

GENDER AND ENTREPRENEURSHIP ACROSS 28 COUNTRIES:  
A MULTILEVEL ANALYSIS USING GEM DATA

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A dissertation submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Sociology.

Chapel Hill  
2006

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## ABSTRACT

AMANDA BRICKMAN ELAM: Gender and Entrepreneurship  
Across 28 Countries: A Multilevel Analysis Using GEM Data  
(Under the direction of Howard Aldrich)

Explanations for the extensive variation in rates of entrepreneurship across countries and gender have been biased by the dominant paradigms of the field, the limits of the resulting research designs, and ultimately by the lack of a comprehensive multilevel theoretical framework for predicting and understanding the decision to start a business. I propose an alternative view of entrepreneurship based on contemporary social theory; in particular on Bourdieu's theory of practice. The resulting practice theory model provides a set of theoretical propositions and hypotheses that fit well with existing evidence from the field of entrepreneurship and from other studies of gender and work. Results from a series of 2-level random coefficient models investigating the relative impacts of micro- and macro-level correlates of nascent entrepreneurship strongly support a practice theory view of entrepreneurship. The capital structures -- economic, cultural, social and symbolic -- that define social positions explain most of the gender variation and a large extent of the variation across countries. Country characteristics also explain a good portion of the country variation. Perceptions, social ties, and national gender culture are significant correlates of nascent entrepreneurship, net of all other micro- and macro-level factors. The variation in rates of nascent entrepreneurship is more extensive across countries than across gender. Micro-macro interactions are also explored.

## ACKNOWLEDGEMENTS

I would first like to acknowledge the contributions of my dissertation committee. Each committee member played an instrumental role in the development of this project. Many thanks go to my advisor and mentor, Howard Aldrich, for staying the course and for pushing me to produce an ever-better thesis. Very heartfelt and special thanks go to Barbara Entwisle, who helped me stay focused on how much I had accomplished at each stage and what I could do to reach the next one. I walked away from every lunch meeting with renewed vigor and optimism. Many thanks go to Andy Perrin and Francois Nielsen for guiding me through the social theory literature that I have come to love so much. They each encouraged me to follow my muse and always seemed to know where I needed to look next. Last, but not least, Candy Brush deserves a very special thanks for offering irreplaceable guidance on the gender and entrepreneurship literature and tremendous inspiration and encouragement from afar. I honestly could not have chosen a better committee. Thank you all so much!

A multitude of thanks also goes to my family without whose support none of this would ever have happened. To my husband, there simply aren't enough words to express my love and gratitude. You are my champion in every way. To my three wonderful children, I offer thanks for understanding when Mommy's work was more important than stories or playtime. I love you all to pieces. Many thanks go also to my in-laws whose constant delight in their grandchildren has saved me so many times. Thanks go to my parents as well for the constant love and support they have always given me – not to mention the hours of proof-reading and advice they provided. And finally, thanks to my

close friends who have cheered me along every step of the way – especially Johanna who called me every morning at the beginning of the project to make sure I was at my desk by 9am. Thank you so much to every one of you!

## TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ix
LIST OF FIGURES.....	x
Chapter	
1 THE PROBLEM.....	1
Three Road Blocks.....	3
Mixed Findings.....	4
Limits and Biases.....	10
Lack of Theoretical Framework.....	14
Summary.....	19
Plan for Chapters.....	20
II A PRACTICE THEORY.....	22
Bourdieu's Theory of Practice.....	24
Roots and Improvements.....	31
Bringing in Gender.....	39
Conceptualizing Country Differences.....	49
Summary.....	55
III GENDERED CAPITAL AND BUSINESS START-UP.....	59
Why Individuals Start Businesses.....	61
Symbolic Capital.....	63
Economic Capital.....	64

	Cultural Capital.....	66
	Social Capital.....	72
	National Differences.....	75
	Hypotheses.....	78
	Summary.....	79
IV	DATA AND METHODOLOGY.....	80
	Measures.....	82
	Nascent Entrepreneurship.....	82
	Economic Capital.....	83
	Cultural Capital.....	85
	Social Capital.....	87
	Symbolic Capital.....	87
	Country-level Measures.....	88
	Model Specification.....	90
	Data Quality.....	91
V	RESULTS AND DISCUSSION.....	95
	Results.....	95
	Model 1: Variation Across Gender and Country.....	96
	Model 2: Impact of Gender as a Fixed Effect.....	97
	Model 3: Impact of Forms of Capital.....	98
	Model 4: Impact of Gender Interactions.....	101
	Model 5: Impact of Macro-level Factors.....	102
	Model 6: Impact of Macro-Micro Interactions.....	103
	Testing for Reliability and Validity.....	105
	Differences across Country and Gender.....	106
	Discussion.....	119

VI	IMPLICATIONS AND CONCLUSIONS.....	124
	REFERENCES.....	137



## LIST OF TABLES

Table	Page
1. Descriptive Statistics for Relevant Dependent and Independent Variables for GEM 2001 Adult Population Survey Data, Respondents aged 18-64 in 28 Countries.....	84
2. Country-Level Variables and Values .....	89
3. Hypotheses and Support .....	96
4. Odds Ratios for 2-level Random Coefficient Models of Nascent Entrepreneurship across Gender and Country .....	98

## LIST OF FIGURES

Figure	Page
1. Evidence of Variation across Country and Gender .....	3
2. Social and Symbolic Space .....	28
3. Social Reproduction through Practice and Capital Structures .....	30
4. Research Model for a Practice Theory View of Structured Social Action .....	57
5. Proportion of Nascent Entrepreneurship for Model 1 .....	107
6. Predicted Probability of Nascent Entrepreneurship for Model 3 .....	108
7. Predicted Probability of Nascent Entrepreneurship for Model 6 .....	108
8. Predicted Probability Estimates for Nascent Entrepreneurship by Country and Perception of Opportunity .....	110
9. Predicted Probability Estimates for Nascent Entrepreneurship by Country and Perception of Startup Skills .....	110
10. Predicted Probability Estimates for Nascent Entrepreneurship by Country and Fear of Failure .....	111
11. Predicted Probability Estimates for Nascent Entrepreneurship by Country and Perception of Better Family Financial Future .....	111
12. Predicted Probability Estimates for Nascent Entrepreneurship by Country and Knowing an Entrepreneur .....	112
13. Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Perception of Opportunity .....	113
14. Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and No Perception of Opportunity .....	113
15. Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Perception of Start-up Skills .....	114
16. Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and No Perception of Start-up Skills .....	114
17. Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and No Fear Failure .....	115

18. Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Fear of Failure.....	115
19. Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Expectation of Better Family Financial Future.....	116
20. Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and No Expectation of Better Family Financial Future.....	116
21. Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Knowing Entrepreneur.....	117
22. Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Not Knowing Entrepreneur.....	117

## CHAPTER 1

### THE PROBLEM

Entrepreneurship fires the imagination. Viewed as critical to the economic life and prosperity of every society, new businesses are thought to produce much of the innovation, new markets, and employment that drive economic growth and ultimately improve standards of living across all levels of society (Minniti, Arenius, and Langowitz 2005; OECD 2005). Despite beliefs in the importance of entrepreneurship as a social phenomenon, scholars are only beginning to understand it. Of particular interest are explanations of variance in entrepreneurship rates across countries and other social groups as defined by gender, race, and ethnic origin.

Recent estimates suggest that, on average, a little over 9% of adults aged 18-64 are either starting new businesses or managing young businesses around the world each year. Yet entrepreneurship rates vary extensively across countries from as low as 1.2% in Japan to 38.1% in Peru (Acs, Arenius, Hay, and Minniti 2005; Minniti, Arenius, and Langowitz 2005). Despite recent advancements in cross-national data collection and measurement, explanations for this variation remain elusive. For a variety of reasons, not least of which is ease of measurement, cross-national studies of entrepreneurship have traditionally focused on macro-economic explanations. However, recent findings suggest that macroeconomic factors offer very little explanation of the cross-country variation (OECD 2001; Reynolds, Bygrave, and Autio 2004). Countries tend to hold rank over the years and throughout macro-economic fluctuations, suggesting that non-economic factors may best explain cross-

country differences (Schramm, Litan, and al. 2005), but few studies show exactly how these “other” factors work.

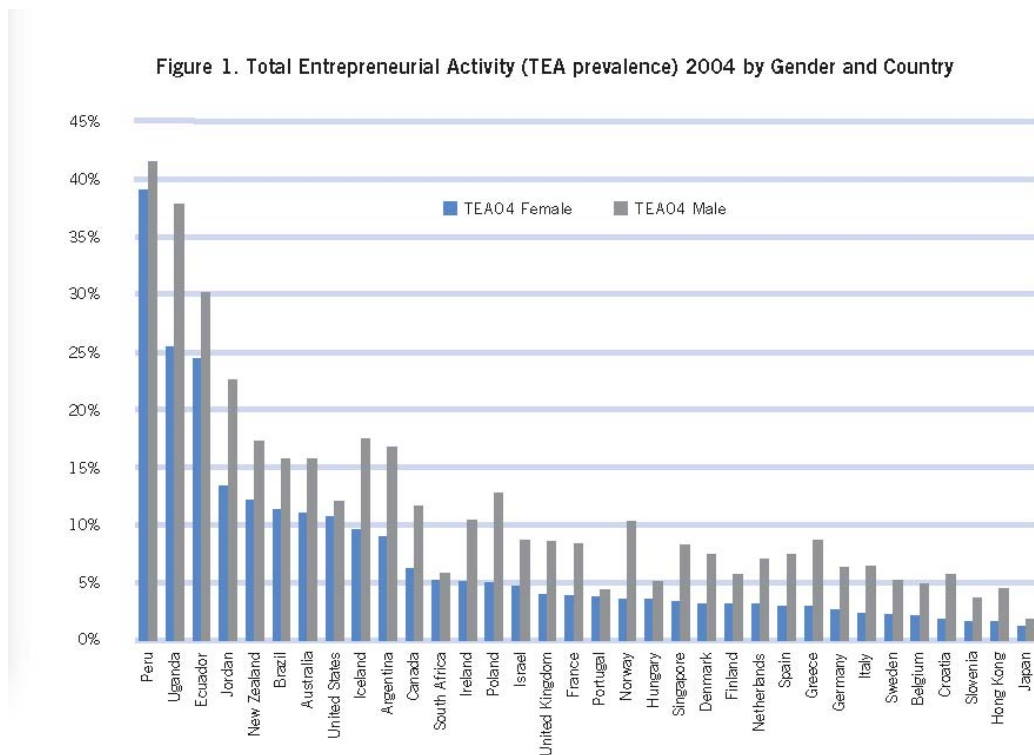
Just as elusive are explanations for variations in entrepreneurship rates across gender. Women are, on average, about half as likely as men to start businesses and much less likely to start high-growth, high-profit firms (Acs, Arenius, Hay, and Minniti 2005; Reynolds, Bygrave, and Autio 2004). The pattern of gender variation is fairly consistent across countries – that is, female participation rates are consistently lower in all countries. However, the extent to which female rates of entrepreneurship are lower also varies quite a bit across countries (see Figure 1). In one study of 29 countries, the gender gap ranged from 0.3% in Italy to 14.4% in Mexico (Reynolds, Bygrave, Autio, Cox, and Hay 2003). Another study using the same dataset confirmed these results, but also reported no statistical difference between male and female rates of entrepreneurship in countries like Thailand, China, and South Africa (Minniti and Arenius 2003; Minniti, Arenius, and Langowitz 2005). Some obvious explanations include higher rates of female employment and necessity entrepreneurship as found in many developing economies. However, like crossnational patterns of entrepreneurship, gendered rates of entrepreneurship are also found to be stable across measurement years and, as such, are resistant to fluctuations in macro-economic conditions, suggesting alternative sources of determination.

The central aim of this research project is to answer one important question: *How do we account for gendered variation in entrepreneurship rates in and across countries around the world?* Moreover, if macro-economic factors offer poor explanations of country and gender differences in entrepreneurship, where else can we look for better answers?

I propose that better explanations for variations in entrepreneurship participation rates can be found in the application of a basic sociological perspective. In other words, the answer lies in social and cultural factors – i.e., the ideas, relationships, and power differences -- that combine with material factors to create distinct social positions and to set

the context for social action. In this chapter, I review the current state of findings and the obstacles that have impeded the development of a comprehensive sociological theory of entrepreneurship. I further propose a new basis for theorizing about and investigating gendered patterns of entrepreneurship.

Figure 1: Variation of Entrepreneurial Activity across Gender and Country, GEM 2004 (Minniti, Arenius, and Langowitz 2005: 19)



### THREE ROAD BLOCKS

There are three primary reasons why scholars of entrepreneurship have failed so far to unlock the puzzle of crossnational and gendered patterns of entrepreneurship. First of all, existing research is fragmented, disconnected, and often contradictory (Brush 1992; Moore 1990; Reynolds 1991; Thornton 1999). Second, these mixed findings are a result of the limits and biases of the data and methods that typically produce them (Ahl 2004; Coviello and Jones 2004; Hurley 1999). And, third, the study of entrepreneurship lacks a coherent,

theory-driven conceptual framework that would lead to better data, methods, and ultimately findings upon which to base our understandings of entrepreneurship (Berger 1991; Coviello and Jones 2004; George and Zahra 2002; Reynolds 1991; Thornton 1999).

### *Mixed Findings*

On the first point, national studies from the United States and other Western, industrialized countries suggest that male and female entrepreneurs tend to share more similarities than differences (Brush 1992; Brush 1999; Gatewood, Carter, Brush, Greene, Hart, and eds. 2003) – that is, when important controls are in place. When controlling for key factors, such as age, education, work experience, industry/occupation, and business characteristics, many studies have concluded that female entrepreneurs tend to be very similar to male entrepreneurs (Brush 1992; Brush 1999; Gatewood et al. 2003). These studies typically conclude that business processes are the same for men and women entrepreneurs who find themselves in similar circumstances (e.g., Cassar 2004, Kalleberg & Leicht 1991). Therein lies the problem -- men and women typically do not find themselves in similar circumstances. Thus controlling for key factors does not provide a sound basis for explaining away gender differences. Rather it indicates the probable sources of gender differences.

Evidence from national studies of gender and entrepreneurship reveals quite a bit about these probable sources of difference. Women entrepreneurs tend to be younger and to have less technical education and less experience, especially industry-related (Brush 1992; Fischer, Reuber, and Dyke 1993; Hisrich and Brush 1987). They tend to start smaller businesses in more competitive service industries, with lower start-up costs and lower rates of return (Brush 1992; Brush 1999; Devine 1994; Fischer, Reuber, and Dyke 1993). Women tend to use less start-up capital and tend to adopt more flexible and conservative start-up strategies than their male counterparts (Carter and Rosa 1998; Cassar 2004; Verheul and

Thurik 2001). Female entrepreneurs tend to have less powerful networks, work fewer hours, and have more family role demands than do male entrepreneurs (Aldrich 1989; Brush 1999; Kalleberg and Leicht 2000). Indeed, in some respects, women appear to approach business start-up very differently from men. Evidence suggests that women hold different values and goals from men and may consequently adopt different strategies (Bird and Brush 2002; Brush 1992). Moreover, there may be very “rational” reasons for these different approaches. Findings from studies of self-employment suggest that returns to self-employment tend to be lower for women than for men, especially for women lower down on the socio-economic scale (Devine 1994). As a group, women, in effect, approach business start-up from very different social positions, characterized by different sets of resources and different rates of returns.

Cross-national studies have found similar patterns of gender difference, but with an ever-increasing degree of complexity. Until recently, crossnational studies of entrepreneurship have involved either comparisons of individual-level factors across very small samples of countries or macro-level correlations of entrepreneurship with various country characteristics. Studies of gender and entrepreneurship at the individual level have reported significant and generally consistent gender differences in education and experience, money assets, industry, and business characteristics across countries. Women who start businesses tend to have less education, experience and capital, tend to start businesses in industries with lower entry barriers but higher dissolution and lower growth rates, and, controlling for such factors, tend to start smaller businesses that stay smaller (Acs, Arenius, Hay, and Minniti 2005; Brush 1992; Minniti and Arenius 2003; Minniti, Arenius, and Langowitz 2005).

Significant differences have also been found across gender and country in motivations for start-up and perceptions of start-up environment (Busenitz and Lau 1996; Kolvereid and Shane 1993; Minniti, Arenius, and Langowitz 2005; Shane, Kolvereid, and



Westhead 1991). Studies of network composition have revealed significant differences across gender and countries, with the greatest differences observed between countries (Aldrich, Reese, and Dubini 1989; Dodd and Patra 2002). These patterns also appear to hold well for entrepreneurs outside the usual slate of Western, industrialized countries (Arum and Müller 2004; Bliss and Garratt 2001; Chamlee-Wright 1997; Lee, Campbell, and Chia-Chan 1999; Shabbir and di Gregorio 1996).

Findings from country-level studies have addressed the significance of cultural and institutional factors as well as macro-economic factors for the prevalence of entrepreneurship. Important correlates of entrepreneurship activity at the national level include macro-economic structures such as population age structure, national income, industrial structure, degree of business regulation, and social welfare provisions (Reynolds, Bygrave, and Autio 2004; Stel, Wennekers, Thurik, Reynolds, and Wit 2003; Wennekers 2005). National culture has also been correlated with rates of entrepreneurship. Most of this work has centered on applications of Hofstede's (2001) typology of national cultures (power distance, individualism, masculinity, uncertainty avoidance, short-term orientation) and Lumpkin and Dess' (1996) concept of entrepreneurial orientation (EO) (Hayton, George, and Zahra 2002; Hofstede 2001; Lumpkin and Dess 1996). Lee & Petersen (2000), for example, have found that a conducive, entrepreneurial culture (that is, high on measures of EO) involves low uncertainty avoidance (or high tolerance for risk), low power distance (or low tolerance for inequality), masculinity, individualism, achievement orientation and universalism (Lee and Peterson 2000).

Other studies have extended this research to draw links between national cultural characteristics and patterns of cognition, concluding that while "entrepreneurial dispositions vary across cultures" (Stewart Jr., Carland, Carland, Watson, and Sweo 2003), there does appear to be "a universal culture of entrepreneurship" (Mitchell, Smith, Morse, Seawright, Peredo, and Mckenzie 2002). The importance of particular cognitive perceptions or specific

values, such as internal locus of control for entrepreneurship, have been further tested with the result that particular cognitive scripts and orientations are associated with some of Hofstede's (2001) national cultural constructs and with the decision to start a business (Mitchell, Smith, Seawright, and Morse 2000; Mueller and Thomas 2001; Mueller 2004). For example, Mitchell et al 2000 find that cognitive scripts associated with venture-specific skills and more general business acumen (arrangement and ability scripts) are consistent predictors of venture creation across countries, but that the effect of "willingness" and to some extent "ability scripts" tend to be associated with Hofstede's national values of individualism and power distance, and thus tend to vary across countries.

According to Hayton, George, and Zahra (2002), most empirical studies on national culture have used Hofstede's (2001) conceptualization of national culture while "other domains have been underdeveloped". In fact, without reference to any of the aforementioned cultural models or constructs and without mention of any other theoretical underpinning, the Global Entrepreneurship Monitor (GEM) 2004 report presented findings on an index measure of national culture (perceptions of social acceptance of entrepreneurial careers, respect for new business success, and positive media coverage) and found that a positive national culture increases the likelihood of entrepreneurial participation by a factor of 4. Also according to this report, measures of a positive personal context were even more important, increasing the likelihood of entrepreneurial participation by as much as 8 times (Reynolds, Bygrave, and Autio 2004). Personal context was defined primarily in terms of respondent's perceptions of personal context (start-up skills, opportunities, fear of failure, etc). In a more recent study, Arenius and Minniti (2005) found that these perceptions were the strongest and most significant effects in a 28-country study of nascent entrepreneurship. The authors concluded that perceptual variables are important predictors of the decision to start a business, particularly for women, and should be included in future studies.

One of the more exciting aspects of crossnational research is the possibility of exploring the links between macro-level, or national environmental factors, and the decision to start a business across gender (Busenitz and Lau 1996). Recent evidence suggests that some macro-level predictors of entrepreneurship may work differently for males and female (Acs, Arenius, Hay, and Minniti 2005; Brush 1999; Minniti, Arenius, and Langowitz 2005). Demographic factors, for example, such as age distribution and population growth, appear to affect men and women similarly, but significant gender differences in participation rates are found depending on levels of national income, government regulation, literacy/education, and industrial make-up (Arenius and Minniti 2005; Minniti and Arenius 2003; Reynolds, Bygrave, and Autio 2004). Crossnational studies have determined generally that women in wealthier countries may be less likely than men to pursue entrepreneurship, but that the opposite may be true in poorer nations (Acs, Arenius, Hay, and Minniti 2005; Minniti, Arenius, and Langowitz 2005; Reynolds, Bygrave, and Autio 2004; Reynolds et al. 2003). Furthermore, both the size of the informal sector and the proportion of jobs in agriculture correlate with women's entrepreneurship, especially with what scholars have termed "necessity entrepreneurship" (Reynolds et al. 2003). Countries with large agricultural sectors have more necessity entrepreneurship, but not necessarily involving women. Women's participation rates vary specifically with the proportion of women in the agricultural sector, as well as with the overall size of the informal sector. While women's entrepreneurship is positively correlated with education/literacy rates and female labor force participation, the relationship between men's rates of entrepreneurship and education appears more complex and related to industrial make-up (Reynolds et al. 2003).

Despite the extensive interest in the importance of national culture for entrepreneurship activity, I could not find any studies that link national culture specifically to gendered patterns of entrepreneurship. A few studies link various aspects of national culture to possible determinants of the decision to start a business, usually cognitions, but

again the emphasis is on identifying the existence of gender and country differences and not on the explanation of such differences (Arenius and Minniti 2005; Kolvereid and Shane 1993; Minniti, Arenius, and Langowitz 2005; Shane, Kolvereid, and Westhead 1991). One exception is Mueller's (2004) study of the relationship between gender gaps in entrepreneurial traits and national characteristics, including Hofstede's dimensions of national culture. The results showed that the men and women share a more similar locus of control in less masculine countries and less difference in risk-taking potential in more collectivist-type countries, according to Hofstede's dimensions. Mueller concluded that gender gaps in entrepreneurial traits are greatest among more advanced economies and least among less developed economies (Mueller 2004).

Crossnational findings on entrepreneurship can be overwhelmingly complex, fragmented, and contradictory. Individual-level interactions may combine with macro-micro level interactions to create a hugely chaotic web of conclusions. The importance of untangling the web is clear, however, particularly for the study of less advantaged groups of entrepreneurs. For example, recent findings have drawn a strong correlation between national levels of income inequality and entrepreneurship (Lippmann, Davis, and Aldrich 2005; Reynolds, Bygrave, and Autio 2004). While income inequality may stimulate entrepreneurship generally, the effect is likely to result in different forms of entrepreneurship across gender and across rich and poor countries, with the strong likelihood that the women in the poorest countries will pursue the least empowering forms. Another example can be found in the evidence of a growing class division among the self-employed in the United States and possibly in other advanced economies (Budig 2001; Carr 1996; Devine 1994). Entrepreneurship may serve as a path out of poverty for men and women in developing countries, but in more advanced economies, there is evidence to suggest that self-employment traps people, especially women, in a cycle of poverty.

### *Limits and Biases*

The second reason we currently hold such limited understandings of entrepreneurship is that the study of entrepreneurship tends to be heavily biased in terms of structural explanations, profit-oriented businesses, and male experiences and suffers from serious limitations in data quality and research methodology. There are three major tensions within most social science disciplines. The first tension concerns the opposition between social structure and social action. This tension has classical roots, beginning with Aristotle and his writings on the debate over the nature of social action – that is, the extent to which social action is determined by various forces versus an expression of freewill, or, choice (Emirbayer and Mische 1998). The second is the tension between structure and culture (Berger 1991). Somewhere along the line social scientists have drawn a distinction between structural versus cultural sources of determination or constraint. The third is the tension between two types of research methods - quantitative (large samples, surveys and statistics) and qualitative (small samples, ethnographies and structured interviews). The study of entrepreneurship, especially in the hands of Western scholars, leans towards a structural view of action (i.e., an emphasis on firms and macro-level constructs), the use of quantitative methods, and tends to draw a clear distinction between structural and cultural determinants of venture creation.

The structure-agency opposition is often found in overviews and meta-analyses of the entrepreneurship literature. One example is Gartner's (1985) framework, used by Brush (1992) to organize the literature on women's entrepreneurship. Gartner's (1985) framework – individual, organization, environment, and process – was originally intended to draw attention to the lack of attention to processes linking actors (individuals and organizations) to the environment (Gartner 1985). The point here is that scholarly attention tended to focus on either the traits of individuals and organizations or on aspects of the environment, rather than on the connections between the traits and environments. The conceptual pattern is

even clearer in a later framework. Reynolds (1991) described three different conceptualizations of entrepreneurship in his overview: (1) set of traits or mindset; (2) a social context; or (3) the intersection of a set individual traits and a contextually-determined opportunity. Agency is found at the individual level of traits and mindsets. Structure can be found in the social context or structural locations in which entrepreneurship is prevalent. The third category represents the call for a focus on the intersection between traits and contexts. This call for research focusing on processes and links between macro- and micro-levels of analysis has been repeated heavily over the last decade and a half with more specific recommendations such as the collection of better data and the use of more rigorous methods like multilevel models for the study of micro-macro linkages (Moore 1990; Thornton 1999).

The culture-structure dichotomy is also apparent in overviews of research on entrepreneurship. Berger (1991), for one, identified two distinct perspectives on entrepreneurship: (1) an economic/neo-classical; and (2) a cultural view. In the neo-classical economic view, Berger argued, the emphasis is placed on the availability of capital, access to market, labor supply, availability of raw materials and other key resources, technology, and human capital. In contrast, Berger wrote, the cultural view puts the emphasis on norms and beliefs, psychological motivations (including values such as achievement), the legitimacy of entrepreneurship, and the internal fit of culture and structural characteristics. Berger went on to argue that because the economic view has dominated the conversation, the analysis of entrepreneurship in cultural terms has remained elusive. Consequently, she called for more work on the linkages between culture and structure.

