

Do Business-Friendly States Attract Female Entrepreneurs?



Halil Kaya¹

Northeastern State University, College of Business and Technology, Department of Accounting and Finance, Broken Arrow, Oklahoma, United States

ABSTRACT

In this study, we examine whether business friendly states attract more female entrepreneurs compared to non-business friendly states. In the survey that we employ, business-friendliness has four components. These are the “ease of hire”, “ease of start”, “training/networking programs”, and “regulations”. Besides looking at how each of these business friendliness components affects the concentration of female entrepreneurs in a state, we also examine how each component affects other entrepreneur characteristics including “previous entrepreneurial experience”, “age”, “political view”, “education level”, and “race”. Our results for “overall business friendliness” show that, in business-friendly states, there are more female owners and experienced owners when compared to the other states. In these states, there are more conservatives but fewer liberals and independents. Also, in these states, we are seeing more technical college and high school graduates and fewer community college graduates and master’s graduates. Finally, in these states, we see fewer Asian or Hispanic owners when compared to the other states. With regard to the components of business friendliness, we find that the states with higher scores in “ease of start” or “training/networking programs” have significantly more female entrepreneurs when compared to the other states. Our results show that “ease of hire” and “regulations” do not significantly affect the concentration of female entrepreneurs in a state.

¹ E-mail: kaya@nsuok.edu

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Introduction

In this study, we examine how a state's institutional framework affects female entrepreneurship in that state. We use a survey that explores how business-friendly each U.S. state is. The survey has an overall business friendliness score for each state. It also gives each state scores on four components of business friendliness which include "ease of hire", "ease of start", "overall regulations", and "training and networking programs". Our objective is to find how the overall business friendliness score of each state as well as each of its four components affects the concentration of female entrepreneurs in each state. Do more business-friendly states attract more female entrepreneurs? Do states with a better hiring process or a better start-up process attract more female entrepreneurs? How do the regulations in each state affect female entrepreneurship in that state? Do states with better training and networking programs attract female entrepreneurs?

Besides examining the relationship between business friendliness and the gender of the entrepreneurs, we also examine the relationship between business friendliness and a few other characteristics of entrepreneurs including "previous entrepreneurial experience", "age", "political view", "education level", and "race". We try to answer the following question: Do more business-friendly states attract certain types of entrepreneurs?

In previous research, institutions are divided into two groups: formal institutions and informal institutions. According to this classification, laws, regulations and government procedures are classified as formal institutions and beliefs, ideas and attitudes (i.e. culture) are classified as informal institutions. Previous studies like Smallbone et al. (2010), Vaillant and Lafuente (2007), Kreft and Sobel (2005), Ovaska and Sobel (2005), Klapper, Laeven, and Rajan (2006), Parker (2007), Van Stel, Storey, and Thurik (2007), Acs and Szerb (2007), Nyström (2008), Acs et al. (2009), Stephan and Uhlaner (2010), Dreher and Gassebner (2013), and others show that formal institutions are important for entrepreneurship. Other studies like Wennekers and Thurik (1999), Valdez and Richardson (2013), Aidis et al. (2007), Manolova, Eunni, and Gyoshev (2008), and others show that informal institutions are important for entrepreneurship.

A group of papers including Amine and Staub (2009), Baughn, Chua, and Neupert (2006), Estrin and Mickiewicz (2011), Noguera, Alvarez, and Urbano (2013), and Noguera, et al. (2015) focus on the relationship between institutional framework and female entrepreneurship. These studies examine how different formal and/or informal institutional factors affect female entrepreneurship. They generally argue that only certain formal and informal institutional factors are important in female entrepreneurship.

In this current study, we follow the footsteps of Amine and Staub (2009), Baughn, Chua, and Neupert (2006), Estrin and Mickiewicz (2011), Noguera, Alvarez, and Urbano (2013), and Noguera, et al. (2015), and examine how certain formal and/or informal institutional factors affect female entrepreneurship in the U.S. As mentioned above, we focus on business friendliness of U.S. states. In this current study, out of the four components of business friendliness, “ease of hire”, “ease of start”, and “overall regulations” represent formal institutions and “training and networking programs” represent informal institutions.

This study makes an important contribution to the literature because it focuses on the relationship between business friendliness (which covers both formal and informal factors) and female entrepreneurship. The paper shows that, out of the three formal institutional factors, only “ease of start” affects the concentration of female entrepreneurs in a state. The other two formal institutional factors which are “ease of hire” and “overall regulations” do not affect female entrepreneurs’ decision to start a business in a state. The paper also shows that the informal factor that is examined (which is the “training and networking programs”) is also an important factor that affects female entrepreneurs’ decision to start a business in a state. This finding is in line with the previous studies.

