THE CHARACTERISTICS OF SMALL FIRMS THAT SERVE AS OWNERS’ “PRIMARY EMPLOYMENT”

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Abstract

Our objective in this study is to examine the relation between firm characteristics and entrepreneurship as “primary employment”. What type of small firms are organized in a way to promote “primary employment”? In order to achieve that objective, we compare firm characteristics in high “primary employment” U.S. states versus in low “primary employment” states. We use the “United States Small Business Friendliness Survey” done by Kauffman Foundation and Thumptack.com in 2013. Our nonparametric tests show that in the states where relatively high percentage of owners have their business as “primary employment” (i.e. “high primary employment states”), firms tend to be limited in their operational area (i.e. operate only in that state) although their sales are less local (meaning that they focus on other areas in their state rather than their own locale). In these states, while more firms are in the “home maintenance and repair” industry, fewer firms operate in the “events” industry. We also find that there is no significant difference between high- and low-primary employment states in terms of firm age and firm size. We advise policymakers to use these findings when formulating policies that support entrepreneurship as “primary employment”.

Key Words: Entrepreneurship, small business, primary employment, entrepreneurial activity, firm characteristics

Classification JEL: E23, L21, L22, L26

1. Introduction and context of the study

In this study, we examine the relation between firm characteristics and entrepreneurship as “primary employment”. The question that we want to answer is this: “What type of firms are organized in a way to promote “primary employment”? We are hoping to guide policymakers who want to promote this strong form of entrepreneurship where the business itself is the main job of the entrepreneur (rather than a “side job or a hobby”).

In order to achieve our objective, we analyze U.S. states. First, we differentiate between states that have a higher percentage of small business owners that have their business as “primary employment” (rather than a side job or a hobby) and states that have a lower percentage of owners that have their business as “primary employment”. We call the first group the “high primary employment states” and the second group the “low primary employment states”. Then, we compare firm characteristics in “high primary employment states” versus in “low primary employment states”.

A small business owner to have his/her business as “primary employment” is important because this form of entrepreneurship reflects a stronger form of entrepreneurship than a business run as a side job/hobby. Our purpose here is to differentiate between the characteristics of firms in “high primary employment states” versus in “low primary employment states”. What type of firm characteristics promote business owners to have their business as their primary employment? We are hoping to answer this question. The answer here will help policymakers with their policymaking process: In order to promote this stronger form of entrepreneurship (i.e. business as “primary employment”), what type of firms should the policymakers focus their support on? If a state wants to successfully promote this stronger form of entrepreneurship, it needs to be efficient in allocating its resources, therefore it needs to know what type of firms to support more.

In our analysis, we use the “United States Small Business Friendliness Survey” done by Kauffman Foundation and Thumptack.com in 2013. This survey asks small business owners about whether their business is their “primary employment”. It also asks them questions about firm characteristics like operating area, the percentage of local sales, age, size, and industry.

The paper proceeds as follows: Section 2 goes over the previous literature. Section 3 explains the data and the methodology. Section 4 shows the empirical results. Finally, Section 5 concludes.
2. Literature Review

Several previous studies differentiate between entrepreneurship as a primary job versus as a side job or a hobby. The research on this topic has developed over time. Kourilsky and Walstad (2002) surveyed 1,001 owners/founders of high-technology businesses with under 200 employees. Their findings suggest an important potential role for education in general and entrepreneurship education in particular. The authors state that “One potential strategy recommended is to craft crosscutting educational partnerships that carefully blend entrepreneurship education, technology content-specific education, and high-technology venture experience at both the high school and college levels”. The authors ask the entrepreneurs about their first significant event towards starting or owning a business and find that the top six events are “Past job or job experience”, “Technology idea or opportunity/Inventing the system”, “Losing a job or becoming unemployed”, “Independence/Freedom/Be my own boss/Work at home”, “Technology hobby”, and “Need/Demand/Market at right time”.

