

UDK: 005.336.5:004(73)
005.32:331.4
JEL: L26, O33
COBISS.SR-ID: 222331148

ORIGINAL SCIENTIFIC PAPER

The Impact of Technology Use on Entrepreneurial Activity and Owner Composition



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ABSTRACT

In this study, we examine the impact of each U.S. state's score in technology use on the entrepreneurial activity in that state. We specifically focus on each state's score on internet startup process, internet tax payment process, and internet licensing process to see how they impact the entrepreneurial activity in each state. We also examine whether the characteristics of small businesses and entrepreneurs differ across high technology use and low technology use states. Our results show that there is no statistically significant difference in terms of total entrepreneurial activity between states with technology scores and low technology scores. However, our results confirm that small businesses and entrepreneurs with certain characteristics prefer high technology use states. We find that new startups, entrepreneurs that are independent in the political scale and community college graduates tend to prefer states with high internet startup scores and high internet tax scores. Female entrepreneurs also tend to prefer states with high internet startup scores. Finally, we find that single employee firms, entrepreneurs with previous entrepreneurial experience, entrepreneurs that are liberal in the political scale and technical college graduates tend to prefer states with high internet licensing scores.

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KEY WORDS: *entrepreneurship, small business, technology, entrepreneurial activity, owner characteristics*

Introduction

In this study, we examine two issues: First, we examine the impact of technology use on entrepreneurial activity. We focus on the use of the internet in three different startup-related activities: We look at the internet use during the startup, the tax payment, and the licensing processes for new businesses. Our objective is to see how the use of this technology affects the entrepreneurial activity in the U.S. states.

Our second objective is to see how the internet use in these processes affect the firm and the owner compositions. We test to see whether the characteristics of small businesses and entrepreneurs differ across high technology use and low technology use U.S. states.

The results here will hopefully guide the state officials to improve the startup, the tax payment, and the licensing processes in their states. Knowing whether the use of this technology helps their state's entrepreneurial environment will help them in improving their state's systems. Also knowing what type of firms or owners are attracted to their state due to the ease that comes with the online format will help. The policy makers will also see which groups are discouraged due to all of these processes being online.

We focus on small business owners' perceptions on the internet use during the startup, the tax payment, and the licensing processes. For this purpose, we use the "United States Small Business Friendliness Survey" done by Kauffman Foundation and Thumtack.com in 2013. The survey asks small business owners several questions including their opinions on their state's tech friendliness during these processes. It also asks respondents questions on the type of business (i.e. the age of the firm, the number of employees, etc.) as well as on the owner characteristics (i.e. gender, race, age, previous entrepreneurial experience, political view, educational level, etc.).

The paper proceeds as follows: Section 2 discusses the previous literature. Section 3 describes the data and the methodology. Section 4 shows the empirical results. Section 5 concludes.

Literature Review

Since the use of technology during the business startup, the tax payment, and the licensing processes makes the whole process easier, we expect more entrepreneurial activity in high tech states when compared to the other states. The use of technology reduces some of the burden on the entrepreneurs who struggle with many rules and regulations.

Since technology use helps with the burden associated with rules and regulations, here in this section, we are examining the papers that focus on the strictness of rules and regulations and how it impacts entrepreneurial activity. There is an extensive literature on the impact of rules and regulations on entrepreneurial activity. These papers have shown that there is a negative relation between the degree of rules and regulations in a country and the entrepreneurial activity. For example, Zoltan J. Acs, Pontus Braunerhjelm, David B. Audretsch, and Bo Carlsson (2009) examine factors such as risk aversion, legal restrictions, bureaucratic constraints, labor market rigidities, taxes, and lack of social acceptance. They show that entrepreneurial activities decrease under greater regulation, administrative burden and market intervention by government.

Ruta Aidis, Saul Estrin, and Tomasz Mickiewicz (2008) suggest that Russia's institutional environment explains its relatively low levels of entrepreneurship development. Ruta Aidis, Friederike Welter, David Smallbone, and Nina Isakova (2007) focus on the impact of the formal institutions such as rules and regulations on female business development. They also look at the impact of the informal institutions such as gendered norms and values on female business startups. They show that although rules and regulations may permit women to start their own businesses, gendered norms and values restrict women's activities and their access to resources. Zoltan J. Acs and Laszlo Szerb (2007) find that middle-income countries should focus on improving technology availability, increasing human capital, and promoting enterprise development. For developed economies, reducing entry regulations, in most cases, will not result in more high-potential startups. In these countries, they argue that, labor market reform and deregulation of financial markets may be needed.

