Empirical Study of Need-driven and Opportunity-driven Women Entrepreneurship in the state of Alabama[1]

Abstract

Entrepreneurship has attracted the attention of many and is seen as the economic engine that has the potential to deliver future job growth. Because of this potential it is crucial to identify what drives entrepreneurship. Extant literature has focused on *availability of financing*--sufficient collateral—as a significant constraint hindering small business capitalization and business startups. Existing literature also suggests a dichotomy that *need-driven* entrepreneurs are more impacted by *availability of financing* than *opportunity-driven* entrepreneurs. This study empirically investigates the expected linkage between *availability of financing* and *intention to start a business* for need-driven and opportunity-driven women entrepreneurs in the state of Alabama. The results from a survey of 1200 women intending to start a business in Alabama reveal that the strength of the linkage between *availability of financing* and *intention to start a business* varies with the entrepreneurial archetype. I conclude the study with implications for women entrepreneurs, policy makers and for future research.

Key Words: Entrepreneurship in Alabama; Women entrepreneurship; Personal wealth constraints; Need-driven entrepreneurship; Opportunity-driven entrepreneurship; Barriers to entrepreneurship

[1] We gratefully acknowledge the financial support from two research grants provided by the College of Business and Auburn University at Montgomery for this research study making this the largest survey (n=1200) thus far on women entrepreneurs in the state of Alabama.

While entrepreneurship has been recognized as an area of interest by academics, business specialists, governments and policy makers (Davidsson & Honig, 2003; Schramm, 2006; Jack, Moult, Anderson, & Dodd, 2010), women entrepreneurs are still underrepresented in enterprises of all sizes despite the fact that women entrepreneurs account for nearly one third of all businesses worldwide (ILO, 2012). Consequently, there is legitimate interest focused on exploring incentives and constraints in business start-ups for women. Among the many barriers identified in the literature, the constraints of personal wealth and liquidity together with lack of governmental financial support have been a consistent theme in the many studies done across the globe. However, there is a lack of consistency among these studies that are often done in vastly different national and economic contexts.

The current study is a region--focused-initiative, justified by an intensifying demand by scholars for additional assessment studies that investigate the role played by entrepreneurs in regional and local economies. The demand is rationalized along the view that entrepreneurs play an important role in local economies through investment activities made by them, which help to foster job creation, reduce wealth-/income disparity among local residents, and connect the local economy to the larger, global economy (Henderson, 2002).

Our study starts with a brief overview of financing barriers to entrepreneurship, continues with a discussion of women entrepreneurship, and presents a research framework that is focused on *personal wealth and liquidity constraints* and *availability of public financing mechanisms* as barriers to women entrepreneurship. The research framework then leads to research hypotheses that are empirically tested using the largest survey of women entrepreneurship ever done in the state of Alabama. The findings are discussed and the paper concludes with limitations and suggestions for future research and policy making.

Literature review

Access to capital is critical to new venture creation, whether that capital comes from personal assets or external financing. Studies in the US have shown that in a credit-constrained environment, the probability of entrepreneurship increases with personal assets (Evans and Jovanovic, 1989; Evans and Leighton, 1989). There are similar empirical results for measures of external capital in relation to entrepreneurial activity (Blanchflower and Oswald, 1998; Guiso et al., 2002). This phenomenon is not limited to the United States. Fonseca, Lopez-Garcia and Pissarides (2001) show across several European nations that fewer individuals become entrepreneurs when start-up costs were higher and when the credit environment was tight. Afandi and Kermani (2015) reported similar results across a sample of 30 European countries.

The results concerning the availability of capital are consistent with several contemporary studies in entrepreneurship which investigated the role played by financial capital and its constraining effect on business startups. Among them are Kim, Aldrich, and Keister (2006), Aghion, Fally and Scarpetta (2007), Fonseca, Michaud, and Sopraseuth (2007), Kerr and Nanda (2009), Chaney, (2013), Beck and Demirgüç-Kunt (2008), Carreira and Silva (2010), and Hurst and Lusardi, (2004). Generally, scholars are universally united in the view that access to financial capital remains a major determinant for business startups (Beck and Demirgüç-Kunt, 2008; Carreira and Silva, 2010), although some studies found evidence that the wealthy are not as influenced by the availability of credit, claiming that any capital shortage affects only the middle and low--income groups in society (Hurst and Lusardi, 2004).

With the credit and wealth constraints serving as limiters of entrepreneurship generally, and with little research examining how these barriers might affect female entrepreneurs, we turn our attention to the subject of women and the financing of a new venture.

