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## IMMIGRATION AND HIGH-GROWTH ENTREPRENEURSHIP IN DEVELOPING COUNTRIES

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*Immigration is emerging as a potent and visible policy tool at the disposal of policymakers seeking to increase economic development through entrepreneurship. However, it is less clear if immigration has the same role in developing countries. This paper presents a narration on whether the independent effects and interaction between rates of immigration and the social desirability of entrepreneurship in developing countries exercise any influence on the likelihood of individuals entering into high-growth entrepreneurship. The propositions reported would argue that each has an independent positive influence, but that social desirability would be instrumental in moderating the positive effect of immigration, such that as social desirability increases, the influence of immigration on high-growth entrepreneurship decreases.*

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Keywords: high-growth entrepreneurship, developing countries, immigration, social desirability,

### INTRODUCTION

The literature and news media are abuzz with examples of immigrant entrepreneurs starting high-growth businesses (Saxenian, 2002). The huge influx of highly educated and skilled immigrants into centers of economic activity promises to change attitudes toward immigration and beliefs about entrepreneurship. In fact, in examining the U.S., the Kauffman Foundation (Wadhwa, Rissing, Saxenian & Gereffi, 2007) suggests that immigrant entrepreneurs are more likely than the typical indigenous individual to start businesses and to opt for high-growth ventures (e.g., technology companies) instead of more general forms of entrepreneurship (e.g., personal services, retail, or home-based businesses). Similarly, in the Netherlands, Rath and Kloosterman (2000) find that immigrant entrepreneurs, especially those of Turkish and Chinese descent, account for a disproportionate number of entrepreneurs in that country. Nonetheless, the U.S. and the Netherlands have pro-entrepreneurship cultures, making them relatively welcoming of immigrants compared with many other countries, especially those in the developing world. When it comes to immigration, should we expect the same patterns to hold in both developing and developed countries? If so, then developing countries may look to immigration as a source of economic gain; or is there more to the story? I seek to provide some answers to this question and in the process also seek to demystify the ‘immigrant entrepreneur’.

While much theorizing explains entrepreneurial behaviors in mature market conditions, a smaller but growing literature has begun to examine the context of developing countries to see if the same theories hold or not (Reynolds, Bosma, Autio, Hunt, De Bono, Servais & Lopez-Garcia et al., 2005). The gist of my conceptualization and arguments lead to policy implications that are tailored to the developing country context. Many studies have suggested that in developed countries, the value of diversity, especially when that diversity comes with technical expertise, warrants a more open policy of immigration (Levie, 2007; Wadhwa et al., 2007). In terms of contemporary political events, we still see H-1B visas being issued in the U.S., and the desire of companies like Microsoft to sponsor them by the tens of thousands in order to meet their need for software developers.

Developed countries not only vary substantially in terms of their immigration levels, policies, and cultural attitudes toward new immigrants, but also in their acceptance of entrepreneurship as a legitimate career choice. On the other hand, many economies transitioning from central planning to free market systems lack pro-entrepreneurship cultures and the indigenous individuals may have relatively more fear of failure and lower risk tolerance (Henry, Hill & Leitch et al., 2003). Simultaneously, some developing economies lag in controlling corruption because of their socioeconomic legacies (Smallbone & Welter 2001). According to Tonoyan, Strohmeyer, Habib and Perlitz (2010), corruption rates in post-Soviet countries and those transitioning out of state socialism are rising and are now among the highest in the world. Other developing countries may have weak governments and large shadow economies that make them more or less open to legitimate entrepreneurship. All told, it seems that the opportunities for immigrants are somewhat determined by the level of development of a country. Thus, studies that lump together developed and developing countries may inadvertently contribute to poor policy transfer.

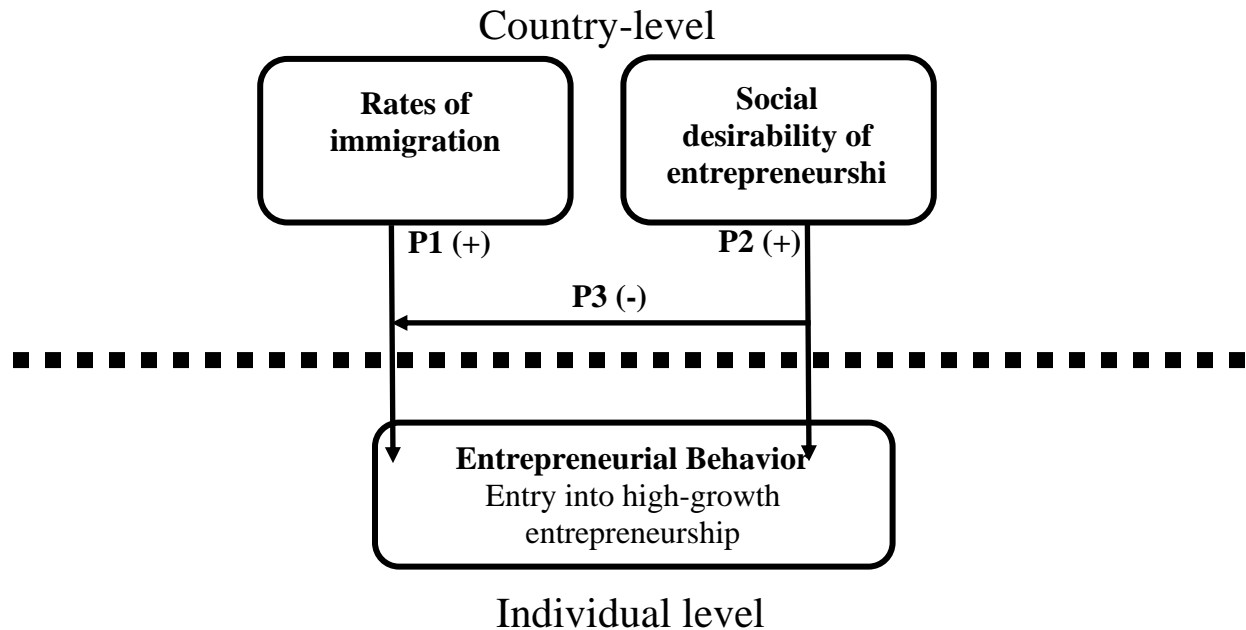
I undertake explaining how cultural values, which I view as informal institutions, influence entrepreneurial activity by looking at the independent influences of immigration (which I take to reflect the immigration friendliness of a culture) and the social desirability of entrepreneurship (which I interpret as a collective attitude about the legitimacy and attractiveness of entrepreneurship as a career choice), as well as the interaction of these two constructs, in influencing the choice to engage in high-growth entrepreneurship in developing countries. This narrowing of prevue is appropriate given that these economies are often being subjected to more radical policy changes seeking to foster economic growth. Closer attention to high-growth entrepreneurial ventures is justified because they are the ones that tend to generate economic growth (Shane, 2009), which is the prime directive of policymakers of most developing countries.

