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Chapter 23:

Entrepreneurship in emerging economies

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Entrepreneurship in Emerging Economies

1. Introduction

Entrepreneurship is one of the fastest growing branches of management and business research, yet it originated with studies that took as given the institutional context; that of the developed countries. Consistent with this, the key early theorists of entrepreneurship, including Schumpeter (2008 [1934]), von Mises (1966), Kirzner (1973), paid no attention to national development status nor to the specific issues of emerging economies. That changed only in the late 20th century, when Baumol (1990) asked about the linkages between the institutional setup and the motivation to engage in alternative types of entrepreneurship. According to Baumol, it is not the availability of entrepreneurial talent that explains variation in entrepreneurial outcomes across nations, but the form of the institutional arrangements; these create a variety of incentives system leading entrepreneurship. In this chapter we consider both, factors influencing the supply of entrepreneurship, and the impact of the social and institutional context on entrepreneurial activity.

Once questions about institutions have been raised, we can no longer consider all economies to be uniform, nor to conform to the behavior common in developed economies. This leads to us undertake research from a comparative perspective and to consider emerging market economies as distinctive. Yet it is also not appropriate to create a simple dichotomous comparative framework because emerging economies, while being similar in terms of development level, are not homogeneous in a number of important aspects, most notably in terms of their institutional contexts (Hoskisson et al., 2000; Wright et al., 2005). Moreover, while in many countries, the pace of development has been rapid, in others it has been slower (Hoskisson et al., 2013). Thus previous decades have witnessed dynamic development in some of the poorest countries, especially in South East Asia (O'Neil, 2011), starting with the smaller economies of Hong Kong, South Korea, Singapore and Taiwan. Recent years have been dominated by the spectacular development of China, with India now following a similar path. And much of this development was accompanied by the emergence of 'billions of entrepreneurs' (Khanna, 2011). In this process, institutional change came hand in hand with the opening up of opportunities. Similarly, many transition economies of Central and Eastern Europe also offered new prospects for entrepreneurship a (Estrin & Mickiewicz, 2011a). These developments have created heterogeneity in the institutional contexts of emerging economies (Carney, Estrin, Liang & Shapiro, 2017), with significant implications for the nature and extent of entrepreneurship (Zahra & Wright, 2011).

Institutions refer to the 'humanly devised constraints that structure political, economic and social interaction' (North, 1991, p.97). North's key distinction is between *formal institutions*, namely the "rules of the game" represented by the laws and structures that set out the economic incentives to guide individual choices, and *informal institutions* which are the social arrangements and norms that affect the actual operations of those formal institutions. Institutions therefore define and limit the set of strategic choices, including the decision to create a new firm as well as the incentives of potential entrepreneurs (Baumol, 1990). Williamson (2000) integrates the theory on institutions, categorizing them at three levels distinguished by the pace at which they change, each placing constraints on the ones below, and jointly determining national and organizational resource allocation. Thus, what North (1990) terms informal institutions, including social capital, are the deepest-rooted institutions and therefore placed at the top of Williamson's hierarchy. They influence the effectiveness of rules and controls at the lower levels. At the second level are formal institutions; the codified "rules of the game" (North, 1990) that relate to the rule of law and property rights that are stable and effectively enforced and define the formal institutional environment. The third level, governance, represents the particular structures adopted by organizations and individuals to manage transactions. These three levels of institutions are closely inter-related. But change at the higher levels is much slower than at lower levels (see however: Estrin & Mickiewicz, 2011a).

Emerging economy research highlights the importance of institutions for securing the efficiency of markets (Khanna & Palepu, 2010; Wright et al., 2005; Xu & Meyer, 2013). We start with an empirical analysis describing the characteristics of entrepreneurship in emerging economies in Section 2. In particular, we contrast the way that human capital is utilized by entrepreneurs in emerging market economies and in developed countries. In Section 3 we continue the theme of human capital, bringing in theory, and considering entrepreneurship in emerging economies at the individual level. Section 4 considers the importance of an entrepreneur's social capital in the emerging economy context, while section 5 is dedicated to the important role that repatriating human and social capital from abroad plays in emerging economy entrepreneurship, especially that of an innovative character. The sixth section goes to the macro level and provides cross-country comparisons of the effects of institutions on entrepreneurial activity. Finally, we offer conclusions and suggest avenues for future research.

2. Empirical evidence institutions and entrepreneurship in emerging markets

As we already hinted, the earlier stages of economic development are associated with greater entrepreneurial activity. Figure 1 provides empirical illustration of this proposition. The figures is constructed utilizing Global Entrepreneurship Monitor (GEM) data which have been collected as representative national surveys of individuals since 1999 when it covered 10 countries (Reynolds et al., 2005). 106 countries appeared at least once in the survey between 2001 and 2015, with an increasing emphasis on emerging economies. The dataset is drawn from the working age populations, and contains detailed information about the characteristics of entrepreneurs, employees and individuals not currently employed, including age, gender, education, attitudes, and their entrepreneurial experience and networks.

In Figure 1, each dot represents a country-year point, where the years range from 2001 to 2015. Level of development is captured by Gross Domestic Product per person employed, based on purchasing power parity, in constant (2011) prices, expressed in United States' dollars. The entrepreneurship prevalence rate relates to nascent entrepreneurship that is to the percentage of the working population being involved in starting a new firm; operationalized as the prevalence rate of nascent entrepreneurs amongst working age population of each country.

{Figure 1}

The pattern is of a U-curve: entrepreneurship rates are high in less developed countries, go down in middle income countries and then seems to increase again in the most developed economies. This relationship is consistent with previous findings (Wennekers, van Stel, Thurik, & Reynolds, 2005; Acs, Desai, & Hessels, 2008). However, note that the fit of the right-hand branch of the graph relies on a handful of outliers only. It is possible that what we actually see may represent an L-shaped curve; entrepreneurship rates going down at some stage of development, around 50k of GDP per employee and staying low thereafter. A possible U-shape is largely driven by Qatar (third observation from the right; the first two from the right relate to Luxembourg). What is clear is that in emerging economies there is far more dispersion in rates of entrepreneurship, which suggests heteroscedasticity: entrepreneurial outcomes differ much more in emerging markets.

If we are inclined to believe in the U-shaped pattern in Figure 1, it would conform to the stages of development identified by Porter (1990), with countries first being "factor" driven" (that is reliant on labor and especially capital for growth) at low levels of GDP per capita; then "*efficiency* –*driven*" (that is reliant on skills for growth) at middle income levels; and finally "innovation-driven" (that is, reliant on technical change for growth) when they are developed. Acs et al. (2008) offer the following explanation of the U-shape. Countries in the factor-driven stage largely produce agricultural goods, commodities or low value-added products using basic technologies, and most firms in manufacturing and services are small. Barriers to entrepreneurial entry are relatively low and exit rates may also be high. In the efficiency-driven stage, countries begin to manufacture and possibly export at scale, and firms are typically much larger, as are barriers to entry of new firms. In consequence selfemployment rates are lower and there is less opportunity for entrepreneurship. Moreover, managers can earn more when employed by somebody else because the returns to wage work are higher in large firms relative to entrepreneurial activity. This may explain the observed decline in entrepreneurial activity as economies become more developed. However, when economies reach the technological frontier at which growth relies on innovation rather than the improved application of existing technologies (Acemoglu, Zilibotti, & Aghion, 2006), the role of the entrepreneur as innovator may once again become more central.

An alternative explanation of the nonlinear relationship, and consistent with the Lshaped interpretation, hinges on the fact that entrepreneurial entry is a heterogeneous phenomenon. Some entrepreneurial projects, especially in less developed countries, are undertaken out of necessity and their function is to provide basic income support when opportunities in sufficiently well-paid employment are scarce. Indeed, this is what we observe when we extract the pure 'necessity' motive amongst entrepreneurs. Figure 2 shows how the proportion of those who start their businesses because they do not have any better work alternatives changes with the level of development. The trend is clearly negative and the fit is good. This *necessity entrepreneurship* is closely associated with lower levels of entrepreneurial ambitions: ventures started out of necessity are likely to start small and to stay small. There is another reason why entrepreneurship does not bring economic dynamism in some emerging economies, as emphasized by De Soto (1989; 2000): institutional barriers to engage in formal sector projects are high and entrepreneurs tend to stay within the informal economy where the opportunities to grow are more constrained (Estrin & Mickiewicz, 2012).

{Figure 2}

To obtain more insights into these issues we run regressions using all the available data, from GEM, 2001-2015. While previous research has relied on models with country random effects, now with fifteen years of data and a large number of countries, we can estimate our models including country and year fixed effects. These fixed effects are therefore added to the set of over 1.7 million individual observations with robust standard errors. In each estimated model below, we apply logit to estimate the likelihood of an individual in a country being engaged in a start-up project (nascent entrepreneurship) amongst the working age population. Model 1 is a basic model where the key explanatory variable of interest is our proxy for the level of development (GDP per person in employment), consistent with the discussion above. In Model 2 we add interactions of individual characteristics such as education and age with the level of development. Models 3 and 4 are similar, except in those two we add the individual attitude to risk proxied as the respondent's self-declared fear of failure, and also the self-declared entrepreneurial skills. This comes at a cost; the sample shrinks by about 300,000 observations. The set of controls we use is reported in Table 1, along with descriptive statistics and variable labels. This list, which includes variables at the individual level like gender and age, and at the country level

like inflation and growth, is consistent with norms in the literature (e.g. Estrin, Mickiewicz, & Stephan, 2016). Table 2 contains our results.

{Tables 1-2 here}

As mentioned already, in model 1 the key explanatory variable of interest is GDP per person employed, representing the level of development. There is less entrepreneurship in more developed countries, in line with the graphs¹. The coefficient of GDP per capita turns insignificant in Model 2, but this is because we now also interacted it with the individual characteristics. These interactions are of particular interest as they directly test the differences in characteristics of entrepreneurs between emerging economies and developed countries.

We find more serial entrepreneurship in developed countries compared with emerging economies. This is supported by the signs of the coefficients both when evidence of engagement in entrepreneurship is captured by those who left businesses, and when it is captured by those who currently own another business. In the latter case, we have an overall negative effect probably due to opportunity cost, but the effect is less negative for developed countries. These results may be interpreted in the context of our earlier remarks on necessity entrepreneurship. It is more likely that those with accumulated entrepreneurial experience engage in opportunity entrepreneurship than necessity entrepreneurship.

We found a similar result with respect to self-declared entrepreneurial skills. These are more likely to be transformed into entrepreneurial projects in developed countries. Likewise, there are stronger positive effects of education in more developed countries

¹ In a model with squared term added (not reported), we found the expected reversed J-shaped pattern, but only one term is significant, and therefore we report the linear specification as superior. This may indicate that the underlying pattern is in fact L-shaped not U-shaped as discussed above.

compared with less developed countries. Finally, business angels are more likely to start businesses in developed countries compared with developing countries.

All these effects point to an interesting phenomenon: human capital based on experience and on education, as well as financial resources, is more likely to be utilized in entrepreneurial projects in developed countries compared to emerging economies. Yet, another way to summarize the results is to say that there are more people without entrepreneurial or other skills engaging in entrepreneurship in emerging economies. Presented this way, we come back to where we started: necessity entrepreneurship is more widespread in emerging economies and is likely to be less related to skills.

We also register two interesting differences related to demographics. Females are relatively more likely to start a business in less developed countries. Again, consistent with higher prevalence rates of necessity entrepreneurship, this may simply suggest higher barriers to women becoming an employee rather than self-employed. Finally, the age profile is flatter in emerging economies than in developed countries; young people are more likely to start business in emerging economies, but likewise old people. This again may be consistent with the prevalence of necessity entrepreneurship in emerging economies where the old have less access to welfare. We now turn to the extant literature that may shed light on some of these stylized facts.

1. Personal Characteristics, Traits and Occupational Choice

In this section, we review the literature on the socio-demographic and personality profile of those starting businesses in emerging economies, with a special focus on their human capital. There is less evidence on these topics and their relevance for entrepreneurship in emerging economies compared with developed countries. This is why we started with our own analysis above. Overall, there are both similarities and stark differences between entrepreneurs in emerging economies and developed economies. We first discuss socio-demographic characteristics (age, gender), human capital (education) and then turn to personality and occupational choice.

