

A Note

High-Impact Gazelles:
Should they be a major focus of SME development?

Tom Gibson
Hugh Stevenson

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Purpose

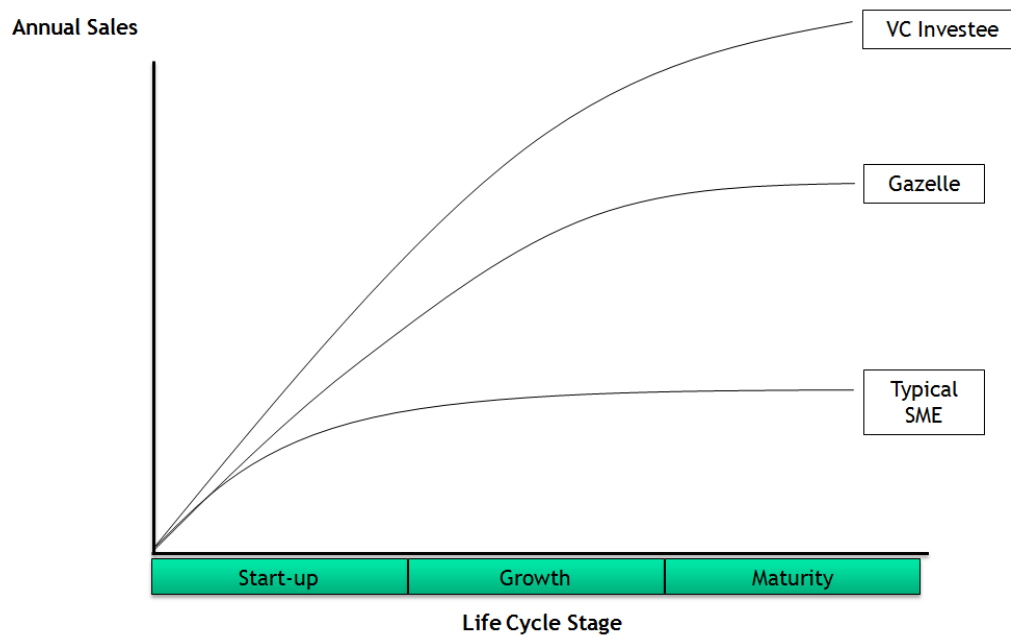
The purpose of this note is threefold. First, it will summarize the current state of experience and research regarding a fast growth group of SMEs known as “gazelles”. Second, it endeavors to identify missing data relating to emerging markets and how we might complete the picture. Third, it suggests next steps in the implementation of a gazelle strategy.

Socioeconomic Contributions of High-Growth Gazelles

SMEs are not homogenous. Thirty years of research shows that a small percentage of them, the gazelles, create the vast majority of net new jobs and GDP growth in the U.S. and Europe.

Gazelles are fundamentally unlike the majority of SMEs which tend to be lifestyle businesses. They are fast growing, but usually not venture capital clients. The following life cycle model illustrates some of these differences:

LIFE CYCLES BY SME TYPE



There is broad consensus on the definition of “gazelles”. MIT economist, David Birch ¹, introduced the term in the early 1980s and defined them as private businesses having at least \$100,000 in annual revenues (roughly \$250,000 today) and sustaining annual revenue growth of more than 20% over a

¹ The Job Generation Process. David L Birch. MIT 1979,1984

four-year period. More recently, economist Zoltan Acs², of the U.S. SBA and George Mason University, added an employment growth component to Birch's definition to define "high-impact gazelles". Typical of gazelle research outside the U.S. is a 2008 study by Matthias Deschryvere³ of ETLA, the Research Institute of the Finnish Economy, using the slightly different criterion of 20% per annum growth over a three-year period, as well as work carried out by Werner Holzl⁴ on behalf of the Europe Innovation Panel on Gazelles .

Using large datasets and the definitions above, Birch, Acs, Deschryvere and Holzl found the following, striking data:

- *Birch et al.* Gazelles consistently represent about **4% of U.S. private businesses**, but create between **70% and 100% of net new jobs**, depending on the period studied.
- *Acs et al.* High-impact gazelles constitute between **2% and 3% of U.S. private businesses**, depending on the period, but consistently create "**almost all**" **net new jobs**.
- *Deschryvere*: During the period 2003 – 2006, **5.4% of Finnish private businesses** with more than 10 employees created **90% of net new jobs**.
- *Holzl*: **5-10% of the firms** delivered **50-80% of employment generation**

Many other researchers have arrived at similar conclusions for developed economies.

