Determinants of the Risk Attitude in Entrepreneurship: Evidence from Latin America

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Abstract

This paper departs from the traditional analysis of the effects of risk aversion in entrepreneurship to study the determinants of entrepreneurial risk aversion in developing a new venture and becoming an entrepreneur. We took fear of failing as a proxy for risk aversion and applied our analysis to the most important Latin American economies. We observed that being male, having more years of formal education and believing to have the necessary skills to develop a new venture decreased the probability of feeling a fear of failing and, thus, eventually increased the probability of developing a new venture. Age affects risk quadratically (first positively, but after some point, negatively), and if there is a prior experience of having shut down a business, risk aversion increases, that is, the probability of feeling a fear of failing, which reduces the probability of becoming an entrepreneur.

1. INTRODUCTION

Traditionally, entrepreneurship has been a subject of study in management using the case study methodology. Only recently have a larger number of economists realized that entrepreneurship is at the core of the field of economics and, therefore, the subject deserves to be treated from the perspective of the rational choice paradigm using all the empirical tools and theoretical methods available to modern microeconomic analysis.

From the standpoint of economic theory, one of the focuses of entrepreneurship literature has been on the relationship between risk aversion and entrepreneurship. Literature has shown that more risk-averse individuals are more likely to become employees, while less risk-averse individuals are more likely to become entrepreneurs. Important early contributions here are the works of Kihlstrom and Laffont (1979), who developed a model that, in equilibrium, produces less risk-averse entrepreneurs, and the work of Kanbur (1979), who developed a model that disputes Friedman's (1953) claim that different attitudes toward risk result in income inequality. We should also mention here the classic work of Knight (1971), who emphasizes the "willingness (and) power to give satisfactory guarantees," that is, the willingness to assume risk, as a fundamental factor determining the abundance of entrepreneurs. Since then, a considerable body of research that studies the risk aversion-entrepreneurship relationship has emerged (Parker, 1997; Cressy, 2000; Van Praag and Cramer, 2001; Parker, 2007; and Newman, 2007). We will briefly discuss some of these papers in the next section.

On the empirical side, much of the research on entrepreneurship has focused on correlating entrepreneurship to economic growth (see, for example, Acs, 1996; Acs and Varga 2005; Acs, 2006; Acs and Szerb, 2007; Van Stel, Carree and Thurik, 2005; Wennekers, Van Stel, Thurik and Reynolds, 2005; Wong, Ho and Autio, 2005) and on explaining the determinants of entrepreneurship (see, for example, Delmar and Davidsson, 2000; Davidsson and Honig, 2003; Parker, 2004; Davidsson, 2006; Grilo and Thurik, 2008). In these cases, different proxies of risk aversion are usually considered to be determining factors affecting entrepreneurship.

In this paper we do something innovative. Instead of studying the effect of risk attitudes on entrepreneurship, we analyze the factors that can explain the individual´s attitude toward risk at the microeconomic level. In other words, whether how willing an individual is to bear the risk inherent to developing a new venture is one of the precursors to entrepreneurship. From an empirical point of view, the attitude towards risk has been taken into account as a determinant of entrepreneurship. For instance, Ardagna and Lusardi (2008) use a proxy for risk aversion as an exogenous variable when explaining international differences in entrepreneurship levels and Cramer, Hartog, Jonker and Van Praag (2002) use Dutch data to show that risk aversion negatively affects entrepreneurship. To our knowledge, the only study trying to establish what are the determinants of risk aversion (fear of failing) is the one by Sepúlveda and Bonilla (2011), which research the issue for Chile.

In this research we expand the previous one beyond Chile to cover five Latin American countries where GEM data is available. We want to study what the factors are that affect, at the individual level, the attitude toward the risk of starting a new business. We want to know whether age, gender, skills, previous failed experiences in a business, and educational levels, among others, can help to differentiate among individuals more or less willing to bear the risk of becoming entrepreneurs. We are also interested in studying whether there are some country effects that may help to explain specific characteristics of subgroups of the data.

We focus on Latin America because all these countries are in the group of developing economies and, therefore, they face similar economic challenges for the future. For them, choosing between a good or bad production policy can make the difference between achieving development and maintaining poor economic conditions for a long time. Also, Latin American countries usually share some degree of political instability (Blanco and Grier, 2009) and we observe in these countries, from time to time, the emergence of populist leaders that damage the political and economic institutions, property rights and the fiscal balance, which directly affects the risk of any entrepreneurial activity. We want to see how this context impacts the results of our analysis.

To this end, we take advantage of a question in the Adult Population Survey (APS) of the Global Entrepreneurship Monitor (GEM) project that asks individuals whether "fear of failure would prevent them from starting a new business." This is a yes or no question, which

we use to model "fear of failure" as a proxy for the attitude toward risk. We assume that a person who declares that fear of failure would prevent him or her from starting a venture has a more risk-averse attitude than one who is not afraid to take on the challenge.

