“OLD GAZELLES”:
AN ANALYSIS OF MATURE, HIGH-GROWTH, GEORGIA-BASED FIRMS

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APRIL 13, 2007

A MASTER’S PROJECT SUBMITTED TO THE FACULTY
OF THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF REGIONAL PLANNING
IN THE DEPARTMENT OF CITY AND REGIONAL PLANNING.

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ADVISOR
EXECUTIVE SUMMARY

As a follow up to a study that identified high-growth firms in Georgia in the late 1980s and measured their success through 1998, this research update gathered employment data to measure the 20-year firm survival rate. While not all of these “old gazelles” (mature firms that grew rapidly in their early years) continue to grow at high rates during their second decade, more than 50% of firms from 1998 were still in business with an average of nearly 100 employees and a median nine-year employment growth rate of 11%. More detailed employment and firm acquisition data is analyzed, and further research areas are outlined to explore the long-term effects of gazelles on communities as they mature and change ownership.

To complement the data analysis, the second section of the paper explores gazelle characteristics and supportive economic development policies in a literature review. Analysis of the Georgia policy environment reveals that new policies signal a recent shift from recruitment and retention strategies to support for small business creation and development. These policies increase the incentives for gazelle entrepreneurs to locate in the state, decrease bureaucratic transaction costs and increase the opportunities for networking and knowledge sharing. As gazelles prospered during the research period (1987 – present) in Georgia in an unfavorable policy environment, the introduction of these more favorable policies will likely increase the success rate of gazelles in the state’s future.
BACKGROUND AND METHODOLOGY

This paper builds on the research done in 1999 by Malizia and Winders on high-growth firms (known as "gazelles") located in the state of Georgia. Produced under a grant from the Tennessee Valley Authority, the initial report defined and analyzed "gazelle" characteristics (based on sector, size, and location) and determined policy implications.

Original Study. The original dataset was developed using ES-202 data on firms that 1) began hiring workers between 1987 and 1989, and 2) added 20 or more employees by 1994. As there was no conventionally accepted definition of "gazelles" in the business context, this method used data on firms that grew quickly over a five to seven year period. However, the researchers removed several categories of firms that did not meet the originally intended criteria, including branch plants, firms that were formed before 1985, and firms that were not truly growth firms (either provided personnel services or were seasonal employers). After eliminating these firms, only 319 of approximately 17,000 initial firms remained (see Malizia and Winders 1999 for more detailed research methodology).

In order to conduct a longitudinal analysis, the researchers reviewed each firm's status four years later. They found that by 1998, only 214 of the 319 were still in business, 14 of which had been acquired, leaving only 200 firms with their original location and ownership status. Seventy-seven of these firms could not be reached to obtain data, with 123 remaining firms providing information through mailed surveys or phone contact. This report found that while gazelles represented only 1.4 out of 100
businesses, they remained important employers – with employment growing from 14.8 in 1989 to 68.1 in 1998. Based on the importance of gazelles, the report recommended community-based and process-oriented strategies to improve local capacity for business development, to build networks of entrepreneurs and to help young companies manage growth.

Current Research Methodology. During the 2007 gazelle research update, the 123 remaining firms were researched online and contacted by phone to determine the firm status and size (see Appendix One for detailed results). The 2007 update took place in two phases. First, online searches were performed to confirm or update firm contact information. During this web-based research phase, any information regarding firm size, as well as information related to ownership changes (through acquisition), was noted. After the online research was concluded, the researcher called each firm using the most up-to-date contact information and inquired about the current firm size (measured as total number of employees). To maximize the likelihood that a firm would provide data for the research update, number of current employees (a basic metric that would be easily attainable over the phone) was used as a proxy for firm size.

Current Research Results. Of the 123 firms surveyed, 37% (45 firms) provided employment information and did not reveal any changes in ownership status. An additional 17% (21 firms) were still in business but would not reveal employment data. Therefore, in total more than half of the firms (54% at 66 firms) maintained their original ownership, with no information indicating that their major business purpose or location
had changed substantially. This group represents approximately 21% of the 319 firms identified as gazelles in the original dataset (see Appendix Two for firm status results).

Of the 58 firms surveyed, data elicitation revealed that 18 firms had been acquired. Fourteen of these 18 firms were no longer in business under the same name, but the like businesses were still in operation at the same or similar location. Six of these fourteen acquired firms were local banks, mirroring the financial sector’s trend toward consolidation during that period. The remaining four (of the 18 acquired) firms were acquired but operating as subsidiaries under the original name at the original firm location.

The remaining 39 firms could not be contacted (because contact information was no longer valid) and were presumed out of business. Although extensive internet research was performed on all firms to gain information on the cause or timing of firm exit from the local economy, research confirmed the dissolution of only two of these firms. Further research could be done with local chambers of commerce or economic development officials to investigate whether these firms exited successfully (through acquisition) or if the firm terminated operations willingly or under duress.