More work has certainly been carried out on the importance of culture for entrepreneurship, but the focus has been mainly on the relationship between diffuse aspects of national culture and entrepreneurial cognitions. Little attention has been paid to the relative importance of culture versus material factors or the ways in which culture interacts

with other social and material factors to influence entrepreneurship. George & Zahra (2002) more recently reiterated Berger's call for more attention to resolving the structure-culture dichotomy. In effect, there appears to be a fair amount of consensus that culture works through cognitions to influence entrepreneurship behavior, but little attention to the other ways in which culture influences business creation and employment choices. In this way, Berger's observation about the dichotomous views that characterize the field of entrepreneurship continues to apply.

In addition to a bias towards structure, gender scholars have identified a bias toward male-type businesses and experiences (Ahl 2004; Baker, Aldrich, and Liou 1997; Greer and Greene 2003; Hurley 1999; Kantor 2002; Mirchandani 1999). Feminist critiques in particular have cited evidence of male bias (i.e., an emphasis on male ways of doing, knowing and thinking), making the point that such a bias tends to result in a lack of attention and sensitivity to matters of class, race, and gender within the field of entrepreneurship studies (Ahl 2004; Hurley 1999). Baker, Aldrich & Liou (1997) showed that the study of women's entrepreneurship was, up to 1996, underrepresented in the scholarly literature on entrepreneurship (Baker, Aldrich, and Liou 1997). Ahl (2004) revealed the extent to which entrepreneurship is defined as a "male pursuit" in the entrepreneurship literature. Hurley (1998) suggested that sampling designs that focus on the measurement of high-profit, high-potential, or "successful" business ventures explain some extent of the male bias in entrepreneurship studies. Indeed, debates over how to define entrepreneurship for measurement, e.g., business forms, industries, definitions of innovation, etc., have very likely contributed to these biases toward structural explanations and male-type businesses. In contrast to findings from narrowly-defined samples, studies adopting the broadest definition of entrepreneurship, namely the self-employed (both part-time and full-time), have confirmed the importance of considering class, education, family, part-time as well as full-

time hours, and returns to self-employment in studies of gender and self-employment (Budig 2001; Carr 1996; Devine 1994).

It is hardly surprising that these types of biases in measurement, methodology and perspective have emerged in the field of entrepreneurship, as this field is interdisciplinary with contributions from diverse perspectives on social behavior. Scholars, after all, come at problems with perspectives and practices that characterize their personal experiences and fields of origin. Economists and business scholars, for example, tend to be preoccupied with high-profit businesses; whereas psychologists and sociologists tend to focus on individual traits and social factors. Biases of perspectives, research practices, and results are an inevitable product of the different priorities and assumptions that emerge from an interdisciplinary field of study.

In any case, these biases toward structural factors, high-profit or potential firms, and male-type businesses are a very real problem for studies of entrepreneurship generally, especially for studies of gender and entrepreneurship. The combined effect of a bias toward male-type experiences or structural explanations produces skewed findings and leads to inflexible measures and incomplete datasets. The resulting findings make it much easier to discount the importance of gender and tend to conflict with findings from broader measures and datasets, creating a mass of fragmented, disconnected and often contradictory research findings.

The biases in research findings and design are further complicated by the costs and data quality limitations associated with the study of entrepreneurship. Entrepreneurship is a difficult construct to measure. It has taken decades for basic understandings to emerge and we are still some distance away from achieving a full consensus on concepts and definitions. Despite the additional costs and logistical challenges of crossnational research, this area of research holds a great deal of promise for the study of entrepreneurship.



Before we can harness the potential of crossnational data collection efforts, however, we must first develop a coherent, conceptual framework to guide research design and data collection efforts (DiPrete and Forristal 1994). Such a framework will help make sense of the current mixed findings and will help place disparate middle-range theoretical perspectives and research findings in concert with one another, controlling tendencies towards biases and data limitations that prevent generalizability. My proposal for a broader framework for the study of entrepreneurship does not preclude the value or importance of the diverse perspectives that currently produce research on entrepreneurship, but rather aims to draw power from the variety of insights and understandings produced across this diverse, interdisciplinary field of study.

#### *Lack of Theoretical Framework*

Finally, we arrive at the third reason for and the very likely the source of many of the problems of the existing literature – namely, the absence of a coherent, theoretical framework for the study of entrepreneurship. Critics have consistently reported a lack of consistency and rigor of methodology and concepts for well over a decade now (Ahl 2004; Berger 1991; Bygrave and Hofer 1991; Coviello and Jones 2004; Hayton, George, and Zahra 2002; Herron and al 1991; Reynolds 1991). Many critics have ascribed these problems to a lack of comprehensive or integrative theory, or paradigm, to guide research efforts in the study of entrepreneurship (Ahl 2004; Berger 1991; Brush 1992; Coviello and Jones 2004; Reynolds 1991; Thornton 1999). Several attempts have, in fact, been made to propose conceptual framework over the past 15 years or so. Below I review those attempts briefly, summarize the most important insights and discuss why these frameworks are still inadequate to the task of explaining entrepreneurship.

Reynolds's (1991) triad of entrepreneurship definitions -- which I roughly translate as trait-based, contextual, and integrated views – applies well to theories of entrepreneurship.

As important and informative as the research on traits and context is, my focus is on theories that go beyond the usual descriptive approach of characterizing the individuals, environments, and even processes most strongly associated with entrepreneurship – the so-called, integrated theories. There are, to my mind, three perspectives that best represent integrated views of entrepreneurship, focusing specifically on the intersection of individuals and contexts. The first perspective is a cultural view of entrepreneurship and is related to what is popularly referred to as the Austrian school of economics with which Joseph Schumpeter is famously associated (Berger 1991; Chamlee-Wright 1997). The second is based on the view of entrepreneurship as the intersection of individual and opportunity (Baker, Gedajlovic, and Lubatkin 2005; De Carolis and Saporito 2006; Shane and Venkataraman 2000) that has emerged recently out of the general field of entrepreneurship studies. The third perspective is associated with the study of women and entrepreneurship (Bird and Brush 2002; Brush 1992).

The cultural view is typified in Berger's (1991) cultural view of entrepreneurship. This perspective is centered around the importance of a conducive cultural climate in which entrepreneurship is viewed as a legitimate activity. In fact, Berger describes "culture as the conductor and the individual as the catalyst." She essentially makes a normative argument, citing the work of Weber, Smelser, Parsons and others on the importance of roles, ideals, expectations, and values. Berger notes, however, that incorporating these notions of cultural forces into theories of entrepreneurship has not been easy and that producing the evidence to support the importance of national culture has been much more difficult.

Along the same vein, Lavoie in the same text details an interpretive perspective on entrepreneurship, based on the principles from the Austrian school of economic theory (Lavoie 1991). The value of an interpretive perspective is that it challenges the rational actor economic maximization model that dominates economic theory by placing the emphasis on the importance of social action as defined by cultural preferences. This

Austrian school approach has problems, however. Lavoie observed that it is not systematic enough because it leans too much towards a freewill view of action. In this way, the theory places too much emphasis on perceptions of profit opportunities, failing to explain some important forms of entrepreneurship, such as so-called lifestyle businesses in Western contexts or the female-run home-based businesses that so often serve an important role in subsistence economies. As an alternative, Lavoie proposed a balance between a transaction cost and collective strategy approach to understanding entrepreneurship. This balanced perspective is certainly a useful way of considering how culture influences the practice of entrepreneurship. However, like so many other attempts it is too abstract, revealing little about patterns of difference across social groups and providing very little direction on how to operationalize the theory for research models other than those found in qualitative or ethnographic type studies.

The second perspective began with Shane and Venkataraman's (2000) definition of entrepreneurship as the nexus between "enterprising individuals" and "lucrative opportunities." The proposed framework centered on the "discovery, evaluation and exploitation (DEE)" of opportunities. The very terms they chose put the focus on the processes, such as cognition and resource mobilization, that underlie the start of a business. Unfortunately, while the authors place some importance on the characteristics of the individual in question (e.g., must be enterprising) and recognize that information is asymmetrically distributed among members of a given population, they completely ignore gender and other social characteristics that influence the distribution of information and other resources important for business start-up and success.

In an effort to improve Shane and Venkataraman's "undersocialized" framework, Baker et al. (2005) propose a Comparative, Discovery, Evaluation, and Exploitation (CDEE) framework. This improved model, they argued, emphasizes the importance of embeddedness, in that social positions determine the availability and perceptions of

opportunities. This improved model is better, but still does not address gender, or indeed, status characteristics in any direct fashion. Nonetheless there is a place for gender in the comparative category, within the concept of social position. However, like interpretive/cultural approaches and Shane and Ventkatamaran's original model, this model offers a process view that is too abstract to effectively operationalize.

DeCarolis and Saporito (2006) also tried to improve on Shane and Ventkatamaran's framework by suggesting that the nexus between individual and opportunity can best be explained through an exploration of the external and internal factors that affect why some people and not others discover and exploit opportunities. This model highlighted the importance of external factors, such as social capital and cultural environment, and internal factors, such as cognition, for patterns of entrepreneurship across types of individuals. Unlike the earlier models, they tested their model on rates of innovation across countries and found correlations between those rates and macro-level measures of national culture (i.e., Hofstede's 2001 dimensions) and wealth. The benefits of the DeCarolis and Saporito (2006) model are that they extended the notion of embeddedness to include both cultural and social forces, i.e., ideas and relationships. Also, they implicitly recognized the relationship between culture and cognition. However, their model ignored the relative importance of local versus global context. The macro-level focus of their model ultimately ignored the individual level processes that drive differential rates of entrepreneurship (i.e., power) across social groups, like gender.

The third integrated-type perspective emerged from the study of women and entrepreneurship. As well illustrated by meta-analyses of the literature on gender and entrepreneurship, entrepreneurship is generally characterized as a male-type activity and scholarly efforts tend to reflect that fact (Ahl 2004; Baker, Aldrich, and Liou 1997; Brush 1992). Following Aldrich's (1989) point that women hold a different view of reality that emanates from social structures, such as the workplace, marriage, family and social life,

Brush (1992) argued for an integrative view of gender and entrepreneurship. Women, she argued, conceive of their business as “cooperative networks of relationships rather than primarily as a separate profit-making entity.” Bird & Brush (2002) more recently proposed a “Gendered Perspective on Organizational Creation” where gendered worldviews emerge from gendered patterns of social and cultural structures (including social networks and social values) and play a central role in the process of business creation. This perspective offers a lot of power for the study of gender and entrepreneurship. For one thing, it places a strong emphasis on the importance of social position, as defined by gender in addition to class or occupation/industry. It also ties the concept of social position firmly to ideas and social relationships. What is not so clear, perhaps, is how macro-level factors, material and cultural, work to produce these distinct, gendered worldviews or approaches to business start-up.

These frameworks have, in different ways and to different degrees, focused on the importance of cultural and social forces, rather than on material factors, for entrepreneurship. The emphasis is clearly on entrepreneurship as cognition and social action, defined locally by personal context and emerging out of the nexus between individual and opportunity. The importance of resource mobilization and practices ring clear as well. Less well emphasized, however, is the importance of social networks and cultural scripts for defining personal context and influencing cognition and economic behavior. Completely missing is any notion of gender -- arguably the most universal of all principles of social organization (Ortner 1996). Also and most importantly missing is a theory of the processes that drive the decision to become an entrepreneur. How do social positions, cultural scripts, cognitions, and practices influence entrepreneurship? What we really need is a theoretical framework that helps to reveal and explain the social and cultural processes that create and sustain patterns of entrepreneurship, predicting which groups are more likely to start businesses. None of these theories can quite do it.

## SUMMARY

The existing research presents a complex and often confusing picture of entrepreneurship that does not, in effect, tell us much about the broader context in which women and men make the decision to start a business. Two particular areas of confusion stand out. First of all, there is some confusion over the question of how material and cultural factors influence entrepreneurship and some debate over which set of factors is more predictive. Culture appears to influence entrepreneurship in important ways, but we know very little about how culture influences individual level patterns and how cultural factors stand in contrast to the influence of material factors as determinants of entrepreneurship. Some scholars have argued that material factors are more predictive of shifts in rates of entrepreneurship (Mueller and Goic 2002), yet relative differences between countries and between genders change little in response to shifts in the material environment.

The second question that stands out concerns the importance of global versus local context. Work on culture and entrepreneurship recognizes the relationship between culture and cognition, but there is very little understanding of how cognition relates to issues of social differences and relationships with others. The fact is that women and men find themselves in very different situations with different sets of resources and opportunities. But existing theoretical frameworks tend to be too abstract, too undersocialized, and, in essence, biased against the experiences of less-advantaged social groups. A more explicit theory of how patterns of difference are culturally and socially produced and reproduced is needed – that is, a theory that brings balance to the view of entrepreneurship as a structured social action.

The immediate focus of this proposed project is to address the problems in the existing research (male bias, profit bias, structural bias, lack of methodological rigor, lack of comprehensive theory and lack of comparative analysis) by proposing a theoretical

framework particularly well-suited to the study of entrepreneurship, especially for understanding the ways in which cultural and social forces (ideas, relationships, and power) combine with material structures to shape differential patterns of entrepreneurship across social groups. The guiding research questions are: *How do we account for gendered variation in entrepreneurship rates in and across countries around the world? To what extent do country-level factors, such as a culture supportive of entrepreneurship, level of development, and degree of inequality, explain cross country variation and account for variations in the gender patterns of participation across countries?*

## PLAN FOR CHAPTERS

In chapter 2 I develop a set of propositions based on existing theories of social difference and action – three theories are of particular note -- Bourdieu’s theory of practice, status expectations state theory, and Lenski’s evolutionary theory of social change (Bourdieu 1986; Bourdieu 1990; Bourdieu 2001; Lenski 1966; Lenski 2005). Practice theory argues that social action follows from a most often unconscious process of decision-making and can be most accurately defined as a set of practices, or (collective) strategies of action. Also, gender and other status characteristics are treated as social constructions that may vary significantly across individual-level cultural definitions and ultimately across countries. And finally, social action is assumed to be gendered – that is, to follow a culturally-defined division of labor between the sexes. Clearly, assumptions are made about social action and gender that share much in common with institutional views of social action. However, the resulting practice theory view actually represents an integrated multi-level theory of structured social action. The relative importance of material, social, cultural factors are considered across multiple levels of analysis.

In chapter 3, I apply the proposed practice theory to the case of gender and entrepreneurship and develop a set of hypotheses to test. I adopt the explicit view of

entrepreneurship as a process whereby entrepreneurship is conceived generally as an act of business creation that occurs at some point after opportunity recognition and that may involve innovation, high growth, or high capitalization (Aldrich and Ruef 2006). I further define entrepreneurship as a strategy for income generation – i.e., culturally-defined and most often habitual practice -- more likely to appear under particular sets of material, cultural, and social conditions.

Chapter 4 contains a description of the data, methods and measures used for the test. The data includes individual-level responses from the 2001 Global Entrepreneurship Monitor and a collection of country-level measures from various public sources. Following the widely-adopted process view of entrepreneurship, I choose one possible construction of *nascent entrepreneurship* for my dependent variable along with 10 measures of capital resources at the individual level and 4 measures at the country-level for my independent variables.

In chapter 5, I present and discuss the results of my analysis of the relative importance of key macro and micro-level variables for gendered patterns of nascent entrepreneurship across 28 countries. My findings provide strong support for the proposed theoretical view – most especially for the relative importance of social and cultural measures of capital resources over material/economic measures and for the argument that culture works through perceptions to shape the decision to start a business.

And finally, in chapter 6, I present my conclusions. Explanations of social action, for example, can best be found at the individual level, in the factors closest to processes of social organization and interaction. I further conclude that comparative research at the national level has much to offer the study of entrepreneurship, especially in the form of multilevel analyses -- with the clear stipulation that strong multilevel research requires strong multilevel theory (DiPrete and Forristal 1994).



## CHAPTER 2

### A PRACTICE THEORY OF ENTREPRENEURSHIP

The arguments put forth in the previous chapter focused on the need for a new and improved theoretical framework for the study of entrepreneurship. Current findings are mixed and plagued with problems of bias toward business forms and experiences that are not representative of all social groups. As a consequence, theories of entrepreneurship tend to share similar biases. Thus, what is needed is an overarching theory of entrepreneurship that centers on the ways in which social, cultural, and material factors combine to create new businesses and new business owners. Such a theory should, importantly, provide a central place for notions of class, gender, race and other key social groups. And, certainly for the purposes of crossnational research, such a theory should also be multilevel and testable (DiPrete and Forristal 1994). I am explicitly interested in a testable theory because, in the tradition of Emile Durkheim, I am interested in the links between theory and empirical reality. Grand theories are derived in some fashion or another from observations and analyses of the world around us. The most interesting and important part about any social theory, in my opinion, is the extent to which it actually applies to the realities of our social world today.

Scholars within the field of entrepreneurship have already made some progress in the direction of a comprehensive conceptual framework for the study of entrepreneurship, but I think we can do better. One of the more interesting aspects of academic life for me is the discovery, translation, and synthesis of parallel conversations across fields of special

interest. We have seen a big push for more and better theorizing within the field of entrepreneurship studies over the past decade or more. This same push for an integrated view of social action has been going on within the field of Sociology for many more years (Ritzer 2000; Turner 1991). It is from this pool of theory, classic and contemporary, that I draw ideas for the development of a more comprehensive theoretical view of entrepreneurship.

In this chapter, I describe 3 powerful theoretical perspectives, from which I glean a set of propositions that, in combination, meet the demands of the required framework. The first perspective is Pierre Bourdieu's so-called practice theory, most especially his work on the four basic forms of capital and social action (Bourdieu 1986; Bourdieu 1990; Bourdieu 2001). The second perspective is the gender and status cognition work that has emerged out of a larger body of theory called status expectations state theory (Foschi 2000; Ridgeway and Correll 2004b). The third perspective I draw on is Gerhard Lenski's evolutionary theory of societal development and differences (Lenski 1966; Lenski 2005). I begin with Bourdieu's perspective because it presents a strong single-system view of social reproduction and change. Bourdieu has done the best job yet of theorizing about the ways in which social, cultural, and material forces intersect to produce particular types of social action (Lash 1993). Bourdieu's theory handles the concepts of social class, practices such as occupations, and mental states particularly well, but stops short of a full understanding of gender and other status characteristics as determinants of social outcomes. For the gender component, I summarize Bourdieu's work on gender and draw on status expectations state theory to fill in the blanks. Then, with the single system view in place, I draw on Lenski's macro-level theory of societal change to guide my ideas about how cultural and material factors at the country-level might influence social action at the individual level of analysis.

## BOURDIEU'S THEORY OF ACTION

Why do people act? This question has prompted academic debate for thousands of years. The classic debate begins with the question of freewill – to what extent is social action voluntary versus determined? The answer, of course, is both. Both modern and classic social theorists have worked from the assumption that social action is determined to some greater or lesser extent by various social forces. In the usual academic tradition of position-taking, however, most scholars have chosen to lean one way or another. To the point, one could argue, that larger fields of study have become divided according to theoretical preferences, levels of analysis, and methods of inquiry. The debate has evolved such that today scholars commonly use additional terminology to describe this classical opposition – e.g., agency versus structure, micro versus macro, and culture versus structure. As a general rule, scholars who study culture tend toward micro-level analysis and the use of more interpretative or ethnographic type methodologies; while scholars of structure tend toward higher units of analysis and survey or quantitative type methodologies. Despite the cleavages, modern social theorists have continued to expand on the original debate, tossing out limiting dichotomies and, more or less, embracing dialectical, or even dynamic, views of such classic oppositions.

This modern era of social theorizing has seen some important contributions to understandings of the conditions under which social actors exert their freewill. Recent scholars have developed what may best be described as “process views” of the ways in which existing social structures shape choice and action. Important examples of this work include cognitive theories that link Durkheim’s “collective conscience” and “social currents” to the transposable mental structures where they originate, revealing the inherent reciprocity and multiplicity of structures at various levels of play (Giddens 1984; Swidler 1986). Another example of process theory includes social network theories which reveal the ways in which social relationships constrain or enhance opportunities for various actors and

outcomes (Portes 1998; Portes 2000). Other scholars have devoted considerable energy to the elaboration of the particulars of social action – i.e., the relationship to time and the body, to situation and social networks, as well as the importance of the variety and number of forces in play (Emirbayer 1997; Emirbayer and Goodwin 1994; Emirbayer and Mische 1998; Joas 1996; Sewell 1992). From this body of theorizing emerge some strong themes about the complexity of social, cultural, and material structures.

Despite the recent refinements in thought about social action, however, most entrepreneurship research continues to be dominated by *rational choice* models where the assumption is that individuals act consciously and strategically, with much freewill, in order to maximize either economic return or utility. Certainly some research in this field is founded on different assumptions, assumptions of *bounded rationality*, whereby actors are viewed as only partly rational. The boundaries to rationality emerge from limits on time, ability, and information processing that individuals face in the decision-making process (Simon 1957). Simon (1957) further coined the expression “satisficing” to describe the limited extent to which individuals actually search out and process information about all possible choices.

Bounded rationality is certainly an improvement on previous notions of rational action, but like all other rational actor views, suffers from two enormously important shortcomings. First, rational action views provide a woefully undersocialized view of social action. These conceptualizations fail to consider the importance of social relationships and shared cultural definitions for legitimate action. The understanding that social group membership influences individual behavior and decision-making is not new to the social sciences, of course. Classic concepts such as Durkheim’s collective conscience and social currents, Weber’s institutionalization, and Merton’s reference group, for example, have become a part of the basic vocabulary of sociologists (Ritzer 2000; Turner 1991). Yet the very fact that such external structures shape our behavior seems largely lost in a lot of social research today – that is, outside the field of Sociology. Second, the notion of consciousness

is over-emphasized in these models. Ironically, modern neuroscience indicates that most human thought is actually unconscious (Zull 2002). The search for a strong and cohesive theoretical framework must begin with a more enlightened set of assumptions about the very nature and variety of social action.

There are few comprehensive theories that successfully incorporate such complex views of social action. It is hardly surprising that the attempts have begun with an explicit focus on bridging the existing theoretical oppositions (Bourdieu 1984; Bourdieu 1990; Giddens 1984; Sewell 1992). The most successful attempt to date can be found in Pierre Bourdieu's theory of social action (Lash 1993; Turner 1991). In his overall theory of practice, Bourdieu has addressed the relationship between agency and structure, the problematic distinction between culture and structure, and the importance of culture as a form of structure by posing a theory of structured action (Bourdieu 1984; Bourdieu 1998; Swartz 1997). Bourdieu identified several key constructs in his theory of practice, or structured social action – field, capital, and habitus (Bourdieu 1984; Bourdieu 1990). The essential premise of this practice theory is that *individuals use available resources, or forms of capital, to act in largely unconscious and habitual ways to maximize their social power or legitimacy.*

To summarize, Bourdieu argued that the field of power is characterized by a hierarchy of social positions determined by the volume and type of capital that a given individual holds. He expanded the traditional economic view of capital, however, to include four different types of capital – economic, cultural, social and symbolic (Bourdieu 1986). Bourdieu described economic capital as money and assets – basically “what you own.” Cultural capital, he described as taking three forms: embodied (habitus, or, long-lasting dispositions of the mind or body), objectified (cultural goods, including books, pictures, instruments, machines, etc.), and institutionalized (education qualifications and other guarantees of knowledge) – basically “what you know” or ways of thinking, feeling, and

doing. Social capital, he defined as “the aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships” – basically, “whom you know” with some emphasis on the importance of family and other forms of group membership. And, finally, he defined symbolic capital as legitimacy, or symbolic power in its purest form (Bourdieu 1986) – in essence, the social approval, influence, prestige, or social status it affords.

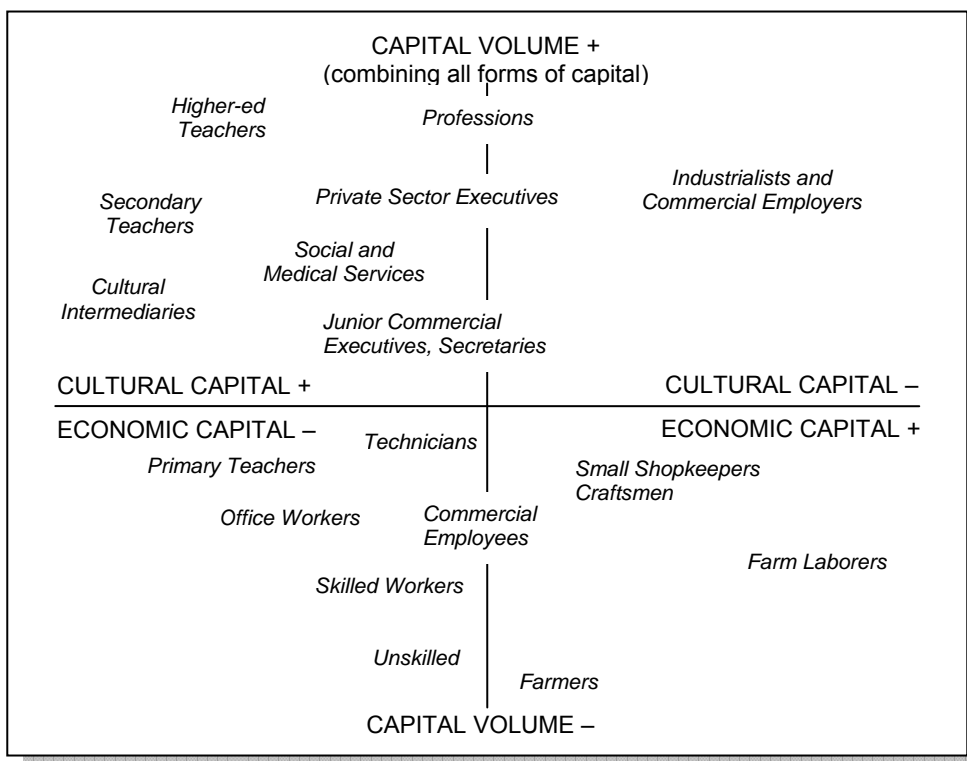
For Bourdieu, these forms of capital collectively contribute to the structure of social positions within specific fields of play, as well as within the overarching field of power. He was careful to note, however, that economic capital is significantly more deterministic than the other forms (Swartz 1997). In that sense, he understood that material factors tend to weigh more heavily than social and cultural factors. That said, Bourdieu identified cultural capital as an increasingly powerful determinant of social position within modern society (Bourdieu 1984; Bourdieu 1998; Swartz 1997).