We estimate a Probit model that can correctly predict, about 67% of the time, whether an individual has a greater or lesser "fear of failing." We found that women have more fear of failing than men do. Each extra year of education above the mean of the sample can decrease the probability of feeling a fear of failing by 0.7%. Individuals who believe they have the skills necessary to be entrepreneurs have a 14% lower probability of feeling a fear of failing. Individuals with a previous failure or individuals who know a nascent entrepreneur are less likely to experience the fear of failure.

The paper continues as follows: Section 2 briefly describes the literature that studies the effects of entrepreneurship and economics; Section 3 describes the methodology used in this study; Section 4 presents the main results of our analysis; and Section 5 explains the conclusions.

2. ENTREPRENEURSHIP AND ECONOMICS

Entrepreneurship is a key element in the growth of nations. The entrepreneur's role in the process of development has been emphasized in the literature for a long time. Schumpeter (1934) argues that the existence of innovative entrepreneurs drives the process of "creative destruction" by which new firms replace the old ones through efficiency improvements, which results in higher levels of productivity. Kirzner (1973, 1979) highlights the role of the entrepreneur as the one who is able to recognize opportunities where the ordinary person cannot see any. Knight (1921) recognizes that the entrepreneur is a leader who organizes production inputs and is willing to confront the uncertainty that characterizes a new endeavor.

More recently, Baumol (2002) argues that the entrepreneurial spirit is the main factor explaining the "growth miracle of capitalism." Through innovation, the entrepreneur is then the engine of growth. Acs (2006) explains how entrepreneurship is good for economic growth by separating necessity entrepreneurs--those who become entrepreneurs because no other option is available--from opportunity entrepreneurs, those who become entrepreneurs looking

for an undiscovered opportunity. Acs argues that the first type of entrepreneurship has no effect on economic development, while the second has a positive and significant effect on economic development and growth.

Given the importance of entrepreneurship on economic growth, most of the recent work has focused on the determinants of entrepreneurial activity, like the role of individual characteristics on entrepreneurship. For instance, Evans and Jovanovic (1989) investigate the link between initial wealth, the regulatory and institutional environment in which entrepreneurs have to operate, and the choice of becoming an entrepreneur. Holtz-Eakin, Joulfaian and Rosen (1994) inspect the relationship between access to capital and entrepreneurial survival. Johnson, McMillan, and Woodruff (2002) analyze the nexus between property rights and entrepreneurship. Lerner and Malmendier (2007) study the effect of entrepreneurial peers on entrepreneurship rates. Giannetti and Simonov (2009) examine the effect of social interaction on the levels of entrepreneurial activity, and Ardagna and Lusardi (2008) explain international differences in entrepreneurship by highlighting the role of individual characteristics and regulatory constraints.

The theoretical literature about the choice of becoming an entrepreneur puts the emphasis on risk aversion. Indeed, since the work of Knight (1921), who emphasizes the willingness to bear risk as a fundamental factor determining the abundance of entrepreneurs, the literature describes entrepreneurship as the result of choosing between working for someone else (low risk) and self-employment (high risk). Within this notion, more recently, Cressy (2000) proposes that the positive effect of wealth on business startups, as advanced by Evans and Jovanovic (1989) and corroborated by most of the empirical literature, may be the result of decreasing absolute risk aversion (DARA). Kan and Tsai (2006) empirically prove Cressy's argument and find that Evans and Jovanovic's claim is robust to the inclusion of risk aversion. Newman (2007), on the other hand, develops a principal-agent model to challenge the risk aversion-based explanation for the existence of employees and entrepreneurs by endogenizing entrepreneurial risk and allowing for optimal insurance contracts as well as occupational self-selection.

All the previous discussion is about the effect of risk aversion or about general attitudes toward risk in the decision to become an entrepreneur. Indeed, an individual's

attitude toward risk is a key precursor to entrepreneurial activity. For this reason, it is important to study and understand what factors can influence attitudes toward risk. To our knowledge, no empirical work has been done on the factors that affect an individual's attitudes toward risk and that individual's choice to become an entrepreneur. In this paper we present an empirical investigation that aims to shed light on the factors that affect an individual's attitude toward the risk involved in becoming an entrepreneur.

3. EMPIRICAL METHODOLOGY

The GEM is an international research program started in 1999 that collects, annually, cross-country harmonized data on entrepreneurship. The project consists of two surveys: (i) the Adult Population Survey (APS), and the (ii) Expert Questionnaire Data.

The APS surveys about 2,000 individuals, selected at random, from each of the participating countries. The number of surveyed countries has increased from 10 in 1999 to 85 in 2012.

The GEM project contains, among several questions, a query that asks individuals: "would fear of failure prevent you from starting a business?" We use the answers to this question as a proxy for the attitude toward risk of the individual answering the survey. We consider that the person who answers yes to this query is less willing to bear the risk of becoming an entrepreneur than the person who answers no. We use data from the APS applied in the following emerging markets in Latin America: Argentina, Brazil, Chile, Mexico, and Venezuela, all in 2005.