Rantamaki-Lahtinen and Vihinen (2004) discuss the transition of “hobby” entrepreneurs into regular business owners. The authors examine the role of equine industries in Finnish rural development and rural entrepreneurship. The authors categorize the business owners roughly onto three groups; 1) horse-owners, who just keep one or few horses as a hobby, 2) life-style entrepreneurs, who run small-scale horse related enterprise and 3) professionals. The authors show that, in some cases this classification can also be seen as a continuum; something that originally starts as a hobby, might later grow to be a big business.

Cagetti and De Nardi (2006) examine the relation between the type of entrepreneur and his/her wealth. The authors argue that the poorest business owners might be the low-wage workers who turn to self-employment for lack of better opportunities or people who are self-employed as a hobby. Interestingly, the business owners who do not have an active management role in the business are very rich and are likely to use the business as an investment opportunity.

According to Williams (2007), informal business ventures can often arise from some hobby or interest. According to the author, this is “the systematic pursuit of an amateur, hobbyist or volunteer activity that participants find so substantial and interesting that they launch themselves on a career centered on acquiring and expressing its special skills”.

Shah and Tripsas (2007) develop a “process model of how users, an understudied source of entrepreneurship, create, evaluate, share, and commercialize their ideas”. The authors “compare and contrast our model to the classic model of the entrepreneurial process, highlighting the emergent and collective nature of the user's entrepreneurial process”. According to the authors, users are often “accidental” entrepreneurs who happen upon an idea through their own use and then share it with others. Shah and Tripsas (2007) contend that “users also tend to engage in collective creative activity prior to firm formation—often within the social context provided by user communities—that results in the improvement of ideas”.

According to Okpara (2007), creative entrepreneurs possess high levels of energy and great degrees of perseverance and inauguration, which combined with a willingness to take moderate, calculated risk, enable them to transform what began as a very simple ill-defined idea or hobby into something concrete.

Kerr and Nanda (2009) argue that most hobby entrepreneurs or sole proprietors will never seek to hire someone else, remaining permanently in the lower bubble. In some cases, the start-up will grow much larger, according to the authors, following the path of famous Silicon Valley firms like Hewlett-Packard that began in a garage.

Tambunan (2009) categorize women entrepreneurs in Asian developing countries into three groups: chance entrepreneurs, forced entrepreneurs, and created or pulled entrepreneurs. According to the author, one of the motivations of chance entrepreneurs is their business being their hobby or special interest. Van der Merwe and Lebakeng (2010) investigate women entrepreneurship in Lesotho and find that 11% of the entrepreneurs are motivated by the further development and expansion of their hobby.

Giacomin et al. (2011) try to identify the impact of the socio-economic characteristics of entrepreneurs on their opportunity-necessity positioning. The authors show the impact of the socio-economic characteristics of entrepreneurs on the alignment of their project with a necessity or opportunity entrepreneurial dynamics. The authors state that not all jobseekers are necessity entrepreneurs and that new venture creation based on family influence may convey both a necessity and an opportunity dimension. They also describe “hobby entrepreneurship” as a new type of entrepreneurship.

Williams and Nadin (2012) argue that entrepreneurial business ventures in the informal economy, can be either a spin-off from the formal occupation of the informal entrepreneur, or alternatively, can derive from a hobby or interest. Williams and Round (2006) interviews 600 entrepreneurs in Ukraine and finds that one fifth of them arose out of a hobby or interest that leads them to set up enterprises selling goods produced or services resulting from it. The authors state that this percentage includes those who learned some skill by pursuing some hobby or interest (e.g., painting, carpentry) and then decided to establish an enterprise based on this skill.

Heimonen (2013) classifies some business ventures as supplementary form of income where the entrepreneur seeks both personal and financial success. These entrepreneurs describe their purpose as “have fun, do what you want to do and at the same time earn some money; it is a hobby and at the same time an opportunity to earn money; part time
entrepreneurship, small scale business, flexible working hours with long weekends; opportunity to maintain good health and functionality”.