**Limitations of methodology.** Most phone call data was obtained from the firm receptionist or whomever answered the initial phone call. While many of these employees responded with an exact figure, not all responses were given with confidence. We cannot be sure that the employment data provided is completely accurate, especially data from firms that have a high percentage of part-time, seasonal or contracted employees.
LONGITUDINAL DATA ANALYSIS

This long-term research project explores the characteristics of firms that grow quickly in their initial stages. These firms, commonly called “gazelles”, have received attention from the field of economic development because this small percentage of new firms creates a disproportionately large percentage of new jobs (Buss 2002). The data offers insight in the following areas, all of which are analyzed and conclude with opportunities for further study.

**Firm Lifespan:** How do the lifespans of gazelles differ from lifespans of average (non-growth) firms? While less than 2% of firms that began hiring employees from 1987-1989 in Georgia became gazelles (317 of approximately 17,000), a high percentage of these firms were still in business in 2007. Sixty-six firms were still in existence in 2007, representing over 20% of the original sample of gazelle firms. While reliable data on the average life-span of a firm could not be found, it is estimated that this survival rate is much higher than the survival rate of the average firm. Further research on this comparison would help policy makers understand the long-term impacts of gazelle firms on their regional economies.

**Acquisition (Rate):** Are gazelles more likely to be acquired? Of the 319 in the original firm sample, 27 were confirmed as acquired by 1998 with 18 more by 2007. This total (45) represents over 14% of the original gazelle sample and almost certainly should include some of the firms from which data could not be found. Like the research question posed above regarding firm lifespan, data on acquisitions of average firms over a 20 year...
time horizon could be compared to this data to determine if gazelles are more likely to
exit successfully through acquisition. Further research could focus on the attributes of the
founders of high-growth ventures, which might reveal that the skill sets of gazelle-
founding entrepreneurs are more suited to starting and growing firms – rather than
managing them in their mature stage. This could indicate that they are more likely to sell
their ventures, perhaps in order to start new growth ventures.

Acquisition (Method): *What effect does acquisition have on the local economy?* Much
of the focus on gazelles assumes that, because they create more jobs than the average
firm, they are good for the local economy in which they operate. However, as acquisition
appears to be a reasonably likely occurrence for these successful firms, some
communities may face the loss of these jobs if the firm is moved or altered significantly.
Data in this project reveal a variety of results from firm acquisition including: total job
loss and firm closure; firm name change but maintenance of operations and jobs; and firm
name, location and job consistency, operating under new ownership (often as a
subsidiary). In order to understand the effects of acquisition on the local economy, more
research could be done on the likelihood of job loss through firm closure or location
change.

Growth (Rate and Method): *How do gazelles continue to grow over time?* Of the 45
firms that provided employment data, slightly more than half continued to grow (26
firms). Of these growing firms, the average nine-year growth rate was 112%, and the
median over the period was 50%. Of the firms that experienced a decline in employment,
the average decline was 39% and the median decline was 40% over the nine year period. For all the firms, the nine year employment change was an average increase of 48% and a median increase of 11%. This data indicates that gazelles are more likely than not to continue growth even in their late stages, but that decline is not unlikely. The range of employee growth, from -79% to 971% over the period from 1998-2007, indicates the wide variety of growth possibilities for firms as they enter their second decade, even if they began as fast-growing firms (see Appendix Three for growth distribution). A potential expansion on these findings could be to research the methods by which these firms experienced growth. That is, does growth happen internally through expansion or externally through acquisition – and if so, does this transition happen through necessity (i.e., to maintain certain growth targets, acquisition becomes the most cost-effective mechanism) or because management preferences changed, or because firm strategy (which focused, perhaps, on diversification or growth in a completely new line of service) required outside input?

Growth (Location): How does firm growth outside of the original community effect that community over time? While this research update did not specifically track the locational changes of firms over time (including firms that were acquired), data was collected on several firms that have grown significantly outside of Georgia. The employment numbers provided in this report are for employee number at Georgia locations only, but several firms have headquarters based in this location with many additional jobs created in other states (and countries). Further research could reveal whether growth outside of a firm’s initial location – and outside of the original location’s
state – has positive (or negative) consequences for the local community (and state).
Along those lines, as the company grows, further research could expose the marginal
effect that this growth has on the community and whether jobs created outside of the
local area but have any measurable effect on the original local economy.