Estimation

The answers to the "fear of failing" question adopts the value of 1 if answer is yes and 0 if answer is no. For this reason, we estimated the following Probit model:

$$FF_i = \gamma_0 + \gamma_1 AGE_i + \gamma_2 AGE^2_i + \gamma_3 WOMEN_i + \gamma_4 SUSKILL_i + \gamma_5 KNOWENT_i + \gamma_6 CLOSE_i + \gamma_7 OPPORT_i + \gamma_8 EDUCSD_i + \gamma_9 EDUCPS_i + \gamma_{10} EDUCGE_i + \gamma_{11} TEA05OPP_i + COUNTRY\ DUMMIES + INTERACTION\ EFFECTS + \varepsilon_i \quad (1)$$

Where:

- *i* denotes each individual in the survey,
- *FF* is a dummy variable that represents the answer to the question: Would fear of failure prevent you from starting a business?,
- *AGE* represents the age, in years, of the individual answering the survey,
- *WOMEN* is a dummy variable equal to 1 if the person is a female and 0 otherwise,
- *SUSKILL* is a dummy variable that equals 1 if the person answers yes to the question: Do you have the knowledge, skill and experience required to start a new business? and 0 otherwise,
- *KNOWENT* equals 1 if the individual personally knows someone that started a business in the past 2 years,
- *CLOSE* equals 1 if the person has, in the past 12 months, shut down, discontinued or quit a business he or she owned and managed and 0 otherwise,
- *OPPORT* is a dummy variable representing the yes or no answer to the question: In the next six months will there be good opportunities for starting a business in the area where you live?,
- *EDUCSD*, *EDUCPS*, and *EDUCGE* are dummy variables that equal 1 if the person answering the survey had some secondary degree of education (but did not finish it), had some post-secondary degree of education or graduate education, respectively, and 0 otherwise,
- *TEA05OPP* is Total Entrepreneurial Activity [TEA] Index 2005 that reports opportunity as the major motive. We also include country dummies and interaction dummies to check for slope changes among countries. **ε** is a normally distributed disturbance with mean 0 and unit variance.
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Tables 1 to 6 present a summary of the aggregated data and by country.

[INSERT TABLE 1 to 6]

4. RESULTS

To preview the estimation of equation (1), we obtained the pair-wise correlation among the variables as shown in table 7. We observed that in most cases, the correlation is significantly different from zero at conventional levels and none is sufficiently high to make collinearity a problem. [INSERT TABLE 7]

Table 8 displays the results of the coefficient estimates and the marginal effects for four different specifications. [INSERT TABLE 8] As can be seen, in its four specifications, the model is capable of correctly classifying about 67% of the outcomes. The second and third columns show the result for the baseline model. We can observe that age affects fear of failing quadratically. When young, a person experiences an increase in the probability of feeling a fear of failing for each year that his age increases. However, after about 40 years of age, the probability of feeling a fear of failing goes down as age increases. The same effect appears in each one of the countries analyzed. Indeed, while in Argentina the probability of feeling a fear of failing goes down after 30 years of age, in Chile it decreases after 53 years of age, and in Brazil after 51 years of age. In Mexico and Venezuela, the probability of feeling a fear of failing is not affected by age as the coefficients turn out to be non-significant.[1]

A possible explanation for this result is that age may actually be capturing a wealth effect. Indeed, we do not have a proxy for wealth in the APS, and if wealth is positively correlated with age, then higher levels of wealth may reduce the person's dependency on the future flows of the project. In this sense, the individual may experience lower levels of "fear of failing" because a failure would not mean financial disaster or, alternatively, as Cressy (2000) suggests, because individuals present DARA preferences.

The dummy *WOMEN* is statistically significant and has a positive sign, which indicates that women feel more fear of failing than men. In this sense, women would be more risk averse than men with respect to starting a new venture. Indeed, the probability of feeling a fear

[1] Results for each country are available upon request.

of failing increases by about 6.5% (marginal effects) if the person is a woman. This should be one of the factors explaining why women tend to embrace entrepreneurial activity at lower rates than men. For instance, the GEM report of 2008 shows that for all the countries surveyed that year, the total entrepreneurship activity is lower for women. There is also evidence that women tend to be more risk averse than men when confronting financial decisions (See Jianakoplos and Bernasek, 1998) and consumer decisions like smoking and wearing seat belts (Hersch, 1996).

The variable *CLOSE* is statistically significant at conventional levels and shows that people who have closed down a business in the last twelve months have a higher level of a fear of failing. Column three indicates that having the experience of shutting down a business in the recent past increases the probability of feeling a fear of failure by 7.7 percent. Having a previous failure has both costs and benefits. On the one hand, a person who recently shut down a business could be more prone to feeling fear of a new failure because of the material losses he has just endured. On the other hand, the experience of closing down a business may increase his stock of experience and thus decrease fear of failure in the future. Shepherd (2003) shows how business failure can become a positive experience for future endeavors. Sitkin (1992) indicates that failure is more important than success as a source of learning. The positive sign in this case would therefore indicate that in these Latin American countries, the costs of shutting down a business outweigh the potential benefits from that experience. A possible explanation for this result may be a stigma effect on failed entrepreneurs in these economies. The stigma originates in the fact that in Latin America, there is little trust in institutions like the judicial system or the government[2] (see, for example, The World Justice Project) and, therefore, there is a social presumption of fraud by the failed entrepreneur that makes it difficult for the entrepreneur to make a come back, principally since in these countries, there are no well-developed chapters on business reorganization in the bankruptcy laws and the rule of law is weak. There is also a perception of a low level of enforcement of the law. Therefore, the marginal expected cost of fraudulent behavior may be lower than the marginal expected benefit.