Rangarajan and Lakshmi (2013) argue that “creativity and innovation are considered to be inseparable from entrepreneurship, which is in turn manifested in the act of starting up and running an enterprise. The authors argue that “people become more creative when they feel motivated primarily by the interest, satisfaction, and challenge of the situation and not by external pressures; the passion and interest - a person's internal desire to do something unique to show-case himself or herself; the person's sense of challenge, or a drive to crack a problem that no one else has been able to solve. Creative entrepreneurs possess high levels of energy and great degrees of perseverance and inauguration, which combined with a willingness to take moderate, calculated risk, enable them to transform what began as a very simple ill-defined idea or hobby into something concrete”. The authors support their arguments by surveying entrepreneurs in Chennai, India and by showing that these entrepreneurs’ production reflects a high level of creativity and innovation. According to the authors, “innovation is the key to push entrepreneurship”.

Warnick (2016) states that “entrepreneurship research has, to date, focused on passion in terms of a passion for activities related to the entrepreneurial process (“entrepreneurial passion”), including the identification of new venture opportunities, the founding of new ventures, and new venture development”. The author “expands the conception of passion in entrepreneurship research to include entrepreneurs who engage in entrepreneurial activities not out of entrepreneurial passion, but out of a passion for the domain of their venture and product or service it provides (“domain passion”)”. The author develops a dynamic model of hobby monetization. Warnick (2016) shows “the mechanisms by which monetization of domain passion as a hobby-related venture can (1) bolster or (2) erode domain passion”. The author also “demonstrates the importance of founder domain passion and entrepreneurial passion to startup investors, finding that both are important in investors’ decision-making in addition to domain and entrepreneurial experience and openness/receptivity to feedback”. The author states that “the appeal of entrepreneurial passion to startup investors was further elevated when accompanied by domain experience, and both passions become even more appealing when investors perceived the founder to be highly open and receptive to feedback”.

Anwar and Daniel (2016) argue that home-based businesses and their founders represent an important, but under-researched facet of entrepreneurship. According to the authors, unlike hobby-businesses with little economic impact, home-based business make significant contribution to national economies in terms of both turnover and employment.

Block and Landgraf (2016) argue that part-time entrepreneurship is often a first step towards full-time entrepreneurship. The authors analyze how financial and non-financial motives of part-time entrepreneurs influence the propensity of part-time entrepreneurs to become full-time entrepreneurs. Their results show that “the motivation to supplement wage income or the motivation to achieve social recognition is negatively associated with transition behavior, whereas the motivation to achieve independence or self-realization is positively associated with transition behavior”. They show that the motivation to follow a role model, financial success, and innovation are not significantly related to transition behavior. Fohta et al. (2010) argue that individuals may take on second jobs where they gain nonmonetary benefits that might not be available in their primary jobs. According to the author, “Hybrid entrepreneurship” may be preferred to a second wage position because it provides additional monetary and psychological benefits.

To summarize, the previous literature explores the motives of the entrepreneurs and explain the process in which a hobby turns into a full-time job. In our study, we first differentiate between entrepreneurship as a primary job versus as a side job/hobby. Then, we explore the relation between firm characteristics and the tendency to run a small business as a primary job. In the following section, we explain our data and our methodology.

3. Data and Methodology

In this study, we use the “United States Small Business Friendliness Survey” done by Kauffman Foundation and Thumbtack.com in 2013. This survey asks small business owners about whether their business is their “primary employment”. It also asks them questions about firm characteristics like operating area, the percentage of local sales, age, size, and industry.

Our objective in this study is to examine the relation between firm characteristics and entrepreneurship as “primary employment”. The question that we want to answer is this: “What type of firms are organized in a way to promote “primary employment”?”. In order to achieve that objective, we compare owner characteristics in high “primary employment” U.S. states versus in low “primary employment” states.