Lee Branstetter, Francisco Lima, Lowell J. Taylor, and Ana Venâncio (2014) examine Portugal, which implemented one of the most dramatic and thorough policies of entry deregulation in the industrialized world. Their results indicate that the reform resulted in increased firm formation and

employment, but mostly among "marginal firms" that would have been most readily deterred by existing heavy entry regulations. These marginal firms were typically small, owned by relatively poorly-educated entrepreneurs, operating in the low-tech sector (agriculture, construction, and retail trade). The authors argue that these firms were also less likely to survive their first two years than comparable firms that entered prior to the reform. Aristidis Bitzenis and Ersanja Nito (2005) show that the most important obstacles faced by entrepreneurs in Albania include unfair competition, changes in taxation procedures, lack of financial resources and problems related to public order. Axel Dreher and Martin Gassebner (2013) show that the existence of a larger number of procedures required to start a business, as well as larger minimum capital requirements are detrimental to entrepreneurship. Miguel García-Posada and Juan S. Mora-Sanguinetti (2015) find that higher judicial efficacy increases the entry rate of firms, while it has no effect on the exit rate.

William B. Gartner and Scott A. Shane (1995) argue that changes in values, attitudes, technology, government regulations, and world economic and social changes have a significant influence on changes in entrepreneurship over time. Ejaz Ghani, William R. Kerr, and Stephen O'Connell (2014) examine the spatial determinants of entrepreneurship in India. They find that local education levels and physical infrastructure quality play the most important roles in promoting entry. They also find evidence that strict labor regulations discourage entrepreneurship, and better household banking environments are associated with higher entry in the unorganized sector. Leora Klapper, Luc Laeven, and Raghuram Rajan (2006) examine the effect of market entry regulations on the creation of new limited-liability firms, the average size of entrants, and the growth of incumbent firms. They find that costly regulations hamper the creation of new firms, especially in industries that should naturally have high entry. Tatiana S. Manolova, Rangamohan V. Eunni, and Bojidar S. Gyoshev (2008) argue that comparisons of the overall institutional framework across countries should, therefore, be used as a first approximation only and interpreted with great care.

Khaled Nawaser, Seyed Mohammad Sadeq Khaksar, Fatemeh Shaksian, and Asghar Afshar Jahanshahi (2011) find that laws, the present regulations and motivational factors are the obstacles for achieving appropriate entrepreneurship development. Kristina Nyström (2008) shows that a smaller government sector, better legal structure and security of

property rights, as well as less regulation of credit, labor and business tend to increase entrepreneurial activity. Tomi Ovaska and Russell S. Sobel (2005) focus on entrepreneurship in post-socialist economies. They show credit availability, contract enforcement, low government corruption, sound monetary policy, high foreign direct investment, and policies (such as low regulations and taxes) that are consistent with giving citizens a high degree of economic freedom are important factors for entrepreneurial activity. Simon C. Parker (2007) shows two issues. First, legal structures shape organizational forms in entrepreneurship. Second, legal rules and institutions carry public policy implications for entrepreneurship in at least three areas: regulation; bankruptcy legislation; and the broad area of property rights, corruption, and the efficiency of courts. He reviews the literature on each of these issues.

David Smallbone, Friederike Welter, Artem Voytovich, and Igor Egorov (2010) contend that governments play a particularly important role for entrepreneurship development in a transition context, particularly with respect to their role in creating the institutional framework that enables and/or constrains entrepreneurship. Russell S. Sobel, J. R. Clark, and Dwight R. Lee (2007) argue that while entrepreneurs benefit from unrestricted free entry into markets, they have a time-inconsistent incentive to lobby for government entry restrictions once they become successful. Bad political institutions yield to these demands, and growing barriers are placed on domestic and international competition. Ute Stephan and Lorraine M. Uhlaner (2010) find that opportunity existence and the quality of formal institutions support entrepreneurship. Michael E. Valdez and James Richardson (2013) suggest that a society's normative, cultural-cognitive, and regulative institutions are related to entrepreneurial activity. Normative and cultural-cognitive institutions' descriptive power in explaining entrepreneurial activity is higher than regulative institutions' or per capita gross domestic product. According to the authors, this suggests that differences in values, beliefs, and abilities may play a greater role than purely economic considerations of opportunity and transaction costs.