Figure 2 offers a graphic representation of how Bourdieu viewed economic and cultural capital in relation to social positions, as indicated by occupational title, within the field of power. Bourdieu developed this model, based on early correspondence (factor) analysis, to explain aesthetic tastes and, later, political views (Swartz 1997). For example, individuals with greater proportions of economic capital might value and practice profit-seeking behaviors more than those with a greater proportion of cultural capital. Individuals with lower overall levels of total capital might support social welfare programs more than those with higher total capital.

Bourdieu further theorized that each form of capital is convertible at varying exchange rates into the other forms according to prevailing social definitions. Economic capital, for instance, can buy education and relationships with “expert” others can result in valuable knowledge or confer valuable credibility or legitimacy. In terms of conversion, Bourdieu was particularly interested in the conversion of economic capital, cultural and

social capital into symbolic capital. How much money you have, for example, is equivalent, and convertible, into some socially-defined amount of symbolic capital, or, legitimacy. Educational degrees, expert knowledge, or social ties can also result in the award of prestige within the overall field of power. This idea of convertibility into legitimacy is key to understanding the theory because Bourdieu argued that individual actors compete within fields of practice for legitimacy (represented by total capital held) and, consequently, for definitions of legitimacy. In this sense, Bourdieu appeared to view economic, cultural, and social capital as currencies representing social value that in particular configurations result in particular social positions within the overall field of power.

Figure 2: Social and Symbolic Space (Bourdieu 1998:5)



For Bourdieu, the level and composition of total capital not only defined an individual's position within the reigning opportunity structure, but also served as the

resources available to an individual in the (most often unconscious) calculation of possible actions and produced a corresponding *habitus*. According to Swartz (1997), Bourdieu defined the habitus as:

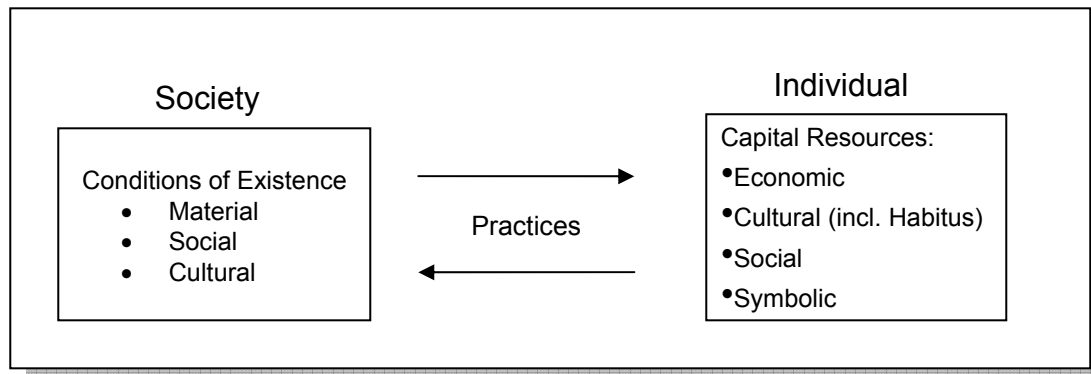
a system of lasting, transposable, dispositions which, integrating past experiences, function at every moment as a matrix of perceptions, appreciations, and actions and make possible the achievement of infinitely diversified tasks, thanks to analogical transfers of schemes permitting the solution of similarly shaped problems.

The notion that capital structures determine the habitus as well as objective position within a given opportunity structure is critical to understanding Bourdieu's theory of action. For in defining a given social position, structures of capital shape the interests and perceptions of available opportunities and constraints, and, consequently, individual action, or, more precisely, practice at a given moment in time. In this sense, neither the habitus or the associated capital structures are static characteristics of a social system or of an individual. Rather the habitus is a reflection of one's social position and, as an individual social position changes, so will the corresponding habitus, and perhaps vice versa.

Figure 3 offers a rough sketch of Bourdieu's conceptualization of how capital structures work to reproduce social positions through practice. This practice perspective basically argues that "what you do with what you have" determines your social position, which in turn determines what you have, and so on. This last statement brings to mind a famous quotation from *The Twilight of Sovereignty* by Walter Wriston: "Capital will always go where it is welcome and stay where it is well-treated." I expect the original intent of the quote referred to money capital, but the application to other forms of capital is also apparent. People who value education will likely pursue education and people who value economic capital will likely pursue economic capital, and so on.



Figure 3: Social reproduction through Practice and Capital Structures



Integral to Bourdieu's theory of action, then, is the idea that culture and structural factors work together to define the opportunity structure as well as the interests and perceptions of the available opportunities and constraints that shape individual action. In this sense then, Bourdieu viewed all action as strategic in the collective sense and based on culturally-defined interests and dispositions. Thus, the whole question of structure and action is framed in terms of the struggle for legitimacy, social status, or power. Social action, however, does not take place within the overarching field of power, but rather in somewhat self-contained fields of play, or, practice.

The distinction between field of power and field of practice is important for Bourdieu's theory in that the definitions of legitimacy that guide the conversion of capitals and the award/penalty of social legitimacy or symbolic capital, are specific to fields of practice. Individuals, Bourdieu proposed, use whatever capital they have – economic, cultural, social, and symbolic – *to maximize the return of legitimacy, or symbolic capital*, on the investment of time, energy and capital. In other words, individuals pursue strategies of action based on what seems possible and what seems appropriate, i.e., whatever is likely to gain legitimacy, or, to redefine it in their favor, according to field-specific definitions of social legitimacy.

Bourdieu further proposed that strategies of action are determined in largely unconscious ways and are based on group interests rather than on individual interests, as in family-based or collective strategies of action. For this reason, the term “practice” best reflects the primary intent of Bourdieu’s conceptualization of social action.

In the next section, I briefly review the roots of Bourdieu’s theory of practice and discuss three general areas where Bourdieu’s core theory could be improved. Then I review Bourdieu’s ideas on gender and cognition and suggest the ways in which status expectations state theory can improve the core model. Finally I consider how the resulting single-system view fits within the context of a larger macro-level system.

## ROOTS AND IMPROVEMENTS

Bourdieu’s theory of structured social action is, in fact, counted as part of a larger body of theory called practice theory (Ortner 1996). Practice theory offers a powerful perspective for understanding the ways in which social action is structured. The primary focus of this body of theory is on the development, maintenance, and transformation of social and cultural forms. The interplay of social, cultural and material forces play central roles in practice theory, with special attention to the fit between cultural structures and material circumstances. Bourdieu’s practice theory has been described as a particularly insightful or effective version of the practice perspective on social action (Ortner 1996; Turner 1991). Turner (1991) has further argued that Bourdieu’s theory provides an easily testable theory of the cultural, social, and psychological processes that structure social action, unlike Giddens’ (1984) highly abstract structuration theory. Bourdieu’s theory generally fits well with both classical and contemporary views of human agency, as well as with modern day research on neuroscience and cognition. However, while it does a good job of theorizing the interplay of social, cultural, and material forces, there are areas for improvement.

Bourdieu's theory of practice draws inspiration from a number of classic theorists. He was concerned with the classical opposition between determinism and voluntarism – i.e., the debate over whether social action is more a result of structured patterns of behavior, like habit or coercion, or a result of freedom and creative intention (Bourdieu 1990; Emirbayer and Mische 1998; Joas 1996). He drew heavily on anthropological theories and concepts, including notions of culture as social structure from French structuralists, such as Levi-Strauss, and notions of culture as symbolically manifested in physical objects from cultural anthropologists, such as Geertz and Schneider (Ortner 1996). Despite his start in the field of anthropology, Bourdieu later made the shift to the field of sociology and his perspective changed accordingly. He incorporated sociological ideas about status structures, power, inequality, and social ties. He shared Marx's concern with class inequality, false consciousness, and the struggle for power. He shared Parson's view of structure as multi-level and culture working largely through internalized norms and ideals. From there he strove to develop a theory that integrated major theoretical oppositions and synthesized vastly different theoretical perspectives (Bourdieu and Wacquant 1992; Swartz 1997).

Overall Bourdieu's theory does some things very well and some things not so well. For the most part he seems to have served as an important point of departure for contemporary views of social action (Emirbayer 1997; Emirbayer and Mische 1998; Giddens 1984; Joas 1996; Portes 1998; Sewell 1992; Swidler 2001; Swidler 1986). The aspects of social action Bourdieu addressed with particular success include the situationality of agency and the intersectionality of structures, the multifaceted conceptualization of cultural capital as a set of internalized structures as well as institutional and objectified forms, and the general concept of social capital. Sewell (1992), Giddens (1984), and Joas (1996), for example, all argued that action is situationally rooted. Citing Bourdieu, both Sewell (1992) and Giddens (1984) viewed resources as intersecting and deterministic of social action.

Their goals were similar insofar as they strove to propose theories in the gray area between the classic theoretical oppositions that Bourdieu worked hard to transcend.

Following Bourdieu, Giddens (1984) posited social action as structured by the dual forces – material and non-material resources and mental schemas. Sewell (1992) also viewed action as influenced largely through cognition and situated or embedded in terms of resources. Joas (1996) also emphasized the importance of the situation for social action. He went beyond even Bourdieu's explicit view of social action as situated within the context of a given capital structure, however, placing greater emphasis on the importance of the embodied, or, corporeal, state of social action and restrictions that social relations impose. Also like Bourdieu, Joas argued that classic assumptions of rationality and intentionality are overplayed in the social sciences and that most social action is situational, embodied and social, thus largely unconscious and reactive.

Central to this idea of social action as embedded in intersecting social, cultural and material structures, is Bourdieu's concept of social capital. Portes (1998), for one, credited Bourdieu with the best theoretical development of the concept of social capital, but notes that the concept is not new to sociology. He argued the roots of the concept can be found in the classic works of Durkheim and Marx. In a very Marxist tradition certainly, capital structures for Bourdieu are social relations, not purely objectified structures. What you own, who you know, what you know, and the social status/legitimacy you enjoy determines both the capital resources at your disposal and your understandings of what to do with these resources. In this sense, capital is not a thing, for Bourdieu, but a social relation between persons, mediated through material objects. Indeed, many of Bourdieu's ideas are not new in and of themselves. Rather it is the unique conceptual framework that Bourdieu built with these longstanding concepts that makes his theory so useful for sociological inquiry.

Nan Lin proposed a very different definition of social capital from Bourdieu -- i.e., the resources provided by social ties as opposed to the value of the social ties themselves (Lin

2001). In this sense, then the value of a given social tie lies in potential resources, such that knowing an entrepreneur or a banker may mean different things for different people. Portes (1998) cautioned that “equating social capital with the resources acquired through it can easily lead to tautological statements.” Portes (2000) appeared to agree with Lin’s definition when he argued that the proposed benefits of social capital may be disappear after controlling for other factors. The larger point here is that social capital works in intricate ways with other forms of capital to create positions and social action. The question remains whether the value is in the relationships or in the resources those relationships provide. Bourdieu defined the actual tie in very abstract terms, but perhaps more accurate and easier to measure terms, leaving plenty of room for further investigation of the links between social capital and other forms of capital.

Emirbayer (1997) took the idea of embeddedness one step further when he defined all social action as socially negotiated and dynamic. He proposed a relational or transactional view of agency, suggesting that social action is negotiated in every interaction. This is an important idea concerning the ways in which cultural, social and material structures work together to reproduce the existing social order. It relates strongly to the ideas put forth by Ridgeway and Smith-Lovin (1999) on the role of interaction in the reproduction of gender systems. Emirbayer (1997) further developed the argument that social action is embedded in multiple ways – that is, embedded temporally and spatially as well as relationally. Along with Mische, Emirbayer (1998) wrote that human agency is temporal in the sense that “action in the present occurs in the context of past experience and with varying extent of deliberation based upon reflection upon past experiences, future goals, and estimations of consequences in relation to present circumstances”. Bourdieu did not explicitly present social action as embedded to this extent, but I think the basic ideas are there in his writings on the habitus and cultural capital as key sources of social change.

Bourdieu also does a good job of highlighting the importance of embodied culture. This notion of the habitus as a set of “embodied” dispositions and internalized norms, values, and schemas serves as a basis for his ideas about the largely unconscious, or habituated, nature of social action. Recently, cognitive psychology and neuroscience have revealed new understandings about the internal structures of the mind. As cited by Zull (2002), research from these fields suggests the following three conclusions: (1) that thought is mostly unconscious; (2) that abstract thought is largely metaphorical; and (3) that the mind is inherently embodied (Zull 2002). This summary of key points is a tidy way of saying that cognition is a physical, biological process. Bourdieu seems to have intuited much of the current research on cognition and the structures of the brain. Not only did he view the habitus as embodied or corporeal, but he also posited that the mental structures and schemas that constituted the habitus were transposable or easily carried from one situation to another, by way of metaphors. Bourdieu’s view of social action, again, was flexible, but, he argued, mostly unconscious as habits or deeply internalized cultural practices.

This brings us to a consideration of criticisms made about Bourdieu’s work. Sewell (1992) among others criticized Bourdieu’s theory of practice as overly structural or deterministic, reminiscent even of the “cultural dope” view. The result, Sewell argued, is a loss of agency and the potential for social change. Joas (1996) made a similar point in his work on creative action (Joas 1996). He argued that creativity is present in all action and routine is a result of creativity. For Joas, action is “situated creativity” – that is, all actors are “acting” and have some control over their actions within a given context.

Despite a largely routinized view of social action, Bourdieu apparently understood that social action is not always unconscious, unintentional, or necessarily habituated. Swartz (1997) writes that, for Bourdieu, the habitus serves as the “bodily and cognitive basis of action, as well as inventive and habituated forms of action”. In this way, Bourdieu’s overall view of action may be very similar to that of Joas, who rejects both the autonomous

rational actor model and Parson's "cultural dope" view, arguing that creativity is an ever-present dimension of all social action.

A better source of wisdom on this idea of creativity and agency is Swidler's (1986, 2001) theory of culture as a toolkit – that is, sets of repertoires or strategies of action that people collect and create through experience and education and continuously draw upon to justify, or, make sense of their actions. Swidler posited that actors use this "toolkit" of cultural repertoires to compete for dominance. The central thesis here is not unlike Bourdieu's argument that individuals compete for control over the definitions of legitimacy within a system, in order to gain or reproduce their social status and power. Bourdieu further argued that higher status individuals perpetrate "symbolic violence" – that is, they manipulate cultural symbols and meanings - in order to maintain their advantages. (This view of cultural manipulation in order preserve status advantage is very pertinent to Bourdieu's ideas on gender. Accordingly, I discuss it more in the next section of this chapter.) It is, however, this notion of culture as primarily a process of post-hoc reflection and rationalization that Bourdieu failed to expand upon in his writings about the ways in which actors use their capital resources to act. A synthesis of Swidler's ideas with Bourdieu's ideas leads to the clear conclusion that while culture is certainly multi-level, multitudinous and differently available, these cultural repertoires, or idea sets, are in fact available in patterned ways across the social landscape as illustrated by Bourdieu's notion of the habitus as a reflection of one's social position.

Working from a similar cultural perspective, Lamont drew just that conclusion in her studies of the cultural preferences and evaluations of American versus French men who share similar class positions (Lamont 1992; Lamont 2000). Lamont's specific interest was in "national cultural repertoires of evaluation" or, in more Bourdieuan terms, definitions of legitimacy. She found definite differences between the definitions of legitimacy employed by white, upper-middle-class French men as compared to white, upper-middle-class American

men. She found, for example, that evaluations based on market performance were more frequent in the American sample, whereas evaluations based upon civic solidarity were more frequent in her French sample. With these findings, Lamont was able to confirm, in some sense, this idea of culture as a vast range of often contradictory cultural ideas and practices, indeed a multiplicity of cultural repertoires, but one patterned across countries, resulting in differences within a given social group marked by class and gender.

Swidler (2001) extended these ideas further in her book *Talk of Love*. Here she elaborated on her ideas about the ways in which individuals use culture and how they are tied to individual situation. She argued that cultural meanings operate less as logical structures that integrate ends and means, and more as tools or resources that cultivate skills and capacities that people integrate into larger, more stable "strategies of action." Swidler is interested in the social processes that create cultural coherence and unity. Her conclusion is that cultural patterns are given unity by the institutional dilemmas to which they are tied. In other words, she argued that strategies of action are, in the end, constrained by institutional logics through practical dilemmas or by what can reasonably be justified. This idea lies at the heart of Bourdieu's thoughts on the importance of field-specific definitions of legitimacy. What Bourdieu did not spend enough time on is elaborating on the opportunity for agency, creativity, thus social change, in each social action or interaction.

This view of action as a process of reflection and learning through post-hoc evaluations further relates well to Bourdieu's ideas on socialization and the internalization of culture. Actors draw on past experiences and learning and future goals or expectations for decisions about how to act in the present. Bourdieu's view of social change centers around his conceptualization of cultural capital. It is through education and experience that the habitus and practices evolve. Furthermore, he argued, early life experiences set the foundation of the habitus for life. We continue to grow and learn throughout our lives, but, while our objective reality and capital holdings may change, our dispositions and worldviews



tend not to. The extent to which this proposition is true may be debatable, but the crux of the idea is that it is through cognitive processes, both the internalization of cultural ideas and the post hoc reflection and learning gained through interaction with the material world and other people, that patterns of action are continuously reproduced and less often changed.

In sum, Bourdieu's theory does a decent job of addressing classical and contemporary concerns about social action and social structure. Still contemporary theorists have found much to improve upon and have offered important conceptualizations of social action. A synthesis of Bourdieu's theory of social action, or practice, with the improvements offered by contemporary theorists leaves us with a first set of propositions:

*Proposition 1: Individuals use forms of capital (economic, social, cultural, and symbolic), like resources, to compete for legitimacy or social power within specific fields of play.*

*Proposition 2: Individuals act in ways that tend to maximize social power or legitimacy. Action is largely unconscious and based upon internalized, collective cultural strategies of action, that is, those functionally best for the overall group.*

*Proposition 3: Social positions and related worldviews are basically represented by particular volumes and arrangements of capital forms that tend to be reproduced through structured social action (or practices). Changes in capital structure may lead to changes in social position but are bound or constrained by limitations of other capital holdings, especially the habitus as set early in life.*

*Proposition 4: Culture influences social action in different ways. Cultural logics are internalized early in life and held in the habitus. Individuals use culture as a resource, like other forms of capital, to compete for legitimacy within specific fields of play. However, the use or manipulation of institutional logics is constrained by what can reasonably be justified in terms of practical dilemmas to which institutional logics are tied.*

*Proposition 5: Economic capital is the most important form of capital for predicting action, but cultural capital is the great leveler and becoming increasingly important in modern societies. Of particular importance is the habitus, or worldview, for predictions of social action.*

There are two additional areas of weakness in Bourdieu's theory that need to be addressed in particular for my study of gender and entrepreneurship across countries.

Bourdieu gave very little thought to the concept of gender and little consideration to the

concept of crosscultural comparison is his monolithic body of theory. The next two sections draw on two theories that help fill in these holes. The first is status expectations state theory and the second is eco-evolutionary theories of society.

## BRINGING IN GENDER

Feminist scholars have argued that gender is omni-present – that is, present in every interaction and in every social arrangement – and that being female is a less valued status in every society (de Beauvoir 1952; Foschi 2000; Ortner 1996; Ridgeway 1992). Despite the limited play of gender in aforementioned theories of social action, Bourdieu, for one, explicitly recognized this feminist perspective in his later writings where he described gender as a universal organizing principle in all societies (Swartz 1997). If Bourdieu, indeed, thought this way, then, how can we understand the concept of gender as a universal organizing principle in terms of Bourdieu's forms of capital?

Bourdieu (2001) essentially recognized gender as a binary universal organizing principle, a deep symbolic logic that orders definitions of legitimacy within the field of power. More generally, McCall (1992) observed that Bourdieu's work on gender centered around three principle ideas – social order, social positions, and dispositions – and rightly so. To place Bourdieu's conceptualization into some sort of context, let us consider how his conceptualization relates to popular debates about the concept of gender in the social sciences.

Gender scholars have long debated the nature of gender as a construct on two points. The first part of the debate concerns the basis of gender – is it a result of basic biological differences or a social construction? The idea of gender as a social construction is clear in Bourdieu's definition of gender as a “deep symbolic logic.” However, the extent to which biology serves as a marker or symbol of that essential gender logic is less clear in Bourdieu's practice theory. Dispositions or the habitus, for example, are “embodied” in

Bourdieu's theory. However, Bourdieu's sense of embodiment was generally intended to reflect the internalization of culture and the perhaps the extent to which the habitus or the mind is a reflection of physical biology. It is less clear that Bourdieu understood the sense of embodiment that merges from the physical experience of social life as the member of a social group marked by less valued physical characteristics, such as the female body or (dark) skin color. In this way, I tend to interpret Bourdieu's understanding of gender as largely a social construction, with some implicit understanding that dispositions may have biological sources.

The second part of the debate concerns the binary nature of the construction. Bourdieu's position on this point is clear and one I share. Except for a few very rare and largely historical instances, gender is found universally to be a binary social construction. Gender scholars, especially those who study sexuality, may prefer a continuum view of gender with arbitrary cutoffs defining the various categories (e.g., male, female, male-female, female-male). However, for the purposes of most social research and most social life, the binary construction is the most suitable conceptualization. It is simply the way most people think, at least initially, about gender – male or female.

In terms of social order or value, there is no debate among gender scholars. Women are "the second sex" as Simone de Beauvoir (1952) so aptly put it. Research from the field of anthropology confirms that societies are typically patriarchal, in the sense that males are valued more than females (Ortner 1996). In fact, Ortner reports, little or no anthropologic evidence exists of gender egalitarian societies. Matriarchal societies may be more egalitarian than patriarchies, but these differences are a matter of social organization, or forms of practice and technology, that allow women to claim more relative status within the overarching field of power. Despite stronger female claims to power/legitimacy, males still tend to hold higher levels of overall legitimacy in matriarchal cultures.

The higher rank of males over females has been documented extensively in Western feminist literature over the course of the 20<sup>th</sup> century. Studies of Western culture, for example, have revealed the extent to which women are objectified and infantilized in popular media directed at both male and female audiences (Faludi 1991; Friedan 1963; Wolf 1991). Research from the fields of anthropology and psychology further confirms the existence of binary constructions of males and females, with greater social value attached to male ways of thinking, feeling, and doing (Bourdieu 2001; Ortner 1996; Williams and Best 1990). Male culture (or male ways of thinking, feeling, and doing) has been further characterized as centered largely on principles of competition and economic/material success, while female culture (or female ways of thinking, feeling, and doing) has been characterized as centered on principles of connection, and self-sacrifice, and relational success (Chodorow 1978; Tannen 1990).

Bourdieu goes on to argue that females hold secondary positions to males across all social locations within a given society – in other words, controlling for other forms of capital, women have smaller holdings of symbolic capital. In fact, gender studies have revealed significant differences in the access and control over all forms of capital – economic, social, cultural, and symbolic capital. These differences, or constraints, are particularly apparent in culturally oppressive societies where women have fewer economic and political rights, where they face restrictions on how they interact with others (e.g., who they talk to or work with), access and control over education and other sources of cultural capital, such as television and printed media, and where female work takes place in less visible contexts, e.g., behind closed doors. What Bourdieu fails to elaborate on, and even feminist reviews of Bourdieu's theory seem to miss, is the fact that "being male" is generally an advantage, especially in male-type fields of practice, like paid work. In other words, gender is a possible source, or penalty, of symbolic capital or legitimacy. One good example of this non-material advantage is seen in Christine Williams' analysis of the glass ceiling and glass escalator

phenomena (Williams 1989; Williams 1992; Williams 1995). Williams found that men hold promotion advantages in both male- and female-type occupations. In male-type occupations, women encounter barriers to promotion: whereas, in female-type occupations such as nursing and elementary education, men tend to be promoted out of the lower ranks into administrative positions more quickly.

Third, Bourdieu argued that females hold embodied dispositions (i.e., habitus or embodied cultural capital) that serve to reproduce the existing social order. Bourdieu referred to this process of reproduction in many ways, as symbolic domination, manipulation or force. He wrote that, "Symbolic force is a form of power that is exerted on bodies directly... without any physical constraint... works only on the basis of dispositions deposited like springs at the deepest level of the body" (Bourdieu 1998: 38). These dispositions, he went on to say, direct male and female practices in ways that reproduce the existing social order. On this point, he stated that:

The regularities of the physical order and the social order impose and inculcate dispositions by excluding women from the noblest tasks..., by designating inferior places for them..., by teaching them how to hold their bodies..., by assigning them menial and drudging tasks, and more generally, by taking advantage, in accordance with the fundamental presuppositions, of biological differences, which thus appear to be at the basis of social difference." (Bourdieu 1998: 24).

