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Growth Entrepreneurship in Developing Countries A Preliminary Literature Review



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Growth Entrepreneurship in Developing Countries

A Preliminary Literature Review

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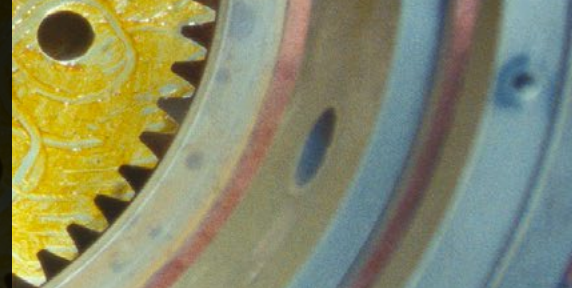
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NOTE FROM AUTHORS

Entrepreneurship is a key focus area of the Trade & Competitiveness Global Practice (T&C) of the World Bank Group (WBG). In September 2015, T&C started the preparation for a new study on growth entrepreneurship in the developing country context. This document attempts to summarize the key arguments and evidence presented in available literature on the subject. It was prepared as a precursor to the development of the Project Concept Note (PCN) for the study.

The authors welcome recommendations from readers as to additional literature that may be available. This review and the forthcoming study on growth entrepreneurship in the developing country context is funded by Finland, Norway, and Sweden through infoDev's (www.infodev.org) multi-donor trust fund.

0. EXECUTIVE SUMMARY

Worldwide, policymakers have an imperative to enable growth and employment. Within that equation, entrepreneurs and early-stage firms have an important role to play, perhaps particularly so in countries with a nascent private sector. The importance of entrepreneurship is recognized by policymakers around the globe, as evidenced by the plethora of recent initiatives focused on start-up competitions, one-stop shops for business registration, and programs for business incubation and acceleration.

However, of the vast numbers of newly created enterprises, very few succeed. Among those that do, only a **small subset constitute “high-growth” firms that scale within comparatively short time-frames, creating disproportionate value in the form of employment and incomes.** It also appears that these firms play a valuable role in stimulating innovation and competitiveness. A central question for policymakers is therefore how to enable a greater number of growth oriented ventures to emerge and subsequently reach scale.

The World Bank is planning a new study of the role of growth entrepreneurship in the developing country context. The literature review provided in this document attempts to provide an overview of what we know about 1) the impact of growth entrepreneurship, 2) why and how high growth firms emerge, and 3) the policy instruments that enable new ventures to emerge and grow. This literature review constitutes a background paper to be used as an input to formulate research questions and the research design for the upcoming study on growth entrepreneurship. As the research process progresses, this literature review will also be updated.

First, a few observations based on the literature review to date:

- **There is far more information on these topics for developed countries than for developing countries.** Nevertheless, policy choices and funding allocations made in low and middle-income economies are often based on the assumption that trends in high-income economies (primarily the U.S. and Northern Europe) also hold true for low and middle-income economies.
- **A plethora of different definitions are used** for the notion of “growth entrepreneurship,” which not only makes it difficult to compare conclusions from different studies, but also complicates our ability to draw policy implications from the studies available.

- **Theoretical frameworks that outline variables linking entrepreneurship and growth are not well developed.** The study of entrepreneurship draws integrally from multiple academic disciplines including economics, management, and psychology. Understanding the relationship between entrepreneurship and growth necessarily involves analysis at the level of the individual entrepreneur, at the level of the firm, and at the level of institutions and enabling environments. This makes research in this field a more complex undertaking than in more established fields of economic research.

Taken together, these facts illustrate that the entrepreneurship field is relatively new, especially in the developing country context. A few key takeaways from the literature are, however, possible:

There are three main frameworks to study growth entrepreneurship— at the level of the individual entrepreneur, at the level of the firm, and at level of institutions and enabling environments.

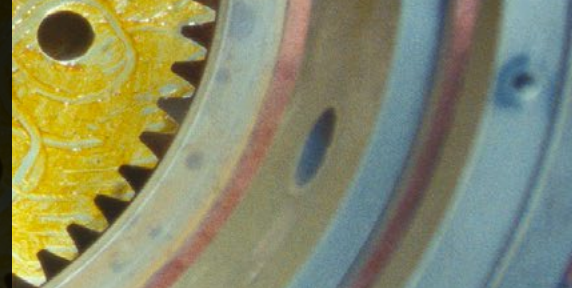
At the level of the individual entrepreneur, **scholars distinguish between “necessity” entrepreneurs (also sometimes referred to as “subsistence” entrepreneurs) and “opportunity” entrepreneurs (also sometimes referred to as “growth” entrepreneurs, “transformational” or “innovative” entrepreneurs).** There is broad agreement that these two types of entrepreneurs exist and that they respond very differently to policy measures. Indeed, some scholars argue that many entrepreneurial policies are flawed precisely because they fail to distinguish between these heterogeneous sets of entrepreneurs.

A body of literature assesses whether successful growth entrepreneurs have something others do not possess. For example, **typical successful growth entrepreneurs** tend to have high levels of education and work experience, and are often **midcareer professionals in their late 30s to early 40s.** Further, certain psychological traits such as higher risk tolerance and an internal locus of control have been found to be characteristics indicative of successful growth entrepreneurs.

At the firm level, data across multiple countries confirms that **fast-growing firms tend to be young and small,** although other research suggests that growth can be episodic and that firms of any age or size can experience short periods of growth.

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Some debate also exists on whether high-growth firms disproportionately emerge from **certain sectors**.

At the environmental level, some scholars emphasize the role of **effective institutions**, while an emerging group of researchers refer to the broader notion of an **“entrepreneurial ecosystem.”** This is an interwoven set of characteristics, external to the firm, that create an environment conducive to firm growth. Its components include regulatory frameworks, human capital, access to finance, social networks, and cultural characteristics. Within this literature, there is debate on the relative importance of assessing these systems at sub-national, national, or international levels. One strand of the literature focuses on **the role of agglomeration, finding that firm innovation and growth are higher within specific geographical areas or regions where entrepreneurial activity is concentrated**, due to better availability of infrastructure, opportunities for learning and imitation, and larger markets for inputs and outputs.

The literature identifies **binding constraints** that affect high-growth firms. These relate to **market failures that restrict free flow of knowledge and new ideas, formation and maintenance of networks and social capital, and the flow of risk capital toward innovation activities**. Understanding these binding constraints is essential to design effective policies to address these constraints and to allow high-growth firms to emerge.

There is some debate on whether or not public interventions should directly target potential high-growth firms. For example, one option for public intervention is to **provide early-stage financing** directly

to young and growing firms. Alternatively, governments can work to improve policy frameworks that impact new ventures early in their life-cycle in a non-targeted way—such as through reforms to labor laws and social security regimes, and through the provision of quality infrastructure. **Evaluations of targeted interventions are limited.** With regard to entrepreneurial eco-systems, **some scholars argue that many policy interventions fail as they address only a part of the ecosystem**, instead of approaching it holistically. On the question of whether to target potential high-growth firms, the issue is whether it is indeed possible to identify growth firms *ex ante* at all. However, **new research using data on individual and firm-level traits seem to make it possible to narrow down the pool of potential growth firms.**

This review has covered a broad array of literature related to growth entrepreneurship and the debates over options for support mechanisms. **However, there are still many open questions, and clearly a need to further collect data and conduct research and evaluations.**

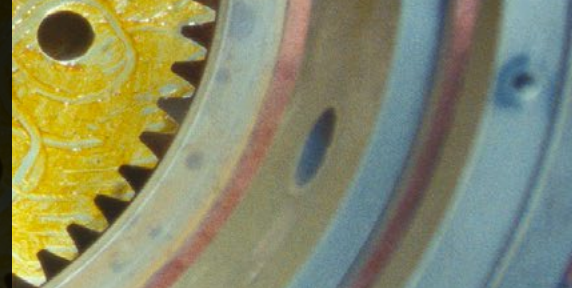
The forthcoming World Bank study on growth entrepreneurship will be one small contribution to this agenda. **We invite others to join us** in the endeavor to increase the evidence base on entrepreneurship, thus contributing to developing countries’ abilities to better harness entrepreneurial talent to achieve sustainable and equitable growth.

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I. INTRODUCTION

Worldwide, policymakers want to know how they can best use their resources to spur a thriving economy—an economy that can compete and grow, generate jobs, increase incomes, and provide improved products and services to the population.

They recognize that for economies to thrive, competition, “churn”, or “dynamism” is needed; where new ventures emerge and grow and other firms exit. In this context, attention has recently focused on a small subset of so-called “high-growth” firms. These firms enter, innovate, and scale within a comparatively short time-frame, creating disproportionate value in the form of employment, income, and improved products or services.

Improving our knowledge and understanding of high-growth firms in developing countries is critical to improving effectiveness of interventions to spur job creation and increase productivity. However, most of what we understand about growth entrepreneurship today is based on data from Europe, North America, and the broader group of upper-income OECD-member countries, simply because this is where most reliable data is available. We therefore know far less about growth entrepreneurship in a developing country context.

The World Bank’s Trade and Competitiveness Global Practice will contribute to the knowledge base on entrepreneurship with a study that addresses three core questions:

- 1. What is the impact of growth entrepreneurship on economic growth, employment, innovation, productivity, and economic inclusion in developing countries?**
- 2. Why and how do high-growth businesses emerge?** What firm-level, individual, and environmental characteristics are common to firms started by entrepreneurs that reached significant scale within relatively short periods of time?
- 3. What policy instruments are successful at enabling growth entrepreneurship?** Should policies be focused on merely creating an environment conducive to overall entrepreneurial activity, or should they provide targeted assistance to high-growth firms in particular?

This paper constitutes a summary review of the literature about each of these questions. It contributes to the refinement of the research questions, scope, and methodology of the proposed research product.

II. A REVIEW OF DEFINITIONS

There is no consensus on the definitions of “growth entrepreneurship” or “high-growth firms”. Researchers use a range of terms, which makes it difficult to draw comparative conclusions across studies. The Flagship methodology paper will propose a more concrete definition

for both “high-growth firm” and “scale-up”, based in part on commonly accepted definitions, and in part on assumptions that can be borne out by analysis of empirical data. An overview of terms most commonly used is given below.

BOX 1: DEFINITIONS

Entrepreneurship: The process of *starting* a business; using a manifest ability and willingness of individuals, on their own, in teams, within and outside existing organizations, to perceive and create new economic opportunities (new products, new production methods, new organizational schemes, and new product-market combinations) and to introduce their ideas in the market, in the face of uncertainty and other obstacles, by making decisions on location, form, and the use of resources and institutions.¹

Transformational/Opportunity/Growth Entrepreneur: An entrepreneur who *aims* to create large, vibrant businesses that grow much *beyond* the scope of an individual’s subsistence needs and provide jobs and income for others.²

Subsistence/Necessity Entrepreneur: A person who engages in entrepreneurial activity chiefly as a means of providing subsistence income to himself/herself. Subsistence entrepreneurs typically do not – and do not aspire to – grow the business to the point of creating employment opportunities for workers outside of their immediate family.³

High-Growth Entrepreneur: A high-growth entrepreneur leads, founds, organizes, or runs a business that can be classified as high-growth.

Entrepreneurial Firms: Praag and Versloot,⁴ in a 2007 systematic review of the literature on the contributions of what they term “entrepreneurial firms,”⁵ defined these as enterprises with less than 100 employees, that are younger than seven years old, and are new entrants to a particular market.

High-growth/Fast-Growth Business/Gazelle/High-Impact Firms: The United Kingdom and the OECD defines high-growth businesses as firms with 10 or more employees who experience average annual growth in employment or turnover of 20 percent or more over three years. MIT economist David Birch introduced the term gazelle in the 1980s and defined it as a firm that has at least \$100,000 (roughly \$250,000 today) in annual revenues and sustaining 20 percent annual revenue growth over a four-year period.⁶ Economist Zoltan Acs expands on the work of Birch⁷ to introduce employment growth as a further way to qualify the term gazelle. High-impact firms are gazelles (as per the definition above) when they have an employment growth quantifier⁸ of two or more over a four-year period.⁹

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III. WHAT IS THE ECONOMIC IMPACT OF GROWTH ENTREPRENEURSHIP?