Van Stel, Andre, David J. Storey, and A. Roy Thurik (2007) find the minimum capital requirement required to start a business lowers entrepreneurship rates across countries, as do labor market regulations. Friederike Welter (2004) argues that an integrated strategy for fostering female entrepreneurship needs to consider that there are shortcomings in the institutional (political and societal) environment, possibly restricting

women's interest in entrepreneurship and thus determining the extent of female entrepreneurship. Sander Wennekers and Roy Thurik (1999) argue that both culture and the institutional framework are important conditions codetermining the amount of entrepreneurship in an economy and the way in which entrepreneurs operate in practice. According to the authors, technological, demographic and economic forces are also important. Shaker A. Zahra and Dennis M. Garvis (2000) show that aggressive government intervention, technological changes, and fierce local rivalries all contribute to hostile international environments for U.S. firms' global expansion. The authors show that there are upper limits to the potential gains a firm achieves from its aggressive pursuit of international corporate entrepreneurship when the international environment in which it competes is hostile.

Data and Methodology

In this study, our main objective is to examine the impact of each U.S. states' business friendliness score in technology use on the entrepreneurial activity in that state. We specifically focus on each state's score on internet startup process, internet tax payment process, and internet licensing process to see how they impact the entrepreneurial activity in each state. We also examine whether the characteristics of small businesses and entrepreneurs differ across high technology use and low technology use states.

I use the "United States Small Business Friendliness Survey" done by Kauffman Foundation and Thumtack.com in 2013. The survey asks small business owners their opinions on their state's internet startup process, internet tax payment process, and internet licensing process. It also asks respondents questions on the type of business (i.e. the age of the firm, the number of employees, etc.) as well as on the owner characteristics (i.e. gender, race, previous entrepreneurial experience, political view, education, etc.).

In order to access the entrepreneurial activity index for each state, I use Kauffman's [website](http://www.kauffman.org/multimedia/infographics/2013/kiea-interactive) (<http://www.kauffman.org/multimedia/infographics/2013/kiea-interactive>). All other variables are available in the survey itself. All of the variables are explained below:

Entreactivity: the entrepreneurial activity index for each state (from Kauffman's website)

Internetstart: the percentage of respondents in a state that have used the internet to form/start the business (computed from the individual responses in each state)

Internettax: the percentage of respondents in a state that have used the internet to pay the taxes on business earnings (computed from the individual responses in each state)

Internetlicensing: the percentage of respondents in a state that have used the internet to get a license or permit to do business (computed from the individual responses in each state)

Ageofbuslessthanone: the percentage of small businesses in a state that are less than 1 year old (computed from the individual responses in each state)

Employeesone: the percentage of small businesses in a state that are single-employee businesses (computed from the individual responses in each state)

Previousentre: the percentage of small business owners in a state that have previous entrepreneurial experience (computed from the individual responses in each state)

Prevstartupsfiveormore: the percentage of small business owners in a state that have previously started five or more businesses (computed from the individual responses in each state)

Female: the percentage of small business owners in a state that are female (computed from the individual responses in each state)

Ageunderthirtyfive: the percentage of small business owners in a state that are younger than thirty-five years of age (computed from the individual responses in each state)

Asian: the percentage of small business owners in a state that are Asian (computed from the individual responses in each state)

White: the percentage of small business owners in a state that are white (computed from the individual responses in each state)

Black: the percentage of small business owners in a state that are black (computed from the individual responses in each state)

Hispanic: the percentage of small business owners in a state that are hispanic (computed from the individual responses in each state)

Independent: the percentage of small business owners in a state that are independent in their political view (computed from the individual responses in each state)

Conservative: the percentage of small business owners in a state that are conservative in their political view (computed from the individual responses in each state)

Liberal: the percentage of small business owners in a state that are liberal in their political view (computed from the individual responses in each state)

No Highschool: the percentage of small business owners in a state that did not graduate from high school (computed from the individual responses in each state)