3.1 Age

Research on age and entrepreneurship is a relatively new area overall, triggered in part by an interest in aging in light of demographic shifts in developed economies (Kautonen, Down, & Minniti, 2014). With the exception of China, emerging economies tend to be characterized by younger populations. While Lévesque and Minniti (2011) outline that both, populations skewed towards the younger and towards the older can hamper entrepreneurial activity, our results above suggest that this does not apply to emerging economies: the propensity to engage in entrepreneurship is higher in both groups.

At the individual-level, start-up activity shows an inverted U-shaped relationship with age and is highest among middle-aged people (Parker, 2009). Descriptively, successive reports by GEM testify the highest start-up rates among the 25–34 and 35–44 year compared to both younger and older individuals (Kelley, Singer, & Herrington, 2015). These age differences probably reflect changing opportunity costs and life circumstances (Jayawarna, Rouse, & Kitching, 2013; Lévesque & Minniti, 2006), age-related changes in preferences (Wach, Stephan, & Gorgievski, 2016), and declines in certain cognitive abilities in older age (Gielnik, Zacher, & Frese, 2012).

Yet GEM data signal relatively higher start-up activity among older people in many emerging economies relative to developed economies – in particular for Sub-Saharan Africa, Latin America and the Caribbean and the MENA region (Schott, Rogoff, Herrington, & Kew, 2017). As already hinted above, these findings, consistent with our regression results, may be explained by the greater necessity to engage in entrepreneurship due to the lack of welfare and pension systems. This resonates with a study across European countries, which found evidence for an age-related decline for opportunity but not necessity entrepreneurship (Kautonen et al., 2014). Little research explores how entrepreneurs' age relates to business success and growth in emerging economies. In developed economies, the exploration of entrepreneurial opportunities (and growth aspirations) decline with age, especially for those entrepreneurs plagued by health problems (Gielnik et al., 2012).

3.2 Gender

On average, women are less likely to start businesses than men (Estrin & Mickiewicz, 2011; Jennings & Brush, 2013; Kelley et al., 2015) for a complex variety of reasons. Standard explanations include personal characteristics, human capital, and barriers related to prejudice concerning access to resources. For example, in terms of personal characteristics, women tend to exhibit lower entrepreneurial self-efficacy and higher fear of failure, both closely associated with business creation (e.g., Koellinger, Minniti, & Schade, 2013), though gender differences in general personality traits are much less pronounced (Obschonka, Schmitt-Rodermund, & Terracciano, 2014). Women especially in emerging economies often have lower levels of human capital (education) and there are more constraints for them in accessing financial capital (Demirgüç-Kunt, Klapper, & Singer, 2013). These differences not only hamper the development of entrepreneurial skills and confidence, they are also perpetuated by the fact that fewer (same-sex) entrepreneurial role models are available to support women. Gendered institutions, especially restriction on the freedom of movement of women (Estrin & Mickiewicz, 2011b) and those relating to access to finance (Demirgüç-Kunt et al., 2013), limit the growth ambitions of female entrepreneurs; and these constraints are more widespread in emerging economies. Finally, entrepreneurship is often depicted as a stereotypically male career. Such stereotypes can be overcome if entrepreneurship is deliberately presented as a gender neutral career choice (Gupta, Goktan,

& Gunay, 2014; Gupta, Turban, & Bhawe, 2008) or when non-pecuniary motives are emphasized, as is the case for social entrepreneurship (Estrin, Mickiewicz, & Stephan, 2013b).

In summary, several factors are stacked against a greater participation of women in entrepreneurship in emerging economies. Yet as our own analyses show, the proportion of women starting a business is slightly higher in emerging economies compared to developed economies. Again, this may in part be due to a higher degree of necessity and the relative lack of paid employment options for women. One may also speculate whether micro-finance programs have played a role in boosting female entrepreneurship in emerging economies. Such programs, which often target women, are widely available across emerging economies (Chliova, Brinckmann, & Rosenbusch, 2015; Khavul, 2010). However, there is also important variation among emerging economies. In a handful of emerging economies women start businesses at the same or even at a higher rate than men². These countries include economies in Africa such as Nigeria, Uganda, and Ghana; in Latin America such as Brazil; and in South-East Asia such as Indonesia, Malaysia, Vietnam and the Philippines. At the same time, there are significant gender gaps in start-up activity to the disadvantage of women in other emerging economies such as Turkey, India and South Africa (Kelley et al., 2015). Some of these differences can be explained by the varying characteristics of institutional frameworks, which may restrict women's' economic rights (Estrin & Mickiewicz, 2011b, Demirgüç-Kunt et al., 2013). But it is likely that the cultural factors and traditions such as those of female market-traders in Sub-Saharan Africa also play a role. Interestingly, the estimations we provided in Section 2 suggest that for emerging economies the neccessitypush motive dominates.

² As in our Section 2 above, in the literature, this is measured through the total early stage entrepreneurial activity rate which combines nascent and young entrepreneurs (Reynolds et al., 2005).

A related topic concerns the performance of the new ventures in emerging economies. Here, the contrast between female and male entrepreneurs has received less attention to date. Even for developed economies, the evidence is conflicting (Jennings & Brush, 2013). A study across emerging economies detects a pattern that reflects findings in developed countries; there are size differences (to the disadvantage of female-led enterprises), but much smaller gender differences in measures of firm efficiency and growth (Bardasi, Sabarwal, & Terrell, 2011).

3.3 Education

Education develops individual skills and knowledge base, thereby enhancing individuals' ability to discover and exploit opportunities to start and grow businesses (Davidsson & Honig, 2003). At the same time, as individuals invest resources into education, their outside options improve and wage employment may offer more certain returns than entrepreneurship (Estrin et al., 2016). Once a business is created, higher education generally benefits firms' performance (for a meta-analysis, Unger, Rauch, Frese, & Rosenbusch, 2011). Research on how education impacts start-ups, however, yields more mixed findings and the effects are contingent on the wider institutional framework (Estrin et al., 2016).

In a meta-analytic review of research across emerging economies, van der Sluis, van Praag, and Vijverberg (2005) find that more educated individuals typically chose wage employment over self-employment. However, if they engage in entrepreneurship, then more educated individuals are likely to engage in non-farm entrepreneurship. The effect of education on choosing wage over self-employment is particularly pronounced for women (van der Sluis et al., 2005). The same study also documents a positive association of education with firm performance, and again the positive effect of education on performance is particularly pronounced for women (van der Sluis et al., 2005) – which is similar to the effects found for education and gender in developed economies (Van der Sluis, Van Praag, & Vijverberg, 2008).

We replicate the findings for education and entrepreneurial entry in our own analyses presented in Section 2. As we report in Table 2 that higher quality human capital feeds more often into entrepreneurship in developed than emerging economies; more highly educated individuals in emerging economies are more likely to seek wage employment over entrepreneurship, compared with those less educated.

3.4 Other entrepreneurial forms

Start-ups are not the only form of entrepreneurship. Many entrepreneurial firms have been created in emerging economies, especially in those transitioning from central planning, through the process of privatization, for example via *management and employee buyouts* (Wright, et al., 1994, 2000). These may involve job protection efforts, as well as entrenchment and appropriation by incumbents where outside investors and management are absent (Frydman, Pistor, & Rapaczynski, 1996; Sun, Wright & Mellahi, 2010). They may also enable insiders to engage in entrepreneurial activities that they were constrained from pursuing under the previous ownership regime, especially if their firm was a smaller, peripheral part of a larger state-owned enterprise (Buck, et al. 1994; Filatotchev, et al., 1999; Karsai & Wright, 1994). Yet studies suggest that start-ups perform better than state owned firms privatized to domestic owners (for a review see Estrin et al., 2009).

Family firms have an important role to play in entrepreneurship in many emerging economies but may take different forms from those typically observed in developed economies. For example, to the extent that kinship and extended families are a feature of many emerging economies, family firms may oftentimes involve intergenerational teams among extended families (Cruz, Hamilton & Jack, 2012). In former socialist economies

where entrepreneurship has been enabled by institutional reforms (Estrin, Meyer & Bytchkova, 2006), many new family firms are emerging. Indeed, since reforms began around 1990, many of these firms are beginning to face succession challenges, which in some contexts, may be distinct. Thus, due to the one-child policy in China, family firms with only one heir face more limited options to continue family management and reduced probability of adult children working in the family firm (Cao, Cumming & Wang, 2015). Next generation family members, particularly if they have been educated abroad, may for example be more interested in starting their own ventures in IT sectors rather than joining the family firm in a traditional sector.

As in developed economies, there is scope in emerging economies for the creation of entrepreneurial firms through *spin-offs* by university faculty (Alhstrom et al., 2007). However, the challenges in establishing mechanisms to identify and support academic entrepreneurship in developed economies, which have been well-discussed (e.g. Shane, 2004; Clarysse et al., 2005), would appear to be even greater in emerging economies.

Social entrepreneurship, the creation of ventures primarily to create societal in addition to economic value (Zahra et al., 2009; Zahra & Wright, 2016), is a form of entrepreneurship that attracts increasing research attention. Social entrepreneurs are seen to provide solutions to societal challenges ranging from poverty, social exclusion, and poor health to environmental degradation. These challenges are arguably more widespread in emerging economies (see section 5.2). However, evidence on how successful and efficient social enterprises are in addressing societal challenges is scarce. Case study research (e.g., Mair, Marti & Ventresca, 2012) as well as a recent systematic review (Stephan, Patterson, Kelly & Mair, 2016) highlight just how complex and lengthy is the process of stimulating social change. This is likely to be even more so the case in emerging economies where weaker institutional frameworks mean even greater uncertainties (Estrin et al., 2013b).

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Indeed, there is some evidence that balancing social and economic activities, which lies at the heart of social enterprises (Battilana & Lee, 2014), is more difficult to achieve in emerging markets (Ault, 2016). New evidence further suggests that social enterprise leaders in China and Russia were younger and their social enterprises more focused on revenue-generating activities compared to their European Union counterparts. This may reflect the relative novelty of the concept of social entrepreneurship in these contexts. In post-communist Central European transition economies, such as Hungary and Romania, social enterprises appear to rely to a greater extent on grants (Huysentruyt et al., 2016).

3.5 Personality traits

After decades of conflicting findings as to whether and how personality matters for entrepreneurship, several meta-analyses offer an evidence-based answer (Frese & Gielnik, 2014; Rauch & Frese, 2007): specific traits such as self-efficacy, achievement motivation, innovativeness and to a lesser extent risk propensity show consistent positive relationships with entrepreneurial entry and performance, while proactive personality is positively related to performance.

Research on the personality traits of entrepreneurs in emerging economies is sparse. Several studies document the beneficial effects of a proactive personality (Frese et al., 2007; Rooks, Sserwanga, & Frese, 2016), similar to the effects established in developed economies (Frese & Gielnik, 2014). Proactive entrepreneurs adopt a self-starting opportunity-focused and strategic approach, as part of which they also develop their personal and business relationships and accumulate social capital (Rooks et al., 2016). As a specific personality trait, proactive personality can be successfully trained; with positive effects on small business growth that outstrip those of traditional business training in emerging economies (Campos et al., 2017; also Glaub, Frese, Fischer, & Hoppe, 2014). Other traits studied are self-efficacy and the need for achievement. The effects of selfefficacy positively fuel intentions to become an entrepreneur and performance (Bullough, Renko, & Myatt, 2014; see also next section). Comparing the Czech Republic, an emerging economy, with Austria, an adjacent developed economy, one study suggests that the need for achievement may be more closely related to entrepreneurial success in emerging than in developed countries (Kessler, 2007).

Section 2 shed new light on the role of traits for entrepreneurship. The GEM database includes proxy measures for two traits: entrepreneurial self-efficacy (the confidence in own entrepreneurial skills) and fear of failure, a measure that reflects loss aversion (Higgins, 1997) which is related to low risk taking. Both traits are more closely associated with entrepreneurial entry in developed than emerging economies. Again, our tentative explanation is the need to consider opportunity cost of entrepreneurship and the considerable role that the necessity entrepreneurship plays in emerging markets.