Alternative theories and research examine the relationship between growth entrepreneurship and economic growth, innovation, productivity, and employment creation.

STRUCTURAL TRANSFORMATION AND PRODUCTIVITY GROWTH

Understanding entrepreneurship, the processes by which firms enter and exit the market, and in particular, the nature of expanding firms, is fundamental to our understanding of the process of structural transformation, and ultimately, increased productivity. Structural transformation is the process of reallocating society's factors of production across sectors. This occurs through the contraction and exit of some firms, which then frees up resources that can be reallocated to expanding firms. This is in line with Schumpeter's¹⁰ description of capitalism as a process of creative destruction where novel ideas continuously challenge old structures, giving rise to structural transformation when new and successful innovations, products, firms, and industries arise and obsolete ones decline. In this sense, we can understand the importance of entrepreneurship as a main driver of creative destruction—channeled via firm entry, expansion, contraction, and exit.¹¹

ECONOMIC GROWTH

Carree and Thurik¹² note a **paucity of theoretical frameworks linking entrepreneurship to conventionally measured economic growth**, notwithstanding the numerous claims linking the two. They suggest that a framework connecting entrepreneurial activity to economic growth should identify the micro-economic foundations of growth, emphasize the role of *knowledge externalities* in the growth process, and identify intermediate linkages from entrepreneurial activity to economic progress. They propose that **knowledge spillovers facilitate innovation, which in turn drives growth**. The knowledge spillover theory¹³ asserts that entrepreneurship contributes to growth by serving as a mechanism to facilitate knowledge spilling over from existing activities of incumbent firms or universities to new and innovative ones. Because it facilitates the

spillover and commercialization of knowledge that might otherwise have remained dormant and uncommercialized within the incumbent firm, entrepreneurship has a positive impact on innovation and subsequently on growth.

Following a distinction introduced by GEM (2006), Acs¹⁴ notes that there are general two types of entrepreneurs: those that want to exploit a perceived business opportunity (opportunity entrepreneurs), and those that are pushed into entrepreneurship because all other opportunities for work are either absent or unsatisfactory (necessity entrepreneurs). Along similar lines, Schoar¹⁵ distinguishes between subsistence and transformational entrepreneurs. Schoar argues that people engaging in different types of entrepreneurship are different in nature and respond very differently to policy changes and economic cycles. In fact, she argues, many failed entrepreneurial policies are flawed in that they fail to distinguish between heterogeneous sets of entrepreneurial actors. In particular, **only a negligible fraction of subsistence entrepreneurs will transition to transformational entrepreneurs**.

Illustrating this point, Mondragon-Velez and Pena-Parga¹⁶ demonstrate that, in Colombia, the flow of unemployed to self-employed micro-entrepreneurs is eight times higher than the flow of unemployed to entrepreneurial business owners (owners of firms that hire other people). Further, entry into self-employment is often characterized by a low level of human capital. It is motivated mainly by a desire to support families. Meanwhile, **becoming a business owner that hires other people (transformational entrepreneur) is generally characterized by higher levels of human capital**, and higher willingness to take risks.¹⁷

De Mel, McKenzie, and Woodruff¹⁸ find substantial differences between the two groups of entrepreneurs in terms of IQ, willingness to take risks, and the level of managerial and financial literacy (in Sri Lanka). Adragna and Lusardi¹⁹ find a difference in ambitions and expectations between the two groups. The distinction between the two taxonomic types of entrepreneurship can take many different names, depending on the author. For instance, Acs²⁰ defines "high-impact entrepreneurship" as fundamentally distinct from merely the creation of

new firms, per se. High-impact entrepreneurship (HIE), as per his definition, is innovation-driven and creates wealth and growth through expansion, and bringing new inventions to markets. We will return to this fundamental distinction in the taxonomies of entrepreneurship, and its implications for policy in subsequent sections.

Given the distinction between types of entrepreneurial activity, some studies look at the incidences of different types of entrepreneurship, and their implications. In general, **higher levels of transformational/opportunity entrepreneurship are typically associated with higher levels of aggregate economic growth.** To this end, studies that look only at the total entrepreneurial activity (without distinguishing between transformational versus subsistence) may not tell us much. For instance, Shane²¹ suggests that high levels of total entrepreneurial activity often signify high levels of necessity entrepreneurs, which is often not indicative of a successful economy.

A key indicator may be whether or not the type of entrepreneurial activity being studied encompasses innovation activities. Van Stel et al.,²² in a study covering 36 countries from the Global Entrepreneurship Monitor (GEM sources data on entrepreneurship from both developing and developed countries), find that high levels of total entrepreneurship is associated with higher economic growth only in higher-income countries where innovation is more common. In developing countries, the relationship between total entrepreneurial activity (of which the vast amount is based on necessity) and economic growth is negative. Braunerhjelm et al.,²³ find a positive relationship between total entrepreneurial activity and economic growth across 17 OECD countries between 1981 and 2001. Wong et al.,²⁴ in their study of 37 GEM countries, find that only potential high-growth entrepreneurs (similar to Schoar's "transformational entrepreneur") are positively associated with economic growth, while other forms of entrepreneurial activity are not.

While necessity entrepreneurs still provide meaningful sources of employment and income for many poor people in developing countries, they do not seem to have the same differential impact on aggregate economic growth as transformational firms. Further, there is a **special set of high-growth firms that typically pursue innovation as a path to growth** among transformational/opportunity entrepreneurs. For these reasons, entrepreneurship literature shows a renewed focus on high-growth firms.

It is also important to note that individuals are not merely filtered into categories of "subsistence" and

"transformational" entrepreneurs by mere accident. Rather, **the entrenched rules of the game that specify the relative payoffs to different entrepreneurial activities play a key role in determining the allocation of entrepreneurship.** More to the point, society's rules and institutions help determine whether entrepreneurial activities will be put toward productive or unproductive directions that can significantly affect an economy's productive growth.²⁵ This suggests an important role for policy to adjust the "rules of the game", to play an active role in the allocation of entrepreneurial activity, and thus to potentially determine the breakdown of entrepreneurial activity toward either necessity-driven or transformational purposes.

INNOVATION AND CONSUMER CHOICE

Firm-level empirical research supports the notion that high-growth firms contribute uniquely to product and process innovation, thus driving productivity gains and adding value for their economies. Praag and Versloot²⁶ conduct a 2007 systematic review of literature on the contributions of what they term "entrepreneurial firms" (young and new entrants) to innovation,²⁷ productivity, and growth in developed countries, focusing on empirical, quantifiable measures. Their conclusions are that while large firms may invest more in total dollar value in innovations, **entrepreneurial firms are more innovation-intensive relative to size and produce innovations more efficiently.** The quality of innovations coming out of entrepreneurial firms may be higher and levels and quality of commercialization of innovations are higher and more radical for entrepreneurial firms than for other types of firms. In a cross-country review from five OECD countries, Schreyer²⁸ finds that entrepreneurial firms are more R&D intensive than the average permanent firm. Additionally, **entrepreneurial firms provide a relatively large share of a state's value-added growth by positively affecting productivity growth.**²⁹

In a review of its investment portfolio of 40 growth-oriented SMEs across 10 developing countries, SEAF³⁰ suggests that **high-growth firms (HGFs) are important because they generate business for other companies in the local economy.** Their review asserts that HGFs often start out small and local, so, a large part of the cost of their goods sold and capital expenditures goes to other domestic businesses. This indicates a powerful economic multiplier effect of the success of just a few growth-oriented firms. Additionally, they say, **HGFs help serve as market aggregators by purchasing inputs from micro and small firms, thus serving as a critical link between smaller suppliers and customers further up the value chain.**

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What benefits do high-growth firms provide to their consumers? **Innovations by entrepreneurial firms may have positive implications by enhancing competition and diversifying markets, thus ultimately enhancing consumer choice.** Carree and Thurik³¹ propose the following framework: in the longer-term, successful fast-growing new firms promote increased efficiency due to intensified competition and process innovation and enhance market demand due to product innovation. This leads to a greater variety of products and better correspondence to the diversity of consumer preferences, which has important implications for consumers in developing countries where advanced goods and services may not reach remote areas.

EMPLOYMENT

In addition to the contribution of entrepreneurship to aggregate economic growth, we are interested in how new firms contribute to overall employment generation. **Several studies in developed countries have found positive relationships between total entrepreneurial activity (measured by new firm entry) and overall job growth.** For instance, Acs and Mueller³² find that a

high rate of firm entry in the U.S. is associated with job growth; Fritsch and Mueller³³ find higher startup rates are associated with positive employment growth for agglomerated/high productivity regions;³⁴ Baptista and Preto³⁵ find that higher startup rates lead to long-run employment creation in 30 Portuguese regions; Van Stel et al.³⁶ find that higher startup rates lead to employment creation in 40 Dutch regions; and Carree and Thurik³⁷ find that higher startup rates are associated with national employment growth in the long run for all OECD countries.

However, we return to a distinction between the set of all firms entering the market at any given point and the special set of high-performing firms that will eventually grow. Research shows that only a small set of entering firms will survive and subsequently grow. **Most findings on survival rates suggest that up to a third of all new firms do not survive beyond two years.**³⁸ Therefore, when we speak of young, small firms, we are talking about a dynamic set of firms that continually enter and exit the market, all the while creating and destroying jobs. Newer research from the U.S. suggests **this dynamic of new and young companies being created and dying in a state of intense competition is responsible for the gains in net job creation.**³⁹

BOX 2: EVIDENCE FOR THE CONTRIBUTION OF HIGH-GROWTH FIRMS TO EMPLOYMENT IN DEVELOPED VS. DEVELOPING COUNTRIES

THE CONTRIBUTIONS OF HIGH-GROWTH FIRMS TO EMPLOYMENT IN DEVELOPED COUNTRIES

Much of the research on the contributions of high-growth firms to employment growth comes from firm-level data derived from national census and statistical bureaus. This data is hardest to come by in developing countries; so, **much of our understanding of high-growth firms comes from developed OECD countries.**

In their landmark study, using a 1981 database of 5.6 million firms in the U.S., Birch et al.⁴⁴ find that gazelles comprise only about 4 percent of all firms, yet create between 70 and 100 percent of all net new jobs. Similarly, Acs et al.⁴⁵ find that high-impact gazelles constitute between 2 and 3 percent of all U.S. private businesses, depending on the period, but create “almost all” net new jobs perennially. Data from European countries seem to indicate similar trends. During 2003 to 2006, 5.4 percent of Finnish private businesses with

more than ten employees created 90 percent of net new jobs.⁴⁶ A highly influential NESTA paper from the United Kingdom estimated that only a “vital 6 percent” of firms employing more than ten employees accounted for over half of all jobs created.⁴⁷ The proportion of the economy comprising gazelles varies in other European countries. However, in all countries studied, they represent only a minority of the firms in the private sector (3.9 percent of firms are gazelles in Germany, 3.8 percent in Belgium, and 5.4 percent in Norway).⁴⁸

THE CONTRIBUTION OF HIGH-GROWTH FIRMS TO EMPLOYMENT IN DEVELOPING COUNTRIES

We have established that high-growth firms contribute disproportionately to job creation in developed countries, but does the same hold good for developing countries? Similarly, is the number of high-growth firms relative to the entire universe of firms very small in developing countries?

