

**SMALL BUSINESS GROWTH DURING A RECESSION: LOCAL POLICY IMPLICATIONS**

**Christiana McFarland**

**Kathleen McConnell**

**Caitlin Geary**

**National League of Cities**

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## SMALL BUSINESS GROWTH DURING A RECESSION: LOCAL POLICY IMPLICATIONS

Christiana McFarland

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Caitlin Geary<sup>1</sup>

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### INTRODUCTION

The current recessionary period has garnered new attention to the role of small businesses in generating economic growth. As a result, local governments are increasingly interested in supporting and growing their small business community. Understanding the relationship between local policies and small business growth may foster more strategic and informed policy choices. To this end, we investigate the relationship between local government policies and small business growth at various stages of development.

Our conceptual framework asserts that businesses at different stages of development will have distinct needs, and therefore, interact with the local policy environment in different ways. Specifically, we examine needs and policies along the following dimensions: management and skills development; market expansion; access to capital; regulatory process; and policy culture. We use data from the 2009 International City/County Management Association and National League of Cities economic development survey, the National Establishment Time Series Database, and the American Community Survey to construct four regression models to predict growth between 2007 and 2008 of small businesses overall, small businesses in the self-employed stage, small businesses with one to nine employees, and small businesses with two to 99 employees. Our definition of small business growth includes new firm formation, or openings, expansions, and relocations. Our sample consists of 109 counties with populations greater than 50,000.

We find that although the direction of the relationship between policies and growth of small businesses at different stages remains constant, the strength of these relationships vary. This indicates that some local policies may be more likely than others to influence the growth of small businesses in different stages of development.

### BUSINESS FORMATION AND GROWTH

The literature on the formation and growth of small businesses tends to focus on characteristics of the region or location of the business.<sup>2</sup> Goetz and Freshwater (2001) examine the impact of state-level entrepreneurial climate on entrepreneurial activity. They suggest that state-level variation in new small business formation is attributed to the level of resources or “inputs” available, including ideas and

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<sup>1</sup> Christiana McFarland is the director of the Finance and Economic Development Program in the Center for Research and Innovation at the National League of Cities. Katie McConnell is senior associate in the Finance and Economic Development Program. Caitlin Geary is the Finance and Economic Development fellow. The authors would like to thank Christopher Hoene and Darrene Hackler for their conceptual and editorial contributions to this paper.

<sup>2</sup> This study focuses on all small businesses including, but not limited to, entrepreneurs. Therefore, our literature review considers research both on traditional small business as well as entrepreneurs.

innovation, human capital and financial capital. In one of the few county-level analyses, Scorsone et al. (2006) find that the share of people commuting out of the county for work, employment share in the farm sector, degree of rurality, and poverty are inversely related to business start-up rate. In a compendium of studies examining the regional variation of new firm formation across countries, Reynolds et al. (1994) find that the same factors explain regional variation in birth rates of new firms across a number of developed countries, including urbanization/agglomeration, presence of small firms, and economic specialization. Armington and Acs (2002) find that industry intensity, population and income growth, human capital, and establishment size impact regional variation in new firm formation. Their findings do not support a relationship between unemployment and new formation. Fritsch and Mueller (2005) find that variation in regional start-up rate is attributed to high levels of regional innovation, existing entrepreneurship, and, contrary to Armington and Acs (2002), unemployment.

As noted above, there are different findings on the relationship between unemployment and small business growth. This topic has been of particular interest as of late as local communities grapple with high unemployment. Presumably, the recession causes formerly employed individuals to create their own business out of either desire or necessity. Fairlie (2010), in his paper for the Kauffman Foundation, states that in the U.S., new people reporting entry into entrepreneurial activity in 2009 was at its highest level in fourteen years and marked the second straight year of increase. However, he cautions, while it is clear that there is some relationship between the increase in entrepreneurial activity and the high unemployment of the recessionary years, "...it is impossible to clearly disaggregate those trends" (p. 6). Despite the lack of consensus on the relationship between unemployment and entrepreneurial activity and small business growth, for the purpose of this study, we include unemployment because without it, we would ignore one of the major issues affecting overall economic conditions.

Although most of the studies on firm formation and growth allude to policies that foster a good business climate, targeted small business policies are either not recommended or not included in the analysis. For example, in their analysis of 119 Kentucky counties, Scorsone et al. (2006) exclude policy variables because they do not anticipate variation within the same state. "Incorporating local policy differences would have aided the analysis as well, but, unfortunately, most of the entrepreneurship support structures and incentives are provided at the state or national levels, with local areas serving mostly in the role of recipients of aid, resources, and information as opposed to being initiators of entrepreneurial culture and ideas" (p. 161). Viewing the policy context only in terms of state-level taxes and regulation dismisses the critical role that local governments have come to play in business development (Clarke and Gaile 1998).

Although Fritsch and Mueller (2005) do not include policy level variables in their analysis, they state that "we did not detect any sign of any policies in operation that led to quick and large changes of the levels of regional new firm formation activity" (p. 17). They support local policies aimed at entrepreneurship and small businesses, but caution that these policies will have their greatest impact over an extended period of time. Without including policy-level variables, Armington and Acs (2002) explain two-thirds of the regional differences in new firm formation, and suggest that the residual could potentially be explained by policies, as well as other "exceptional" regional resources. Reynolds et al. (1994) assert that the most beneficial government intervention is to "adjust or review their current posture toward business organizations to ensure that small firms are not disadvantaged in relation to larger firms" (p. 453). Although we do not disagree with the importance of local policies that aim to create general conditions conducive to business growth, such as education and transportation, we are particularly interested in the relationship between specific policies for small businesses and small business growth.

In this vein, Bates (1995) finds that non-minority small firms receiving state and local aid perform better and remain in operation longer than those that do not, controlling for firm and owner characteristics. Bates warns, however, that it is often difficult to parse out the influence of specific government policies given that business owners may also utilize several types and sources of assistance (p. 35). Molnar (1997) finds that participants in business incubators, which are often supported by local governments, have a survival rate of 87 percent after five years, compared with 44 percent of businesses that did not use an incubator. It should be noted, however, that this study does not control for factors associated with location variation of these firms.