3.6 Occupational choice

A prominent occupational choice model for entrepreneurship is the Theory of Planned Behavior (TPB, Schlaegel & Koenig, 2014). It predicts that entrepreneurial behavior will be based on individual's intentions which are themselves determined by attitudes, social norms and perceived behavior control/self-efficacy beliefs (Ajzen, 1991). In turn, sociodemographic characteristics (Lakovleva, Kolvereid, & Stephan, 2011), personality traits (Karimi et al., 2017) and personal preferences such as values (Gorgievski, Stephan, Laguna, & Moriano, 2017) impact entrepreneurial career choice indirectly through their influence on attitudes, social norms and self-efficacy. Research has shown that the TPB predicts future entrepreneurial behavior in longitudinal studies (albeit in developed economies, Kolvereid & Isaksen, 2006; Van Gelderen, Kautonen, & Fink, 2015) and TPB is also supported by experimental evidence in other domains (Webb & Sheeran, 2006).

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TPB predicts entrepreneurial intentions equally well in both developed and emerging economies (see Schlaegel & Koenig, 2014 for a meta-analysis). In a study comparing 13 countries of which five were emerging economies, Iakovleva et al. (2011) find that respondents from emerging economies show stronger entrepreneurial inclinations across the board (higher entrepreneurial attitudes, social norms, self-efficacy and intention). However, most studies within this framework in emerging economies have drawn on student samples. Considering the often low rates of participation in higher education in emerging economies, these samples are not representative. However, since education is associated with more highgrowth and opportunity entrepreneurship (Estrin, Korosteleva, & Mickiewicz, 2013a) as well as social entrepreneurship (see: Estrin et al., 2016), student samples in emerging economies provide an important insight into high-impact entrepreneurship (Nabi & Liñán, 2011).

3.7. Social capital

Alongside human capital, social capital plays an important role for entrepreneurial behavior. Social capital refers to the resources embedded in and available through relationships (e.g., Gedajlovic et al., 2013, Nahapiet & Ghoshal, 1998). Entrepreneurs rely on social capital in emerging economies to a greater extent than in developed ones as a substitute for weak formal institutions, although culture also plays a role (for more details on institutions and culture see section 6). In brief, in emerging economies, weak formal institutions mean that there is limited enforcement of rules and regulations that would ensure due process and punish expropriation. This leads entrepreneurs to rely on informal social structures to enable exchange based on mutual trust and enforceable social norms of cooperation (Puffer, McCarthy & Boisot, 2010; Tan, Yang & Veliyath, 2009).

A range of studies show that social capital is 'good' for entrepreneurship. At the macro-level, studies have shown that in countries with higher levels of social capital individuals are more likely to start businesses (e.g. Estrin et al., 2013b; Stephan & Uhlaner, 2010), individuals see more business opportunities (Kwon & Arenius, 2010) and angel investors are more likely to invest in starting-businesses (Ding, Au & Chiang, 2015). Importantly, these relationships are even stronger in environments with weak formal institutions such as emerging economies (De Clercq, Denis & Dakhli, 2010; Danis, De Clercq & Petricevic, 2011; Kim & Li, 2014).

At the level of the individual entrepreneur, social capital has a positive effect on firm performance in emerging economies (Batjargal, 2003). In particular, the weak-tie aspect of social capital, relationships with dissimilar others and those not in the immediate circle of family and friends, engenders access to novel information and opportunities and is linked to firm growth in emerging economies (Batjargal, Hitt, Tsui, Arregle, Webb, & Miller, 2013; Efendic, Mickiewicz & Rebmann, 2015).

However, social capital also brings drawbacks, particularly in emerging economies. For instance, close-knit ties have been shown to facilitate corruption in emerging economies (Tonoyan, Strohmeyer, Habib & Perlitz, 2010). Moreover, the financial and time burden associated with maintaining social capital such as in the form of community obligations can be considerable and impact the business negatively (Ugwu et al., 2016).

Research has also shown that emerging economy entrepreneurs may benefit from weak-tie social capital by contributing to community in the form of philanthropy (Mickiewicz, Sauka & Stephan, 2016) or through social entrepreneurial efforts (Estrin et al., 2013b). Such research in turn opens new perspectives on bottom-up processes underlying culture or the building of informal institutions. Social capital in the specific sense of connections to the political class and elite are the subject of the Chapter by Pei Sun in this volume.

2. Bringing human and social capital back home: high impact returnee entrepreneurs

An important feature of entrepreneurship in emerging economies is the return of entrepreneurs and in particular 'high impact' entrepreneurs from emerging economies to their home countries. Such returnee entrepreneurs are often scientists and engineers who transfer back to start up a new venture in their native countries some years after obtaining business experience and/or education in OECD countries (Filatotchev et al., 2011; Saxenian, 2006; Wright et al., 2008).

Returnees represent an important and international dimension of entrepreneurship in emerging economies. Entrepreneurial ventures may seek to internationalize from emerging economies to developed economies (Yasuhiro, Peng & Deeds, 2008). Some limited research has shown that the international expansion of new ventures from emerging economies is driven by their desire to enhance domestic reputation, to exploit their stocks of prior knowledge, and to explore benefits of incoming knowledge flows (Yasuhiro, Khavul, Peng & Deeds, 2013). Alternatively, entrepreneurs may migrate from many emerging economies across the globe to developed economies, establishing ventures in the host country (Aliaga-Isla & Rialp, 2013). Such immigrant or diaspora entrepreneurs often utilize ethnic and cultural social capital to establish their ventures in particular locations characterized by population concentrations or enclaves with the same religion, cultural and language (Riddle, Hrivnak & Nielsen, 2010; Vaaler, 2013).

Returnee entrepreneurs are viewed as bringing the benefits of commercial, academic, scientific and technical knowledge, as well as sometimes access to financial resources, from developed economies to (opportunity) entrepreneurship-deficient emerging economies. By being linked to host and home countries, returnees also have the cultural and language attributes

that enable them to take opportunities and ideas from the former country and implement them in the latter.

5.1 Characteristics and behavior

Returnee entrepreneurs may begin with a venture in the host country in the West and return to their home emerging economy country to create another one. Alternatively, they may create a returnee venture in their home emerging economy before internationalizing through the establishment of a venture in their host developed country in the West, or a thirdparty country.

Returnee entrepreneurs may also have been employed by an overseas affiliate of a multi-national company located in their home country prior to starting their venture (Liu et al., 2010a; b). Further, rather than spending a short period in the host country, some returnees may be coming back to their homeland when the commercial and political environment becomes more favorable, after spending all their lives in foreign countries (Kuznetsov, 2006; Lin, 2010). The social capital of these returnees may be quite distinctive from that of returnees who have only spent short periods abroad.

Returnees may also differ in terms of their entrepreneurship modes. For example, "transnational" entrepreneurs may be able to start their ventures abroad, grow their businesses and then bring them back to the home land (Drori, Honig & Wright, 2009; Pruthi & Wright, 2017). Diaspora entrepreneurs having developed their ventures in the host country may seek to leverage their financial and human capital to establish new businesses in their emerging economy home countries (Vaaler 2013). Others may have been involved in research and development projects in foreign universities and returned home to commercialize their ideas and know-how. Tax advantages and other economic inducements by governments may be important catalysts of a rise in returnees. Such benefits may help to encourage scientists returning home after years spent in foreign research centers who may also become entrepreneurs. These differences in careers and experiences may lead to differences in entrepreneurial orientations and subsequent design of business ventures set up by the returnees.

Studies have examined characteristics of returnee entrepreneurs that are related to venture performance in comparison with non-returnee firms (Dai & Liu, 2009; Filatotchev et al., 2009; Liu et al., 2010a), notably showing that returnee owned ventures outperform non-returnee firms regarding exporting, innovation and employment growth.

The experience of returnee entrepreneurs in the commercial context of the West may contribute to their learning behavior. Work experience abroad, preferably in leadership roles, appears to have a greater impact than educational experience in the host country (Cui et al., 2015; Tan & Meyer, 2010). Experiential and vicarious learning by returnees contributes to perceptual performance, while vicarious learning contributes to employment growth in returnee owned ventures (Liu et al., 2014). However, the age of the firm appears to weaken the impact of experiential and vicarious learning, suggesting that while returnees may try to maintain their networks in the West, in order to update their technological knowledge and access to export markets, the learning benefits from experience in the West depreciate over time.

5.2 Location choices

Several papers have explored factors affecting location choices of returnee entrepreneurs and how location choices subsequently affect firm performance. There appears to be a tendency for returnee entrepreneurs with academic knowledge in the form of patents transferred from abroad to seek complementary assets by locating in non-university science parks, and for those with previous firm ownership abroad to choose university science parks (Wright et al., 2008). The firms of returnees with patents from abroad enjoyed stronger employment growth in non-university science parks, and those with commercial experience abroad with MNCs performed better in university science parks.

5.3 Knowledge spillovers

Returnee entrepreneurs have contributed significantly to technological development, and in particular to the IT industry, in several emerging economies, including India, mainland China, South Korea and Taiwan (Saxenian, 2002; 2006). However, Kenney et al. (2013) note that, based on evidence from ICT industries in Taiwan, China, and India, returnee entrepreneurs played a major role in the expansion phase after domestic entrepreneurs had created the early successful ICT firms. Nevertheless, they conclude that such countries should focus on supporting the development of indigenous entrepreneurship rather than courting returnee entrepreneurs. Notably, the knowledge acquired in the West by returnee entrepreneurs means that their firms have positive effects on the innovative activities of non-returnee firms through knowledge spillovers that help to enhance the technological capabilities of local firms, especially if the technology gap is large (Filatotchev et al., 2011; Liu et al., 2010a,b). An important caveat, however, is that firms owned by local non-returnees need to have the absorptive capacity to assimilate such knowledge.

5.4 Social ties and social spill-over effects

The decision to become a returnee entrepreneur has been seen as a discrete decision by an individual having identified an opportunity. However, this may be an over-simplistic view. Qin and Estrin (2015) add to understanding of the transmission mechanisms through which individuals become returnee entrepreneurs. Using quantitative data on overseas alumni of a top Indian university they find a strong impact of peer influence on the likelihood of returnee entrepreneurship as peers shape career aspirations and facilitate resource and information transfer. Pruthi (2014) also explores the role of social ties in venture creation by Indian returnee entrepreneurs. Using a qualitative approach to examine the structure of

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returnee entrepreneurs' social ties, she suggests that local ties are crucial for venture creation by returnee entrepreneurs.

Returnee entrepreneurs' prior exposure to different institutional contexts shapes their new ventures' formal–informal orientation at an early stage, and returnee entrepreneurs emphasize formality more than informality compared with local entrepreneurs (Lin et al., 2015). However, over time, the formality and informality balance of both types of entrepreneurs converges in line with the institutional transition in China.

Yet other scenarios exist. Where conditions are ripe, instead of adjusting to local norms, newcomers may generate a shift in these norms. Arora and Gambarella (2006) discuss an Indian case: the software industry, built to a considerable extent on linkages with Indian US diaspora, "was virtually the first instance where wealth was created honestly and legally, and more importantly, visibly so" (*Ibid*.: 299). That led to some shift in public attitudes towards entrepreneurship and generated acceptance of more entrepreneurship friendly policies, creating a virtuous circle (see also: Khanna, 2011). What we discuss here are spillover effects enhancing local 'entrepreneurial capital' (Audretsch & Keilbach, 2004)

5.5 Disadvantages

Many studies have tended to focus on the advantages of returnees, whilst overlooking the disadvantages. While the assumption has often been that returnee entrepreneurs can transfer and leverage their commercial experience and advanced technological knowledge in the host institutional environment, returnees may also face challenges arising from a lack of local ties and understanding of the local context (Li, Zhang, Li, Zhou, & Zhang, 2012; Wahba & Zenou, 2012). Having left the country for a period, returnees face the challenge of being outsiders in terms of the loss of home country network positions and hence in gaining access to local resources and opportunities (Wahba & Zenou, 2012). There is some evidence that returnee entrepreneurs do not necessarily perform better than local counterparts due to their exits from local networks and lack of shared identities (Li et al., 2012). This raises the question of whether and how they might be able to regain their *insidership*.

Research is beginning to emerge on how *outsidership* affects returnee entrepreneurs' resource acquisition and hence firm performance, as well as the strategic actions through which they attempt to regain *insidership* and leverage their transnational competitive advantages. Although local ties may be dormant, it may be possible to resurrect them, especially if returnees are perceived to have local affiliations, accents, etc. (Qin & Estrin, 2015).