Implications for Developing Countries

Data on gazelles in countries outside the OECD is relatively sparse. However persuasive the data on gazelles in developed countries, the effort has not yet migrated to developing countries where creating employment is imperative to the alleviation of poverty. The time has come to extend this knowledge base and approach to emerging markets.

What information we have suggests that the percentage of gazelles in the private sector may be higher in developing countries than in wealthier ones (as might be expected in more rapidly growing economies). In our research for this note, we did find a study of gazelles in Brazil, as well as one in the EU that included statistics for a number of the former COMECON countries still in transition. The Brazilian study⁵, by the Instituto Brasileiro de Geografia e Estatística, uses the EU definition of 20% growth in salaried employment over a three-year period. The EU study⁶, by Europe Innova, uses Birch's revenue-based criteria. In these two data collections, we found the following to be particularly encouraging:

² High-Impact Firms: Gazelles Revisited. Zoltan Acs, William Parsons and Spencer Tracy. Corporate Research Board, . 2008

³ Deschryvere, Matthias (2008), "High-growth Firms and Job Creation in Finland."

⁴ Gazelles: Findings from the Sectoral Innovation Watch Project. Werner Holzl. Austrian Institute of Economic Research. 2008

⁵ Brazilian Institute of Geography and Statistics (IBGE), Ministry of Planning. 2008

⁶ Gazelles High Growth Companies. Europe Innova. European Commission. Kay Mítusch, Antje Schinke. 2011

- In Brazil, high employment growth gazelles constituted **8.3% of Brazilian private businesses** and created **57.4% of net new jobs** between 2005 and 2008.
- While the percentage of gazelles in the private sector is **3.9% in Germany, 3.8% in Belgium, and 5.4% in Norway**, the portion of gazelles in **Lithuania is 22.3%, 20.3% in Bulgaria, and 18.2% in Romania** (adjusted for the presence of the informal sector in those countries).

Currently, the AllWorld Network, chaired by Harvard professor Michael Porter, is in the process of identifying gazelles within transition and developing economies. Based largely on the model of *Inc.* magazine's annual "Inc. 500" fastest-growing U.S. companies, AllWorld has found substantial numbers of gazelles in the course of its research and is in the process of establishing the Africa 500, Arabia 500, Asia 500, Eurasia 500, and Latin America 500, some of which will be announced by the end of 2011. Looking for slightly larger gazelles with minimum sales between \$500,000 and \$1 million, AllWorld has found that the average annual revenue growth for these companies over the past three years has been 40%.

These data strongly suggest that gazelles are likely to be widespread in developing and transition economies. They make a compelling case for additional, more systematic work to confirm these indications.

It is important to understand that there is a clear distinction between gazelles and the clients of venture capital companies, which constitute only a tiny subset of the gazelle group. Indeed, in the U.S., while in a typical year of the past decade some 300,000 to 400,000 businesses qualified as gazelles, only 3,500 to 4,500 received venture capital financing. Venture capitalists are looking for companies offering spectacular rates of return, which are very difficult to identify *ex ante*. The typical gazelle is a more "normal" company growing relatively quickly, but is not, in the vast majority of cases, the star sought by the venture capitalist.

Whatever the number of gazelles in developing countries, the tiny volume of available venture capital is grossly inadequate to meet their financing needs. Moreover, opportunities for exits from equity are too few to justify a capital gains-based strategy for financing more than a minute subset of the herd. To sustain high growth, the gazelle population will need more widely available, long-term, non-asset-based risk capital instruments. What is missing, most critically, is second stage financing. Once the gazelle has exhausted available source of early stage financing (friends, family, working capital loans from banks), it lacks the longer-term funding needed to sustain its growth into the future.

IFC Data Collection Project

Enterprise Survey Database: To provide confirmation of the gazelle population in developing countries, IFC is undertaking a pilot project to collect data on the revenue growth of SMEs from the Enterprise Survey database ⁷(detailed information on over 100,000 companies worldwide collected every two to four years by the World Bank).