The net employment effects of the rapid process of entry and exit (churn) among small, young firms are thought to be positive overall, at least for developed countries.⁴⁰

Contrary to traditionally held beliefs that small businesses create most private sector jobs, newer research that uses census data from the U.S. and controls for age, finds that **it is young firms and startups that are the most important sources of net job creation**. Early research by Birch⁴¹ established the view that small and medium enterprises (SMEs) are the major engines of job creation in the U.S. Decades of SME policy in the U.S. and other countries are based on this view.

However, newer research by Haltiwanger et al.,⁴² that uses the U.S. Census Bureau Business Dynamics Statistics and Longitudinal Business Database, finds that, once controlling for age, there is no systematic relationship between firm size and firm growth. They suggest that because new firms tend to be small, the finding of a systematic inverse relationship between firm size and net growth rates in prior analyses is entirely attributable to the fact that most new firms are classified in the smallest size classes. The implication for these findings is that policies that target businesses of a

certain size, while ignoring the role of age, will likely have limited success in improving job creation. They use this as the basis for recommendations to target policy interventions to address challenges that young firms and, particularly, startups face (regulatory challenges and market failures).

The positive effect of firm entry on employment growth is attributable only to a fraction of the so-called high-performing firms. Shane⁴³ asserts that any given cohort of firms will never have higher employment levels than when they are first created. Again, this is related to the fact that a huge number of those firms created will not survive in the long term. He suggests that of those surviving firms, about 90 percent will not grow at all, and will be left with the same number of employees as when they started. Only about 5 to 10 percent of surviving firms will have a larger number of employees at any point in time after they were created. Investigating who these so-called “high-growth” firms (HGFs) are, and what direct contributions to employment they make, is the focus of the rest of this review.

Are these gazelles as important to the economies of developing countries as they are for advanced economies? Unfortunately, **there is not nearly as much data on high-growth entrepreneurship in developing countries. There is a serious need for further research.** The few studies that do exist suggest an important role for high-growth firms in developing countries.

Data from developing and middle-income countries indicate that the percentage of gazelles in the private sector may, in fact, be higher than in high-income countries. In Brazil, for example, high-growth gazelles constituted 8.3 percent of Brazilian private businesses, and generated 57.4 percent of net new jobs from 2005 to 2008.⁴⁹ In Eastern European former Eastern Bloc “transition” countries, gazelles occupy a substantial proportion of firms as compared to their Western European counterparts.⁵⁰ In a study of 925 Colombian companies using the WB Enterprise Surveys, high-growth firms

represented 8 percent of Colombian SMEs in 2010, but accounted for 45 percent of new job creation.⁵¹

The Global Entrepreneurship Monitor conducted a five-year survey of 70,000 entrepreneurs in over 60 countries—many of them developing countries—and found that while only 4 percent of the entrepreneurs were high-growth, they generated 38 percent of all jobs in the firms that took part in the survey.⁵² The data suggest that **supporting the expansion of an existing high-growth SME can create up to 100 times the number of new jobs as supporting a new microenterprise or subsistence SME.** Also, the jobs created by growth entrepreneurs tend to pay higher wages than national averages, and employees report higher levels of job satisfaction. While supporting the microenterprise sector can be a useful tool to support the extreme poor or the bottom 40 percent, it is argued that supporting high-impact entrepreneurship has larger society-wide benefits and spillovers, and larger implications for structural transformation and macro-level growth.

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CONCLUSIONS ON THE LITERATURE AND NEXT STEPS FOR THE STUDY

The literature generally agrees that, across multiple countries and geographies, small numbers of firms contribute to disproportionate amounts of new jobs. However, this conclusion cannot be confidently drawn without data from more developing countries. Of particular interest is whether the findings of Haltiwanger et al.—that young and small firms are the main drivers of net job creation—apply equally to developing countries, using reliable census data. Additionally, there is evidence that the success of growth-oriented firms has wider economic benefits beyond contributions to employment growth. These wider benefits include fostering innovation and productivity gains, reallocating the factors of production

and driving structural transformation, enhancing competition, and diversifying markets, all of which ultimately improve consumer choice. However, much of this research tends to come from developed countries.

There is a dearth of direct study of HGFs in developing countries, both in terms of their contributions to employment, and their economy-wide benefits. Additionally, several authors note that there are few theoretical frameworks that link entrepreneurship to economic growth. More empirical research could be done on the microeconomic foundations and intermediate inputs that link the two, particularly for developing countries.

IV. WHY AND HOW DO HIGH-GROWTH BUSINESSES EMERGE?

In the previous section, we established that high-growth firms are likely to be very important to net job creation. They have other economic benefits and tend to make up a small, but variable, proportion of their countries' private sector economies. What, then, are the factors that enable such firms to emerge? Are there special traits that these firms and their founders and managers have in common? In analyzing the conditions for growth entrepreneurship, three strands of literature converge, based on economics, management, and psychology. The diagram below presents the three levels of analysis – individual, firm, and environmental levels – for both industries and geographies (city, region, or country).

ENTREPRENEURIAL CHARACTERISTICS

Literature that focuses on the individual level attributes the success of entrepreneurial firms disproportionately to the characteristics of people, usually the founding entrepreneur or founding team. Common characteristics

often cited include education levels, work experience, and gender and also psychological traits of individuals. Within the venture capital industry, for instance, as much focus is put on the capacity of the management team of the firm as on the business itself. Indeed, in one survey, venture capitalists attributed 65 percent of failures within their portfolio companies to problems within the startups' management teams.⁵³

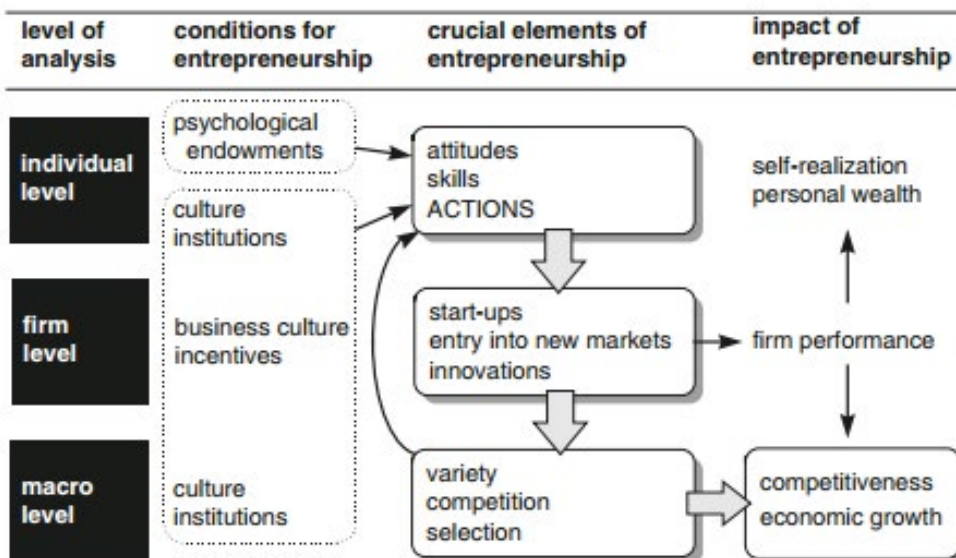
Education Level: Higher levels of education of the firm founders tend to predict firm growth. Nichter & Goldmark⁵⁴ suggest there is a threshold effect of education on firm growth patterns. SMEs with highly educated owners tend to grow more quickly, but a country-specific threshold must be reached for a firm to experience this growth effect.

Work Experience: Entrepreneurs with more years of work experience tend to have faster-growing firms. Work experience tends to help entrepreneurs both directly, through improving direct knowledge and firm capabilities,

and indirectly, through networks and contacts. One study in Kenya found that entrepreneurs with a certain threshold of work experience (in this case, seven years) vastly outperformed those who had less experience.⁵⁵ Work experience is particularly important if it occurred within the same sector. In developing countries, growth entrepreneurs tend to come from having been previously employed as managers in the same or similar sector, often by a foreign firm.⁵⁶

Gender: HGFs are typically owned by males, but women can be effective owners if certain binding constraints are alleviated.

FIGURE 1: A FRAMEWORK FOR ANALYZING THE EMERGENCE OF ENTREPRENEURSHIP AND ITS IMPACTS



Source: Carree and Thurik (2010)

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Women-owned firms face significantly more obstacles than male-owned firms in terms of asymmetrical rights, obligations, and legal protections. They consequently grow at slower rates than male-owned firms on average.⁵⁷ This could also be because women tend to own firms that are concentrated in slower growing sectors, often because of barriers to entry facing females in high-growth industries. Despite this, women are highly effective firm owners, with higher levels of labor productivity on average than male-owned firms,⁵⁸ and comparable closure rates to firms owned by men.⁵⁹

Age: There is substantial literature on the relation between age of the individual and the propensity to start new (and successful) businesses. While the conventional belief (perhaps due to a few highly publicized cases) is that entrepreneurship is mostly the province of the very young, who are presumably unfettered and willing to take risks and challenge established ways of doing things, the data suggest otherwise. **The consensus of research findings is that growth entrepreneurship tends to be concentrated among mid-career individuals, between 35 and 45 years of age.**⁶⁰ A Kauffman Foundation Firm Survey of nearly 5,000 companies in the U.S. found that the mean and median age of all entrepreneurs in the survey was 45, and the age distribution of first-time founders was highest in the late 30s and early 40s. However, the probability of starting a business declines after 50. Most of this research is focused on the U.S. and other developed countries.

Psychological Traits: Locus of control, risk appetite, motivation, and a desire to learn and network by the entrepreneur all seem to be related to entrepreneurial success. Much has been written about the potential common psychological traits of successful entrepreneurs. Advances in credit risk methodologies and predictive behavior take advantage of cutting-edge research in this field by using known psychological traits to predict entrepreneurial success or failure. While the efficacy of predictive behavior methodologies is still uncertain, some studies have attempted to use rigorous techniques to identify potential entrepreneurs. One such study⁶¹ in Pakistan concluded that extraversion, risk-taking, and openness to experience are significantly related to entrepreneurial intentions among business graduates. Neither internal nor external locus of control was found to have a significant impact on entrepreneurial intentions despite other studies finding so.

However, in a study of entrepreneurial leaders, Ernst and Young found that successful entrepreneurs combine an internal locus of control with a willingness to take risks

and seize opportunities, along with passion, persistence, and an eye for niches and market gaps.⁶² An internal locus of control is defined as a belief in the ability of an individual to control one's environment and outcomes. Gallup research recently created the Entrepreneurial Profile 10 (EP10),⁶³ which is a talents-based assessment of entrepreneurial ability, based on years of research of successful entrepreneurs. According to this profile, the ten traits essential in a successful entrepreneur are: Business Focus, Confidence, Creative Thinker, Delegator, Determination, Independent, Knowledge-Seeker, Promoter, Relationship-BUILDER, and Risk-Taker.

There is debate in this literature about which of these traits associated with growth entrepreneurship are people born with, and which traits can be learned. This literature has parallels with that on high-performing athletes; while everyone can learn a sport and become proficient, only some possess the potential to become competitive at a national or international level. Also, among those that do have potential, those who have access to know-how and networks outperform compared to those that do not.

Venture capital investors in developed economies have long used an individual lens to assess opportunity and risk. They consistently attribute a high proportion of failures to issues within the management team. However, it is not clear if investors in developing countries would see the same rationale for failure in their portfolios, or if firm-level factors or aspects of the business-enabling environment play a more prominent role.

FIRM CHARACTERISTICS

Several firm-level characteristics are analyzed in the literature. These most commonly relate to age of the firm, size of the firm, and the sector within which the firm is operating.

Firm Age: The discussion of firm age and growth potential is typically motivated by research from the U.S., which suggests that job creation comes mostly from young firms and startups. The Kauffman Foundation analyzed data from the U.S. Census Bureau and examined net new job creation in terms of firm age rather than size. They find that nearly all net job creation since 1980 has occurred in firms less than five years old, and that, without startups, net job creation for the American economy would have been negative in all but a handful of those years.⁶⁴ They find that, in general, the net addition of jobs from year to year comes from three sources: startups, young firms (ages one to five), and the largest and oldest companies.