Very few studies of the formation and growth of firms, particularly for smaller firms, have examined the relationship between specific local government policies and growth. Those that do tend to treat small businesses as a homogenous group. In this study, we take as a starting point that small businesses have distinct management and operational challenges at various stages in their development. We examine the relationship between local small business development policies and growth of small businesses in various stages between 2007 and 2008. To test our hypothesis, we use policy proxies for management and skills development, market expansion assistance, regulatory assistance, access to capital, and local government supportive culture, and examine the effects of these policies on growth in 109 U.S. counties above 50,000 in population.

### **SMALL BUSINESS STAGES OF DEVELOPMENT**

“Small businesses” refer to a diverse group of entities of different sizes, growth aspirations, industries and outputs. Studies of small businesses have found that, despite these differences, businesses move through stages of development that reflect a high level of uniformity of management, technical, financial and other challenges and needs. The stages framework offers a unique way for local governments to understand and to address the challenges and needs of the local business community.

The concept of small business “stages” is not new. In an effort to inform management practices of small business owners, Churchill and Lewis (1983) develop a framework based on nature, characteristics, management factors, and problems facing businesses. They find that “categorizing the problems and growth patterns of small businesses in a systematic way that is useful to entrepreneurs seems at first glance a hopeless task...They are characterized by independence of action, differing organizational structures, and varied management styles. Yet on closer scrutiny, it becomes apparent that they experience common problems arising at similar stages in their development” (p. 30). Churchill and Lewis (1983) identify five stages, including existence, survival, success, take-off, and resource maturity.

More recently, Lichtenstein and Lyons (2006) develop a new way to segment and understand business assets in communities. Their “pipeline” model of entrepreneurs and firms is intended to help communities more effectively differentiate businesses to improve performance in working with and building entrepreneurial communities. The pipeline is operationalized according to the lifecycle of businesses, as well as skills needed at each stage, such as technical and managerial skills, to move the firm to increased growth and wealth creation. They identify six stages, including pre-venture, existence or infancy, early growth, expansion or sustained growth, maturity, and decline.

The Edward Lowe Foundation has also put forth a business stage framework.<sup>3</sup> They state that, “stages reflect operational and management issues establishments face as they grow from startups to mature

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<sup>3</sup> Edward Lowe Foundation actively embraces and encourages entrepreneurship as the source and strategy for economic growth, community development and economically independent individuals ([www.edwardlowe.org](http://www.edwardlowe.org)).

companies...For regardless of their industry sector, companies in the same developmental stage experience similar challenges.” The Lowe Foundation identifies stages including self-employed, stage one, and stage two. They use three key factors to determine net new establishments, or growth, in each stage: openings (the difference between births and deaths (openings and closings) of establishments); expansions (the difference between establishments that have increased jobs compared with those that have contracted their labor force); and relocations (establishments that have moved into a designated area versus those that have left the area).

For the purpose of this study, we use the business stage model established by the Lowe Foundation, as it is most conducive to identifying comparable data across communities. We use the business development stage frameworks offered by the Lowe Foundation, Churchill and Lewis (1983) and Lichtenstein and Lyons (2006) to describe the challenges and needs of small businesses. Although these sources identify different numbers and names of stages, conceptually, their underlying logic is the same.

Businesses in the *self-employed stage* are generally comprised of one employee, the entrepreneur/owner. In 2008, self-employed businesses comprised 36 percent of all resident establishments in the U.S. and seven percent of jobs nationally.<sup>45</sup> According to Lichtenstein and Lyons (2006), “this phase begins with either an interest or desire on the part of an entrepreneur to start a business, or an idea for a business, and ends with the emergence or birth of an organization with an economic offering (i.e., a product or a service) ready to be sold to a potential client and to generate revenue” (p. 379). The Lowe Foundation describes businesses within this stage as sole proprietorship-type businesses that are conducted at a relatively small-scale.

The biggest challenge facing companies in the self-employed stage is simply business survival. Owners typically work for themselves and many times lack a solid business model or organizational charter. Ensuring survival in the self-employed stage includes the ability to build assets, assemble resources, develop a business/marketing strategy, and create networks. In addition, the success of the business venture is often dependent on the competencies of the small business owner. According to Wadhwa et al. (2009), the most important factors of entrepreneurial success are management experience and ability to learn from successes and failures.

*Stage one* companies have between one and nine employees and make less than one million per year in revenues. In 2008, first stage companies comprised 56 percent of all resident establishments in the U.S., and were responsible for 32 percent of jobs nationally. Stage one companies include life style businesses, commonly referred to as mom and pop stores, and new start-up businesses. Businesses at this stage are still focused on survival. As noted by Churchill and Lewis (1983), these firms are focused on building market share, customer relationships, and a technological base, as well as developing their product or service and obtaining capital.

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<sup>4</sup> A resident establishment (vs. a nonresident establishment) is either a standalone business in the area or a business with headquarters in the same state. The Lowe Foundation makes the distinction between resident and nonresident sectors because resident companies have more influence on job creation than businesses headquartered outside the state.

<sup>5</sup> Due to the nature of self-employed businesses as having no employees other than the owner and often home-based, they are easily undercounted in their contribution to employment and business formation.

Having enough capital is particularly important to stage one companies who need to cover often expensive start-up costs. This is supported by Huang and Brown (1999) in their study of problems facing small business. They find “obtaining external financing” a statistically significant problem facing small business with less than 20 employees. Additionally, a company’s marketing capacity is important during stage one as a means to build a stable customer base. This is supported by Wu and Young’s (2003) study, which finds that marketing is the most frequently cited problem for surveyed small businesses.