For this purpose, we divide the U.S. states into two groups based on the percentage of respondents that have their business as their primary job. The states with a percentage above the mean percentage for all states are classified as “high primary employment” states. The states with a percentage below the mean percentage for all states are classified as “low primary employment” states.

Then, we use nonparametric tests (i.e. Mann-Whitney-Wilcoxon tests) to compare the firms’ characteristics (operational area, percentage of local sales, age, size, and industry) across high- and low- primary employment states.
All of the variables are explained below. These variables for each state are computed using the individuals’ responses:

- **Percentageofprimaryemp**: the percentage of small business owners that have their business as their primary job.
- **Operstates1**: operating in a single state
- **Operstates2-5**: operating in two to five states
- **Operstate>5**: operating in more than five states
- **Mostlocal**: more than 90% of sales are within 50 miles of the firm
- **Ageofbus<1**: firm is established less than a year ago
- **Ageofbus1-2**: firm is established one or two years ago
- **Ageofbus3-4**: firm is established three of four years ago
- **Ageofbus>4**: firm is established more than four years ago
- **Employees1**: firm has only one employee
- **Employees2-20**: firm has two to twenty employees
- **Employees21-50**: firm has twenty-one to fifty employees
- **Employees51-100**: firm has fifty-one to one hundred employees
- **Employees>100**: firm has more than one hundred employees

The industry variables “Business”, “Care”, etc. are self-explanatory.

For each firm characteristic variable, we compute the percentage values for each state. For example, in North Carolina, what percentage of firms has only one employee? If fifty percent of the small businesses has only one employee, North Carolina’s “Operstates1” score is 50. Therefore, each state in the survey has a percentage value for each of these variables.

Table no. 1 shows the summary statistics for our variables. All of the variables are in percentage per state. As we can see in Panel A, the median value of “Percentageofprimaryemployment” across all states is 72.83. This means that, in the median state, 72.83% of entrepreneurs have their business as their primary job.

For “Firm Operating Area”, we have four variables. These are “Operstates1”, “Operstates2-5”, “Operstates>5”, and “Mostlocal”. As we can see in Panel B, the median values of these variables across all states are 67.07%, 26.53%, 7.53%, and 88.24%, respectively. These values indicate that, in the median state, 67.07% of the small firms operate in a single state, 26.53% operate in two to five states, 7.53% operate in more than five states, and 88.24% of the firms have at least 90% of their sales within fifty miles of the firm.

Panels C, D, and E show the summary statistics for “Firm Age”, “Firm Size”, and “Firm Industry”, respectively.
### Table no. 1. Summary Statistics (All Variables in %)

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<tbody>
<tr>
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<td>Stdev</td>
<td>Min</td>
<td>Max</td>
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<td>72.83</td>
<td>6.44</td>
<td>52.63</td>
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<td></td>
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<td>Operstates1</td>
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<tr>
<td>Operstates2-5</td>
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<td>Operstates&gt;5</td>
<td></td>
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<tr>
<td>Mostlocal</td>
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<td>Employees1</td>
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<td>Employees2-20</td>
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<td>Employees21-50</td>
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<td>Employees51-100</td>
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<td>Employees&gt;100</td>
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</tbody>
</table>

### 4. Empirical Results

Table no. 2 shows the results of the Mann-Whitney-Wilcoxon tests that compare firms’ operational areas across high- and low- primary employment states. The table shows that small firms in “high primary employment states” tend to be more limited in their operational area when compared to small firms in “low primary employment states”. When we look at the variable “Operstates1”, we see that a higher percentage of small firms in “high primary employment states” tend to operate in a single state when compared to small firms in “low primary employment states”. While the median percentage of firms that operate in a single state is 69.64% in “high primary employment states”, the median is 57.50% in “low primary employment states”.
When we look at the variable “Operstates2-5”, we see that a lower percentage of small firms in “high primary employment states” tend to operate in two to five states when compared to small firms in “low primary employment states”. While the median percentage of firms that operate in two to five states is 22.59% in “high primary employment states”, the corresponding percentage is 30.49% in “low primary employment states” (the p-value of the difference is 0.0062).