Women Entrepreneurs

Notwithstanding the relative lack of empirical research, throughout the world female entrepreneurs are often seen as an underutilized source of value creation (Afandi & Kermani, 2015). While a literature review reveals an abundance of studies on entrepreneurship in general, there is less in the way of research into female entrepreneurship and especially the questions of financing new ventures (Sullivan & Meek, 2012). Some exceptions where female entrepreneurs were the focus of research on financing behaviors revealed that women were more likely to rely on personal wealth rather than external funding sources to finance their startups (Chaganti, DeCarolis, & Deeds, 1995). Another study of the financing behavior of female entrepreneurs conducted by Coleman (2000) found that women paid more for their business-startup loans and, at least for service business, had to pledge more collateral to secure those loans than did men. Finally, one study (Carter, Shaw, Lam & Wilson, 2007) reported that women were more likely to rely on close friends or family, rather than institutions or professional investors, when seeking external funding for their entrepreneurial ventures, a result consistent with an earlier study by Haynes and Haynes (1999).

The literature to date suggests the importance of personal wealth and borrowing capacity for female entrepreneurs as determinants of their entrepreneurial activity. In addition to the credit and wealth constraints which might affect new venture creation rates, there is also significant evidence that women are less likely to create new ventures both in the United States and in the rest of the world (Afandi & Kermani, 2015). Though women-owned businesses are as successful as those owned by men (Afandi & Kermani, 2015), women remain less likely overall to start businesses. A number of social and experiential variables, such as access to childcare, differences in entrepreneurial motivation, and relative size of personal networks may be associated with the lower likelihood of female entrepreneurship (Sullivan & Meek, 2012).

Previous research has found that women entrepreneurs more often start new ventures in service-sector and labor-intensive trade businesses than do men (Klapper & Parker, 2011). Although the service and trade sectors usually require less capital-funding than do businesses in the manufacturing sector at startup, the labor intensive businesses favored by female entrepreneurs have a lower potential for growth and development (Klapper & Parker, 2011). In a similar vein, female entrepreneurs report more difficulty raising external capital, but these difficulties appear to be related more to their work experience and social networks than to their gender per se (Harrison & Mason, 2007; Li & Martin 2016).

Although there is theoretical work suggesting that women may have impediments to new-venture creation apart from a simple wealth constraint (Sullivan & Meek, 2012), the literature to date lacks a comprehensive test of women's' perceptions of entrepreneurship impediments, and particularly there has been no formal examination of the more economically distressed populations of potential women-entrepreneurs in Alabama. This study tests the relationship between personal wealth and entrepreneurial intentions, and the relationship between the availability of financing for new business and entrepreneurial intentions among women in Alabama. Both the wealth constraint and credit constraints, and any interaction between them, are important in advancing the economic fortunes of Alabama and of an underrepresented population in new venture creation.

Need-driven and Opportunity-driven Entrepreneurship

While many of the academic and policy discussions around promoting entrepreneurship have focused on technology startups and other innovative small businesses, the vast majority of small businesses do not fit that stereotype. Need-driven entrepreneurs are more likely to be low-income folks who may not have other job opportunities, and so going into business for themselves might be the only job they can do. Then on the other side, there are opportunity-driven entrepreneurs, who see these great opportunities, and they do it because they see a good investment opportunity, or they have a great idea. Rosa et al. (2006) in their qualitative study of entrepreneurship, specifically in Uganda and Sri Lanka, found that need for income is a primary motive for business start-up in poor countries, and that future studies should empirically affirm that necessity-driven business startups also exist in advanced nations as well. Block et al. (2010) found both necessity-driven and opportunity-driven startups in Germany and furthermore revealed empirically significant differences between the two archetypes of entrepreneurship. The GEM (Global Entrepreneurship Monitor) further defines necessity-driven entrepreneurship as self-employment seeking small business startups that individuals start for making income. Necessity-driven entrepreneurs are “those who start an autonomous enterprise for not having better occupancy options, opening a business in order to generate income for themselves or for their families.” In contrast, GEM defines opportunity-driven entrepreneurs as those “who identify a chance of business and decide to undertake it despite having alternative employment and income” (Acs et al., 2004).