The business owner’s abilities are particularly important during this stage. According to Churchill and Lewis (1983), “small businesses are built on the owner’s talents: the ability to sell, produce, invent or whatever”(p.43). This is of particular importance during stage one as the business owner typically serves as the main decision maker and success and failure depends on his/her judgment.

Although growth is the goal for many stage one companies, it is not necessarily a characteristic. Indeed, many companies, particularly life style businesses, will remain in stage one for the duration of existence providing a living wage for the owners and employees (Lichtenstein and Lyons 2006). Additionally, a large number of companies will not survive past stage one, with fifty percent of small businesses no longer in existence after five years (Hamilton-Pennell 2010a).

*Stage two* companies have between 10 and 99 employees. According to Lowe, second-stage companies have grown past the start-up stage but have not grown to maturity. They have enough employees to exceed the comfortable control span of one owner/CEO and benefit from adding professional managers, but they do not yet have a full-scale professional management team. At this stage, a company typically has a proven product, a niche in the market, and a customer base. Survival is no longer a daily concern. In 2008, second stage companies comprised about 8 percent of all resident establishments in the U.S. and provide 35 percent of jobs nationally.

Second stage companies are often referred to as “high growth,” or businesses with \$750,000 to \$50 million in revenues, a proven business model and the capacity to grow. Although not all second stage companies are high growth, most high growth companies can be found in stage two (Stangler 2010). Second stage companies are thought to have the greatest economic impact because most offer goods and services to markets outside their local area (Hamilton-Pennell 2010b).

At this stage, owners must make a decision to grow or to remain at the current size. According to Churchill and Lewis (1983), companies that choose not to grow “...can stay at this stage indefinitely, provided the environmental change does not destroy its market niche or ineffective management reduces its competitive abilities” (p. 34). Stage two companies that do not wish to grow must still be very aware of market conditions and aptly manage their larger employee base.

Companies that choose to grow are faced with a new set of challenges. “CEOs of high-growth firms routinely struggle with common problems, such as funding expansion, developing management talent, and overcoming delays due to permitting processes. These difficulties slow growth and reduce long-term job creation” (Gundersen 2010, p. 1). Capital is again important, as finding a way to finance growth becomes key. According to Lichtenstein and Lyons (2006), even profitable companies will likely need to find financing sources as revenues will not be able to cover the needs of growth and expansion. Additionally, the role of the business owner is drastically changing. As the business grows and new employees are added, the owner will no longer be able to be involved in every decision. New

management skills, including delegation and strategic planning, are required. Additionally, as facilities expand, the business owner will have greater interaction with the regulatory environment.

Our review of the literature revealed categories of small business management and operational challenges that tend to vary by development stage. These include management and skills development, market expansion, access to capital, and regulatory barriers. We create a conceptual framework that explicitly links business needs at various stages to local government policies. Hypotheses are generated about the relationship between small business growth and policy usage by understanding the resource and skill needs of small businesses at various stages of development.

## **LOCAL POLICY FOR SMALL BUSINESSES**

### *Management and Skills Development*

Lack of management and business skills is a common culprit of small business failure. While most business owners have a great idea or product, the ability to properly manage the business is also required for success. Local programs for small business management and skills development typically include general management training, financial advising, assistance with formulating a business plan, and other technical assistance associated with business ownership (Blakely and Leigh 2010, Lerner 2009). These programs are often offered by the local government through a partnership with a Small Business Development Center.

Management and skills development is critical at every stage of small business growth; however, the types of skills needed vary by stage and become more specialized as businesses grow. Reynolds et al. (1994) note that in the earliest stage, small business owners benefit most from assistance in developing a marketing strategy, an operational plan for delivering goods and services, and a plan for assembling resources. For companies in stage one, since the basic elements of the businesses have been established, assistance should be more focused on managing within specific industry sectors. In stage two, business owners are typically dealing with larger employee pools and challenges associated with growth, delegation, and strategic management. Business owners in stage two are more likely to learn by networking with other business owners. Their management challenges tend to be more specific than those addressed in local programs and they are often too busy with growth to seek out public assistance (Gundersen 2010).

*Given the general nature of most local management and skills development policies, we hypothesize that counties with management and skills development programs will likely have higher levels of small business growth overall, particularly growth of earlier stage businesses.*

### *Market Expansion Assistance*

In their study of businesses across a range of growth, industry and size characteristics, Huang and Brown (1999) find that sales and marketing issues were the most dominant problem encountered by small business owners. Market expansion can be daunting for entrepreneurs and small business owners because of their lack of resources and specialized marketing knowledge. Local programs to assist small businesses in expanding the market for their goods and services typically include programs such as buy-local campaigns or group marketing systems. These programs are often focused on the local and regional consumer base.

Stage two companies typically have a basic marketing system already in place and their efforts are geared toward expansion into markets outside the local area. The Economic Gardening philosophy of economic development focuses on growth of stage two businesses and recognizes that these companies need “sophisticated corporate level tools like database researching, geographic information systems, search engine optimization and social network mapping to the small, growing company...In a typical engagement, the Economic Gardening team will assist a company with core strategy, market analysis, competitor intelligence, using temperament to slot teams and undertaking custom business research” (Gibbons 2010). More specialized marketing programs geared toward penetration in external markets require a level of resources and technical expertise often not found in local government marketing programs.

*Given the local consumer-based approach of most local market expansion assistance programs, we hypothesize that counties with marketing programs for small businesses are likely to have higher levels of small business growth overall, particularly growth of earlier stage businesses.*

#### *Regulatory Assistance*

Ideally, a local government’s regulatory processes, like permitting and zoning, exist to guard against detrimental development, preserve local assets, and safe guard citizens. These processes can also directly impact the ease of doing business in a jurisdiction. Regulatory processes riddled with delays, confusing and redundant steps and multiple approval processes present barriers to small businesses which do not have the time or resources to navigate these bureaucratic steps (McFarland and Seeger 2010). According to Roxas et al. (2008), the speed, efficiency, and complexity of local regulatory processes are indicators of a local government’s responsiveness to the needs of small business.