⁷ www.enterprisesurveys.org

As a result of this project, we are getting an indication of not only the typical growth of formal SMEs, but also of the percentage of SMEs on the gazelle trajectory of 20% plus annualized revenue. The available data will allow us to review the situation over four years in 13 countries: DRC, Mali, Niger, Botswana, Cameroon, Cape Verde, Chile, Peru, Uruguay, Argentina, Bolivia and Colombia. We have focused on SMEs achieving four-year growth of 20% per annum established by Birch, Acs and others. Preliminary results are quite promising and very consistent:

Country	% of SMEs with sales of more than 20% per year for at least 4 years
Colombia	33%
Peru	26%
Chile	33%
Cape Verde	31%

The percentages of gazelles are so high due to the higher levels of economic growth as compared with developed countries.

IFC has also analyzed factors which are significantly different between gazelles and other slower growing SMEs. Important factors appear to be whether the company has a) a website b) applied for an electrical connection in the previous two years and c) a line of credit from a financial institution.

Under investigation are the years of experience of the top manager, the age of the company and having an internationally recognized quality certification

SME Loan Portfolios: IFC may also consider reviewing the SME loan portfolios of selected IFC client banks. This initial data collection will simply provide annualized growth figures for each SME borrower under a credit line during the life of each loan for the banks. By combining this with the Enterprise Survey Database approach, it may be possible to benchmark the bank portfolios against the market.

Ex Ante Identification of Latent Gazelles: Methodology and Characteristics

The promising data on gazelles raises the question of how to identify a latent gazelle which has not yet achieved four years of sustained high growth. Assuming the pilot data show significant percentages of SMEs growing at 20% per annum and greater, additional phases of research should be undertaken to identify common internal attributes and external characteristics of latent and statistical gazelles. It is important to remember here that we are not talking about start-ups, but typically companies which are already two to three years along a recognizable growth trajectory.

Although this area of research is neither extensive nor highly comparable in its methodology, it does indicate that the attributes which drive growth at the gazelle pace are overlapping with, yet *not* simply identical to, those commonly associated with successful entrepreneurs or highly profitable companies. Such a probe into the more subtle commonalities among high-growth SMEs, focused on developing countries, could provide some of the most useful data on the characteristics of gazelles, allowing the eventual creation of a database for screening candidates if it works well. Some of the key factors to look for might include:

1. Innovative Entrepreneurs – gazelles should have founders and owners with personal attributes such as a strong entrepreneurial spirit, drive, confidence and a tolerance for uncertainty, as well as relevant professional experience and a strong network. In this respect, the psychometric testing approach developed by groups such as Entrepreneurial Finance Lab of Harvard University⁸ for assessing personal characteristics of SME owners applying for credit may prove a useful tool.
2. Strong Management Arrangements – consisting of functional managers (e.g, finance, marketing) who complement the abilities and skills of a founder or owner who is not a strong manager.
3. Availability of Skilled and Experienced Labour – a particular issue in developing countries, this is also likely to be a major factor in a company's ability to ramp up sales in second stage growth (and can be related to the quality and depth of employee training).

If the second and third factors are not already present, one would expect the company to have the potential to develop them, possibly with the help of outside support, such as that described below for what has become known as “economic gardening” (discussed below). Creation of a management team is a critical issue for the entrepreneur, given the shortage of available talent and experience, particularly in developing markets, and the time and effort required to train them. Initially, much may depend on the entrepreneur’s ability to put in place systems which compensate for a shortage of managerial capacity.

External factors, while still important, will probably prove to be much less significant than they are generally given credit for. For example, many gazelles flourish in low-growth markets by being more efficient and competitive than their rivals. Their product is often solid and unspectacular, but satisfies a definite market need. Much research into other common characteristics of gazelles, beyond revenue and employment growth, shows weak correlations between gazelles and, for example, specific sectors, geographical contexts, and often, surprisingly, the level of education of the lead entrepreneur.

The enabling environment is also critical, particularly the level of competition, as this encourages innovation and productivity and market-led growth.