Lin et al. (2017) using Chinese data show that returnee entrepreneurs can overcome *outsidership* through strategic actions such as locating in cities with prior experience or collaborating with local top management team (TMT) members who serve as local brokers to facilitate resource acquisition. This study draws attention to the important point that while much returnee research has focused on individuals, in fact it is important also to consider the nature of the entrepreneurial team as this may provide insights into the role of social capital.

Returnee entrepreneurs may experience a cultural shock when they go back to their home environment having left it some years before (Zhou and Hsu, 2011). As such, they may suffer problems in readjusting to the local market, especially if they lack local connections (Li et al., 2012; Obukhova et al., 2013; Lin et al., 2015). Returnees' perceived difficulties in readjusting to the local norms and culture in their home countries can undermine the positive relationship between international knowledge transfer and returnees' decisions to become entrepreneurs (Lin et al., 2016).

Of particular importance in emerging economies that feature great uncertainties and fast changes in market opportunities is the time spent converting an idea into a business. The capability of returnees to make better use of advanced technological knowhow and foreign capital resources resulting from their experience abroad may help them to overcome the hurdles in establishing their ventures more speedily. However, exposure to commercial environments in developed economies may be insufficient to facilitate entry into returnees' home markets. As they have been away from their home market, they may lack knowledge about home market institutions or social capital from not being able to develop local networks, which may slow their ability to establish their ventures. Hence, contextual influences on the different resources available to returnee entrepreneurs may have positive or negative influences on their entry speed.

Qin et al (2017) find that returnees are slower in new venture entry in the home country, compared with homegrown entrepreneurs. Ventures with innovative technology and backed by foreign capital are slower to set up due to higher levels of liabilities of newness and foreignness. However, if these firms have a returnee founder who can leverage experience with foreign resources and technological knowhow, such negative effects are mitigated. This effect appears to be stronger than the influence exerted by the role of family and friends in the home country.

3. Institutional and Cultural Contexts

In the Introduction, we emphasized commonalities as well as heterogeneity in emerging economies in terms of their institutions. We started by noting the seminal contribution of Baumol (1990) in highlighting that to understand differences in levels of entrepreneurship, it is critical to focus on variation in institutions, and therefore the incentives driving the choice of entrepreneurship rather than other occupations such as wage employment. Baumol distinguished institutions in terms of whether they encouraged entrepreneurship which was *productive*, in the sense of adding value; *non-productive* for example the choice to seek rents

in bureaucratic environments; and *destructive*, exemplified by the choice to organize an extortion racket rather than to become a retail trader in lawless environments. The literature has gone on to classify emerging markets according to the character and the form of their institutions, focusing on the effects of institutions on the productive form of entrepreneurial activity. Considerable research has therefore concentrated on hypothesizing and testing the impact of institutional characteristics on (productive) entrepreneurship. The fundamental point in this section is that a well-functioning business environment is likely to provide clear incentives to entrepreneurs (North 1990; Bowen & De Clercq 2008), while a weak institutional environment is an impediment to entrepreneurship (McMillan & Woodruff 2002; Aidis et al., 2008).

6.1 Categorizing institutions relevant for entrepreneurship

We have seen that Williamson (2000) provides a helpful way to categorize institutions that has motivated subsequent empirical work, arguing that institutions can be represented in terms of a hierarchy, each placing constraints on the levels below. He places informal institutions, denoted as social embeddedness, at the top; these are the deepest rooted and the slowest changing. We consider the empirical work on impact of this level in section 6.3.

Formal institutions are located at Williamson's second level. The literature has developed in two directions to capture this critical aspect of the institutional environment. The first is to consider the large variety of legal arrangements protecting private ownership. Entrepreneurs must raise capital, bear risks and enter new markets over a long time horizon and this is strengthened by property rights that are stable and effectively enforced. In terms of empirical measurement, this literature typically focuses on legal systems (Shleifer, Lopez-de-Silanes, & La Porta, 2008), and political systems conducive to security of property rights such as the rule of law and effectiveness of governance (Bowen & De Clercq, 2008; Estrin et al, 2011). There are a variety of measures of these institutional characteristics, and this analysis is often undertaken based on a statistical clustering of variables (Aidis, Estrin, & Mickiewicz, 2012). Specific variables used in the literature include national legal systems by historical origin (Shleifer et al., 2008), corruption (Anokhin & Schultze, 2009); intellectual property rights (Autio & Acs, 2013); and rule of law (Estrin et al. 2013a; Estrin et al., 2013b; 2016). The latter emphasis is consistent with Acemoglu & Johnson (2005) and Acemoglu & Robinson (2012), who highlight the danger of expropriation, which may especially important for entrepreneurs who need to rely on the security of their residual claims to the returns from the organizations that they have created (Estrin et al, 2013b). This dimension is measured in Polity IV, especially by the 'effective constraints on the executive' measure (Gurr, Marshall & Jaggers, 2016) seen by Acemoglu and Johnson (2005) as a distinctive proxy for the rule of law that we applied in Table 2.

Williamson's third level of institutions is governance, which aligns the governance structure with the types of transactions. While this includes government business regulatory rules, Williamson also places particular emphasis on private governance; for entrepreneurship, this refers to arrangements underlying, for example, the provision of finance, often seen as critical for entrepreneurs (Parker, 2009) and the development of supply and distribution networks in order to scale the business (Khanna & Palepu, 2010); we return to these issues below in section 6.4. Government regulatory institutions relate to the scale and the day-to-day effectiveness of the government apparatus; cumbersome regulations and burdensome rules can also have a strong negative influence on entrepreneurs, by raising the costs of running new business (Djankov et al., 2002).

6.2 Findings on formal institutions

Estrin et al. (2011b; 2013a; 2016) show that entrepreneurial activity benefits from strong constitutional level institutions that act to protect property rights via the rule of law.

These institutions support entrepreneurial activity by lowering uncertainties and the threat of expropriation of any returns that entrepreneurs may generate. This is true for different types of entrepreneurship, but especially for high-growth entrepreneurship (Estrin et al., 2013a). Interestingly, social entrepreneurship is less affected (Estrin, et al., 2013b; 2016). In general the empirical literature cited above confirms that all forms of entrepreneurship are more likely to thrive in contexts in which institutions are more effective, notably in which the rule of law is stronger, there are stronger limitations on the possibility of expropriation, corruption is lower, and intellectual property rights are better protected. The quality of institutions becomes more important as the complexity and sophistication of the entrepreneurial activity increases. Thus the rule of law, for example, matters more for more ambitious entrepreneurial ventures than it does for firms that are created to provide self-employment only (Estrin et al., 2013a). The distinction between more and less ambitious entrepreneurship is also closely correlated with the opportunity-necessity axis discussed above.

Emerging economies are often described as having underdeveloped formal institutions in terms of institutional voids (Khanna & Palepu, 2010; Mair & Marti, 2009, Puffer, McCarthy & Boisot, 2010). Different types of institutional voids can be distinguished. First, institutional voids highlighted in the work by Khanna and Palepu (2010) are those that hinder market functioning, typically due to the lack of intermediaries and weakly developed capital, labor and product markets. Such voids in turn offer opportunities for (highly skilled) entrepreneur to create businesses bridging these voids. Second, institutional voids hamper not just the functioning of markets but also their development in the first place (Mair & Marti, 2009). When constitutional level institutions are not enforced, the rules of exchange are uncertain and market development stalls. Entrepreneurs in emerging economies deal with these two types of institutional voids by relying on informal institutions especially social networks (Puffer et al., 2010). However, strong-tie social networks can become tight knit 'clubs' which may hamper entrepreneurship by gatekeeping access to resources for entrepreneurial talent from outside of these networks (Aidis, et al., 2008); in Baumol's (1990) terminology, some entrepreneurial talent is not used for productive entrepreneurship.

A third type of institutional void refers to those that impede market participation (Mair & Marti, 2009; Mair et al., 2012). Because institutional arrangements are either absent or weak, they prevent individuals and firms to participate in market exchange in the first place. Examples range from the lack of physical infrastructure that does not allow individuals to travel to market places or informal institutions that exclude women from part-taking in economic activity (Estrin & Mickiewicz, 2011b). Such voids are widespread in the least developed countries, but also exist for rural entrepreneurs and for entire segments of society in thriving emerging market economies such as India.

A fourth type of institutional void has been discussed in the social entrepreneurship literature with regard to the lack of social welfare provision, which in turn creates demand (social need) for social entrepreneurs (Dacin, Dacin & Matear, 2010). The evidence suggests that these voids indeed encourage individuals to take steps to create social enterprises (Estrin et al., 2013a), but may hamper the creation of operating social enterprises especially in the absence of supportive informal institutions (Stephan, Uhlaner & Stride, 2015).

6.3 Culture

As indicated, we now return to Williamson's highest institutional level embeddedness. Culture, or the shared values, norms and practices of societies (House et al., 2004), are seen as drivers of entrepreneurship that complement formal institutions. Though the entrepreneurship literature tends to focus on the decisive innovator-entrepreneur (Schumpeter, 2008), recent research for a wide variety of countries finds little support for the notion that entrepreneurship thrives in individualistic cultures. Pinillos and Reyes (2009) suggest that, if anything, values of cultural collectivism support entrepreneurship, and particularly so in developing countries. Indeed, Stephan and Uhlaner (2010) find that it is a particular aspect of cultural collectivism norms, so-called socially supportive cultures which are rich in weak-tie social capital that enable entrepreneurship. These cultures provide a context in which entrepreneurs can easily draw on informal support and capital to launch their business, where they are less afraid to take risk and feel more confident that they can succeed (Hopp & Stephan, 2012). Here 'socially supportive' may be a better label than 'collectivism', given ambiguities that the latter term invokes (Schwartz, 1990). Recent research points to the association between innovativeness (therefore high impact entrepreneurship) and focus on the outside, including other-regarding values. Such a perspective overcomes the limitation of the old individualism-collectivism axis (Mickiewicz et al., 2016).

Stephan and Uhlaner (2010) did not find any direct relationship between performance-based cultures with entrepreneurship; however, performance-based cultural norms appeared to shape more competitive and entrepreneurship-supportive formal institutions. Indeed, Thai and Turkina (2014) found performance-based cultural norms to be related to the level of formally-registered as opposed to informal entrepreneurship. Similarly, performance-based cultures have been shown to influence planning, while socially supportive culture is associated with an effectual logic (Laskovaia, Shirokova, & Morris, 2017). Emerging market economies are heterogeneous with regard to socially supportive culture and most show low performance-based cultures (Stephan & Uhlaner, 2010). Thus, the literature suggests that culture may help to better understand the diversity in entrepreneurship among emerging economies.

6.4. Entrepreneurial finance

Weaknesses in the availability of external finance is viewed as one of the major constraints on the emergence and scaling up of entrepreneurial ventures in all economies (Parker, 2009) but the problems are particularly acute in emerging economies. This is because the deficiencies in the institutional environment has not only the direct effects on entrepreneurship we discussed above, but also has indirect effects via weaknesses in capital markets (Khanna & Palepu, 2010) and their impact on the provision of entrepreneurial finance. For example, the development of venture capital in emerging economies has been hampered by a weak institutional environment that typically makes enforcement of contracts difficult and severe informational asymmetries between entrepreneurs and investors (Wright et al., 1998; Wright, 2007). Ahlstrom et al. (2006) discuss the problems of accounting information and due diligence in China. These problems may be especially severe for VCs without local networks, and be a major challenge for foreign VC firms entering such markets unless they can syndicate with local firms. In developed economies where there is an established rule of law, the VC contract can form a 'backdrop' to the operation of relationships in these circumstances. However, in weak institutional environments characteristic of many emerging economies, and in which enforcing contracts may be problematical, securing majority ownership stakes, convertible securities and covenants such as anti-dilution provisions, board veto rights and drag-along clauses are important (Farag et al., 2004). Becoming more closely involved in portfolio companies (Pruthi, Wright & Lockett, 2003) as well as the development of longer term relationships involving trust may be a substitute. The development of exit routes is important for the functioning of VC markets, and which may be especially challenging in emerging economies because of illiquidity in capital markets. Indeed, the very notion of exit may be somewhat challenging in a context where VCs have built a relationship with an entrepreneur but then seek to end it through the

traditional forms of realizing gains seen in Anglo-American markets. Groh and Wallmeroth (2016) explore the determinants of VC in 118 countries, 78 of which they considered to be emerging markets. Using panel data from 2000 to 2013 they show that M&A activity, legal rights and investor protection, innovation, IP protection, corruption, corporate taxes and unemployment impact the development of VC markets. They show that the economic magnitude and direction of impact of these determinants differs between developed and emerging markets. As emerging economies evolve, such as those of central and eastern Europe that joined the European Union, restructuring and the introduction of hard budget constraints to create a private sector banking system result in increased availability of debt finance for smaller entrepreneurial firms to complement VC investment (Wright, et al., 2004).