Reynolds et al. (1994) describe the effects these processes can have on new business formation. “Governments can, given their powers, have considerable influence over the entrepreneurial process by stifling the efforts of those attempting to start a new business. This may be done through onerous bureaucratic requirements, complex regulations, or merely slow reaction to requests for decisions required to form a new business” (p. 452). Local government efforts to reduce delays, streamline processes, and offer assistance for businesses to navigate the regulatory process are critical to business growth and success. Morris and Brennan (2003) offer additional support about the importance of minimizing the burden of regulatory processes. In a survey of 209 Australian small business owners about drivers or inhibitors of business development, “local government regulation” was reported to be “very important” or “important” by 61 percent of respondents.

*We hypothesize that counties with permitting and zoning assistance are expected to have higher levels of small business growth at all stages.*

#### *Access to Capital*

Even in good economic times, the relatively high failure rate of new small businesses tends to limit the financing options for small businesses. For example, Bradshaw (2002) notes, “banks try to keep their losses on small business loans to a half percent or less” (p. 360). In the recent recessionary period, stricter underwriting standards and bank restrictions on lending, including smaller-dollar loans that are of particular interest to new small businesses, have made these capital sources even scarcer (Board of Governors of the Federal Reserve System, July 2010). Most state and local government financing



programs, such as revolving loan funds and microenterprise programs are geared toward businesses that are above average risk and may not be able to participate in traditional lending market. Local government programs provide more flexible sources of capital with better loan terms.

Additionally, state and local government financing programs are often offered in response to a perceived market failure. “The geographic concentration and industrial focus of venture capital investments have contributed to the perception that specific regions of the country (the more geographically isolated and/or sparsely populated) and certain industries (traditional, non-high tech) are underserved by the private venture capital firms. A common response to this perception is the initiation of public programs to enhance the availability of equity capital for local entrepreneurs and businesses” (Barkley et al. 2001, p. 350). The goal of local programs, therefore, is to provide equity to underserved markets or to correct market failures, not necessarily to make a profit.

The availability of capital is also important for second stage companies that need to be able to fund efforts to grow and expand their products and market reach. However, unlike first stage companies who tend to be unproven, second-stage companies have already achieved a measure of success and offer a proven product, positive revenues, and a stable customer base. This affords second stage companies additional financing opportunities to cover growth and expansion efforts, particularly from more traditional private market financing sources.

Although there is widespread consensus that nearly all small businesses and entrepreneurs have a need for capital, whether it is for start-up costs, daily operating expenses, or expansion financing, there are mixed opinions about the ability of governments to effectively provide this capital, even for those most in need. Lerner (2009) claims that government intervention in this arena is not the best use government resources or efforts because they can distort markets by supporting unviable companies. “In their eagerness to jump-start entrepreneurial activity, governments frequently race to hand out capital. This is equivalent to serving the main course before setting the table, and unlikely to lead to a successful dinner party...” (Lerner 2009, p. 109). Providing capital requires a level of management, capitalization, and industry expertise often not found in local government (Reynolds, et al. 1994). Barkley et al. (2001) review state-assisted venture capital programs in 13 states and find that although rare, those that have the greatest success have adequate public funding for capitalization and management, expertise in fund management, distance from the political process, supportive government regulations, and strong financial returns on fund investments.

*We hypothesize that counties with programs to provide access to capital for small businesses are expected to have higher levels of small business growth overall, particularly for earlier stage businesses.*

#### *Local Government Supportive Culture*

The local government culture is the policy context and orientation of the local government toward the participatory role of the business community in developing economic development policy. “The local government social support system is constituted by a proactive local government leadership with a clear economic vision for the city that encourages participation of entrepreneurs and small businesses in city development planning...and other efforts to support these firms within the city” (Roxas et al. 2008). Although much has been written about the location factors that contribute to an entrepreneurial climate and culture, including social capital, less empirical work has been done on the role of a supportive local government culture on small business growth. However, case studies and surveys of

entrepreneurs and small businesses clearly note the important role that a supportive local government culture plays in their ability to grow and succeed.

This supportive culture is most often reflected in local government partnerships with private businesses and industry leaders to develop economic development strategies. “Cities need to make sure city policies support their local businesses and do not hinder growth. For example, a city could form a task force with the local chamber of commerce and other stakeholders like regional technology councils to better understand the needs of local businesses and make sure policies are supportive of an entrepreneurial culture” (Lewandowski in Seeger 2009). In a survey of entrepreneurs and small businesses in Australia, Morris and Brennan (2003) find that small businesses highly value having open communications with local government. It enables the local governments to have a better understanding of the problems and issues facing businesses in the local area.

*We hypothesize that counties with a supportive business culture are expected to have higher levels of small business growth overall.*

## **CONCEPTUAL MODEL, DATA, AND METHODS**

Drawing on the literature, arguments and hypotheses offered in the preceding sections, the conceptual model we are investigating is as follows:

***Small Business Growth = Local policies (Management/Skills Development, Market Assistance, Regulatory Assistance, Access to Capital, Supportive Culture) + Location Factors (Population Growth, Industry Density, Unemployment, Human Capital)***

We examine the relationship between local small business development policies and growth of small businesses in various stages of development between 2007 and 2008. The small business data are derived from the National Establishment Time Series (NETS) Database via [youreconomy.org](http://youreconomy.org). [Youreconomy.org](http://youreconomy.org) is a website database with records for over 37 million U.S. establishments developed by the Edward Lowe Foundation using statistics from Dunn & Bradstreet.<sup>6</sup> The database uses three key factors to determine net new establishments, or growth, in each stage: opened (the difference between births and deaths (openings and closings) of establishments); expanded (the difference between establishments that have increased jobs compared with those that have contracted their labor force); and relocated (establishments that have moved into a designated area versus those that have left the area) ([www.youreconomy.org](http://www.youreconomy.org)).

