigrant entrepreneurs in Australia. Entrep Region Dev. 2003;15(2):137–49.
Constant A, Shachmurove Y, Zimmermann KF. What makes an entrepreneur and does it pay? Native men, turks, and other migrants in Germany. Int Migr. 2007;45(4):71–100.
Constant A, Zimmermann KF. The making of entrepreneurs in Germany: are native men and immigrants alike? Small Bus Econ. 2006;26(3):279–300.
Cox Edwards A, Ureta M. International migration, remittances, and schooling: evidence from El Salvador. J Dev Econ. 2003;72(2):429–61.
Dai O, Lui X. Returnee entrepreneurs and firm performance in Chinese high-technology industries. Int Bus Rev. 2009;18(4):373–86.
de Haas H. International migration, remittances and development: myths and facts. Third World Q. 2005;26(8):1269–84.
de Haas H. Engaging diasporas. How governments and development agencies can support diaspora involvement in the development of their origin countries. Oxford: International Migration Institute (IMI), University of Oxford for OXFAM NOVIB; 2006.
de Haas H. The myth of invasion: the inconvenient realities of African migration to Europe. Third World Q. 2009;29(7):1305–22.
de Haas H. Migration and development: a theoretical perspective. Int Mig Rev. 2010;44(1):227–64.
de Meza D, Webb DC. Too much investment: a problem of asymmetric information. Q J Econ. 1987;102(2):281–92.
Démurger S, Xu H. Return migrants: the rise of new entrepreneurs in rural China. World Dev. 2011;39(10):1847–61.
Di Giovanni J, Levchenko AA, Ortega F. A global view of cross-border migration. J Eur Econ Assoc. 2015;13(1):168–202.
Di Maria C, Stryszowski P. Migration, human capital accumulation and economic development. J Dev Econ. 2009;90(2):306–13.
Docquier F, Lodigiani E, Rapoport H, Schiff M. Emigration and democracy. J Dev Econ. 2016;120:209–23.
Docquier F, Rapoport H. Globalization, brain drain, and development. J Econ Lit. 2012;50(3):681–730.
Dustmann C, Kirchkamp O. The optimal migration duration and activity choice after remigration. J Dev Econ. 2002; 67(2):351–72.
Egger PH, von Ehrlich M, Nelson DR. Migration and trade. World Econ. 2012;35(2):216–41.
Fairlie RW, Lofstrom M. Immigration and entrepreneurship. Bonn: IZA Discussion Paper No. 7669, Institute for the Study of Labor; 2013.
Frijters P, Kong T, Meng X. Migrant entrepreneurs and credit constraints under labor market discrimination. Bonn: IZA Discussion Paper No. 5967, Institute for the Study of Labor; 2011.
Funkhouser E. Migration from Nicaragua: some recent evidence. World Dev. 1992;20(8):1209–18.
Gibson J, McKenzie D. The economic consequences of 'brain drain' of the best and brightest: microeconomic evidence from five countries. Econ J. 2012;122(560):339–75.
Giuliano P, Ruiz-Arranz M. Remittances, financial development, and growth. J Dev Econ. 2009;90(1):144–52.
Giulietti C, Ning G, Zimmermann KF. Self-employment of rural-to-urban migrants in China. Int J Manpower. 2012;33(1):96–117.
Giulietti C, Wahba J, Zimmermann KF. Entrepreneurship of the left behind. Res Labor E. 2013;37:65–92.
Gurgand M, Lambert S, Rapoport H, Zenou Y. Migration and development: insights from the 3rd AFD-World Bank Migration and Development Conference. Reg Sci Urban Econ. 2012;42(5):761–4.
Harris JR, Todaro MP. Migration, unemployment and development: a two-sector analysis. Am Econ Rev. 1970;60(1):126–42.
Hart DM, Acs ZJ. High-tech immigrant entrepreneurship in the United States. Econ Dev Q. 2011;25(2):116–29.
Hildebrandt N, McKenzie D. The effects of migration on child health in Mexico. Washington, DC: World Bank Policy Research Working Paper 3573, World Bank; 2005.