The second main contribution of the study is its finding of a significant relationship between business friendliness and the other characteristics of entrepreneurs. The study shows that business-friendly states attract entrepreneurs with certain characteristics. First, business-friendly states attract more experienced entrepreneurs. Second, entrepreneurs in these states tend to have a more conservative political view. Third, these states attract more technical college and high school graduates and fewer community college and master’s graduates. Fourth, they attract fewer Asian or Hispanic entrepreneurs.

We advise policymakers to consider the findings here when developing their strategies for attracting entrepreneurs to their state. For example, if

they want to attract more female entrepreneurs, they will need to improve the start-up process and the training and networking programs. Improving the hiring process or the regulations will not attract more female entrepreneurs. As shown in this paper, improving the start-up process, the hiring process, the regulations, or the training and networking programs each will attract certain groups of entrepreneurs to a state. Therefore, depending on the state's objectives, each state should focus on improving different aspects of the entrepreneurial process.

Institutional Framework and Female Entrepreneurship

Formal Institutions and Female Entrepreneurship

Previous studies show that formal institutions are important for entrepreneurship. For example, Kreft and Sobel (2005) show that taxes, regulations, and private property rights are important for entrepreneurial activity. Ovaska and Sobel (2005) argue that corruption, credit, contract enforcement, monetary policy, policies supporting economic freedom, and foreign direct investment are important for entrepreneurial activity. Klapper, Laeven, and Rajan (2006) find that regulations that create additional costs to startup firms deter new firm creation. Parker (2007) contends that rules and regulations affect the organizational form of startups. Van Stel, Storey, and Thurik (2007) find that while labor market regulations and minimum capital requirement are important, the administrative considerations are not important for nascent or young businesses. Acs and Szerb (2007) argue that developed countries should deregulate their financial markets and reform their labor market, while middle-income countries should make technology more available, increase human capital, and promote enterprise development. Nyström (2008) argues that a smaller government sector, a better legal structure, and fewer regulations promote entrepreneurial activity. Acs et al. (2009) find that regulations, administrative burden and government intervention deter new startups. Stephan and Uhlaner (2010) explain that opportunities and quality of formal institutions are both important. Dreher and Gassebner (2013) show that entrepreneurial activity is hampered when the startup process is more complex or when there are larger minimum capital requirements.

Bitzenis and Nito (2005) show that, in Albania, changes in tax laws, unfair competition, and insufficient financial resources are detrimental to

entrepreneurship in that country, while others like bureaucracy and corruption are not. Bergmann and Sternberg (2007) examine the entrepreneurial environment in Germany and show that the rate of new startups is not similar in different regions due to the unemployment situation in each region. Aidis, Estrin, and Mickiewicz (2008) explain that Russia's business environment (i.e. networks and formal institutions) favors entrepreneurial insiders (i.e. those already in business) rather than outsiders.

Manolova, Eunni, and Gyoshev (2008) show that, in Bulgaria, entrepreneurs were dissatisfied with the laws, government policies, and regulations promoting entrepreneurship. For Iran, Nawaser et al. (2011) contend that laws/regulations are important. For Portugal, Branstetter et al. (2014) show that the reforms in Portugal benefited only certain groups. Ghani, Kerr, and O'Connell (2014) find that, in India, the education level of local people and the quality of the physical infrastructure are important for entrepreneurial activity. Also, strict labor regulations deter entrepreneurship. For Spain, García-Posada and Mora-Sanguinetti (2015) show that judicial system is important.

Besides the above-mentioned papers, there are papers that specifically focus on the relationship between formal institutions and women's entrepreneurship. For example, Welter (2004) explains that, in Germany, women entrepreneurs should be supported more. Bock (2004) explains that rural development policies do not support Dutch farmwomen. Estrin and Mickiewicz (2011) find that women are less likely to undertake entrepreneurial activity in countries where the state sector is larger. Also, discrimination against women, in particular, restrictions on freedom of movement away from home, make it less likely for women to have high entrepreneurial aspirations in terms of employment growth. Amine and Staub (2009) show that female entrepreneurs in sub-Saharan Africa face a daunting array of challenges arising from the socio-cultural, economic, legal, political, and technological environments in which they live.