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<sup>6</sup> NETS includes sole proprietors and partnership establishments that are active enough for D&B to find. In contrast, proprietorships and partnerships that haven't hired employees aren't included in the Census Bureau's Statistics of U.S. Businesses (SUSB) or Business Information Tracking Series (BITS) because they are considered to be non-employers. Also, if a business is listed in SUSB or BITS, its owners and partners are not counted as employees. These differences mean that NETS represents a greater total of small-business establishments and employees than the SUSB and BITS databases ([www.youreconomy.org](http://www.youreconomy.org)).

The data for the local policy variables are derived from the 2009 economic development survey conducted by the International City/County Management Association and National League of Cities.<sup>7</sup> The survey was mailed in October 2009 to chief administrative officers in all 556 counties with populations 50,000 and over, as well as all 3,283 municipalities with a population of 10,000 and over. Data for location factors are derived from the American Community Survey.<sup>8</sup>

Merging the available data for small businesses, local policies, and location factors results in counties being the most readily available unit of analysis. This analysis examines the impact of local government policy on growth of small businesses from 109 counties.

**Table 1: Summary Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Small business Growth overall, 2007-2008	109	0.03	0.22	0.1108	0.03730
Self-employed Stage Growth, 2007-2008	109	0.01	0.24	0.1204	0.04451
Stage 1 Growth, 2007-2008	109	0.02	0.26	0.1226	0.04388
Stage 2 Growth, 2007-8008	109	-0.06	0.06	-0.0059	0.01994
Population Growth, 2007- 2008	109	-0.09	0.09	0.0078	0.01730
Industry Density, 2007	109	0.03	0.13	0.0615	0.01713
Unemployment Growth, 2007- 2008	109	-0.48	1.36	0.0865	0.28162
% of Civilian Labor Force in Professional and Management Occupations, 2007	109	0.16	0.63	0.3125	0.07678
Small Business Development Center	109	--	--	0	--
Small Business Marketing Assistance Program	109	--	--	0	--
Permit and Zoning Assistance	109	--	--	1	--
Revolving Loan Fund	109	--	--	0	--
Partner with Private Business	109	--	--	0	--
Valid N (listwise)	109				

\*denotes mode

*Dependent Variable: Small Business Growth*

We analyze four dependent variables in separate regression analyses to better understand how the relationship between local government policies and small business growth varies by the development stage of the business. We use the business stage framework established by the Edward Lowe Foundation. Although conceptually their stages are more inclusive than simply establishment size, the data for stages is based on the size criterion due to data limitations: self-employed; stage one (two to nine employees); and stage two (10-99).<sup>9</sup> Growth is defined as the number of new establishments in

<sup>7</sup> The printing and mailing of the survey was funded by the generous support of the Alternative Finance Technical Assistance Consortium and the W. K. Kellogg Foundation.

<sup>8</sup> The American Community Survey only offers annual estimates for places with populations greater than 65,000. For counties with populations 65,000 and above, 2007 and 2008 annual American Community Survey estimates were applied. For counties with populations between 50,000 and 65,000, 2005-2007 three-year estimates were used as a proxy for 2007 information and 2006-2008 three-year estimates were used for 2008 information.

<sup>9</sup> This research does not assert a particular definition of small businesses base on size. This framework and analysis could easily be applied to larger small businesses.

each stage, including establishments that have opened, expanded into a new stage, and relocated for a different area.

In our sample of 109 counties, the mean growth between 2007 and 2008 for all new small businesses with less than 100 employees, including self-employed, stage one and stage two companies, is about 11 percent. During the same time period, self-employed firms and stage one firms, on average, experienced about 12 percent growth, whereas stage two businesses, on average, experienced a slight decrease in growth.

### *Independent Variables: Policy*

We derive our set of local government policies by creating policy categories based on types of small business challenges (i.e. management and skill development, market expansion, regulatory processes, access to capital) and choosing policies for each category that are the most prevalently used by local governments in our sample. We also add a category to capture the policy orientation of the local government toward the business community to get a sense of whether or not a supportive local government culture and policy context has a relationship with small business growth.

It is worth noting that the economic development survey asks local governments to select whether or not they have particular policies in their jurisdiction. The broad list of policies consists of a mix of traditional economic development tools and what might be characterized as new practices, or more innovative tools. Our ability to include these more innovative practices in the analysis is limited given the lower number of counties that report usage of these policies.

Additionally, it may seem counterintuitive to include local policy information from the 2009 ICMA/NLC survey to explain growth between 2007 and 2008. We choose to use the 2009 survey results for two reasons. First, the local usage of the policies included in our analyses is mostly stable over time. For instance, a comparison of policy usage of counties above 50,000 from the 2004 and 2009 surveys reveals stable policy usage during the past five years. In other words, local governments have not drastically changed their approach to small businesses during the recession. We also use the 2009 survey sample and data to ensure that we are capturing actual policy usage during the recessionary period.

### *Management and Skills Development*

Management and skills development policy is measured by the presence (or lack thereof) of a Small Business Development Center. We expect that counties with management and skills development programs will likely have higher levels of small business growth overall, and particularly growth of earlier stage businesses. Although the modal category for presence of management and skills development policy is zero, 43 percent of counties in our sample have a Small Business Development Center.

### *Market Expansion Assistance*

Market expansion assistance is measured by whether or not a local government has a small business marketing program. We expect that counties with marketing programs for small businesses are likely to have higher levels of small business growth overall, and particularly growth of earlier stage businesses. Although the modal category for small business marketing programs is zero, 28 percent of counties in our sample report having a small business marketing program.

### *Regulatory Assistance*

Regulatory assistance is measured by the presence (or lack thereof) of permitting and zoning assistance. We expect that counties with permitting and zoning assistance are expected to have higher levels of small business growth at all stages. The modal category for zoning and permit assistance is one; 59 percent of counties in our sample report assisting companies with permitting and zoning.