However, gazelles are not typically found in sectors with small market potential. Therefore total market potential should be sufficient to allow for gazelle type growth and one would expect that, other things being equal, gazelles in developing countries would be found in industry segments that in OECD countries are usually sizeable.

⁸ www.efinlab.com

More detailed work has been carried out in MENA, notably Egypt, by Andrew Stone of the World Bank using the Investment Climate Assessment Enterprise Surveys⁹. This study showed that high growth SMEs are more likely to:

- Innovate
- Offer formal training to employees
- Receive an international quality certification
- Have a website
- Be younger
- Use foreign-licensed technology
- Suffer fewer power interruptions

However, the probability of being a high employment growth SME is negatively related to:

- Experiencing serious problems with access to land
- Having high regulatory compliance costs
- Taking out a loan (perhaps because the financial system is not effective at allocating credit to high-growth firms)

Capacity Building

The data suggest that economic development officials would benefit from recognizing the value of cultivating high-growth firms versus trying to increase entrepreneurship overall or trying to attract relocating companies when utilizing their resources (from Acs et al, “High-Growth Firms: Gazelles Revisited”).

Economic gardening is a form of local or regional capacity building. Its lessons can be applied to any form of gazelle capacity building support. Much of what it provides is similar, though much broader, to what good venture capital companies provide to their investees. Before Birch’s work on gazelles, economic development agencies throughout the U.S. typically put their resources behind the conventional, and still widely practiced, strategy of “economic hunting”: providing inducements for firms elsewhere to pack up and move to one’s own locale. Economic gardening, a direct outgrowth of Birch’s work, rejects this approach in favor of identifying existing local gazelles, statistical and latent, and finding ways to help them grow even faster and larger, whether in a city of five million or a region of rural towns.

The earliest and most compelling example of a successful economic gardening program is Littleton, Colorado. In the late 1980s, Littleton was the first city to undertake the approach, having thoroughly researched the findings of Birch and others. Although on a relatively small scale, results were impressive. During a period of severe economic decline in Colorado, Littleton, then a town with a population 40,000 and a 30% vacancy rate in commercial property, generated 15,000 new jobs within a period of seven years. Since that time, the city of Littleton has continued to work to expand the movement and generate new ideas on how to make it even more effective.

⁹ SME Innovators and Gazelles in MENA. Andrew Stone. World Bank 2011

Principal among advocates for economic gardening in the U.S. are the Federal Reserve Bank of Atlanta, the Kauffman Foundation and the Small Business Administration, which devoted an entire chapter of its annual report¹⁰ to the subject.

From a review of current information on economic gardening, two distinguishing elements emerge: (1) it assumes that entrepreneurs grossly underutilize information resources in the public domain and (2) as opposed to typical business development services, economic gardening programs establish a high profile locally in order to draw out and capitalize on all available public and private resources with the potential to support local entrepreneurs. This includes lobbying for more entrepreneur-friendly policies and greater expenditures on physical infrastructure.

The softer side of economic gardening overlaps with local government public relations and efforts to promote positive opinions about entrepreneurship. However, the harder elements of economic gardening programs are highly focused, direct services which typically include assistance in:

- recruitment of labor and management personnel
- site selection
- understanding regulations
- obtaining government procurement contracts
- obtaining licenses and certifications
- networking and mentoring schemes
- approaches to problem solving
- employee training
- preparation of applications for finance
- business planning

Many programs provide direct one-on-one counseling or arrange for peer-to-peer counseling and mentoring. The degree to which these services are provided directly by the agency managing the program varies among gardening programs. In many cases, the agency will mostly play a catalytic role, drawing on local private resources outside the agency to provide them, with the recipient covering the costs directly (hence it is very difficult to get a handle on program costs).

Common to virtually all economic gardening programs are substantial efforts to provide entrepreneurs with awareness of, access to, and understanding of how to use information resources. Prominent among such efforts is work with entrepreneurs to maximize the beneficial use of geographic information systems (GIS). Many provide annotated databases of information resources related to:

- market intelligence
- human resource management
- economic forecasting
- government procurement
- business and financing planning
- industry sector research and analysis
- international trade issues

Many also provide access to, and perhaps more importantly, assistance in using high-level databases such as Dow Jones Factiva, Harris InfoSource, Lexis-Nexis, and Dun & Bradstreet's Marketplace Gold profiles of 13 million U.S. businesses.