Given the difficulties in raising VC in many emerging economies, entrepreneurs may turn to other less formal sources of raising capital by for example drawing on their social capital to exploit personal ties and relationships, possibly within the informal sector (Estrin & Mickiewicz, 2012). Harrison (2012) notes that in emerging markets there are challenges regarding the definition of the phenomenon. Further, while institutional voids may shape its development, cultural constraints may hinder efforts to legitimizing angel activity.

Micro-lending has been a common source of entrepreneurial funding at the so-called base of the pyramid dimension of entrepreneurship. However, there is little evidence to support the effectiveness of micro-lending in addressing poverty and seeding sustainable entrepreneurial activity in emerging economies (Duvendack, et al., 2011; Tarozzi, Desai, & Johnson, 2014).

Last but not least, parallel to the role of returning migrants, inflow of remittances by the diaspora of migrant workers or entrepreneurs from emerging economies (Vaaler, 2013) may also be important as a source of funds. Korosteleva and Mickiewicz (2011) provide evidence that inflow of remittances to a country is strongly and positively associated with the amount of total capital invested in a new start-up (scaled by GDP per capita). Studying individuals who cross the Mexican-US border, Bercovitz, Martens & Savage (2013) find that the likelihood that remittances are used for entrepreneurial activities increases with the absolute level of remittances.

4. Conclusions and Avenues for Future Research

The earliest ideas of entrepreneurship highlighted its potential role in the process of economic development; indeed, Schumpeter's seminal (1934) book had development in its title. While much of the more recent literature has identified emerging markets in terms of their institutional arrangements rather than their rates of economic growth, the founding work on entrepreneurship was silent on the relationship between the former and entrepreneurial activity. However, research in the past decade has significantly addressed that deficiency, and there is now a huge literature about entrepreneurship in emerging markets, which we have sought in this chapter to briefly summarize.

We have organized the findings from the literature at three levels. In the first, we considered evidence at the micro-economic level, using the most recent data from GEM to provide new findings as to the similarities and differences between entrepreneurs in emerging and developed economies. We started with the crucial finding that entrepreneurial activity is not the same in emerging and developed economies; in fact as the level of development increases the level of entrepreneurial activity initially falls, though it later stabilizes. There is also far greater heterogeneity in rates of entrepreneurship in emerging economies, probably

because of heterogeneity in all Williamson's layers of institutions including social capital and culture, as well as in specific attributes such as the extent of returnee entrepreneurship.

The greater prevalence of necessity entrepreneurship is another factor critical in understanding the differences between emerging and developed economies. As a result, we find that human capital derived from education and experience as well as financial capital, play a greater role in entrepreneurship in developed than emerging economies. This is because these factors are less important if the motivation for becoming an entrepreneur is necessity and given the paucity of alternatives to earn a living. Human capital plays a more important role in contexts where the occupational choice between wage employment and entrepreneurship is based on an evaluation of the relative returns of the two. Interestingly however, female entrepreneurship is relatively more common in emerging economies, perhaps driven again by necessity but also possibly by policies supporting female entrepreneurship. In terms of traits, the significant differences between emerging and developed economy entrepreneurs are also likely associated with the greater proportion of necessity entrepreneurship in the former. Thus, both entrepreneurial self-efficacy and fear of failure are more closely associated with entrepreneurial entry in developed economies, perhaps because necessity entrepreneurship is less likely to be correlated with those. In terms of policy, the focus should therefore be on increasing the rates of opportunity entrepreneurship in emerging economies, so that factors such as human capital can play a greater role in driving high-impact entrepreneurial activity.

Secondly, the phenomenon of returnee entrepreneurs is a rather unique feature of emerging economies, and they play a significant role in the broader entrepreneurial activity and environment which has been closely studied. The central finding is that returnees outperform their domestic entrepreneurial rivals, and considerable attention has been devoted to considering why as well as how to harness the benefits more effectively. The reasons relate

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to the skills, technology, funding and networks brought home by the returnees, and there are clear spillover benefits to the entrepreneurial community as well as the broader economy. Key policy issues concern maintaining the returnees' links to their former host economies while simultaneously integrating them more effectively into their home business environment. An example of India, which unlike China, introduced policies to enhance linkages with its diaspora only at the beginning of 21st century, and benefited from opening up afterwards (Khanna, 2011), is a good illustration of this policy recommendation. It is also important to build absorptive capacity in domestic institutions and through human capital.

Finally, as we have seen, institutions play a considerable role in the rate of entrepreneurship, in a manner not observed in developed economies that are more homogenous in this respect. In general, institutions protecting property rights, ensuring the rule of law, and limiting levels of corruption act to increase both the quantity and the sophistication of entrepreneurial ventures (Estrin et al., 2013a). Since there is evidence that entrepreneurship is associated with innovation and growth (Acs et al., 2008), this finding is of considerable significance for policy makers and multilateral institutions. However, it is not straightforward to improve institutions so as to increase entrepreneurship. Formal institutions can perhaps be improved more rapidly than informal ones, but significant and sustained progress in both are important, as the change in the former may not be sustained without a change in the latter. Hence, as well as addressing the legal structures, policy-makers need to think deeply about education and other factors affecting culture in order to stimulate entrepreneurship.
7.1 Further research

Our overview suggests several promising avenues for future research to deepen our understanding of emerging economy entrepreneurship whilst contributing to theory in a range of fields.

Diversity of entrepreneurial forms across emerging economies is striking. Although there is similarly heterogeneity among entrepreneurs in developed economies, it can be tempting to simply equate entrepreneurship in emerging economies with necessity entrepreneurship. Although necessity entrepreneurship dominates, we also find highly-skilled, high-growth entrepreneurship in emerging economies, and many of our mostly 'Western' theories of entrepreneurships may be particularly applicable to understanding this type of entrepreneurship. At the same time and considering the sheer volume of necessity entrepreneurship in emerging economies, understanding how to effectively support these entrepreneurs (beyond offering micro-finance) and build their skills to develop them into growth-oriented business seems a worthwhile avenue, which may go hand in hand with the development of more contextualized entrepreneurship theories (Zahra & Wright, 2011). Similarly, more work is needed to understand the potential role of social capital in substituting for absent institutions in emerging markets. A particular aspect of social capital that has been relatively unexplored in the literature, but which would seem to be of particular importance in emerging economies is its link with religion (see Neubert, Bradely, Ardianti & Simiyu, 2017).

In addition, we know very little about the micro-foundations and psychological characteristics of those engaged in entrepreneurship in emerging economies. Is it indeed the case, as some of our findings suggest, that psychological characteristics (self-efficacy and fear of failure) are less relevant for start-ups in emerging economies? Or might it be the case

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that our models of relevant psychological characteristics are not easily transferable to understand emerging economy (necessity) entrepreneurship?

Much research on returnee entrepreneurs has focused on voluntary returnees creating formal businesses in China and, more recently, India. However, there is scope to widen this agenda as returnees also play a role elsewhere, including Latin America, Africa, the Middle East and other parts of Asia. These returnees may not necessarily have been in education or higher level employment. For example, migrant workers may return home to poorer countries of Asia and Africa after several years of manual labor in the Middle East, some of whom may start businesses. Returnees may not necessarily have returned voluntarily. Political developments in some countries are leading to a tougher approach to the deportation of illegal or unregistered immigrants, as well as making many immigrants feel less welcome in their adopted countries. Accordingly, there is likely to be an increased flow of people back to their home countries, a least some of whom will become returnee entrepreneurs. Some of these individuals may also have been immigrant entrepreneurs in the host country. The nature, rationale and networks involved in these ventures may be quite distinct from returnees studied so far. For example, to what extent are these ventures informal rather than formal?

The immigrant entrepreneurship literature has tended to focus on migration from emerging economies to developed economies (Aliaga-Isla & Rialp, 2013). As emerging economies begin to develop at differing rates (Hoskisson et al., 2013) migration may also involve the movement of entrepreneurs from laggard emerging economies to geographically and culturally adjacent more advanced emerging economies. As yet, we have little rigorous analysis of this dimension of emerging economy entrepreneurship (for an exception see for example Wong & Primecz, 2011). Further research is needed to shed light on the distinctiveness of this type of migrant entrepreneurship. The heterogeneity and differences among emerging economies are striking. Our review of the literature suggests the importance of understanding and 'unpacking' these differences in their influence on entrepreneurship, and institutional theory appears to be a useful tool to do so. Whilst great strides have been made, the configuration and co-existence of institutions, both formal and informal, in their impact on entrepreneurship appear still under-researched.

The influence of institutional context on the heterogeneity of entrepreneurial ownership forms in a particular country has been recognized (Zahra & Wright, 2011) but further empirical research is needed to explore the drivers, evolution and impact of this variety in different emerging economies. Also given the difficulties in reforming institutions at the higher levels of Williamson's hierarchy, attention might focus on identifying mechanisms to change institutions at the lower levels that might be implemented more rapidly and effectively. Further research is also needed that explores the heterogeneity within different ownership forms in different emerging economies. Academic spin-offs vary according to the extent of IP involved and universities differ in terms of the support they provide (Clarysse et al., 2005). Paucity of world class research in many emerging economies may limit the extent of spin-offs that depend on formal IP. However, many academics may seek to create spin-offs in order to generate income to supplement poor university salaries. Further research is needed to explore the extent and impact of these different forms of entrepreneurial engagement.

Turning to finance, we have seen that the institutional factors that may constrain entrepreneurship generally in emerging markets also limit the development of capital markets to the detriment of new venture funding. Hence access to finance (alongside access to insurance; see: Banerjee & Duflo, 2011) remains a key barrier to the development of emerging markets entrepreneurship and high impact entrepreneurship in particular. Further research is therefore required on ways to relax these constraints, for example through returning financial capital (Korosteleva & Mickiewicz, 2011) alongside migrant returnees as well as enabling access to developed capital markets abroad. Recent studies are beginning to highlight the importance of remittances for the establishment of entrepreneurial ventures but at present we have little systematic analysis of the nature of these ventures and their impact. Furthermore, other innovative forms of finance call for special attention. Crowdfunding in particular may address some of the financing gaps relating to the provision of finance for entrepreneurial ventures from more traditional sources. Furthermore, as emerging economies evolve, the accumulation of individual wealth increases the scope for the development of a business angel market; an area which once again is crying out for further research.