### *Access to Capital*

Access to capital is measured by whether or not a county reported using a revolving loan fund. We expect that counties with programs to provide access to capital for small businesses are expected to have higher levels of small business growth overall, particularly for earlier stage companies. Although the modal category for the presence of a revolving loan fund is zero, 29 percent of counties in our sample report using a revolving loan fund.

### *Building a Local Government Supportive Culture*

A supportive culture is measured by whether the county creates partnerships with private businesses and industry for the advancement of economic development strategies. We expect that counties with a supportive business culture are expected to have higher levels of small business growth overall. Although the modal category for the presence of a partnership with private business and industry is zero, 48 percent of counties in our sample report promoting partnerships with private businesses for economic development purposes.

### *Control Variables: Location Factors*

In addition to the policy variables hypothesized to have a relationship with growth of small businesses, we also include a set of control variables. These variables are those location factors identified in the literature as impacting small business formation and growth.

### *Human Capital*

Human Capital is measured by the percent of the civilian labor force in 2007 with professional and/or management experience. We expect that counties in which there is a greater percentage of the population with professional and management experience will have higher levels of small business growth. Those with professional and management experience are more likely than those without experience to have the skills needed start and sustain their own business (Reynolds, et al. 1994, Acs and Armington 2004). Counties in our sample have on average 31 percent of their population with professional and/or management experience, with the lowest percentage being 16 percent and the highest 63 percent.

### *Industry Density*

Industry density is measured by the total number of self-employed, stage one and stage two small businesses relative to the population of the county in 2007. We expect that counties with greater industry density will have higher levels of small business growth. Industry density reflects the level of agglomeration. "Entrepreneurship is a business in which there are increasing returns...If entrepreneurs are already active in the market, investors, employees, intermediaries such as lawyers and data providers, and the wider capital market are likely to be knowledgeable about the venturing process and

what strategies, financing, support, and exit mechanisms it requires” (Lerner 2009, p. 10). Small business owners, including entrepreneurs, benefit from being near other small businesses, as this leads to greater levels of knowledge spillovers between companies, declining costs of production, and greater number of service providers for smaller businesses (Armington and Acs 2002).

On average, counties in our sample have about 62 small businesses per 1,000 residents. The least dense county has 30 small businesses per 1,000 residents; the densest county has 130 small businesses per 1,000 residents.

### *Population Growth*

Population growth is measured by the growth in the total population between 2007 and 2008. We expect that counties with greater population growth will have greater small business growth. Higher levels of population growth reflect an increase in local demand for products and services, as well as increased supply of potential new business owners (Reynolds et al. 1994). On average, counties in our sample grew about one percent between 2007 and 2008. The slowest growing county lost about nine percent of its population, while the fastest growing gained about nine percent.

### *Unemployment Growth*

Growth in unemployment is measured by the change in unemployment in the civilian labor force between 2007 and 2008. We expect that counties with greater growth in unemployment will have greater levels of small business growth, particularly in earlier stages. As previously explained, although there are mixed opinions in the literature on the impact of unemployment on the growth of small businesses, we include it in our model to account for recessionary impacts.

On average, counties experienced a nine percent increase in unemployment between 2007 and 2008. The county with the lowest unemployment rate experienced a 48 percent decrease in unemployment, while the county with the highest rate experienced a 136 percent increase in unemployment over the same period.

**Table 2: Summary of Variables, Measures, Data Sources, and Hypothesized Relationships**

Variable	Measure	Data Source	Hypothesized Relationship
Small Business Growth Overall	Growth in businesses with 1-100 employees, 2007-2008	National Establishment Time Series Database	
Self-employed Growth	Growth in business with 1 employee, 2007-2008	National Establishment Time Series Database	
Stage 1 Growth	Growth in businesses with 2-9 employees, 2007-2008	National Establishment Time Series Database	
Stage 2 Growth	Growth in businesses with 10-99 employees, 2007-2008	National Establishment Time Series Database	
Population growth	Growth in population, 2007-2008	ACS	+
Industry density	Number of small businesses per capita, 2007	National Establishment Time Series Database	+

Unemployment growth	Growth in unemployment, 2007	ACS	+
Human capital	% of population in professional or managerial occupations, 2007	ACS	+
Policy: management and skills development	Presence of a Small Business Development Center (0/1)	Survey	+
Policy: market expansion assistance	Presence of marketing for small businesses (0/1)	Survey	+
Policy: regulatory assistance	Presence of permitting and zoning assistance (0/1)	Survey	+
Policy: access to capital	Presence of revolving loan fund (0/1)	Survey	+
Policy: local government supportive culture	Presence of a partnership with private businesses/industry for the development of economic development strategies (0/1)	Survey	+

## EXPLAINING VARIATION IN SMALL BUSINESS GROWTH

We examine four dependent variables in separate regression analyses to better understand how the relationship between local government policies and small business growth varies by the development stage of the business. The regression models include the policy variables and location factors described above, representing our model of policy responses to small business needs (management and skills development, market expansion assistance, regulatory assistance, access to capital, and local government culture), as well as control variables for location factors predicted to impact new business formation and growth of small businesses (human capital, industry density, population growth, and unemployment growth). We estimate the final regression model using OLS. We use the Durbin Watson test statistics to test for serial correlation and find that no multicollinearity exists between the independent variables used in the analysis. The results of the four estimations are presented in Tables 3, 4, 5 and 6. The comparative results across the four models are presented in Table 7.