Hunt J, Gauthier-Loiselle M. How much does immigration boost innovation? Am Econ J-Macroecon. 2010;2(2):31–56.
Ilahi N. Return migration and occupational change. Rev Dev Econ. 1999;3(2):170–86.
Itzigsohn J. Migrant remittances, labour markets, and household strategies: a comparative analysis of low-income household strategies in the Caribbean Basin. Soc Forces. 1995;74(2):633–55.
Jansen M, de Kok J, van Spronsen J, Willemsen S. Immigrant entrepreneurship in the Netherlands. Zoetermeer: Research Report H200304, SCALES; 2003.
Kelley D, Singer S, Herrington M. Global entrepreneurship monitor global report 2011. London: Global Entrepreneurship Research Association; 2012.
Kenney M, Breznitz D, Murphree M. Coming back home after the sun rises: returnee entrepreneurs and the growth of high tech industries. Res Policy. 2012;42(2):391–407.
Kotabe M, Riddle L, Sonderegger P, Täube FA. Diaspora investment and entrepreneurship: the role of people, their movements, and capital in the international economy. J Int Manag. 2013;19(1):3–5.
Kugler M, Rapoport H. Migration, FDI and the margins of trade. Cambridge: CID Working Paper No. 222, Harvard University; 2011.
Levitt P. Social remittances: migration driven local-level forms of cultural diffusion. Int Migr Rev. 1998;32(4):926–48.
Lewis WA. Economic development with unlimited supplies of labour. Manch Sch. 1954;22(2):139–91.
Lianos T, Pseiridis A. On the occupational choices of return migrants. Entrep Region Dev. 2009;21(2):155–81.
López-Córdova JE, Olmedo A. International remittances and development: existing evidence, policies and recommendations. Buenos Aires: INTAL-ITD Occasional Paper No 41, Inter-American Development Bank; 2006.
Lucas REB, Stark O. Motivations to remit: evidence from Botswana. J Polit Econ. 1985;93(5):901–18.
Mansuri G. Does work migration spur investment in origin communities? Entrepreneurship, schooling, and child health in rural Pakistan. In: Özden Ç, Schiff M, editors. International migration, economic development and policy, vol. Chapter 3. Washington, DC: World Bank and Palgrave Macmillan; 2007. p. 99–140.
Marchand K, Siegel M. Immigrant entrepreneurship in cities. Background paper for world migration report migrants and cities: new urban partnerships to manage mobility. Geneva: International Migration for Migration; 2015.
Marchetta F. Return migration and the survival of entrepreneurial activities in Egypt. World Dev. 2012;40(10):1999–2013.
Massey DS, Parado EA. International migration and business formation in Mexico. Soc Sci Quarterly. 1998;79(1):1–20.
McCormick B, Wahba J. Overseas work experience, savings and entrepreneurship amongst return migrants to LDCs. Scot J Polit Econ. 2001;48(2):164–78.
Mesnard A. Temporary migration and capital market imperfections. Oxford Econ Pap. 2004;56(2):242–62.
Mohapatra S, Özden Ç, Plaza S, Shaw W. Leveraging migration for Africa: remittances, skills and investments. Washington, DC: World Bank; 2011.
Mora MT, Davila A. Ethnic group size, linguistic isolation, and immigrant entrepreneurship in the USA. Entrep Region Dev. 2007;17(5):389–404.
Mountford A. Can a brain drain be good for growth in the source economy? J Dev Econ. 1997;53(2):287–303.
Münz R. The global race for talent: Europe's migration challenge. Brussels: Breughel Policy Brief 2014/02, The Breughel Institute; 2014.
Naudé W. Promoting entrepreneurship in developing countries: policy challenges. Helsinki: United Nations University Policy Brief No. 4, UNU-WIDER; 2010.
Naudé W. Entrepreneurship is not a binding constraint on growth and development in the poorest countries. World Dev. 2011;39(1):33–44.
Neville F, Orser B, Riding A, Jung O. Do young firms owned by recent immigrants outperform other young firms? J Bus Venturing. 2014;29(1):55–71.
OECD. International migration outlook 2008. Paris: Organisation for Economic Co-operation and Development; 2008.
