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# Creating Jobs That Reduce Poverty: A Research Agenda on Developing-Country Gazelles

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## Abstract

Given that 400 million new jobs need to be created globally over the next decade to absorb new entrants to the labor market, it is easy to understand why small businesses are enjoying popularity with policy makers. Although research has established a positive link between small businesses and job creation in the United States, relatively little evidence exists that small firms drive job creation in developing countries. Less is known about which kinds of small businesses create jobs in developing countries as well as their impact on poverty reduction. Unless a deeper understanding is developed regarding which small and medium enterprises (SMEs) create jobs and how they do it, it is unlikely that policies designed to support them will achieve the impact necessary to tackle the global jobs deficit. This paper outlines a research agenda designed to close the knowledge gap regarding a special class of firms known as “gazelles,” which in the United States have been found to create a disproportionate number of jobs. Fulfilling the proposed research agenda will help build the evidence required to create SME policies that maximize results in terms of achieving fundamental objectives such as creating jobs, raising worker productivity, and reducing poverty.

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## Why Establishing an Evidenced-Based Link Between Developing-Country Gazelles, Job Creation, and Poverty Reduction Matters

Given that 400 million new jobs need to be created globally over the next decade just to absorb new entrants to the labor market, it is easy to understand why small businesses are enjoying such popularity with politicians and policy makers.<sup>1</sup> Although over 30 years of research have firmly established a positive link between small businesses and job creation in the United States, relatively little evidence exists to support the claim that small firms drive job creation in developing countries.<sup>2</sup> Even less is known about which kinds of small businesses create jobs in developing countries as well as their impact on poverty reduction.<sup>3</sup>

Unless a deeper understanding is developed regarding which small and medium enterprises (SMEs) create jobs and how they do it, it is unlikely that policies and programs designed to support them will achieve the impact necessary to tackle the massive global jobs deficit. Furthermore, ensuring that limited development resources are used as effectively as possible is even more important considering the constrained budget environments confronting most donors and governments.

This paper outlines a research agenda designed to close the knowledge gap regarding a special class of firms known as “gazelles,” which in the United States have been found to create a vastly disproportionate number of jobs in the economy. It is based on a series of three roundtables organized by RTI International and the Aspen Network of Development Entrepreneurs (ANDE). The purpose of the roundtables, which took place in 2011, was to convene a group of experts and senior-level SME stakeholders to delve deeply into the topic of developing-country gazelles. The roundtables focused on basic questions such as whether developing-country gazelles should be a focus of SME development and, if so, how their

expansion should be financed and from where the necessary capital should be sourced.

Roundtable experts included Dr. Zoltan Acs, director of the Center for Entrepreneurship and Public Policy at George Mason University and a renowned expert on gazelles; Anne Habiby, Harvard Kennedy School Fellow and cofounder of AllWorld Network, whose mission is to finance and advance all the growth entrepreneurs in the world by 2015; Nazeem Martin, managing director of Business Partners Limited, a specialist risk finance company based in South Africa known for its innovative and scalable SME investment model; Thierry Sanders, founder and director of BiD Network, a Netherlands-based organization that prepares emerging market entrepreneurs for investors; Christopher Davis, an attorney with extensive experience establishing venture capital funds around the world; and John May, Chairman Emeritus of the Angel Capital Association.

The roundtable series generated a robust discussion regarding developing-country gazelles and identified a number of substantive issues requiring follow-up, including the need to establish a research agenda. To move the research forward, several participants volunteered at the conclusion of the series to form a working group on developing-country gazelles.\* This paper is a product of the working group’s discussions.

Fulfilling the research agenda proposed in this paper will help build the body of evidence required to create SME policies and programs that yield maximum results in terms of achieving fundamental economic and social objectives such as creating jobs, raising worker productivity, and reducing poverty.