This produces somewhat of a barbell effect, with job creation occurring at the youngest and oldest ends of the firm age spectrum, and low job creation occurring in between.⁶⁵

The assertion that high-growth firms are typically young firms in the U.S. is corroborated by data from some developing countries. Studies in both Latin American and Africa show that young, small firms are more likely to show high rates of growth, as compared with older firms of similar size and sector.⁶⁶ An Inter-American Development Bank study revealed that firms tend to go through their major expansion periods in their third year of operation (on average).⁶⁷ Other studies from developing countries indicate that the average growth rate of firms decreases with age.⁶⁸ A postulated reason for this is that firms tend to either grow quickly at first, or exit the market, and then level off their growth paths once they reach the optimal size for their sector and geography.

Aga et al.⁶⁹ use the World Bank Enterprise Surveys to investigate the role of age and size on firm employment growth for developing countries. They find that a small number of young and small firms are the most dynamic in terms of adding jobs, on net. This is mostly consistent with the findings of Haltiwanger et al. in the U.S., and Eslava and Haltiwanger in Colombia.⁷⁰ In looking at geographic breakdowns of job creation in regions of India, Ghani et al.⁷¹ find that job growth is predicted by higher concentrations of new and young establishments.

There is debate, however, whether high-growth firms are always young. Acs et al.⁷² look at “high-impact” firms (firms with significant revenue growth and expanding employment) and find that they are in fact relatively old, with an average age of 25 and almost 95 percent of them being older than five years. Brown et al.⁷³ look at the “vital 6 percent” of high-growth firms in the United Kingdom and find that, in fact, there is no correlation between a growth firm and either age, size, or sector.

Firm Size: Some empirical studies covering the developing world find that smaller firms grow faster than larger firms, which is contrary to Gibrat’s Law.⁷⁴ However, there is some debate on whether this holds good for all countries. In a study of OECD countries, Schreyer⁷⁵ finds that large firms play an important role for job creators among high-growth firms. In their attempt to debunk certain myths regarding the profile of HGFs, Brown et al.⁷⁶ suggest the majority of HGFs are in fact larger than previously believed. **This is an important debate around the role of firm size and growth rates,** and one that deserves attention through future research, especially in developing countries.

Sector: High-growth firms can be found across many disparate sectors in the economy. Despite the excitement in many policy circles over the high-tech sectors, Brown et al.⁷⁷ caution against such a focus as a predictor of growth. They argue that HGFs are not necessarily synonymous with high-tech firms and that there is, in fact, a broad sectoral heterogeneity to HGFs in general. Research focused specifically on technology-based HGFs in the United Kingdom, for example, found that only around 15 percent of HGFs operate in technology sectors.⁷⁸ The authors argue that policymakers should be cautious toward policies and sectoral promotion schemes that expect fast growth resulting exclusively from IP or new technology innovations.

The Kauffman Foundation argues, however, that we *can* look to particular high-growth sectors over the past decade to identify potential high-growth firms. In the U.S., the information technology sector, along with retail, healthcare, accommodation, food services, professional, scientific, and technical services have shown strong job creation, and we can look to these sectors to find high-growth entrepreneurs. In OECD countries, studies find that high-growth firms tend to exist in all industries, but that they are relatively more frequent in knowledge-intensive service industries and in education and healthcare.⁷⁹

Other Firm Characteristics: Additional firm characteristics that are thought to contribute to firm growth are foreign ownership,⁸⁰ engagement in export activities,⁸¹ and offering workers formal job training.⁸² There are a number of country-specific studies that look into these features of firms as being correlated with periods of high-growth, but more research could be done on validating these findings across countries and regions.

ENVIRONMENTAL CHARACTERISTICS

Successful entrepreneurs, who lead HGFs, thrive in environments with multiple factors working together to form an entrepreneurial ecosystem. The entrepreneurship ecosystem necessary for cultivating entrepreneurs comprises conducive policy, markets, capital, human skills, culture, and support mechanisms coming together to provide an enabling environment.⁸³ Studies that evaluate the binding constraints to growth for potential HGFs, tend to find multiple interconnected factors, which combine to either create or limit a successful entrepreneurial ecosystem. For example, a study⁸⁴ that looks at constraints to potential HGFs in the United Kingdom identified several key binding constraints to growth. Among them, obtaining long-term risk capital, access to insurance, skill shortages in potential

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employees, overly burdensome labor regulations that limit their ability to hire workers under flexible conditions, lack of managerial skills, and the availability and cost of premises.

The OECD's diagnostic framework defines an entrepreneurial ecosystem as a set of interconnected entrepreneurial actors, entrepreneurial organizations, institutions, and processes that formally and informally coalesce to connect, mediate, and govern the performance within the local entrepreneurial environment.⁸⁵ Similarly, ANDE's review of the various measures, definitions, and diagnostics of entrepreneurial ecosystems found that they all take a multidimensional approach to measurement, taking into account the various domains that can affect entrepreneurship in a region and how they interact with each other.⁸⁶

Which elements of an entrepreneurial ecosystem matter most for entrepreneurial outcomes is a matter of some debate. Below is a brief discussion of the various elements that are thought to compose an entrepreneurial ecosystem. There is continued debate on which of these inputs should be prioritized by policymakers and which matter most to a successful ecosystem:

Regulatory frameworks: Governmental regulation is an important aspect of any vibrant private sector, but **overly burdensome regulatory frameworks often serve as binding constraints to firm growth.** There is strong evidence that a heavy regulatory burden negatively impacts the rate of new firm entry.⁸⁷ While small and informal firms are often able to function by circumventing government regulations and taxation, they risk becoming more visible as they grow; therefore **high-growth firms tend to be formal enterprises.**

Contracts with governments and large international buyers are often off-limits for informal firms, due to legal documentation requirements. Because of this, informal small firms tend to grow more slowly than formal firms.⁸⁸ An econometric study in Cote D'Ivoire⁸⁹ corroborated this, finding that formal status has a positive effect on firm growth, even after controlling for firm size, age, and efficiency. This poses significant barriers to growth for many firms in developing countries, as the vast majority of these firms tend to be informal.⁹⁰

Other aspects of the so-called "business-enabling environment" for which regulation is a significant determinant, include the tax system, property rights enforcement, access to external finance, bankruptcy regulation, and labor and tax regulation. A review of the

impact of the business environment on SME entry found that a **thriving and vibrant SME sector (characterized by a high rate of entry of new and innovative entrepreneurial firms and exit of less successful ones) is associated with environments that promote ease of entry and exit due to a low administrative burden, have sound contract enforcement mechanisms, effective property rights registration procedures, strong creditors' rights protections, low tax burden on new and small firms, and more flexible labor markets.**⁹¹ The study used SME data from 99 countries spanning from high to low incomes.

Human capital: A well-functioning entrepreneurial ecosystem has ample availability of human capital in the form of skilled employees and managers. A growing evidence base points to the differential impacts of managerial capacity and management practices on firm growth. For example, in Mexico, a randomized experiment found that consulting services to SMEs generated an 80 percent increase in sales and a 120 percent increase in profits.⁹² Evaluation findings⁹³ from European programs that provide subsidized advice to HGFs find a modest sales growth effect for smaller firms in the sample. Endeavor Insight conducted surveys of more than 1,000 leaders at entrepreneurial companies in Uganda and Kenya⁹⁴ to identify factors that helped their companies grow. Interestingly, the respondents rarely mentioned regulatory frameworks and taxes as a major constraint to growth. Instead, entrepreneurs in both countries highlighted the importance of **human capital** increases (including management and technical training) as a significant need.

Startups may, in fact, be more dependent on human capital than incumbent firms. Cardon⁹⁵ explains that startups may require specific expertise and highly-skilled workers more than incumbent firms, because they often lack other resources such as capital, resources, and access to finance. In this sense, the human capital contained within the founders and workers of a startup is often its greatest asset. A study⁹⁶ of 338 Italian new technology-based firms from 1995 to 2008 measured the long-term effects of the founders' initial human capital at the time of firm start up. It found a positive and significant presence of an "entrepreneurial imprinting effect" exerted by founders' levels of human capital on venture growth.

Access to Finance: Access to finance is a key feature of an entrepreneurial ecosystem and one that is often lacking for small and new firms in developing countries. A wide body of literature suggests that small firms have more difficulty accessing finance than larger firms.⁹⁷ However in their review of the literature, Nichter and Goldmark

conclude that access to finance may be necessary for small firm growth, but not enough by itself. A randomized study of 225 SMEs producing garments in Nairobi, Kenya, explicitly tested the link between access to finance and firm growth and found mixed results. A few cross-country studies that use the World Bank Enterprise Survey (WBES) data find that alleviation of credit constraints can lead to improved firm performance and employment growth.⁹⁸ A study in Romania⁹⁹ found that access to external finance increases the growth of both employment and sales among small firms. Ongoing research¹⁰⁰ by DECFP-IFC uses firm-level data (Orbis and WBES data) to analyze how access to finance affects firm employment growth and, in particular, investigates whether there is a differential impact for microenterprises and SMEs. Preliminary results suggest that there is a strong positive correlation between firm financing and the rate of employment growth and that there is a 70 percent greater effect for SMEs than for large firms. Whether or not prior access to bank finance is a predictor of firm success is something that is debated.

Access to finance for innovation is often a product of the overall business environment. A study¹⁰¹ in Bolivia pinpoints the effect that macroeconomic volatility may have on investment for growth entrepreneurs. The study looked at how binding constraints vary across different firm categories (such as firm size, or growth trajectory), and found that larger firms or firms with higher growth potential were affected more directly by the overall business environment, as their growth is tied closely with investment, which in turn is determined by overall economic volatility. In more volatile economies, savings and investment are reduced.¹⁰² Indeed, some claim that one of the biggest market failures for potential HGFs in developing countries is related to the difficulties in financing innovation, as these firms often rely on innovation-intensive growth. Innovation implies uncertain rewards. Innovation risks tend to be exacerbated in the context of developing countries, where the path to scale is more volatile, and capital is more reluctant to get involved.¹⁰³

Of particular note is the role played by informational asymmetries in restricting access to finance for small and young firms. Financial sector infrastructure reforms are designed to reduce such informational frictions. Several studies have investigated the effect on firm performance of implementation of financial sector infrastructure reforms. This research has found that reforms help increase SME access to finance and lower interest rates,¹⁰⁴ mitigate negative effects of low bank competition within countries, reduce collateral required to secure loans, increase lending collateralized by moveable assets, and boost firm performance in areas such as sales and employment.¹⁰⁵

Social Networks and Access to Markets: A key feature of a successful entrepreneurial ecosystem is the ability of an entrepreneur to access markets, both global and domestic. Having an extensive social network is an asset that can facilitate an entrepreneur's access to markets.¹⁰⁶ Many studies across countries and industries confirm the notion that growth entrepreneurs tend to come from close-knit communities, agglomerated networks, and distinct ethnic communities that control modes of production for certain sectors.¹⁰⁷ Clusters (geographic and sectoral agglomerations of enterprises) may also facilitate small firm growth by enhancing horizontal, as well as vertical, linkages.¹⁰⁸

Of particular note are the effects of so-called agglomeration economies, or businesses that cluster together in specific geographic areas, usually cities. The positive effects on firm innovation and growth due to agglomeration are due to a better availability of infrastructure, more opportunities for learning, imitation through labor turnover and interaction with suppliers, and larger markets for skilled labor, raw materials, and output.¹⁰⁹ The regional dimension of high-growth firms should not be understated—in fact, this is seemingly the only characteristic of high-growth firms where there appears to be widespread agreement. These networks of firms feature a high degree of specialization and tend to benefit from spillovers due to geographical proximity and are found across countries and industries. For example, Silicon Valley for high-tech or the textile industry in Northern Italy. There are, in fact, a small number of regions in most industrialized countries that stand out with a much higher share of fast-growing firms than their numbers in the overall number of firms would suggest.¹¹⁰

Culture: Culture, defined as the underlying system of values particular to a specific group or society, is thought to shape the development of personality traits and may motivate individuals in a society to engage, or not engage, in certain behaviors. Thus, a culture that encourages entrepreneurial activity through its selection of values is a feature of the entrepreneurial ecosystem. A cross-country study¹¹¹ using 1,800 survey responses in nine countries found a relationship between Hofstede's¹¹² culture dimensions and the prevalence of entrepreneurial potential. In particular, the study found that entrepreneurial orientation (an internal locus of control combined with a propensity toward innovation) is more likely to appear in individualistic, low-uncertainty avoidance cultures than in collectivistic, high-uncertainty avoidance cultures. Future research is recommended to investigate links between other aspects of entrepreneurial

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behavior and other contextual factors, such as education systems, political economy, and stages of development.