According to North (1990) and Scott (2002), informal institutions exert their influence through individual consideration of social desirability and cultural legitimacy of entrepreneurship as a career choice (Ajzen, 1991; Cassar, 2007; Krueger, 2000). By contrast, formal institutions regulate an individual's financial incentives for choosing such a career. Thus, institutions influence not only what individuals search and observe, but also how they react to potential entrepreneurial opportunities (Hwang & Powell, 2005; Thornton, 1999). Utility maximization is a driving force behind entrepreneurship. In particular, entrepreneurs' decisions as to whether or not to engage in entrepreneurial activities depend upon the net benefits expected over the opportunity cost of potentially reduced or foregone wages or even salaried work – i.e., the utility expected from entrepreneurship should be greater than that from standard forms of employment (Douglas & Shepherd, 2002; Hayton, George, & Zahra, 2002; Reynolds et al. 2005). From the employment choice perspective, institutions affect the incentives of entrepreneurs considering entry into high-growth entrepreneurship as a career.

I propose that the immigration and social desirability of entrepreneurship do have direct positive effects on high-growth entrepreneurship. In addition, the interaction of these two variables will be negative, suggesting an alternative explanation to the one usually provided in the developed country context. The proposed theoretical framework is shown in Figure 1 below. I conclude that the cultural forces that affect entrepreneurship in developing countries may

indeed be different from those that affect it in developed countries, further highlighting the need for more research that distinguishes countries according to their stage of socioeconomic development.

*Figure 1. Theoretical Model.*



This paper proceeds as follows. First, I will elaborate on the choice of high-growth entrepreneurship in developing countries as an outcome and develop the concepts behind the two main explanatory variables. The following section presents my arguments sustaining the propositions concerning the role of immigration and social desirability, and their interaction, on the propensity of individuals to engage in high-growth entrepreneurship. Then, I will discuss this study's implications for entrepreneurship research, practice, and policy.

## BACKGROUND AND THEORY DEVELOPMENT

There are plenty of reasons to expect that immigration will have varying effects on entrepreneurship between developed and developing country contexts. However, little research has examined what those differences might be. Instead, some scholars have recently focused on how immigrant remittances can become venture capital in the home country (Vaaler, 2011).

The lack of studies suggests that scholars generally expect little from immigration as a policy lever in developing countries. Yet, researchers have uncovered several insights that suggest the need for further study. For instance, in a study of Bangladeshi immigrants into Japan, Rahman and Lian (2011) note that international migration in Asia has led to the emergence of immigrant-run businesses. Immigration should not be ignored as a relevant policy tool in developing countries, especially given recent evidence that some countries have successfully used diaspora strategies to bring back emigrants (Lin, 2010; Riddle & Brinkerhoff, 2011; Riddle et al., 2010; Vaaler, 2013).

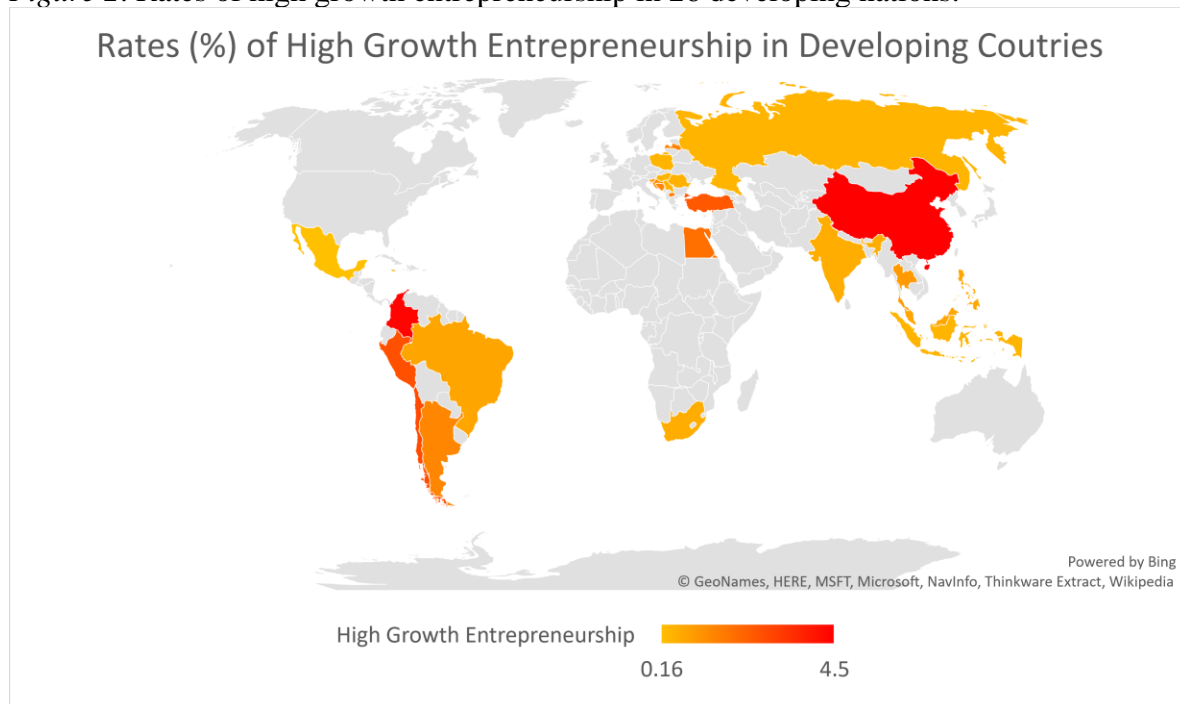
Hart and Acs (2011) documented the wide phenomenon of immigrant high-tech entrepreneurship in the U.S. and conclude that firms with immigrant founders are more likely to be born global, in the sense of starting out with ties to foreign firms. Similarly, Zolin and Schlosser (2013) suggest that immigrants make good founding team members if they bring with them international connections. Ilhan-Nas et al. (2011) show that transnationalism, mixed-embeddedness, and the interaction of social, human, and financial capital are crucial for ethnic entrepreneurship. Ndofor and Priem (2011) argue that immigrants and their children make a choice between whether to tie their entrepreneurship to their ethnic niche markets or go after the dominant market. Chrysostome (2010) suggests that ethno-cultural, financial, managerial, psycho-behavioral, and institutional factors are at play in predicting immigrant entrepreneurship success.