Based on the previous findings on the relationship between formal institutions and entrepreneurship, and between formal institutions and female entrepreneurship, we expect to find a positive relationship between our three formal factors (i.e. "ease of start", "ease of hire", and "overall regulations") and female entrepreneurship. Therefore, our first three hypotheses can be stated as below:

Hypothesis 1: "States with an easier startup process attract significantly more female entrepreneurs".

Hypothesis 2: "States with an easier hiring process attract significantly more female entrepreneurs".

Hypothesis 3: "States with more favorable regulations attract significantly more female entrepreneurs".

Informal Institutions and Female Entrepreneurship

There are several papers that focus on the relationship between informal institutions and entrepreneurship. For example, Wennekers and Thurik (1999) argue that culture, technology, demography, and institutional framework are all important for the entrepreneurial environment. Valdez and Richardson (2013) stress the importance of differences in beliefs, values, and abilities in entrepreneurship and deemphasize the transaction and opportunity costs.

Quite a few studies focus on the relationship between informal institutions and female entrepreneurship. For example, for Ukraine and Lithuania, Aidis et al. (2007) contend that informal institutions (i.e. gendered values and norms) deter female entrepreneurs. For Latvia and Hungary, Manolova, Eunni, and Gyoshev (2008) show that skills/knowledge is important. For Iran, Nawaser et al. (2011) contend that motivational factors and laws/regulations are important. Noguera, Alvarez, and Urbano (2013) find that fear of failure and perceived capabilities are important factors for female entrepreneurship.

Baughn, Chua, and Neupert (2006) focus on normative influences as a key institutional factor affecting female entrepreneurship. Amine and Staub (2009) state that regulations, as well as normative and cognitive systems deter female entrepreneurship. Noguera et al. (2015) find that informal factors such as recognition of entrepreneurial career and female networks are more important for female entrepreneurship than formal factors. Similarly, Khyareh (2018) shows that informal factors such as fear of failing, entrepreneurial skills, and female networks are more important for female entrepreneurship than formal factors like education and start-up capital.

Other studies like Brush (1992), Rosa and Hamilton (1994), Brush et al. (2006), and Sexton and Bowman-Upton (1990) examine how characteristics of female entrepreneurs, entrepreneurial intentions, motivations or self-efficacy affect female entrepreneurship.

In our study, one of the components of business friendliness is “training and networking programs” and it is an informal factor that has been shown to explain both entrepreneurship in general and female entrepreneurship. Networks allow entrepreneurs to access resources such as capital, information, and skills. Greve and Salaff (2003) show the importance of networks for entrepreneurship. Also, knowing someone with previous experience who can provide support to the entrepreneur is shown to be valuable (Hoang and Antoncic (2003), Greve (1995), Allen (2000), Kwong, Jones-Evans, and Thompson (2012), and Langowitz and Minniti (2007)).

Based on the previous findings on the relationship between informal institutions and female entrepreneurship, and more specifically between networks and female entrepreneurship, we expect to find a positive relationship between the availability of “training and networking programs” in a state and female entrepreneurship. Therefore, our final hypotheses can be stated as below:

Hypothesis 4: “States with better training and networking programs for entrepreneurs attract significantly more female entrepreneurs”.

Data and Methodology

Our objective is to see how business friendliness in a state affects owner characteristics. The 2013 “United States Small Business Friendliness Survey” (by Thumtack.com and Kauffman Foundation) asks small business owners to rate their state in each category of business friendliness. The survey also asks them basic questions on their personal characteristics (i.e. gender, age, political view, entrepreneurial experience, race, education, and position in the firm).

All of the variables in this study are explained below.

Business friendliness variables:

Overall score: each state’s overall business friendliness score

Ease of start: each state’s ease of start score as shown in the survey

Ease of hire: each state’s ease of hire score as shown in the survey

Overall reg: each state’s overall regulations score

Training/networking: each state’s training/networking score

Each state’s “overall score” on business friendliness is available in the survey. The survey also includes each state’s scores on the components of business friendliness (i.e. “ease of starting a business”, “ease of hiring”,

“regulations”, and “training and networking programs”). We convert the letter grades in the survey to numbers as follows: A+ becomes 12; A becomes 11, and so on. The lowest letter grade is F. After the conversion, F becomes 1.