This theory vividly recalls Betty Friedan's argument in the *Feminine Mystique* (1963), where she proposed that American society was setting women up for failure by convincing them that motherhood and feminine ideals of beauty and practice hold all the potential for self-fulfillment that women need. Bourdieu seems to make the same argument for the reproduction of gender inequality and of the broader class structure for that matter. This argument captures the unconscious ways in which actors consent to their subordination and work with the existing social structure to reproduce their own disadvantage. He basically argued that consent is achieved through mental programming that directs female practices

in unconscious ways, resulting in lower capital holdings and reproducing the secondary position of women. Not only are stereotypically female ways of thinking, feeling, and doing less valued in the broader social space, but to behave otherwise, to not conform, risks negative sanctions, effectively penalties of social legitimacy, or, near-term social failure. Research from the field of work and gender confirms this proposition. Kay and Hagan (1998) found that, in cases where worldviews were out of synch with firm monetary goals, female lawyers experienced much poorer results of promotion (i.e., partnership) compared to their male peers (Kay and Hagan 1998). Clearly, then, the extent to which women are disadvantaged in any given cultural context further depends on the extent to which the edicts of female culture directly compete with those of the field of practice.

It is worthwhile to note, also, that Bourdieu saw the original division of labor between the sexes as natural and functional. He has received some stern criticism from feminists on this point (Adkins 2004). The value in his theory, however, is that while the division of labor may be functional or natural, the meanings and values attached to the forms of labor are cultural constructions. In this sense then, Bourdieu viewed gender inequality as a social construction. He does not address directly whether there is any possibility of resolution or total egalitarianism, but he does hold out hope for change through a process of “cognitive revolution.” For Bourdieu, culture is created by and operates through the human mind. Symbolic systems are, in effect, “instruments of domination” (Swartz 1997) and cognition is the process through which these instruments function. Just as threats of physical violence or coercion change behavior through the mind, so can the demands of a given social context.

Missing from Bourdieu’s work on gender inequality is an account of how gender influences social action or, more explicitly, a mechanistic theory of gendered cognition. Bourdieu has proposed that we hold different schemas of symbolic meaning in our minds and that these cognitive maps direct the ways in which we use available resources to act,

but how does gender affect the choices/assessments actors make? For this answer, I turn to theory and research from the psychological study of status expectation states. Findings from this body of research and theory show that status characteristics, such as gender, serve as important sources of information in decision-making and interaction (Foschi 1996; Foschi 2000; Ridgeway 1991; Ridgeway 1992; Ridgeway and Smith-Lovin 1999; Webster and Hysom 1998; Webster, Whitmeyer, and Rashotte 2004). Status expectations states research persuasively demonstrates how social definitions of legitimacy and gender work through the mind to organize interactions and to shape expectations and evaluations of others. Foschi (1996) defined a status characteristic as “any valued attribute implying task competence” – i.e., any social symbol from a special skill to a general attribute, such as gender, that is relevant to the task, or, situation at hand. The central insight of status expectations state theory is that individuals use cultural beliefs linked to status characteristics, to form prejudgments, or, expectations of competency for relevant others on a given task set in ways that shape the interaction itself (Ridgeway 1992; Ridgeway & Smith-Lovin 1999). It is strongly related to ideas of self-fulfilling prophecy and double standards of competence.

Status characteristics, like gender, serve as one of many sources of information that individuals draw on in order to anticipate or evaluate a given performance. The fact is that we all rely heavily on the use of social markers (such as gender, race, class, sexual orientation, even weight and height) to help us quickly assess a person in a particular situation, in order to guide the interaction. In this way, we can best predict how to address the person -- the tone of voice, the words, the body language -- that will best communicate our desired ends. That is, of course, an idealized version of how social categories might serve us. The greater point is that we need these social schemas, these rules linked to status characteristics, to help us get along with others and to function in very basic ways. Social categories help us organize the world, streamline our thinking, and enable us to act

quickly and in mostly unconscious, but very efficient, ways. Gender, it turns out, is a particularly powerful status characteristic, resulting in highly predictable expectations and evaluations, although perhaps not always in the long term interests of a given status group (Foschi 2000; Ridgeway and Smith-Lovin 1999).

As useful as such status characteristics are for helping us understand the world, they are imperfect and, therefore thankfully, not the only place we look for information in our attempts to anticipate or evaluate performances. There are two other important sources of information – task-related schemas and experience. Gender, for example, is weighted with other salient status characteristics, by relevance to the task, to form an aggregate performance expectation for one actor relative to another (Ridgeway and Smith-Lovin 1999). Ridgeway and Smith-Lovin (1999) argued that there are few environments where gender is not salient. They noted specifically that gender becomes salient in settings when it either differentiates actors or when a task is gender-linked. In other words, gender becomes salient in every mixed-group interaction and when the gender-linkage of the task is at odds with the gender of the actor.

In addition to status characteristics and task-related stereotypes, individual experience and learning also provide important information for future expectations and evaluations. Experience can confirm or deny reality, but cultural beliefs still prove to be fairly inert or rigid. Research has proven this to be particularly true for gender related evaluations and expectations. In controlled experimental settings, women, it seems, have to outperform expectations of at least double the rate of men on male-type tasks in order to be evaluated as competent (Foschi 2000; Foschi, Lai, and Sigerson 1994). Thus we have proof that double standards do operate, at least under controlled conditions with limited information. In the real world, of course, we tend to have a lot more information available.

Status expectations state theory fits very well with Bourdieu's theory of practice in several ways. First, like Bourdieu, expectations state theorists argue that the cultural



structures are held in the mind and are used by social actors to make sense of the world. Status expectations state theory, of course, takes this cognitive argument even further by proposing a theory of the cognitive process behind the use of these schemas of social categories and has produced controlled experimental evidence to support it. Findings show that individuals assign different levels of expected competency depending on the gender of the performer (Foschi 2000; Ridgeway and Smith-Lovin 1999; Webster, Whitmeyer, and Rashotte 2004). In this way, the evidence demonstrates how the process of setting expectations or evaluating performances involves a gender-based award or, more often, penalty of legitimacy, independent of other possible sources of information. As such, status expectations state theory gives gender, and other status characteristics, a central place in the operation of the habitus.

Second, Bourdieu proposed that central to the social fact of gender difference and inequality is the gendered nature of the habitus – that men and women tend to hold very different worldviews which lead to different social actions or practices. Status expectations state theory does not argue this point exactly, but research from this school of theory has identified the gender of the observer as an important predictor of prejudgments or evaluations. In fact, studies of how gendered expectations states may be changing have shown that college-age females are much more egalitarian, or gender-neutral, in their expectations of competency (Foschi, Lai, and Sigerson 1994). More generally, expectations state theory identifies the fit between the gender of the performer and the gender-link of the task as critical to process of expectation setting. This idea fits in well with Bourdieu's ideas on how the definitions of legitimacy will differ across fields of play and inspires an understanding of how gender might influence social action. In effect, definitions of legitimacy vary in status expectations theory according to the salience of the status characteristic(s) to the goal-oriented task at hand. Under such conditions of salience, the reward/loss of legitimacy may be a product of the fit between the gender of the actor and the

field of practice. In terms of a discriminatory outcome, women may face strict penalties of legitimacy in the competition for male-linked occupational positions, particularly in the case of worldviews, and ultimately practices, that contradict dominant views. In terms of social action, the conditions of fit between gendered habitus and prevailing field definitions may well influence perceptions of opportunities and self-assessments relative to those perceptions.

Third, and finally, the importance of education and learning are central to Bourdieu's views on social change. Along these lines, status expectations state theory shows how new information can result in adjustments to the basic schemas. Research has shown that subjects will adjust their expectations of performance based on confirmatory or non-confirmatory experiences. Expectations state findings have also shown, however, that basic expectations or perceptions are incredibly resilient, such that individuals will more readily use information that confirms previous expectations than information that disconfirms those expectations. The result for gender assessments are double standards of competency that are relatively resistant to change (Foschi, Lai, and Sigerson 1994).

The essential insights for theorizing the effect of gender on social action are threefold. First practice theory suggests that the habitus is gendered and as such will result in a self-perpetuating cycle of lower total capital for women. Second, practice theory combines with status expectations state theory to suggest further that gender as a status characteristic is a potential source/penalty of symbolic capital or legitimacy, explaining discrimination and predicting self-assessment relative to the gender characterization of a particular task. With the very general concept of status as a source of social reward, expectations state theory offers the potential to extend practice theory to other social status characteristics. Third, a status expectations state extension to practice theory further leads us to expect that while being female will hold a lower value generally in the overarching field of power, the value of gender as a source of symbolic capital may vary across fields of

practice. This notion of the importance of the fit between the field definitions of legitimacy and the ascribed characteristics of actors reflects the concept of *salience* as trigger for the relevance of gender, or other status characteristics, to social action in a particular field of practice.

In sum, my synthesis of feminist views of gender, Bourdieu's practice theory, and status expectations state theory results in the following propositions:

*Proposition 6: Status characteristics, such as gender and race, will result in lower total capital for women and other disadvantaged social groups in the overarching field of power, dependent upon the power and claims to status allowed by existing cultural definitions and patterns of practice.*

*Proposition 7: Status characteristics, such as gender and race, will result in differential rewards of legitimacy in particular fields of play and in the context of particular occupations/industries (task sets), according to the field-specific definitions of legitimacy.*

*Proposition 8: The extent to which a given individual experiences a reward or penalty of symbolic capital will depend on the salience of their sum of status characteristics to the task and field of play. For women, this generally results in a wage penalty across occupations, but more so in occupations or industries that are culturally defined as more appropriate for men.*

## CONCEPTUALIZING COUNTRY DIFFERENCES

As much insight as Bourdieu has provided for understandings of how social systems tend to reproduce themselves, his view of society as a set of social processes is really a single-system view. Bourdieu's theory was not designed to explain cross-system, or, cross-country variation. We can, however, draw on the implicit notion that practices, symbolic systems, and objective conditions can vary across social systems. In this way practice theory opens the door for a consideration of how the material, social, and cultural conditions interact to produce patterns of social action across social systems. In order to develop a practice theory of societal variation, though, we need to look to other macro theories of social differentiation and inequality.

There were many macro-comparative theories of society available for consideration for this part of the project. In his review and synthesis of prior theories for the development of his evolutionary view of human sociality, Sanderson (2001) identified eight basic theoretical views – functionalism, two conflict theory views (Marxian and Weberian), two social constructionist views (symbolic interactionism, ethnomethodology), exchange/rational choice theory, sociobiology, and cultural materialism. Lenski (2005) also considered prior and alternative views to his own theoretical view of societal variation, adding at least 3 substantive perspectives to the list of possible alternatives – Parsonian evolutionary theory, world systems theory and historical particularism. All these perspectives, I believe, offer important ideas about how social systems differ from one another. For the purpose of this thesis, however, Lenski's evolutionary theory offers the most effective macro-comparative view of social stratification and patterns of social action. For one, Lenski's evolutionary theory synthesizes many of the key insights of these prior theories, combining notions of how cultural, social, and material forces shape social processes in ways that increase and decrease levels of inequality experienced by individuals within a given place and time.

For Lenski, the oversights of prior and alternative theories are largely found in the absence of biology and environment from the list of determinants, as well as in the short-term view of historical change (Lenski 1966; Lenski 2005; Sanderson 2001). In an attempt to synthesize such important concepts as material conditions (including biology), cultural beliefs and practices, levels of inequality, and social change, Lenski developed a complex theory of the processes and stages of societal evolution and corresponding levels of social inequality. He proposed a typology of 5 societal forms based on the productive/subsistence technologies used: (1) hunting and gathering; (2) simple horticultural; (3) advanced horticultural; (4) agrarian; and (5) industrial (Lenski 1966; Lenski 2005). Unfortunately for this project, the propositions he offered pertain to differences across these historical subsets of social systems. Most societies studied comparatively by social scientists today are

already in the industrial phase of development. Lenski makes a point to note that the modern conception of the post-industrial society still fits within his industrial subset because of the continued dependence on the same industrial technologies (Lenski 2005). Still I think this theory offers some general wisdom for the prediction of country differences within a given societal subset. The purpose of this section is to explore Lenski's insights.

The evolutionary perspective of societal differences offers at least three distinct contributions for the practice theory view of crossnational variation that I am proposing. The first concerns the importance of material structures at the macro-level for patterns of social behavior. The second is the interplay of cultural and material structures. And the third contribution concerns the role of gender in macro-social change processes and the resulting stratification systems.

First, Lenski's basic argument is that social inequality exists only in the presence of an economic surplus; the existence of which further depends on the dominant forms of productive technology used. Lenski further argues that control over the economic surplus confers "power and privilege" and that those with power, in turn, govern the distribution of the economic surplus. This string of ideas is pretty straight forward: societies can only distribute unequally what they have. Importantly, Lenski tested his theory of social stratification and social evolution and found that class inequality is indeed tied to form of (subsistence) technology (Lenski 1966). I further propose that the size of the economic surplus is an important determinant of societal differences and tied to the technologies and very probably the culture among countries that share similar forms of subsistence/productive technologies.

Building on Lenski's early work, Turner suggested four determinants of societal differences – population pressures, centralization of power, productive systems (including physical capital, technology, and human capital), and distribution systems (Turner 2004). With this typology, Turner highlights the importance of material structures other than

technology for social patterns. Importantly, he sets distribution systems apart from physical structures and technology as a determinant of societal differences in and of itself. I believe Lenski's theory implies as much, but Turner's conceptualization more effectively dramatizes my point. I propose that the level of income inequality within a given society determines the leverage that individual members can exert in the competition for a share of the economic surplus. To put it in more Marxian terms, the greater the income stratification, the more power the owners/managers of production have and the less power the workers have for control over the economic surplus. Thus, higher levels of income inequality influence patterns of social action through processes of cumulative advantage and disadvantage, especially for economic behavior.

Second, culture plays a central role in the production and reproduction of inequality. In his most recent work, Lenski identified a set of 6 determinants that best characterize any given society: (1) biological systems of information; (2) bio-physical environment; (3) socio-cultural environment; (4) technology; (5) social organization; and (6) ideology (Lenski 2005). The last three determinants Lenski treated as elements of cultural systems of information. Of the three, technology he argues appears to have been "the most important ... by magnitude of impact ... on the life of human societies." (Lenski 2005: 63). In fact, Lenski defined technology as "information about the ways in which the resources of the environment may be used to satisfy human needs and desires" (Lenski 2005: 63). In this sense, then, of technology as a cultural product or practice, the importance of culture for determining social differences and in driving social change is immediately central to Lenski's theory of social inequality.

But what is technology? I argue that technology is a cultural production, a set of practices, forms of organization, or tools that represents a way of life, dependent to some extent upon the material environment, but ultimately a human invention that mediates the reliance of humankind on nature. It is in this way that I see the fit between practice theory

and an evolutionary view of society. Like practice theory, Lenski's evolutionary theory not only finds a place for both culture and material conditions as change agents, but also places technology or practice (that is, ways of doing things) at the center of the explanation of patterns of inequality. Lenski himself might not be so comfortable with my interpretation, of course. He recently drew a very clear distinction between his materialist evolutionary view and Parson's much more normative evolutionary view (Lenski 2005). My argument is that there is a very fine line between soft and hard versions of technology. In fact, just like a computer system, each form guides the functioning of the other and neither can work alone.

Third, gender, too, has been recognized as an important source of difference and inequality in ecological-evolutionary theory. This view tends towards a mainly biological and functional treatment of gender, but Lenski, for one, recognized the importance of physical and cultural technologies (e.g., social arrangements like domestic division of labor) for limiting/expanding female economic participation, thus power. In particular, he cites the importance of reproductive technologies for releasing women from biological and functional destiny, thus expanding possibilities for economic participation (Lenski 2005).

Unfortunately, the limits of Lenski's perhaps overly parsimonious comparative model of societal types hold serious implications for the study of class inequalities as well as gender inequality. As Blumberg found in her research, Lenski's typology is so broad that it can miss important characteristics about the relationship between technology and gender inequality (Blumberg 2004). The level and character of gender inequality can vary extensively within any one of the given types of societies. For example, Blumberg's (2004) findings suggest that the *form* of technology (i.e., rice production) matters because the more labor intensive forms give women important economic roles, boosting female control over the economic surplus, while the more capital intensive forms of rice production decrease women's economic roles, thus providing the power-holders (typically men) more direct

control over the economic surplus. In this way, evolutionary theory may have trouble predicting differences between societies that share a common technological structure.

Another important limitation of Lenski's ecological-evolutionary view concerns the lack of theory linking structure and agency, like the socio-cultural process that Bourdieu's theory proposes. Evolutionary theorists have spent a great deal of time developing lists of determinants and articulating theories about the ways in which these determinants impact societies directly and indirectly through interaction with other determinants at the macro-level. And while they may clearly state assumptions about the ways individuals act and why they do so, there is little discussion of how social processes figure into the picture, i.e., how these determinants actually influence social action at the individual level. The importance of social networks, for example, is largely underdeveloped. The same is true for theorizing on cognition, although to a lesser extent as notions of sociobiology are worked into the overall body of theory (see Sanderson 2001). This state of affairs is understandable given that the general focus has been on the processes that create different material and social environments across countries rather than on the processes that create or recreate differences between individual members. However, there is a definite opportunity for more theorizing on the within-society determinants of social action within the ecological-evolutionary framework.

There is at least one work by an evolutionary theorist that attempts to explain these intermediate processes and how over the course of human history they have resulted in current patterns of global inequality -- i.e., the dominance of Western civilization (Diamond 2005). The general argument is that the survival of the fittest is a product of the best fit between cultural practices, human biology, and the environment. The result is a somewhat passive view of social transformation and survival. Practice theory, in contrast, offers a more concrete set of predictions and understandings about social action -- that social systems are constructed in ways that tend toward reproduction of existing structures; that



change can result from shifts in material, social, or cultural shifts; and that individuals use various capital factors to act in strategic, if largely unconscious ways, in order to maximize their legitimacy.

In sum, evolutionary theory takes up the macro-view where Bourdieu's single-system theory left off. This body of theory suggests where we might look for important macro-factors in studies of inequality and differences across countries. Culture in the form of ideology, practice, and technology offers one set of possible determinants. Population pressures, national wealth, and distribution systems offer another set of possible factors. To understand exactly how these macro-factors influence individual-level behavior, however, we must consider the processes that link these macro-level contextual factors to individual behavior. Nevertheless, we are left with two final propositions to complete the proposed practice view of social action.

*Proposition 9: Macro-level material structures are important determinants of differences in social behavior. National economic surplus is an important predictor of overall levels of income stratification. In terms of social structures, the level of income inequality is, in itself, an important predictor of differential outcomes, insofar as the greater the degree of social inequality, the greater the leverage of the power holders to accumulate advantage and vice versa.*

*Proposition 10: Culture at the macro-level is an important determinant of social behavior, especially as it moves from softer forms, such as ideology and forms of social organization to its more objectified form such as physical technology.*

## SUMMARY

In sum, Bourdieu's theory of practice offers a very powerful conceptual framework for the study of social action. It provides a very effective means of introducing and combining those three very important elements of the sociological perspective – ideas, relationships, and power - into studies of human behavior. Moreover, Bourdieu's theory reveals the process through which these three factors influence behavior. Understanding processes is

critical for understanding how factors on all levels of analysis work to influence social action (Reskin 2003).

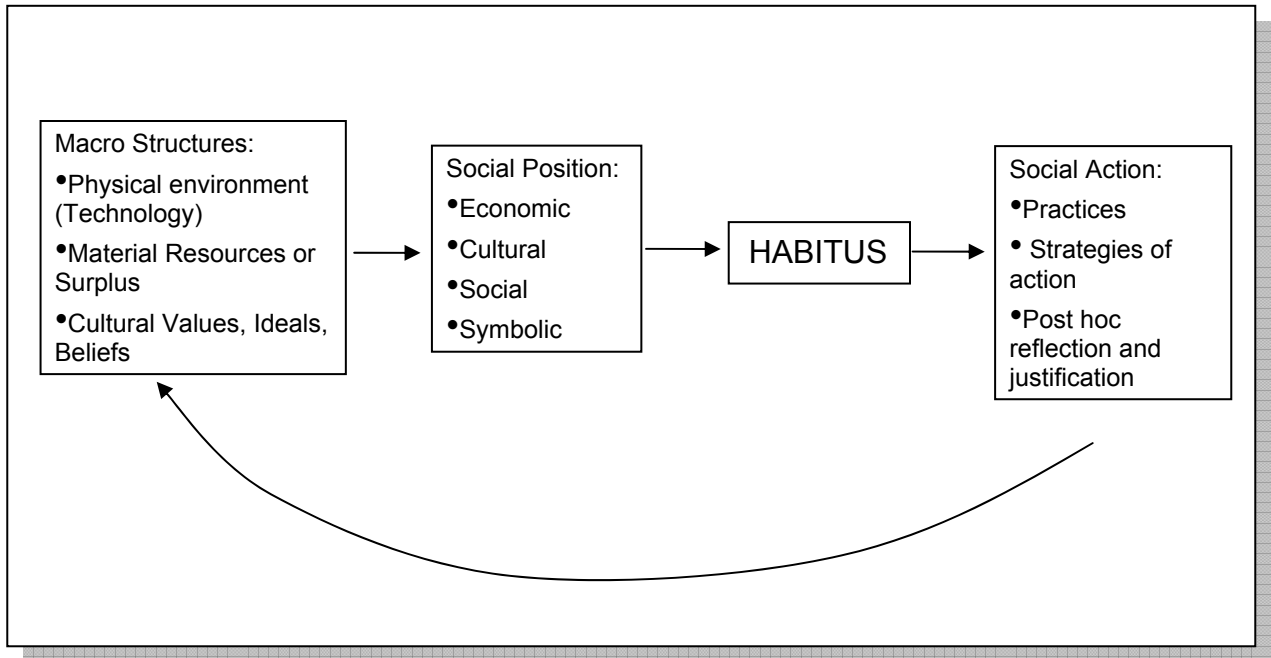
However, there are decided limits to Bourdieu's theory when it comes to predicting patterns across gender and countries. The strength of Bourdieu's theory for the study of gender includes a definition of gender as a universal logic with functional origins deeply-embedded in the habitus, which places a higher general value on being male. The result is a gendered habitus that results in the pursuit of different strategies and consequently the reproduction of different structures of capital and the existing social order. In this sense, I expect to find that not only will women and men tend to hold different compositions and levels of total capital in a given field of play, but that they will hold different worldviews as well. Following Bourdieu's general theory, these different worldviews will lead women to pursue different actions, or practices, that will tend to reproduce their circumstances. I have argued that the extension of Bourdieu's basic theory of gender with key propositions from status expectation states theory allows the characterization of gender (and other status characteristics) as a source/penalty of legitimacy or symbolic capital, depending on the task-linked, or field-specific, definitions of legitimacy.

I have further shown how Lenski's evolutionary view of societal variation allows for the prediction of crossnational differences. This perspective draws our attention to the importance of environmental factors, such as economic surplus, cultural legitimacy, technology, and income inequality. Specifically, Lenski's early theory argued that cultural practice in the form of technology has driven the growth of economic surpluses which, in turn, has resulted in varying levels of inequality. Gender theorists, such as Blumberg, Huber, and Chafetz, working from the evolutionary perspective have further argued for the importance of technology as a determinant of gender inequality (Blumberg 2004; Chafetz 2004; Huber 2004). Blumberg (2004) in particular has shown that lower rates of gender inequality are correlated with the dominance of collective technologies that provide women

with stronger economic roles. In effect, we may expect to find significant differences in rates of gender difference/inequality across countries that differ significantly in terms of national wealth, levels of income inequality, and cultural practices (technologies) limit/open women's access to legitimate economic roles.

The framework I develop here (see Figure 4) ultimately results in the following expectations: (1) that macro-level factors such as national wealth, norms and ideals of cultural practices (e.g., ideal and objective forms of technology) and the existing distribution system (e.g., income inequality) will result in different configurations of capital and different worldviews, or perceptions, across status groups and across countries. I further theorize that culture, working through the habitus in the form of dispositions, perceptions, and worldviews, will serve as a key predictor of social and will thus play a central role in the process of social reproduction and ultimately in processes of social change. I expect that the rules governing the assignment of legitimacy, or prestige, will vary across gender and across fields of practice and across nations, resulting in different holdings of capital (volume and type) and different rules concerning the legitimate usage for men and women.

Figure 4: Research Model for a Practice Theory View of Structured Social Action



In essence, I am arguing that women will typically find themselves in different positions compared to men, but that even sharing the same capital holdings, women will face different social rules about how to use those resources and will thus tend to behave differently. In any study of gendered behavior, then, I would expect to find differences in capital holdings and practices. In particular, I would expect to find differences in cognition and communication (habitus and social capital). For, as Bourdieu argued, symbolic systems are learned (and enforced, I would add) through social relationships and work through the habitus to affect action. Furthermore, I would expect to find gender differences in definitions of legitimacy, or symbolic value, in the field of power and to varying degrees across specific fields of practice that generally favor men.

In some sense, the practice theory view I am proposing here produces arguments very similar to institutional theory. The difference is that I am not arguing against the importance of material structures or, in fact, against the existence of rational decision-

making. Rather I am suggesting that actors are intendedly rational, but that, while decision-making may seem conscious and rational, most inputs are unconscious. Additionally, while I recognized that money and other economic factors are important determinants of many behaviors, I also see that the returns of legitimacy to wealth vary across social positions. In essence, what is deemed “rational” is better assessed from the standpoint of the actor – that is, better predicted in terms of the returns of legitimacy for a given social position rather than according to value-free economic returns. And finally, how individuals behave in response to changing material conditions has everything to do with prevailing cultural understandings defined by the dominant classes, but internalized in the habitus in the sense of a Marxian false consciousness or Parson’s functional roles, and acted upon accordingly.