¹⁰ Small Business Administration Annual Report 2009

Since the Littleton experiment began, dozens of other development agencies in the U.S. have taken up Littleton's model. Economic gardening has now become a global movement focused on the care and feeding of latent gazelles. The scale of the success in Littleton and other places is strong evidence that such programs do generate economic and job growth which would not have happened without the program and is for the most part attributable to them.

Most of these interventions have been attempted in developing countries, but to support SMEs in general. However, they are often too broadly targeted and supply driven, with weak uptake by businesses. Results have been mixed at best. The harder elements of economic gardening programs in strong economies may likely provide important instruction on how to support gazelles in weaker markets.

Gazelle Finance Strategy

While economic gardening in the OECD encompasses a wide range of support mechanisms, only a minority of programs deal directly with access to finance. This reflects surveys of entrepreneurs in developed countries that typically rank financial obstacles well below issues of government interference, market cycles and taxation. In developed economies, the market is well positioned to meet their financing needs via a combination of funding from private equity sources, long-term bank loans and sometimes venture capital.

By contrast, surveys of entrepreneurs in developing countries almost invariably show the lack of access to finance as among the first complaints. The typical growth trajectory of a developing country SME begins with financing that combines contributions from family, friends, personal savings, and often a small, fully collateralized bank loan. Growth often ends when these external resources have been exhausted and the internal resources (retained earnings) are insufficient to finance an expansion to the next magnitude of business.

The World Bank Enterprise Survey database shows that the average value of collateral needed for a bank loan for 125 developing and transition economies is 144% of the amount of the loan. A 2007 survey by IFC of its client banks specializing in loans to microenterprises and SMEs in 67 countries reported that the average term of the 186,000 "medium" loans, averaging about \$235,000, was 11 months.¹¹

However, rapid business expansions are rarely achieved with short-term, fully collateralized, working capital loans. The leap that characterizes a gazelle in a developing market results most typically from opportunities to expand from a local market to a national market, from domestic sales to export, from a grocery store to a chain of stores, from growing food to canning it, or from integrating into the supply chain of a large corporation. These opportunities require "gazelle finance"; that is to say, long-term finance based on the future growth potential of the gazelle.

The volume of venture capital available for smaller businesses in developing countries is tiny compared with the number of gazelles that require financing, while opportunities for exits from equity have proved to be far too few to justify a capital gains-based strategy, particularly in smaller, low-income countries. To sustain high growth, the gazelle population will need innovative risk

¹¹ Financing SMEs around the World. M.Berryman and M Mirmulstein. Access Finance, IFC 2007

capital instruments that are widely available and deployed in volumes of transactions magnitudes greater than achieved by venture capital funds.

Among the most promising of such innovative strategies is the royalty-based financing practiced by IFC's investee Business Partners of South Africa (BP). During the past decade, BP has typically financed more than 500 businesses per year, none of which required 100% collateral coverage. In some 70% of these transactions, BP provided a relatively low-interest, medium- to long-term loan to the investee with an attached right to a small percentage of gross sales, normally 0.5% to 5% of turnover. An important component of these investments has been the use of BP's extensive database of information on SME markets, performance, and internal attributes as well as BP's own mentoring program using seasoned businesspeople from outside BP.

During the past decade, largely driven by its success with this "sales-based" financing strategy, BP has achieved typical returns on equity to its shareholders ranging from 8.5% to 11%. The success of BP's model has become increasingly recognized throughout global SME finance and is being adopted by a wide variety of SME financiers, including Small Enterprise Assistance Funds (SEAF) and Root Capital.

As a hybrid of commercial lending and participating risk capital, the royalty structure shows promise to meet the basic requirements of appropriate "gazelle finance".

