The importance of small firms concentration in employment growth within American communites

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Abstract

Maslow's individual hierarchy of needs can be modified to help explain the relationship between small firm development and community involvement in the development. This study supports a previously published framework of the modification of Maslow's model to the area of small business and community development. The study attempts to correlate employment growth with a state's concentration of small firms. Results suggest a positive correlation between employment growth and small firm concentration; however, no evidence was found to indicate a relationship between employment variation and small firm concentration.

Keywords: Employment, Firm Size, Small Firm, Maslow

Introduction

Small businesses in the United States employ a large number of individuals and thus represent a large portion of the American economy. Since 1995, it is estimated that 65% of new jobs in the United States have derived from small businesses (Nazar, 2013). It is also estimated that over half of the jobs in the United States are a result of small businesses (Nazar, 2013). Since small businesses represent such a large percentage of jobs in the United States economy, further study into the development of small businesses and their relationship to communities is warranted.

Utilizing Maslow's 1943 article: *A Theory of Human Motivation*, a framework has been developed to help communities better interact with small businesses to foster future growth and employment (Harris, Zimmer, & Bohley, 2014). This paper utilizes data on small businesses, employment growth, employment growth variation, and gross domestic product (GDP) to help show the relevance of the previously discussed framework on the development of small businesses and their communities. The paper includes a brief theoretical basis, an explanation of the data, the methodology used to evaluate the data, a discussion of the results of the study, and a conclusion.

Theoretical Basis

Maslow's hierarchy of needs provides a framework to help explain the motivation behind human behavior. This framework operates on the basis that the first step of the framework must be achieved before the second step in the framework will occur. This literature review will review Malsow's framework of human motivation and the extrapolation of that framework to the relationship between small business and communities.

The first step in Maslow's hierarchy is the stage where physical needs drive behavior. At this stage, according to Maslow (1943), physical needs will motivate a human's behavior (Matterson & Ivancevich, 1999). There are numerous. They can include food, clothing, shelter, etc.; however, they were so numerous that Maslow did not attempt to define them. An example of how a physical need motivates behavior would is when an individual is hungry, the physical need of food will drive behavior above other motivators. If the need for food is so great, an individual's behavior will be motivated to find food without real concern for the next step in the framework, which is safety. If a person is hungry, they will likely be willing to risk their safety (ex. Break the law) to gain food.

However, once the physical needs are met, the next step in the hierarchy can occur. In this case, the next step is safety. Once an individual's physical needs are met, the need to feel safe will motivate an individual's behavior according to Maslow (1943). Maslow discusses a well-run community as a way to satisfy the safety need of human motivation (Matterson & Ivancevich, 1999). For example, it there is a low crime rate and good healthcare (i.e. low disease) an individual's safety need could be met allowing that individual to move on to the next step in the hierarchy, which are the love needs.

Love needs can motivate behavior once both the physical and safety needs are met. Maslow's contention is that an individual wants to be loved or belong to the group. In other words, once the physical needs are met, and an individual feels safe, they want to have friends and belong. An interesting note to the love need is that if an individual finds himself at the physical or safety need of the framework, the need for love maybe nonexistent because the other stages motivate behavior. For a person that is so hungry that the need for food motivates behavior will likely feel that the need for love is very distant. However, once the physical, safety, and love needs are met, the next step of esteem needs can begin to motivate behavior.

Esteem needs can motivate behavior when the previous three needs are met. There are two different categories that Maslow identifies as esteem needs (Maslow, 1943; Matterson & Ivancevich, 1999):

1) The need for independence, strength, and achievement
2) The need for reputation, appreciation, and/or prestige.

Maslow (1943) proposes that these esteem needs follow the need for love. In a community, once an individual has friends (love need); they want to be respected in the community (Matterson & Ivancevich, 1999). Maslow goes on to identify that if an individual makes it to this level of motivation, and the esteem needs are not met it can be detrimental leading to a feeling of inferiority. If the esteem need is met, then an individual can move to the final level of Maslow's hierarchy, self-actualization.

Self Actualization is the final stage of Maslow's hierarchy. Once the physical, safety, love, and esteem needs are met, an individual's behavior is motivated by wanting to become self-actualized. To describe what is meant by self-actualized, it is best to use Maslow's own words: "What a man *can* be, he *must* be." (Matterson and Ivancevich, 1999, p. 267). Maslow's final stage of the hierarchy states that a person's motivation of behavior is to become all that they can be.