When we look at the variable “Operstates5”, we find no significant difference between high- and low-primary employment states. The median percentage of firms that operate in more than five states is 7.42% in “high primary employment states” and the corresponding percentage is 8.24% in “low primary employment states” (the p-value of the difference is 0.4110).

Therefore, we conclude that small firms tend to be more limited in their operational area in “high primary employment states” when compared to other states. This finding implies that “operational area” is one of the aspects that differentiate high- and low-primary employment states.

The table also looks into the percentage of firms that have mostly local sales across high- and low-primary employment states. The results here show that while the median value is 87.41% for high-primary employment states, it is 88.89% in low-primary employment states (the p-value of the difference is 0.0532). Therefore, we can conclude that although firms in high-primary employment states tend to be more limited in their operational area (in terms of the states that they operate in), they are not focused on local sales. In these states, relatively fewer firms tend to focus on local sales. These findings indicate that, the firms in these states tend to focus on a single state but they also tend to sell their products within the whole state rather than within their locale.

Table no. 3 shows the results of the Mann-Whitney-Wilcoxon tests that compare firms’ age across high- and low-primary employment states. We look at four different variables. These are “Ageofbus<1”, “Ageofbus1-2”, “Ageofbus3-4”, and “Ageofbus>4”. The table shows that there is no significant difference between high- and low-primary employment states for any of these four variables.

Table no. 2. Firm Operational Area

<table>
<thead>
<tr>
<th>Variable</th>
<th>High-Score</th>
<th>Low-Score</th>
<th>Mann-W. p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Med.</td>
<td>Mean</td>
</tr>
<tr>
<td>Operstates1</td>
<td>69.18</td>
<td>69.64</td>
<td>58.56</td>
</tr>
<tr>
<td>Operstates2-5</td>
<td>23.10</td>
<td>22.59</td>
<td>34.03</td>
</tr>
<tr>
<td>Operstates&gt;5</td>
<td>7.72</td>
<td>7.42</td>
<td>7.40</td>
</tr>
<tr>
<td>Mostlocal</td>
<td>86.34</td>
<td>87.41</td>
<td>89.53</td>
</tr>
</tbody>
</table>

Note: *** shows significance at 1%, ** at 5%, and * at 10% level.

Table no. 3. Firm Age

<table>
<thead>
<tr>
<th>Variable</th>
<th>High-Score</th>
<th>Low-Score</th>
<th>Mann-W. p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Med.</td>
<td>Mean</td>
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<tr>
<td>Ageofbus&lt;1</td>
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<td>6.00</td>
<td>6.19</td>
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<td>Ageofbus1-2</td>
<td>16.82</td>
<td>16.36</td>
<td>18.01</td>
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<tr>
<td>Ageofbus3-4</td>
<td>18.29</td>
<td>18.93</td>
<td>17.74</td>
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<tr>
<td>Ageofbus&gt;4</td>
<td>58.74</td>
<td>57.64</td>
<td>58.06</td>
</tr>
</tbody>
</table>

Note: *** shows significance at 1%, ** at 5%, and * at 10% level.
When we look at the variable “Ageofbus<1”, we see that the median percentage of firms that started less than one year ago is 6.00% in “high primary employment states” and the corresponding percentage is 6.02% in “low primary employment states” (the p-value of the difference is 0.4684).

The results for the variable “Ageofbus1-2” show that the median percentage of firms that started one or two years ago is 16.36% in “high primary employment states” and the corresponding percentage is 16.98% in “low primary employment states” (the p-value of the difference is 0.4317).

When we look at the variable “Ageofbus3-4”, we see that the median percentage of firms that started three or four years ago is 18.93% in “high primary employment states” and the corresponding percentage is 18.18% in “low primary employment states” (the p-value of the difference is 0.1737).