Highschool: the percentage of small business owners in a state that graduated from high school (computed from the individual responses in each state)

Community College: the percentage of small business owners in a state that graduated from a community college (computed from the individual responses in each state)

Technical College: the percentage of small business owners in a state that graduated from a technical college (computed from the individual responses in each state)

Undergrad: the percentage of small business owners in a state that has a bachelor's degree (computed from the individual responses in each state)

Masters: the percentage of small business owners in a state that has a master's degree (computed from the individual responses in each state)

Doctoral: the percentage of small business owners in a state that has a doctoral degree (computed from the individual responses in each state)

In order to do the analyses, I run nonparametric tests that compare states with high- and low-scores in each internet use category. To divide between high- and low- score states in each category, I use the mean value. The states with scores higher than the mean are classified as high-score states, and the states with scores lower than the mean are classified as low-score states.

First, I divide the 41 states in the survey into high- and low- internet start score states, using the mean internet start score (i.e. "internetstart") among the 41 states as the dividing point. Then, I compare high- and low-internet start score groups' entrepreneurial activity. Are they significantly different? I also compare the two groups in terms of firm and owner characteristics. Then, I do the same for the internet tax score (i.e.

“internettax”). Do high- and low-internet tax score states differ in terms of entrepreneurial activity? Do they differ in terms of firm and owner characteristics? Finally, I do the same analysis for internet licensing score (i.e. internetlicensing”). Do high- and low-internet licensing score states differ in terms of entrepreneurial activity? Do they differ in terms of firm and owner characteristics?

Figure 1 shows the mean entrepreneurial activity across 50 states and the District of Columbia over time. 1999, 2001, 2002, and more recently 2013 are the years when the activity is low. Especially from 2012 to 2013, there was a bog drop in entrepreneurial activity.

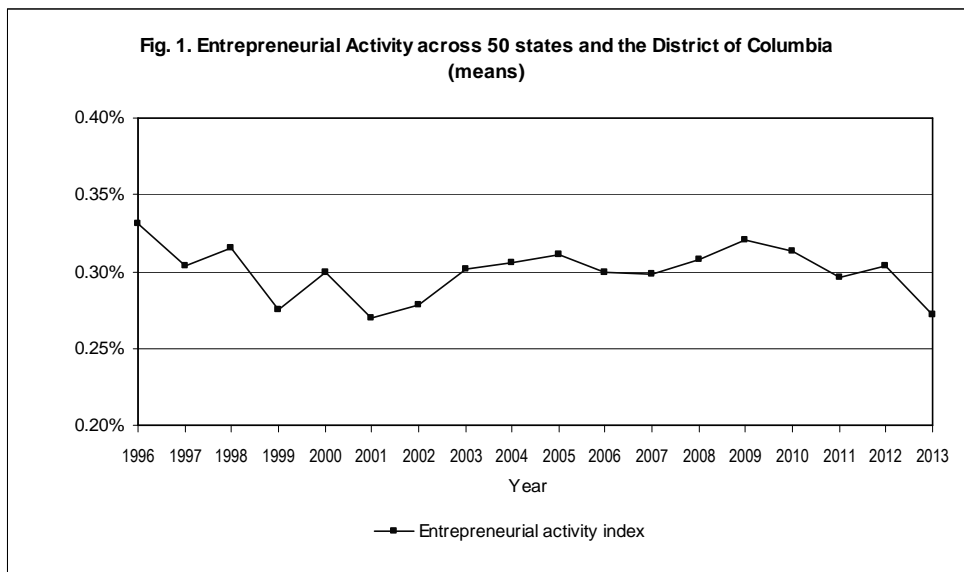


Figure 2 shows the median entrepreneurial activity across 50 states and the District of Columbia over time. The two figures are very similar. 2013 is again a low point in entrepreneurial activity.