Entrepreneurship creates jobs, and jobs are the foundation of a stable, civil society. Need-driven entrepreneurs are self-employed who create jobs for themselves to survive in economies that are not robust enough to find jobs for all. Opportunity-driven entrepreneurs, on the other hand, are risk takers who attempt to create new businesses from application of new knowledge. The role of public financing and other governmental supports is not to pick winners but to enable entrepreneurial success. Governments can create regulatory environments and strengthen ecosystems that promote entrepreneurship: incubators, seed funds, mentorship networks, tax subsidies, etc. (Koltai, 2016: 171). However, need- and opportunity- driven entrepreneurs are likely to respond to these external supports differently. Bahn et al. (2016) documented empirical evidence that shows significant gap in entrepreneurship for women and that this gap has widened in current recessionary times. Hence a focus on women at the level of need-driven and opportunity-driven entrepreneurship is an empirical need today.

Also coherent with contemporary studies in entrepreneurship (e.g. Simón-Moya et al., 2014) which urge that future research studies in entrepreneurship examine entrepreneurial issues at granular levels, we limit our current investigation to women intending to start new businesses and we have further limited the geographic scope of our empirical study to the state of Alabama so that the statistically significant findings of our study will lead to specific guidance for the state of Alabama.

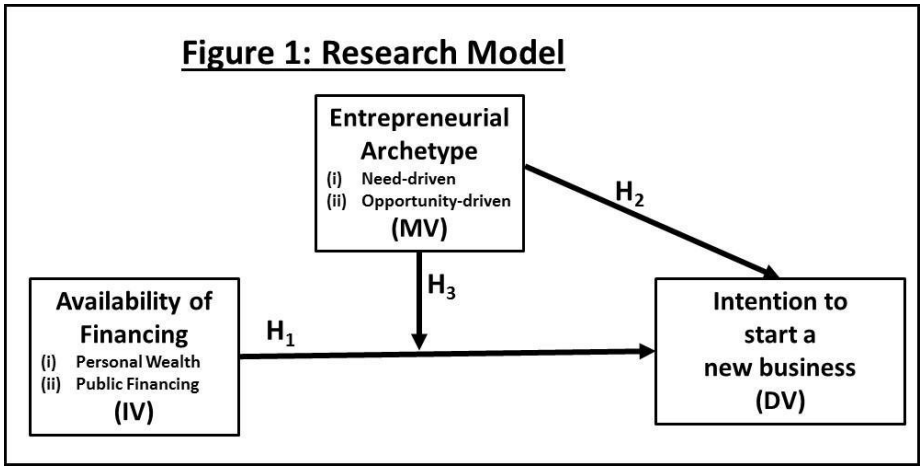
Why the state of Alabama?

Alabama presents a unique context within the US as a state economy that continues to lag behind national averages on most economic measures. Economic conditions in Alabama feature high rates of poverty (17%), a declining per capita income, low rates of labor force participation, and population loss (Starks, 2012). Several studies found that a country's level of entrepreneurial activity can explain a significant portion of the differences in national economic growth rates (Reynolds et al., 1999; Carree and Thurik, 2003). It is also clear that entrepreneurs significantly impact local economies by fostering localized job creation, increasing wealth and incomes, and ultimately helping to connect local economies to the larger, global economy (Henderson, 2002).Thus, the context of women in Alabama should be empirically investigated to reveal the barriers to entrepreneurship.

Our study focuses on women in the state of Alabama, and the value of our study is in uncovering the specific impacts of wealth and credit constraints on the intention to start a business which is a prospective measure of entrepreneurial activity. Intention to start a business is the initial seed that germinates into an entrepreneurial activity which then flourishes into an actual business if nurtured well (Krueger & Brazeal, 1994).

Research Model, Questions and Hypotheses

The conceptual model that guides our research is depicted in Figure 1 below.



Stemming from the research model, for the state of Alabama, we have the following research questions and hypotheses for our study.

Research Questions	Null Hypotheses
RQ1: Is there a difference in intention to start a new business between women who perceive availability of financing and those who do not?	$H_0$1: Intention to start a new business does not differ between women who perceive availability of financing and those who do not.
RQ2: Is there a difference in intention to start a new business between entrepreneurial archetypes, i.e., women who are necessity-driven and those who are opportunity-driven?	$H_0$2: Intention to start a new business does not differ between entrepreneurial archetypes, i.e., women who are necessity-driven and those who are opportunity-driven.
RQ3: Is there a difference in intention to start a new business based on availability of financing and entrepreneurial archetypes?	$H_0$3: Intention to start a new business does not differ based on availability of financing and entrepreneurial archetypes.

