

the determinants of

SMALL BUSINESS SUCCESS IN ALASKA

By Mouhcine Guettabi

INTRODUCTION

Although the contribution of small businesses and entrepreneurship to regional communities and the economy at large is widely supported in the literature, there does not seem to be a universally accepted definition for small businesses and entrepreneurship. Without an agreed upon definition, it is challenging for governments and policy makers to address the needs, concerns, and issues of these firms. It also makes it difficult to understand the link between small businesses and economic growth.

The majority of definitions stem from qualitative measures such as ownership/control and quantitative measures such as number of employees or owned assets. They also tend to vary from industry to industry, reflecting their differences. The following definition from the U.S. Department of the Treasury reflects this complexity.

“Size is determined by the amount of average annual receipts or by the number of employees. Service businesses generally have a size standard that would be determined by averaging your gross annual receipts for the last three years. This average is then linked to the North American Industrial Classification System (NAICS) code for the procurement you are looking to compete under. If your average annual receipts falls under the amount designated for that NAICS code, then your firm is considered to be small by definition. For example, if you were selling Computer Programming Services under NAICS code 541511 your average annual receipts over the past three years would have to be below \$21.0 million to qualify as a small business concern. For most manufacturing NAICS codes, the number of employees will be used as a size standard. For example, a min-

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ing firm is considered “small” if it has fewer than 500 employees.”

A different approach defines small business as one where no public negotiability or share ownership exists, and one in which owners must personally guarantee any existing or planned financing (Osteryoung and Newman, 1992).

The emergence of an entrepreneurial approach has broadened small business and entrepreneurship to encompass ideas of wealth creation, innovation, and value adding processes both for the individual and the community (Kao et al., 2002). Most scholars seem to agree that a typical entrepreneurship is a small business; however, small businesses are not necessarily entrepreneurial enterprises. This is mainly due to the amount and the speed of wealth creation, the level of risk-taking, and the innovative ability. Entrepreneurship is generally a type of behavior that concentrates more on opportunities rather than resources (Stevenson and Gumpert, 1991).

This article examines the extent to which the creative class contributes to growth in Alaska communities. The heterogeneity of the communities’ economic structures coupled with their resource dependence make this strategy less than ideal. Places considering a creative class development approach should analyze their economic drivers and determine if the strategy fits with the current industrial structure and general environment.

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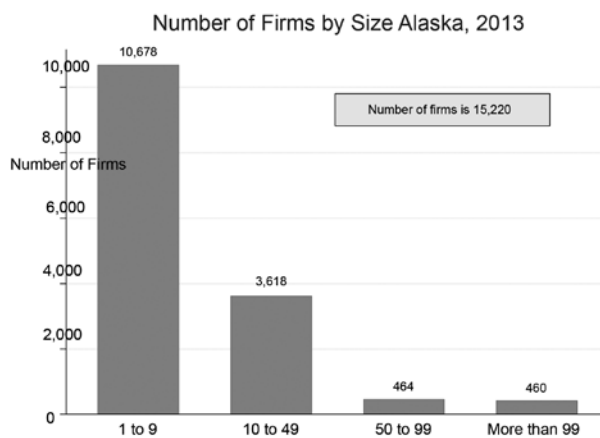
A SPECIAL FOCUS ON THE CREATIVE CLASS

The presence of human capital has been linked to employment growth in both urban and rural areas. This article examines the relationship between small business development using multiple metrics in Alaska’s boroughs and the presence of the creative class. There is weak evidence supporting a causal link once we account for initial place specific economic conditions. Regions that are considering creative class theory as a development strategy need to recognize that place specific characteristics determine to a large extent the likelihood of success. Quality of life interacts with industrial structure and therefore cannot be ignored when entertaining economic development options.

Before we proceed with our analysis, we provide a description of the Alaska economy. In the Alaska economy, as of 2013 there were 15,220 firms, the majority of which are very small. Figure 1 and Table 1 show that 70 percent of all firms in the state have less than 10 employees and account for about 13 percent of the workers. On the other hand, while there are less than 1,000 (5 percent) firms with more than 50 employees, they employ more than 60 percent of the labor force. This concentration of employment in large firms is not dissimilar from the national picture. Alaska's dispersed population makes the analysis slightly more complicated.