## CHAPTER 3

### GENDERED CAPITAL AND BUSINESS START-UP

In chapter one, I described the current state of entrepreneurship research and theory. To summarize briefly, the existing research is fragmented and often contradictory and suffers from a distinct bias towards structural explanations and male-type businesses and experiences. Limitations in data quality and design exacerbate the situation. Behind these problems lies the main challenge facing the study of entrepreneurship today – the search for a comprehensive, coherent theory of entrepreneurship that bridges current divisions in perspective, methods, and conclusions that bias privileged views. We need a theory that offers a view of how culture, social, and material forces combine to structure entrepreneurship and lead to processes of reproduction and change.

Some scholars would argue against the need for a comprehensive theory of entrepreneurship. There are pros and cons to all levels of theorizing. Sociologists have long struggled with the high levels of abstraction in efforts to empirically test the validity of grand theories, such as that produced by Marx, Weber, Durkheim and others. This struggle was the main impetus behind Robert Merton's invention of the term "middle-range theory" (Merton 1968). In my mind, however, there is still an important place in sociology for grand theories of social life. On one hand, grand theory capitalizes on parsimony. Reductive schemas are simply easier to remember and, for that reason, ultimately more useful for framing issues. Weber made a similar argument in his writings on the importance of ideal

types as conceptual tools (Ritzer 2000). Secondly, the big picture view of grand theory helps guide the development, testing and synthesis of middle-range and micro-theories.

On the other hand, what we gain in an easy-to-remember general theoretical framework, we may lose in terms of testability. Sanderson (2001) notes that, with few exceptions, sociologists have struggled a great deal to bridge the gap between abstract general theory and empirical testing (Sanderson 2001). The ones that succeed, he argues, have produced the most brilliant theory. Sanderson includes sociologists like Randall Collins and Theda Skocpol in the group of exceptions. I would definitely add Bourdieu and Lenski in this group. The secret to the development of strong social theory according to Sanderson (2001), and Durkheim long before, is to stay connected to the empirical study of real world social issues. Therein lies the opportunity for a comprehensive theory of entrepreneurship, especially one grounded on the empirical efforts and theories of those who have gone before.

In the previous chapter I offered a practice theory view, inspired largely by Bourdieu's theory of structured social action, status expectations state theory, and Lenski's evolutionary theory, as a means of better incorporating basic sociological principles – ideas relationships and power – into studies of human behavior. The main goal of this practice theory view is to reveal the ways in which social, cultural, and material systems combine to reproduce differential outcomes in behaviors across social groups. I use the set of 10 propositions developed in the last chapter to guide the development of a set of hypotheses about gender patterns of entrepreneurship across countries in this chapter. First I define entrepreneurship and elaborate a practice theory view of the decision to start a business. Next, I review the entrepreneurship literature as it applies to the key predictors articulated in the practice theory propositions. And, finally, I propose a set of five hypotheses to guide the test of this practice theory of entrepreneurship.

## WHY INDIVIDUALS START BUSINESSES

The concept of entrepreneurship has been constructed in many different ways. Reynolds (1991) summarizes the different definitions well in three categories of perspective – (1) as a set of traits or mindsets in the tradition of psychologists like McClelland; (2) as a product of a particular context of social, material, and cultural conditions; and (3) the nexus, or intersection of individual and opportunity (Reynolds 1991). As discussed in the first chapter, this third view comes closest to an integrated theoretical approach to the study of entrepreneurship -- that is, a theoretical view sensitive to the combined influence of social, cultural, and material factors on business start-up. I view entrepreneurship very generally as a goal-oriented, productive activity within the economic field of practice – i.e., a practice or habituated strategy of action that is legitimated and chosen according to social definitions of status appropriate behaviors and competencies. To be more specific, I define entrepreneurship as the activity of business creation in its broadest sense, including sole proprietorships and businesses that start with multiple proprietors and/or employees. All forms of business creation share some common traits (Aldrich and Ruef 2006). All forms involve the goal of the exchange of product or service for pay. All forms involve the mobilization of resources in order to participate independently and directly in marketplace transactions. All forms of business creation involve the establishment of boundaries and some form of organizational identity. And all nascent business owners, or entrepreneurs, choose the activity of entrepreneurship because the option seems legitimate and for the most part familiar. It is simply “what one does” given a certain set of circumstances. In this sense, entrepreneurship is a habituated strategy of action.

This notion of entrepreneurship as a *habituated strategy of action* fits well with other conceptions from the field of entrepreneurship where it is typically viewed as an activity pursued by actors in competition for economic capital. Early conceptions of entrepreneurship, such as those advanced by Max Weber and Joseph Schumpeter,



emphasized the functional aspects of entrepreneurship for society -- wealth creation and innovation. However, as Stinchcombe and others would later observe, individuals create businesses for a variety of reasons. Stinchcombe, for one, emphasized the importance of resource mobilization, risk-taking, and group goals for the individual decision to start a business (Stinchcombe 1965). It is this sense of the importance of social context and individual preferences exactly that makes a practice theory view of social action such a good fit for the study of entrepreneurship.

People start businesses for a variety of reasons. Intuitively, scholars of entrepreneurship have understood that these reasons vary across groups, but substantiating such a claim with empirical evidence has proven elusive. Research on motivations for starting a business, for example, has revealed little difference between men and women entrepreneurs (Brush 1992; Carter 1997). The most commonly reported motivation is autonomy or independence. However, autonomy means something different to individuals in different social positions. I believe a practice theory view will help illuminate this observation.

My practice theory conception of entrepreneurship posits that people adopt entrepreneurship as a strategy of action in the economic field of practice in the interest of maximizing their legitimacy within the overarching field of power. This theoretical view further suggests that the likelihood that an individual will adopt entrepreneurship as an economic strategy of action will depend on the field-specific definitions of legitimacy, especially with regard to the individual's collection of status characteristics and resources. The decision to start a business will be further shaped by social position in terms of the resources available to them, most especially through their particular worldviews. In the most basic sense, people start businesses when it appears to them as an appropriate and very likely successful strategy for maintaining or boosting their social power or legitimacy.

This practice view of entrepreneurship is already well-supported by findings and empirically-based theories of entrepreneurship. For example, while the concept of economic capital has tended to dominate the conversation, the concepts of human capital and, more recently, social capital have been well developed (See Aldrich and Kim forthcoming 2007; Kim, Aldrich, and Keister 2006; Kim and Aldrich 2005). Also, the emphasis on internalized norms, values, and ideals and general dispositions found in the concept of the habitus fits neatly in with research on “cognitive schemas” or “mental maps” developed by researchers on cognition and organizational culture (DiMaggio 1997; Hofstede 2001), as well with conceptualizations of choice versus constraint in studies of women and paid work (Budig 2001; Carr 1996; Gatewood et al. 2003; Jennings and McDougald 2006). The following review develops a practice view of entrepreneurship as a gendered phenomenon and relates this view to current findings on entrepreneurship and gender.

## SYMBOLIC CAPITAL

Practice theory, following Bourdieu, defines symbolic capital as social power or legitimacy in its purest form. Individuals compete for legitimacy or symbolic power within a given field of practice and gain legitimacy (i.e., social approval) by complying with prevailing, field-specific definitions of legitimacy. The fit, then, between the gender of the individual and field-specific definitions of legitimacy is crucial for achieving the most success within a given field of practice because individuals draw on prevailing definitions of legitimacy in their conscious and unconscious selection of the appropriate strategy of action. Therein lies the problem for women within the economic field of practice, particularly in highly masculine-type activities or occupations.

Paid work in general is defined as a highly masculine endeavor. The extent to which particular practices are defined as masculine or feminine varies across occupations, industries, countries and even life course stages (Charles and Grusky 2004; Williams 1992;

Williams and Best 1990). Certainly, within the economic field of practice, entrepreneurship is defined as a *highly* masculine activity across many countries in the world (Ahl 2004; Hurley 1999; Mirchandani 1999), so it is hardly surprising that men are, on average, twice as likely to start a business. Still gender-linked definitions of legitimacy can vary widely across national cultures (Lamont 1992; Lamont 2000), such that it is also not surprising that the gender gap in rates varies across national contexts. The extent to which, and the ways in which, gendered definitions of legitimacy affect capital holdings are less clear. For example, the extent to which we can interpret residual effects of gender as evidence of discrimination, or, coercion versus unaccounted factors influencing self-selection is certainly not apparent. This debate is reflected in studies of motivations to start a business where scholars argue in favor of, or against, the factors that push versus those that pull people into entrepreneurship. Practice theory in my mind clearly places the emphasis on choice and agency, which supports more of a self-selection argument.

## ECONOMIC CAPITAL

Bourdieu defines economic capital as money and property and recognizes that such holdings constitute the most dominant form of capital with the highest conversion rates to symbolic capital. This is especially true within an economic field of practice where, I would argue, definitions of legitimacy tie legitimacy rewards very closely to levels of economic capital. Having at least some level of economic capital is, undoubtedly, the most critical resource for starting any business. Having money, however, is not enough. Knowing what to do with it (cultural capital) is also critical. Having expert advisors (social capital) helps on that account and can also help gain access to more money, for seed or growth. Applying a practice theory view requires an emphasis on the importance of the relationship between economic capital and symbolic capital, as well as the influence of additional forms of capital.

Early studies of women's entrepreneurship suggested that women face stiff barriers in access to financial capital (Brush 1992; Brush 1999; Brush 2004; Cassar 2004; Hisrich and Brush 1984). The findings, however, have been mixed (Brush 1992; Carter 1997; Marlow and Patton 2005). Certainly at the aggregate level women entrepreneurs face barriers to capital. Women business owners tend to start out with less capital – debt and equity - which sets them up for long-term disadvantage as they attempt to grow their businesses (Carter 1997; Carter and Rosa 1998; Marlow and Patton 2005; Verheul and Thurik 2001). Women are more likely to receive capital from individual investors (angels) than from venture capitalists and are less likely to use commercial credit or equity than men (Brush 1999; Carter and Rosa 1998; CWBR 2004; Gatewood et al. 2003; Verheul and Thurik 2001). However, with key controls in place, Carter & Rosa (1998) found that women were actually less likely to experience credit rejection than men.

Most of the gender disadvantage can be explained, of course, by structural inequalities, such as industry location, business age and size, and work experience (Loscocco, Robinson, Hall, and Allen 1991; Verheul and Thurik 2001). Women tend to own businesses in industries where businesses are smaller and younger, require less start up capital, are less profitable and much riskier (Carter 1997; Carter and Rosa 1998; Loscocco and Robinson 1991; Loscocco, Robinson, Hall, and Allen 1991; Verheul and Thurik 2001). Other structural explanations include lower levels of income and savings, lower levels of social capital, and gender discrimination in lending and investment. Self-employment studies have found a distinct class divide among women entering self-employment in the United States. Self-employment, it seems, is a more popular strategy among women with lower levels of household income and with lower levels of human capital (Budig 2001; Carr 1996). Research suggests that women entrepreneurs are less likely to have ties with key financial providers and tend to use their networks very differently (Aldrich 1989; Aldrich, Elam, and Reese 1997). Moreover, Carter & Rosa (1998) found that while structural

differences explained many of the disadvantages women face in access to available capital, they were much more likely than men to be rejected for credit because of family size and lack of business experience.

Cross-national reports on women in micro-enterprise indicate that women in less-developed countries may face even greater barriers to capital than those met by women in the industrialized West (OECD 1998; UN 2000). Chamlee-Wright (1997) described some of the challenges that women in Ghana face. Basic property rights and mediating bodies that ensure the enforcement of contracts are far more critical for women in these countries, where lending institutions are rare, or, unavailable for the kind of necessity-based, or, subsistence entrepreneurship most women do (Chamlee-Wright 1997). In this case, personal savings, household income, and other family assets may be the only forms of financial capital available. Still as some argue is true in Western countries, household income may be differently available to women compared to men (Carter 1997). As such, we would expect that higher levels of household income to correlate with higher rates of entrepreneurship in general. However, research from the field of anthropology suggests that as household income and social status increase, normative expectations for gendered behavior also increase (Ortner 1996).

## CULTURAL CAPITAL

Cultural capital is a critical form of capital in practice theory because it is here that definitions of legitimacy are held and transmitted. Cultural capital constitutes the beliefs and traditions, the ideas and the strategies, that pertain to gender and social behavior (including market behavior). A more general definition, however, is knowledge, or know-how. In Chapter two I discussed three forms of cultural capital. The two concepts most important to the study of entrepreneurship are habitus (dispositions, worldview, perceptions, etc.) and institutionalized cultural capital.

Education and experience, as types of institutionalized cultural capital, play a key role in both practice theory and research on entrepreneurship. Bourdieu viewed education as the great social equalizer and focused much of his own research on the role of formal education in the transmission of cultural capital and the consequent reproduction of existing social structures (Swartz 1997). Education in its institutional form served two primary purposes for Bourdieu. The first was the transmission of the practical knowledge and ideology that shape the habitus. The second, as Bourdieu argued, was that, in modern society, education is predisposed to function as symbolic capital, to be recognized as capital, and to be recognized as legitimate competence (Swartz 1997). In this sense then education and experience provide individuals with knowledge and the dispositions that prepare them for business start-up.

Entrepreneurship research suggests that education is a key predictor of business start-up in the U.S. and around the world (Acs, Arenius, Hay, and Minniti 2005; Aldrich 1999; Aldrich and Ruef 2006; Kim, Aldrich, and Keister 2006). Recent findings further suggest that education and experience (i.e., human capital) are much more important predictors of start-up than economic or other cultural capital factors (Kim, Aldrich, and Keister 2006). As for gender differentials, cross-national research has suggested that education is a stronger overall predictor of women's entrepreneurship than men's. The GEM 2003 team reported that women with more education were more likely to start a business than other women – whereas men with average levels of education were more likely to start businesses than men with higher and lower levels of education (Reynolds, Bygrave, and Autio 2004). Evidence from the United States, however, deviates from this pattern of gender difference. One recent study found that women with less education were more likely to become self-employed and to work part-time hours than men, and women with more education are less likely to enter self-employment (Budig 2001). Such findings suggest that characteristics of

the national environment may have an important influence on the decision to start a business.

These findings on cultural capital also point to the importance of industry and family situation as explanations for gendered rates of start-up. The value of education (and experience) as a social equalizer is closely tied to the types of knowledge gained and to the industries in which the education may be applied. Industry, in effect, can serve as a proxy for the type of education and experience that prospective entrepreneurs have and serves a key role in practice theory. Studies of entrepreneurship have shown that not only are women more likely to own businesses within traditionally female-type industries, characterized by lower returns on capital, less technological innovation, more competitive/risk and by businesses that are younger and smaller and require less start up capital, but that they are also less likely to earn money even within the same industrial subcategories than their male counterparts (Verheul and Thurik 2001). Studies on self-employment have produced similar evidence and have further shown that patterns of sex segregation are more pronounced among the self-employed than among wage earners (Devine 1994). Gendered definitions of legitimacy lead men and women into particular careers and experiences that, in the end, reproduce existing structural differences.

Cultural capital in the sense of the habitus is held in the mind and shapes our beliefs about how the world works, and consequently, our dispositions, tastes, and preferences. A practice theory conceptualization of this type of cultural capital is particularly powerful in that culture (i.e., ways of knowing and thinking) is treated as a resource that structures and liberates as much as the more objectified or institutionalizes types of cultural capital (e.g., knowledge) do. In that respect, gendered definitions of legitimacy constitute cultural capital just as much as education, work experience, and more specialized knowledge about how to start and run a business do. Definitions of legitimacy are held in the habitus and absorbed through institutional settings, such as education and experience. These definitions or

mental schemas do more than simply serve as knowledge about how the world works, but combine with other forms of capital to reproduce themselves (Bourdieu 1986; Bourdieu 1990).

Research shows that even in countries where women enjoy similar levels of education and work experience, women tend to approach business ownership very differently from men (Bird and Brush 2002; Brush 1992). Women choose different industries, different business forms (Budig 2001; Carr 1996; Devine 1994). They apply different founding strategies and are more likely to cite family concerns as important in the decision to start the business (Carter, Williams, and Reynolds 1997; Davies-Netzley 2000; Jennings and McDougald 2006). However, research on motivations to start businesses has suggested that women and men choose entrepreneurship for roughly the same reasons. Autonomy, in fact, appears to be the most important motive in many studies in the industrialized West (Brush 1992; Cromie 1987). That said, it appears obvious that women, especially mothers, may attach very different meanings to the goal of autonomy (Birley and Westhead 1994; Brush 1992; Cromie 1987; Elam 1997; Fischer, Reuber, and Dyke 1993).

Research on management styles further supports these findings. One study in the retail sector showed that, while women may have fewer resources at start-up, they appear to be able to compensate with “broad generalist” founding strategies, making resource-deficiencies a bigger problem for the male population than the female population of retail entrepreneurs (Carter, Williams, and Reynolds 1997). Other research on traits and behaviors such as risk-taking also suggests that women, as more conservative strategists, may have an advantage over men in their approach to founding (Verheul and Thurik 2001). These bits of evidence suggest that, while business processes may be the same, women and men hold different worldviews and adopt strategies that, in some cases, influence business practices and processes quite differently.



In contrast to these findings, however, Cliff et al. (2005) reported findings suggesting that, *ceteris paribus*, gender culture may operate quite independently of business processes to influence entrepreneurship. They found very little evidence of gender differences in the ways men and women run their businesses, but substantial differences in the way they talk about how they run their businesses (Cliff, Langton, and Aldrich 2005). This finding fits well with Swidler's post hoc justification argument that people mostly use (gendered) culture to justify actions they have already taken (Swidler 2001; Swidler 1986) and supports my practice theory view that gender serves as an important determinant of disposition or worldview. In this sense then, the actions of women and men in similar occupational situations and life circumstances may be constrained by the practical dilemmas they face such that they take similar actions, even as they justify or rationalize their decision in different ways, drawing on different cultural toolkits or worldviews (Swidler 2001).

Of course, men and women on average do not start businesses from the same set of circumstances or even expected circumstances – such that cultural ideas about gender appropriate work and life priorities combine with practical dilemmas to create very different patterns of choice. For instance, while definitions of legitimacy governing the field of practice (entrepreneurship) put a high exchange rate on the conversion between economic capital and legitimacy, gendered definitions of legitimacy from the broader social field of power result in a lower exchange rate between legitimacy and economic capital for women. This proposition helps to qualify the perception that women are somehow less serious in their approach to business creation. The bare facts are that for women on average, starting a business with high growth intentions, high innovation characteristics, and high profit potential will not result in the same return on investment, that is, it will not win her the same social approval and legitimacy rewards, especially not if it means putting work ahead of family demands. Men, on the other hand, face more pressure to achieve economic success

because it is, perhaps, the primary means of maximizing their legitimacy. In this sense, men are just as trapped as women are in the web of gendered cultural definitions.

Findings on the importance of family situation further support this picture suggesting that entry into self-employment is closely tied to concerns about work-family balance for women (Budig 2001; Carr 1996; Davies-Netzley 2000; Goffee and Scase 1985; Jennings and McDougald 2006). Findings on motives, network characteristics, education, work experience, even industry and occupation have revealed an association with family situation for women (Budig 2001; Carr 1996; Cromie 1987; Loscocco and Leicht 1993). The differences found are often attributed to choices women make in order to better accommodate family demands or to satisfy innate preferences (Bird and Brush 2002; Brush 1992; Jennings and McDougald 2006) – in other words, a change in economic strategy. Loscocco & Leicht (1993) offer one particularly important conclusion in that children, they say, are experienced as an incentive to fulfill the good provider role for men and for single mothers, suggesting that definitions for legitimacy can vary within gender as well. Social expectations for economic behavior, certainly, can be different for single mothers than for married mothers and unmarried, childless women.

Institutionalized cultural capital in the form of education and work experience may level the playing field and lead slowly to shifts in cultural views, but in some cases may also serve to reinforce gender essentialism in the sense that wage and salary work may offer women more opportunity to maximize their returns to legitimacy. Kay & Hagan (1998) found that the fit between field and individual worldview was more detrimental to women in smaller firms compared to those in larger firms (Kay and Hagan 1998). As long as unpaid family work is defined as an important source of social approval, or legitimacy for women, women will continue to make choices and adopt strategies that allow them to maximize their legitimacy, according to gender-specific definitions of legitimacy.

In sum, gendered cultural capital results in different conceptualizations of and consequently different approaches to entrepreneurship. The pursuit of entrepreneurship as a means of maximizing economic capital is a strategy particularly compatible with male culture, and thus one that may be perceived as more appropriate or realistic for men compared to women, particularly mothers. Consequently, the returns to education, in the form of legitimacy, for women may be higher in wage and salary work than in entrepreneurship. Higher levels of education provide women with types of cultural capital particularly useful in the economic field of practice – that is, capital that pertains to the development of work-related skills and abilities, as well as different conceptualizations of gender-specific definitions of legitimacy.

## SOCIAL CAPITAL

Like cultural capital, social capital is a term used broadly within the field of sociology and suffers the affliction of multiple and conflicting conceptualizations. The proper practice theory definition of social capital is effectively one's social network -- that is, whom one knows. Social capital is considered an important resource for entrepreneurs, for it is through one's social ties that resources can be gathered and mobilized (Aldrich 1989; Aldrich 1999; Lin 2005). Lin, in fact, argues that resources are what constitute social capital as opposed to network ties themselves (Lin 2005). For entrepreneurs, networks can be a very important source of cultural capital or entrepreneurial knowledge and spirit and may significantly increase the likelihood of starting a business (Aldrich 1989; Aldrich and Kim forthcoming 2007; Audretsch and Keilbach 2004; Renzulli, Aldrich, and Moody 2000; Reynolds, Bygrave, and Autio 2004). Previous findings indicate that knowing an entrepreneur significantly increased the likelihood of the decision to start a business (Reynolds, Bygrave, and Autio 2004).

Research on gender differences in network characteristics shows that women share more similarity than difference with their male counterparts (Aldrich, Elam, and Reese 1997). Nonetheless, women entrepreneurs still tend to have networks that are smaller and less diverse compared to men (Aldrich 1989; Renzulli, Aldrich, and Moody 2000). Entrepreneurial founding teams, for example, appear to work on the principle of gender homophily (like attracted to like), effectively leading to the homogeneity of ties - which, in a field dominated by men, puts women at a distinct disadvantage as compared to men (Ruef, Aldrich, and Carter 2003). Moreover, studies on gender and network composition have consistently shown that family situation contributes to the proportion of kin ties for women, that single, childless women have networks most similar to those of the men they work with, and that men are less likely than women to go to their spouses and more likely to turn to key employees for business advice (Aldrich 1989; Aldrich, Reese, and Dubini 1989; Carter and Rosa 1998; Renzulli, Aldrich, and Moody 2000). Life course studies further suggest that as women in particular move through various life stages, their social networks will shift in composition. From a practical standpoint, this means that not only do the levels and labor of kin-keeping shift, but that the composition of individual networks change accordingly. In other words, reference groups change.

Merton's concept of reference groups seems very pertinent to Bourdieu's thinking on the relation of social capital to habitus, though not one he developed for the case of gender differences. Merton argued basically that people make assessments about themselves and others according to the benchmark set by those in their in-group or chosen reference group (Merton and Lazarsfeld 1950). This idea of social networks as important contributors to the notions of self is not new to sociology at all, but is certainly one area of the study of entrepreneurship that has not been studied. In any case, the basic idea that worldviews are constantly negotiated and shaped through social ties highlights the importance of social embeddedness for social outcomes. Measuring gender differences in network

characteristics offers a sense of whom people turn to for ideas and advice when making decisions about how to act in one field or another. Under circumstances of high composition of kin, it may be even more important for women to know an entrepreneur than it is for men.

From a practice theory perspective, family can be a particularly important form of social capital (Swartz 1997). Not only can families provide economic and social capital, but they may also serve as a primary source of cultural capital, especially during the “formative” years, when, Bourdieu argued, the foundation of the habitus is developed (Bourdieu 1990). Research on entrepreneurship and family ties supports this proposition. Recent evidence suggests that not only does having an entrepreneur in the family matter for business start-up, but also that the life course stage at which an individual has a parent engaged in entrepreneurship matters (Aldrich and Kim forthcoming 2007). In their research on occupational inheritance and entrepreneurship in the U.S., Aldrich and Kim find that nascent entrepreneurs draw different types of resources from their parents at different points of the life course. The potential transmission of social and financial capital is most valuable to young adults, whereas the transmission of practical skills and knowledge is more likely during adolescence. The transmission of an “entrepreneurial spirit” occurs much earlier, the authors argue. Preferences for work values, their findings suggest, are developed in childhood, but are a product of both genes and parental influence. Untangling the extent to which later-life work values derive from the absorption of parental work value preferences (e.g., autonomy, flexibility, complexity) or from genetic disposition is difficult, but Aldrich and Kim surmise a 50-50 split based on existing research. The authors further argue that genetic potential may be more or less constrained by the social environment. That is, genetic potential may have a better chance for expression in resource-rich environments, leaving context as more predictive of behavior in impoverished environments.

Networks are set up to manage life demands. The resources that individuals draw from networks are very important for understanding network composition and important to outcomes of entrepreneurship/business activities. The relationships we cultivate are often purposeful – they provide the information and support needed to achieve short-term (daily) and long-term goals in all aspects of life. Networks are particularly important for entrepreneurs and arguably require more management than is true for most wage and salary workers. Entrepreneurs are not necessarily provided with ready set of relationships necessary for success unlike the norm in wage and salary work. Entrepreneurs must, in effect, construct their business networks. For women, particularly those caught in life stages with high levels of family demands, knowing an entrepreneur may be especially unlikely, unless there is one in the family. We still lack a clear understanding of why men and women appear to use social networks so differently. The answer may lie in a less studied area in entrepreneurship -- the “what you know” or “how you see the world” category.