Sample

The sample frame was a compilation of several third-party panels coordinated by Qualtrics (Qualtrics, Provo, UT). One thousand eight hundred fifty two panel members were asked to participate in the study. The first three questions in the survey were designed to assure participants were part of the sample frame, Alabama female entrepreneurs. One hundred twenty-two respondents (7%) were eliminated because they did not live in Alabama. An additional 38 respondents were not women and thus eliminated from consideration. Finally, 408 (24%)

respondents were eliminated when they indicated that they would not be interested in starting a business even if no barriers existed. The 1,284--a 69% response rate--respondents included in data analysis represent the largest survey focused on women entrepreneurship in the state of Alabama.

Variables and Measures

Arenius and Minniti (2005) discuss the perceptual variables involved that influence nascent entrepreneurs (first timers). So we measure the variables in our study using responses to a questionnaire that potential first time women entrepreneurs would fill-in. The three variables are measured in this study.

To measure *availability of financing*, respondents were asked to state their level of agreement with this statement, "A lack of family money is a barrier for me to starting a new business." "The lack of government programs is a barrier to me starting a new business," was used to measure the availability of a public financing mechanism. Both personal wealth and public programs together represent *availability of financing.* Entrepreneurial archetypes was coded as "1" for need-driven entrepreneurs, and as "2" for opportunity-driven entrepreneurs. A seven point Likert scale anchored by strongly disagree and strongly agree was used. A not applicable or don't know option was also included as a potential response. Intention to start a new business was measured by asking respondents how soon they intended to start a new business. Potential responses were, "right away," to 4 years or more.

Data Collection Methodology

The target population for this study was female entrepreneurs who reside within the state of Alabama. A third-party, Qualtrics, was contracted to collect 1200 completed survey. This represents the largest survey focused on Alabama, female entrepreneurs. Qualtrics in turn utilized one or more research organizations who maintain respondent panels. Thus, the panels represent the sampling frame. Three filter questions were used to eliminate respondents who did not possess desired characteristics. The first question used to identify the gender of the respondent. There is extensive research for male entrepreneurs. Therefore, we chose to focus on the underrepresented female population. Additionally, the desired environmental domain is the state of Alabama. Respondents were asked which state they lived in. Non-Alabamians were excluded. Finally, respondents were given a scenario where all barriers to starting a business did not exist. If the respondent indicated they were would not be interested in starting a business in this environment, they were eliminated from the survey.

Results and Discussion

Table 1 shows the descriptive statistics and bivariate correlations (Pearson's rho) for the four variables in our study, namely, "*Intention to Start*" (mean value of 3.98 and standard deviation of 1.75 with a range of 1 to 6); . "*Personal Wealth*" (mean value of 5.84 and standard deviation of 1.49 with a range of 1 to 7); "*Public Programs*" (mean value of 4.33 and standard deviation of 1.65 with a range of 1 to 7); and "*Entrepreneurial Archetypes*" (mean value of 1.73 and standard deviation of 0.44). Table 1 shows that bivariate correlations (Pearson's rho) for the four variables in the study are all statistically significant. Other correlation metrics, namely Kendall's tau and Spearman rank correlation, showed similar results and are not reported here.

Table 2 summarizes the regression and ANOVA results with the dependent variable "*Intention to Start*" regressed against "*Personal Wealth*" and "*Public Programs*" and "*Entrepreneurial archetypes.*" It is interesting to note from the results in Table 2 that the main effects of "*Personal Wealth*"; "*Public Programs*" and "*Entrepreneurial archetypes*" on "*Intention to Start*" are all statistically insignificant (F=16.94, p =0.00). The individual beta coefficients of "*Personal Wealth*"; "*Public Programs*" and "*Entrepreneurial archetypes*" in the regression model are all significant at p=0.00 level. Thus, the main effects from the explanatory variables stated in hypotheses 1 and 2 are supported by the results.

To test the mediation effect of entrepreneurial archetypes, we used the (Baron and Kenny, 1986) mediation procedure to test if entrepreneurial archetypes mediate the proposed relationships among personal wealth, public programs and intention to start new business. Mediation analysis is used to test whether the relationship between an independent variable and a dependent variable is affected by a third variable or mediator (MacKinnon et al., 2002; Baron and Kenny, 1986). Baron and Kenny (1986) use a series of three regression tests to determine if a relationship between an independent and a dependent variable is fully or partially mediated by a third variable. The first regression test, *shown in Table 3*, is between the mediating variable (*Entrepreneurial archetypes*) and the independent variables (*Personal Wealth and Public Programs*); the second regression, *shown in Table 4*, is between the dependent variable (*Intention to Start*) and the mediating variable (*Entrepreneurial archetypes*); the third regression, *shown in Table 5*, is between the dependent variable (*Intention to Start*) and the independent variables (*Personal Wealth and Public Programs*) and the mediating variable (*Entrepreneurial archetypes*).