Extrapolating an Individual Framework to Small Business and Community

As discussed in the opening paragraph of this manuscript, small businesses represent a large portion of the United States economy and makes up a large percentage of the employment within the United States. Because of the impact that small businesses have on the United States economy, a better understanding of the mutually beneficial relationship between small businesses and their communities is warranted. Harris, Zimmer, and Bohley (2014) propose a framework, derived from Maslow's theory of motivation, to better understand the motivation between small businesses and their communities. In the following paragraphs a description of the framework will be provided.

The first step of Maslow's hierarchy is that behavior is driven by the most basic physical needs. When extrapolating this concept to the area of small businesses and community, the first step in the motivational hierarchy for small businesses and community is; basic survival (Harris, Zimmer, & Bohley, 2014). During basic survival, small businesses need access to a workforce, operating space, and capital. If a community does not provide the environment for a workforce, operating space, and easy access to capital runs the risk of starving small business and thus losing the employment and economic benefit that that the small business provides. If a community can satisfy the basic survival needs of the small businesses, then the relationship can move to the next level of the hierarchy, which is; stability.

Whereas Maslow's individual motivational theory held that the second step in the hierarchy was safety, Harris, Zimmer, and Bohley (2014) postulate that the second step in the motivational hierarchy for small business and community is: stability. Stability in a community is established with the institutions within the community. For example, a small business must feel confident that they have protection (Legal) for both their physical and property rights. Furthermore, a corrupt society can lead to an unstable business environment, which could lead to a lack of small business growth. A solid banking sector is important to continuing to serve the capital needs of small businesses as well as a good educational base to continue to provide a satisfactory workforce for future growth. In other words, a well-rounded community can recruit both qualified individuals and small businesses leading to a more stable environment. Once the stability need is satisfied, the next need in the small business community hierarchy is; external focus.

Once a small business and community satisfy the basic survival needs and the stability need, the external focus need can motivate behavior. External focus is small business and community counterpart to Maslow's love need. In this stage of the framework, small businesses move from being very insular to looking externally to find customers, suppliers, and community leaders. Communities can help to satisfy this need through being proactive in assisting the outreach and being open to conversations to provide the small business by developing networks focused on providing small businesses with customers, suppliers, and access to community leaders. At this stage in the hierarchy, the small business wants to become more involved in the community. Once, this need is satisfied, the next step can be taken.

The fourth stage of small business and community development that coincides with Maslow's esteem needs is the interdependence and acknowledgment stage. During the external focus stage, the small business need is more for the small business itself. When the need is satisfies and the small business moves to the interdependence and acknowledgement stage, the small business is likely doing well financially and is looking to be acknowledged from others in their industry as well as the community in which they reside. Communities can help facilitate the satisfaction of this need through public local recognition and a continuing relationship between the community and the small business.

Finally, once all four of the previous needs are met, a small business and community can move to the final stage of the hierarchy. Maslow's final stage of the hierarchy was self – actualization. The final stage in Harris, Zimmer, and Bohley's (2014), model was economic diversity. A strong small business community has been linked to an increased potential of employment growth (Zimmer, 2013). When a community has a strong small business environment, it will likely have less concentration of small business and a more diverse economic portfolio. The clustering of firm growth will likely begin to happen. So, a community would be well served to continue to nurture and develop the small businesses that are current instead of constantly trying to recruit new small businesses. According to Daly, it cost 10 times more to attract a new customer (Daly, 2001, p85). If the classic marketing argument of is costs less to retain a customer than it is to gain a new customer holds true for small businesses, communities should be focused on keeping, nurturing, and supporting its current small businesses.

Research Design

This paper focuses on the final stage of the small business-community framework of economic diversity. The purpose of this study is to test the assumption that there is a positive correlation between employment growth and small firm concentration. Secondly, this paper seeks to test the assumption that there is correlation between small firm concentration and the variation in employment growth. These ideals are gathered from the previously described framework of small business and community.

The following hypotheses were formed:
H1: There is a positive correlation between employment growth and small firm concentration.
$H1_0$: There is not a positive correlation between employment growth and small firm concentration.

H2: There is a positive correlation between small firm concentration and the variation in employment growth.
$H2_0$: There is not a positive correlation between small firm concentration and the variation in employment growth.