The owner characteristic variables are explained below:

Position in the firm:

“Managerbutnotowner”: the % who are the manager but not the owner

“Nonmanageremployee”: the % who are an employee but not the manager

“Ownerandmanager”: the % who are the owner and the manager

“Ownerbutnotmanager”: the % who are the owner but not the manager

Previous entrepreneurial experience:

“Previousentre”: The % who has previous entrepreneurship experience

“Previousstartups1”: The % who started one previous business

“Previousstartups2”: The % who started two previous businesses

“Previousstartups3”: The % who started three previous businesses

“Previousstartups4”: The % who started four previous businesses

“Previousstartups>4”: The % who started more than four previous businesses

The other variables are self-explanatory.

When doing the empirical analyses, we run nonparametric tests that compare “high” and “low” overall score states in terms of owner characteristic variables. For each category, the mean score is used to decide whether a state has a “high” or “low” score in that category.

Table 1 shows the descriptive statistics for our variables.

Table 1: Summary Statistics (All Variables in %)

Variable	Mean	Median	Stdev	Min	Max
Panel A. Overall Score and Components					
Overallscore	6.93	7.00	3.51	1.00	12.00
Easeofstart	6.93	7.00	3.51	1.00	12.00
Easeofhire	7.02	7.00	3.54	1.00	12.00
Overallreg	6.98	7.00	3.47	1.00	12.00
Trainingnetworking	7.17	8.00	3.29	1.00	12.00
Panel B. Position and Experience					
Managerbutnotowner	3.39	3.25	1.87	0.00	8.33
Nonmanageremployee	0.53	0.41	0.72	0.00	3.23
Ownerandmanager	94.02	94.59	2.80	86.11	100.00
Ownerbutnotmanager	2.05	2.01	1.80	0.00	8.33
Previousentre	43.84	43.33	6.78	29.49	57.14
Previousstartups1	44.74	44.64	12.08	16.67	100.00
Previousstartups2	30.53	31.51	8.03	0.00	41.67
Previousstartups3	15.10	14.68	7.42	0.00	33.33
Previousstartups4	4.18	4.42	3.63	0.00	14.29
Previousstartups>4	5.45	4.76	4.54	0.00	21.43
Panel C. Owner Characteristics					
Female	37.00	36.96	5.96	21.05	52.94
Age<25	2.09	2.18	1.67	0.00	8.70
Age25-34	18.72	19.21	5.14	5.26	35.48
Age35-44	24.27	25.32	3.98	14.29	31.82
Age45-54	28.18	28.46	5.88	10.00	46.67
Age55-64	21.38	20.45	6.32	8.70	42.11
Age>64	5.36	5.71	2.61	0.00	11.43
Independent	30.52	28.85	6.62	21.05	52.63
Otherpolitical	17.43	16.67	4.80	8.33	34.78
Leanconservative	14.51	14.17	4.54	0.00	26.32
Leanliberal	12.84	11.79	5.14	5.06	26.47
Strongconservative	14.86	14.71	6.70	0.00	26.09
Strongliberal	9.84	9.89	3.92	0.00	19.05
No Highschool	0.66	0.00	1.06	0.00	4.35
Highschool	17.18	17.09	4.73	4.76	34.09
Community College	17.99	17.28	6.67	5.26	35.00
Technical College	16.00	14.67	5.09	4.35	26.32
Undergrad	31.51	31.58	8.11	10.00	61.70
Master's	12.88	13.27	4.35	4.26	24.05
Doctoral	3.79	3.64	2.59	0.00	15.79

Variable	Mean	Median	Stdev	Min	Max
Asian	1.67	1.12	2.73	0.00	16.67
Otherrace	5.38	4.21	5.34	0.00	26.67
Black	7.36	4.84	7.72	0.00	34.71
Hispanic	4.95	3.85	4.26	0.00	16.16
White	80.63	81.82	11.33	53.33	100.00

Source: Author's own work

Empirical Results

Table 2 looks at owner characteristics in high- and low-overall score states. The last column shows Mann-Whitney-Wilcoxon test results.