### High-Growth Entrepreneurship in Developing Countries

The selected context is highly timely and appropriate given increasing attention paid to immigration as a source of entrepreneurship (Saxenian, 2002; Wadhwa et al. 2007). Shane (2009) suggests that high-growth ventures create more employment and wealth than general entrepreneurship. He states as evidence that: (1) a typical U.S. start-up only has \$25,000 start-up capital and often operates in retail or personal services (Hurst and Lusardi 2004); (2) Many of these businesses are home-based and have no employees (Acs & Armington, 2004; Prat, 1999), and (3) their owners aspire to generate around \$20,000 per year to supplement other sources of income, such as regular employment (Haynes, 2001). Furthermore, many of these firms are less productive than older firms due to a lack of economies of scale and scope (Shane, 2009), such that they are hardly likely to be a major boon to economic development. In fact, the typical U.S. start-up is no longer in business after five years (Shane, 2009), and the net jobs created by new firms becomes negative after just a few years as the majority begins to fail (Knaup, 2005; Persson, 2004). Part of the problem is that most entrepreneurs choose industries that are already highly competitive and where barriers to entry are relatively high (Johnson, 2004). However, firms that receive the backing of venture capital do far better, generating a significant economic impact and disproportionate job creation, thus it should come as no surprise that venture capitalists tend to fund high-growth start-ups (Shane, 2009).

Comparing the institutional factors affecting high-growth entrepreneurship can therefore inform us about how institutions drive economic growth more directly than looking to general entrepreneurship, which has been studied much more intensively, but is less strongly linked to economic growth. Percentage rates of high growth entrepreneurship available from the Global Entrepreneurship Monitor (GEM) data set for 26 developing countries is shown in Figure 2 below. It corresponds to the responses on the survey question “How likely are you to create more than 19 jobs in the next 5 years?” (0 = not likely; 1 = likely).

Figure 2. Rates of high growth entrepreneurship in 26 developing nations.



### Social Desirability of Entrepreneurship

I start with the assumption that entrepreneurs' decisions as to whether or not to engage in entrepreneurial activities are driven by the expected net gain of such endeavors, taking into account the opportunity cost of potentially foregone wages or salaries (Douglas & Shepherd, 2002; Hayton et al., 2002; Reynolds et al., 2005). Entrepreneurs adapt their activities and strategies in response to threats and opportunities created by prevailing formal and informal institutions. Informal institutions, as defined by North (1990) and Scott (2002), exert their influences through an individual's considerations of the social desirability and cultural legitimacy of entrepreneurship as a career choice (Ajzen, 1991; Cassar, 2007; Krueger, 2000). Consequently, the social desirability of entrepreneurship is an informal (cultural) institution.

The social desirability of entrepreneurship refers to "the subjective norms or commonly held perceptions regarding the status and rewards of entrepreneurship in a given population" (Stephan & Uhlaner, 2010: 1348). It is considered an important perceptual variable affecting nascent entrepreneurship (Pia & Maria 2005) and part of each country's institutional profile (Busenitz et al., 2000).

While social desirability of entrepreneurship reflects a cultural value that is expected to strongly correlate with entrepreneurship in general, it is yet to be established as important driver of high-growth entrepreneurship and has been scarcely examined in developing country contexts. One could expect a higher social desirability for high-growth entrepreneurship where there exist relatively mature markets for initial public offerings or other facilities for securitization of new firms, and abundant social examples of successful entrepreneurial quests such as the widely publicized cases of 'young geniuses' becoming famously rich by 'going public'.

In fact, most cultural research has focused on variables such as individualism and collectivism. For instance, Morris et al. (1994) find that moderate levels of individualism and collectivism are superior to high and low levels of each for spurring corporate entrepreneurship (entrepreneurship inside of incumbent corporations). More recently, individualism and collectivism have been found to correlate with starting a business and staying in business, respectively, and other studies find support for relationships between entrepreneurial behaviors and cultural values like independence, achievement, competitiveness, strong work ethic and masculinity (Berger, 1991; Cauthorn, 1989; Hebert & Link, 1988; Lipset, 2000). Yet, according to Morris and Schindehutte (2005 455): “These values are not pervasive in a number of cultures and ethnic communities and may have limited applicability in certain developing economies.” By contrast, the social desirability of entrepreneurship is a more direct and explicit measure of cultural attitudes toward entrepreneurship as a career choice.

### Immigration

Immigration, because it is a policy tool with such powerful implications, deserves close attention. However, the literature on immigration, through related concepts, such as ethnic fractionalization and ethnic polarization has yielded mixed results. Audretsch et al. (2010) demonstrate that in the German context, regions with higher levels of knowledge and cultural diversity experienced higher levels of technology entrepreneurship relative to regions with relatively low knowledge and low diversity. Also, Niebuhr (2010) claim that differences in capabilities and knowledge of workers from diverse cultural backgrounds augments performance of regional research and development sectors. It is noteworthy that in both cases, the value of cultural diversity is conditional upon the presence of skilled labor.

In this context, Sobel et al. (2010: 269) propose that diversity among individuals can be destructive in some countries, and constructive in others. They suggest that cultural diversity can be destructive in developing economies with weak institutions, whereas it is may be constructive in developed countries with mature institutions. Their thesis is founded upon the observation that developed areas rich in cultural heterogeneity, such as Coastal U.S. cities, benefit from higher levels of entrepreneurship as a consequence of the extensive mix of cultural capital available there. Notwithstanding, the research challenge endures as summarized by Alesina and Ferrara (2005: 762) who argue that suboptimal policies can emanate from diversity in the presence of conflict, but in its absence, diversity fosters innovation.