## NATIONAL DIFFERENCES

The practice theory view I propose suggests that, in addition to basic demographic structures, there are 4 macro-level factors likely to influence rates of entrepreneurship – national wealth, national income inequality, national cultural support of entrepreneurship, and national beliefs relating to gender and work roles. This section relates to the final two theoretical propositions developed in the last chapter. The first argues that macro-level material structures, such as national income, productive technologies, and income inequality, are important determinants of social behavior. Previous crossnational research has demonstrated that entrepreneurship participation rates vary across national income levels in clearly patterned ways. Low income countries see the highest rates of participation in entrepreneurship, followed by high income countries, and then middle income countries. This curvilinear relationship has been further deconstructed to reveal that types of

entrepreneurship also vary according to national income level. The high entrepreneurship rates in low wealth countries are explained by the high prevalence of necessity entrepreneurship, while high wealth countries see the highest rates of opportunity entrepreneurship (Acs, Arenius, Hay, and Minniti 2005; Wennekers 2005). Crossnational findings show gender differences in participation rates across national income levels as well. The smallest gender gaps in participation are found in the poorest countries, where entrepreneurship is often the only employment option. In contrast, the largest gender gaps are found in the wealthiest countries (Minniti, Arenius, and Langowitz 2005).

Following Lenski, I argue that the size of the national economic surplus is tied to technology and to dominant forms of practice. Lower income countries, for example, with more early-stage market systems and few large, bureaucratic organizations will necessarily see more entrepreneurship. Small businesses, or micro-enterprises, will be a way of life and, therefore, a widely-known and habituated strategy of action. In contrast, middle income countries will be dominated by large, bureaucratic organizations (with strong employment protections), such that few people will ever gain the experience necessary for the confidence to start a business and fewer will choose to risk the loss of job security for the unknown. The situation in high income countries, I expect, will relate to the changing structure of society as well. High income countries with large, bureaucratic organizations, but few job protections and decreasing relative wage scales, along with tremendous investments in research and development, will see higher rates of entrepreneurship.

Of particular importance to the study of gender and entrepreneurship, I believe, are systems of stratification, or, distribution systems. One unpublished study found a positive association between income inequality and entrepreneurial activity (Lippmann, Davis, and Aldrich 2005). I argue from a practice theory perspective that, while greater levels of inequality may fuel entrepreneurship through competition and the increased chances for economic mobility, it will also result in a loss of market power for the more disadvantaged

members of society – that is, those disadvantaged in terms of class, gender, and other minority statuses. It is very important that we develop better understandings of how entrepreneurship and systems of stratification work, especially in case of gender because, as Lippmann, Davis, and Aldrich (2005) have presented the dilemma: “prevailing patterns in gender inequality might do more to restrict entrepreneurial opportunities than entrepreneurship will do to upset gender inequality in societies.” In fact, sociologists researching gender and self-employment have found evidence of an exaggerated class divide for women compared to men in the United States (Budig 2001; Carr 1996; Devine 1994).

Such findings directly challenge conclusions from the study of entrepreneurship that propose entrepreneurship as a path out of poverty for women or that recommend an “increased tolerance” for income inequality as a policy strategy for countries wishing to stimulate entrepreneurial activity. This policy recommendation came from two GEM reports (Minniti and Arenius 2003; Reynolds, Bygrave, and Autio 2004), but was more recently replaced with a general statement recommending that policies be tailored to the requirements of particular national contexts (Acs, Arenius, Hay, and Minniti 2005; Arenius and Minniti 2005; Minniti, Arenius, and Langowitz 2005). This is a particularly important change of mind, because, as the practice view teaches, in spite of the fact that patterns can be observed on an aggregate level, the influence of social, cultural, and material structures is a local experience.

The importance of cultural variables at the macro-level for predicting rates of social behavior is a rather hotly contested issue (See Hofstede 2002; McSweeney 2002a; McSweeney 2002b). At the macro-level, a practice theory view would suggest that aggregate measures of culture, if specific enough, would correlate with aggregate measures behavior. Recent crossnational evidence has found just that pattern. GEM findings have shown that a supportive national cultural environment increases the likelihood of



entrepreneurship participation by about 4 times (Reynolds, Hay, Bygrave, Camp, and Autio 2001). There is no evidence currently concerning the effect of a national cultural environment on women's rates of entrepreneurship, but I argue that such a correlation would be dependent upon the nature of national cultural beliefs concerning gender and work. Building on Lenski's work, Blumberg argued that level of female economic participation is the most important predictor of the status of women at the macro-level (Blumberg 2004). I expect that if gender culture matters at all for women's entrepreneurship participation, it works through definitions of legitimacy of women's participation in paid work and even more likely through institutionalized policies and practices, such as female labor force participation and state-regulated childcare arrangements.

One of the challenges of disentangling the puzzles of multilevel influences across countries at different stages of growth is that as countries evolve in terms of material wealth so do they evolve in terms of levels of income inequality and culture. In other words, the wealthiest countries in the world today also tend to have lower levels of income inequality and gender inequality than found in developing nations. Despite the tendency towards some modern convergence toward similar material, social, and cultural systems there are definite patterns of difference. As Nolan and Lenski (1999) have pointed out, evolutionary change is path-dependent and countries begin at different places culturally, technologically, and in terms of physical environment and material resources.

## HYPOTHESES

Based on the preceding literature review, I offer the following five hypotheses to guide the test of the practice theory of entrepreneurship developed in this chapter.

*H1: Controlling for social position, worldviews and dispositions are the most important predictors of business creation.*

*H2: Women hold distinct worldviews or dispositions that decrease the likelihood of business creation.*

*H3: Controlling for other factors, national culture is an important predictor of business creation.*

*H4: National cultural measures work through the habitus to influence startup decision, especially for women.*

*H5: Individual-level factors outweigh macro-level factors in decision to start a business.*

## SUMMARY

In this chapter I have argued for the importance of a comprehensive theory of entrepreneurship to the continued study and theorizing about the social character of entrepreneurship. I have defined entrepreneurship generally as a goal-oriented, productive activity within the economic field of practice. More specifically, entrepreneurship is as a practice or habituated strategy of action that is legitimated and chosen according to social definitions of status appropriate behaviors and expected competencies. I have further shown that this practice view of entrepreneurship fits well with current findings on gendered patterns of entrepreneurship. Finally, I developed a set of hypotheses to test empirically. In the next chapter, I describe the data and summarize the measures used in the empirical test.

## CHAPTER 4

### DATA AND METHODOLOGY

The data for this project come from 4 different sources. The individual level data are drawn from the Global Entrepreneurship Monitor (GEM) as is the measure for national culture supportive of entrepreneurship. The other three country-level measures -- national wealth, national income inequality and national cultural belief in a traditional gender division of labor – are drawn from the United Nations' Human Development Report Indicators, the World Bank's World Indicators Database, and the International Social Survey Programme 2002: Family and Changing Gender Roles III Module respectively.

The GEM program is a long-term, cross-national research program that emerged out of a research partnership between Babson College, the London Business School and the Ewing Marion Kauffman Foundation (Reynolds et al. 2005). The purpose of this research program is to perform annual worldwide assessments of entrepreneurial activity, in order to calculate the rates and character of entrepreneurship participation in countries around the world. The global research team collects data each year from three different sources for each country -- adult population surveys, interviews with entrepreneurship experts, and a selection of standardized national data. Six annual waves of data have been collected to date. Of these 6 waves of data only the first 3 waves (1999, 2000, 2001) were publicly available at time of data analysis. This project uses data from the adult population surveys for 2001 and 2000. The newer waves include more countries, less missing data, and

additional measures. The decision to proceed with the older waves of data was a necessary concession in light of co-authorship restrictions on the non-public data.

The adult population data for both waves is drawn from nationally-representative samples, based on a single interview schedule agreed upon by all national research teams, and translated and collected by market survey firms with the appropriate experience and under the direct supervision and final review of the appointed national teams. The 2001 wave includes data for 31 countries and the 2000 wave includes data for 21 countries (Reynolds, Bygrave, and Autio 2002; Reynolds et al. 2001). I restricted the overall samples for each wave to respondents aged 18-64 because some countries only collected data from individuals within that age range. The analysis primarily involved the use of the 2001 data (N=59,370) for a restricted sample of 28 countries. The 2000 data (N=38,507) was used to calculate a country-level measure for national culture supportive of entrepreneurship for the 21 countries that overlap with the 2001 sample.

Launched in 1990, The Human Development Report is an independent report commissioned by the United Nations Development Programme (UNDP). It is produced annually by a team of leading scholars, development practitioners, and members of the Human Development Report Office of UNDP. The goal of this research program is “putting people back at the center of the development process in terms of economic debate, policy and advocacy” (UNDP 2005). The measure collected from this data source is 2001 GDP per capita for the 28 countries in this study.

The World Bank’s World Development Indicators (WDI) database is an annual compendium of economic, social, environmental, business, and technology indicators used by scholars, practitioners, and policy advocates around the world. According to the World Bank, the WDI is the most widely-used, official source of development data from the World Bank and other international agencies. The World Bank measure used here is the Gini Score representing national income inequality for the 28 countries in this study.

Formed in 1983, the International Social Survey Program (ISSP) is an ongoing crossnational research program (ISSP 2004). The program organizes topical modules dealing with important areas of social science as supplements to regular national surveys. Each survey includes questions about general attitudes toward various social issues such as the legal system, gender, family, and the economy. Participating countries vary for each topical module. The summary measure for national gender culture used in this study comes from the 2002 Family and Changing Gender Roles Module.

In the following sections, I review the measures and model specification, concluding with a brief discussion of the data issues inherent in crossnational studies.

## MEASURES

The measures for this analysis reflect the compromise between the data available, the importance of key variables per previous findings, and, of course, the theoretical model of entrepreneurship present in the previous chapter. There are some variables that are particularly critical to the study of gender and entrepreneurship that are not available for this analysis and deserve mention here. Industry and family context (marriage and presence of children) are important examples, and would have improved the quality of the study. Nevertheless, the GEM data did offer a decent selection of measures for testing the proposed theoretical model. Below I describe the measures used – including the dependent variable, nascent entrepreneurship, and five categories of independent variables -- symbolic capital, economic capital, social capital, cultural capital, and country-level factors.

### *Nascent Entrepreneurship*

The dependent variable for this project is nascent entrepreneurship. Definitions of entrepreneurship and entrepreneurs tend to vary extensively. Paul Reynolds' work on entrepreneurship as a process helps to resolve much of the ambiguity surrounding the

operationalization of the state of entrepreneurship or business startup. He described entrepreneurship as a multi-step process with high attrition rates near the beginning. Consequently, Reynolds (1991) recommended that the best point at which to study business start-up is the point at which individuals become nascent entrepreneurs – that is, those individuals actively starting a new business. One popular convention for creating a measure of nascent entrepreneurship is to qualify entrepreneurs according to four criteria – those who report having started a business, having been active over the past 12 months, expecting full or part ownership, and having no positive cash flow for the past three months (Kim, Aldrich, and Keister 2006).

Arenius & Minniti (2005), however, chose a slightly different specification in their GEM analyses and defined nascent entrepreneurship as those who qualify according to the first three criteria – business start-up, active over past 12 months, and expectation of full/part ownership (Arenius and Minniti 2005). For reasons of comparability and because this project is to some degree an extension of the Arenius and Minniti paper, I define my dependent variable, nascent entrepreneurship, according to this second definition. Thus, nascent entrepreneurship includes all individuals involved in a business start-up, active over past 12 months, with the expectation of full/part ownership. As shown in Table 1, about 5% of total respondents qualify as nascent entrepreneurs, with the proportion of nascent entrepreneurship ranging from 14% in New Zealand to 1% in France and Japan. Rates for women are consistently lower across all countries and significantly lower in most countries. The US has a mean of 12% nascent entrepreneurship, about double the overall rate, and a significant gender difference of about 3%.

### *Economic Capital*

I plan to test one individual-level measure of economic capital - household income. Studies of self-employment in the US have shown the importance of economic class for

patterns of entrepreneurship (Budig 2001; Carr 1996; Devine 1994). I have included two measures of household income, based on a ranked categorical variable of household income recoded into relative thirds within a given national context. The measures involved are two dummy variables – one for being in the middle third and the other for being in the upper third.

Table 1: Descriptive Statistics for Relevant Dependent and Independent Variables for GEM 2001 Adult Population Survey Data, Respondents aged 18-64 in 28 Countries

Variables	n	Overall				Men		Women		Gender	
		Min	Max	Mean	SD	Mean	SD	Mean	SD	Gap	ttest
<b>Nascent Entrepreneurship</b>	59370	0	1	0.05	0.225	0.07	0.258	0.04	0.187	0.035	***
<b>Economic Capital</b>											
lower third national income	36333	0	1	0.30	0.458	0.27	0.443	0.33	0.471	-0.06	***
middle third national income	36333	0	1	0.41	0.492	0.41	0.492	0.41	0.492	0.003	
upper third national income	36333	0	1	0.29	0.453	0.32	0.466	0.26	0.438	0.060	***
<b>Cultural Capital - Institutionalized</b>											
age	59370	18	64	39.36	12.913	39.10	13.038	39.60	12.789	-0.493	***
less than secondary educ	51820	0	1	0.26	0.440	0.26	0.439	0.26	0.440	0.00	
secondary degree	51820	0	1	0.39	0.487	0.38	0.485	0.40	0.489	-0.016	***
postsecondary educ	51820	0	1	0.33	0.470	0.34	0.472	0.32	0.468	0.013	***
graduate educ	51820	0	1	0.02	0.141	0.02	0.148	0.02	0.134	0.004	
fulltime employment	59370	0	1	0.49	0.500	0.60	0.490	0.38	0.485	0.22	***
parttime employment	50641	0	1	0.09	0.281	0.06	0.243	0.11	0.312	-0.046	***
unemployed	50641	0	1	0.14	0.349	0.12	0.323	0.16	0.370	-0.046	***
homemaker	50641	0	1	0.09	0.292	0.01	0.089	0.18	0.381	-0.168	***
retired or student	50641	0	1	0.11	0.311	0.11	0.314	0.11	0.309	0.005	
<b>Cultural Capital - Habitus</b>											
expecting opportunity	59190	0	1	0.24	0.430	0.28	0.449	0.21	0.408	0.070	***
belief in start up skill	59334	0	1	0.39	0.487	0.48	0.500	0.30	0.458	0.179	***
fear of failure	59339	0	1	0.33	0.471	0.31	0.461	0.36	0.479	-0.050	***
expecting better financial future	59143	0	1	0.34	0.472	0.37	0.483	0.30	0.459	0.070	***
<b>Social Capital</b>											
knowing an entrepreneur	59365	0	1	0.35	0.478	0.41	0.492	0.30	0.459	0.110	***
<b>Symbolic Capital</b>											
female	59370	0	1	0.51	0.500	--	--	--	--	--	

Note: \* significant at .05; \*\* significant at .01; \*\*\* significant at .001

About 30% of the respondents report incomes that fall in the lower third and 29% in the upper third, leaving about 41% in the middle third of their national income distribution. According to Table 1, women were significantly more likely to report household incomes in the lower third and significantly less likely to report household income in the upper third as compared to men. The descriptive statistics further show that women report lower class location more often than men across all countries and that these gender differences in household income are significant for most countries.

Household income is not available for a few countries – namely, Belgium, Brazil, Ireland, the Netherlands, Spain and the UK. The GEM 2001 Operations Manual states that household income was collected for about two thirds of the countries. I understand that this is not an unusual data collection problem because some respondents are reluctant to share that information and because some researchers may choose not to ask. A second problem with the household income measure is that it is categorical and not a continuous measure, harmonized into USD. However, the concept of economic capital as a predictor of social position, thus habitus, is important to the proposed theory, so I have kept this variable in the model. Also, Arenius and Minniti (2005) included it in their model and found a significant effect. Again, this project is designed largely as an extension of their study, so it was important to establish some criteria for comparability.

### *Cultural Capital*

The research model requires two types of cultural capital measures – institutionalized (education and experience) and habitus (perceptions). A continuous measure for education is not available, so level of education will be tested directly with a set of three dichotomous measures – secondary education or less, post-secondary education, and graduate education experience. Following conventional practice, I will use age as a proxy for work experience (e.g., Arenius and Minniti 2005). Continuous age data is missing



for Australia and Russia, but a 10-year cohort measure was available. I filled in the missing age data with median age of 10-year cohort. Age, or, age cohort as the case may be, is not necessarily the best way to measure work experience, especially in cases where women take time out from paid work to care for children or the home. Because age does not necessarily capture work experience, a measure of work status was also included in the form of four dichotomous variables – fulltime, part-time, homemaker, and unemployed. And, finally, I tested four measures of habitus, including perceptions of good start-up opportunities, perception of startup skills, fear of failure, and financial outlook for family. The perception measures are all dichotomous variables.

Table 1 shows that the sample ranged in age from 18-64 with an average age of about 39. Women were very slightly, but significantly, older than men. In contrast, men were very slightly, but significantly, more likely than women on average to have completed at least some postsecondary education. About 65% of the sample reported at least a secondary education, with only 2% college graduates. About 49% of the total sample was employed fulltime. Men were much more likely to be employed full-time than women and women were significantly more likely to be employed part-time, to be homemakers, or unemployed than men. In terms of the habitus measures, 24% of the sample reported expecting to see good start-up opportunities, 39% reported having the skills to start a business, 33% reported fearing failure in business start-up, and 34% expect a better financial future for their families within the next year. Men in the sample were significantly more likely to report perceptions of good start-up opportunities (28% of men compared to 21% of women) and having the necessary skills to start a business (48% of men compared to 30% of women). Men also reported a significantly more positive outlook for their family financial future (37% of men compared to 30% of women). Women, on the other hand, were overall significantly more likely to report a fear of failure (36% of women compared to 31% of men). Additional descriptive analyses indicate that women in the sample were

significantly less likely to report having the skills to start a business across all countries. Significant gender differences in the other perceptions were much less consistent across countries, but showed clear trends towards significance.

Further descriptive analysis reveals that average age varies from 35 in South Africa to 42 in Denmark. The United States had the highest levels of education with 11% reporting a college degree. Most of the countries in the sample had no college graduates, but all countries had individuals with at least some postsecondary education. The lowest levels of education were reported in Hungary where the top educational level reported was some postsecondary education for 9% of the sample.

### *Social Capital*

I tested one dichotomous measure of social capital - personally knowing an entrepreneur over the past 12 months. About 35% of all respondents reported personally knowing an entrepreneur. Men were significantly more likely to say “yes” (41% of men compared to 30% of women). Descriptive statistics further indicate that the men in the sample are significantly more likely to know an entrepreneur than women across all countries. These tables also show that positive responses vary from a low of 16% in Japan to a high of 48% in Australia. The gender gap ranges from 4% to 21% across countries and is significant in every country.

### *Symbolic Capital*

The key variable for this category is a dichotomous measure of gender called female, where 1=female and 0=male. As previously argued, gender is omni-present and the sample data certainly reflects that proposition. Roughly 51% of the total sample is female (see Table 1) and gender composition varies from a low of 41% female in Brazil to 59% in Denmark. (The descriptive statistics for Mexico revealed a gender composition of 73%

female. This distribution suggested a serious sampling problem. Mexico was therefore dropped from continued analysis, along with the special samples for Scotland and Wales.) Table 1 further reveals significant gender differences across all variables in the analysis. There is, however, a fair amount of variation in gender differences across countries. A few variables are consistently significant for gender across all countries – perceived skill for start up and personally knowing an entrepreneur. As other variables are included I expect the gender effect to diminish. However, I want to emphasize that the gender effect is NOT disappearing, but rather the gender effect is shifting to other sources of gender difference.

### *Country-level Factors*

I tested four country-level measures - national wealth, national income inequality, national culture supportive of entrepreneurship, and national beliefs in a traditional gender division of labor. National wealth was measured by 2001 per capita GDP (USD) figures, drawn from 2005 Human Development Report database. As shown in Table 2, national wealth varies from \$2,840 per capita GDP for India to \$34,320 per capita GDP for the United States. Income inequality was measured using 2001 Gini scores also from the World Bank Indicators 2005 datafile. Gini scores are calculations of national income inequality, which vary from a low score of 24.7 for Denmark to a high of 59.3 for Argentina.

The measure for national culture is based on a question from the 2000 wave of GEM data. There were three possible measures to test – “is starting a business a respected activity,” “the community resents wealthy entrepreneurs,” and “people prefer a uniform standard of living.” Recent GEM findings are based on a composite measure of these three data points. However, I am uneasy with the assumptions that underlie this index measure. Because my interest centers around the first question that asks whether starting a business is a respected activity, I chose to test that measure directly. Culture changes more slowly than economic structures, so using a measure from the previous calendar year is unlikely to

pose any problems. The GEM 2000 data came from a shorter list of countries consequently there are some missing values. However, values are available for most of the countries in the 2001 sample. As Table 2 indicates, the country scores of respect for starting a business range from 31.1% in Japan up to 98.8% in Spain.

Table 2: Country Values for Macro-level Variables

<b>COUNTRIES (29)</b>	<b>HDR 2001 GDP pc (xxx)</b>	<b>WB 2001 GINI</b>	<b>GEM 2000 Entrep Respect</b>	<b>ISSP 2002 Gender DOL</b>
Argentina	11,320.0	52.2	88.9	--
Australia	25,370.0	35.2	83.7	21.6
Belgium	25,520.0	25.0	93.9	24.6
Brazil	7,360.0	59.3	78.6	48.7
Canada	27,130.0	33.1	86.0	10.5
Denmark	29,000.0	24.7	91.1	13.6
Finland	24,430.0	26.9	87.7	11.7
France	23,990.0	32.7	74.2	17.9
Germany	25,350.0	28.3	86.2	20.5
Hungary	12,340.0	26.9	--	39.2
India	2,840.0	32.5	66.5	--
Ireland	32,410.0	35.9	51.3	18.6
Israel	19,790.0	35.5	63.7	26.9
Italy	24,670.0	36.0	92.0	--
Japan	25,130.0	24.9	31.1	30.9
Korea, South	15,090.0	31.6	75.5	--
Mexico			--	
Netherlands	27,109.0	30.9	--	12.3
New Zealand	19,160.0	36.2	--	19.8
Norway	29,620.0	25.8	95.0	9.5
Poland	9,450.0	34.1	--	45.7
Portugal	18,150.0	38.5	--	30.6
Russia	7,100.0	31.0	--	58.4
Singapore	22,680.0	42.5	64.7	--
South Africa	11,290.0	57.8	--	--
Spain	20,150.0	32.5	98.8	24.7
Sweden	24,180.0	25.0	95.0	7.6
UK	24,160.0	36.0	68.9	19.8
US	34,320.0	40.8	75.1	23.6
<b>AVERAGE</b>	<b>20,682.46</b>	<b>34.71</b>	<b>78.47</b>	<b>23.33</b>

The final country-level measure I test in this study is national belief in a traditional gender division of labor. The scores shown in Table 2 were based on responses to one attitudinal question in the ISSP Family and Changing Gender Roles module – “A man's job is to earn money, a women's job is to look after the home and family.” As shown in Table 2,

the number of favorable responses (agree or strongly agree) varied across countries from a low of 7.6% in Sweden to a high of 58.4% in Russia.

## MODEL SPECIFICATION

The multilevel analysis I performed was based on the results of a series of 2-level random coefficient models. The random coefficient methodology is based on a multi-level family planning study by Entwisle and Mason (1985). A random coefficient model is a form of linear mixed modeling also referred to as a hierarchical linear modeling and latent variable modeling (For overviews, see Guo and Zhao 2000; Pinheiro and Bates 2000; Rabe-Hesketh and Skrondal 2005). The standard notation for a random effects logistic regression model is:

$$\Pr (y_{ij} = 1 \mid x_{ij}, \zeta_{0j}, \zeta_{1j}) = (\beta_0 + \zeta_{0j}) + (\beta_1 + \zeta_{1j}) x_{1ij} + e_{ij}$$

Where the outcome is the probability that y for each individual in country j will equal 1, given any fixed effects  $x_{ij}$ , a random intercept  $(\beta_0 + \zeta_{0j})$  for each country j and a random slope  $(\beta_1 + \zeta_{1j})$  for a given fixed factor  $x_1$  for individuals in country j.

Random coefficient models can alternatively be understood in terms of the following three equations:

$$1) \quad E_{ij} = \beta_{0j} + \beta_{4j}G_{ij} + \epsilon_{ij}$$

$$2) \quad E_{ij} = \beta_{0j} + \beta_{1j}EC_{ij} + \beta_{2j}CC_{ij} + \beta_{3j}SC_{ij} + \beta_{4j}G_{ij} + \epsilon_{ij}$$

$$3) \quad \beta_{0j} = \mu_0 + \mu_{1j}CULT_j + \mu_{2j}GDP_j + \mu_{2j}Gini_j + \alpha_j$$

Where E=nascent entrepreneurship, G=gender, EC=economic capital, CC= cultural capital, SC=social capital, i=individual, j=country,  $\mu$ =macro-level coefficients,  $\alpha$  =macro-level error, CULT=national culture supportive of entrepreneurship, and GDP=national wealth.

The first equation confirms the gender variation across countries. The second equation is the individual level regression equation which I will run for each of the 28 countries. The third and final equation tests for the relative importance of country-level factors - culture, national wealth, and income inequality - for cross-national variations in the coefficients calculated using the second equation. This last step confirms the presence of country effects and measures the extent to which culture, national wealth and income stratification account for country differences across each set of factors. In sum, the analysis tested the relative importance of various sets of resources for the nascent entrepreneurship by gender and across countries and measured the extent to which national level variables account for country and gender variations in nascent entrepreneurship.