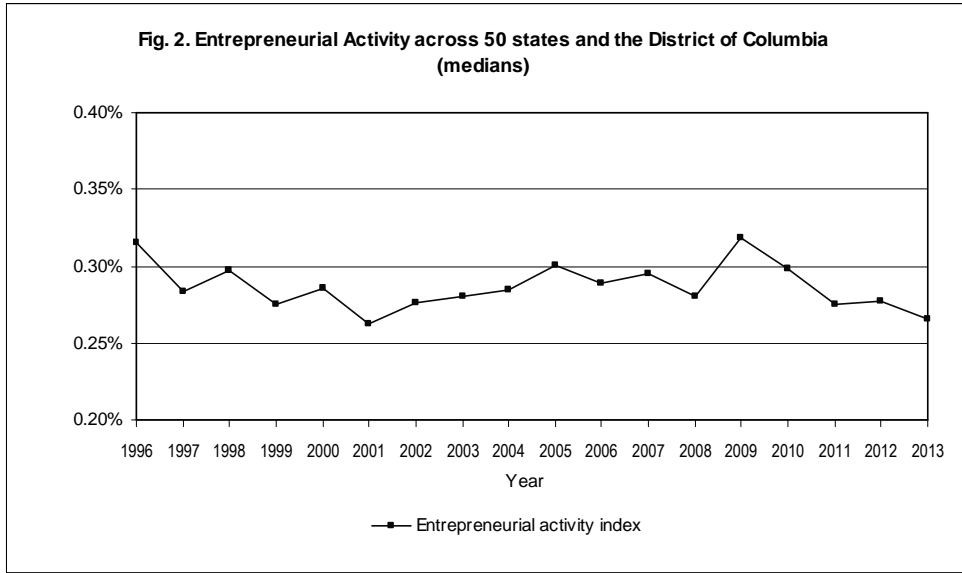


Table 1 shows the summary statistics for our variables. All of the variables are in percentage.

Table 1: Summary Statistics (All Variables in %)

Variable	Mean	Median	Stdev	Min	Max
Entreactivity	0.2548	0.2471	0.0711	0.1109	0.4030
Internetstart	58.21	58.62	6.39	37.50	69.11
Internettax	34.54	34.78	6.71	20.83	54.51
Internetlicensing	32.94	32.93	10.07	18.30	64.09
Ageofbuslessthanone	6.16	6.02	2.84	0.00	11.90
Employeesone	53.03	52.17	6.98	36.11	68.18
Previousentre	43.84	43.33	6.78	29.49	57.14
Prevstartupsfiveormore	5.45	4.76	4.54	0.00	21.43
Female	37.00	36.96	5.96	21.05	52.94
Ageunderthirtyfive	20.82	20.31	5.98	5.26	38.71
Asian	1.67	1.12	2.73	0.00	16.67
White	80.63	81.82	11.33	53.33	100.00
Black	7.36	4.84	7.72	0.00	34.71
Hispanic	4.95	3.85	4.26	0.00	16.16
Independent	30.52	28.85	6.62	21.05	52.63
Conservative	29.37	28.39	9.65	4.35	47.37
Liberal	22.68	21.14	6.60	13.33	42.86

Variable	Mean	Median	Stdev	Min	Max
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
Masters	12.88	13.27	4.35	4.26	24.05
Doctoral	3.79	3.64	2.59	0.00	15.79

Empirical Results

Table 2 compares the entrepreneurial activity and firm and entrepreneur characteristics across high- and low- internet start score states. Panel A looks at the entrepreneurial activity index, Panel B looks at firm characteristics, Panel C looks at entrepreneur's experience, gender, age, and race, Panel D examines entrepreneur's political view, and Panel E looks at entrepreneur's education level. In all panels, the last column shows the results of the Mann-Whitney Wilcoxon test.

As we can see from Panel A, the internet start score does not have a statistically significant impact on the total entrepreneurial activity in a state. The median entrepreneurial activity index is 0.2452% in high-score states versus 0.2563% in low-score states (the p-value of the difference is 0.3793).

We are seeing that the internet start score has a statistically significant impact on some firm and entrepreneur characteristics. In Panels B, C, D, and E, when we look at the medians, we are seeing that in high-score states, a marginally higher percentage of firms tend to be a newly-founded firm (6.25% of the firms versus 5.33% of the firms; p-value=0.1021), a higher percentage of entrepreneurs tend to be female (38.71% versus 36.79%; p-value=0.0605), a higher percentage of entrepreneurs tend to be independent in their political view (29.41% versus 27.53%; p-value=0.0974), and a higher percentage of entrepreneurs tend to be community college graduates (20.16% versus 15.40%; p-value=0.0622).