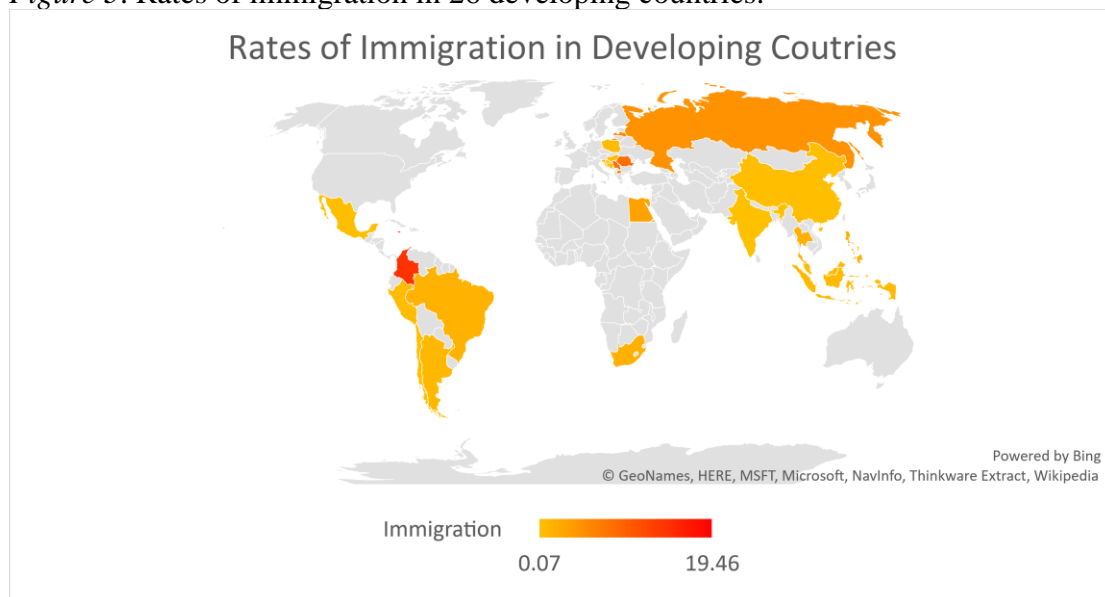
Most of the literature assessing cultural diversity through economic lenses views it as a positive force. However, where the potential for diversity to fuel societal polarization exists, the former may be perceived as undesirable. For example, Easterly and Levine (1997) explain the relatively low levels of economic development found in African countries according to the relative levels of ethnic diversity persistence. These authors reason that the African continent is an economic dawdler due to inappropriate public policies, unstable political regimes, and socioeconomic deterrents emanating from the prevalence of ethnic heterogeneity. However, more recently, Esteban et al. (2012) sustain that ethnic fractionalization does not capture ethnic conflict, which in their view has been the main thrust behind the argument. They argue that ethnic polarization is a more relevant buffer of economic growth, while fractionalization triggers

a positive effect due to the cultural capital it brings (Sobel et al., 2010). In sum, polarization tends to stress asymmetries among ethnic group sizes and serves as a relevant explanatory variable of conflict and instability, that culminates in civil wars (Montalvo & Reynal-Querol, 2005).

Notwithstanding the above, polarization could also be viewed as implying a certain degree of social conflict that manifests itself in biased policies promoted by societal actors favoring their preferred ethnic groups (Alesina, 1994). For instance, according to Montalvo and Reynal-Querol (2005:797) “ethnic polarization generates problems in the design of structural policies related to infrastructure and education”, whereas La Porta et al. (1999) find that ethnic diversity produces corruption and lowers efficiency in governments that take part in expropriating the groups targeted by discrimination.

Scholars have just recently begun to examine the effect of immigration policies on entrepreneurship more directly. For example, Mahuteau et al. (2011) analyze Australian data and propose that stricter rules for receiving welfare payments increase entrepreneurship among immigrants to that country. On the other hand, Hout and Rosen (2000) find that second generation immigrants are more likely to engage in entrepreneurship. Hunt (2011) shows that immigrants who enter as students or trainees out-patent, out-license, and out-commercialize natives in the United States. Nonetheless, there are scarce resources in the literature assessing the relationship between institutions and entrepreneurship in developing countries. To my knowledge, there are no studies that look directly at the role of immigration on entrepreneurship in developing countries. Consequently, there are none in this narrowed context that examine high-growth entrepreneurship in particular. National rates of immigration, measured as the number of immigrants as percentage of mother countries’ population, available from the United Nation’s report for 26 developing countries are shown in Figure 3.

*Figure 3. Rates of immigration in 26 developing countries.*





## PROPOSITION DEVELOPMENT

In this section, I will make propositions about the associations between immigration and social desirability of entrepreneurship and the likelihood of individuals entering into high-growth entrepreneurship. Subsequently, I will theorize the combined or interaction effect of immigration and social desirability on high-growth entrepreneurship.

### Immigration and High-Growth Entrepreneurship

Given that the institutions in developing countries may be less mature and potentially more corrupt than in developed countries, it is not obvious that the positive relationship between immigration and entrepreneurship found in the latter holds in the former nations. For instance, Lassen (2007) point out that ethnic diversity may decrease trust in formal institutions because officials become biased toward their in-groups and against out-groups. Also, Sobel et al. (2010) argue that cultural diversity has a negative effect on entrepreneurial-related activities in regions where formal institutions are weak, and a positive influence in contexts with strong institutions. Despite the aforementioned, multiculturalism and immigration have spread throughout the world and became common in present-day societies, such that different sub-cultures can and do exist within countries (Davidsson & Wiklund, 1997; García-cabrera & García-soto, 2008; Levie, 2007). In this realm, studies have shown that ethnic minorities are often more likely to start businesses (Vinogradov & Kolvereid, 2007). One potential explanation suggests that immigrants may be considered “misfit” individuals who do not share the dominant cultural values (Hofstede et al., 2004) and consequently become more prone to start their own businesses rather than entering the traditional labor market. Curiously or not, according to the Kaufman foundation (Wadhwa et al., 2007), 25.3 percent of the technology and engineering start-ups in the U.S. between 1995 and 2005 had a foreign-born founding member. The majority of these immigrants came from India, the U.K., China, Taiwan, Japan and Germany. Most migrated to study and decided to stay in the country of their university. They also tended to prefer cosmopolitan areas over rural ones. Perhaps not surprisingly given these statistics, immigration has been positively associated with entrepreneurship in several contexts, though mostly located in developed nations.