References

- Acemoglu, D., & Johnson, S. 2005. Unbundling institutions. *Journal of Political Economy*, 113: 943-995.
- Acemoglu D., & Robinson, J. (2012). Why Nations Fail, New York: Crown Publishing.
- Acemoglu, D., Zilibotti, F., & Aghion, P., (2006) Distance to frontier, selection and economic growth, *Journal of European Economic Association*, 41, 1, 31-74.
- Acs, Z. J., Desai, S., & Hessels, J. (2008). Entrepreneurship, economic development and institutions. *Small business economics*, *31*(3), 219-234.
- Ahlstrom, D., Bruton, G., & K. Yeh. 2007. Venture capital in China: Past, present, & future. Asia Pacific Journal of Management,
- Aidis, R., Estrin, S. & Mickiewicz, T. (2008) Institutions and Entrepreneurship Development in Russia: A Comparative Perspective, *Journal of Business Venturing*, 23, 656-672.
- Aidis, R., Estrin, S. & Mickiewicz, T. (2012). Size matters: Entrepreneurial entry and government. Small Business Economics, 39, 119–139.
- Aliaga-Isla, R. & Rialp, A. (2013) Systematic review of immigrant entrepreneurship literature: previous findings and ways forward, Entrepreneurship & Regional Development, 25:9-10, 819-844
- Anokhin, S. & Schulze, W. 2009. Entrepreneurship, innovation and corruption. *Journal of Business Venturing*, 24(5): 465-476.
- Autio, E., & Acs, Z. 2010. Intellectual property protection and the formation of entrepreneurial growth aspirations. *Strategic Entrepreneurship Journal*, 4(3), 234-251.
- Arora, A., & Gambardella, A. (Eds.). (2006). From underdogs to tigers: The rise and growth of the software industry in Brazil, China, India, Ireland, and Israel. Oxford: Oxford University Press.
- Audretsch, D., & Keilbach, M. (2004). Entrepreneurship capital and economic performance. *Regional studies*, *38*(8), 949-959.
- Ault, J. K. (2016). An institutional perspective on the social outcome of entrepreneurship: Commercial microfinance and inclusive markets. *Journal of International Business Studies*, 47(8), 951–967.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human* Decision Processes, 50(2), 179–211. http://doi.org/10.1016/0749-5978(91)90020-T

- Banerjee, A. V., & Duflo, E. (2011). *Poor economics: A radical rethinking of the way to fight global poverty*. London: Public Affairs.
- Bardasi, E., Sabarwal, S., & Terrell, K. (2011). How do female entrepreneurs perform? Evidence from three developing regions. *Small Business Economics*, *37*(4), 417–441.

Batjargal, B. (2003). Social capital and entrepreneurial performance in Russia: A longitudinal study. *Organization Studies*, 24(4), 535–556.

Batjargal, B. A. T., Hitt, M. A., Tsui, A. S., Arregle, J.-L., Webb, J. W., & Miller, T. L. (2013). Institutional polycentrism, entrepreneurs' social networks, and new venture growth. *Academy of Management Journal*, 56(4), 1024–1049.

Battilana, J., & Lee, M. (2014). Advancing Research on Hybrid Organizing – Insights from the Study of Social Enterprises. *Academy of Management Annals*, 8, 397–441.

Baumol, W. J. (1990). Entrepreneurship: Productive, unproductive, and destructive. *Journal* of Political Economy, 98, 893-921.

Bercovitz, J., Martens, A. & Savage, J. 2013. Connecting Remittances and Entrepreneurship in Mexico:Financial Resources and Social Institutions, Academy of Management Proceedings. Doi: 10.5465/AMBPP.2013.16811abstract

Bowen, H.P. & De Clercq, D. (2008) Institutional Context and Allocation of Entrepreneurial Effort, *Journal of International Business Studies*, 39, <u>4</u>, 747–767.

Bruton, G., Khavul, S. Siegel, D. & Wright, M. 2015. New financial alternatives in seeding entrepreneurship: microfinance, crowdfunding, and peer-to-peer innovations, *Entrepreneurship Theory and Practice*, 39(1), 9–26

Buck, T., Filatotchev, I. & Wright, M. 1994. Buy-outs and the Transformation of CEE', *Comparative Economic Studies*, Summer.

Bullough, A., Renko, M., & Myatt, T. (2014). Danger Zone Entrepreneurs: The Importance of Resilience and Self-Efficacy for Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 38(3), 473–499.

Campos, F., Frese, M., Goldstein, M., Iacovone, L., Johnson, H. C., McKenzie, D., & Mensmann, M. (2017). Teaching personal initiative beats traditional training in boosting small business in West Africa. *Science*, 357(6357), 1287–1290.

Carney, M., Estrin, S., Liang, S., & Shapiro, D. (2017) National Institutional Systems, Foreign Ownership and Firm Performance: The Case of Understudied Countries. LSE mimeo.

Chliova, M., Brinckmann, J., & Rosenbusch, N. (2015). Is microcredit a blessing for the poor? A meta-analysis examining development outcomes and contextual considerations. *Journal of Business Venturing*, *30*(3), 467–487.

Cao, J., Cumming, D. & Wang, X. 2015. One-Child Policy and Family Firms in China. *Journal* of Corporate Finance, 33, DOI: 10.1016/j.jcorpfin.2015.01.005

Clarysse, B., Wright, M., Lockett, A., van de Elde, E., & Vohora, A. (2005), 'Spinning out new ventures: A typology of incubation strategies from European research institutions', *Journal of Business Venturing*, **20**(2): 183-216

Cruz, A., Hamilton, E. & Jack.S. 2012. Understanding entrepreneurial cultures in family businesses: a study of family entrepreneurial teams in Honduras. *Journal of Family Business Strategy*, 3, 147-161.

Cui, L., Li, Y., Meyer, K. E. & Li, Z.J. (2015). Leadership Experience meets Ownership Structure: Returnee Managers and Internationalization of Emerging Economy Firms, *Management International Review*, 55(3): 366-387.

- Dacin, P. A., Dacin, M. T., & Matear, M. (2010). Social Entrepreneurship: Why We Don't Need a New Theory and How We Move Forward From Here. *The Academy of Management Perspectives*, 24(3), 37–57.
- Danis, W. M., Clercq, D. De, & Petricevic, O. (2011). Are social networks more important for new business activity in emerging than developed economies? An empirical extension. *International Business Research*, *20*, 394–408.
- Dai, O. & Liu, X. (2009). Returnee Entrepreneurs and Firm Performance in Emerging Economies. *International Business Review*, 18(4), 373-386.
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301–331.
- De Clercq, D, Danis, W. M., & Dakhli, M. (2010). The moderating effect of institutional context on the relationship between associational activity and new business activity in emerging economies. *International Business Review*, *19*, 85–101.
- Demirgüç-Kunt, A., Klapper, L., & Singer, D. (2013). Financial inclusion and legal discrimination against women: Evidence from developing countries. World Bank Policy Research Working Paper 6416.
- De Soto, H. (1989). The Other Path. New York: Harper & Row.
- De Soto, H. (2000). The mystery of capital: Why capitalism triumphs in the West and fails everywhere else. London: Black Swan.Djankov, S., La Porta R. Lopez-de-Silanes F., Shleifer A. (2002), The Regulation of Entry, *Quarterly Journal of Economics*, vol. 117 (1), 1-37.
- Ding, Z., Au, K., & Chiang, F. (2015). Social trust and angel investors' decisions: A multilevel analysis across nations. *Journal of Business Venturing*, 30(2), 307–321.
- Drori I, Honig B. & Wright M. (2009). Transnational Entrepreneurs. *Entrepreneurship Theory* and Practice, 33, 1001-1022.
- Duvendack, M., Palmer-Jones, R., Copestake, J.G., Hooper, L., Loke, Y., & Rao, N. (2011). What is the evidence of the impact of microfinance on the well-being of poor people? London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.
- Efendic, A., Mickiewicz, T., & Rebmann, A. (2015). Growth aspirations and social capital: Young firms in a post-conflict environment. *International Small Business Journal*, 33(5), 537–561.
- Estrin, S., Meyer, K.E. & Bytchkova, M. (2006) Entrepreneurship in transition economies. In: <u>Casson, M.</u>, Yeung, B., Basu, A. and <u>Wadeson, N.</u> (eds.) The Oxford handbook of entrepreneurship. Oxford University Press, Oxford, pp. 693-725.
- Estrin, S., & Mickiewicz, T. M. (2011a). Entrepreneurship in transition economies: The role of institutions and generational Change. In M. Minniti (Ed.), *The Dynamics of Entrepreneurship*. Oxford: Oxford University Press, 181-208.
- Estrin, S., & Mickiewicz, T. (2011b). Institutions and female entrepreneurship. *Small Business Economics*, *37*(4), 397–415. http://doi.org/10.1007/s11187-011-9373-0
- Estrin, S., & Mickiewicz, T. (2012). Shadow economy and entrepreneurial entry. *Review of Development Economics*, 16(4), 559-578.
- Estrin, S., Korosteleva, J., & Mickiewicz, T. (2013a). Which institutions encourage entrepreneurial growth aspirations? *Journal of Business Venturing*, 28(4), 564–580.
- Estrin, S., Mickiewicz, T., & Stephan, U. (2013b). Entrepreneurship, Social Capital, and Institutions: Social and Commercial Entrepreneurship Across Nations. *Entrepreneurship Theory and Practice*, 37(3), 479–504.
- Estrin, S., Mickiewicz, T., & Stephan, U. (2016). Human capital in social and commercial entrepreneurship. *Journal of Business Venturing*, *31*(4), 449–467.
- Estrin, S., E. Kocenda, J. Hanousek & J. Svejnar (2009). The Effects of Privatization and

Ownership in Transition Economies". *Journal of Economic Literature*, 47(3), 699 – 728.

- Farag, H., Hommel, U., Witt, P. & Wright, M. 2004. Contracting, monitoring and exiting venture investments in transitioning economies: a comparative analysis of Eastern European and German markets. *Venture Capital: An International Journal of Entrepreneurial Finance*, 6: 257-282.
- Filatotchev, I., Liu, X. H., Buck, T., & Wright, M. 2009. The export orientation and export performance of high-technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs. *Journal of International Business Studies*, 40(6): 1005-1021.
- Filatotchev, I., Liu, X., Lu, J. & Wright, M. (2011). Knowledge Spillovers Through Human Mobility Across National Borders: Evidence from Zhongguancun Science Park in China. *Research Policy*, 40(3), 453 – 462.
- Filatotchev, I., Buck, T. & Wright, M. 1999. Corporate Entrepreneurship in Russia, Ukraine and Belarus, *Journal of Business Venturing*, 14(5), 475-492.
- Frese, M., & Gielnik, M. M. (2014). The psychology of entrepreneurship. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*, 413–438.
- Frese, M., Krauss, S. I., Keith, N., Escher, S., Grabarkiewicz, R., Luneng, S. T., ... Friedrich, C. (2007). Business owners' action planning and its relationship to business success in three African countries. *Journal of Applied Psychology*, 92(6), 1481–1498.
- Frydman, Roman, Katharina Pistor, and Andrzej Rapaczynski. 1996. "Exit and Voice After Mass Privatization: The Case of Russia," *European Economic Review* 40, pp. 581-588.
- Gedajlovic, E., Honig, B., Moore, C. B., Payne, G. T., & Wright, M. (2013). Social Capital and Entrepreneurship: A Schema and Research Agenda. *Entrepreneurship Theory and Practice*, *37*(3), 455–478.
- Gielnik, M. M., Zacher, H., & Frese, M. (2012). Focus on opportunities as a mediator of the relationship between business owners' age and venture growth. *Journal of Business Venturing*, 27(1), 127–142.
- Glaub, M. E., Frese, M., Fischer, S., & Hoppe, M. (2014). Increasing Personal Initiative in Small Business Managers or Owners Leads to Entrepreneurial Success: A Theory-Based Controlled Randomized Field Intervention for Evidence-BasedManagement. Academy of Management Learning & Education, 13(3), 354–379.
- Gorgievski, M. J., Stephan, U., Laguna, M., & Moriano, J. A. (2017). Predicting Entrepreneurial Career Intentions. *Journal of Career Assessment*, DOI: 106907271771454.
- Groh, A. & Wallmeroth, J. (2016). Determinants of venture capital investments in emerging markets. *Emerging Markets Review*, 29, 104-132.
- Gupta, V. K., Goktan, A. B., & Gunay, G. (2014). Gender differences in evaluation of new business opportunity: A stereotype threat perspective. *Journal of Business Venturing*, 29(2), 273–288. http://doi.org/10.1016/j.jbusvent.2013.02.002
- Gupta, V. K., Turban, D. B., & Bhawe, N. M. (2008). The effect of gender stereotype activation on entrepreneurial intentions. *Journal of Applied Psychology*, 93, 1053– 1061.
- Gurr, T. R., Marshall, M. G., & Jaggers, K. (2016). POLITY IV PROJECT: Political Regime Characteristics and Transitions, 1800-2015, Dataset Users Manual. Vienna, VA: Center for Systemic Peace.
- Harrison, R. (2012). The internationalisation of business angel investment activity: a review and research agenda. *Venture Capital*, 19, 119-127.
- Higgins, E. T. (1997). Beyond pleasure and pain. American Psychologist, 52(12), 1280-1300.