[2] The exception to this is Chile.

The variable *SUSKILL* is also statistically significant at conventional levels and clearly shows that people who believe that they have the skills necessary to start a new business are less likely to experience a fear of failing. In quantitative terms, this is the most important factor affecting the probability of experiencing the fear of failing. The marginal effect indicates that if an individual believes that he has the knowledge and skill needed to start a new business, then the probability of feeling a fear of failing decreases by about 12 percent.

The coefficients in the variables *KNOWENT* and *OPPORT* show the expected sign, but they are not statistically significant. Thus, knowing an entrepreneur and believing that there is an economic opportunity on the market does not seem to affect the probability of feeling a fear of failing.

The effect of education on the fear of failing is studied through the variables *EDUCSD*, *EDUCPS*, and *EDUCGE,* as described above. The estimated results indicate that having post-secondary and graduate education decreases the fear of failing. Indeed, a person who attains these levels of education decreases his probability of feeling the fear of failing by about 4 percent in both cases. So, the cumulative effect of education would decrease the probability of feeling the fear of failing by about 8 percent.

In the four and fifth columns we show the results of estimating model 2, which incorporates dummies for each country in addition to the aforementioned variables. We use Mexico as the base. The estimated coefficients show that people in Argentina, Brazil, Chile and Venezuela begin at higher levels of a fear of failing than people in Mexico. For instance, while people in Venezuela have an 8% higher probability of feeling the fear of failing than people in Mexico, people in Chile have a 15% higher probability of feeling the fear of failing than people in Mexico.

Model 3 (sixth and seventh columns) adds the variable *TEA05OPP*, which is included to control for those people who report opportunity as their major motive for embarking on an entrepreneurial endeavor. Indeed, the probability of feeling the fear of failing goes down by 15% when the person undertakes an entrepreneurship in the search for an opportunity, that is, the person interviewed is not doing it because of necessity.

Model 4 (last two columns) expand the model by including the interaction between the variable *CLOSE* and each one of the countries, except Mexico. In all cases, the coefficient and

the marginal effects are negative. This allows us to observe the net effect, by country, that having shut down a business in the recent past (12 months) has on the probability of having a fear of failure today. For instance, while in Argentina having closed a business in the past 12 months increases the probability of feeling the fear of failure by 3.26% (0.2536 – 0.2210), in Chile, the same experience increases the probability by 11.7% (0.2536 – 0.1362). We also estimated the model with more interactions, but none of them turned out to be significant. Hence, the predictive capacity of the model was not improved. [INSERT Figure 1]

Figures 1, 2 and 3 show the marginal effect of the *CLOSE, WOMEN*, and *SUSKILL* variables for different ages while evaluating the other independent variables at their mean. As can be seen, in all cases the effect is quadratic, driven by age. [INSERT Figure 2] [INSERT Figure 3]

5. CONCLUSIONS

We have studied the factors that, at the individual level, affect the attitude toward the risk of starting a new business. Our focus has been the main Latin American countries because they face similar economic and political conditions. In addition, for these countries the difference between choosing a good or bad entrepreneurial and production policy may account, in the future, for the difference between achieving development and maintaining poor economic conditions.

Our findings suggest that age affects the fear of failing (our proxy for risk aversion) quadratically. Before the age of 40, age increases the probability of feeling a fear of failing, but after 40, every additional year decreases that probability. Being a woman also increases the probability of feeling a fear of failing, something that is consistent with previous literature about gender and risk aversion. Having shut down a business recently increases the fear of failing. This result contradicts the entrepreneurship literature applied to developed countries, and we hypothesized that the low level of trust and the weaknesses in institutions in Latin America generate a stigma effect that helps to explain this result.

People believing that they have the skills to develop a new business is the most important factor in reducing the fear of failing and this provides an important insight for policy makers about entrepreneurial and business education at all levels. Knowing an

entrepreneur and believing that a market opportunity exists do not affect the fear of failing and this result supports the Larroulet and Couyooumdjian (2009) explanation of the Latin American paradox that contends that much of the Latin American entrepreneurship is a necessity entrepreneurship instead of an opportunity entrepreneurship. Finally, more years of education decrease the probability of feeling the fear of failing.

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Table 1: Data summary: all countries.