A similar reasoning is used to sustain that cultural diversity has relevant positive effects on entrepreneurial rates. The main explanation is based upon the fact that the mixing of cultural capital between immigrants and locals creates opportunities for new recombination's that otherwise would have been more difficult to discover (Sobel et al. 2010). For instance, if we consider that there exist transaction costs in the search and combination of knowledge (Fleming, 2001; Fleming & Sorenson 2004), then diversity improves “hit rates” for productive new products and services by virtue of local adoption of knowledge originating from abroad, that normally would have been very expensive to acquire through indirect exposure (e.g., book learning) or travel. Thus, immigration may be viewed as a factor contributing to the minimization of entrepreneurship-related transaction costs, consequently augmenting individuals' willingness to engage in such ventures and potentially tipping him or her in favor of pursuing a business they previously would have not considered worthwhile.

Summarizing, immigration may increase the probability of an individual coming into contact with those who have different cultural capital than their own (Sobel et al., 2010). When

there are many groups with different cultural backgrounds, points of view, and needs interacting together, there is a higher propensity to identify new opportunities to combine resources, capabilities, and technological components. From the employment choice perspective, the net gain expected by potential entrepreneurs seeking to engage in high-growth entrepreneurship is likely to increase as immigration increases. In short, proposition 1: As immigration increases, the likelihood that entrepreneurs will choose high-growth entrepreneurship increases in developing countries.

### Social Desirability and High-Growth Entrepreneurship

A culture is the assemblage of thinking patterns, feelings and actions, learned and shared by individuals living within the same social environment (Hofstede, 1991, 2003). The social desirability of entrepreneurship is a widely held perception about the status and rewards of entrepreneurship in a population (Stephan & Uhlaner, 2010). As such, the concept has been widely linked to the propensity of individuals to engage in entrepreneurial ventures by providing more community support and commensurate resource access (Stephan & Uhlaner, 2010). Social desirability of entrepreneurship brings social capital availability, information sharing, and voluntary cooperation, each of which support the career path of entrepreneurship (Adler & Kwon, 2002; Fukuyama, 2001).

Cultures where the social desirability of entrepreneurship is high are more conducive and readier to legitimize entrepreneurship as a career path. They create favorable institutional environments, such that more individuals perceive a net benefit from starting a new venture, regardless of their dispositions, attributes, and traits (Etzioni, 1987). Such a culture may also lead to changes in attitudes toward entrepreneurship (Krueger, 2000, 2003; Krueger & Carsrud, 1993; Liñán, Urbano & Guerrero, 2011), leading to more entrepreneurial behaviors (Mcgrath et al. 1992; Mueller and Thomas 2001). Put differently, high levels of social desirability of productive entrepreneurship may shift entrepreneurs away from less productive, or unproductive entrepreneurship, or the choice of employment for salary or wages. In particular, high-growth entrepreneurship, because it creates jobs and produces wealth and status, is especially likely to be encouraged by high levels of social desirability. For example, entrepreneurship may become more socially desirable if there are sufficient occasions of success around to convince many individuals to form messages, norms and rules that highlight, reward, and support entrepreneurs. More importantly, when cognitive and normative institutions line up to lower the transaction costs of pursuing high-growth entrepreneurship, more of it can be expected. Cases of high-growth ventures are more likely to be rewarded with wider media coverage because of the broad impact they have in the economy. They are also more likely to find supportive stakeholders, especially customers and financiers.

In sum, the arguments presented above suggest that not only does social desirability fosters general entrepreneurship, but also it fosters high-growth entrepreneurship in developing countries. Social desirability also increases the positive net gains that potential entrepreneurs perceive as outcomes of engaging in high-growth entrepreneurship. Thus, I conjecture that proposition 2: As the social desirability of entrepreneurship increases, the likelihood that entrepreneurs will choose high-growth entrepreneurship increases in developing countries.

### Immigration, Social Desirability and High-Growth Entrepreneurship

Together, we might expect both forces (social desirability of entrepreneurship and immigration) to enhance the likelihood of individuals entering high-growth entrepreneurship, though these institutions have yet to be modelled as interacting together to influence rates of high-growth entrepreneurship. This interaction can be thought of as the moderating effect of social desirability on immigration's effect. Immigration should be most valuable in promoting the net benefits perceived from high-growth entrepreneurship when its social desirability in the recipient country is low, and least valuable when social desirability is already high. The social desirability of entrepreneurship thus negatively moderates the effect of immigration, such that as the social desirability in the given context weakens the positive effect of immigration increases.

At first glance, one might think that immigration into a milieu where entrepreneurship is socially desirable would drive more entrepreneurs to start businesses. However, the migration destination of the most marketable or skilled individuals is likely to be tipped in favor of more developed countries rather than developing countries because the former are generally considered more attractive destinations given the relatively higher wages and benefits available there. Thus, to immigrate has many similarities with the career choice of entrepreneurship, that is, it seems to depend on opportunity recognition on the part of immigrants. Entrepreneurial opportunity recognition is the ability to identify situations in which new goods, services, raw materials, markets and organizing methods can be introduced through the formation of new means, ends, or means–ends relationships (Eckhardt & Shane, 2003p. 336). It involves three stages that can be briefly described as follows: (1) opportunity recognition refers to linking known products with existing demands to exploit a previously recognized opportunity; (2) opportunity discovery is initiated with a known product and proceeds towards spotting an unknown demand, or from a known demand that motivates searching unknown products; and (3) opportunity creation pertains to a situation when an entrepreneur's actions creates the product as well as the demand for it, both of which were unknown prior to such actions (Dyer, Gregersen, & Christensen, 2008).