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\* The working group consists of representatives from RTI International (Chrysanthos Miliaras), ANDE (Randall Kempner and Jenny Everett), Grassroots Business Fund (Agnes Dasewicz [now with USAID] and Robert Webster), Inter-American Development Bank (Nobu Otsuka), International Finance Corporation (Alan David Johnson and Hugh Stevenson), Small Enterprise Assistance Funds (Mildred Callear), SME Think (Tom Gibson), and US Treasury (Christopher Grewe).

## Benefits of Segmenting Small and Medium Enterprises by Growth and Job Creation Impact: An Illustrative Example

One way to expand our understanding of developing-country SMEs is to segment them by their growth rate and job creation impact. Massachusetts Institute of Technology economist David Birch conducted such an analysis in the late 1970s for US businesses. His pioneering research revealed that the vast majority of jobs were created by a special breed of firm that he called “gazelles.” Birch defined gazelles as enterprises whose sales grew by at least 20 percent per year over a 4-year period and found that they were predominantly small businesses. Birch’s findings countered the then-dominant view that large businesses were the economy’s main job creation engine.<sup>4</sup>

Birch’s results have been confirmed by a number of economists seeking to understand which US businesses are most responsible for growth and job creation. Researchers have also expanded on Birch’s original gazelle definition to include an employment creation criterion. Such firms, often referred to as “high-impact companies,” are enterprises whose sales have at least doubled over a 4-year period and that have an employment growth quantifier of two or more over the same period.<sup>5†</sup> (For purposes of this paper, we refer to all high-impact companies as gazelles.)

A recent report released by the US Small Business Administration<sup>4</sup> revealed that over 4-year periods from 1994 to 2008, US gazelles

- accounted for 6.3 percent (approximately 350,000) of US companies. Of these, 94 percent had fewer than 20 employees.

<sup>†</sup> Employment growth quantifier is the product of a firm’s absolute and percentage change in employment, over a 4-year period. EGQ mitigates the unfavorable impacts of measuring employment in either percentage terms, which favors small companies, or absolute terms, which favors large businesses.<sup>6</sup>

- were evenly distributed across all industries. No industry contained more than 7 percent gazelles, and only 3 industries (out of 89) contained less than 1 percent gazelles.
- created all net new jobs in the economy. On average, gazelles created 10.7 million jobs during each 4-year period, while all other businesses shed 4.1 million jobs. Fifty-seven percent of all net new jobs were created by small and medium gazelles.
- are 5 years younger, on average, than other businesses. Their median age is 12 years, and the average age of firms poised for growth is 8 years.

Developing-country SMEs operate in economies that are vastly different from the US economy. Also, data on developing-country firms are less readily available than data for US firms.<sup>7</sup> In spite of these important differences, it would be very useful to many audiences (e.g., policy makers, donors, financial institutions, and educational institutions engaged in workforce development) to know which developing-country firms have the highest economic and job creation impact. Moreover, in addition to such quantitative analysis, it would be useful to address key qualitative questions such as how and why gazelles are able to create jobs. For instance, in the United States, it is not well understood why gazelles are able to create jobs in economic downturns, declining industries, and depressed economic regions while other firms are not.<sup>4</sup> There are sure to be similar questions that apply to developing-country gazelles as we deepen our understanding of this important class of firms.

## Bridging the Knowledge Gap on Developing-Country Gazelles

Although some research has been conducted on developing-country gazelles, they have not been studied nearly as extensively and systematically as their counterparts in the United States.<sup>8</sup> As a result, very little is known about which developing-country firms have the highest impact in terms of growth, job creation, and poverty alleviation.

Thus, a primary objective of researching developing-country gazelles should be to determine to what extent they are present in developing countries. Do developing countries have higher or lower concentrations of gazelles compared with the United States? If so, how do they differ and why do those differences exist? Answers to such questions could yield vital insights into the structural constraints—such as access to finance, workforce composition, and business environment—preventing growth-oriented SMEs from being able to fulfill their potential and become full-fledged gazelles.