Table 2: Comparison of High- and Low-Overall Score States

	High-Overall Score		Low-Overall Score		Mann-W. p-value
	Mean	Med.	Mean	Med.	
Panel A. Position and Experience					
Managerbutnotowner	3.61	3.48	3.12	3.00	0.2152
Nonmanageremployee	0.52	0.00	0.55	0.51	0.1341
Ownerandmanager	93.66	94.57	94.49	94.64	0.2191
Ownerbutnotmanager	2.21	1.91	1.84	2.09	0.4632
Previousentre	45.39	45.24	41.87	41.75	**0.0360
Previousstartups1	45.62	45.83	43.61	42.09	*0.0901
Previousstartups2	29.80	30.00	31.45	32.37	0.1292
Previousstartups3	14.75	14.29	15.55	14.90	0.4014
Previousstartups4	5.00	5.26	3.13	3.04	*0.0812
Previousstartups>4	4.82	4.00	6.26	5.59	*0.0920
Panel B. Owner Characteristics					
Female	38.43	37.63	35.18	36.42	*0.0706
Age<25	2.00	2.18	2.22	2.15	0.4579
Age25-34	19.54	19.75	17.68	17.54	0.1013
Age35-44	24.46	25.53	24.02	25.00	0.3614
Age45-54	27.49	27.69	29.07	28.54	0.2599
Age55-64	20.65	20.00	22.30	21.01	0.2350
Age>64	5.86	5.71	4.71	5.47	0.2514
Independent	28.94	28.19	32.53	29.81	**0.0451
Otherpolitical	16.27	15.79	18.91	16.76	*0.0724
Leanconservative	16.39	15.00	12.10	12.21	***0.0024
Leanliberal	11.18	9.92	14.96	15.09	***0.0025
Strongconservative	17.88	17.95	11.01	10.03	***0.0006

Strongliberal	9.33	9.89	10.48	9.88	0.2556
No Highschool	0.55	0.00	0.82	0.39	0.1385
Highschool	18.21	17.74	15.87	16.18	*0.0516
Community College	16.54	16.54	19.84	20.13	*0.0503
Technical College	18.03	18.52	13.40	13.04	***0.0012
Undergrad	31.10	30.86	32.02	32.20	0.2772
Master's	11.76	10.73	14.30	14.44	**0.0403
Doctoral	3.82	3.64	3.75	3.67	0.3276
Asian	0.95	1.09	2.59	1.83	**0.0303
Otherrace	4.83	3.82	6.08	4.28	0.2036
Black	8.41	4.44	6.03	4.95	0.2769
Hispanic	3.87	2.89	6.34	4.80	**0.0171
White	81.94	81.82	78.95	81.17	0.2192

Source: Author's own work

Panel A shows that there is no significant difference between the two groups of states with respect to the respondent's position, however the two groups differ significantly in terms of the owner's previous entrepreneurship experience. In the high-overall score states, there are more experienced owners when compared to the other states (except for owners with four or more previous entrepreneurship experience).

Panel B shows that, in the high-overall score states, we see more female owners compared to the other states (38.43% versus 35.18%).

Panel B also shows that, in the high-overall score states, there are more conservatives and fewer independents and liberals, there are more high school and technical college graduates and fewer community college and master's graduates, and there are fewer Asians and Hispanics when compared to the low-overall score states. There is no significant difference between the two groups in terms of the age of the owner.

Table 3 looks at owner characteristics in high- and low-ease of start score states. Again, there is no significant difference between the two groups with respect to the owner's position in the firm. In the high-score states, there are more experienced people when compared to the other states.

Panel B shows that, in the high-score states, there are more female owners (38.93% vs 34.54%). There are more strong conservatives and fewer liberal leaning owners, and more technical college and high school graduates in these states. In terms of the race or age of the owner, we are not seeing any significant difference between the two groups of states.

Table 3: The Impact of "Ease of Start"

Variable	High-Score		Low-Score		Mann-W. p-value
	Mean	Med.	Mean	Med.	
Panel A. Position and Experience					
Managerbutnotowner	3.50	3.28	3.27	3.20	0.4167
Nonmanageremployee	0.63	0.39	0.41	0.46	0.3910
Ownerandmanager	93.65	94.57	94.50	94.64	0.2816
Ownerbutnotmanager	2.22	1.87	1.83	2.20	0.4947
Previousentre	45.14	45.24	42.18	42.12	*0.0880
Previousstartups1	43.36	44.64	46.51	45.29	0.2431
Previousstartups2	30.77	30.09	30.22	32.37	0.2556
Previousstartups3	16.41	15.28	13.44	13.60	*0.0922
Previousstartups4	4.42	4.96	3.87	3.17	0.2202
Previousstartups>4	5.05	4.76	5.97	4.28	0.3711
Panel B. Owner Characteristics					
Female	38.93	38.64	34.54	35.55	**0.0202
Age<25	1.97	2.18	2.25	2.18	0.4789
Age25-34	19.63	19.23	17.57	18.43	0.2556
Age35-44	23.92	24.63	24.71	25.43	0.3419
Age45-54	28.29	28.46	28.05	28.41	0.5000
Age55-64	20.91	20.00	21.97	20.80	0.3713
Age>64	5.27	4.99	5.46	5.91	0.2641
Independent	29.67	28.72	31.60	29.41	0.3663
Otherpolitical	16.25	15.48	18.94	16.76	*0.0590
Leanconservative	15.45	14.46	13.30	13.51	0.1036
Leanliberal	11.97	10.26	13.95	13.61	**0.0426
Strongconservative	16.52	15.08	12.75	10.28	**0.0196
Strongliberal	10.13	9.89	9.46	9.71	0.3419
No Highschool	0.63	0.38	0.70	0.00	0.3621
Highschool	18.30	18.53	15.76	15.79	**0.0236
Community College	17.29	17.28	18.88	17.28	0.2861
Technical College	17.42	17.00	14.17	13.04	***0.0090
Undergrad	30.45	30.65	32.86	32.20	0.1755
Master's	12.36	11.32	13.53	14.24	0.1755
Doctoral	3.55	3.64	4.09	3.67	0.3323
Asian	1.40	1.61	2.03	0.69	0.3340
Otherrace	4.47	4.03	6.54	4.28	0.2858
Black	9.12	4.44	5.12	5.03	0.2553
Hispanic	4.93	4.03	4.98	3.76	0.4529
White	80.08	81.45	81.33	83.76	0.3713