Methodology

The study examines statewide data (50 states plus Washington D.C.) from 2001 through 2011. A panel data set is assembled with care taken to properly deal with data holes and missing variables. State QCEW (Quarterly Census of Employment and Wages) employment and state gross domestic product (GDP) data were collected from the Bureau of Labor Statistics (BLS) as indicated in Table-1. For each state, firm sizes were calculated as % of QCEW employment within each of the designated firm size categories. For the purposes of this study, small firms were designated as those with fewer than 20 employees. It should also be noted that as QCEW records were used, only employees covered under unemployment insurance were considered, which does not include sole proprietors.

A regression model is constructed to assess the influences of firm size concentration on employment growth and variation. Given the data was constructed as an unbalanced panel; the data was analyzed using a fixed effects model to control for yearly and state specific influence. Use of the fixed effects model allows for the model to compensate for the impact of time and therefore allow for use of nominal GDP. Additional, the choice of model will account for state variation which could influence the results. A GDP growth variable was added to the model to control for economic activity. The small firm concentration variable was the only additional variable added.

The fixed effect models used the following formats:

$$\mathrm{Q}_{\mathrm{d,t}} = \beta_0 + \sum_{\mathrm{i,t}} \beta_{i,t}(X_{i,t}) + \varepsilon \qquad (1)$$

t: Time (year)

Dependent	Q_d:	QCEW Employment Growth
		QCEW Employment Growth Variation
Independent	X_i:	GDP Growth
		Firm Concentration Under 20

As the study only focuses on two independent variables, the analysis will focus only on correlation. The lack of sample size and potential for omitted variables suggest that substantial further work is required to determine the potential for causality.

Findings

The findings section is divided into two sections: employment growth and employment growth variation. As indicated in Table-2, the fixed regression results confirm a positive correlation between employment growth and small firm concentration. Even when controlling for economic growth, small firms associate with higher levels on employment growth. Therefore, null hypothesis one can be rejected. There is a positive correlation between small firm concentration and the variation in employment growth. Additionally, Table-3 summarizes the fixed effects regression results for the employment growth variation. The results indicate little correlation between small firm concentration and the variation in employment growth (either positive or negative). The model is largely insignificant in determination of employment growth variation. Therefore, null hypothesis two cannot be rejected. There is not a positive correlation between small firm concentration and the variation in employment growth.

Conclusion

Utilizing the Maslow hierarchy of needs individual motivational framework, this paper has sought to help validate the previously modeled framework (Harris, Zimmer, & Bohley, 2014) extrapolating Maslow's hierarchy of needs to the area of small business and community. This paper utilized data on small businesses, employment growth, employment growth variation, and gross domestic product (GDP) to help show the relevance of the previously discussed framework on the development of small businesses and their communities.

This article found correlation between increased statewide concentration of smaller firms and statewide employment growth. At the same time, small firm concentration has no apparent correlation with yearly variation in statewide employment growth. Significant further research is required to determine if these correlations are causal, and the potential direction of this causality. These findings suggest that communities would be well advised in their efforts to attract and support small businesses.

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Appendix A

Table 2

Fixed Effects Regression Results - Employment Growth

Variable	Coef.	Std Error	|t|	p value	
GDP Growth	0.3194	0.0234	13.65	0.000	***
Firm Concentration Under 20	0.0238	0.0120	1.99	0.047	**
Intercept	-0.0215				

*Note. Statistical Significance 1% ***, 5% ***

Groups (Year:State), F(2,439) = 106.15 or Prob>F 0.0000

R-Sqr: within 0.3260, between 0.9145, overall 0.6074

Observations 450

Table 1

Summary Statistics

	Obs.	Mean	Std. Dev.	Min.	Max.
QCEW Employment Growth	458	-0.0006	0.0253	-0.1014	0.0642
QCEW Employment Growth Variation	458	0.0007	0.0005	0.0001	0.0029
GDP Growth (nominal)	510	0.0433	0.0323	-0.0676	0.1709
Firm Concentration Under 20	502	0.2844	0.0471	0.1965	0.4513

Table 3

Fixed Effects Regression Results - Employment Growth Variation

Variable	Coef.	Std Error	|t|	p value	
GDP Growth	0.0028	0.0011	2.58	0.010	***
Firm Concentration Under 20	-0.0003	0.0055	0.52	0.601	
Intercept	0.0006				

*Note. Statistical Significance 1% ***, 5% ***

Groups (Year:State), F(2,439) = 3.33 or Prob>F 0.0367

R-Sqr: within 0.0149, between 0.0006, overall 0.0072

Observations 450