Understanding the determinants of new firm creation is especially important due to the positive economic benefits and overall regional development that are associated with increased business activity.

FIGURE 1



The study objectives were to first describe the current state of small businesses and entrepreneurship across the different boroughs in Alaska and then attempt to determine the factors influencing the success and growth of these outcomes.

To achieve this end, we did the following:

- Examine previous work that has investigated the contributing aggregate factors to business start-ups, longevity, growth, and other metrics of success to create an exhaustive literature review as a baseline.
- Determine the role played by factors identified in the previous step in encouraging small business development in Alaska.

It is evident, however, that much of the literature that focuses on the determinants of small businesses/entrepreneurship and their economic impact has been conducted on a national, regional or international context. County level studies on states with characteristics like Alaska's are scarce.

- Understand why these Alaska specific factors may be different from those in the previous literature.

Review of Major Concepts

The U.S. Small Business Administration reports indicate that small businesses are the vast majority of employers, and they create the lion's share of new jobs each year and more than half of all net new jobs in recessionary periods (Headd, 2010). Looking at the last three recessions, the smallest firms created more jobs following the 2001 recession, larger small firms led the expansion following the 1991 downturn, and a combination of the two followed the most recent recession. This evidence has resulted in numerous efforts at the federal, state, and local levels to foster small business development.

It is evident, however, that much of the literature that focuses on the determinants of small businesses/entrepreneurship and their economic impact has been conducted on a national, regional or international context. County level studies on states with characteristics like Alaska's are scarce. The study aimed to close that gap by addressing how Alaska's industrial structure, cultural environment, climate, and human and creative capital influence the small business environment.

Most growth theories are based on the idea that human capital or the human factor is key. The research approach has differed depending on the emphasis of the question. For example, Schumpeter (1911) focused on entrepreneurial or innovative skills, while Becker (1964) highlighted the role of education, and Florida (2002) zeroed in on creativity as being the true engine of growth.

The line of research that has received the most attention and is relevant here has examined the factors which effect regional firm formation. Some of the old-

TABLE 1: EMPLOYERS AND EMPLOYMENT BY FIRM SIZE (PRIVATE AND LOCAL GOV'T) ALASKA 2013¹

Employees in Firm	Number of Firms	Full Time Employees		Part Time Employees		Temporary Employees	
		Number	Percent	Number	Percent	Number	Percent
1 to 9	10,678	21,926	58%	9,619	25%	6,576	17%
10 to 49	3,618	44,112	61%	14,442	20%	14,224	19%
50 to 99	464	20,287	64%	5,373	17%	5,898	18%
More than 99	460	104,498	70%	21,282	14%	24,003	16%

er studies focused on issues such as taxation, transport costs, and scale economies (Bartik, 1989; Kiesnick, 1981). Others identified population density, industrial clustering and the availability of financing as causal determinants of regional differences in firm birth rates (Reynolds et al., 1994).

Florida argues that creative skills, measured by the number of workers in creative occupations, are crucial for economic growth and has found supporting evidence for this premise in urban areas. And rural growth from 1990 to 2004 was positively associated with creative occupation employment (McGranahan and Wojan, 2007). Given some of these findings, the attention has shifted to policies recommending that cities must attract and retain creative workers. This line of reasoning is derived from three premises: 1) urban economic development now depends largely on novel combinations of knowledge and ideas, 2) certain occupations specialize in this task, and 3) people in these occupations are drawn to areas providing a high quality of life.

To help determine share of employment in the creative class, we used the best creative class measure, along with two measures of diversity.

The Creative Class:

Richard Florida defines the creative class as: "People in science and engineering, architecture and design, education, arts, music and entertainment whose economic function is to create new ideas, new technology, and new creative content."ⁱⁱ

However, as McGranahan and Wojan explain, although a premise of Florida's work is that the creative class is relatively footloose, some occupations included in the definition, most notably "education, training, and library occupations" and "healthcare practitioners and technical occupations" are involved in economic reproduction and locate largely to provide essential services to a population. In rural areas, the perverse result is that high employment shares in these occupations can indicate a dearth of economic development.