Table 3 results reveal an especially strong relationship between the mediating variable "*Entrepreneurial archetypes*" and the independent variables "*Personal Wealth and Public Programs*" (F=9.912, p =0.00). This result in Table 3 meets Baron and Kenny (1986) step 1 rule. Table 4 reveals statistically significant main effects of the independent variables "*Personal Wealth and Public Programs*" on the dependent variable "*Intent to Start*" (F= 13.224, p =0.00). This result in Table 4 meets Baron and Kenny (1986) step 2 rule. Table 5, which is same as Table 2 above, shows that statistically significant main effects of the independent variables "*Personal Wealth and Public Programs*" and the mediating variable "*Entrepreneurial*

archetypes" on the dependent variable "*Intent to Start*" (F= 16.94, p =0.00). This result in Table 5 meets Baron and Kenny (1986) step 3 rule. In fact the F-statistic between step 2 and step 3 of Baron and Kenny's procedure increased by 28% due to the mediating variable "*Entrepreneurial archetypes.*" Thus, the mediating effect of "*Entrepreneurial archetypes*" is empirically supported in this study.

Chi-square (χ 2) calculation between "*Personal Wealth and Public Programs*" was 316.4 and is statistically significant at 0.01 level. This means that external (public) financing mechanisms can temper the demotivating effect of low personal wealth as a barrier to starting a new business. Conceptually "*Personal Wealth and Public Programs*" together should be seen as an aggregate construct that represents *availability of financing* without any reference to the sources of financing. Less wealth means that it's much harder to start a business, not only because it's hard to finance one's own business, but also because one does not have collateral to get other business financing. That is, lack of financing is indeed a structural barrier for entrepreneurs. Policy makers should increase resource allocations that will increase external funding for women entrepreneurs through such mechanisms as Small Business Administration grants, Minority Purchase Programs, Guaranteed loans, Government subsidies, Angel investments, and Venture Capital, capturing the amount of capital available to start a business. Even infrastructural support such as incubators and university based entrepreneurial programs would reduce the barriers to start a new business. Our findings support Lerner (2010) who suggests that public financing programs that support promotion of new business ventures is of critical importance to economic growth. Silicon Valley, Singapore, Tel Aviv are some examples of the global hubs of entrepreneurial activity which bear the marks of government investment.

One important and paradoxical insight that arises from our empirical results is that *availability of financing* or lack thereof is less of a barrier to need-driven women entrepreneurs compared to opportunity-driven women entrepreneurs. That is, opportunity-driven women entrepreneurs view *availability of financing* or lack thereof as a barrier more than need-driven women entrepreneurs. On the surface this is finding is counter-intuitive as we expect need-driven women entrepreneurs to be cash-strapped and in need of financing more than their counterparts who are opportunity-driven women entrepreneurs. However, upon further reflection one may explain this anomaly as a result of relative ignorance about (public) financing programs or the current dire need of the entrepreneurs to make some income for immediate survival. The grand success of microlending that started in Bangladesh by Nobel Prize laureate Muhammad Yunus is a direct result of this empirical reality for need-driven women entrepreneurs.

Limitations

Limitations of this study include the lack of an experimental design, use of cross-sectional data. Similarly this study used potential, rather than established entrepreneurs, and thus our results are suggestive rather than definitive. Our study results possess limited generalizability due to the

non-experimental design (Shadish et al., 2002) and its singular focus on women in Alabama. However, it is impractical to study entrepreneurship phenomenon using experimental design because it is hard to control for the many variables that impact it. Also, Kotrlik et al. (2001) suggest that a large sample size can mitigate the problem of lack of experimental design in research studies.

Cohen (1992) suggested that at significance levels of 0.05 and a power of 0.80, one would need a sample size of 783 respondents to detect a small effect (r=0.10), 85 respondents to detect a medium effect (r=0.30) and 28 respondents to detect a large effect (r=0.50). Our large sample size (N=1284) makes detecting small effects feasible and this is a real contribution of our study because entrepreneurship is a complex phenomenon that has too many variables affecting entrepreneurial activity.