Variable	Obs	Mean	Std. Dev.	Min	Max
Fear of Failure	6512	0.3315	0.4708	0	1
Age	9384	39.397	15.627	18	90
Women	9384	0.5437	0.4981	0	1
Skills	6434	0.5959	0.4908	0	1
Education					
Some Secondary	9384	0.4519	0.4977	0	1
Secondary	9384	0.2605	0.4390	0	1
Post Secondary	9384	0.0956	0.2940	0	1
Graduate	9384	0.1773	0.3820	0	1
Close Before	9348	0.0746	0.2627	0	1
Know Someone	6572	0.4376	0.4961	0	1
Opportunity	6038	0.4824	0.4997	0	1

Table 2: Data summary: Argentina.

Variable	Obs	Mean	Std. Dev.	Min	Max
Fear of Failure	1141	0.3225	0.4676	0	1
Age	1882	42.251	16.968	18	80
Women	1882	0.4989	0.5001	0	1
Skills	1117	0.6258	0.4841	0	1
Education					
Some Secondary	1882	0.2981	0.4575	0	1
Secondary	1882	0.2407	0.4276	0	1
Post Secondary	1882	0.1530	0.3601	0	1
Graduate	1882	0.3082	0.4619	0	1
Close Before	1880	0.0899	0.2861	0	1
Know Someone	1154	0.4263	0.4948	0	1
Opportunity	1016	0.5738	0.4948	0	1

Table 3: Data summary: Brazil

Variable	Obs	Mean	Std. Dev.	Min	Max
Fear of Failure	1404	0.3746	0.4842	0	1
Age	1875	36.510	13.086	18	64
Women	1875	0.5221	0.4996	0	1
Skills	1398	0.5501	0.4977	0	1
Education					
Some Secondary	1875	0.6000	0.4900	0	1
Secondary	1875	0.2805	0.4494	0	1
Post Secondary	1875	0.0523	0.2226	0	1
Graduate	1875	0.0672	0.2504	0	1
Close Before	1873	0.0577	0.2332	0	1
Know Someone	1416	0.4244	0.4944	0	1
Opportunity	1360	0.4419	0.4968	0	1

Table 4: Data summary: Chile.

Variable	Obs	Mean	Std. Dev.	Min	Max
Fear of Failure	1194	0.3903	0.4880	0	1
Age	1868	43.612	16.441	18	90
Women	1868	0.6676	0.4712	0	1
Skills	1185	0.6599	0.4739	0	1
Education					
Some Secondary	1868	0.2976	0.4573	0	1
Secondary	1868	0.3019	0.4592	0	1
Post Secondary	1868	0.1520	0.3592	0	1
Graduate	1868	0.2468	0.4313	0	1
Close Before	1865	0.0810	0.2729	0	1
Know Someone	1204	0.4518	0.4979	0	1
Opportunity	1078	0.4879	0.5001	0	1

Table 5: Data summary: Mexico.

Variable	Obs	Mean	Std. Dev.	Min	Max
Fear of Failure	1854	0.2772	0.4478	0	1
Age	1884	36.301	14.785	18	86
Women	1884	0.4995	0.5001	0	1
Skills	1838	0.4859	0.4999	0	1
Education					
Some Secondary	1884	0.5632	0.4961	0	1
Secondary	1884	0.2404	0.4275	0	1
Post Secondary	1884	-----	----	----	----
Graduate	1884	0.1874	0.3903	0	1
Close Before	1868	0.0889	0.2846	0	1
Know Someone	1870	0.3872	0.4872	0	1
Opportunity	1781	0.3638	0.4812	0	1

Table 6: Data summary: Venezuela.

Variable	Obs	Mean	Std. Dev.	Min	Max
Fear of Failure	919	0.3101	0.4628	0	1
Age	1875	38.333	15.117	18	89
Women	1875	0.5312	0.4992	0	1
Skills	896	0.7712	0.4203	0	1
Education					
Some Secondary	1875	0.5003	0.5001	0	1
Secondary	1875	0.2395	0.4269	0	1
Post Secondary	1875	0.1211	0.3263	0	1
Graduate	1875	0.0768	0.2663	0	1
Close Before	1862	0.0553	0.2287	0	1
Know Someone	928	0.5550	0.4972	0	1
Opportunity	803	0.6912	0.4623	0	1

Table 7: Correlation Matrix

	Fear F.	Age	Women	Skills	Educss	Educsd	Educps	Educge	Close	Know	Opport
Fear F.	1										
Age	0.011	1									
	(0.390)										
Women	0.078	0.028	1								
	(0.00)***	(0.006)									
Skills	-0.125	-0.022	-0.093	1							
	(0.00)***	(0.084)	(0.00)***								
Educss	0.051	0.180	0.033	-0.118	1						
	(0.00)***	(0.00)***	(0.002)	(0.00)***							
Educsd	0.00	-0.119	-0.012	0.027	-0.539	1					
	(0.982)	(0.00)***	(0.251)	(0.028)	(0.00)***						
Educps	-0.027	-0.038	0.012	0.081	-0.295	-0.193	1				
	(0.030)	(0.00)***	(0.250)	(0.00)***	(0.00)***	(0.00)***					
Educge	-0.039	-0.043	-0.034	0.059	-0.422	-0.276	-0.151	1			
	(0.002)	(0.00)***	(0.001)	(0.00)***	(0.00)***	(0.00)***	(0.00)***				
Close	0.036	-0.026	-0.037	0.109	-0.041	0.003	0.018	0.04	1		
	(0.004)	(0.014)	(0.00)***	(0.00)***	(0.00)***	(0.783)	(0.074)	(0.00)***			
Know	-0.02	-0.129	-0.104	0.225	-0.158	0.053	0.063	0.087	0.111	1	
	(0.112)	(0.00)***	(0.00)***	(0.00)***	(0.00)***	(0.00)***	(0.00)***	(0.00)***	(0.00)***		
Opport	-0.031	-0.055	-0.064	0.269	-0.032	-0.011	0.053	0.007	0.055	0.211	1
	(0.017)	(0.00)***	(0.00)***	(0.00)***	(0.013)	(0.405)	(0.00)***	(0.610)	(0.00)***	(0.00)***	