Capacity Building

Capacity building is an essential element of a gazelle strategy. It can take various forms such as direct consultancy, training, mentoring and facilitating networking and is essential if high-impact gazelles are to improve their efficiency and effectiveness and thus maximize their potential. One possibility might be to develop a training program based on the kind of practical support provided by venture capital companies to their clients and the harder elements of economic gardening programs. It would be designed to meet the special needs of gazelle entrepreneurs by, for example, assisting in:

- teaching how to create management teams
- making use of systems and procedures to remedy deficiencies in the management structures
- developing recruitment and retention initiatives
- creating awareness and understanding of how to use information resources
- mentoring
- networking

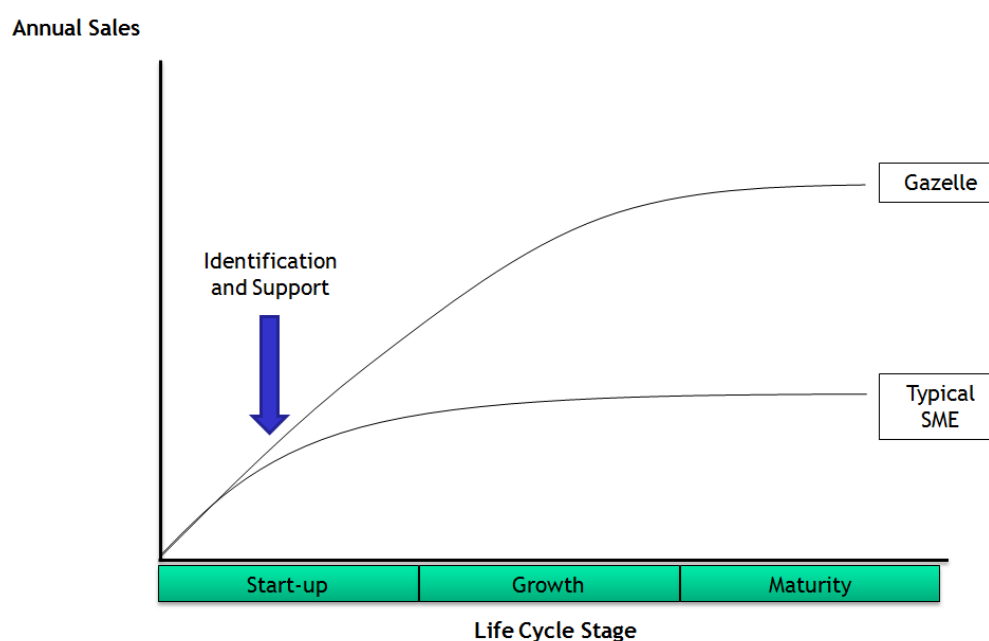
An important goal would be to learn more about gazelles and their needs and what works by carrying out more general monitoring and evaluation of such a project's results using standard methodologies for assessing training programs. However, the possibility of creating a control group against which results can be compared in a meaningful way should also be considered.

Nevertheless, to induce consideration of gazelle capacity building and gazelle finance over the longer term and on a broader scale, we must continue in parallel with the effort to demonstrate in the form of objective, quantifiable and robust data the presence in developing markets of gazelles, the dynamics of their financial performance, their socio-economic potential, and the ex ante characteristics that identify them in their latent stage.

Conclusions and Final Thoughts

SMEs are a huge spectrum. Logically we should shift our support towards those segments which have most impact in terms of jobs, even though these are obviously the most successful. However, gazelles do need support at a crucial stage in their development as they move into their growth path. As illustrated in the graph below we need to identify latent gazelles at the right point in their life cycle and provide appropriate capacity building and finance to allow them to shift into a high-growth trajectory:

GAZELLE IDENTIFICATION IN THE SME LIFE CYCLE



Gazelles appear successful, so some critics would argue why support them, and contend that resources should be allocated to the broader SME market segments for poverty alleviation. However, it is a false dichotomy to consider supporting gazelles versus typical SMEs, not least since SMEs are the pool from which gazelles develop.

A big advocacy and research effort is needed to justify supporting gazelles. Pro-gazelle initiatives are hampered by talking about winners as against pro-poor, financial inclusion measures. Gazelles are powerful anti-poverty tools, providing social safety nets, generating taxes and creating jobs for workers. Employment is the biggest social problem: globally the official unemployment level (according to the ILO) is over 200m, heavily concentrated among youth and regionally in South Asia and the Middle East, which alone needs 30m jobs. The impact of gazelles may look indirect, but is in fact very real.