In recasting the creative class, these two broad occupational categories are dropped. Comparing results using the recast creative class measure with Florida's original measure confirms that the present measure is a more valid construct.

Diversity and Tolerance:

The creative class as defined here is attracted to areas with low entry barriers that are perceived to be welcoming. It is assumed that more diverse regions are expected to have an advantage in attracting and retaining creative people with unorthodox ideas by lowering the entry barrier and making diverse ideas available. We used two measures of diversity in the analysis.

(1) *The Melting Pot Index* is a measure of the percentage of the population that is foreign born. Previ-

In the context of entrepreneurship and small business creation, the relationship between creative workers/openness and business development is slightly harder to determine because the decision to start a business or become an entrepreneur is a complicated process that rests on a confluence of factors.

ous studies support the inclusion of the index since they have found a significant and positive effect of immigrants on new firm formation (Reynolds et al., 1995; Saxenian, 1999; Kirchoff et al., 2002). Since the immigrants usually lack skills, resources, and networks, they tend to be more self-employed than non-immigrants. In addition, they bring new ideas and cultures to enrich a region and create new business opportunities.

(2) *Tolerance*: A Gay Index is used to capture the broader diversity of a region. The index is a measure of the concentration of same-sex male unmarried partners, commonly understood to be gay male couples, in the population and is used to approximate the level of openness or tolerance to newcomers or "non-conformists" in a region. It is assumed that high concentrations of gay men in a region signal a broader openness towards those who are different, creating lower entry barriers to human capital of various kinds and backgrounds.

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As we can see in Table 2, there is significant variation in the share of employment in creative class occupations across the different boroughs in Alaska. Across time however, there does not seem to be significant changes, which is unsurprising given the fact that industrial structure (composition of industries) is slow to change.

Minnitti and Bygrave (1999:43) argue that an individual's decision to become an entrepreneur is a function of three elements: "1) the subjective initial endowment, which is personal; 2) the institutional and economic circumstances of the economy, which are objective and community specific; and 3) the existing level of entrepreneurial activity in that community as perceived and evaluated by the individual."

The first component implies a micro perspective that can, however, be analyzed at the macro level by observing the demographic characteristics of a community. The other two components are macro components that are critical in the analysis of the conditions that foster entrepreneurship in a community.