**Data Conclusions.** In summary, data reveal that more than half of gazelles that survived
between 1989 and 1998 have survived without ownership changes through to 2007. Of
the surviving firms which provided employment data, the median (9-year) growth rate
was 11% but with a employment growth range of -79% to 971%. The remaining
gazelles remained important employers, retaining an average of 94 workers per firm. In
addition to maintaining strong survival and employment growth rates, these firms are also
strong acquisition targets, with at least 14% of firms over the total period being acquired.
Further exploratory research is recommended to compare these rates with average firm
survival and acquisition rates to more completely understand the long-term advantages
that gazelles have over average firms. In addition, research is recommended to
understand the motives behind founder exit strategies and to understand the effects that
acquisition and location changes have on the original local economies.
POLICY ANALYSIS

This section explores policies that support the creation and growth of gazelles in local economies. After examining current literature on the topic, the dataset described above is revisited in the context of an analysis of the policy environment in Georgia. Finally, policy recommendations for Georgia are explored to improve the economic environment for gazelles.

Literature Review

There is some difficulty in compiling research on gazelles, in part because an exact definition of “gazelles” has yet to be agreed upon by the business and economic development communities (Delmar and Davidsson 1998). Given the elusiveness of gazelle characteristics (perhaps unsurprising given their nickname), most research on supportive economic policies has been qualitative and performed through interviews and focus groups.

This exploratory research has revealed several common gazelle characteristics. First, because of their rapid growth, gazelles (by definition) must adapt quickly to changing internal and external environments. This fast-paced environment often means that firms demand fast and easy access to a range of information. Governments could fill a void in this area, especially where private sector services are perceived as too expensive for gazelles who frequently reinvest all available capital to fuel firm growth (Fischer and Reuber 2003).

Second, as these firms undergo rapid change they must be led by managers with the ability to acquire new talent and make important strategic decisions. With their eyes
on the future, these leaders often create a strong management team with a balance of skills in order to manage the changes that happen to the firm as it grows quickly. By knowing their own strengths and weaknesses – and hiring and training others to balance those skills – gazelle leaders often excel at managing their internal human resources (Barnard et. al. 1998). Governments could provide resources to help train and manage leaders in this critical area in an effort to build the necessary skills to run a fast-growth business.

Third, rapid growth almost always relies on access to capital (Buss 2002). Gazelle owners identify financial supporters as critical to their success (Barnard et. al. 1998). Governments could provide indirect financial resources – such as decreased fees and taxes or free (or low-cost) professional services (see above) – which would limit the financial strain that could prevent gazelles from prospering.

Finally, gazelle founders rely heavily on strong networks of relationships. Gazelle leaders identify peer networks as necessary to grow their business, and investors often prefer that gazelle leaders have strong networks and mentors (Barnard et. al. 1998). Skeptical of the efficiency of private sector resources (too expensive and perceived to give advice that simply fuels further business) and public sector resources (too slow to respond), gazelle leaders may therefore prefer peer networks as the primary means of learning and obtaining advice. As deep, meaningful peer networks can be time-consuming and expensive to develop, governments could provide networking opportunities that are aimed at supporting rapid growth (Fischer and Reuber 2003).

Gazelle entrepreneurs, however, are not unified in their view of the role public policy can play in the success of their ventures. While most doubt the ability of the
public sector to provide effective support to their ventures – in part because of the speed at which they demand services – some gazelle leaders prefer public services over services from private sector firms. Even though the public and private sectors can both have selfish motives for providing services (private sector to maximize profits and public sector to provide political justification for economic development programs), some gazelle leaders place more trust in public services. While expectations for public services are low, public services are perceived as far more affordable to most gazelle leaders, which is especially important as most gazelles are quickly reinvesting available capital to fuel their growth (Fischer and Reuber 2003).

Given this set of beliefs and characteristics, several policy solutions have been highlighted in literature as meeting the specific needs of gazelles:

**Small Business Innovation Research (SBIR) Program.** Coordinated and funded at the federal level by the Small Business Administration, the SBIR program provides research and development funds for small business. Aimed at firms with high, initial R&D costs, this program gives awards of up to $1.6 million each to firms to commercialize their innovative technology. Buss (2002) identifies the involvement of entrepreneurs in Indiana in the SBIR program and notes that this program could be especially important to entrepreneurs who are not located in high-tech clusters (presumably where more resources – capital and services – would be available).

**Innovators Alliance.** Located in Ontario, Canada, this non-profit organization aims to “foster sustained and superior business results through … knowledge sharing among CEOs” (see www.innovators.org). It was started in 1999 with government funding which decreased over four years as private industry sponsors became involved. Services are
geared to leaders of high-growth firms and include educational workshops, social networking events, and knowledge sharing opportunities. Fischer and Reuber (2003) highlight this endeavor as highly successful, noting that meetings regularly have 70% attendance from local members. Confidentiality breeds collaboration and openness at meetings and events, and a members-only website is now used to share information online.