Conclusion

The challenges of entrepreneurship are even starker for many communities of color, for women workers, and for low-income families who are dire need for income for daily living. Pittaway (2005) builds on the classical Schumpeterian taxonomy of entrepreneurial activity in terms of introduction of a new good, or the introduction of a new method of production, or the opening of a new market, or the conquest of a new sources of supply of raw materials or half manufactured goods or the carrying out of the new organization of an industry. However, entrepreneurship is more than starting something new that displaces the old. The promotion of new business ventures for need-driven and opportunity-driven women entrepreneurs is of critical importance to all female residents of state of Alabama. While the challenges facing public financing programs may seem technical or bureaucratic, well-considered policies are likely to profoundly influence start-up opportunities as empirically shown in our study of women entrepreneurs in state of Alabama.

References

1. Acs, Z.L., Arenius, P., Hay, M., and Minniti, M. (2005). *The Global Entrepreneurship Monitor, 2004 Executive Report*, London Business School and Babson College.
2. Afandi, E., & Kermani, M. (2015). Bridging the gender gap in entrepreneurship: An empirical analysis. *Journal of Developmental Entrepreneurship, 20*(2), 1-22.
3. Aghion, P., Fally, T., & Scarpetta, S. (2007). Credit constraints as a barrier to the entry and post-entry growth of firms. *Economic policy*, *22*(52), 732-779.
4. Arenius, P., & Minniti, M. (2005). Perceptual variables and nascent entrepreneurship. *Small business economics*, 24(3), 233-247.Beck, T., & Demirgüç-Kunt, A. (2008). Access to finance: An unfinished agenda. *The World Bank Economic Review*, *22*(3), 383-396.
5. Bahn, K., Willensky, R. and McGrew, A. (2016). A Progressive Agenda for Inclusive and Diverse Entrepreneurship. *Center for American Progress,* https://www.americanprogress.org/issues/economy/reports/
6. Baron, R. M. & Kenny, D. A. (1986). The Moderator–Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of personality and social psychology*. 51 (6): 1173-1198.
7. Beck, T., & Demirgüç-Kunt, A. (2008). Access to Finance: An Unfinished Agenda. The World Bank Economic Review , 22 (3), 383-396.
8. Blanchflower, D.G. and Oswald, A.J. (1998). What Makes an Entrepreneur?, *Journal of Labor Economics*. 26(3): 16-30.
9. Block, Jorn H. and Wagner, Marcus, Necessity and Opportunity Entrepreneurs in Germany: Characteristics and Earnings Differentials (April 1, 2010). Schmalenbach Business Review, Vol. 62, pp. 154-174, April 2010. Available at SSRN: https://ssrn.com/abstract=1604117
10. Bosma, N., Acs, Z. J., Autio, E., Coduras, A., & Levie, J. (2008). Global entrepreneurship monitor. *Executive Report*.
11. Cantillon, R. (1997/1755). Essai sur la nature du commerce en général. Paris: Institute national d'Études démographiques.
12. Carree, M. A., & Thurik, A. R. (2003). The impact of entrepreneurship on economic growth. In *Handbook of entrepreneurship research* (pp. 437-471). Springer US.
13. Carreira, C., & Silva, F. (2010). No deep pockets: Some stylized empirical results of firms' financial constraints. *Journal of Economic Surveys*, *24*(4), 731-753.