TABLE 2: SHARE OF EMPLOYMENT IN THE CREATIVE CLASS

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Borough												
Aleutians East	4.18%	4.12%	4.12%	4.02%	3.98%	3.42%	3.26%	3.21%	3.61%	3.80%	3.49%	3.70%
Aleutians West	5.87%	6.16%	5.39%	5.71%	4.80%	5.42%	5.64%	5.85%	6.45%	6.50%	5.74%	5.91%
Anchorage	15.91%	15.85%	16.30%	16.24%	16.60%	16.80%	16.33%	16.35%	16.92%	17.86%	17.39%	17.58%
Bethel	8.06%	7.63%	7.29%	7.79%	7.70%	7.97%	7.96%	7.36%	7.51%	7.79%	8.12%	7.35%
Bristol Bay	4.18%	3.66%	3.94%	3.40%	3.30%	3.51%	3.13%	4.93%	4.58%	4.80%	5.12%	6.71%
Denali	10.62%	11.72%	9.42%	8.10%	8.36%	8.16%	8.71%	7.57%	7.72%	8.15%	8.22%	8.20%
Dillingham	10.49%	10.72%	11.85%	10.17%	10.60%	10.66%	10.92%	10.67%	9.45%	8.78%	9.22%	9.09%
Fairbanks North Star	14.99%	14.77%	14.70%	14.85%	15.20%	15.05%	14.04%	14.78%	15.25%	15.33%	15.38%	15.50%
Haines	8.80%	8.07%	8.13%	7.70%	7.55%	8.67%	7.88%	7.62%	6.63%	8.58%	7.51%	7.97%
Hoonah-Angoon									5.41%	6.04%	7.64%	6.98%
Juneau	17.15%	16.98%	16.79%	16.40%	17.57%	17.16%	16.87%	17.25%	17.29%	17.62%	18.30%	17.63%
Kenai Peninsula	8.99%	9.13%	9.47%	9.30%	9.59%	9.32%	10.05%	9.80%	9.82%	10.18%	10.59%	10.35%
Ketchikan Gateway	11.10%	11.44%	11.47%	12.11%	11.22%	11.08%	10.82%	11.70%	11.45%	11.57%	12.21%	11.98%
Kodiak Island	8.88%	9.21%	9.37%	9.20%	9.40%	9.10%	9.17%	8.61%	8.60%	9.46%	9.03%	8.84%
Lake and Peninsula	6.35%	6.37%	6.31%	5.87%	6.13%	5.60%	4.73%	4.65%	6.75%	7.65%	11.35%	7.39%
Matanuska Susitna	9.92%	9.30%	9.99%	10.14%	10.34%	10.30%	10.91%	11.26%	11.72%	11.59%	11.61%	11.50%
Nome	11.04%	10.43%	10.11%	10.28%	10.33%	10.48%	9.93%	9.61%	10.31%	10.18%	10.01%	10.89%
North Slope	9.87%	10.38%	11.70%	12.14%	12.43%	12.05%	12.13%	11.99%	11.63%	11.80%	12.90%	12.68%
Northwest Arctic	10.04%	10.24%	10.38%	9.80%	8.38%	8.55%	8.53%	8.46%	8.48%	9.32%	10.37%	11.70%
Petersburg									7.62%	9.22%	7.73%	8.15%
Prince Wales												
Ketchikan	8.80%	8.86%	7.35%	7.27%	5.79%	6.39%	7.13%	7.64%				
Prince of Wales-Hyder								8.48%	7.85%	7.75%	8.40%	
Sitka	10.37%	10.63%	10.61%	9.70%	10.22%	10.75%	10.33%	10.18%	11.06%	11.18%	11.27%	11.75%
Skagway									16.53%	19.34%	18.20%	19.94%
Skagway Hoonah												
Angoon	9.33%	9.14%	9.04%	9.40%	8.72%	11.63%	11.73%	11.76%				
Southeast Fairbanks	7.66%	9.59%	8.88%	9.20%	8.90%	8.63%	8.87%	8.35%	8.37%	9.38%	9.88%	10.39%
Valdez Cordova	9.76%	10.34%	10.25%	9.90%	11.61%	11.18%	11.02%	11.10%	10.36%	10.83%	10.48%	10.24%
Wade Hampton	8.02%	7.54%	8.57%	7.30%	8.46%	7.18%	8.00%	6.56%	6.69%	6.03%	8.46%	6.90%
Wrangell									7.32%	7.21%	6.35%	6.40%
Wrangell Petersburg	6.05%	6.92%	6.54%	7.18%	6.40%	6.38%	6.63%	8.63%				
Yakutat	4.98%	6.66%	9.52%	7.68%	7.50%	10.72%	10.71%	11.73%	11.04%	10.89%	10.00%	8.48%
Yukon Koyukuk	8.44%	7.96%	8.24%	9.50%	8.90%	9.19%	9.40%	8.20%	7.64%	6.93%	7.24%	6.74%

TABLE 3: VARIABLE DESCRIPTIONS

Variable	Description	Source
Nonfarm Proprietors	Nonfarm proprietors employment is the number of sole proprietorships and partners (excluding limited partners). Nonfarm proprietors employment is estimated using IRS Schedule C and Schedule B tax forms.	Bureau of Economic Analysis
NonEmployer	NonEmployers are those businesses with no paid employees that have receipts above \$1,000 and below \$1 million for corporations and partnerships. Two exceptions are construction businesses for which receipts must only be above \$1, and service-type industries for which receipts must be below \$2 million. Sole proprietorships are different in that restrictions on receipts vary by industry. It is important to note that the methodology used to classify NonEmployer businesses changed in 2009. NonEmployer statistics only count those businesses that file taxes, as most of the data on NonEmployers comes from IRS business income tax returns.	NonEmployer Statistics – Census Bureau
Small Establishments	Number of Establishments with less than 250 employees	County Business Patterns – Census Bureau
Births	Number of Establishment births from previous year to current year. Ex: If data is labeled 2000, the variable indicates establishment births from 1999 to 2000.	Statistics of US Business – Census Bureau