OECD. Entrepreneurship and Migrants. Report by the OECD Working Party on SMEs and Entrepreneurship. Paris: Organisation for Economic Co-operation and Development; 2010.
OECD. International migration outlook 2011. Paris: Organisation for Economic Co-operation and Development; 2011.
Oosterbeek H, van Praag M, Ijsselstein A. The impact of entrepreneurship education on entrepreneurship skills and motivation. Eur Econ Rev. 2010;54(3):442–54.
Piracha M, Vadean F. Return migration and occupational choice: evidence from Albania. World Dev. 2010;38(8):1141–55.
Price M, Chacko E. The mixed embeddedness of ethnic entrepreneurs in a new immigrant gateway. J Immigr Refug Stud. 2009;7(3):328–46.
Rapoport H. Migration, credit constraints and self-employment: a simple model of occupational choice, inequality and growth. Econ Bull. 2002;15(9):1–5.
Ratha D. Leveraging remittances for development. Washington, DC: MPI Policy Brief, Migration Policy Institute; 2007.
Rauch JE, Trindade V. Ethnic Chinese networks in international trade. Rev Econ Stat. 2002;84(1):116–30.
Saxenian A. Brain circulation: how high-skill immigration makes everyone better off. Brookings Rev. 2002;20(1):28–31.
Saxenian A. The new argonauts. Cambridge: Harvard University Press; 2006.
Spilimbergo A. Democracy and foreign education. Am Econ Rev. 2009;99(1):528–43.
Stark O, Wang Y. Inducing human capital formation: migration as a substitute for subsidies. J Public Econ. 2002;86(1):29–46.
Stel N. Diaspora versus refugee: the political economy of Lebanese entrepreneurship regimes. Maastricht: MSM Working Paper 2013/16, Maastricht School of Management; 2013.
Stephan PE, Levin SG. Exceptional contributions to US science by the foreign-born and foreign-educated. Popul Res Policy Rev. 2001;20(1-2):59–79.
Taylor JE, Mora J, Adams RH, Lopez-Feldmann A. Remittances, inequality and poverty: evidence from rural Mexico. Providence, RI: Paper Prepared for the American Agricultural Economics Association Annual Meeting; 2005. 24-27 July 2005.
United Nations. The number of international migrants worldwide reaches 232 million. New York: Population Facts 2013/2, United Nations Department of Economic and Social Affairs, Population Division; 2013.
Vaaler PM. Immigrant remittances and the venture investment environment of developing countries. J Int Bus Stud. 2011;42:1121–49.
Vasco C. Migration, remittances and entrepreneurship: the case of rural Ecuador. Migraciones Int. 2013;7(1):37–64.

Vorderwülbecke A. Entrepreneurship and migration. In: Xavier SR, Kelley P, Kew L, Herrington M, Vorderwülbecke A, editors. Global entrepreneurship monitor—2012 global report. London: Global Entrepreneurship Research Association; 2012. p. 42–50.
Wadhwa V, Rissing BA, Saxenian A, Gereffi G. Education, entrepreneurship and immigration: America's new immigrant entrepreneurs, part II. Duke, UC Berkley and Ewing Marion Kauffman Foundation;2007.
Wahba J, Zenou Y. Out of sight, out of mind: migration, entrepreneurship and social capital. Reg Sci Urban Econ. 2012; 42(5):890–903.
Woodruff C, Zenteno R. Migration networks and microenterprises in Mexico. J Dev Econ. 2007;82(2):509–28.
World Bank. Migration and remittance flows: recent trends and outlook, 2013-2016. Washington, DC: Migration and Development Brief 21, World Bank; 2013.
Yang D. International migration, remittances, and household investment: evidence from Philippine migrants' exchange rate shocks. Econ J. 2008;118(528):591–630.
Yang D. Migrant remittances. J Econ Perspect. 2011;25(3):129–51.
Zhang G. The choice of formal or informal finance: evidence from Chengdu, China. China Econ Rev. 2008;19(4):659–78.
Zhou M. Revising ethnic entrepreneurship: convergencies, controversies, and conceptual advancements. Int Migr Rev. 2004;38(3):1040–74.