Source: Author's own work

Table 4 compares the high- and low-ease of hire score states. Again, there is no significant difference between the two groups with respect to the owner's position in the firm. In the high-score states, there are more experienced people when compared to the other states. Interestingly, there are fewer people with two previous experiences in these states.

Table 4: The Impact of "Ease of Hire"

Variable	High-Score		Low-Score		Mann-W. p-value
	Mean	Med.	Mean	Med.	
Panel A. Position and Experience					
Managerbutnotowner	3.53	3.38	3.27	3.14	0.3009
Nonmanageremployee	0.52	0.00	0.54	0.46	0.2504
Ownerandmanager	93.69	94.30	94.34	94.69	0.2208
Ownerbutnotmanager	2.26	1.64	1.85	2.24	0.4323
Previousentre	44.88	45.20	42.85	42.55	0.1577
Previousstartups1	42.99	42.81	46.41	47.71	0.1005
Previousstartups2	29.21	30.52	31.78	33.03	*0.0702
Previousstartups3	15.99	15.95	14.26	14.47	0.2285
Previousstartups4	5.02	4.86	3.37	3.03	*0.0808
Previousstartups>4	6.78	6.07	4.19	3.37	**0.0166
Panel B. Owner Characteristics					
Female	37.95	37.30	36.10	36.94	0.1608
Age<25	1.61	1.89	2.55	2.27	*0.0927
Age25-34	18.12	18.85	19.30	19.29	0.2406
Age35-44	24.87	25.76	23.69	24.37	0.1454
Age45-54	27.79	26.74	28.56	28.57	0.2170
Age55-64	22.15	20.76	20.64	19.50	*0.0896
Age>64	5.46	5.58	5.25	5.80	0.4636
Independent	31.09	28.46	29.97	29.41	0.4948
Otherpolitical	16.23	15.79	18.57	18.83	*0.0875
Leanconservative	15.70	15.09	13.37	13.64	*0.0776
Leanliberal	12.18	10.74	13.47	13.64	0.2366
Strongconservative	15.98	15.59	13.80	12.60	0.1608
Strongliberal	8.81	8.69	10.81	10.83	*0.0573
No Highschool	0.69	0.43	0.64	0.00	0.2461
Highschool	17.41	17.65	16.97	16.98	0.4173
Community College	16.44	18.17	19.46	17.28	0.1454
Technical College	17.48	16.95	14.58	13.33	**0.0339
Undergrad	30.64	31.20	32.33	31.82	0.3287
Master's	13.37	13.92	12.41	12.27	0.3335
Doctoral	3.97	3.64	3.61	3.57	0.4792

Variable	High-Score		Low-Score		Mann-W. p-value
	Mean	Med.	Mean	Med.	
Asian	1.11	1.11	2.21	1.69	0.1757
Otherrace	3.94	3.94	6.75	4.35	0.1450
Black	9.50	5.05	5.33	4.26	0.1421
Hispanic	5.25	3.54	4.67	4.07	0.4173
White	80.20	80.23	81.03	83.05	0.4123

Source: Author's own work

Panel B shows that there are similar number of female owners in these two groups of states (37.95% versus 36.10%). When we look at the age variables, in the high-score states, we are seeing fewer people that are younger than 25 and more people that are between 55 and 64 years of age. In these states, there are more are more people leaning conservatives and fewer people who define themselves as a strong liberal. In these states, there are more technical college graduates. In terms of the race groups, there is no significant difference between the two groups.