Economic factors suggest the levels and types of resources that are available for entrepreneurship and prior entrepreneurial activity suggest the extent to which past opportunities and pre-dispositions toward entrepreneurship exist.

Given the difficulty in defining small business development, the variables defined in Table 3 are used as proxies for small business activity. This helps capture the borough business dynamics through a few different metrics.

As a first step, we provide the changing conditions across all boroughs using these different proxies in Table 3. It is fairly obvious that they do not all move in the same directions as the relative importance of for example capital may be more pronounced in determining the change in the number of non-farm proprietors than that of non-employers.

Community developers need to be clear about the metric they are targeting given that the determinants of overall establishments are not necessarily the same as those of non-employers. The recipe for encouraging entrepreneurial growth is not the same as the strategy one would take in trying to boost economic growth. For example, tax incentives may be attractive to large firms but do little to encourage an employee to start a business.

What are the attributes of some of the fastest growing communities?

Table 4 shows how these proxies have changed in the last decade. Six boroughs have seen an across the board increase (Denali, Fairbanks, Kenai, Kodiak, Matanuska, and Southeast Fairbanks) in all the

metrics. With the exception of Matanuska, the other boroughs have economies that revolve around an economic base. Table 5 shows each borough's economic base or relative concentration using the location quotient method. For this study, the local area is the boroughs; and the base region is the state. (For more discussion on location quotients, see the sidebar)

$$LQ = (e_{i,j} / e_j) / (E_{i,S} / E_S)$$

Where

$e_{i,j}$: Employment in industry i in borough j

e_j : Overall employment in borough j

$E_{i,S}$: Employment in industry i at the state level

E_S : Overall employment at the state level



The Mat-Su Regional Medical Center. This new hospital, opened in 2006, is a symbol of growth and change in Alaska's fastest-growing region, the Matanuska-Susitna Borough north of Anchorage.

Denali is a clear example of a borough leveraging its locational advantage with sustained growth over the last 20 years by becoming a tourism hub. An increase in the number of hotels and other accommodations has accompanied the impressive growth in visitors. Of the 97 establishments in Denali, 40 of them are in accommodation and food services, and seven are in arts, entertainment, and recreation. Fairbanks's economy is heavily dependent on military and government employment, which makes it sensitive to base closures and government budget cuts.

Kenai and Kodiak are fishing communities whose economies are dependent on the resource while

Typically if $LQ > 1$, $LQ = 1$, or $LQ < 1$, then the proportion of industry concentration is greater than, equal to, or less than the industry concentration in the base region as a whole. The interpretation is normally that a $LQ \geq 1$ indicates that the economy is self-sufficient, and may even be exporting the goods or service of that particular industry, while a location quotient less than 1.0 suggests that the region tends to import the goods or service. So a portion of local employment in that industry is assumed to be export.

Matanuska was largely a bedroom community that afforded Anchorage employees lower housing costs but has grown to include employment in some basic industries. Given the diversity in specialization across the boroughs, it is necessary to account for the infrastructure availability in determining the type of development that matches the communities' characteristics.