Numbers in parentheses are p-values for the null hypothesis that the correlation is zero.

Table 8: Coefficient and Marginal Effects Estimates

Variable	Model 1	Marginal Effect	Model 2	Marginal Effect	Model 3	Marginal Effect	Model 4	Marginal Effect
Age	0.0244***	0.0088***	0.0217***	0.0078***	0.0232***	0.0083***	0.0239***	0.0086***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Age2	-0.0003***	-0.0001***	-0.0003***	-0.0001***	-0.0003***	-0.0001***	-0.0003***	-0.0001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Women	0.1811***	0.0651***	0.1619***	0.0581***	0.1532***	0.0548***	0.1554***	0.0556***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Close	0.2089***	0.0777***	0.2101***	0.0781***	0.2520***	0.0940***	0.6593***	0.2536***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Suskill	-0.3295***	-0.1199***	-0.3546***	-0.1289***	-0.3354***	-0.1216***	-0.3341***	-0.1211***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Knowent	0.0509	0.0183	0.0457	0.0165	0.0636*	0.0228*	0.0622*	0.0223*
	(0.168)	(0.168)	(0.218)	(0.218)	(0.088)	(0.088)	(0.097)	(0.097)
Opport	-0.0081	-0.0029	-0.0318	-0.0114	-0.0116	-0.0042	-0.0219	-0.0079
	(0.824)	(0.824)	(0.390)	(0.390)	(0.756)	(0.756)	(0.555)	(0.555)
Educsd	-0.0237	-0.0085	-0.0715	-0.0255	-0.0573	-0.0204	-0.0639	-0.0227
	(0.580)	(0.580)	(0.102)	(0.102)	(0.191)	(0.188)	(0.146)	(0.143)
Educps	-0.1274*	-0.0447**	-0.2529***	-0.0860***	-0.2213***	-0.0757***	-0.2218***	-0.0757***
	(0.053)	(0.053)	(0.000)	(0.000)	(0.002)	(0.001)	(0.002)	(0.001)
Educge	-0.1365***	-0.0481***	-0.1841***	-0.0643***	-0.1609***	-0.0563***	-0.1614***	-0.0564***
	(0.005)	(0.005)	(0.000)	(0.000)	(0.002)	(0.002)	(0.002)	(0.001)
Argentina			0.2765***	0.1030***	0.2890***	0.1075***	0.3767***	0.1413***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Brazil			0.2626***	0.0971***	0.2754***	0.1017***	0.3241***	0.1201***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Chile			0.3824***	0.1435***	0.3981***	0.1494***	0.4431***	0.1667***
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Venezuela			0.1998***	0.0739***	0.2339***	0.0868***	0.2964***	0.1107***
			(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Tea05opp					-0.4760***	-0.1520***	-0.4622***	-0.1480***
					(0.000)	(0.000)	(0.000)	(0.000)
Close x Argentina							-0.7995***	-0.2210***
							(0.000)	(0.000)
Close x Brazil							-0.5013***	-0.1551***
							(0.004)	(0.000)
Close x Chile							-0.4284***	-0.1362***
							(0.008)	(0.002)

Variable	Model 1	Marginal Effect	Model 2	Marginal Effect	Model 3	Marginal Effect	Model 4	Marginal Effect
Close x Venezuela							-0.7072***	-0.2017***
							(0.002)	(0.000)
Constant	-0.8101***		-0.8626***		-0.9040***		-0.9556***	
	(0.000)		(0.000)		(0.000)		(0.000)	
Observations	5777	5777	5777	5777	5777	5777	5777	5777
Pseudo R^2	0.0201		0.0281		0.0344		0.0379	
C.C. proportion	67.23%		67.23%		67.18%		67.53%	
LR Chi^2	147		205.33		251.79		277.27	
Log Likelihood	-3584.9		-3555.7		-3532.5		-3519.7	

P- values in parentheses, *** p<0.01, ** p<0.05, * p<0.1
C.C.: correctly classified