Finally, when we look at the variable “Ageofbus>4”, we see that the median percentage of firms that started more than four years ago is 57.64% in “high primary employment states” and the corresponding percentage is 57.50% in “low primary employment states” (the p-value of the difference is 0.4842).

We can conclude that “firm age” is not significantly different across high- and low-primary employment states. This finding indicates that “firm age” is one of the aspects that differentiate high- and low-primary employment states.

Table no. 4 shows the results of the Mann-Whitney-Wilcoxon tests that compare firms’ size across high- and low- primary employment states. We look at five different variables. These are “Employees1”, “Employees2-20”, “Employees21-50”, and “Employees51-100”, and “Employees>100”. The table shows that there is no significant difference between high- and low-primary employment states for any of these five variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>High-Score Mean</th>
<th>High-Score Med.</th>
<th>Low-Score Mean</th>
<th>Low-Score Med.</th>
<th>Mann-W. p-value</th>
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<tr>
<td>Employees1</td>
<td>52.63</td>
<td>51.93</td>
<td>53.59</td>
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<td>Employees2-20</td>
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<td>44.48</td>
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<td>0.71</td>
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<td>Employees51-100</td>
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<tr>
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<td>0.00</td>
<td>0.2992</td>
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</table>

Note: *** shows significance at 1%, ** at 5%, and * at 10% level.

When we look at the variable “Employees1”, we see that the median percentage of firms that have only one employee is 51.93% in “high primary employment states” and the corresponding percentage is 52.94% in “low primary employment states” (the p-value of the difference is 0.2757).

The results for the variable “Employees2-20” show that the median percentage of firms that have between two and twenty employees is 45.85% in “high primary employment states” and the corresponding percentage is 44.72% in “low primary employment states” (the p-value of the difference is 0.1605).

When we look at the variable “Employees21-50”, we see that the median percentage of firms that have between twenty-one and fifty employees is 0.60% in “high primary employment states” and the corresponding percentage is 1.22% in “low primary employment states” (the p-value of the difference is 0.1203).

The results for the variable “Employees51-100” show that the median percentage of firms that have between fifty-one and one hundred employees is 0.00% in both “high primary employment states” and “low primary employment states” (the p-value of the difference is 0.1266).

Finally, when we look at the variable “Employees>100”, we see that the median percentage of firms that have more than one hundred employees is 0.00% in both “high primary employment states” and “low primary employment states” (the p-value of the difference is 0.2992).

We can conclude that “firm size” is not significantly different across high- and low-primary employment states. This finding indicates that “firm size” is one of the aspects that differentiate high- and low-primary employment states.

Table no. 5 shows the results of the Mann-Whitney-Wilcoxon tests that compare firms’ industry across high- and low- primary employment states. There are nine industry classifications in the survey. These are “Business”, “Care”, “Events”, “Instruction”, “Vehicle”, “Health”, “Home”, “Technology”, and “Writing”.

Note: *** shows significance at 1%, ** at 5%, and * at 10% level.
Table no. 5. Firm Industry

<table>
<thead>
<tr>
<th>Variable</th>
<th>High-Score Mean</th>
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<th>Low-Score Mean</th>
<th>Med.</th>
<th>Mann-W. p-value</th>
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<td>Care</td>
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<td>4.87</td>
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<td>Events</td>
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<td>19.56</td>
<td>25.09</td>
<td>23.81</td>
<td>***0.0013</td>
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<tr>
<td>Instruction</td>
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<td>7.66</td>
<td>6.41</td>
<td>6.03</td>
<td>0.1637</td>
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<td>Vehicle</td>
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<td>2.95</td>
<td>2.23</td>
<td>1.89</td>
<td>0.2017</td>
</tr>
<tr>
<td>Health</td>
<td>13.38</td>
<td>12.86</td>
<td>12.32</td>
<td>11.43</td>
<td>0.1276</td>
</tr>
<tr>
<td>Home</td>
<td>35.98</td>
<td>36.50</td>
<td>33.68</td>
<td>34.68</td>
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<tr>
<td>Technology</td>
<td>10.27</td>
<td>9.92</td>
<td>8.98</td>
<td>8.82</td>
<td>0.2670</td>
</tr>
<tr>
<td>Writing</td>
<td>0.70</td>
<td>0.62</td>
<td>0.86</td>
<td>0.43</td>
<td>0.4945</td>
</tr>
</tbody>
</table>

Note: *** shows significance at 1%, ** at 5%, and * at 10% level.