Krugman (1991) explains that regions with higher levels of manufacturing activities present opportunities for the creation of new firms. He argues that these places contain resources that minimize costs for exporting goods to other regions. On the other hand, less developed areas may lack the infrastructure necessary for new

TABLE 4: PROXIES FOR SMALL BUSINESS GROWTH

	Non-Employers (2004-2010)	Number of Births (2000-2010)	Number of Establishments (2000-2010)	Number of Non- Farm proprietors (2000-2010)	Overall Employment (2000-2010)
	Change between 2000 and 2010				
Aleutians East	-38	-1	11	695	-283
Aleutians West	-22	-3	13	0	676
Anchorage	825	-107	573	-641	32,301
Bethel	210	-5	-23	166	-76
Bristol Bay	-6	1	-1	232	-95
Denali	10	1	30	107	138
Dillingham	156	-5	4	-117	66
Fairbanks	249	1	263	805	5,552
Haines	12	-5	10	187	134
Juneau	61	-2	6	-1,702	690
Kenai	209	12	159	1,153	2305
Ketchikan	65	0	-6	257	281
Kodiak	13	8	17	131	274
Lake and Peninsula	-7	3	0	-355	-6
Matanuska	852	16	534	3,926	5,412
Nome	102	-4	-30	224	507
North Slope	45	-5	1	175	780
Northwest Arctic	23	-17	-29	373	232
Prince of Wales	92	9	-31	601	-753
Sitka City	65	6	-13	401	243
Skagway	-38	10	31	327	-6
Southeast Fairbanks	33	12	43	279	351
Valdez-Cordova	166	-17	-56	409	424
Wade Hampton	117	-1	-7	295	-158
Wrangell-Petersburg	38	-4	-33	560	212
Yakutat City	-1	1	-4	-136	-118
Yukon-Koyukuk	-20	-6	-27	338	-206

TABLE 5: WHAT ARE THESE COMMUNITIES' SPECIALTIES?

Fastest growing areas are highlighted

Location Quotient: ⁱⁱⁱ $\{(e_i/e_r) / (E_i/E_r)\}$	Industries of Specialization (in terms of employment)
Aleutians East	None
Aleutians West	Manufacturing
Anchorage	None
Bethel	Forestry, Fishing, and Related Activities/Utilities/Local Government
Bristol Bay	Manufacturing/Real Estate and Leasing
Denali	Arts, Entertainment, and Recreation/Accommodation and Food Services/Federal Civilian
Dillingham	Forestry, Fishing, and Related Activities
Fairbanks	Military
Haines	Management of Companies and Enterprises/Arts, Entertainment, and Recreation
Juneau	State Government
Kenai	Forestry, Fishing, and Related Activities
Ketchikan	None
Kodiak	Forestry, Fishing, and Related Activities/Manufacturing
Lake and Peninsula	Arts, Entertainment, and Recreation/Gov't and Gov't Enterprises/Local Gov't
Matanuska	None
Nome	Local Gov't
North Slope	Mining/Administrative and Waste Management
Northwest Arctic	Arts, Entertainment, and Recreation
Prince of Wales	Forestry, Fishing, and Related Activities/Local Gov't
Sitka City	None
Skagway	Arts, Entertainment, and Recreation
Southeast Fairbanks	Federal, civilian
Valdez-Cordova	Forestry, Fishing, and Related Activities/Transportation and Warehousing
Wade Hampton	Forestry, Fishing, and Related Activities
Wrangell-Petersburg	None
Yakutat City	Federal Civilian/State and Local Gov't
Yukon-Koyukuk	Local Gov't

firms to flourish. Researchers (e.g. Birch, 1987; Gartner, 1985) argue that environments where adequate services, transportation, facilities, infrastructure, and good living conditions are available are more conducive to new venture creation. Availability rather than costs and the level of economic development, they say, will direct entrepreneurs to the establishment of businesses in particular regions.

This viewpoint is particularly relevant for Alaska, given the high cost of business, transportation challenges, and the possible lack of financial access in certain communities. To fully comprehend the opportunities and challenges in Alaska, some context is helpful.

An important Alaska specific report produced by The Institute of Social and Economic Research, University of Alaska Anchorage investigated the factors influencing small business viability in rural Alaska

communities that are off the road system ("Viability of Business Enterprises for Rural Alaska: Community Factors and Entrepreneurial Strategies," 2008). They found that some of these places have location advantages that make business development more likely.