**Table 3: Small Business Growth Overall, 2007-2008**

Adj. R <sup>2</sup> = .40	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.037	0.015		2.515	0.014
Population Growth, 2007- 2008	0.684	0.170	0.317	4.025	0.000
Industry Density, 2007	0.508	0.174	0.233	2.926	0.004
Unemployment Growth, 2007-2008	0.018	0.011	0.136	1.713	0.090
% of Civilian Labor Force in Professional and Management Occupations, 2007	0.069	0.037	0.142	1.846	0.068
Small Business Development	-0.009	0.007	-0.121	-1.367	0.175

Center					
Small Business Marketing Assistance Program	0.011	0.007	0.135	1.668	0.099
Permit and Zoning Assistance	0.022	0.006	0.289	3.594	0.001
Revolving Loan Fund	-0.018	0.006	-0.216	-2.772	0.007
Partner with Private Business	0.015	0.006	0.199	2.437	0.017

The first model (Table 3) exhibits the results for the growth in all small businesses in self-employed, stage one and stage two from 2007-2008. Small business growth is more likely in those counties that partner with private businesses and industry for the development of economic development strategies and in those that offer permitting and zoning assistance. Small businesses are less likely to thrive in counties with a revolving loan fund. Small businesses growth is more likely in counties experiencing population growth and in those with greater industry density.

**Table 4: Growth of Businesses in the Self-Employed Stage, 2007-2008**

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Adj. R <sup>2</sup> = .14					
(Constant)	0.085	0.021		4.042	0.000
Population Growth, 2007- 2008	0.608	0.242	0.236	2.509	0.014
Industry Density, 2007	0.003	0.247	0.001	0.010	0.992
Unemployment Growth, 2007-2008	0.021	0.015	0.133	1.399	0.165
% of Civilian Labor Force in Professional and Management Occupations, 2007	0.055	0.053	0.094	1.030	0.305
Small Business Development Center	-0.014	0.009	-0.151	-1.436	0.154
Small Business Marketing Assistance Program	0.008	0.009	0.085	0.876	0.383
Permit and Zoning Assistance	0.027	0.009	0.295	3.076	0.003
Revolving Loan Fund	-0.013	0.009	-0.136	-1.464	0.146
Partner with Private Business	0.006	0.009	0.072	0.736	0.464

The second model (Table 4) exhibits the results for the growth in self-employed businesses. Businesses in this stage are more likely to thrive in counties that offer permitting and zoning assistance, as well as those with greater population growth.

**Table 5: Growth of Businesses in Stage 1, 2007-2008**

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Adj. R <sup>2</sup> = .41					
(Constant)	0.021	0.017		1.202	0.232
Population Growth, 2007- 2008	0.776	0.198	0.306	3.917	0.000
Industry Density, 2007	0.762	0.202	0.298	3.770	0.000
Unemployment Growth, 2007-2008	0.015	0.012	0.098	1.242	0.217



% of Civilian Labor Force in Professional and Management Occupations, 2007	0.104	0.043	0.182	2.389	0.019
Small Business Development Center	-0.007	0.008	-0.074	-0.847	0.399
Small Business Marketing Assistance Program	0.013	0.008	0.133	1.660	0.100
Permit and Zoning Assistance	0.019	0.007	0.209	2.631	0.010
Revolving Loan Fund	-0.020	0.007	-0.211	-2.736	0.007
Partner with Private Business	0.020	0.007	0.225	2.781	0.006

The third model (Table 5) exhibits the results for growth in stage one businesses. Stage one business growth is more likely in those counties that partner with private businesses and industry for the development of economic development strategies and in those that offer permitting and zoning assistance. Stage one businesses are less likely to thrive in counties with a revolving loan fund. Stage one growth is more likely in counties experiencing population growth, in those with greater industry density, and in those with greater proportion of the civilian labor force with professional and management experience. Given that most small businesses are in stage one, it is not surprising that this model is driven by nearly all the same factors contributing to the first model, all small business growth.

**Table 6: Growth of Businesses in Stage 2, 2007-2008**

Adj. R <sup>2</sup> = .18	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-0.042	0.009		-4.544	0.000
Population Growth, 2007- 2008	0.213	0.106	0.185	2.008	0.047
Industry Density, 2007	0.260	0.108	0.223	2.404	0.018
Unemployment Growth, 2007-2008	0.001	0.007	0.011	0.116	0.908
% of Civilian Labor Force in Professional and Management Occupations, 2007	0.039	0.023	0.151	1.688	0.094
Small Business Development Center	-0.003	0.004	-0.083	-0.804	0.424
Small Business Marketing Assistance Program	0.001	0.004	0.019	0.199	0.843
Permit and Zoning Assistance	0.009	0.004	0.230	2.451	0.016
Revolving Loan Fund	-0.007	0.004	-0.153	-1.679	0.096
Partner with Private Business	0.008	0.004	0.197	2.071	0.041

The fourth model (Table 6) exhibits the results for growth in stage two businesses. Stage two business growth is more likely in those counties that partner with private businesses and industry for the development of economic development strategies and in those that offer permitting and zoning assistance. Growth in stage two is more likely in counties experiencing population growth and in those with greater industry density.

**Table 7: Comparative Results across Stages**

Dependent (n=109)/ Independent	All Small Business Growth Adj. R <sup>2</sup> = .40	Self-Employed Growth Adj. R <sup>2</sup> = .14	Stage 1 Growth Adj. R <sup>2</sup> = .41	Stage 2 Growth Adj. R <sup>2</sup> = .18
Population growth, 2007-2008	+**	+**	+**	+*
Industry density, 2007	+**	+	+**	+*
Unemployment growth, 2007-2008	+	+	+	+
% in professional and management occupations, 2007	+	+	+*	+
SBDC (management and skills development)	-	-	-	-
Marketing Assistance (market expansion assistance)	+	+	+	+
Permit and zoning assistance (regulatory assistance)	+**	+**	+**	+*
Revolving loan fund (access to capital)	-.**	-	-.**	-
Partner with Private business (building a local government supportive culture)	+*	+	+**	+*

\*significant at the .05 level

\*\*significant at the .01 level

The variable in our model conceptualizing management and skills development for small businesses is not significant. In fact, small businesses are less likely to thrive in counties with a *Small Business Development Center*. Business growth across all stages is inversely, but not significantly, associated with the presence of a Small Business Development Center. Although insignificance means that the effect is not different from zero in regard to statistical generalizations, with respect to our sample of 109 counties above 50,000 in population, the negative result may reflect the constant “churning” or death and birth of small businesses that occurs when businesses are more likely to benefit from Small Business Development Center services (Hamilton-Pennell 2010a).