Where cultures put less emphasis on the social desirability of entrepreneurship, entrepreneurs that migrate in might have an edge. They may be able to recognize opportunities for high-growth entrepreneurship where the indigenous individuals never considered due to the latter groups' cognitive and normative institutional constraints. Nonetheless, the low social desirability of entrepreneurship in these countries might stifle domestic high-growth entrepreneurship by indigenous individuals. For instance, the pursuit of profit-oriented enterprise may be colored by normative institutions that describe the practices as 'lowly', 'greedy', 'self-serving', 'exploitative', or 'untraditional'. Enterprises that conflict with cultural values and norms are less likely to be endeavored by those who are deeply embedded in the local culture. However, to the extent that many businesses can thrive despite lack of total social acceptance, the opportunity-hungry immigrant entrepreneur may fill market gaps left open by the inertia of the indigenous culture. They may be just the right 'misfits' for high-growth businesses. For example, it has been demonstrated that immigrants are more likely to become entrepreneurs if they are discriminated against (Constant & Zimmermann, 2004), if they are not fluent in the local language (Evans & Leighton, 1989), or belong to an ethnic minority (Hout & Rosen, 2000).

On balance, although from a predominantly mature economy perspective we might view immigration as a boon to high-growth entrepreneurship, from a developing economy perspective it would seem that more social desirability reduces the potential positive influence of immigration on the overall likelihood of individuals entering in high-growth entrepreneurship. An individual from a culture where entrepreneurship's desirability as a career choice is high may see more opportunities and be more likely to act on them, thus buffering any positive effect arising from the immigrant population. Concurrently, the immigrant individual facing higher competition in the entrepreneurial market where entrepreneurship is highly desired by local individuals may be more prone to enter the traditional labor market instead of contributing to what is often called 'red queen' or 'red ocean' competition (Barnett & Hansen, 1996; Barnett & Sorenson, 2002; Johnson, 2004; Shane, 2009). In short, proposition 3: The social desirability of entrepreneurship weakens the positive relationship of immigration on the likelihood of entrepreneurs choosing high-growth entrepreneurship in developing countries.

## DISCUSSION

I have argued that the dynamics between institutions such as immigration and the propensity of individuals to engage in high-growth entrepreneurship is moderated by the level of social desirability of entrepreneurship as a career choice. In particular, this has been discussed in the context of developing countries, where formal institutions are expected to be weaker. The policy implications of my study are limited to the developing country context and may not be applicable to developed countries. Whereas in developed countries like the United States, it may be that immigration promotes high-growth entrepreneurship (Saxenian, 2002; Wadhwa et al., 2007), the positive effect is much more nuanced for developing nations. If developing nations seek to benefit from the entrepreneurial potential of their immigration policies, they must create incentives to attract those individuals who may substantially add to the pool of potential high-growth entrepreneurs, as these may not come otherwise. Competition among countries for the best immigration candidates may tip the scale in favor of developed countries with the ability to attract those with the most marketable skills. Immigrants may be most attracted to migration opportunities with the most promise for financial advancement. Although it may seem as though, on a simple level, this implies overly selective immigration policies, it ought to be clear that we are discussing only the positive implications for the fostering of high-growth entrepreneurship, which may augment economic development (Shane, 2009).

Policymakers already privilege immigration of those individuals with skills that are scarce in their economies. From the perspective of the potential immigrant entrepreneur, it would seem that when choosing where to relocate, the relative intensity of domestic entrepreneurship in the destination country should play an important role. For instance, a computer scientist from a marginal university may be of marginal value in Silicon Valley but may be of high value in less developed parts of the world. Policymakers can help make clear the potential gaps each individual can fill through skills-based immigration policies. It is often the opportunities that are under-exploited by the indigenous population that may be expected to be recognized by immigrant entrepreneurs. This idea contributes to the cultural capital argument (Sobel, Dutta & Roy, 2010), in that what is valuable in one context may not be valuable in others and vice versa. Hence, my study contributes the wider literature examining contextual influences on entrepreneurship.

As an agenda for future research, studies can look into conducting multi-level methodological and estimation techniques to look into the proposed effects. Future researchers might attempt to combine datasets with fine-grained measures of entrepreneurial activities such as the Panel Study of Entrepreneurial Dynamics (PSED), Comprehensive Australian Study of Entrepreneurial Emergence (CAUSEE), World Bank Group Entrepreneurship Snapshots (WBGES), and Kauffman Firm Survey (KFS). Data on high growth entrepreneurship (the outcome proposed in this study) could be obtained from the publicly available Global Entrepreneurship Monitor (GEM) survey, that on immigration from the World Population Policies report or the World Bank report, and on social desirability of entrepreneurship from the GEM data also. Combined, the data could be clustered by countries in a hierarchical nested format. Subsequently, multilevel regressions could be employed to test the proposed main as well as interaction effects.

## CONCLUSION

Social desirability of entrepreneurship serves as a boundary condition on the claim that immigration is a positive force for high-growth entrepreneurship. Developing nations may have use for immigration, but to ensure it is useful for high-growth entrepreneurship requires tailored policies. I focused on high-growth entrepreneurship because I expect it to be prominent in driving economic growth, especially for countries seeking to reach the innovation-driven stage of development enjoyed by the most developed countries of the world. As such, I hope that my study contributes to more nuanced policies based on studies that look to the developing country context as having unique quirks. I also encourage more studies like ours, which are capable of discerning institutional effects on individual level behaviors. This seems particularly important given the dearth of studies that have examined institutions as compared with the vast literature examining individual attributes and dispositions.

## REFERENCES

- Acs Z., & Armington C. (2004). Employment growth and entrepreneurial activity in cities. *Regional Studies*, 38: 911-927.
- Adler, P. S., & Kwon, S. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, 27: 17-40.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50: 179-211.
- Alesina, A. (1994). Political models of macroeconomic policy and fiscal reforms, in Haggards, S., & Webb, S. (Eds) *Voting for reform: Democracy, political liberalization, and economic adjustment*, 37-60. Oxford University Press, New York.
- Alesina, A., & Ferrara, E. L. (2005). Ethnic diversity and economic performance. *Journal of Economic Literature*, 43: 762-800.
- Audretsch, D. B., Dohse, D., & Niebuhr, A. (2010). Cultural diversity and entrepreneurship: A regional analysis for Germany. *The Annals of Regional Science*, 45: 55-85.
- Bandurra, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84: 191-215.