The places that are close to national parks, or have strong local commercial fisheries, or relatively lower travel costs from Anchorage are likely to have a larger, more diverse group of businesses. Places with larger populations are also more likely to draw businesses, but location is even more important than size. The authors note that these advantages may seem obvious, "places that can draw outside money, either from tourism or from commercial fisheries, have advantages over places that don't have such resources." But it is useful to keep in mind that not all rural places are the same – and that some face even bigger challenges than others.

TABLE 6: THE DETERMINANTS OF THE CHANGE IN THE FOUR EMPLOYMENT METRICS

Table 6 ^{iv}	Births Change			Small Business Change			Non-Employer Change			Non-Farm Proprietor Change		
	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010
Important Variables												
Initial level of activity	(-)	(+)	(-)	(+)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)
Creative Class	N.E	N.E	N.E	N.E	N.E	N.E	N.E	(+)	(-)	(+)	(+)	(+)
Melting Pot	(+)	N.E	(+)	(+)	N.E	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Owner Occupied Housing	(+)	(+)	N.E	(+)	(+)	(-)	N.E	(+)	(-)	N.E	N.E	N.E
Bachelor's Degree or Higher	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E

TABLE 7: THE DETERMINANTS IN THE GROWTH RATE IN THE FOUR EMPLOYMENT METRICS

Table 7	Births Growth Rate			Small Business Growth Rate			Non-Employer Growth Rate			Non-Farm Proprietor Growth Rate		
	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010
Important Variables												
Initial level of activity	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E
Creative Class	(-)	(-)	(-)	(-)	(-)	(-)	N.E	N.E	(+)	(-)	N.E	(-)
Melting Pot	(+)	N.E	(-)	N.E	N.E	(+)	(+)	N.E	(+)	(+)	(+)	(+)
Owner Occupied Housing	(+)	(+)	N.E	(+)	(+)	(-)	(+)	(+)	(-)	(+)	(+)	(+)
Bachelor's Degree or Higher	(+)	(+)	(+)	N.E	N.E	(+)	(+)	(+)	N.E	(+)	(+)	(+)

METHODOLOGY

We relied on the literature to inform our specification. Our regression exercise tries to isolate the determinants of small business change and growth. We regress the dependent variables of interest (change/growth) on the initial community characteristics, creative class attributes, and other human capital controls.

Some of the Hypotheses are presented below:

- Demographic factors are positively related to new venture creation. Specifically, a) education, b) creative class, c) diversity (melting pot), and tolerance (Gay Index) are positively related to new venture creation.
- Density and availability of resources are positively associated with new venture growth. Specifically, a) previous levels of small businesses, b) being in a metropolitan area, and c) financial access are positively related to future venture creation.

ISOLATING THE DETERMINANTS OF SMALL BUSINESS CHANGE AND GROWTH

Tables 6 and 7 present a summary of the results isolating the determinants. They contain all U.S. counties including Alaska boroughs. We include an Alaska interaction effect (not shown) to test if the variables of interest affect Alaska differently than they do the rest of the country. Our regressions indicate that the independent variables of interest do not have

a different effect in Alaska than in the rest of the U.S. For all four dependent variables, the initial level of activity (entrepreneurial culture) is very strongly associated with future changes for the period between 2000 and 2006 but not with future growth rates.

This relationship does not hold in the 2007 to 2010 period for births and small business establishments. Initial Diversity (melting pot) seems to also be positively associated with the change in all measurements of business activity. Initial levels of the creative class affect future change in non-farm proprietors but have no independent effect on the other measurements.

Financial capital (as measured by ownership rates) and education (bachelor degrees) affect the future growth rate of non-employers and non-farm proprietors but not the absolute changes. This seems to indicate that the marginal effect of some of these variables is more pronounced in areas with smaller initial levels of activity. In other words, the barriers to growth in rural communities are not necessarily the same ones faced by a small business trying to expand in Anchorage.