The actual statistical calculations presented are binary logistic regressions, estimated using the Stata GLLAMM procedure (Rabe-Hesketh and Skrondal 2005; Rabe-Hesketh, Skrondal, and Pickles 2004). This is a form of maximum likelihood regression well suited for equations with binary dependent variables. This form of regression calculation has allowed me to assess the likelihood that individuals with particular sets of measured characteristics will fall into the group starting a business or the other group of respondents not starting a business.

I present the results of six regression models in the next chapter and discuss the findings in terms of the developed hypotheses.

## DATA QUALITY

Cross-national data collection efforts can be expensive and challenging. One of the biggest concerns for any crossnational study is data quality and the related implications. Data quality is compromised by factors such as data availability, comparability, and reliability. All the data collection agencies from which I gathered data work hard to address

these issues with best practice procedures. The World Bank cautions the use of their data with the following statement:

Considerable effort has been made to standardize the data, but full comparability cannot be assured, and care must be taken in interpreting the indicators. Many factors affect data availability, comparability, and reliability: statistical systems in many developing economies are still weak; statistical methods, coverage, practices, and definitions differ widely; and cross-country and intertemporal comparisons involve complex technical and conceptual problems that cannot be unequivocally resolved. Data coverage may not be complete because of special circumstances or for economies experiencing problems (such as those stemming from conflicts) affecting the collection and reporting of data. For these reasons, although data are drawn from the sources thought to be most authoritative, they should be construed only as indicating trends and characterizing major differences among economies rather than offering precise quantitative measures of those differences. Discrepancies in data presented in different editions of *World Development Indicators* reflect updates by countries as well as revisions to historical series and changes in methodology. (World Bank. 2005)

Both the Human Development Report contributors and the ISSP research team make similar statements concerning their efforts to standardize and ensure comparability and reliability (ISSP 2004; UNDP 2005).

The GEM researchers have also taken concerted measures to ensure the highest data quality possible. For example, the GEM team has worked hard to streamline the instruments and methodologies across countries. Despite their efforts, a variety of sampling methods were, in the end, applied, response rates dipped dangerously low in some countries, and some key demographic data were not collected or coded for a few countries – including exact age, education, work status, and household income (Reynolds et al. 2005). The GEM 2001 Operations Manual, unfortunately, contains an incomplete description of all the different sampling procedures employed. From what I could tell, most of the samples appear to be stratified geographically, but methods at the household and individual level are inconsistent across countries. Quotas and weights were used for some samples but not others.

Below are statements from the GEM 2001 Operations Manual on the question of variation in response rates, sampling techniques, and missing demographic data:

Gross response rates, the number of interviews completed in relation to the number of sample points identified, varied widely, reflecting the differences in the procedures employed. As Japanese respondents were drawn from official lists of individuals residing the area, this response rate was the highest, over 60%. When a true random digit dial procedures is used, the response rates based on all sample points are very low, lower than 5%, because many of the numbers are not active phone numbers or not assigned to a household. All response rates are, again, within the acceptable operational range for commercial market surveys.

Regardless of the sample techniques, most survey operations used a procedure to compare the basic characteristics of the sample with official measures of the population and adjusted the sample with weights to match the more reliable estimates, typically by adjusting for age, gender, region, household size, and some measure of household status, income, educational attainment, religious affiliation, or the like. These adjustments provide confidence that the results are representative of the adult populations in each country.

All survey vendors were required to provide gender and exact age for all respondents. Other socio-demographic items—educational attainment, work status, residence location, household size, household or personal income, and the like—varied dramatically from one survey vendor to another. There are no additional items available in a standardized form for all 23 survey data sets, although some, like educational attainment or household or personal income, are available for two-thirds of the countries.

The implications of these data quality issues are clear. The response rates may be respectable for market research, but the lowest rates may weaken the generalizability of results for some countries and for the macro-level analyses. Some sampling techniques imply biased findings. Convenience sampling at the individual level, for example, may mean a sample bias towards housewives, the most likely adult to be home at the time of the interview. And the missing data issues may mean having to drop a country or use less powerful measures.

Working with a limited budget and tremendous wish list for data collection, the GEM program must make concessions each year. Data quality is, nonetheless, a primary



concern and they clearly have worked hard to ensure the best possible data is produced in each survey year. To whatever extent that data quality concerns vary by country, the effects appear in the country-specific error terms.

In conclusion, the confidence with which crossnational researchers proceed in their data collection and analyses efforts should not be misconstrued as a lack of concern for data quality issues. Issues of data availability, comparability, and reliability are an everyday part of life for crossnational studies and, for that matter, entrepreneurship research. The GEM data is uniquely suited to this study and comparable cross-national data, frankly, just does not exist at the present time.

One indicator that these data quality issues are widely understood in professional circles, in terms of the trade-off between the implications of data quality and the importance of cross-national research for understanding entrepreneurship, is that the existing data concerns have not prevented the publication of studies using GEM data in peer-reviewed journals (Arenius and De Clercq 2005; Arenius and Minniti 2005; Cowling and Bygrave 2005; Stel, Carree, and Thurik 2005; Sternberg and Wennekers 2005; Wennekers 2005; Wong, Ho, and Autio 2005). In the end, we have to start somewhere. Only as the field develops and methods improve, will we see how poor or reasonably good our current approaches prove to be.

## CHAPTER 5

### RESULTS AND DISCUSSION

In the preceding chapters, I argued that the field of entrepreneurship studies sorely needs a comprehensive, multilevel framework for better understanding and explaining who starts businesses and why. I offered practice theory as a framework for the study of social action, applied this theoretical framework to the case of gender and entrepreneurship, and proposed a set of five hypotheses based on practice theory. In the last chapter I described the data, the measures, and the methodology used in the empirical test of the stated hypotheses. In this chapter, I present and discuss the results of the regression models and some additional analyses in terms of the stated hypotheses.

#### RESULTS

In chapter 3, I developed a series of hypotheses concerning the relative importance of a set of individual level factors, the importance of those factors across gender, the importance of a set of macro-level factors, and finally the relative importance of those macro factors compared to the individual-level factors for becoming an entrepreneur. For clarity's sake, I restate those hypotheses below in Table 3, also noting whether or not each hypothesis was supported by the results presented here.

Table 3: Hypotheses and Support

No.	Hypothesis	Supported?
1	Controlling for social position, worldviews and dispositions are the most important predictors of business creation.	Yes
2	Women hold distinct worldviews or dispositions that decrease the likelihood of business creation.	Yes
3	Controlling for other factors, national culture is an important predictor of business creation.	Yes
4	National cultural measures work through the habitus to influence startup decision, especially for women.	Yes
5	Individual-level factors outweigh macro-level factors in decision to start a business.	Yes

I begin in this section with the results of the final series of 6 random coefficient regression models run on the dependent variable, nascent entrepreneurship, shown in Table 4. Each model in the series is designed to answer a particular part of a guiding question: *Which factors best explain the variation in nascent entrepreneurship across country and gender?* The first two models answer the question: *To what extent does nascent entrepreneurship vary across country and gender?* The remaining four models show the impact of various sets of factors on the variances across country and gender, as well as the relative importance of each factor on the likelihood of being a nascent entrepreneur.

*Model 1: Variation Across Gender and Country*

Model 1 is a variance component model, such that the random variances of nascent entrepreneurship across 28 countries and gender are estimated. The model is called a variance component model because the estimated random variance may be considered a component of the overall measurement error of the model in question. The random variances may also be referred to as the random, or latent, effects of country and gender on

the probability of being a nascent entrepreneur. In statistical terms, the random effect of country represents the variance in the intercept of each country regression line whereas the random effect of gender represents the variance in the slope of the regression line for each country. As Table 4 shows, the likelihood of nascent entrepreneurship varied by .615 across the 28 countries measured and .799 across gender. I have included this model for readers new to multilevel modeling. I find the variance component model to be a useful reference point for the purposes of analysis and as an important conceptual step in understanding random coefficient models.

*Model 2: Impact of Gender as a Fixed Effect*

Model 2 includes a fixed effect to control for gender and confirms the significant effect of gender on nascent entrepreneurship. Table 4 shows that, controlling for gender as a fixed effect, the random variation of nascent entrepreneurship across countries decreased to .507 and that the random effect of gender shrunk substantially to .056 in Model 2. The results further show that the odds of being a nascent entrepreneur for females was about half that for males and that the variance in nascent entrepreneurship is much greater across countries than across gender. These results confirm previous findings and serve as a baseline for the subsequent models.

The log likelihood for this model decreased slightly from Model 1 suggesting an improved model fit. A significant likelihood ratio test score of 372.88, comparing Model 1 to Model 2, confirmed it.

Table 4: Odds Ratios for 2-level Random Coefficient Models of Nascent Entrepreneurship across Gender and Country

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<b>Fixed Part:</b>						
female		.46 (.026)***	.78 (.068)**	.47 (.111)***	.41 (.159)*	.48 (.180)*
middle income group			.88 (.068)	.84 (.081)	.85 (.136)	.35 (.145)**
upper income group			.95 (.079)	.84 (.086)	.72 (.116)	.53 (.225)
work/life experience (age)			.99 (.003)***	.99 (.003)***	.99 (.005)*	.99 (.005)*
secondary education degree			1.19 (.101)*	1.19 (.101)*	1.12 (.161)	1.11 (.160)
some postsecondary education			1.20 (.105)*	1.20 (.105)*	1.14 (.163)	1.12 (.161)
college graduate			1.21 (.222)	1.23 (.225)	1.17 (.285)	1.18 (.287)
employed part-time			1.25 (.134)*	1.25 (.134)*	1.46 (.251)*	1.52 (.260)*
unemployed			.87 (.088)	.87 (.088)	.78 (.117)	.79 (.119)
homemaker			.66 (.102)**	.68 (.105)**	.89 (.347)	.90 (.356)
retired or student			.47 (.065)***	.47 (.065)***	.53 (.145)*	.52 (.143)*
opportunity			2.37 (.143)***	2.37 (.143)***	2.58 (.238)***	2.58 (.238)***
start-up skill			5.08 (.398)***	5.08 (.398)***	5.66 (.716)***	5.70 (.721)***
fear of failure			.64 (.044)***	.71 (.062)***	.81 (.112)	.30 (.129)**
better financial future			1.80 (.112)***	1.80 (.112)***	1.95 (.19)***	1.95 (.193)***
knows entrepreneur			2.20 (.139)***	2.20 (.139)***	2.36 (.236)***	2.37 (.237)***
female*middle income				1.13 (.176)	1.36 (.345)	1.37 (.349)
female*upper income group				1.41 (.221)*	2.02 (.504)**	1.93 (.484)**
female*age				1.01 (.005)*	1.01 (.008)	1.01 (.008)
female*fear of failure				.75 (.107)*	.68 (.154)	.69 (.157)
gdp per capita (xxx)					.95 (.040)	1.02 (.053)
income inequality (Gini)					1.02 (.025)	1.06 (.034)
respect for entrepreneurship					1.02 (.014)	1.02 (.019)
belief in traditional gender DOL					1.07 (.025)**	1.05 (.053)
gender DOL*middle income						1.05 (.022)*
gender DOL*upper income						1.02 (.022)
gender DOL*fear of failure						1.05 (.023)**
Constant	-2.35 (.190)***	-2.71 (.103)***	-4.38 (.210)***	-4.19 (.219)***	-10.45 (1.921)***	-9.91 (1.95)***
<b>Random Part:</b>						
country (var1)	.615 (.208)	.507 (.111)	.326 (.124)	.314 (.120)	.302 (.154)	.192 (.121)
female (var2)	.799 (.242)	.056 (.028)	.027 (.029)	.019 (.028)	.073 (.079)	.008 (.016)
Likelihood chi sq	-11758.34	-11729.62	-4554.24	-4547.09	-1901.56	-1894.28
Likelihood Ratio Test		372.88 ***	14350.77***	14.29**	5293.71***	11.93**
N (j)	59370 (28)	59370 (28)	27409 (18)	27409 (18)	12900 (8)	12900 (8)

Note: \* significant at .05; \*\* significant at .01; \*\*\* significant at .001

### Model 3: Impact of Forms of Capital

The results for Model 3 offer strong support for the first hypothesis that, controlling for social position, worldviews and dispositions are the most important predictors of nascent entrepreneurship. The results for Model 3 further show significant effects for all the cultural

capital measures – age/experience, education, and work status. Having a highschool degree or some college education significantly increased the odds of being a nascent entrepreneur by about 20%, net of all other factors. Age as a proxy for work/life experience decreased the odds of being a nascent entrepreneur significantly, by about 1% per year of age, net of all other factors. The four effects for work status measured the change in odds compared to being employed full-time, net of all other factors. The results are a little surprising. Being employed part-time significantly increased the odds of being a nascent entrepreneur by about 25%. This result contradicts previous research that suggests that full-time employment is more predictive of business start-up than other employment statuses. However, the implication is similar. Starting a business often requires a lapse of income, perhaps making employment necessary or attractive to offset financial risk. Business creation can also be very time-consuming, perhaps making full-time employment problematic. Not so surprisingly, homemakers were about 1/3 less likely than the full-time employed to be a nascent entrepreneur, net of all other factors. Retired individuals or students were about half as likely to be a nascent entrepreneur as the full-time employed, net of all other factors. These groups are generally otherwise occupied in terms of time commitments and interests. The odds for the unemployed were not significantly different from that of the full-time employed.

Most importantly, of course, Model 3 results show that the perceptual variables were some of the strongest predictors of nascent entrepreneurship, net of all other factors. These results confirm previous findings (Arenius and Minniti 2005) and support my first hypothesis that habitus measures are the most important predictors of entrepreneurship. However, I was surprised by sheer magnitude of the perception effects relative to the other forms of capital. The perception that one has the skill to start a business increased the odds of nascent entrepreneurship by 5 times, net of all other factors, and the expectation that one will see a start-up opportunity within the next six months more than doubled the odds of

being an nascent entrepreneur, net of all other factors. The expectation that family finances will be better in 12 months increased the odds of being a nascent entrepreneur by 80%, net of all other factors. And finally, the fear of failure had a negative effect on the odds of being and nascent entrepreneur, decreasing the odds, such that one who fears failure in starting a business is less than two thirds as likely to be a nascent entrepreneur, net of all other factors. All four perceptual measures were highly significant at  $p=.001$ .

The results show that the second strongest form of capital is social capital. Having known an entrepreneur within the past year significantly increased the odds of being a nascent entrepreneur, net of all other factors, by more than 2 times. This effect is highly significant at the  $p=.001$  level. I am intrigued by this effect. I expected that social capital would be important because so much of how we view the world is shaped by the opinions of the important others in our lives. This result from a model with controls for key perceptions in place suggests, however, that there is still much to be learned about the importance of social capital for the decision to start a business.

Model 3 shows that economic capital had no significant effect on the odds of becoming an entrepreneur, net of all the other factors in the model. Gender did, however, continue to have a significant, negative effect on the odds of being a nascent entrepreneur. Being female significantly reduced the odds of starting a business by 22%, net of all the other factors.

The results for Model 3 show that the addition of the capital measures to the regression model reduced the random country variance slightly more than one third, from .507 in Model 2 to .326 in Model 3 and reduced the variation in slopes due to the effect of gender by about half, from .056 to .027. It is important to note here that these random variance estimates, like apples and oranges, while similar in function cannot be directly compared. Furthermore there is currently no reliable way to test the significance of random effects (Pinheiro and Bates 2000). We can, however, examine the ways in which the

addition of fixed effects change these measures of random variance and draw conclusions based on the observed patterns. Clearly the addition of the individual level measures of capital did a lot to explain the variation across country and gender. Model 3 also shows that the capital factors account for about one quarter of the effect of gender. The fixed effect for gender decreased from .48 in Model 2 to .78 in Model 3, leaving a reduction in the odds of being a nascent entrepreneur of only 22%, net of all other factors, in Model 3. Here we see the first shift in the direct measure of gender to other sources of gender difference and thus explanation.

The log likelihood decreased heavily from Model 2 to Model 3, suggesting an improved model fit. A large and significant likelihood ratio test score of 14,350.77, comparing Model 2 to Model 3, confirmed it.

#### *Model 4: Impact of Gender Interactions*

In Model 4, I added gender interaction terms in order to investigate the presence of gender-capital interactions, or individual level interactions with gender. A previous regression model revealed interaction effects between gender and three other capital factors – household income, age/experience, and fear of business failure. I ran the model again with just the significant effects in order produce the model shown here in Table 4. These results of Model 4 confirm my second hypotheses that women hold distinct worldviews or dispositions that decrease the odds of starting a business and also show that gender interacts with other forms of capital to influence the likelihood of business start-up.

As the results for Model 4 indicate, fearing business failure decreased the odds of being a nascent entrepreneur by an additional 25% for women, net of all other factors. Also, being in the upper third of the national income distribution significantly increased the odds of being a nascent entrepreneur by 41% for women, net of all other factors. And finally, for each additional year of age, being female increased the odds of being a nascent



entrepreneur by about 1%. The addition of these interactions to the regression model very slightly lowered the random effects of both country and gender differences. With the exception of the fixed effect for gender, the capital effects changed not at all or in such a small way no mention is called for. The addition of the three gender interaction effects, however, *decreased* the odds of being a nascent entrepreneur for women by about 53% compared to men. This shift in effect and power was expected because the interaction effects added were all gender interactions.

As for model fit, the log likelihood decreased slightly from Model 3 to Model 4 suggesting a very slightly improved fit. And again, a significant likelihood ratio test score of 13.62, comparing Model 3 to Model 4, confirms a modest but significant improved fit.

#### *Model 5: Impact of Macro-level Factors*

Model 5 saw the addition of the four macro-level factors. The results partially support my third hypotheses that, controlling for other factors, national culture is an important correlate of nascent entrepreneurship, and offer initial support for my fifth hypothesis that individual-level factors outweigh macro-level factors in predicting start-up. Among the four country-level factors, only the measure of gender culture – the belief in a traditional gender division of labor where men earn the money and women take care of the home – has a significant effect on the odds of being a nascent entrepreneur, net of all other factors. For each unit increase in the gender culture score, the odds of being a nascent entrepreneur increase significantly by about 7%. This is a big finding given the 50-point spread in gender belief scores from a low of 7.6% in Sweden to a high of 58.4% in Russia.

In a separate regression model (results not shown), I added the four macro-level factors to model 2. The results from this model showed significant odds ratios for GDP per capita (1.05) and for income inequality (1.04), as well as for gender culture. Comparing these results to those in Model 5 seems to suggest that the individual-level capital factors

interact with these macro factors in important ways. Further analysis is required to explore these interactions.

The results further show that the addition of the macro-level variables decreased the random country variance by a very small amount and, actually, in an interesting twist, increased the random gender variance by almost 4 times. This increase in the random effect of gender indicates that gender differences may vary quite a bit across countries that share similar levels of national wealth, income inequality, respect for entrepreneurship, and belief in traditional gender roles. Controlling for these macro-level factors resulted in very little change in the size of the fixed effects, however the pattern of significance changed importantly for some factors. The fixed effects of gender and age (experience) saw a decrease in significance, while educational attainment, being a homemaker, and fearing business failure lose significance altogether. This suggests to me that these individual-level factors vary in some patterned way across various levels of the country-level measures. Further analysis is required to unpack this result. It is possible to explore these patterns through the calculation of Empirical Bayes estimates. I offer a small sample of this sort of analysis later in this chapter.

Model fit appears to have improved a great deal as indicated by the decrease in the log likelihood. A significant likelihood ratio test score of 5293.71, comparing Model 4 to Model 5, confirmed it.

#### *Model 6: Impact of Macro-Micro Interactions*

In Model 6, I added significant gender interactions. The results offer support for my fourth hypothesis, that national cultural measures work through the habitus to influence the start-up decision, especially for women, and offer further support for my fifth hypothesis that individual-level factors outweigh macro-level factors in predicting the decision to start a business. I approached the development of this model in the same way I did Model 4. I ran

a larger model and tested for micro-macro interactions between the one significant macro-level factor, gender culture, and the individual-level factors and found three significant interactions. Then I ran the model again with only the significant macro-micro interactions to produce Model 6.

The results show that gender culture interacted significantly with household income and fear of business failure. With each unit increase in the belief in a traditional gender division of labor, the odds of becoming an entrepreneur for individuals with household income in the middle third of the national distribution, compared to those in the lowest third, increased significantly by 5%, net of all other factors. This result indicates that being middle class in a country with a more traditional gender culture increases the odds of business start-up quite a bit. Furthermore, each unit increase in the belief in a traditional gender division of labor increases the odds of becoming an entrepreneur for those who fear failure by 5%, net of all factors. This result is very interesting. It suggests that fearing failure is not a barrier to business start up in countries with very traditional gender views, but rather an impetus. Of course, this finding must be weighed against the controls for fear of failure and the interaction of gender and fear of failure. Both of those effects were increased by the addition of the macro-micro interactions. Both are large and significant *decreases* in the overall odds of nascent entrepreneurship. Fearing business failure significantly decreased the odds of being a nascent entrepreneur by 70% for all respondents and by an additional 31% for women. On balance then, it looks to me like this micro-macro interaction result really only applies to men in traditional gender cultures.

The addition of these micro-macro interaction effects appears to explain another sizeable portion of both the country variance and the gender variance. The random effect of country on nascent entrepreneurship is reduced to .192 and the gender variance is reduced to .008. Using Model 2 as a base model, I calculate that the individual level factors account for about 35% of the country variance and about 52% of the gender variance. The addition

of the macro factors and the interaction effects, most notably the micro-macro interactions, explain an additional 27% of the country variance and 34% of the gender variance of nascent entrepreneurship. These calculations confirm my final hypotheses that individual level factors are more important than macro-level for explaining variances in the nascent entrepreneurship across country and gender. Again, the log likelihood for Model 6 decreases from the previous model suggesting improved fit and a significant likelihood ratio test score of 11.93, comparing Model 5 to Model 6, confirmed it.

#### TESTING FOR RELIABILITY AND VALIDITY

I ran three sets of tests to determine how well the model fits the data. The first series of tests were likelihood ratio tests to measure how the model fit changes as variables are added throughout the progression of the series. As indicated by the log likelihood scores, the models presented in Table 4 improve progressively from Model 1 through to Model 6. Likelihood ratio tests confirm that each model is a significant improvement over the last. It is important to note, however, the limitations of the likelihood ratio test for comparing models that differ in the number of countries measured. The results of a “forced” likelihood ratio test may be unreliable (Pineiro and Bates 2000).

As a result of missing data for some variables in some countries, the numbers of countries included in the regression models decreased over the progression of the series. In an attempt to address the resulting threats to validity and reliability, I ran two additional sets of fitness tests to ensure that the effects were not biased by the presence or absence of particular variables or countries. In the first series, I identified three variables with the greatest missing data problems - household income, work status, and respect for entrepreneurship - and reran each series three more times, dropping one of the problematic variables, or dummy variable sets, each time. In the second series of tests I ran the full

model set for the final 8 countries in Model 6 and compared them to the models presented here in this chapter.

The test results for the dropped variable series showed very little change in the fixed and random effects across regression models. The perceptual variables and the social capital were consistently strong and significant, with rarely any change in effect size. Notably, economic capital (i.e., household income) became significant when the national culture measures were dropped out of the model. This result offers support to the argument that material, social, and cultural factors work in conjunction with one another to influence social action. I pursued that line of inquiry and ran tests to see what happened to the model without the perception measures and without the social capital measures. Dropping the perception measures shifted the effect and power to social capital. Economic capital also increased in significance, but not so much in effect size when perceptions were dropped. Dropping social capital increased the odds of nascent entrepreneurship primarily for one perception measure – having the skills to start a business – a full point from 5.7 to 6.7.

The second series of tests where I ran each model for the final 8 countries remaining in model 6 also showed very little change in fixed and random effects. The few differences that did appear were almost entirely in the random effects of the first two models. The consistency of effects across the larger and smaller samples of countries, I expect, can be explained by the overall similarity of the countries in the overall sample. This result certainly offers further incentive to expand the scope of crossnational data collection efforts to include countries other than the most industrialized.

## DIFFERENCES ACROSS COUNTRY AND GENDER

The charts in Figure 5-7 provide a visual illustration of how the probability of nascent entrepreneurship changes across the models as variable sets were added. It also offers an idea of how the countries dropped out of the regression analysis as a result of missing data.

Figure 5 represents the observed proportion of nascent entrepreneurs by country and gender – the observed or prior means. Figures 6 and 7 show Empirical Bayes estimates of the response probabilities of nascent entrepreneurship (i.e., the probability that  $y_{ij} = 1$ ) by country and gender for Models 3 and 6, respectively. These estimates are called posterior means and are basically adjustments of the prior means given the new information provided by Models 3 and 6.

Figure 6 indicates that the individual factors added to Model 3 narrowed the range of variation, depressing all the predicted probabilities of nascent entrepreneurship. Figure 7 shows that the addition of the macro-effects and interaction effects increased the variation again, primarily by dramatically increasing the probability of nascent entrepreneurship for respondents in the United States in comparison to the other countries still in the model. It appears that controlling for all the fixed factors and interactions, Americans are much more likely to start a business than those in other countries. That picture fits in well with the self perceptions of many Americans.