- Hopp, C., & Stephan, U. (2012). The influence of socio-cultural environments on the performance of nascent entrepreneurs: Community culture, motivation, self-efficacy and start-up success. *Entrepreneurship and Regional Development*, 29(9–19), 1–29.
- Hoskisson, R., Eden, L., Lau, C.M., & Wright, M. (2000). Strategies in Emerging Economies. *Academy of Management Journal*, 43(3), 249-267.
- Hoskisson, R., Wright, M., Filatotchev, I. and Peng, M. Emerging Multinationals from Mid-Range Economies: The Influence of Institutions and Factor Markets, *Journal of Management Studies*, 2013, 50:1295-1321.
- Huysentruyt, M., Mair, J., Le Coq, C., Rimac, T., & Stephan, U. (2016). *Cross-country* report: a first cross-country analysis and profiling of social enterprises prepared by the SEFORIS research consortium. Brussels: Seforis.
- Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education* + *Training*, *53*(5), 353–370.
- Jayawarna, D., Rouse, J., & Kitching, J. (2013). Entrepreneur motivations and life course. International Small Business Journal, 31(1), 34–56.
- Jennings, J. E., & Brush, C. G. (2013). Research on women entrepreneurs: challenges to (and from) the broader entrepreneurship literature? *The Academy of Management Annals*, 7(1), 663–715.
- Karimi, S., Biemans, H. J. A., Mahdei, K. N., Lans, T., Chizari, M., & Mulder, M. (2017). Testing the relationship between personality characteristics, contextual factors and entrepreneurial intentions in a developing country. *International Journal of Psychology*, 52(3), 227–240.
- Karsai, J., Wright, M. & Filatotchev, I. 1997. Venture capital in transition economies: The case of Hungary. *Entrepreneurship Theory and Practice*, 21(4): 93-110.
- Karsai, J. & Wright, M. 1994. Accountability, Governance and Management Buy-outs in Hungary. Europe-Asia Studies (formerly Soviet Studies, 46(6),
- Kautonen, T., Down, S., & Minniti, M. (2014). Ageing and entrepreneurial preferences. Small Business Economics, 42(3), 579–594. http://doi.org/10.1007/s11187-013-9489-5
- Kelley, D., Brush, C., Greene, P., Herrington, M., Ali, A., & Key, P. (2015). *Women's Entrepreneurship*.
- Kelley, D., Singer, S., & Herrington, M. (2015). 2015/2016 Global Report. Global Entrepreneurship Monitor.
- Kenney, M., Breznitz, D., & Murphree, M. 2013. <u>Coming back home after the sun rises:</u> <u>Returnee entrepreneurs and growth of high tech industries.</u> <u>Research Policy</u>, 42 (2), <u>391–407.</u>
- Kessler, A. (2007). Success factors for new businesses in Austria and the Czech Republic. *Entrepreneurship & Regional Development*, 19(5), 381–403. http://doi.org/10.1080/08985620701439959
- Khanna, T. (2009). Billions of entrepreneurs: How China and India are reshaping their futures and yours. Boston, MA: Harvard Business Review Press.
- Khanna, T., & Palepu, K. G. (2010). *Winning in emerging markets: A road map for strategy and execution*. Harvard Business Press.
- Khavul, S. (2010). Microfinance: Creating Opportunities for the Poor? Academy of Management Perspectives, 24(3), 58–72.
- Kim, P. H., & Li, M. (2014). Seeking Assurances When Taking Action: Legal Systems, Social Trust, and Starting Businesses in Emerging Economies. Organization Studies, 35(3), 359–391.
- Kirzner, I. M. (2015). *Competition and Entrepreneurship*. Chicago: University of Chicago press.

- Koellinger, P., Minniti, M., & Schade, C. (2013). Gender Differences in Entrepreneurial Propensity*. Oxford Bulletin of Economics and Statistics, 75(2), 213–234.
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into selfemployment. *Journal of Business Venturing*, 21(6), 866–885.
- Korosteleva, J., & Mickiewicz, T. (2011). Start-up financing in the age of globalization. *Emerging Markets Finance and Trade*, 47(3), 23-49.
- Kwon, S.-W., & Arenius, P. (2010). Nations of entrepreneurs: A social capital perspective. *Journal of Business Venturing*, 25, 315–330.
- Laskovaia, A., Shirokova, G., & Morris, M. H. (2017). National culture, effectuation, and new venture performance: global evidence from student entrepreneurs. *Small Business Economics*, 1–23.
- Lévesque, M., & Minniti, M. (2006). The effect of aging on entrepreneurial behavior. *Journal* of Business Venturing, 21(2), 177–194.
- Lévesque, M., & Minniti, M. (2011). Age matters: how demographics influence aggregate entrepreneurship. *Strategic Entrepreneurship Journal*, 5(3), 269–284. http://doi.org/10.1002/sej.117
- Li, H., Zhang, Y., Li, Y., Zhou, L. & Zhang, W. (2012), Returnees versus locals: who performs better in China's technology entrepreneurship? *Strategic Entrepreneurship Journal*, 6(3), 257–272.
- Li, W. W., Bruton, G. D., & Filatotchev, I. 2016. Mitigating the dual liability of newness and foreignness in capital markets: The role of returnee independent directors. *Journal of World Business*, 51(5): 787-799.
- Lin, D., Lu, J., Li, P. & Liu, X. (2015), Balancing formality and informality in business exchanges as a Yin-Yang duality: a comparative case study of returnee and local entrepreneurs in China, *Management and Organization Review*.
- Lin, D., Lu, J., Liu, X. & Zhang, 2016. International knowledge brokerage and returnees' entrepreneurial decisions. *Journal of International Business Studies*, 47(3), 295-318.
- Liu, X. & Buck, T. (2007). Innovation Performance and Channels for International Technology Spillovers: Evidence from Chinese High-tech Industries. Research Policy, 36, 355-366.
- Liu, X., Lu, J., Filatotchev, I., Buck, T. & Wright, M. (2010a). Returnee Entrepreneurs, Knowledge Spillovers and Innovation in High-tech Firms in Emerging Economies. *Journal of International Business Studies*, 41, 1183-1197.
- Liu, X., Lu, J., & Choi, S.–J. 2014. Bridging knowledge gaps: Returnees and reverse knowledge spillovers from Chinese local firms to foreign firms. Management International Review, 54(2), 253–276.
- Liu, X. Wright, M., Filatotchev, I., Dai, O. and Lu, J. (2010b). Human Mobility and International Knowledge Spillovers: Evidence from High-tech Small and Medium Enterprises in an Emerging Market. *Strategic Entrepreneurship Journal*, 4(4), 340-355.
- Mair, J., & Marti, I. (2009). Entrepreneurship in and around institutional voids: A case study from Bangladesh. *Journal of Business Venturing*, 24(5), 419–435.
- Mair, J., Marti, I., & Ventresca, M. J. (2012). Building Inclusive Markets In Rural Bangladesh: How Intermediaries work Institutional Voids. Academy of Management Journal, 55(4), 819–850.
- McMillan, J. and C., Woodruff (2002) The Central Role of Entrepreneurs in Transition Economies, *Journal of Economic Perspectives*, 16(3), pp. 153-170.
- Mickiewicz, T., Sauka, A., & Stephan, U. (2016). On the compatibility of benevolence and self-interest: Philanthropy and entrepreneurial orientation. *International Small Business Journal*, *34*(3), 303-328.

Mises, L. von (1966). Human Action. Chicago: Contemporary Books.

- Nabi, G., & Liñán, F. (2011). Graduate entrepreneurship in the developing world: intentions, education and development. *Education* + *Training*, *53*(5), 325–334.
- Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital and the Organizational Advantage. *Academy of Management Review*, 23(2), 242–266.
- Neubert, M.J., Bradley, S.M., Ardianti, R. & Simiyu, E. M. (2017). The Role of Spiritual Capital in Innovation and Performance: Evidence from Developing Economies. *Entrepreneurship Theory and Practice*, 41(4), 621-640.
- Obschonka, M., Schmitt-Rodermund, E., & Terracciano, A. (2014). Personality and the Gender Gap in Self-Employment: A Multi-Nation Study. *Plos One*, *9*(8).
- Obukhova, E., Wang, Y. and Li, J. (2012), The Power of Local Networks: Returnee Entrepreneurs, School Ties, and Firm Performance, working paper, MIT Sloan School of Management.
- O'Neil, J. The Growth Map, London, Penguin books
- Parker, S. C. (2009). The economics of entrepreneurship. Cambridge University Press.

Pinillos, M.-J., & Reyes, L. (2009). Relationship between individualist–collectivist culture and entrepreneurial activity: evidence from Global Entrepreneurship Monitor data. *Small Business Economics*, 37(1), 23–37.

- Porter, M. E. (1990). The competitive advantage of nations. New York: Macmillan.
- Puffer, S. M., McCarthy, D. J., & Boisot, M. (2010). Entrepreneurship in Russia and China: The Impact of Formal Institutional Voids. *Entrepreneurship Theory and Practice*, 34(3), 441–467.
- Pruthi, S. (2014), Social ties and venture creation by returnee entrepreneurs, *International Business Review*, **23**(6), 1139–1152.
- Pruthi S, & Wright M (2017) Social ties, social capital and recruiting managers in transnational ventures. Journal of East-West Business 23 (2): 105-139.
- Pruthi, S., Wright, M. & Lockett, A. 2003. Do foreign and domestic venture capital firms differ in their monitoring of investees? Asia Pacific Journal of Management, 20(2): 175-204.
- Qin, F., & Estrin, S. 2015. Does social influence span time and space? Evidence from Indian returnee entrepreneurs. *Strategic Entrepreneurship Journal*, 9(3), 226–242.
- Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology*, 16(4), 353–385.
- Reynolds, P. D., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., ... Chin, N. (2005). Global Entrepreneurship Monitor: Data Collection Design and Implementation 1998-2003. Small Business Economics, 24(3), 205–231.
- Riddle L, Hrivnak G. A, & Nielsen T. M (2010) Transnational diaspora entrepreneurship in emerging markets: Bridging institutional divides. Journal of International Management 16: 398-411.
- Rooks, G., Sserwanga, A., & Frese, M. (2016). Unpacking the Personal Initiative– Performance Relationship: A Multi-Group Analysis of Innovation by Ugandan Rural and Urban Entrepreneurs. *Applied Psychology*, 65(1), 99–131. http://doi.org/10.1111/apps.12033
- Saxenian, A. (2002). Local and Global Networks of Immigrant Professionals in Silicon Valley. San Francisco, CA: Public Policy Institute of California.
- Saxenian, A. (2006). *The New Argonauts: Regional Advantage in a Global Economy*. Harvard University Press: Cambridge, MA.
- Schlaegel, C., & Koenig, M. (2014). Determinants of Entrepreneurial Intent: A Meta-

Analytic Test and Integration of Competing Models. *Entrepreneurship Theory and Practice*, *38*(2), 291–332.

Schott, T., Rogoff, E., Herrington, M., & Kew, P. (2017). Senior Entrepreneurship.