CONCLUSION

As explained above, the decision to start a business is affected by a confluence of factors. This article attempts to chart the community or borough specific factors which may influence this process. It is, how-

Having individuals in creative class occupations is certainly an asset to any community in Alaska. This does not mean that a creative class centric approach is a panacea. Any development strategy needs to also recognize such factors as place specific industrial structure, economic base, demand potential, and proximity to markets.

ever, imperative to recognize that the base economic conditions in the different Alaskan boroughs make it difficult to make sweeping statements regarding the determinants of business activity.

Many rural communities due to the lack of scale/demand are comprised of mainly support service businesses which fulfill the needs of the local residents. Others are endowed with natural resources (commercial fisheries, mining) and therefore have economies which consist of both basic industries (engines of growth that draw resources from outside the region) and non-basic industries (support services) which circulate dollars throughout the economy. To illustrate this point, we generated industries of specialization (Table 5) using the location quotient method. From a policy standpoint, recognizing these locational and resource advantages and disadvantages is key in establishing businesses, especially smaller ones.


In our original analysis, we also considered demographic and economic characteristics of the different boroughs. This is important because it not only gives us a sense of the resources (human capital, financial capital) but also the demand potential of a specific community. Along the same lines, a useful resource in understanding basic community differences is the borough typology produced by the USDA, which provides further insight into some policy sensitive areas. Understanding the industrial composition of some of these communities along with the strengths/weaknesses makes small business considerably more likely to succeed.

We also looked at how the different metrics of the small business environment have changed across the different boroughs. It is clear that some boroughs have fared much better than others. The six boroughs (Denali, Fairbanks, Kenai, Kodiak, Matanuska, and Southeast Fairbanks) that have positive changes along all dimensions are ones which are reliant on a combination of military, federal government, and fisheries businesses.

Due to the resource rich nature of the state, many jobs in the oil and gas industry are technical jobs which are included in the creative class specification but are not necessarily conducive to new venture creation. In fact, the share of people in creative class occupations in Alaska exceeds that of the national average (20 percent vs. 18 percent).

Having individuals in creative class occupations is certainly an asset to any community in Alaska. This does not mean that a creative class centric approach is a panacea. Any development strategy needs to also recognize such factors as place specific industrial structure, economic base, demand potential, and proximity to markets.

Education (whether it is identified in terms of years of schooling or type of job), diversity (melting pot), and financial capital (proxied by percent owners), in addition to the entrepreneurial culture were the most robust determinants/predictors of future success/growth rates. However, these results are slightly different depending on the measurement of small business that one uses.

Development practitioners have many levers to encourage their communities' growth. Improving quality of life as a way to encourage in-migration of creative class workers is not a panacea. This strategy is more likely to work in areas that are proximate to natural amenities and are equipped with already existing infrastructure. Place specific characteristics and the type of industries a community specializes in are also important to take into account before allocating dollars to such a strategy. 

Development practitioners have many levers to encourage their communities' growth. Improving quality of life as a way to encourage in-migration of creative class workers is not a panacea. This strategy is more likely to work in areas that are proximate to natural amenities and are equipped with already existing infrastructure. Place specific characteristics and the type of industries a community specializes in are also important to take into account before allocating dollars to such a strategy.

ENDNOTES

- ⁱ These data come from a recent survey of Alaska firms we conducted for a different project.
- ⁱⁱ Read more: <http://www.businessinsider.com/why-the-creative-class-is-taking-over-the-world-2012-7#ixzz36nxWyMld>
- ⁱⁱⁱ Location quotient is a simple method to measure the relative concentration of an activity (industry in our case) relative to a base unit. For our purposes, the specialization is determined if the intensity or concentration of employment in a borough is at least twice that of the state average. e_i : employment in industry i of a given community / e_t is overall employment for a given community
 E_i : employment in industry i at the state level / E_t overall employment at the state level
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 E_i : employment in industry i at the state level / E_t overall employment at the state level
- ^{iv} Tables 6 and 7 summarize the results by simply showing the sign of the coefficient of interest.
- ^v N.E stands for no statistically significant effect. We include an interaction term to determine if the effect of the variables of interest differed in Alaska than the average (None of the effects of interest were different).

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