Doepke and Zilibotti¹³ argue that the drivers of economic growth are related to preference formation and the transmission process of families. Also, the existing distribution of preferences in the population determines the potential for economic growth, chiefly through the likelihood of individuals' pursuit of entrepreneurship. They show that fast-growing countries have larger shares of the population exhibiting preferences conducive to innovative activities. Finally, a cross-country study¹⁴ that combines national-level culture measures from the Schwartz Values Survey, and data from GEM Surveys, evaluated the moderating effect of national culture on national entrepreneurship-enabling institutions, such as the presence of informal finance, and entrepreneurship education. The study found that the effect of investment capital on entrepreneurial entry was weaker in more hierarchical and conservative cultures.

NEXT STEPS FOR THE STUDY

Much more can be learned about the characteristics of HGFs in developing countries and the nature of their growth trajectories. The studies referenced above seem to point toward some picture of what high-growth firms might look like, where they are concentrated, and what characterizes the environments that promote their growth. However, there is no widespread agreement on these claims. The literature is conflicted on a model for the nature of HGFs, and, in fact, there appears to be a great amount of heterogeneity in terms of firm performance and firm dispersion. This study will, therefore, aim to increase the evidence base available to clarify what the determining factors are for a high-growth firm to emerge and grow, with a particular focus on evidence for developing countries.

V. WHAT POLICY INSTRUMENTS ARE EFFECTIVE AT ENABLING HIGH-GROWTH BUSINESSES?

THE RATIONALE FOR PUBLIC INTERVENTION

The rationale for public intervention in private markets is often justified by way of explaining binding constraints on firms, and how public intervention can alleviate those constraints. **The binding constraints to firm growth differ considerably between transformational and subsistence entrepreneurs.** Many authors approach the discussion of market failures for HGFs by anchoring it in the economics literature that looks at binding constraints to firm growth.¹¹⁵ Whereas subsistence entrepreneurs may be limited by access to short-term credit or burdensome business startup regimes, transformational entrepreneurs with aspirations for growth most likely face constraints in the regulation of labor and product markets, access to longer-term risk capital, and overall macroeconomic stability.¹¹⁶ Constraints that affect high-growth firms and innovation activities, in particular, tend to relate to market failures that restrict the **free flow of knowledge and new ideas, the formation of and maintenance of networks and social capital, and the flow of risk capital** that can be used for innovation.¹¹⁷

The first source of market failures referred to in the literature involves network externalities,¹¹⁸ which occur when a firm's value is conditional on the geographic proximity of complementary firms, institutions, and individuals. Thus regional or geographic platforms, which attempt to foster entrepreneurial networks that promote knowledge spillovers are often pursued as policy. This relates to the "entrepreneurial ecosystem" approach.

The second source of market failure focuses on **knowledge externalities**. Knowledge is typically taken to be a public good. Because local conditions may determine a firm's or an individual's ability to access knowledge, it is thought that public policy can play a direct role in promoting investments in knowledge, which can provide the basis for spurring entrepreneurial firms into becoming high-growth firms.

The third source of market failures involves the **demonstration effect** emanating from knowledge-

based entrepreneurial activity. Nascent entrepreneurs that have the opportunity to observe other successful firms and prove the viability of certain technologies typically have an advantage over other firms in regions or countries that do not have this demonstration effect. The demonstration effect should induce subsequent knowledge-based entrepreneurship, and thus areas that lack demonstrable success stories may remain difficult environments for aspiring HGFs.

INTERVENTIONS AND POLICIES TO PROMOTE AND SUPPORT HGFS

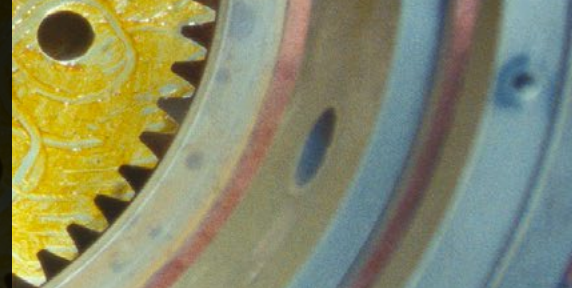
There is debate on whether firms should be directly targeted, or whether policy should focus on improving framework conditions. The literature is unsettled on which approach is better: targeting specific firms or focusing on macro policies that enhance competition and alleviate constraints produced by market failures?

Policies that stimulate growth entrepreneurship and innovation should acknowledge the distinction between transformational and subsistence entrepreneurship and target their approaches accordingly. As discussed in Chapter II of this report, Schoar¹¹⁹ and others have identified the fundamental distinction between subsistence/necessity and transformational/opportunity entrepreneurs. Yet, many researchers note that the vast majority of entrepreneurship policies in developing countries has failed to make this distinction, and thus has failed to target properly the right group of firms. Instead, much of entrepreneurship policy is aimed at supporting broad-based entrepreneurship and firm startup, which has little implications for employment growth, innovation, and structural transformation.¹²⁰ As Shane and others argue, merely encouraging creation of new startups will not transform stagnated economies.

Autio et al.¹²¹ examined policy measures from nine developing countries and determined that, although the importance of high-growth entrepreneurs has been widely established, in an overwhelming number of

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cases government policies still tend to focus on broad-based entrepreneurship, without targeting innovation activities or growth-oriented firms. In fact, in many developing countries, the financial infrastructure and accompanying policy environment is better equipped to provide micro financing to small, unproductive subsistence firms, which creates bottlenecks for transformational entrepreneurs, and produces the unintended consequences of promoting unproductive entrepreneurship.¹²² Thus, governments should distinguish between policies that support all entrepreneurship on the one hand, and policies that support the creation and maintenance of high-growth, innovative firms on the other.¹²³

As discussed in the previous sub-section, many market failures that constrain the innovation activities of potential HGFs relate to problems in the business environment. Perhaps the biggest one is a lack of access to expansion capital, which, for potential HGFs in particular, requires the expansion of institutions that facilitate the growth of venture capital and private equity. Much research has established that **vehicles that extend entrepreneurial finance to small but growing firms are successful at both rationing credit (and selecting successful firms), and at helping firms to grow.** For instance, Kerr et al.¹²⁴ use datasets from groups of angel investors in the U.S. and employ a regression discontinuity approach to evaluate the impact of angel financing on firm growth, finding that the extension of entrepreneurial capital is associated with a 20 to 25 percent higher likelihood of firm survival after four years and a 16 to 19 percent increase in the likelihood of eventually expanding to at least 75 employees. Thus, there is an argument that governmental policy should be focused on freeing up private capital to reach potential HGFs.

Policy that supports high-growth potential, transformational firms should include elements of entrepreneurship policy, SME support frameworks, and innovation policy. Wong¹²⁵ terms the confluence of these different sets of policy, “innovative entrepreneurship policy” (IEP). IEP is geared specifically to supporting the growth of HGFs and differs from broad-based SME policy in a number of respects. While SME policy is mainly about firm survival, IEP should focus on the growth of a few select firms; while SME policy tends to look at the firm as the principle unit of analysis, IEP will look equally at the firm, and the individual “transformational” entrepreneur; while SME policy is primarily concerned with leveling the playing field for small firms vis-à-vis large firms, reducing red tape, and improving productivity, IEP is concerned with overcoming distinct market failures at early points in the firm’s lifecycle, developing missing parts of the

ecosystem (mainly related to access to capital), and places a special emphasis on innovation over productivity.

This will often entail governments playing an active role in forming strong links between universities and the private sector, providing subsidies for R&D investments for targeted firms, where appropriate, developing specialized investor capabilities (for example, governmental support to angel and VC investor communities), and labor market and education policies that specifically aim to increase the supply and quality of entrepreneurs. Some examples of concrete governmental policies that are successful at implementing IEP are national recognition awards for innovative entrepreneurs (Singapore), government policies to promote innovation and R&D at universities (U.S. Bayh-Dole Act, U.S. SBIR Program), co-investment schemes (Taiwan, Singapore), and reducing restrictive immigration policies (Chile, Singapore).

Government policy can play an active role in establishing a successful entrepreneurial ecosystem. However it must take a holistic view of the ecosystem. As an advocate for the “entrepreneurship ecosystem” approach to supporting HGFs, Isenberg¹²⁶ argues that many governmental efforts go wrong in that they address only one or two elements of the ecosystem. However, the entrepreneurship ecosystem consists of a set of many elements that interact in complex ways, and thus broad-based government support should reflect this. He puts forth some suggestions to create an entrepreneurship ecosystem. They include, among others, (i) shaping the ecosystem around local conditions and culture, (ii) avoiding directing resources to only high-technology sectors, but acknowledging that empirical research shows that the majority of HGFs are not primarily tech-driven, (iii) tackling cultural change when necessary, (iv) avoiding over-engineering clusters, but helping them to grow organically, (v) meting out money to new ventures carefully, and recognizing that many incubators do not produced successes, and (vi) reforming legal, bureaucratic, and regulatory frameworks, without over-emphasizing reforms, and without assuming that these are enough to establish a successful entrepreneurial ecosystem. **The reforms that have the most positive impact on venture creation are decriminalizing bankruptcy, shielding shareholders from creditors, and allowing failed entrepreneurs to quickly start over.**

Governments have an important role in establishing the proper institutions to help spur the growth of potential HGFs. Schreyer¹²⁷ argues that governments should focus on so-called “framework conditions” that have impact on firms at early stages of the lifecycle. These include policies

such as rules and regulations that influence the cost of hiring the first employee, the protection of intellectual property rights for young and innovative firms, reducing administrative impediments to firm startup, and economic incentives such as reducing the negative consequences of exiting and firm failure. Other framework conditions that are important to foster firm growth put forward by Schreyer include doing away with indirect tax regimes favoring small enterprises (that can create perverse incentives for firms to remain small), focus on upgrading and making available quality infrastructure such as power, roads, and transportation, upgrade knowledge infrastructure by incentivizing the private sector to increase R&D expenditures, and promote policies that help channel early stage risk capital to innovative activity.¹²⁸

Henrekson and Johannsson¹²⁹ argue that the most governments can (and should do) is eliminate policies that disadvantage potential HGFs, such as centralized wage-setting institutions, employment protection legislation, and institutions that reduce the incentives for VC investment (such as high capital gains taxes). Positive things that governments can do include implementing strong social security and social insurance systems, which can provide income security during periods of uncertainty for both entrepreneurs and new employees in entrepreneurial firms.

For this reason, efforts to promote innovation finance are also common, either through direct provision of capital, or by improving framework conditions and promoting crowding-in of private capital. Examples of this include co-investment vehicles, formation of angel investor networks, and the development of VC funds designed specifically for firms that pursue innovation activities in developing countries.