The variable in our model conceptualizing market expansion assistance for small businesses, *small business marketing program*, is not significant. Although the relationship between small business marketing programs and small business growth is not statistically significant overall or during any stage, for our sample, the relationship is positive at all stages. One possible explanation is that these programs more likely recirculate wealth, or attract new customers from the jurisdiction and region, but do not substantially increase the penetration of small businesses into new, external markets.

As hypothesized, *permitting and zoning assistance* has a significantly positive relationship with small business growth overall, as well as with growth in all stages. For overall small business growth,

permitting and zoning assistance has the second most influential effect in the model. When examining the significance of regulatory assistance across stages, permitting and zoning assistance has the strongest relationships with self-employed growth and stage two growth. In fact, it is the most influential variable in these models. It is the fifth most influential variable in the stage one growth model.

One possible explanation for the stronger relationship between regulatory assistance and self-employed and stage two businesses is that these tend to be stages that have greater growth prospects, product and facilities expansion requirements, and need for speed to market with their services and products. Therefore, the regulatory environment may be a stronger determinant of whether or not these businesses are able to grow. In stage one mom and pop and other lifestyle businesses, growth may be less of a concern, and therefore they have less interaction with and need to navigate local regulatory processes.

We hypothesize that small businesses are more likely to thrive in counties with access to capital policies; however, the presence of a *revolving loan fund* has a negative relationship with business growth at all stages. This relationship is only statistically significant with small business growth overall and stage one growth. The presence of a revolving loan fund is the fourth most influential variable in the overall growth model, as well as the stage one growth model.

Although the negative relationship is contrary to our hypothesis, these findings are supported by past literature. Lerner (2009) provides an array of reasons why government provided capital fails to spur growth, including government's lack of specialized financing and market knowledge and their tendency to lack the patience needed for long-term results. Lerner also contends that public funds are often too small to make a real impact. This may be particularly relevant for local government revolving loan funds, which tend to be fairly modest when compared to traditional venture capital funds. This is further supported by Reynolds et al. (1994) who explain that although small scale efforts, like a government venture capital fund, may help a few local businesses succeed, the overall impact on the local economy will be small. One additional explanation may be the tendency for governments to create policies in response to a local situation or problem. In this case, it may be that local government revolving loan funds are more likely to be found in communities with a less thriving small business community.

As hypothesized, the presence of *partnerships with the private sector for economic development policy making* has a significantly positive relationship with small business growth overall. Counties with private sector partnerships have a better understanding of the challenges facing their local business community and can better respond to their needs. A statistically significant relationship exists between small business growth and presence of private sector partnerships in the stage two growth model, as well as in stage one.

Although a positive relationship exists in the self-employed growth model, this relationship is not statistically significant. One possible explanation is that self-employed businesses may be more difficult to identify, and thus more difficult for the local government to engage in the development of economic development strategies.

In terms of the models' control variables, population growth has a significantly positive relationship with small business growth overall, as well as with growth in all stages. It is the most influential variable in the model predicting growth of all small businesses and growth of stage one businesses.

Industry density has a positive relationship in all of the small business growth models, but only a significant relationship with small business growth overall, stage one growth and stage two growth.

Overall, counties have greater small business growth when they have a greater percentage of their labor force in professional and management occupations. This relationship is only statistically significant, however, for growth in stage one businesses. As previously noted, during stage one in particular, the survival and success of the business is closely related to the skills of the owner.

Lastly, unemployment growth has a positive, but not significant relationship, in all of the small business growth models. Although we are not able to generalize outside of our sample, this positive relationship may support the notion that during a recession, as unemployment increases, those formerly employed are more likely to create their own business out of either desire or necessity.

## **CONCLUSIONS AND RECOMMENDATIONS**

Although interest in small business development has gained traction over the past twenty years, the current national dialogue promoting small businesses as key drivers of economic recovery and growth has increased policy attention toward endogenous growth. Local governments are more likely to seek out policies to spur the growth and development of small businesses. Therefore, understanding the current relationship between local policies and small business growth may help provide a framework for which policies may be more helpful.

Overall, our findings suggest that those local policies that most significantly create opportunities for small business growth are creating a supportive culture between the local public and private sectors and providing regulatory assistance. These are facilitative roles of local government that lie squarely within their purview. The findings also suggest that the primary local policy used for providing small businesses access to capital – revolving loan funds – likely has little of the desired impact on small business growth, and may in fact actually contribute in the opposite direction. Other mechanisms or issues of scale of the capital made available, need to be considered. Similarly, while the results confirmed expectations about the general directional relationship between management and skill development and market assistance efforts, the results also suggest that the specific policies utilized – small business development centers and marketing assistance programs - may need some rethinking at the local level.

Our study of the relationship between local government policies and small business growth also reveals differential relationships among various stages of small business development. Although the direction of these relationships remains constant, the strength of the relationships varies. These preliminary findings suggest that some local policies may be more likely than others to influence the growth of small businesses in different development stages. The most prevalently used policies, which also tend to be more traditional, appear to have a stronger relationship with the growth of stage one businesses. This suggests that more study is required to understand how different local government policies contribute to the growth of stage two companies and self-employed individuals. Of particular interest should be innovative policies targeted at self-employed individuals and stage two businesses, such as economic gardening strategies, which were not included in our analysis.

Since all local policies do not have the same relationship with the growth of small businesses, it would be unwise for local governments approach the entirety of their small business community with the same policy perspective. Local governments should determine the composition of their small business

community and their goals of how small businesses can contribute to current and future economic growth. In collaboration with the small business community, local governments can build an understanding of the challenges small businesses in various stages of development face and their expectations of local government.

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