- Barnett, W. P., & Hansen, M. T. (1996). The Red Queen in Organizational Evolution. *Strategic Management Journal*, 17: 139-57.
- Barnett, W. P., & Sorenson, O. (2002). The Red Queen in Organizational Creation and Development. *Industrial and Corporate Change*, 11: 289-325.
- Berger, B. (1991). *The culture of entrepreneurship*. ICS Press, San Francisco.
- Busenitz, L. W., Gomez, C., & Spencer, J. W. (2000). Country institutional profiles: Unlocking entrepreneurial phenomena. *Academy of Management Journal*, 43: 994-1003.
- Cassar, G. (2007). Money, money, money? A longitudinal investigation of entrepreneur career reasons, growth preferences and achieved growth. *Entrepreneurship & Regional Development*, 19: 89-107.
- Cauthorn, R. C. (1989). *Contributions to a theory of entrepreneurship*. Garland, New York.
- Chrysostome, E. (2010). The success factors of necessity immigrant entrepreneurs: In search of a model. *Thunderbird International Business Review*, 52: 137-52.
- Constant, A., & Zimmermann, K. F. (2004). Self-employment dynamics across the business cycle: migrants versus natives. IZA Discussion Papers. Institute for the Study of Labor (IZA), Bonn, Germany.
- Davidsson, P., & Wiklund, J. (1997). Values, beliefs and regional variations in new firm formation rates. *Journal of Economic Psychology*, 18: 179-99.
- Davidsson, P., & Wiklund, J. (2001). Levels of analysis in entrepreneurship research: Current research practice and suggestions for the future. *Entrepreneurship theory and Practice*, 25: 81-100.
- Douglas, E. J., & Shepherd, D. A. (2002). Self-employment as a career choice: attitudes, entrepreneurial intentions, and utility maximization. *Entrepreneurship theory and Practice*, 26: 81-91.
- Dyer, J. H., Gregersen, H. B., & Christensen, C. (2008). Entrepreneur behaviors, opportunity recognition, and the origins of innovative ventures. *Strategic Entrepreneurship Journal*, 2: 317-38.
- Easterly, W., & Levine, R. (1997). Africa's growth tragedy: Policies and ethnic divisions. *The Quarterly Journal of Economics*, 112: 1203-50.
- Eckhardt, J. T., & Shane, S. A. (2003). Opportunities and entrepreneurship. *Journal of Management*, 29: 333-49.
- Esteban, J., Mayoral, L., Ray, D. (2012). Ethnicity and Conflict: An Empirical Study. *American Economic Review*, 102: 1310-42.
- Etzioni, A. (1987). Entrepreneurship, adaptation and legitimation: a macro-behavioral perspective. *Journal of Economic Behavior and Organization*, 8: 175-89.
- Evans, D. S., & Leighton, L. S. (1989). Some Empirical Aspects of Entrepreneurship. *American Economic Review*, 79: 519-35.
- Fleming, L. (2001). Technology as a complex adaptive system: Evidence from patent data. *Research Policy*, 30: 1019-39.
- Fleming, L., & Sorenson, O. (2004). Science as a map in technological search. *Strategic Management Journal*, 25: 909-28.
- Fukuyama, F. (2001). Social capital, civil society and development. *Third World Quarterly*, 22: 7-20.
- García-Cabrera, A. M., & García-Soto, M. G. (2008). Cultural differences and entrepreneurial behaviour: an intra-country cross-cultural analysis in Cape Verde. *Entrepreneurship & Regional Development*, 20: 451-83.

- Hart, D. M., & Acs, Z. J. (2011). High-tech immigrant entrepreneurship in the United States. *Economic Development Quarterly*, 25: 116-29.
- Haynes, G. (2001). Wealth and income: How did small businesses fare from 1989 to 1998? Report for the U.S. Small Business Administration, Contract number SBAHQ-00-M-0502.
- Hayton, J. C., George, G., & Zahra, S. A. (2002). National culture and entrepreneurship: a review of behavioral research. *Entrepreneurship Theory and Practice*, 26: 33-53.
- Hébert, R. F., & Link, A. N. (1988). *The entrepreneur: mainstream views and radical critiques*. Praeger, Westport, CT.
- Henry, C., Hill, F., & Leitch, C. (2003). *Entrepreneurship education and training*. Ashgate, Aldershot.
- Hofstede, G. (1991). *Cultures and organizations: software of the mind*. McGraw-Hill, London, UK.
- Hofstede, G. (2003). *Culture's consequences: comparing values, behaviors, institutions and organizations across nations*. Sage, Newbury Park.
- Hofstede, G., Noorderhaven, N., Thurik, A. R., Uhlaner, L. M., Wennekers, A. R. M., & Wildeman, R. E. (2004). Culture's role in entrepreneurship: self-employment out of dissatisfaction. in Brown, T. E. and Ulijn, J. M. (Eds). *Innovation, entrepreneurship and culture*. 162-203. Edward Elgar, Cheltenham.
- Hout, M., & Rosen, H. (2000). Self-employment, Family background, and Race. *Journal of Human Resources*, 35: 670-92.
- Hunt, J. (2011). Which Immigrants Are Most Innovative and Entrepreneurial? Distinctions by Entry Visa. *Journal of Labor Economics*, 29: 417-57.
- Hurst, E., & Lusardi, A. (2004). Liquidity constraints, household wealth, and entrepreneurship. *Journal of Political Economy*, 112: 319-47.
- Hwang, H., & Powell, W. W. (2005). Institutions and entrepreneurship. In Alvarez, S., Agrawal, R. and Sorenson, O. (Eds) *Handbook of Entrepreneurship Research*. 179-210. Springer, New York.
- Ilhan-Nas, T., Sahin, K., & Cilingir, Z. (2011). International ethnic entrepreneurship: antecedents, outcomes and environmental context. *International Business Review*, 20: 614-26.
- Johnson, P. (2004). Differences in regional firm formation rates: A decomposition analysis. *Entrepreneurship theory and Practice*, 28: 431-45.
- Knaup, A. (2005). Survival and longevity in the business employment dynamics data. *Monthly Labor Review*, 128: 50-56.
- Krueger, N. F. (2000). The cognitive infrastructure of opportunity emergence. *Entrepreneurship theory and Practice*, 24: 5-23.
- Krueger, N. F. (2003). The cognitive psychology of entrepreneurship. in Acs, Z. and Audretsch, D. (Eds) *Handbook of entrepreneurship research: An interdisciplinary survey and introduction*. 105-40. Kluwer, London, UK.
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: applying the theory of planned behavior. *Entrepreneurship & Regional Development*, 5: 315-30.
- La Porta, R., Lopez De Silanes, F., Shleifer, A., & Vishny, R. W. (1999). The quality of government. *Journal of Law, Economics, and Organization*, 15: 222-279.
- Lassen, D. D. (2007). Ethnic divisions, trust, and the size of the informal sector. *Journal of Economic Behavior & Organization*, 63: 423-38.