Figure 1

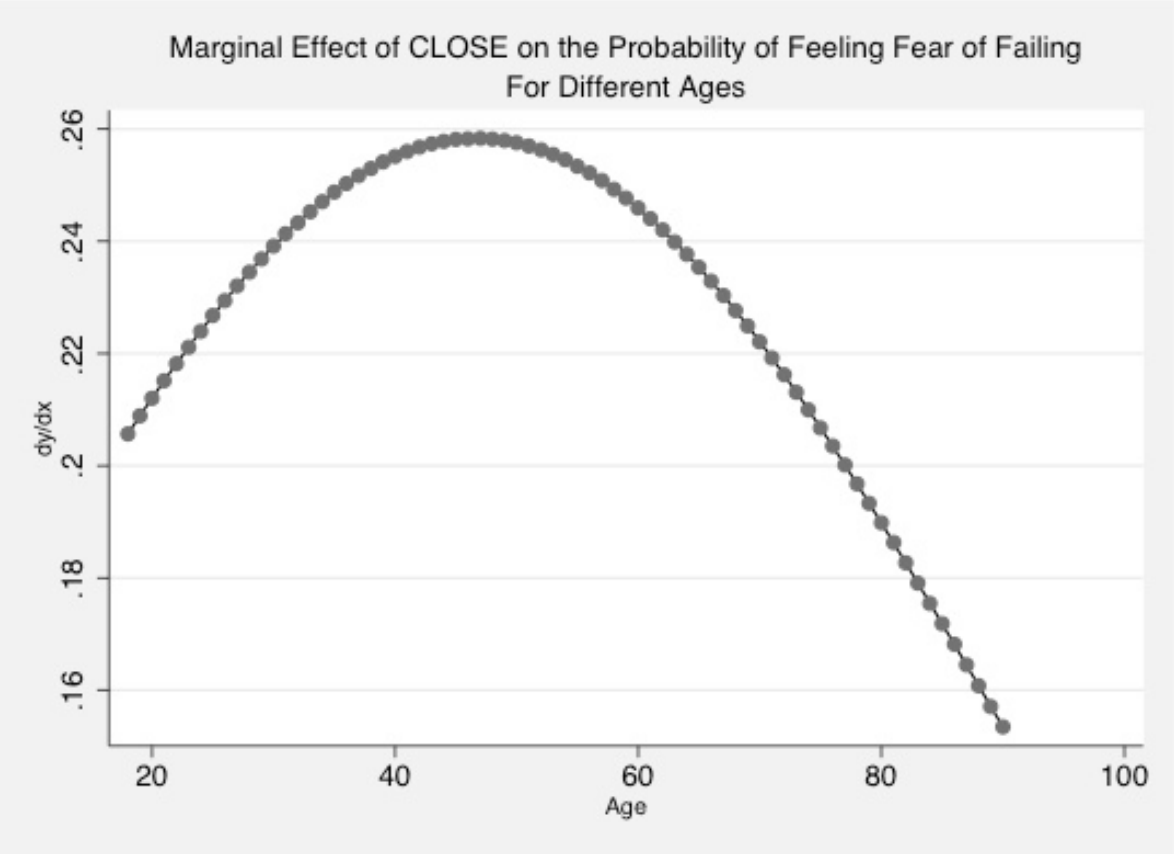


Figure 2

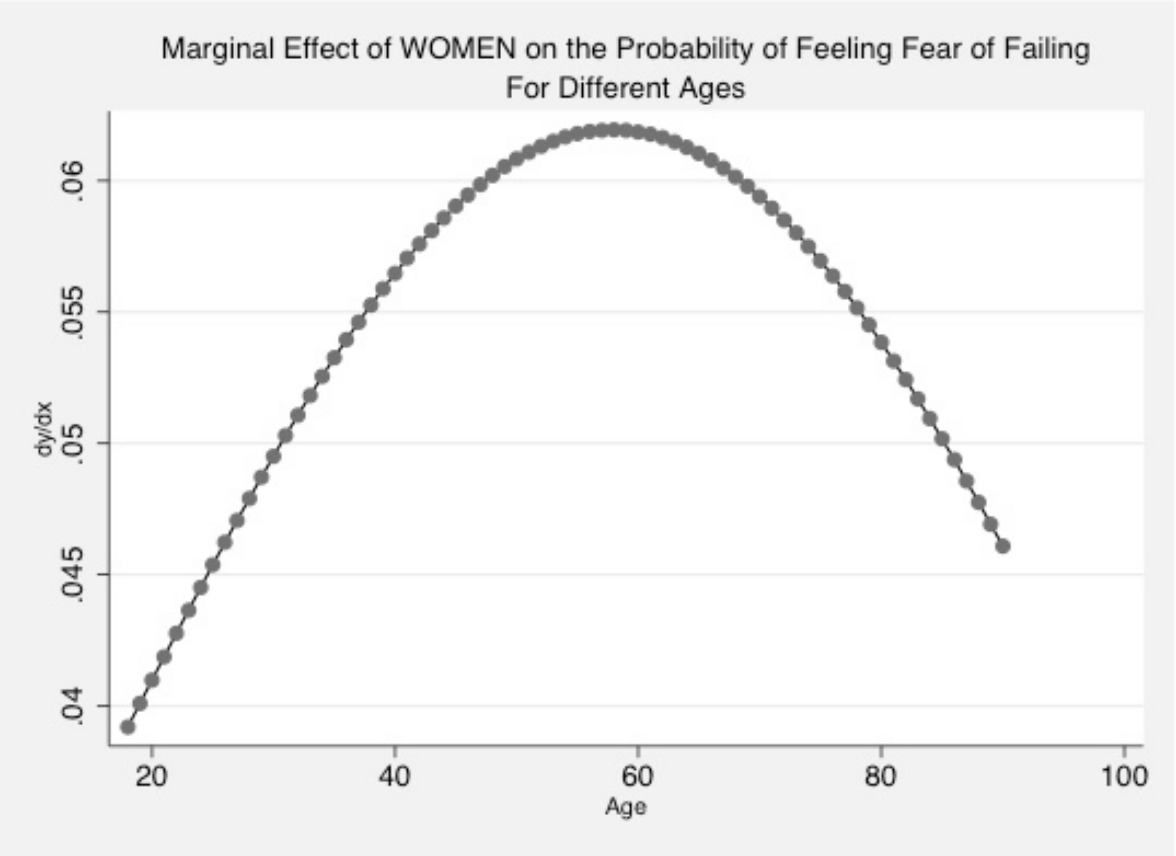
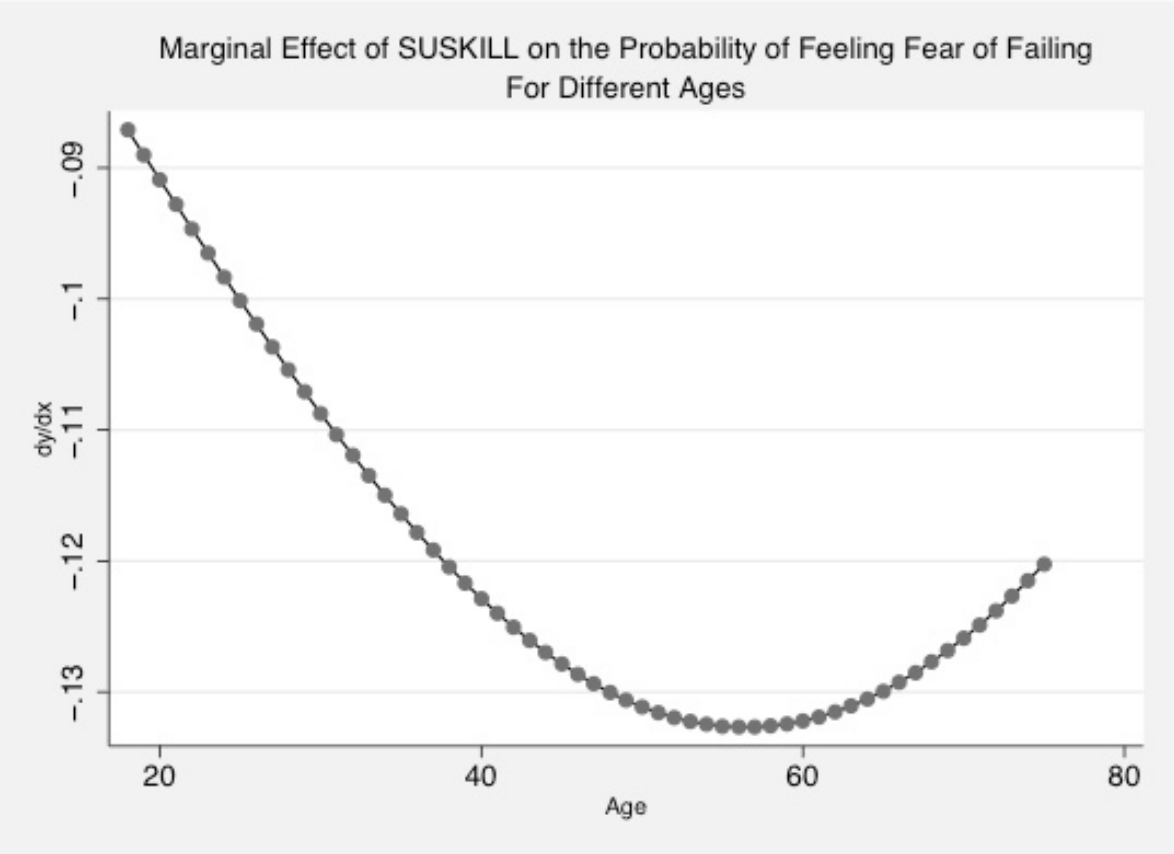

Marginal Effect of WOMEN on the Probability of Feeling Fear of Failing
For Different Ages
dy/dx
.04
.045
.05
.055
.06
20
40
60
80
100
Age

Figure 3


Marginal Effect of SUSKILL on the Probability of Feeling Fear of Failing
For Different Ages
dy/dx
-.09
-.1
-.11
-.12
-.13
20
40
60
80
Age