METHODOLOGIES TO IDENTIFY POTENTIAL HIGH GROWTH FIRMS AND ENTREPRENEURS EX-ANTE

Given the heterogeneous nature of HGFs, there is debate in the literature around whether or not potential HGFs can be identified *ex-ante*. Many researchers argue that, as HGFs are heterogeneous in their characteristics and lack persistence in their growth levels, there are serious difficulties in predicting which firms will grow, making them unlikely to be vehicles for targeted public policy. Therefore, goes this line of thinking, policies should not target specific firms, but rather should target institutional reforms geared toward the broader business environment to foster high-growth firms. On

the other side of the debate is the argument that, while there is no set of universal characteristics that allow us to predict effectively which firms will grow, we can still make some basic predictions regarding firm success and outcomes. Particularly, for firms or individuals that have already demonstrated some moderate success in early stages, or based on what we know from actual HGFs.

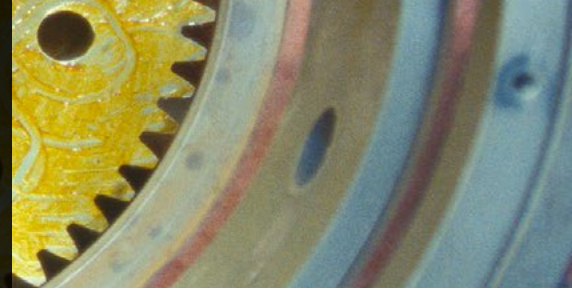
Coad et al.¹³⁰ express doubt over the methodologies available to define and select HGFs, and highlight the controversies surrounding the policy implications of available research. They argue that in many cross-country studies, firm growth appears to be random or at least episodic in nature, and therefore not predictable. Thus, the available evidence is not encouraging for policymakers to target HGFs to promote future firm growth. Instead, they argue that more encouraging results come from research that supports a relationship between business dynamism and institutional elements of the business environment—such as financial development, banking competition, and institutions that foster better contract enforcement.

Despite the evidence that HGFs are indeed heterogeneous and thus difficult to predict *ex-ante*, there are some new testable models to predict firm growth. For instance, the Lussier 15 variable business success versus failure model¹³¹ stands out in its accuracy and has been tested and validated in different parts of the world. The model predicts business success or failure (not growth, but survival) by identifying 15 variables relating to the entrepreneur's level of experience and training, the extent of business planning, and certain firm characteristics such as structure, age, and size. A study¹³² that tested the model on Israeli SMEs found that small businesses can increase their chances of success and subsequent growth if they have adequate capital, maintain good records and financial control, have management experience, have specific plans, make use of professional advice, and have good economic timing.

Brown et al.¹³³ find that HGFs in the United Kingdom are heterogeneous and do not fit any pre-determined mold in terms of sector, age, or size. However, they do not abandon the idea of being able to predict the high growth potential of these firms. While they doubt that a strong predictive capacity exists that can precisely spot firms that will go through a period of high growth, they argue that some firms may display “early signs”, and thus targeting them can be justified. They argue that instead of promoting new startup creation via institutional reforms, **“potential” HGFs can and should be sourced from existing SMEs that display early signs of success.**

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Such early signs include a short-term period (over the course of one year, for example) of above average growth (between 10 to 30 percent revenues). While short-term growth does not qualify as “high-growth” by definition, it could be a predictor of future success. Additionally, certain qualitative measures could be used, such as assessing companies for recent organization changes, adopting a new business model, seeking access to growth capital rather than working capital, seeking support for internationalization (not just exporting), and recent increasing of staff numbers.

A promising new focus area to identify potential HGFs is through the lens of the individual entrepreneur. Gallup, through its EP10 Entrepreneurial Profile Assessment, has developed a means to identify the top ten personality traits most associated with entrepreneurial behavior and outcomes. Its research indicates that, when applied across a nationally representative sample, only 2 percent of test-takers show high levels of entrepreneurial talent, and only 0.5 percent show exceptional talent. Its assessment claims that those identified as having exceptional talent are 24 times more likely to find entrepreneurial success, and there is a 1 in 20 chance of identifying a successful entrepreneur through its system, versus a 1 in 100 chance through the general population. Gallup’s program is being piloted with high schoolers in Costa Rica to test their predictive model of entrepreneurial talent,¹³⁴ and should it be successful, could greatly add to our understanding of predictive models.

New research on business plan competitions, in particular, in combination with expert panels, suggests that these methods show a lot of promise in being able to effectively predict growth. A recent World Bank experimental study¹³⁵ in Nigeria showed that a business plan competition was successful at identifying entrepreneurs with the potential to use large amounts of capital. Through the use of capital, they were able to generate enterprises that hire employees and exhibit rapid growth. The study estimated a real return to capital of approximately 1.5 percent per month on the grants given through the competition and was the first study to provide experimental evidence of how business plan competitions can spur the growth of firms. Recent experimental evidence from both Ghana and Sri Lanka suggests that both survey scores and panel experts are reasonably able to predict firm growth. While survey scores are reasonably predictive of what the panel might say about a particular business idea, the panel scores tend to add to the predictive power.¹³⁶

The composition of the expert panels, and their ability to meet entrepreneurs face-to-face is an important component of the success of a competition’s predictive ability.

A World Bank advisory program¹³⁷ in Poland recently tested a new model of entrepreneurship development using competitions that include face-to-face interviews with expert panels as a means to identify potential high-growth firms (termed “Champions” in the study). Initial findings suggest that interviewing potential entrepreneurs in person is a fundamental aspect of the competition’s predictive capacity, as there are many things that are only learned via face-to-face contact, such as the person’s motivation, willingness to learn, ability to network, open-mindedness, and understanding of the general industry in which he or she operates (all of which are characteristics of these so-called “champions”). Another key aspect of the program is that the panels are composed of a combination of policy experts, and experts from the financial industry, such as venture capital or private equity investors. Many programs suffer because they do not include the judgments of professional investors. These investors have key skills that help to predict the viability of a business idea and the entrepreneurial qualities of a firm’s leader.

NEXT STEPS FOR THE FLAGSHIP

This flagship study can help clarify current debates by properly defining growth entrepreneurship policy as distinct from broad-based entrepreneurship policy and SME policy, and by elaborating the different growth entrepreneurship instruments available to policymakers. The “menu of policy options”, found in the Annex of this document, is a first attempt at classifying the range of instruments currently available.

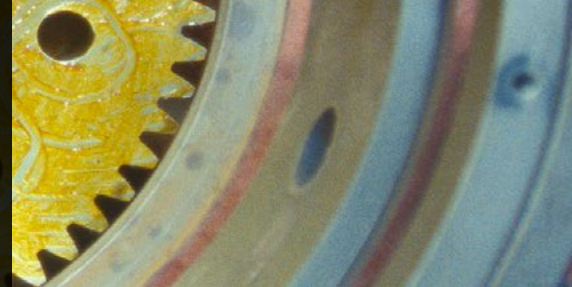
To the extent possible given the limits of time and resources, **the Flagship study will seek to assess the effectiveness of the full array of policies widely hypothesized to have first-order impacts on the emergence and subsequent viability of high-growth firms.** These include not only government initiatives aimed at improving entrepreneurs’ access to capital, markets, knowledge, and workforce talent, but also competition policy, regulatory policy, and procurement policy. These policies, along with others such as innovation policy and skill development, are generally “horizontal” or economy-wide. In addition, there can be spatial approaches (special economic zones etc.), which provide a strong entrepreneurial ecosystem/culture. There can also be firm-level interventions given that, for example, management upgrading is not automatic and requires cultivation (Bloom et al., 2013).

END NOTES

- 1 Wennekers and Thurik, 1999.
- 2 Schoar, 2009.
- 3 Ibid.
- 4 2007.
- 5 The authors consider “entrepreneurial firm”, and “entrepreneur” interchangeable terms. This definition is used primarily because it provides a useful methodological distinction between new and fast-growing small firms and bigger, older, incumbent firms.
- 6 Birch, 1981.
- 7 Ibid.
- 8 The employment growth quantifier (EGQ) is the product of the absolute and percent change in employment over a four-year period.
- 9 Acs et al., 2008.
- 10 1942.
- 11 Henrekson and Johansson, 2010.
- 12 In Acs and Audretsch, 2010.
- 13 Audretsch, 2005.
- 14 2006.
- 15 2009.
- 16 2008.
- 17 Schoar, 2009.
- 18 2013.
- 19 2008.
- 20 2010.
- 21 2009.
- 22 2005.
- 23 2010.
- 24 2005.
- 25 Baumol, 1990.
- 26 2007.
- 27 Praag and Versloot proxy innovation by measures of R&D expenditure, patents, and the introduction of new technologies or products.
- 28 2000.
- 29 Robbins, et al., 2000.
- 30 Small Enterprise Assistance Funds, 2007. SEAF is an international investment management group that provides growth capital and business assistance to small and medium enterprises (SMEs) in emerging and transition markets.
- 31 In Acs and Audretsch, 2010.
- 32 2008.
- 33 2006.
- 34 Agglomeration economies are the benefits that accrue to firms, regions, and governments, when firms and people locate near one another in cities and industrial clusters (Glaesner, 2010). These benefits ultimately come from transport cost savings. There is a fair amount of literature that studies the effect that agglomeration has on firm entry and growth, which will be covered later in this review.
- 35 2009.
- 36 2007.
- 37 2008.
- 38 Stangler and Litan, 2009.
- 39 Haltiwanger et al, 2010.
- 40 De Kok, et al., 2013.
- 41 1981; 1987.
- 42 2012.
- 43 2009.
- 44 1995.
- 45 2008.
- 46 Deschryvere, 2008.
- 47 Anyadije-Danes et al., 2009. NESTA (National Endowment for Science, Technology, and the Arts) is an independent charity that works to increase the innovation capacity of the United Kingdom.
- 48 Gibson, 2011.
- 49 Study by Instituto Brasileiro de Geografia e Estatística. Reviewed by Gibson, 2011.
- 50 Gibson (2011) estimates that gazelles occupy 22.3 percent of firms in Lithuania, 20.3 percent in Bulgaria, and 18.2 percent in Romania, compared to single digit numbers in Western European countries.
- 51 Endeavor Insight, 2014.
- 52 Ibid.
- 53 Gorman and Sahlman, 1989.
- 54 2009.
- 55 Parker, 1995.
- 56 Nichter & Goldmark, 2009.
- 57 Kevane and Wydick, 2001; Kantor, 2005; Downing and Daniels, 1992; Nichter and Goldmark, 2009.
- 58 From a study by Downing and Daniels (1992)
- 59 Mied and Liedholm, 1998.
- 60 Stangler and Spulber, 2013.
- 61 Saeed et al., 2013.
- 62 “Nature or Nurture: Decoding the DNA of the Entrepreneur”. Ernst and Young. Available <http://www.ey.com/GL/en/Services/Strategic-Growth-Markets/Nature-or-nurture--Decoding-the-DNA-of-the-entrepreneur--Entrepreneurs-share-core-traits>.
- 63 Gallup EP10 Profile. Available <http://www.gallup.com/products/170990/entrepreneurial-profile.aspx>.
- 64 Kauffman Foundation, 2009.
- 65 Stangler, 2009.
- 66 Mead and Liedholm, 1998; Parker, 1995.
- 67 Kantis, et al. 2004.
- 68 Burki and Terrell, 1998.
- 69 2015.
- 70 Eslava and Haltiwanger, 2012.