- Levie, J. (2007). Immigration, in-migration, ethnicity and entrepreneurship in the United Kingdom. *Small Business Economics*, 28: 143-69.
- Lin, X. (2010). The diaspora solution to innovation capacity development: Immigrant entrepreneurs in the contemporary world. *Thunderbird International Business Review*, 52: 123-36.
- Liñán, F., Urbano, D., & Guerrero M. (2011). Regional variations in entrepreneurial cognitions: Start-up intentions of university students in Spain. *Entrepreneurship & Regional Development*, 23: 187-215.
- Lipset, S. M. (2000). The indispensability of political parties. *Journal of Democracy*, 11: 48-55.
- Mahuteau, S., Piracha, M., Tani, M., & Vaira-Lucero, M. (2011). Immigration Policy and Entrepreneurship. IZA Discussion Papers. Institute for the Study of Labor (IZA), Bonn, Germany.
- McGrath, R. G., Macmillan, I. C., Yang, E. A., & Tsai, W. (1992). Does culture endure or is it malleable - issues for entrepreneurial economic-development. *Journal of Business Venturing*, 7: 441-58.
- Montalvo, J. G., & Reynal-Querol, M. (2005). Ethnic diversity and economic development. *Journal of Development Economics*, 76: 293-323.
- Morris, M., & Schindehutte, M. (2005). Entrepreneurial values and the ethnic enterprise: an examination of six subcultures. *Journal of Small Business Management*, 43: 453-79.
- Morris, M. H., Davis, D. L., & Allen, J. W. (1994). Fostering corporate entrepreneurship: cross-cultural comparisons of the importance of individualism versus collectivism. *Journal of International Business Studies*, 25: 65-89.
- Mueller, S. L., & Thomas, A. S. (2001). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing*, 16: 51-75.
- Ndofor, H. A., & Priem, R. L. (2011). Immigrant entrepreneurs, the ethnic enclave strategy, and venture performance. *Journal of Management*, 37: 790-818.
- Niebuhr, A. (2010). Migration and innovation: Does cultural diversity matter for regional R&D activity? *Papers in Regional Science*, 89: 563-85.
- North, D. C. (1990). *Institutions, institutional change, and economic performance*. Norton, New York.
- Persson, H. (2004). The survival and growth of new establishments in Sweden, 1987-1995. *Small Business Economics*, 23: 423-40.
- Pratt, J. (1999). *Homebased Business: The Hidden Economy*. Report for the Office of Advocacy. U.S. Small Business Administration, Contract number SBAHQ-97-M-0862.
- Rahman, M. M., & Lian, K. F. (2011). The development of migrant entrepreneurship in Japan: Case of Bangladeshis. *Journal of International Migration and Integration*, 12: 253-74.
- Rath, J., & Kloosterman, R. (2000). Outsiders' business. A critical review of research on immigrant entrepreneurship. *International Migration Review*, 34: 657-81.
- Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., & Lopez-Garcia, P. (2005). *Global Entrepreneurship Monitor: Data Collection Design and Implementation 1998-2003*. *Small Business Economics*, 24: 205-31.
- Riddle, L., & Brinkerhoff, J. (2011). Diaspora entrepreneurs as institutional change agents: The case of Thamel. *International Business Review*, 20: 670-80.
- Riddle, L., Hrivnak, G. A. and Nielsen, T. M. (2010), "Transnational diaspora entrepreneurship in emerging markets: Bridging institutional divides", *Journal of international management*, Vol. 16 No. 4, pp. 398-411.



- Saxenian, A. (2002), "Silicon Valley's New Immigrant High-Growth Entrepreneurs", *Economic Development Quarterly*, Vol. 16 No. 1, pp. 20-31.
- Scott, W. R. (2002), "Institutions and organizations. Sage Publications", Thousand Oaks, CA.
- Shane, S. (2009). Why encouraging more people to become entrepreneurs is bad public policy. *Small Business Economics*, 33: 141-149.
- Smallbone, D., & Welter, F. (2001). The distinctiveness of entrepreneurship in transition economies. *Small Business Economics*, 16: 249-62.
- Sobel, R., Dutta, N., & Roy, S. (2010). Does cultural diversity increase the rate of entrepreneurship? *The Review of Austrian Economics*, 23: 269-286.
- Stephan, U., & Uhlaner, L. (2010). Performance-based vs. socially-supportive culture: A cross-national study of descriptive norms and entrepreneurship. *Journal of International Business Studies*, 41: 1347-1364.
- Thornton, P. H. (1999). The sociology of entrepreneurship. *Annual Review of Sociology*, 25: 19-46.
- Tonoyan, V., Strohmeier, R., Habib, M., & Perlitz, M. (2010). Corruption and entrepreneurship: How formal and informal institutions shape small firm behavior in transition and mature market economies. *Entrepreneurship Theory and Practice*, 34: 803-832.
- Vaaler, P. M. (2011). Immigrant remittances and the venture investment environment of developing countries. *Journal of International Business Studies*, 42: 1121-1149.
- Vaaler, P. M. (2013). Diaspora concentration and the venture investment impact of remittances. *Journal of international management*, 19: 26-46.
- Vinogradov, E., & Kolvereid, L. (2007). Cultural background, human capital and self-employment rates among immigrants in Norway. *Entrepreneurship & Regional Development*, 19: 359-376.
- Wadhwa, V., Rissing, B., Saxenian, A., & Gereffi, G. (2007). Education, Entrepreneurship and Immigration: America's New Immigrant Entrepreneurs. Part II. Kauffman Foundation, Kansas City.
- Zhao, H., Seibert, S., & Hills, G. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90: 1265-1272.
- Zolin, R., & Schlosser, F. (2013). Characteristics of immigrant entrepreneurs and their involvement in international new ventures. *Thunderbird International Business Review*, 55: 271-284.