Table 5 compares the high- and low-overall regulations score states. Again, there is no significant difference between the two groups with respect to the owner's position in the firm. In the high-score states, there are more experienced people.

Panel B shows that there are similar number of female owners in each group (37.96% versus 35.78%). We do not see any significant results for the age groups. In the high-score states, there are more conservative people and fewer liberal people. In these states, there are more technical college and high school graduates and fewer people with an undergraduate degree. In terms of the race groups, in the high-score states, there are fewer Asians but more black owners.

Table 5: The Impact of "Overall Regulations"

Variable	High-Score		Low-Score		Mann-W. p-value
	Mean	Med.	Mean	Med.	
Panel A. Position and Experience					
Managerbutnotowner	3.34	2.94	3.46	3.56	0.2771
Nonmanageremployee	0.52	0.00	0.54	0.49	0.1993
Ownerandmanager	93.90	94.67	94.18	94.45	0.4895
Ownerbutnotmanager	2.23	1.87	1.82	2.20	0.4632
Previousentre	45.95	45.73	41.14	41.28	***0.0075

Variable	High-Score		Low-Score		Mann-W.
	Mean	Med.	Mean	Med.	p-value
Previousstartups1	43.70	43.84	46.07	45.79	0.2905
Previousstartups2	30.24	30.95	30.89	31.82	0.2556
Previousstartups3	16.49	16.67	13.33	14.58	0.1320
Previousstartups4	4.12	4.42	4.24	4.32	0.4841
Previousstartups>4	5.44	5.56	5.46	3.43	0.2036
Panel B. Owner Characteristics					
Female	37.96	37.63	35.78	36.42	0.1134
Age<25	1.99	2.18	2.23	2.15	0.4579
Age25-34	18.53	19.23	18.98	18.68	0.4582
Age35-44	24.95	25.53	23.39	24.61	0.1436
Age45-54	27.71	27.16	28.79	28.80	0.2515
Age55-64	21.23	20.00	21.56	21.49	0.2115
Age>64	5.59	5.45	5.06	5.84	0.3516
Independent	30.62	28.72	30.39	29.41	0.5000
Otherpolitical	16.19	15.94	19.02	17.84	*0.0706
Leanconservative	16.16	15.00	12.40	12.21	***0.0040
Leanliberal	10.69	9.92	15.59	15.57	***0.0002
Strongconservative	17.51	16.92	11.48	10.28	***0.0024
Strongliberal	8.83	8.65	11.13	11.47	**0.0311
No Highschool	0.61	0.00	0.73	0.13	0.4606
Highschool	18.15	17.74	15.95	16.62	*0.0967
Community College	18.28	19.35	17.61	16.85	0.3614
Technical College	17.30	16.90	14.33	13.04	**0.0123
Undergrad	29.50	30.19	34.07	33.91	***0.0038
Master's	12.39	13.27	13.49	13.41	0.2951
Doctoral	3.77	3.52	3.82	3.78	0.2772
Asian	1.03	1.09	2.50	1.65	*0.0757
Otherrace	4.83	4.08	6.09	4.28	0.2227
Black	9.54	5.92	4.58	4.05	**0.0487
Hispanic	4.77	2.89	5.19	4.05	0.1083
White	79.83	78.57	81.65	84.33	0.2685

Source: Author's own work

Table 6 compares the high- and low-training/networking score states. Again, there is no significant difference between the two groups with respect to the owner's position in the firm. In the high-score states, there are more experienced people.

Table 6: The Impact of "Training and Networking"