Another fundamental objective of researching developing-country gazelles should be to determine whether they have a similarly disproportionate impact on job creation as US gazelles do. Determining this impact would require building a much richer understanding of developing-country SMEs than presently exists from the perspective of their economic and social impacts defined in terms of sales growth, job creation, job quality, worker productivity, poverty alleviation, and other key socioeconomic criteria. Creating a profile of developing-country gazelles that includes basic but important information on their age, size, economic sector, location, and demographics, for example, will not only deepen our knowledge of them within a particular country, but will also broaden our understanding of how they differ from country to country. This information would be extremely valuable in terms of tailoring SME programs to meet the circumstances of a particular country.

Moreover, having a profile of developing-country gazelles would enable governments and donors to develop SME policies that are better targeted and more results oriented. For instance, having richer and more consistent data on developing-country gazelles, as well as on developing-country SMEs in general, would enable governments and donors to establish performance benchmarks for certain SME programs to identify companies with exceptional growth, job creation, and poverty alleviation potential.

Presently, however, a company's relative productivity and growth (two potential benchmarks) appear to play little if any role in determining whether it has access to various government and donor programs such as loan guarantee facilities, investment funds, and technical assistance programs. In fact, in some programs disincentives may exist to support companies perceived as being too successful and therefore not worthy of development assistance, even though it could mean the difference between helping them cross the threshold from being a growth-oriented firm to becoming a full-fledged gazelle. Avoiding this potential pitfall is particularly important for countries confronted with the need to massively scale up job creation to keep pace with growing youth populations entering the job market.

Table 1 summarizes the proposed research agenda on developing-country gazelles by laying out the research objectives and the questions and actions associated with the objectives.

**Table 1. Summary of proposed research agenda on developing-country gazelles**

<b>Objectives</b>
<ul style="list-style-type: none"> <li>• Determine to what extent gazelles are present in developing countries.</li> </ul>
<ul style="list-style-type: none"> <li>• Determine the impact of developing-country gazelles on job creation, productivity, and poverty alleviation.</li> </ul>
<ul style="list-style-type: none"> <li>• Develop a profile of developing-country gazelles segmented by socioeconomic criteria such as age, size (sales and number of employees), growth rates, job creation rates, worker productivity, economic sector, location (national, regional), gender, and other demographics.</li> </ul>
<ul style="list-style-type: none"> <li>• Develop evidence-based SME policies that are better targeted and more results oriented toward achieving specific socioeconomic objectives such as increasing job creation, improving worker productivity, and reducing poverty in developing countries.</li> </ul>
<b>Questions</b>
<ul style="list-style-type: none"> <li>• Do developing countries have higher or lower concentrations of gazelles compared with the United States? If so, how do they differ and why do those differences exist?</li> </ul>
<ul style="list-style-type: none"> <li>• What share of new jobs do developing-country gazelles generate and how productive are they?</li> </ul>
<ul style="list-style-type: none"> <li>• How do developing-country gazelles compare with other firms in their economies, ranging from start-ups to large traditional firms? In particular, how do they compare in terms of their size (in employment terms), economic sectors, productivity, and workforce characteristics, for example?</li> </ul>
<ul style="list-style-type: none"> <li>• How do developing-country gazelles compare across countries and regions?</li> </ul>
<ul style="list-style-type: none"> <li>• What are the financing needs of developing-country gazelles? In particular, what types of financial instruments fit the cash flow patterns of high-impact, fast-growing SMEs and are they available?</li> </ul>
<ul style="list-style-type: none"> <li>• What is the individual as well as combined impact of finance and technical assistance on gazelles and SMEs in terms of sales growth, job creation, and poverty alleviation? In particular, does impact vary depending on financial instrument (e.g., short- versus long-term debt, equity versus quasi-equity) and technical assistance offered (e.g., accounting support versus mentoring)?</li> </ul>
<ul style="list-style-type: none"> <li>• What are the barriers preventing growth-oriented SMEs from becoming gazelles?</li> </ul>
<ul style="list-style-type: none"> <li>• What barriers do youth- and women-led growth-oriented SMEs face?</li> </ul>
<b>Actions</b>
<ul style="list-style-type: none"> <li>• Study SME data stored by client banks and investment funds of international financial institutions such as the International Finance Corporation, European Bank for Reconstruction and Development, and Inter-American Development Bank, where data exist across multiple countries and regions. Conduct retrospective analyses of such data to help SME stakeholders better understand the results of their support (e.g., loans and technical assistance) across countries, regions, income levels, and industries, for example.</li> </ul>
<ul style="list-style-type: none"> <li>• Work with national-level institutions (e.g., Central Bank, Tax Service, Department of Statistics) to develop comparison data sets on SMEs and jobs, for example. (Such institutions are likely already collecting useful data, but the data may be unstructured [i.e., not available in a useful format] or are not being analyzed because of lack of resources.) Such information would provide the necessary benchmarks to establish whether donor interventions are adding value to SMEs. To facilitate this, support the capacity development of key national institutions by advising them on improving their data collection, storage, and dissemination methods so that they could track SME data on an ongoing basis.</li> </ul>
<ul style="list-style-type: none"> <li>• Create an information clearinghouse on SMEs (including developing-country gazelles) to aggregate and disseminate data related to them in a systematic manner using the criteria described in this paper. This would make it easier to collect, mine, and analyze data on SMEs to deepen our understanding about which firms have the greatest impact on jobs, worker productivity, and poverty alleviation.</li> </ul>