14. Carter, S., Shaw, E., Lam, W., & Wilson, F. (2007). Gender, entrepreneurship, and bank lending:the criteria and processes used by bank loan officers in assessing applications. *Entrepreneurship, Theory and Practice,* 31(3): 427-44.
15. Chaganti, R., DeCarolis, D., & Deeds, D. (1995). Predictors of capital structure in small ventures. *Entrepreneurship, Theory and Practice, 20*(2): 7-18.
16. Chaney, T. (2013). *Liquidity constrained exporters* (No. w19170). National Bureau of Economic Research.
17. Cohen, J. (1992). A Power Primer. *Psychological Bulletin.* 11(2): 155-159
18. Coleman, S. (2000). Access to capital and terms of credit: a comparison of men- and women-owned small businesses. *Journal of Small Business Management,* 38(3): 37-52..
19. Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of business venturing*, 18(3), 301-331.
20. Evans, D.S. and Jovanovic, B. (1989). An Estimated Model of Entrepreneurial Choice Under Liquidity Constraints, *Journal of Political Economics*. 97(4): 808-825.
21. Evans, D.S. and Leighton, L. (1989). Some Empirical Aspects of Entrepreneurship, *American Economics Review*. 79(3): 519-534.
22. Fonseca, R., Lopez-Garcia, P. and Pissarides, C.A. (2001). Entrepreneurship, Start-Up Costs and Employment, *European Economics Review*, 45(4): 692-713
23. Fonseca, R., Michaud, P. C., & Sopraseuth, T. (2007). Entrepreneurship, wealth, liquidity constraints, and start-up costs. *Comparative Labor Law & Policy Journal*, *28*(4).
24. Guiso, L., Sapienza, P. and Zingales, L. (2002). Does Local Financial Development Matter? *National Bureau of Econ. Research, Working Paper No. 8923*.
25. Harrison, R., & Mason, C. (2007). Does gender matter? Women business angels and the supply of entrepreneurial finance. *Entrepreneurship: Theory and Practice, 31, 445-472.*
26. Haynes, G.W., & Haynes, D.C. (1999), The debt structure of small businesses owned by women in 1987 and 1993. *Journal of Small Business Management,* 37(2): 1-19.
27. Henderson, J. (2002). Building the rural economy with high-growth entrepreneurs. *Economic Review-Federal Reserve Bank of Kansas City*, *87*(3), 45-75.
28. Hurst, E., & Lusardi, A. (2004). Liquidity Constraints, Household Wealth and Business Ownership, *Journal of Political Economics*, 112 (4), 319-332.
29. ILO (International Labor Office). (2012). *Women's Entrepreneurship Development: Encouraging Women Entrepreneurship for Jobs and Development*. [Online] Available from: http://www.ilo.org/wcmsp5/groups/public/---ed_emp_ent/---ifp_seed/documents/publications/wcms_17547.pdf
30. Jack, S., Moult, S., Anderson, A., and Dodd, S. (2010). An Entrepreneurial Network Evolving: Pattern of Change. *International Small Business Journal*, 28(4), 315-337.
31. Kerr, W., & Nanda, R. (2009). *Financing constraints and entrepreneurship* (No. w15498). National Bureau of Economic Research.

32. Kim, P. H., Aldrich, H. E., & Keister, L. A. (2006). Access (not) denied: The impact of financial, human, and cultural capital on entrepreneurial entry in the United States. *Small Business Economics*, *27*(1), 5-22.
33. Klapper, LF.. & Parker, S.C. (2011). Gender and the business environment for new firm creation. *World Bank Research Observer*, 26(2): 237-257.
34. Koltai, S.R. (2016). *Peace through Entrepreneurship*. Brookings Institute Press, Washington, D.C.
35. Kotrlik, J. W. K. J. W., & Higgins, C. C. H. C. C. (2001). Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. *Information technology, learning, and performance journal*, *19*(1), 43.
36. Krueger, N., & Brazeal, D. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship: Theory and Practice, 18*(3), 91-104.
37. Lerner, J. (2010). The future of public efforts to boost entrepreneurship and venture capital. *Small Business Economics*, *35*(3), 255-264.
38. Li, E., & Martin, S. (2016). Capital Formation and Financial Intermediation: The Role of Entrepreneur Reputation Formation. *Journal of Capital Finance,* Forthcoming.
39. Mackinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G. & Sheets, V. (2002). A Comparison of Methods to Test Mediation and Other Intervening Variable Effects. *Psychological Methods*. 7(1): 83-96.
40. Pittaway, L. (2005). Philosophies in entrepreneurship: a focus on economic theories. *International Journal of Entrepreneurial Behavior & Research*, *11*(3), 201-221.
41. The output for this paper was generated using Qualtrics software, 2016 Version of Qualtrics. Copyright © 2016 Qualtrics. Qualtrics and all other Qualtrics product or service names are registered trademarks or trademarks of Qualtrics, Provo, UT, USA. http://www.qualtrics.com
42. Reynolds, P. D., Hay, M., & Camp, S. M. (1999). *Global entrepreneurship monitor* (p. 3). Kansas City, Mo.: Kauffman Center for Entrepreneurial Leadership.
43. Rosa, Peter and Kodithuwakku, Sarath S. and Balunywa, Waswa, Entrepreneurial Motivation in Developing Countries: What Does "Necessity" and "Opportunity" Entrepreneurship Really Mean? (December 3, 2008). Frontiers of Entrepreneurship Research 2006; Frontiers of Entrepreneurship Research 2006. Available at SSRN: https://ssrn.com/abstract=1310913 or http://dx.doi.org/10.2139/ssrn.1310913
44. Schramm, C. J. (2006). *The entrepreneurial imperative: How America's economic miracle will reshape the world (and change your life)*. New York: Collins.
45. Shadish, W.R., Cook, T.D. and Campbell, D.T. (2002). *Experimental and quasi-experimental designs for generalized causal inference.* Belmont, CA: Wadsworth, Cengage Learning.