**The State of Georgia**

**Economic Development Policies.** Georgia focuses much of its economic development efforts on industrial recruitment and growth. Marketing materials for the Georgia Department of Economic Development focus on its high number (17) of Fortune 500 companies and on the incentives available to locate businesses in Georgia. A wide range of tax credit programs are available for business that choose to locate in Georgia, including credits for locating headquarters or manufacturing facilities in the state, for meeting specific designated business needs or for growing in a designated competitive industry (see www.georgia.org).

Until 2004, there were few efforts at the state level to support small and growing businesses. However, when long-time entrepreneur Sonny Perdue was elected governor in 2002, he spurred new efforts to establish programs to foster small business development. While no programs exist that specifically target gazelles, these small business programs aim to create a supportive environment for entrepreneurs to start and grow companies throughout the state. Some of the key programs include:
Georgia Entrepreneur & Small Business Coordinating Network. This group is charged with coordinating the state’s entrepreneurship and small business initiatives. It is one example of Georgia’s effort to provide efficient services by networking public and private resources. More than 30 members from 20 different agencies contribute to the network’s efforts to coordinate resources for small business development (see www.georgia.org).

“Entrepreneur Friendly” Initiative. This multi-stage, community-based program aims to empower communities throughout Georgia to support entrepreneurship locally (see www.georgia.org). The initiative empowers local organizations and individuals to champion the initiative, who will in turn: educate the community about the benefits of entrepreneurship and small-business ownership; develop a strategic plan based on the strengths of current local entrepreneurs and unique local resources; identify and coordinate state and federal resources available to support local entrepreneurial activities; and participate in state-wide entrepreneurial activities to increase sharing of best practices.

Small Business Regulatory Reform Initiative. Developed to streamline the process by which small businesses obtain regulatory information, this initiative provides a specific liaison at each state agency and a new website and toll-free number for businesses to use for queries on state regulations. This effort, like the coordinating network, aims to reduce government inefficiency in order to make small business owners more productive (see www.georgia.org).

Mentor Protégé Program. This program pairs entrepreneurs (selected through a competitive application process) with leaders from established Georgia-based companies.
Entrepreneurs are expected to gain specific tools for improving their businesses from mentors as well as develop valuable peer relationships. The first cycle of this 18-month began in late 2006 (see www.georgia.org).

**Analysis and Recommendations**

While Georgia’s economic development programs are not specifically designed to support the growth and creation of gazelles, the state’s new focus on programs to support small businesses are well suited to meet the needs of gazelle founders. The shift from pure recruitment and retention strategies recognizes the importance that small businesses play in local economies. Georgia’s programs fall into three main categories, each of which is aligned with the needs of gazelle leaders.

First, tax credit programs, including job creation and investment tax credits, provide tax breaks for companies that are growing in terms of employees or in terms of capital expenditures and local investment. These tax incentives may encourage gazelle founders to establish their ventures in Georgia, helping to fuel the economy. These credits encourage both recruitment and growth of existing companies as well as the development and growth of new ventures, satisfying a wide variety of political views of the role of economic developers. While this strategy alone is not likely to turn a new venture into a gazelle, successful entrepreneurs will be attracted to any generous tax incentives – provided that they are well marketed – especially if they believe that their venture has the potential to grow substantially.

Second, the aggressive and public efforts to streamline processes and regulations for entrepreneurs and small business owners should decrease transaction costs and make
Georgia an attractive place to create a venture. For the entrepreneurs who believe that the public sector role in economic development is to enable success through efficiency, these efforts completely satisfy the government’s obligation to support the private sector.

Finally, initial efforts at targeted networking and knowledge sharing opportunities satisfies some of the desires of entrepreneurs to have access to best practices and peers in a low-cost environment. However, the mentoring program assumes the skills from ‘established’ business leaders will transfer to small business owners and does not specify how trust will be established or confidentiality maintained. While this program appears to be a good start towards providing needed services and relationships to small business owners, gazelle leaders might find that the rigid structure of the program failed to meet their needs as their ventures grew rapidly.

CONCLUSION

Given the results of this research study, which found relatively high 20-year survival rates and an average of nearly 100 employees per remaining firm, gazelles are important components of local economies in the long term. They therefore merit the development of economic policies to meet the stated needs of gazelle entrepreneurs, even though this can be difficult given the wide variety of industries in which they operate and the lack of clarity on the specific characteristics that lead to rapid growth.

Gazelles are created and survive without targeted policies, as these firms did in Georgia when most economic development efforts were focused on recruitment and retention of established firms. However, the current policy environment is poised to provide much greater support to future gazelles, with support for small business creation
and development in three areas: providing incentives for companies to start businesses (through tax incentives); creating market efficiency through the elimination of bureaucracy and streamlining of state regulations; and public-private partnerships to support the low-cost networking demands of entrepreneurs. These policies create an environment that supports business development and growth and creates opportunities for gazelle entrepreneurs – visionary leaders who are very unique in their ability to manage their businesses through period of rapid growth – to succeed.
BIBLIOGRAPHY