Therefore, from Table 2, we conclude that although the internet start score does not have a statistically significant impact on a state's total entrepreneurial activity, it has a significant impact on several firm and owner characteristics.

Table 2: Comparison of States with High- and Low-Internet Start Scores

Variable	High		Low		Mann-W. p-value
	Mean	Med.	Mean	Med.	
Panel A. States' Entrepreneurial Activity					
Entreactivity	0.2567	0.2452	0.2520	0.2563	0.3793
Panel B. Firm Characteristics					
Ageofbuslessthanone	6.51	6.25	5.62	5.33	0.1021
Employeesone	53.44	51.89	52.38	52.32	0.4680
Panel C. Entrepreneur's Experience, Gender, Age, Race					
Previousentre	43.67	43.80	44.11	42.34	0.4840
Prevstartupsfiveormore	5.63	5.06	5.17	3.75	0.2870
Female	38.40	38.71	34.82	36.79	0.0605
Ageunderthirtyfive	20.99	20.00	20.55	21.43	0.2231
Asian	1.86	1.19	1.39	0.69	0.3821
White	79.46	79.01	82.46	84.19	0.2312
Black	7.98	5.00	6.40	4.25	0.2228
Hispanic	5.34	4.03	4.35	3.66	0.2781
Panel D. Entrepreneur's Political View					
Independent	31.03	29.41	29.73	27.53	0.0974
Conservative	30.43	32.79	27.72	27.68	0.3248
Liberal	21.68	20.59	24.25	23.70	0.1714
Panel E. Entrepreneur's Education Level					
No Highschool	0.58	0.00	0.80	0.16	0.3598
Highschool	17.11	16.98	17.30	17.47	0.3393
Community College	19.14	20.16	16.19	15.40	0.0622
Technical College	15.95	14.67	16.06	16.41	0.4101
Undergrad	30.47	30.65	33.12	31.95	0.2075
Masters	13.27	13.27	12.26	13.25	0.4416
Doctoral	3.48	3.64	4.27	3.76	0.3998

Table 3 compares the entrepreneurial activity and firm and entrepreneur characteristics across high- and low- internet tax score states. Again, Panel A looks at the entrepreneurial activity index, Panel B looks at firm characteristics, Panel C looks at entrepreneur's experience, gender, age, and race, Panel D examines entrepreneur's political view, and Panel E looks at entrepreneur's education level. In all panels, the last column shows the results of the Mann-Whitney Wilcoxon test.

As we can see from Panel A, the internet tax score does not have a statistically significant impact on the total entrepreneurial activity in a state.

The median entrepreneurial activity index is 0.2419% in high-score states versus 0.2563% in low-score states (the p-value of the difference is 0.4322).

Table 3: Comparison of States with High- and Low-Internet Tax Scores

Variable	High		Low		Mann-W. p-value
	Mean	Med.	Mean	Med.	
Panel A. States' Entrepreneurial Activity					
Entreactivity	0.2533	0.2419	0.2568	0.2563	0.4322
Panel B. Firm Characteristics					
Ageofbuslessthanone	6.83	6.67	5.31	5.27	0.0172
Employeeone	53.09	51.61	52.94	53.63	0.2039
Panel C. Entrepreneur's Experience, Gender, Age, Race					
Previousentre	44.55	44.90	42.94	42.33	0.1755
Prevstartupsfiveormore	5.07	4.00	5.93	5.47	0.3179
Female	36.87	36.84	37.17	38.68	0.3042
Ageunderthirtyfive	20.71	20.31	20.95	20.17	0.4581
Asian	2.09	1.61	1.14	0.61	0.1706
White	80.01	81.45	81.41	82.44	0.4117
Black	7.34	5.05	7.39	4.55	0.4738
Hispanic	5.04	3.85	4.84	3.84	0.3466
Panel D. Entrepreneur's Political View					
Independent	31.10	29.96	29.77	27.78	0.0761
Conservative	29.14	28.39	29.67	31.53	0.3419
Liberal	22.43	20.52	22.99	21.40	0.2642
Panel E. Entrepreneur's Education Level					
No Highschool	0.65	0.00	0.69	0.40	0.2626
Highschool	16.53	16.98	18.02	17.65	0.2002
Community College	16.75	16.97	19.57	20.41	0.1013
Technical College	16.02	14.29	15.96	16.80	0.4168
Undergrad	32.60	31.82	30.11	29.49	0.1109
Masters	13.29	13.57	12.34	12.49	0.3371
Doctoral	4.17	3.64	3.30	3.67	0.4686