46. Siemsen, E., Roth, A. V., & Balasubramanian, S. (2008). How motivation, opportunity, and ability drive knowledge sharing: The constraining-factor model. *Journal of Operations Management*, 26(3), 426-445.
47. Simón-Moya, V., Revuelto-Taboada, L., & Guerrero, R. F. (2014). Institutional and economic drivers of entrepreneurship: An international perspective. *Journal of Business Research*, *67*(5), 715-721.
48. Starks, D. N. (2012, January). The Effect of Entrepreneurship on Economic Growth in Alabama. In *2012 Annual Meeting, February 4-7, 2012, Birmingham, Alabama* (No. 119810). Southern Agricultural Economics Association.
49. Sullivan, D.M., & Meek, W.R. (2012). Gender and entrepreneurship: A review and process model. *Journal of Managerial Psychology*, *27*(5), 428-458.

Table 1

Descriptive Statistics and bivariate correlations

Variable	N	Min	Max	Mean	s.d	Bivariate Correlations			
						ITS	PW	PP	EA
Intention_to_Start **(ITS)**	1250	1.0	6.0	3.98	1.75	1.0	.085**	-.080**	.119**
Personal_Wealth **(PW)**	1236	1.0	7.0	5.84	1.49		1.0	.354**	-.122**
Public_Programs **(PP)**	1171	1.0	7.0	4.33	1.65			1.0	-.096**
Entrepreneurial Archetypes **(EA)**	1250	1.0	2.0	1.73	0.44				1.0

**Correlation is significant at the 0.01 level (2 tailed)

Table 2

Regression with no interaction term (**Dependent Variable = Intention to Start**)

Model 1	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	2.541	.309		8.224	.000**
Personal_Wealth	.171	.036	.145	4.721	.000**
Public_Programs	-.127	.033	-.120	-3.906	.000**
Entrepreneurial Archetypes	.554	.113	.141	4.884	.000**

	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.205	.042	.039	1.707

ANOVA

Model 1	Sum of Squares	df	Mean Square	F	Sig.
Regression	148.144	3	49.381	**16.941**	.000**
Residual	3387.233	1162	2.915		
Total	3535.377	1165			

**significant at the 0.01 level; *significant at the 0.05 level

Table 3

Baron & Kenny (1986) Step 1 Regression

[**Dependent Variable = Entrepreneurial Archetypes**]

	Unstandardized Coefficients		**Standardized Coefficients**		
Model 3	B	Std. Error	Beta	**t**	**Sig.**
(Constant)	1.965	.055		35.546	.00**0
Personal_Wealth	-.027	.009	-.090	-2.898	.004**
Public_Programs	-.018	.008	-.066	-2.137	.033*

	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.129	.017	.015	.441

ANOVA

Model 3	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.860	2	1.930	**9.912**	.000**
Residual	226.500	1163	.195		
Total	230.360	1165			

**significant at the 0.01 level; *significant at the 0.05 level

Table 4

Baron & Kenny (1986) Step 2 Regression [**Dependent Variable = Intention to Start**]

Model 4	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	**Std. Error**	**Beta**		
(Constant)	3.629	.216		16.806	.000**
Personal_Wealth	.156	.036	.133	4.281	.000**
Public_Programs	-.137	.033	-.130	-4.179	.000**

	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.149	.022	.021	1.724

ANOVA

Model 4	Sum of Squares	df	Mean Square	F	Sig.
Regression	78.611	2	39.305	**13.224**	.000**
Residual	3456.766	1163	2.972		
Total	3535.377	1165			

**significant at the 0.01 level; *significant at the 0.05 level

Table 5

Baron & Kenny (1986) Step 3 Regression (**Dependent Variable = Intention to Start**)

Model 1	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	2.541	.309		8.224	.000**
Personal_Wealth	.171	.036	.145	4.721	.000**
Public_Programs	-.127	.033	-.120	-3.906	.000**
Entrepreneurial Archetypes	.554	.113	.141	4.884	.000**

	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.205	.042	.039	1.707

ANOVA

Model 1	Sum of Squares	df	Mean Square	F	Sig.
Regression	148.144	3	49.381	**16.941**	.000**
Residual	3387.233	1162	2.915		
Total	3535.377	1165			

**significant at the 0.01 level; *significant at the 0.05 level