The table shows that the results are significant for only two industries. These are “Events” and “Home” (i.e. Home maintenance and repair) industries. The table shows that, in “high-primary employment states”, there are more small firms in the “home maintenance and repair” industry and fewer small firms in the “events” industry.

When we look at the variable “Events”, we see that a lower percentage of small firms in “high primary employment states” tend to operate in the “Events” industry when compared to small firms in “low primary employment states”. While the median percentage of firms that are in the “Events” industry is 19.56% in “high primary employment states”, the corresponding percentage is 23.81% in “low primary employment states” (the p-value of the difference is 0.0013).

When we look at the variable “Home”, we see that a higher percentage of small firms in “high primary employment states” tend to operate in the “Home” (i.e. Home maintenance and repair”) industry when compared to small firms in “low primary employment states”. While the median percentage of firms that operate in the “Home” industry is 36.50% in “high primary employment states”, the corresponding percentage is only 34.68% in “low primary employment states” (the p-value of the difference is 0.0504).

Our results for the other industry variables are not significant. None of the other industries are significantly different across high- and low-primary employment states. Therefore, we can conclude that the prevalence of small firms in only some industries are significantly different across high- and low-primary employment states.

5. Conclusion

In this study, we examine the relation between firm characteristics and entrepreneurship as “primary employment”. In order to achieve that objective, we compare firm characteristics in high “primary employment” U.S. states versus in low “primary employment” states.

In our analysis, we use the “United States Small Business Friendliness Survey” done by Kauffman Foundation and Thumptack.com in 2013. This survey has questions on firms’ operational area, age, size, and industry. It also asks owners about whether their business is their “primary employment”.

First, we divide the U.S. states into two groups. The first group includes the states that have high “primary employment” (i.e. the states where relatively high percentage of owners have their business as their “primary employment”). The second group includes the states that have low “primary employment” (i.e. the states where relatively low percentage of owners have their business as their “primary employment”).

Our nonparametric tests show that in the states where relatively high percentage of owners have their business as “primary employment” (i.e. “high primary employment states”), small firms tend to be limited in their operational area (i.e. operate only in that state) although their sales are less local (meaning that they focus on other areas in their state rather than their own locale). Therefore, we conclude that the firms in these states where more owners have their business as their “primary employment” tend to have a limited operational area.
We also find that, in these states, more small firms are in the “home maintenance and repair” industry and fewer small firms operate in the “events” industry. Our results show no significant difference between high- and low-primary employment states in terms of the prevalence of the other industries.

When we examine firm age and firm size, we find that there is no significant difference between high- and low-primary employment states in terms of these measures. Therefore, we conclude that while some firm characteristics (i.e., operational area, local versus outside area sales, and the prevalence of some industries) differ across high- and low-primary employment states, others (i.e., firm age, firm size, and the prevalence of some industries) do not.

We advise policymakers to use these findings when formulating policies that support entrepreneurship as “primary employment”. Firm characteristics are different in many ways in “high primary employment states” versus in “low primary employment states”. In states where there are more entrepreneurs running their business as their primary job, we are seeing a higher concentration of firms in certain industries. We are also seeing a higher concentration of firms with limited operational area. In order to promote this stronger form of entrepreneurship (i.e., business as “primary employment”) in their area, policymakers need to focus their support on the operational area aspect and also on certain industries.

6. Bibliography