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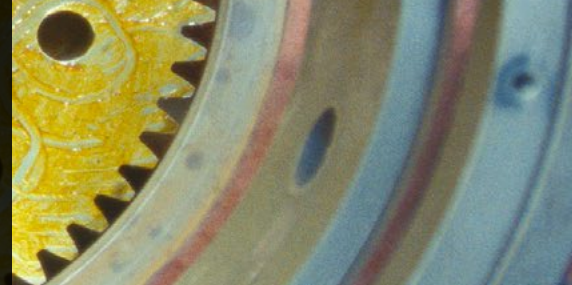
- 71 2011.
- 72 2008.
- 73 2014.
- 74 Aterido et al., 2007; Bigsten and Gebreeysus, 2007; Dinh et al., 2010; Ayyagari et al., 2013.
- 75 2008.
- 76 2014.
- 77 2014.
- 78 Mason and Brown, 2012.
- 79 Schreyer, 2000.
- 80 Aterido et al., 2007.
- 81 Jung et al., 2011.
- 82 Stone and Badaway, 2011.
- 83 Isenberg, 2010.
- 84 Lee, 2012; Grimm et al., 2012.
- 85 Brown and Mason, 2013.
- 86 ANDE, 2013.
- 87 Swedish Agency for Growth Policy Analysis, 2010.
- 88 Nichter & Goldmark, 2009.
- 89 Sleuwaegen & Goedhuys, 2002.
- 90 IFC SME Country Indicators, 2010.
- 91 Gonzales Rocha, 2015.
- 92 Bruhn, Karlan, and Schoar, 2013.
- 93 Storey (2009) evaluates the U.K. Enterprise Initiative, New Zealand Growth Services Range, and Denmark Growth Houses.
- 94 Endeavor Insight, 2015a; Endeavor Insight, 2015b.
- 95 2003.
- 96 Grilli et al., 2013.
- 97 See for example, Ayyagari, et al., 2012; Schiffer and Weder, 2001.
- 98 Dinh et al. (2010) find that access to a loan increased SME employment growth by 3.1 percent, using ES panel data. Shinozaki (2012) found that 1 percent increase in credit resulted in increased sales of 0.76 percent in large firms, and 0.58 percent in small firms in Indonesia. Gandelman and Rastelleti (2013) find that a 1 percent increase in overall credit growth for SMEs translated to 0.5 percent increase in overall investment rate.
- 99 Brown, Earle, and Lup. 2004.
- 100 DECFP-IFC Research on SME Finance and Employment. Sole Martinez. Forthcoming.
- 101 Vargas, 2015.
- 102 Rubini, 2013.
- 103 "The Challenges to Finance Innovation". Innovation Policy Platform. Available at: <https://www.innovationpolicyplatform.org/sites/default/files/The%20challenges%20to%20finance%20innovation.docx>.
- 104 Funchal (2008) finds that bankruptcy reforms in Brazil that improved protections for creditors resulted in a reduction of 22 percent on average for firms' costs of debt, an increase of 39 percent in the aggregated level of credit, and an increase in the flow of both long and short-term credit.
- 105 See Love et al., 2013; Dalberg, 2011; Brown et al., 2009; Love and Martinez-Peria, 2012; Martinez-Peria, 2015
- 106 Nichter & Goldmark, 2009.
- 107 Berry, 1993; Barr, 1998; Fafchamps, 2000.
- 108 Schmitz, 1999.
- 109 De Kok, et al., 2013.
- 110 Schreyer, 2000.
- 111 Mueller and Thomas, 2001.
- 112 1980.
- 113 2013.
- 114 De Clercq et al., 2014.
- 115 Dinh et al., 2010; Vargas, J., 2015.
- 116 Schoar, 2009.
- 117 Audretsch, 2012.
- 118 Audretsh, Keilback, and Lehman, 2005.
- 119 2009.
- 120 Coad and Moreno, 2015; Shane, 2009; Coad and Nightingale, 2013.
- 121 2007.
- 122 Shoar, 2009; Auerswald et al., 2010.
- 123 Auerswald et al., 2010.
- 124 2011.
- 125 2013.
- 126 2010.
- 127 2000.
- 128 Kumar, 2009.
- 129 2010.
- 130 2014.
- 131 Lussier, 1995.
- 132 Marom and Lussier, 2014.
- 133 2014.
- 134 Gallup, 2015.
- 135 McKenzie, 2015.
- 136 Fafchamps and Woodward, 2014; Woodward Presentation, 2013.
- 137 World Bank Group, 2015. References

REFERENCES

- Acs, Z. 2010. "High-Impact Entrepreneurship". Chapter 7 in Z.J. Acs, D.B. Audretsch (eds.), *Handbook of Entrepreneurship Research*, 165. International Handbook Series on Entrepreneurship 5, DOI.
- Acs, Z., Parsons, W., and S. Tracy. 2008. "High-Impact Firms: Gazelles Revisited". Small Business Research Summary. SBA Office of Advocacy. Small Business Research Summary. No. 328.
- Acs, Z., and P. Mueller. 2008. "Employment Effects of Business Dynamics: Mice, Gazelles, and Elephants". *Small Business Economics*. 30: 85 – 100.
- Acs, Z., and Virgill, N. 2010. "Entrepreneurship in Developing Countries". Chapter 18 in Acs, D.B. Audretsch (eds.), *Handbook of Entrepreneurship Research*, 165. International Handbook Series on Entrepreneurship 5, DOI.
- Aga, G., Francis, D., and Rodriguez Meza, J. 2015. "SMEs, Age, and Jobs: A Review of the Literature, Metrics, and Evidence". World Bank Enterprise Surveys Analysis Unit Working Paper. World Bank, Washington, D.C.
- ANDE. 2013. "Entrepreneurial Ecosystem Diagnostic Toolkit. Aspen Network of Development Entrepreneurs.
- Anyadike-Danes, M. Bonner, K., Hart, M., and Mason, C. 2009. "Measuring Business Growth: High Growth Firms and their Contribution to Employment in the U.K." Research Report MBG/35, London: National Endowment for Science, Technology, and the Arts.
- Ardagna, Silvia and Annamaria Lusardi. 2008. "Explaining International Differences in Entrepreneurship: The Role of Individual Characteristics and Regulatory Constraints, in: International Differences in Entrepreneurship, edited by Josh Lerner and Antoinette Schoar, NBER.
- Audretsch, D. B. 2005. "The Knowledge Spillover Theory of Entrepreneurship and Economic Growth". *The Emergence of Entrepreneurial Economics: Research on Technological Innovation, Management and Policy*, Vol. 9: 37-54.
- Audretsch, D. B. 2012. "Determinants of High-Growth Entrepreneurship". Report Prepared for the OECD/DBA International Workshop on 'High-Growth Firms: Local Policies and Local Determinants'. OECD.
- Auerswald, P., Bayrasli, E., and Shroff, S. 2012. "Creating a Place for the Future: Toward a New Development Approach for the Islamic Republic of Pakistan". *Innovations: Technology, Governance, Globalization*, 7:2; pp. 107-134.
- Auerswald, P. E. 2008. "Entrepreneurship in the Theory of the Firm". *Small Business Economics* (2008) 30: pp. 111–126.
- Autio, E., Kronlund, M., and Kovalainen, A. 2007. "High-Growth SME Support Initiatives in Nine Countries: Analysis, Categorization, and Recommendations". Report Prepared for the Finnish Ministry of Trade and Industry. Publications, Industries Department.
- Ayyagari, M., A. Demircuc-Kunt, & V. Maksimovic. 2012. "Financing of Firms in Developing Countries: Lessons from Research". Policy Research Working Paper 6036. World Bank, Washington, D.C.
- Baptista, R. and Preto, M. 2009. "New Firm Formation and Employment Growth: Regional and Business Dynamics". *Small Business Economics*.
- Barr, A. M. 1998. Enterprise performance and the functional diversity of social capital. Working paper number 65. Centre for the Study of African Economies, University of Oxford.
- Baumol, W. J. 1968. "Entrepreneurship in Economic Theory". *The American Economic Review*, Vol. 58, No. 2, Papers and Proceedings of the Eightieth Annual Meeting of the American Economic Association (May), pp. 64-71.
- Baumol, W. J. 1990. "Entrepreneurship: Productive, Unproductive, and Destructive", *The Journal of Political Economy*, Vol. 98, No. 5, Part 1. (Oct., 1990), pp. 893-921.
- Berry, S. (1993). No condition is permanent: The social dynamics of agrarian change in Sub-Saharan Africa. Madison, WI: University of Wisconsin Press.
- Birch, D. 1981. "Who Creates Jobs?" *The Public Interest*. 65, 3 – 14.
- Birch, D. 1987. *Job Creation in America: How our Smallest Companies Put the Most People to Work*. Free Press, New York.
- Birch, D., Haggerty, A., and W. Parsons. 1995. *Who's Creating Jobs?* Cognetics, Inc. Cambridge, MA.
- Blackburn, R. 2012. "Segmenting the SME Market and Implications for Service Provision: A Literature Review". Kingston Business School, Kingston University London.
- Bloom, N., Eifert, B., Mahajan, A., McKenzie, D., and Roberts, J. 2013. Does Management Matter? Evidence from India. *The Quarterly Journal of Economics*, 128(1):1–51
- Brown, Martin, Tullio Jappelli and Marco Paganob. 2009. "Information sharing and credit: Firm-level evidence from transition countries." *Journal of Financial Intermediation* 18(2): 151-172.
- Brown, R., C. Mason, & S. Mawson. 2014. "Increasing 'The Vital 6 Percent': Designing Effective Public Policy to Support High Growth Firms". NESTA Working Paper No. 14/01.
- Brown, D., Earle, J., and Lup, D. 2004. "What Makes Small Firms Grow? Finance, Human Capital, Technical Assistance, and the Business Environment in Romania". *Journal of Economic Literature*. Working Paper 639.
- Bruhn, M., Karlan, D., and Schoar, A. 2013. "The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico". Policy Research Working Paper 6508. World Bank. Washington, D.C.
- Burki, A. A., & Terrell, D. (1998). "Measuring production efficiency of small firms in Pakistan." *World Development*, 26(1), 155–169.
- Carree, M. and A. Thurik. 2010. "The Impact of Entrepreneurship on Economic Growth". In *Handbook of Entrepreneurship Research*. Z.J. Acs and D.B. Audretsch, eds. International Handbook Series on Entrepreneurship.
- Cardon, M.S. 2003. "Contingent Labor as an Enabler of Entrepreneurial Growth". *Human Resource Management*, 42, 357-373.
- Coad, A., and Moreno, F. 2015. "High-Growth Firms: Stylized Facts and Conflicting Results". Working Paper Series. Science Policy Research Unit. SWPS 2015-05. University of Sussex.
- Coad, A. and Nightingale, P. 2013. "Muppets and Gazelles: Political and Methodological Biases in Entrepreneurship Research". *Industrial and Corporate Change*. Vol. 23, Number 1. pp. 113-143.
- Coad, A., Daunfeldt, S., Holzl, W., Johansson, D., and Nightingale, P. 2014. "High-Growth Firms: Introduction to the Special Section". *Industrial and Corporate Change*. Vol. 23, No. 1, pp. 91-112.
- Dalberg. 2011. "Independent Evaluation of the IFC Secured Transactions Advisory Project in China". Internal IFC Evaluation.
- De Clercq, D., Lim, D. & Hoon Oh, C. 2014. "Hierarchy and Conservatism in the Contributions of Resources to Entrepreneurial Activity". *Small Business Economics*. 42: 507-522.
- De Mel, S., David McKenzie and Christopher Woodruff. 2008. "Who are