## Gathering Data on Developing-Country Gazelles: Practical Ideas for Moving Forward

Gathering data on developing-country gazelles is a potentially daunting task. However, practical and actionable ways to move forward could yield useful results in the near term. One way to begin is by studying the enormous amounts of SME data stored by developing-country banks, investment funds, and other institutions. For example, a team from RTI visited Business Partners Limited in South Africa to review its data and to help it measure the impact of its loans and technical assistance on client revenue, job creation, and other factors.<sup>‡</sup> Business Partners has a wealth of data that can be mined to help us answer some basic questions such as the following:

- How has client revenue changed since investment?
- How do client revenue trajectories vary by product, business characteristics, and entrepreneur characteristics?
- What are the characteristics of high-growth businesses?
- How many jobs have clients created? How much investment money is associated with job creation for each product type?
- What is the impact of investment and technical assistance on
  - total number of jobs,
  - total number of “decent jobs” (full time, permanent, decent wage),
  - revenue, and
  - graduation to bank financing?

A similar approach could be applied to the client banks and investment funds of international financial institutions such as the International Finance Corporation, European Bank for Reconstruction and

Development, and Inter-American Development Bank, where data exist across multiple countries and regions. Collectively, these institutions have made millions of loans to SMEs over the past several decades. Conducting retrospective analyses of such data would help SME stakeholders begin to understand the results of their support (e.g., loans and technical assistance) across countries, regions, income levels, and industries, for instance.

Building a deeper understanding of their SME customers would be extremely valuable to financial institutions as well as governments and donors. For example, if banks knew how their financial and nonfinancial services affected their clients in terms of revenue growth and profitability, they could translate that information into better products and services that would help them maintain and grow market share. This information would be especially important in countries where targeting SMEs has become highly competitive. Given the strong business case for financial institutions to track and analyze such data, it should be possible to not only get them to participate in such studies, but also to make such data collection sustainable.

In addition to working with financial institution data, it is also important to work in parallel with national-level institutions (e.g., Central Bank, Tax Service, Department of Statistics, Industry Associations) to develop comparison data sets on SMEs, jobs, and other information. It is likely that such institutions are already collecting useful data, but the data are either unstructured (i.e., not available in a useful format) or are not being analyzed because of lack of resources. Such macro-level information would provide the necessary benchmarks to establish whether donor interventions are adding value to SMEs in the country they are targeting.