- Schumpeter, J. A. (2008[1934]). The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle (1912/1934). New Brunswick, NJ: Transaction Publishers.
- Schwartz, S. H. (1990). Individualism-collectivism: Critique and proposed refinements. *Journal of cross-cultural psychology*, *21*(2), 139-157.
- Shane, S. A. (2004). *Academic entrepreneurship: University spinoffs and wealth creation*. Cheltenham: Edward Elgar Publishing.
- Shleifer, A., Lopes-de Silanes, F., La Porta, R. (2008), The economic consequences of legal orgins, *Journal of Economic Literature*, 46, 2, 285-332.
- Stephan, U., Patterson, M., Kelly, C., & Mair, J. (2016). Organizations Driving Positive Social Change: A Review and an Integrative Framework of Change Processes. Journal of Management, 42(5), 1250–1281.
- Stephan, U., & Uhlaner, L. M. (2010). Performance-based vs socially supportive culture: A cross-national study of descriptive norms and entrepreneurship. *Journal of International Business Studies*, 41(8), 1347–1364.
- Stephan, U., Uhlaner, L. M., & Stride, C. (2015). Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies*, 46(3), 308–331.
- Sun, P.. Wright, M. and Mellahi.K. 2010. Is Entrepreneur-Politician Alliance Sustainable During Transition? The Case of Management Buyouts in China, Management & Organization Review, 6(1): 101-122.
- Tan, Danchi & Meyer, Klaus E. (2010). Business group's outward FDI: A managerial resources perspective, Journal of International Management, 16(2), 154-164
- Tan, J., Yang, J., & Veliyath, R. (2009). Particularistic and system trust among small and medium enterprises: A comparative study in China's transition economy. *Journal of Business Venturing*, 24, 544–557.
- Tarozzi, A., Desai, J., & Johnson, K. (2014). The Impacts of Microcredit: Evidence from Ethiopia. Mimeo
- Thai, M. T. T., & Turkina, E. (2014). Macro-level determinants of formal entrepreneurship versus informal entrepreneurship. *Journal of Business Venturing*, 29(4), 490–510.
- Tonoyan, V., Strohmeyer, 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.
- Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, 26(3), 341–358.
- Ugwu, D. I., Orjiakor, C. T., Enwereuzor, I. K., Onyedibe, C. C., & Ugwu, L. I. (2016). Business-life balance and wellbeing: Exploring the lived experiences of women in a low-to-middle income country. *International Journal of Qualitative Studies on Health and Well-Being*, 11(1), 30492
- Vaaler P. M (2013) Diaspora concentration and the venture investment impact of remittances. Journal of International Management 19: 26-46.
- van der Sluis, J., van Praag, M., & Vijverberg, W. (2005). Entrepreneurship Selection and Performance: A Meta-Analysis of the Impact of Education in Developing Economies. *The World Bank Economic Review*, 19(2), 225–261.
- Van Der Sluis, J., Van Praag, M., & Vijverberg, W. (2008). Education and Entrepreneurship

Selection and Performance: a Review of the Empirical Literature. *Journal of Economic Surveys*, 22(5), 795–841. http://doi.org/10.1111/j.1467-6419.2008.00550.x

- Van Gelderen, M., Kautonen, T., & Fink, M. (2015). From entrepreneurial intentions to actions: Self-control and action-related doubt, fear, and aversion. *Journal of Business Venturing*, 30(5), 655–673.
- Wach, D., Stephan, U., & Gorgievski, M. (2016). More than money: Developing an integrative multi-factorial measure of entrepreneurial success. *International Small Business Journal*, 34(8), 1098–1121. http://doi.org/10.1177/0266242615608469
- Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin*, 132(2), 249–268.
- Wennekers, S., van Stel, A., Thurik, R., Reynolds, P. (2005). Nascent entrepreneurship and the level of economic development. *Small Business Economics*, 24(3), 293-309.
- Williamson, O. E. (2000). The New Institutional Economics : Taking Stock , Looking Ahead. Journal of Economic Literature, 38(3), 595–613.
- Wong, L., & Primecz, H. 2011. Chinese Migrant Entrepreneurs in Budapest: Changing Entrepreneurial Effects and Forms. Journal of Asia Business Studies 5 (1): 61–76.
- Wright, M., Liu, X., Buck, T. & Filatotchev, I. (2008). Returnee Entrepreneur Characteristics, Science Park Location Choice and Performance: An Analysis of High Technology SMEs in China. *Entrepreneurship Theory and Practice*, 32(1), 131-156.
- Wright, M. 2007. Venture capital in China: A view from Europe. Asia Pacific Journal of Management, DOI: 10.1007/s10490-006-9036-xWright, M., Filatotchev, I., Buck, T., & Robbie, K. 1994. Accountability and Efficiency in Privatisation by Buy-out in CEE. Financial Accountability and Management, 10:195 – 214.
- Wright, M. (2011). Entrepreneurial Mobility. In Don Bergh and Dave Ketchen [eds], *Research Methodology in Strategy and Management*, 6, 137-162.
- Wright, M., Karsai, J., Dudinski, J., & Moravic, J. 1998. Operation of Venture Capital in Hungary, Poland, Slovakia, Entrepreneurship and Regional Development, Sep
- Wright, M., Lockett, A. & Pruthi, S. 2002. The screening of venture capital investments in India. *Small Business Economics*, 19: 13-29.
- Wright, M., Lockett, A., Pruthi, S., Manigart, S., Sapienza, H., Desbrieres, P. & Hommel, U. 2004. Venture capital investors, capital markets, valuation and information: US, Europe and Asia. Journal of International Entrepreneurship, 2: 305-326.
- Wright, M., Filatotchev, I., Hoskisson, R. & Peng, M. 2005. Strategy research in emerging economies: Challenging the conventional wisdom. *Journal of Management Studies*, 42: 1-34.
- Wright, M., Hoskisson, R., Busenitz, L. & Dial, J. 2000. Privatisation and Entrepreneurship: The upside of management buy-outs. <u>Academy of Management Review</u>, 25(3): 591-601.
- Yasuhiro, Y., Peng, M. & Deeds, D. (2008). What drives new ventures to internationalize from emerging to developed economies? *Entrepreneurship Theory and Practice*, 32 (2): 59-82.
- Yasuhiro, Y., Khavul, S., Peng, M. & Deeds, D. (2013). Venturing from emerging economies. *Strategic Entrepreneurship Journal*, 7 (3): 181-196.
- Zahra, S., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24(5), 519–532.
- Zahra, S. & Wright, M. 2011. Entrepreneurship's next act. Academy of Management Perspectives, 25: 67-83.

- Zahra, S. and Wright, M. 2016. Understanding the social value of entrepreneurship. *Journal* of Management Studies, 53: 610-629.
- Zhou, Y. and Hsu, J.Y. (2011), Divergent engagements: roles and strategies of Taiwanese and mainland Chinese returnee entrepreneurs in the IT industry, *Global Networks*, **11**(3), 398–419.

Table 1.	Variables	used in	logit re	gression	models.
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Variable	Obs	Mean	Std. Dev. N	Vin	Max
Engaged in nascent business start-up activity	1,953,076	0.05	0.22	0	1
Age	1,953,076	40.2	13.03	16	64
Female	1,952,856	0.52	0.5	0	1
Some secondary education	1,898,833	0.24	0.43	0	1
Secondary education	1,898,833	0.33	0.47	0	1
Tertiary education	1,898,833	0.36	0.48	0	1
Manages and owns a business older than 42 months	1,953,076	0.08	0.27	0	1
Past 12m, sold, shut, discontinued or quit a business	1,886,644	0.04	0.19	0	1
Business angel	1,946,253	0.04	0.2	0	1
Fear of failure would prevent from starting a business	1,664,128	0.39	0.49	0	1
Knowledge and skills for starting a business	1,666,851	0.5	0.5	0	1
Mean age	1,953,076	42.06	4.47	25.39	62.12
Share of females	1,953,076	0.52	0.04	0	0.73
Share of those with some sndry ed.	1,939,268	0.25	0.17	0	0.9
Share of those with secondary ed.	1,939,268	0.33	0.14	0	0.77
Share of those with higher ed.	1,939,268	0.36	0.17	0	0.94
Share of establ. business owners	1,953,076	0.07	0.05	0	0.38
Share of thos who discontinued bus.	1,901,130	0.04	0.04	0	0.3
Constraints on executive	1,907,126	6.4	1.27	1	7
GDP per person employed (constant 2011 PPP \$)	1,940,826	64156.9	30103.99	1813.97	203704.5
GDP deflator	1,936,231	3.64	5.07	-15.71	56.5
GDP growth	1,936,231	2.54	3.37	-14.33	26.28

Sources of data: GEM, Polity IV project, World Bank.

Explanatory variables	(1)	(2)	(3)	(4)
Age	0.106***	0.102***	0.0812***	0.0844***
	(0.00187)	(0.00359)	(0.00198)	(0.00377)
Age squared	-0.001***	-0.001***	-0.001***	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.450***	-0.273***	-0.276***	-0.215***
	(0.00699)	(0.0132)	(0.00734)	(0.0138)
Some secondary education	0.120***	0.127***	0.0586***	0.0952***
	(0.0164)	(0.0272)	(0.0171)	(0.0278)
Secondary education	0.274***	0.186***	0.146***	0.115***
	(0.0156)	(0.0266)	(0.0163)	(0.0273)
Tertiary education	0.503***	0.310***	0.282***	0.195***
	(0.0157)	(0.0272)	(0.0165)	(0.0280)
Manages and owns a business older than 42months	-0.439***	-0.773***	-0.825***	-0.929***
	(0.0142)	(0.0239)	(0.0142)	(0.0250)
Past 12m, sold, shut, discontinued or quit a business	0.734***	0.471***	0.451***	0.334***
	(0.0130)	(0.0203)	(0.0131)	(0.0211)
Business angel	0.680***	0.467***	0.462***	0.361***
	(0.0125)	(0.0204)	(0.0126)	(0.0212)
Fear of failure would prevent from starting a business			-0.385***	-0.195***
			(0.00829)	(0.0162)
Has knowledge and skills for starting a business			1.604***	1.151***
			(0.0103)	(0.0210)

Table 2. Likelihood of being engaged in nascent business start-up activities, logit estimations:continued.

Explanatory variables	(1)	(2)	(3)	(4)
Mean age	-0.183***	-0.188***	-0.182***	-0.193***
	(0.0216)	(0.0215)	(0.0230)	(0.0229)
Mean age squared	0.00202***	0.00208***	0.00213***	0.00226***
	(0.000240)	(0.000239)	(0.000257)	(0.000256)
Share of females	0.315*	0.179	0.394**	0.318*
	(0.132)	(0.132)	(0.141)	(0.141)
Share of those with some secondary education	-0.376***	-0.407***	-0.460***	-0.443***
	(0.0725)	(0.0725)	(0.0757)	(0.0757)
Share of those with secondary education	-0.854***	-0.890***	-0.829***	-0.829***
	(0.0758)	(0.0759)	(0.0789)	(0.0789)
Share of those with higher education	-1.007***	-1.049***	-1.057***	-1.050***
	(0.0784)	(0.0785)	(0.0824)	(0.0823)
Share of established businesses owners	1.536***	1.558***	0.895***	1.012***
	(0.155)	(0.154)	(0.161)	(0.160)
Share of those who discontinued business	4.187***	4.400***	3.385***	3.627***
	(0.195)	(0.195)	(0.206)	(0.204)
Effective constraints on the executive branch of govern.	0.0736***	0.0885***	0.0791***	0.0960***
	(0.0130)	(0.0172)	(0.0137)	(0.0180)
GDP per person employed	-0.000*	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Inflation, GDP deflator (annual %)	-0.000332	-0.00108	-0.00321**	-0.00343**
	(0.00102)	(0.00102)	(0.00108)	(0.00107)
GDP growth (annual %)	0.00583***	0.00632***	0.00176	0.00268
	(0.00168)	(0.00170)	(0.00179)	(0.00181)

Table 2. Likelihood of being engaged in nascent business start-up activities, logit estimations: continued.

Explanatory variables	(1)	(2)	(3)	(4)
GDP per person employed x Age		0.000		-0.000+
		(0.000)		(0.000)
GDP per person employed x Age squared		-0.000+		0.000
		(0.000)		(0.000)
GDP per person employed x Female		-0.000***		-0.000***
		(0.000)		(0.000)
GDP per person employed x Some 2ndary education		0.000+		0.000
		(0.000)		(0.000)
GDP per person employed x Secondary education		0.000***		0.000**
		(0.000)		(0.000)
GDP per person employed x Higher education		0.000***		0.000***
		(0.000)		(0.000)
GDP per person employed x Established business owner		0.000***		0.000***
		(0.000)		(0.000)
GDP per person employed x Discontinued business		0.000***		0.000***
		(0.000)		(0.000)
GDP per person employed x Business angel		0.000***		0.000***
		(0.000)		(0.000)
GDP per person employed x Fear of failure				-0.000***
				(0.000)
GDP per person employed x Entrepreneurial skills				0.000***
				(0.000)
GDP per person employed x Constraints of executive	0.000*** (0.000) 0.000*** (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000) (0.000)	-0.000		
		(0.000)		(0.000)
Constant	-0.183		-1.031+	-0.505
	(0.521)	(0.522)	(0.554)	(0.555)
Observations	1,776,214	1,776,214	1,472,067	1,472,067

Notes:

Dependent: engagement in nascent entrepreneurship = 1, no engagement = 0

logit; country and year dummies included but not reported;

Source: GEM 2001-2015