Variable	High-Score		Low-Score		Mann-W. p-value
	Mean	Med.	Mean	Med.	
Panel A. Position and Experience					
Managerbutnotowner	3.43	3.38	3.35	2.85	0.3096
Nonmanageremployee	0.61	0.42	0.44	0.00	0.3100
Ownerandmanager	93.63	94.37	94.48	94.95	0.1120
Ownerbutnotmanager	2.33	2.22	1.73	1.91	0.3180
Previousentre	44.11	44.35	43.53	42.55	0.4019
Previousstartups1	43.84	45.18	45.79	42.86	0.3818
Previousstartups2	31.36	31.46	29.56	31.82	0.4222
Previousstartups3	15.19	14.80	15.01	14.68	0.4120
Previousstartups4	4.80	5.26	3.46	3.05	*0.0673
Previousstartups>4	4.82	4.91	6.19	4.35	0.3817
Panel B. Owner Characteristics					
Female	39.41	38.83	34.21	35.90	***0.0065
Age<25	2.31	2.35	1.85	1.61	**0.0151
Age25-34	19.63	19.37	17.68	18.64	0.2483
Age35-44	24.89	25.16	23.54	25.53	0.1905
Age45-54	26.72	27.43	29.88	28.57	*0.0525
Age55-64	21.08	20.23	21.72	20.55	0.4844
Age>64	5.37	5.07	5.34	5.93	0.4171
Independent	30.40	28.14	30.66	29.41	0.4274
Otherpolitical	17.45	18.33	17.41	15.79	0.2738
Leanconservative	14.62	14.00	14.38	15.00	0.4687
Leanliberal	12.18	10.87	13.60	12.03	0.1277
Strongconservative	14.68	13.64	15.07	16.15	0.3670
Strongliberal	10.68	11.30	8.87	8.65	**0.0326
No Highschool	0.70	0.32	0.62	0.00	0.2283
Highschool	18.45	18.14	15.72	16.67	*0.0849
Community College	17.90	18.17	18.08	17.28	0.4121
Technical College	15.71	14.20	16.33	16.90	0.2915
Undergrad	29.79	32.48	33.49	30.86	0.3621
Master's	13.91	13.92	11.67	12.27	*0.0809
Doctoral	3.54	3.64	4.08	3.52	0.4583
Asian	1.20	1.15	2.23	1.12	0.3948
Otherrace	5.15	4.46	5.65	4.08	0.3048
Black	10.28	8.84	3.99	4.24	**0.0154
Hispanic	4.22	3.44	5.81	4.26	0.1045
White	79.16	80.01	82.33	84.18	0.1767

Source: Author's own work

Panel B shows that, in the high-score states, there are more female owners (39.41% versus 34.21%). When we look at the age variables, we are seeing that, in the high-score states, there are more owners who are younger than 25 and fewer owners who are between 45 and 54 years of age. In the high-score states, there are more strong liberals. In these states, there are more high school and master's graduates. In terms of the race groups, in the high-score states, we are seeing more black owners.

Conclusion

Our results for “overall business friendliness” show that, in business-friendly states, there are more female owners and more experienced owners. We also find that, in these states, there are more conservatives but fewer liberals and independents. Also, there are more technical college and high school graduates but fewer community college graduates and fewer people with master's degrees when compared to the other states. We also find that, in business-friendly states, there are fewer Asian and Hispanic owners when compared to the other states.

Next, we examine whether each component of business friendliness affects firm characteristics. First, we compare high-ease of start score states to low-ease of start score states. We find that “ease of start” affects most owner characteristics. We find that there are more female owners and more experienced people in the states with a high ease of start score. Therefore, our results fail to reject Hypothesis 1 which states that states with an easier startup process attract significantly more female entrepreneurs. There are fewer liberals and more conservatives. Also, there are more technical college and high school graduates.

When we look at “ease of hire”, we are seeing that, in the states with a high-ease of hire score, there are more people with four or more previous startup experience. There are fewer younger owners and more older owners. There are more conservatives and fewer liberals. Also, there are more technical college graduates. However, there is no significant difference between the two groups of states in terms of the percentage of female owners. Therefore, we reject Hypothesis 2 which states that states with an easier hiring process attract significantly more female entrepreneurs.

When we look at “overall regulations”, we find that, in the states with a high-overall regulations score, there are more people with previous startup experience. There are fewer younger owners and more older owners. There

are more conservatives and fewer liberals. There are fewer people with an undergraduate degree and more people with a technical college or high school degree. Also, there are fewer owners that are "Asian" but more owners that are "Black". However, there is no significant difference between the two groups of states in terms of the percentage of female owners. Therefore, we reject Hypothesis 3 which states that states with more favorable regulations attract significantly more female entrepreneurs.

We find that there are more female owners and more experienced people in the states with more training and networking programs. Therefore, our results fail to reject Hypothesis 4 which states that states with better training and networking programs for entrepreneurs attract significantly more female entrepreneurs. We see younger entrepreneurs in these states, and we also see more liberals. There are more high school graduates and more people with a master's degree. Also, there are more owners that are "Black".

Our results confirm that business friendly states attract certain types of entrepreneurs. Our results also indicate that different components of business friendliness attract different types of entrepreneurs. Policymakers should consider the findings here when developing their strategies for attracting entrepreneurs to their states.

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