We are seeing that the internet tax score has a statistically significant impact on some firm and entrepreneur characteristics. In Panels B, C, D, and E, when we look at the medians, we are seeing that in high-score states, a higher percentage of firms tend to be a newly-founded firm (6.67% of the firms versus 5.27% of the firms; p-value=0.0172), a higher percentage of entrepreneurs tend to be independent in their political view (29.96% versus 27.78%; p-value=0.0761), a marginally lower percentage of entrepreneurs

tend to be community college graduates (16.97% versus 20.41%; p-value=0.1013), and a marginally higher percentage of entrepreneurs tend to have undergraduate degrees (31.82% versus 29.49%; p-value=0.1109).

Therefore, from Table 3, we conclude that although the internet tax score does not have a statistically significant impact on a state's total entrepreneurial activity, it has a significant impact on several firm and owner characteristics.

Table 4 compares the entrepreneurial activity and firm and entrepreneur characteristics across high- and low- internet licensing score states. Again, Panel A looks at the entrepreneurial activity index, Panel B looks at firm characteristics, Panel C looks at entrepreneur's experience, gender, age, and race, Panel D examines entrepreneur's political view, and Panel E looks at entrepreneur's education level. In all panels, the last column shows the results of the Mann-Whitney Wilcoxon test.

As we can see from Panel A, the internet licensing score does not have a statistically significant impact on the total entrepreneurial activity in a state. The median entrepreneurial activity index is 0.2458% in high-score states versus 0.2471% in low-score states (the p-value of the difference is 0.4636).

We are seeing that the internet licensing score has a statistically significant impact on some firm and entrepreneur characteristics. In Panels B, C, D, and E, when we look at the medians, we are seeing that in high-score states, a higher percentage of firms tend to be a single-employee firm (55.00% of the firms versus 51.29% of the firms; p-value=0.0190), a higher percentage of entrepreneurs tend to have previous entrepreneurial experience (45.40% versus 42.55%; p-value=0.0855), a lower percentage of entrepreneurs tend to be black (4.34% versus 5.88%; p-value=0.0700), a higher percentage of entrepreneurs tend to be liberal in their political view (22.20% versus 20.52%; p-value=0.0776), a higher percentage of entrepreneurs are technical college graduates (18.06% versus 13.64%; p-value=0.0330), and a marginally lower percentage of entrepreneurs have a master's degree (12.71% versus 14.22%; p-value=0.1126).

Therefore, from Table 4, we conclude that although the internet licensing score does not have a statistically significant impact on a state's total entrepreneurial activity, it has a significant impact on several firm and owner characteristics.

Table 4: Comparison of States with High- and Low-Internet Licensing Scores

Variable	High		Low		Mann-W. p-value
	Mean	Med.	Mean	Med.	
Panel A. States' Entrepreneurial Activity					
Entreactivity	0.2538	0.2458	0.2558	0.2471	0.4636
Panel B. Firm Characteristics					
Ageofbuslessthanone	6.21	6.35	6.12	5.66	0.3193
Employeeone	55.03	55.00	51.12	51.29	0.0190
Panel C. Entrepreneur's Experience, Gender, Age, Race					
Previousentre	45.29	45.40	42.46	42.55	0.0855
Prevstartupsfiveormore	4.96	3.79	5.92	5.41	0.2444
Female	37.06	36.72	36.95	36.96	0.4327
Ageunderthirtyfive	21.02	20.10	20.62	21.87	0.2964
Asian	2.19	1.40	1.18	0.45	0.2403
White	81.23	82.63	80.05	78.60	0.4022
Black	5.03	4.34	9.58	5.88	0.0700
Hispanic	4.78	3.76	5.12	4.25	0.4532
Panel D. Entrepreneur's Political View					
Independent	30.29	29.58	30.74	28.08	0.2488
Conservative	28.30	28.52	30.39	28.39	0.2247
Liberal	24.16	22.20	21.27	20.52	0.0776
Panel E. Entrepreneur's Education Level					
No Highschool	0.76	0.20	0.58	0.00	0.3119
Highschool	17.44	16.98	16.94	17.09	0.4792
Community College	17.41	17.14	18.54	19.40	0.1841
Technical College	17.70	18.06	14.37	13.64	0.0330
Undergrad	30.82	31.34	32.16	31.58	0.4688
Masters	12.28	12.71	13.44	14.22	0.1126
Doctoral	3.60	3.45	3.97	3.76	0.2571