Growth Entrepreneurship in Developing Countries

A Preliminary Literature Review



- the Microenterprise Owners? Evidence from Sri Lanka on Tokman v. de Soto", in: *International Differences in Entrepreneurship*, edited by Josh Lerner and Antoinette Schoar, NBER.
- Deschryvere, Matthias. 2008. "High Growth Firms and Job Creation in Finland". ETLA Discussion Papers. No. 1144.
- Dinh, H., Mavridis, D., and Nguyen, H. 2010. "The Binding Constraints on Firms' Growth in Developing Countries". The World Bank, Development Economics Unit. Policy Research Working Paper 5485.
- Doepke, M. and Zilibotti, F. 2013. "Culture, Entrepreneurship, and Growth". National Bureau of Economic Research. NBER Working Paper Series. Working Paper 19141.
- Endeavor Insight. 2014. "Poverty Reduction through Job Creation & GDP Growth: Understanding the Potential of High-Impact Entrepreneurship". Supported by Omidyar Network.
- Endeavor Insight. 2015a. "The Critical 5 Percent: Why Scale-up Companies are Vital for Job Creation in Kenya".
- Endeavor Insight. 2015b. "The Critical 6 Percent: Why Scale-Up Companies are Vital for Job Creation in Uganda".
- Eslava, Marcela and John Haltiwanger. 2012. "Young Businesses, Entrepreneurship, and the Dynamics of Employment and Output in Colombia's Manufacturing Industry". CAF Working Papers No. 2012/08.
- Fafchamps, M. (2000). "Ethnicity and credit in African manufacturing." *Journal of Development Economics*, 61(1), 205–235.
- Fafchamps, M., and C. Woodruff. 2014. "Identifying Gazelles: Expert panels vs. Surveys as a Means to Identify Firms with Rapid Growth Potential". Mimeo. University of Warwick.
- Fagerberg, J. and M. Srhloec. 2008. "National Innovation Systems, Capabilities, and Economic Development". *Research Policy* 37: 1417 – 1435.
- Fritsch, M. & P., Mueller. 2008. "The effect of new business formation on regional development over time: the case of Germany," *Small Business Economics*, Springer, vol. 30(1), pages 15-29, January.
- Funchal, B. 2008. "The Effects of the 2005 Bankruptcy Reform in Brazil". *Economics Letters*. 101. 84-86.
- Gallup, 2015. 2015. "Discovering Young Entrepreneurs: A Model Program for Developing Countries". Presentation to the World Bank, July 8, 2015.
- Ghani, E., Kerr, W., O'Connell, S. 2011. "Who Creates Jobs?: New Evidence from India" CEPR Policy Portal. Available at <http://www.voxeu.org/article/who-creates-jobs-new-evidence-india>.
- Gibson, Tom. 2011. "High-Impact Gazelles: Should they be a Major Focus of SME Development?" Consultant Report to the IFC.
- Gonzalez, A., Iacovone, L., and Subhash, H. 2013. "Russian Volatility: Obstacle to Firm Survival and Diversification". World Bank, ECA Region, Financial and Private Sector Development Unit. Policy Research Working Paper 6605.
- Gonzales Rocha, E. "The Impact of Business Environment on the Small and Medium Enterprise Sector's Size and Employment: A Cross-Country Comparison". Kobe University.
- Gorman, M., and Sahlman, W. 1989. "What do Venture Capitalists Do?" *Journal of Business Venturing*. Vol. 4 (4), p. 231-248.
- Grimm, M., Knorringa, P., and Lay, J. 2012. "Constrained Gazelles: High Potentials in West Africa's Informal Economy". *World Development*. Vol. 40, No. 7, pp. 1352-1368.
- Grilli, L., Jensen, H., and Murtinu, S. 2013. "The Imprinting of Founders' Human Capital on Entrepreneurial Venture Growth: Evidence from New Technology-Based Firms". Melbourne Institute Working Paper No. 14/13.
- Haltiwanger, J., Jarmin, R., and Miranda, J. 2012. "Who Creates Jobs? Small vs. Large vs. Young". National Bureau of Economic Research. NBER Working Paper Series. NBER Working Paper 16300.
- Henrekson, M. and Johannson, D. 2010. "Firm Growth, Institutions, and Structural Transformation". IFN Working Paper No. 820.
- Henrekson, M., and Stenkula, M. 2010. "Entrepreneurship and Public Policy." Chapter 21 in Acs, D.B. Audretsch (eds.), *Handbook of Entrepreneurship Research*, 165. International Handbook Series on Entrepreneurship 5, DOI.
- Hofstede, Geert. 1980. *Culture's Consequences: International Differences in Work-Related Values*. Beverly Hills, CA. Sage Publications.
- Independent Evaluation Group (IEG). "The Big Business of Small Enterprises: Evaluation of WBG Experience with Targeted Support to SMEs from 2006-12". 2013. The World Bank Group. Washington, D.C.
- Isenberg, Daniel. 2010. "The Big Idea: How to Start an Entrepreneurial Revolution". *Harvard Business Review*. June 2010 Issue.
- Kantis, H., Angelli, P., & Koenig, V. M. (2004). "Desarrollo emprendedor—America Latina y la experiencia internacional." Washington, DC: Inter-American Development Bank.
- Kauffman Foundation, 2009. "Where Will the Jobs Come From?" Kauffman Foundation Research Series: Firm Formation and Economic Growth. Dane Stangler and Robert Litan.
- Kerr, W., Lerner, J., and Schoar, A. 2011. "The Consequences of Entrepreneurial Finance: Evidence from Angel Financings". National Bureau of Economics Research. NBER Working Paper 15831.
- Kumar, K. "Promoting High Growth Entrepreneurship in India". *The Wall Street Journal*. December 8, 2009.
- Kuznets, Simon. 1973. "Modern Economic Growth: Findings and Reflections". *American Economic Review*. 63: 247-258.
- Lerner, J. 2009. "Boulevard of Broken Dreams: Why Public Efforts to Boost Entrepreneurship and Venture Capital Have Failed and What to do About it." *The Kauffman Foundation Series on Innovation and Entrepreneurship*.
- Lee, Neil. 2012. "Free to Grow? Assessing the Barriers Faced by Actual and Potential High-Growth Firms". NESTA Working Paper 11/01.
- Love, Inessa and María Soledad Martínez Pería. 2012. "How Bank Competition Affects Firms' Access to Finance." Policy Research Working Paper 6163. World Bank.
- Love, Inessa, María Soledad Martínez Pería, & Sandeep Singh. 2013. "Collateral registries for Movable Assets: Does Their Introduction Spur Firms' Access to Bank Finance?" Policy Research Working Paper 6477. World Bank.
- Lussier, R. N. 1995. "A nonfinancial business success versus failure prediction model for young firms." *Journal of Small Business Management*, 33(1), 8-20.
- Marom, S. and Lussier, R. 2014. "A Business Success Versus Failure Prediction Model for Small Businesses in Israel". *Business and Economic Research*. Vol. 4, No. 2.
- Martinez, Sole Maria. 2015. DECFP-IFC Research on Finance and Employment. Working Paper.
- McKenzie, D. 2015. "Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from a Business Plan Competition". World Bank Policy Research Working Paper 7391. World Bank, Development Research Group, Finance and Private Sector Development Team.

- Mead, D. C., & Liedholm, C. 1998. "The dynamics of micro and small enterprises in developing countries." *World Development*, 26(1), 61–74.
- Michelacci, C. 2003. "Low Returns to R&D Due to the Lack of Entrepreneurial Skills", *The Economic Journal* 113, 207–225.
- Miliaras, C. 2012. "Creating Jobs that Reduce Poverty: A Research Agenda on Developing-Country Gazelles". RTI International. RTI Press publication No. OP-0011-1211. Research Triangle Park, NC: RTI Press.
- Mondragon-Velez and Ximena Pena-Parga. 2008. "Business Ownership and Self-Employment in Developing Economies: The Colombian Case", in: *International Differences in Entrepreneurship*, edited by Josh Lerner and Antoinette Schoar, NBER.
- Mueller, S. and Thomas, A. 2001. "Culture and Entrepreneurial Potential: A Nine Country Study of Locus of Control and Innovativeness". *Journal of Business Venturing*. Vol. 16(1): 51-75.
- Nichter and Goldmark, 2009. "Small Firm Growth in Developing Countries". *World Development*. Vol. 37, No. 9. 1453-1464.
- OECD. 2007. "Innovation and Growth". Paris: OECD.
- Mason, C., and Brown, R. 2013. "Entrepreneurial Ecosystems and Growth-Oriented Entrepreneurship". Background Paper for OECD LEED Program and the Dutch Ministry of Foreign Affairs.
- Parker, J. 1995. "Patterns of business growth: Micro and small enterprises in Kenya." PhD Dissertation. East Lansing, Michigan: Michigan State University.
- Praag, C.M. and Versloot, P.H. 2007. "What is the Value of Entrepreneurship? A Review of Recent Research". *Small Business Economics*. 29: 351-382.
- Robbins, D. K., Pantuosco, L. J., Parker, D. F., & Fuller, B. K. 2000. "An empirical assessment of the contribution of small business employment to U.S. state economic performance." *Small Business Economics*, 15: 293–302.
- Rogerson, R., Herrendorf, B., and Valentinyi, A. 2013. "Growth and Structural Transformation". NBER Working Paper Series. National Bureau of Economic Research.
- Rubini, Loris. 2013. "Growth, Structural Transformation, and Volatility". Pontificia Universidad de Chile. Documento de Trabajo, No. 444.
- Saeed, R. Nayyab, H., Rashied, H., Lodhi, R., Musawar, S., and A. Iqbal. 2013. "Who is the Most Potential Entrepreneur? A Case of Pakistan". *Middle East Journal of Scientific Research*. 17 (9): 1307 – 1315.
- Schiffer, M. & Weder, B. 2001. "Firm Size and the Business Environment: Worldwide Survey Results". IFC Working Paper 43. Washington, D.C. International Finance Corporation.
- Schmitz, H. 1999. "Collective efficiency and increasing returns." *Cambridge Journal of Economics*, 23(4), 465–483.
- Schoar, A. 2009. "The Divide between Subsistence and Transformational Entrepreneurship". NBER Innovation Policy and the Economy.
- Schreyer, Paul. 2000. "High-Growth Firms and Employment." OECD Science, Technology, and Industry Working Papers. 2000/03. OECD Publishing.
- SEAF. 2007. "From Poverty to Prosperity: Understanding the Impact of Investing in Small and Medium Enterprises". Data Survey and Case Study Analysis of SEAF Investments.
- Shane, S. 2009. "Why Encouraging More People to Become Entrepreneurs is Bad Public Policy". *Small Business Economics*. 33: 141 – 149.
- Sleuwaegen, L., & Goedhuys, M. (2002). "Growth of firms in developing countries: Evidence from Cote d'Ivoire." *Journal of Development Economics*, 68(1), 117–135.
- Stam, E., Suddle, K., S. Jolanda, A. Hessels & Andre van Stel, 2007. "High Growth Entrepreneurs, Public Policies and Economic Growth," *Jena Economic Research Papers 2007-019*, Friedrich-Schiller-University Jena, Max-Planck-Institute of Economics.
- Stangler, Dane. 2009. "The Economic Future Just Happened". Kauffman Foundation.
- Stangler, D., and Spulber, D. "The Age of the Entrepreneur: Demographics and Entrepreneurship". Kauffman Foundation.
- Storey, David. 2009. "Lessons Learnt from Programmes Aimed at Promoting Fast Growth in SMEs". Presentation to OECD, Financing SME Growth in the MENA Region. University of Warwick.
- Swedish Agency for Growth Policy Analysis. 2010. "The Economic Effects of the Regulatory Burden", Oestersund, Sweden: Swedish Agency for Growth Policy Analysis.
- Vargas, Jose, P. Mauricio. 2015. "Identifying Binding Constraints to Growth: Does Firm Size Matter?" IMF Working Paper, Research Department.
- Weitzman, M. L. 1998. "Recombinant Growth", *Quarterly Journal of Economics* 113(2), 331–360.
- Winter, S. G. 1968. "Toward a Neo-Schumpeterian Theory of the Firm", Working Paper P-3802, RAND.
- Woodward, Christopher (with Marcel Fafchamps). 2013. "Identifying Gazelles and their Constraints to Growth: Evidence from Ghana and Sri Lanka". Presentation to World Bank, Multi-Donor Trust Fund.
- Wong, Poh Kam. 2013. "Innovative Entrepreneurship for Growth and Employment: The Singapore Experience". Presentation, National University of Singapore, Entrepreneurship Centre.
- World Bank Group. 2015. "Pilot Project for the Entrepreneurial Discovery Process (EDP) and Business Needs Analysis in Poland." Mid-term Report.

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