Also, by investing in better SME data collection and analysis, national institutions would be able to become more effective at identifying critical constraints confronting growth-oriented SMEs, which could then be translated into more targeted policies designed to overcome those obstacles. This

<sup>‡</sup> Business Partners Limited is a specialist risk finance company for formal SMEs in South Africa and selected African countries. Business Partners used its innovative and scalable SME investment model to provide approximately \$1.37 billion in finance to more than 32,500 SMEs from 1981 to 2010.<sup>9</sup>

is especially important in developing countries with chronically high levels of unemployment and poverty as well as in those that are experiencing fast growth but face challenges related to sustaining that growth because of issues such as an inadequately trained workforce, insufficient foreign and domestic investment, and the need to improve the business environment. By creating better and richer SME data sets and improving access to them, national-level institutions would provide the empirical foundation necessary for policy makers to design more sustainable development policies. To facilitate this process, donors could support the capacity development of key national institutions by advising them on improving their data collection, storage, and dissemination methods so that they could track SME data on an ongoing basis.

Finally, it is critical for either a donor, such as the World Bank, or a special purpose nonprofit organization to aggregate and disseminate data and information on SMEs, in particular developing-country gazelles, in a structured and systematic manner using the criteria described in this paper. Such an information clearinghouse would make it easier for researchers to collect, mine, and analyze data on SMEs to deepen our understanding about which firms have the greatest impact on major socioeconomic challenges such as increasing the number of jobs, improving worker productivity, and alleviating poverty.

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## Conclusion

Building a knowledge base on developing-country gazelles and other high-growth SMEs is challenging, but doable. For the relatively small cost that such an investment would entail, the payoff would be enormous in terms of providing the empirical foundation necessary to develop SME policies that are more effective at increasing jobs and reducing poverty.

Conducting such research will enable donors to start answering basic questions such as the following:

- Which SMEs have greatest impact on jobs, productivity, and poverty?

- Which inputs (financial and technical assistance) have the greatest impact on SME performance?
- What are the barriers preventing growth-oriented SMEs from becoming gazelles?
- What barriers do youth- and women-led growth-oriented SMEs face?

Armed with better data and information, developing-country governments and donors will be able to design more effective programs. For instance, policies and programs could be designed so that the level of assistance a firm receives is linked to the number of performance benchmarks it satisfies. (Performance benchmarks could include a firm's relative productivity, growth rate, and other characteristics.) This should increase the likelihood that more growth-oriented SMEs succeed in fulfilling their job creation and poverty alleviation potential. It should also ensure that limited resources are allocated more efficiently by discouraging unqualified applicants from applying. Program data could be continually collected and analyzed, thereby enabling program administrators to fine tune a program's cost-benefit ratio, including monitoring which services and combinations of services (e.g., financial and technical assistance) have the most impact.

Some may argue that focusing attention on developing-country gazelles could result in designing SME policies that are aimed at picking so-called winners that are either impossible to predict or do not need development assistance in the first place. However, to achieve major policy goals such as significantly lowering unemployment, raising worker productivity, and reducing poverty, it is critical to develop a much more sophisticated and nuanced understanding of the SME sector, particularly of those firms that are highly successful. Developing a deeper understanding of why some SMEs are able to transform into gazelles and others are not will enable us to design policies and programs that address constraints preventing more growth-oriented SMEs from fulfilling their potential. Designing policies and programs that address constraints should improve the conditions for all businesses and not just benefit individual firms.

Implementing our proposed research agenda will enable the donor community and developing-country governments to more effectively achieve one of their primary goals: to ensure that the economic ecosystem operates optimally. Doing so will benefit all firms, not

just growth-oriented SMEs. Supporting the creation of more developing-country gazelles through better research will expand people's welfare by creating higher paying, more productive jobs that reduce poverty and build the middle class.

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