Conclusion

In this study, using the joint survey done by Kauffman Foundation and Thumtack.com, we examine the impact of each U.S. states' business friendliness score in technology use on the entrepreneurial activity in that state. We specifically focus on each state's score on internet startup process, internet tax payment process, and internet licensing process to see how they impact the entrepreneurial activity in each state.

We access the entrepreneurial activity index for each state through Kauffman's website. We then calculate each state's scores for internet startup process, internet tax payment process, internet licensing process. We do that by finding the percentage of the respondents in each state that used the internet to start their business, to pay their taxes, and to get a license or permit. We follow the same procedure to calculate each state's average firm and owner characteristics. We then merge all the data and form our state-based database.

Our results show that there is no statistically significant difference between states with high technology scores and low technology scores. In other words, the states with high internet use scores in startups, tax payments, and licensing do not have significantly more entrepreneurial activity when compared to the states with low internet use scores. This finding should provide the state officials and administrators with a guiding light. The efforts to increase internet use in these areas do not seem to positively affect the overall entrepreneurial activity.

However, our results confirm that small businesses and entrepreneurs with certain characteristics tend to prefer high technology use states. We find that new startups, entrepreneurs that are independent in the political scale and community college graduates tend to prefer states with high internet startup scores and high internet tax scores. Female entrepreneurs also tend to prefer states with high internet startup scores. Finally, we find that single employee firms, entrepreneurs with previous entrepreneurial experience, entrepreneurs that are liberal in the political scale and technical college graduates tend to prefer states with high internet licensing scores.

We conclude that although the efforts to increase internet use in these areas do not seem to positively affect the overall entrepreneurial activity, these efforts would attract certain types of entrepreneurs into their states. In other words, the composition of small businesses change based on a state's efforts in internet use.

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Uticaj različitih vrsta propisa na preduzetničke aktivnosti i vrste vlasništva

APSTRAKT

Cilj ovog istraživanja se odnosi na utvrđivanje kako različiti propisi utiču na preduzetničke aktivnosti u Sjedinjenim Američkim Državama. Takođe je ispitivano da li karakteristike preduzeća vlasnika se razlikuju u zemljama s povoljnijim propisima u odnosu na druge države. Korišćeno je istraživanje Kauffman fondacije iz 2013. godine o malim firmama u SAD-u. Ova anketa se zasniva na mišljenju

malih privrednika o šest različitih tipova propisa, uključujući "propise zapošljavanja, rada i regrutovanje kadrova kod zapošljavanja", "poreskim propisima", "oblika licenciranja i propisima plaćanja naknade", "propisa zoniranja", "propisa zaštite zdravlja i sigurnosti na poslu" i "zakona o zaštiti okoline". Provereni su rezultati nekoliko neparametrijski ispitivanja, kako bi se utvrdilo da li je došlo do još nekih preduzetničkih aktivnosti u državama sa postignutim visokim rezultatom u svakoj od ovih kategorija propisa u upoređenju sa zemljama sa niskim rezultatom. Dobijeni rezultati pokazuju da su "propisi zapošljavanja, rada i regrutovanja kadrova kod zapošljavanja" imali značajan uticaj na preduzetničke aktivnosti u nekoj zemlji. "Poreski propisi" su imali takođe izvestan značaj. Ovi rezultati ukazuju na to da države i gradovi koji žele da unaprede svoje poslovno okruženje za male firme, posebno treba da se usredsrede na poboljšanje njihovih "propisa zapošljavanja, rada i regrutovanja kadrova kod zapošljavanja", kao i "poreskih propisa".

KLJUČNE REČI: *preduzetništvo, mala preduzeća, propisi, preduzetnička aktivnost, karakteristike vlasnika*

Article history: Received: 20 January, 2016

Accepted: 23 February, 2016