Figure 5: Proportion of Nascent Entrepreneurship for Model 1

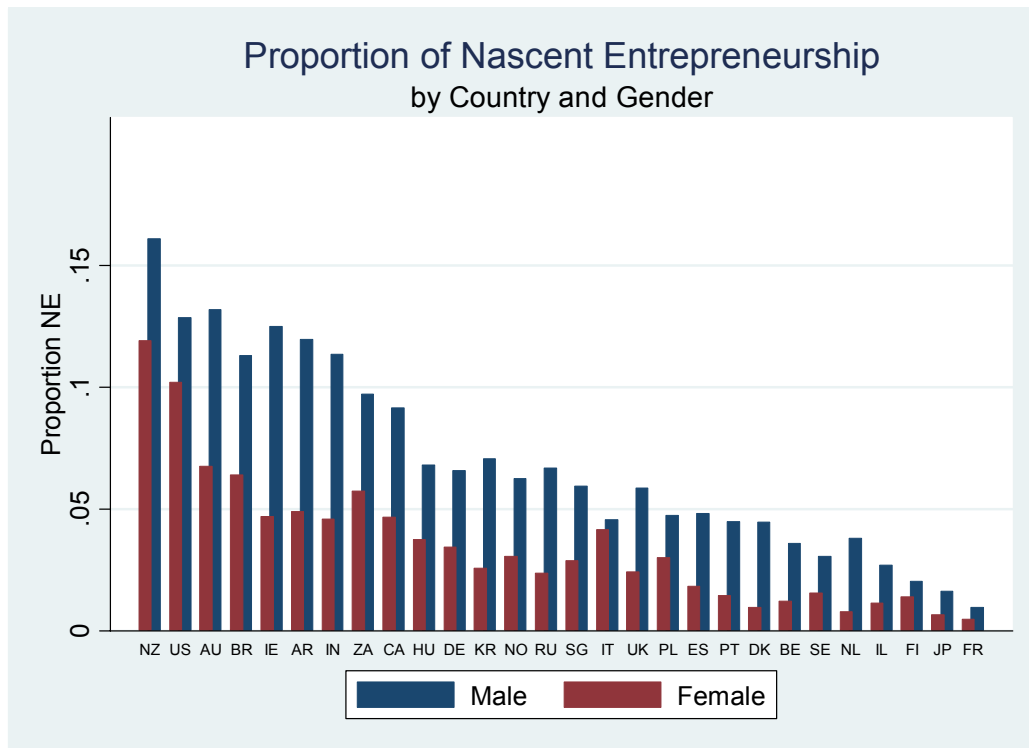


Figure 6: Predicted Probability of Nascent Entrepreneurship for Model 3

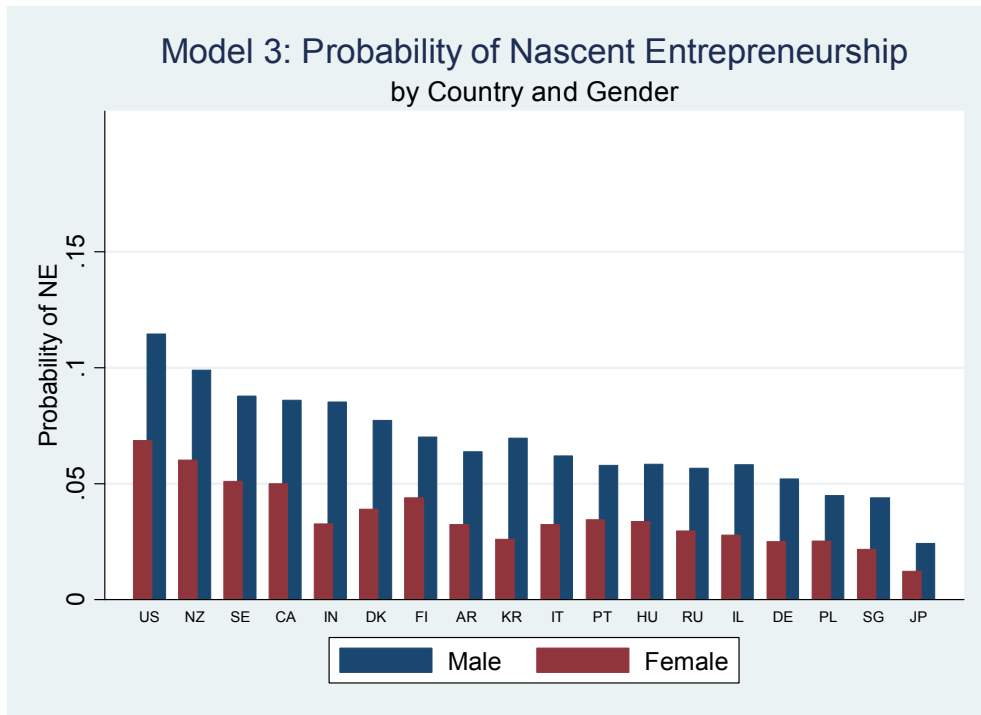
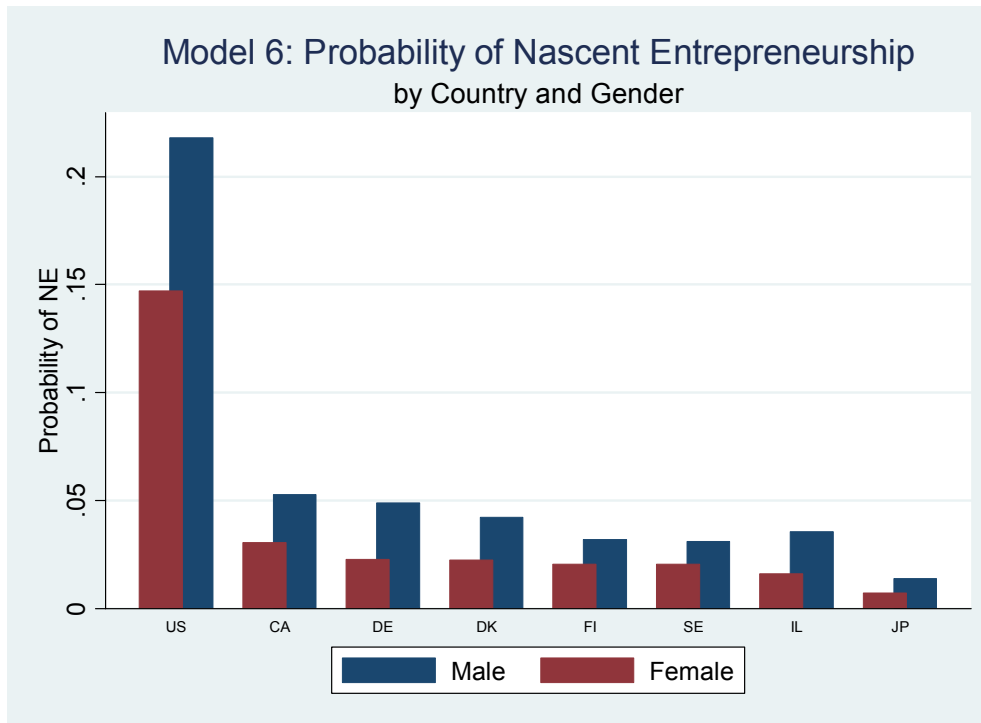


Figure 7: Predicted Probability of Nascent Entrepreneurship for Model 6





The probabilities for Canada (CA) and Germany (DE) are puzzling. It is not clear why the US rates are sparked by the additional controls in Model 6, while probabilities for Canada and Germany remain low. It is also important to note that controlling for additional factors in Models 3 and 6 does not seem to change the gender difference in the predicted probability of nascent entrepreneurship in the United States, as it does for the other countries in the Model 6 sample. It is hard to say much at this point about the macro-factors that may explain these differences because the countries left in by Model 6 are really very similar. Perhaps the answer to these questions lies in the further investigation of the relationship between predicted probabilities and the key predictors of nascent entrepreneurship revealed in the regression analysis, namely perceptions and social capital.

Figures 8-12 offer an illustration of the Empirical Bayes predicted probabilities of nascent entrepreneurship across countries and by perception or social capital response. The figures show that individuals with the more optimistic and confident perceptions are much more likely to start a business. These figures are really simple illustrations of the regression effects found in Model 6 where the perception of start-up skills. What is perhaps more clear in these figures is the extent to which each perception or knowing an entrepreneur matters for the decision to start a business. Clearly, those who do not perceive having the skills to start a business simply will not do it. The same pattern is found to a slightly lesser extent for the importance of knowing an entrepreneur, the expectation of future business opportunities, and the perception of a brighter financial future for one's family. Fear of failure, however, shows a different pattern. Figure 10 shows more balance in predicted probabilities across those who do and do not fear of failure. Apparently, a fear of failure is not enough of a barrier to stop a lot of people from starting a business. These findings have definite policy implications. However, the story does not end here. The next set of charts extends the investigation to gender patterns.

Figure 8: Predicted Probability Estimates for Nascent Entrepreneurship by Country and Perception of Opportunity

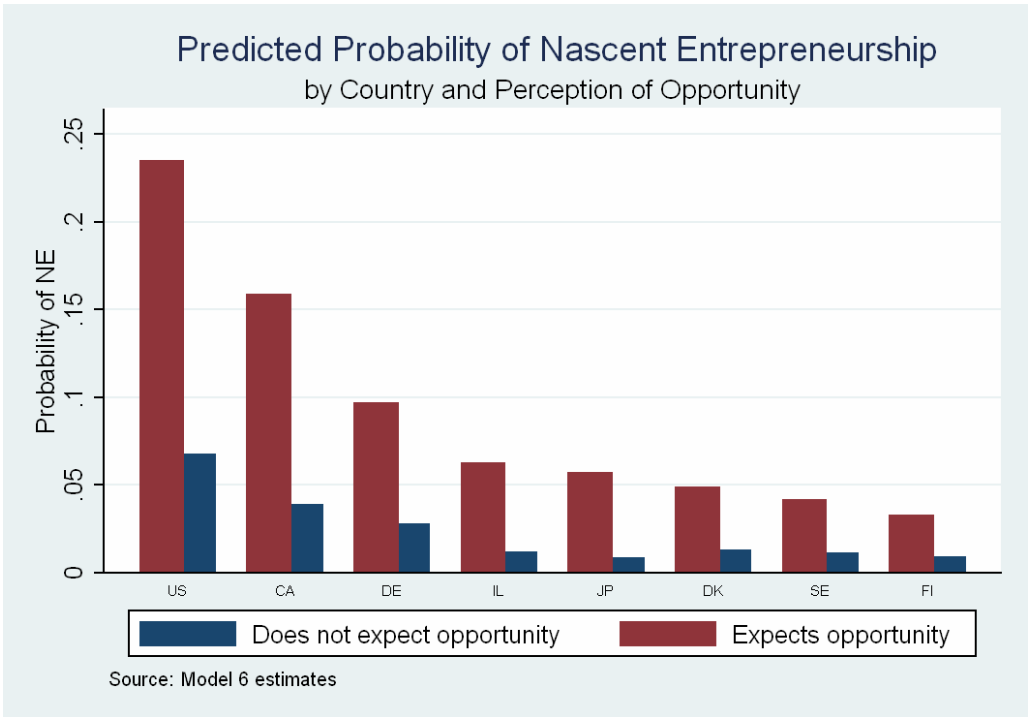


Figure 9: Predicted Probability Estimates for Nascent Entrepreneurship by Country and Perception of Startup Skills

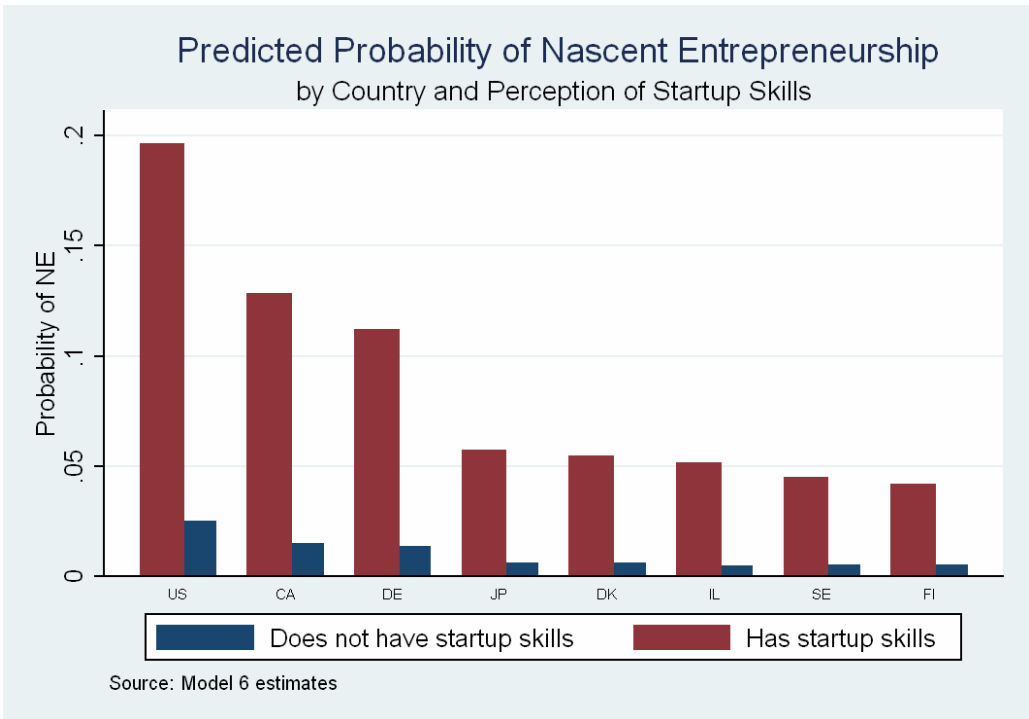


Figure 10: Predicted Probability Estimates for Nascent Entrepreneurship by Country and Fear of Failure

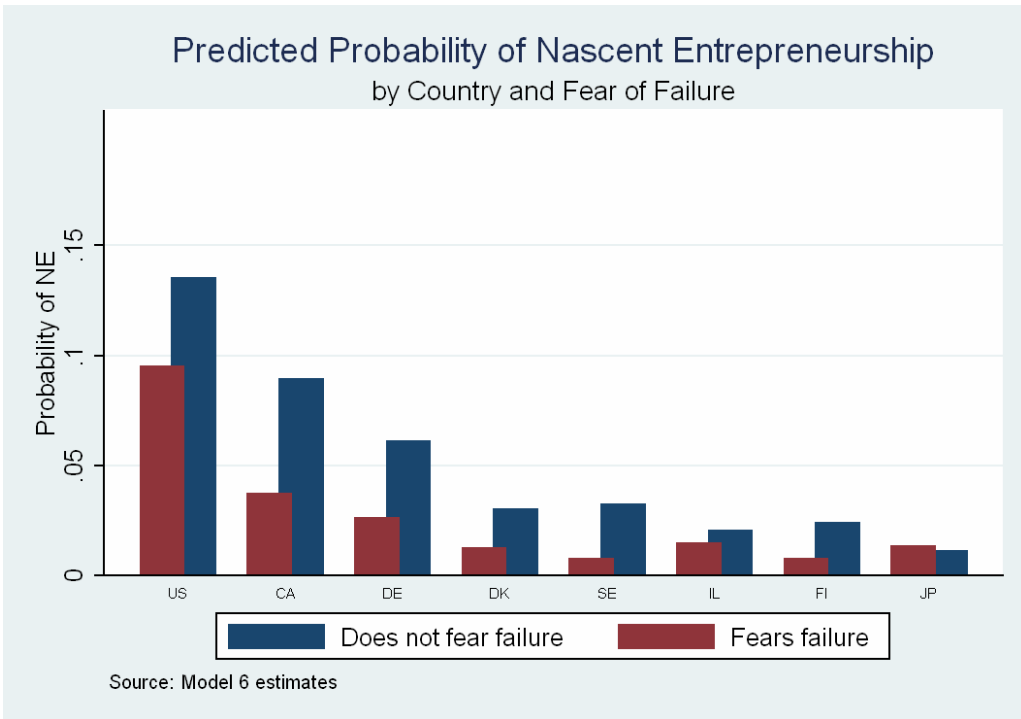


Figure 11: Predicted Probability Estimates for Nascent Entrepreneurship by Country and Expectation of Better Family Financial Future

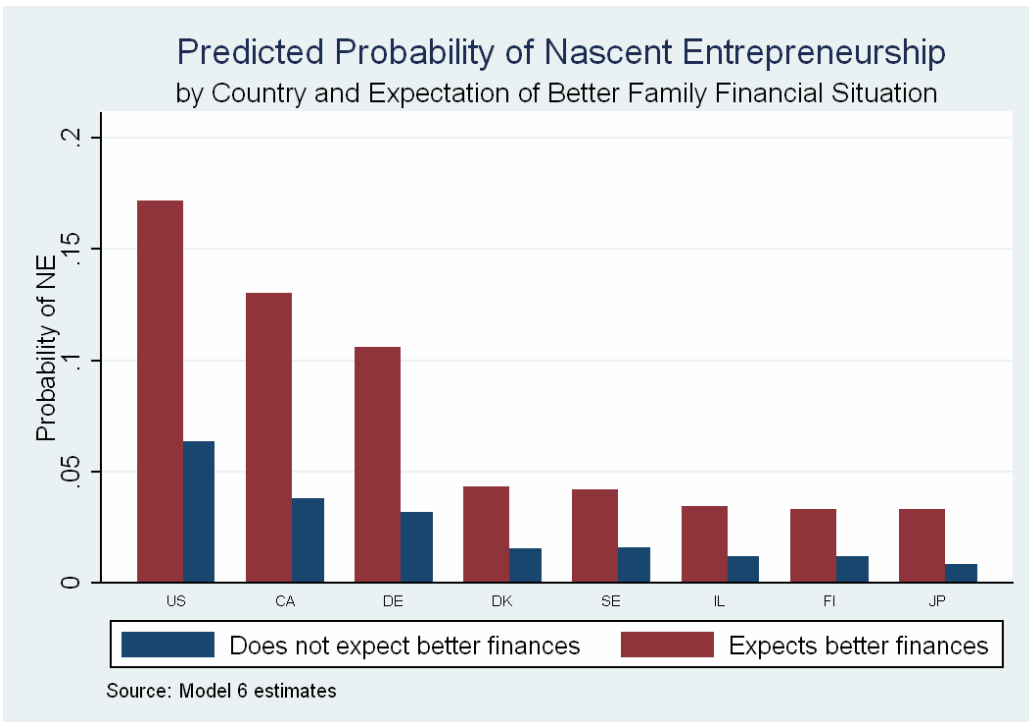
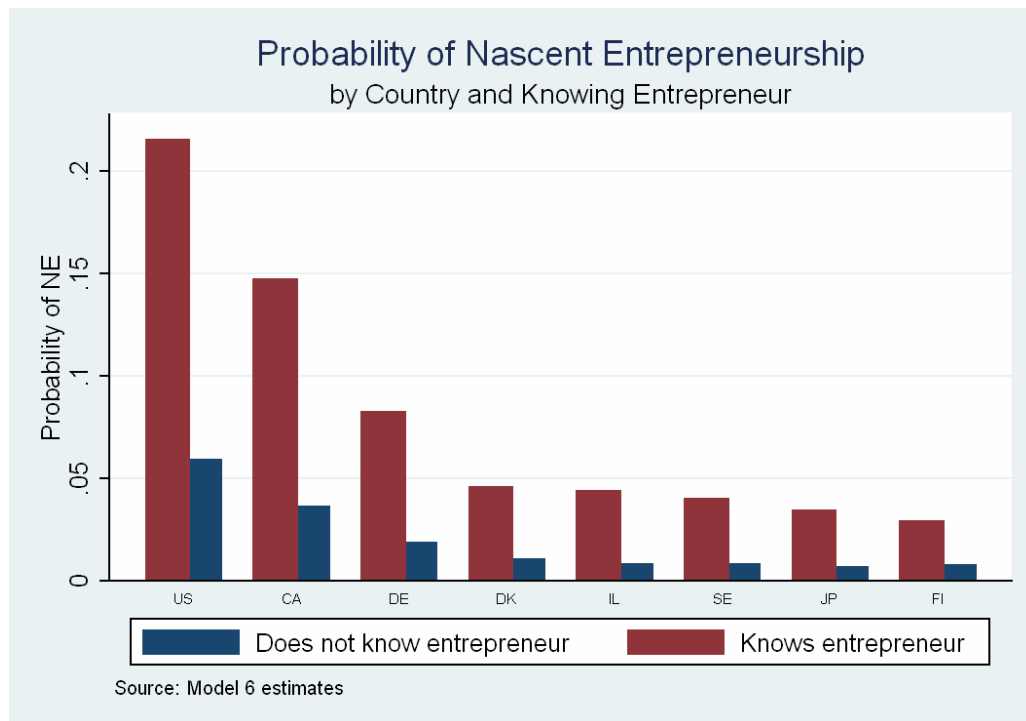


Figure 12: Predicted Probability Estimates for Nascent Entrepreneurship by Country and Knowing an Entrepreneur



Figures 13-22 offer further illustration of the changes in predicted probabilities of nascent entrepreneurship across countries by gender and responses to questions about perceptions or social capital. Immediately apparent are the general patterns found in Figures 8-12. Again, individuals with optimistic and confident perceptions and social capital will be much more likely to start a business. Less apparent, perhaps, is the variation in patterns across gender and country. It appears that those optimistic perceptions and social capital is generally more often exploited by men than women in most countries, but more so in some countries than in others and more so for some factors than for others. For example, the perception of start-up skills evens the playing field in some countries, like the US and Japan. My first instinct is to argue that the more traditional gender culture in these countries explains this effect. In other words, women in more masculine countries are put off more by the gender culture, unless they have the skills and confidence to prove otherwise. However, Sweden, a strong culture of gender equality, shows a similar pattern.

Figure 13: Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Perception of Opportunity

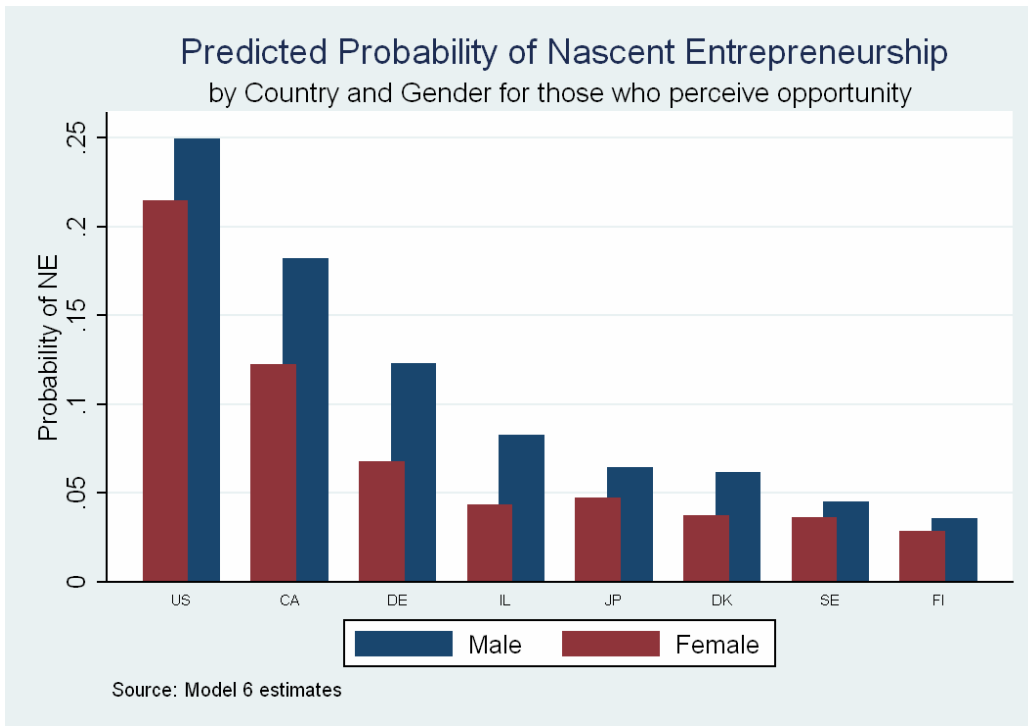


Figure 14: Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and No Perception of Opportunity

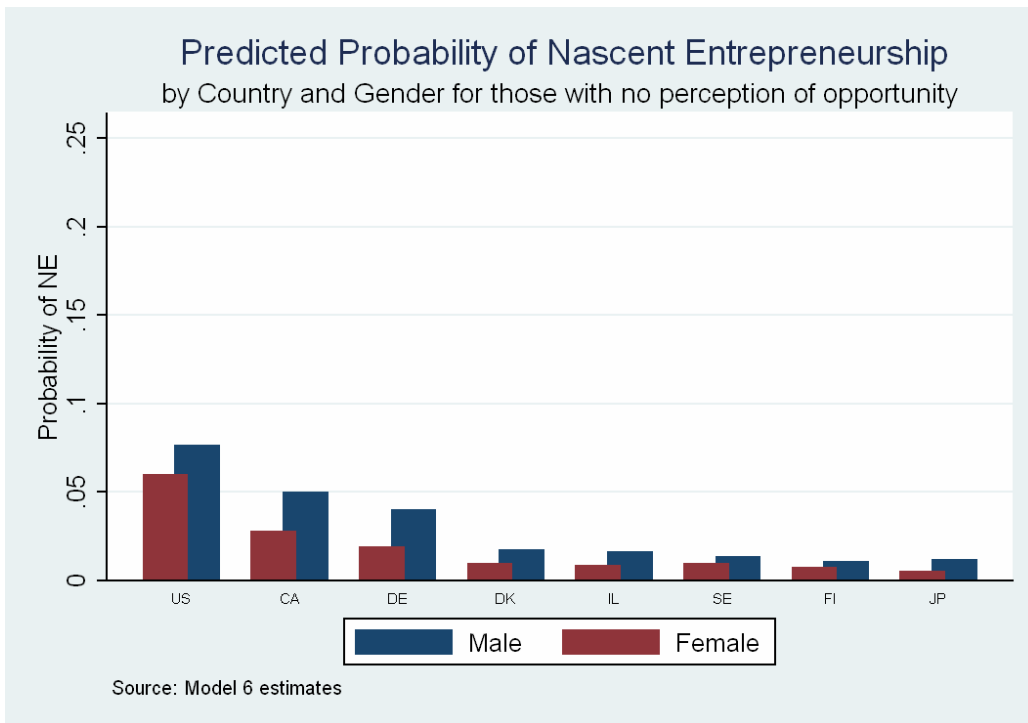


Figure 15: Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Perception of Start-up Skills

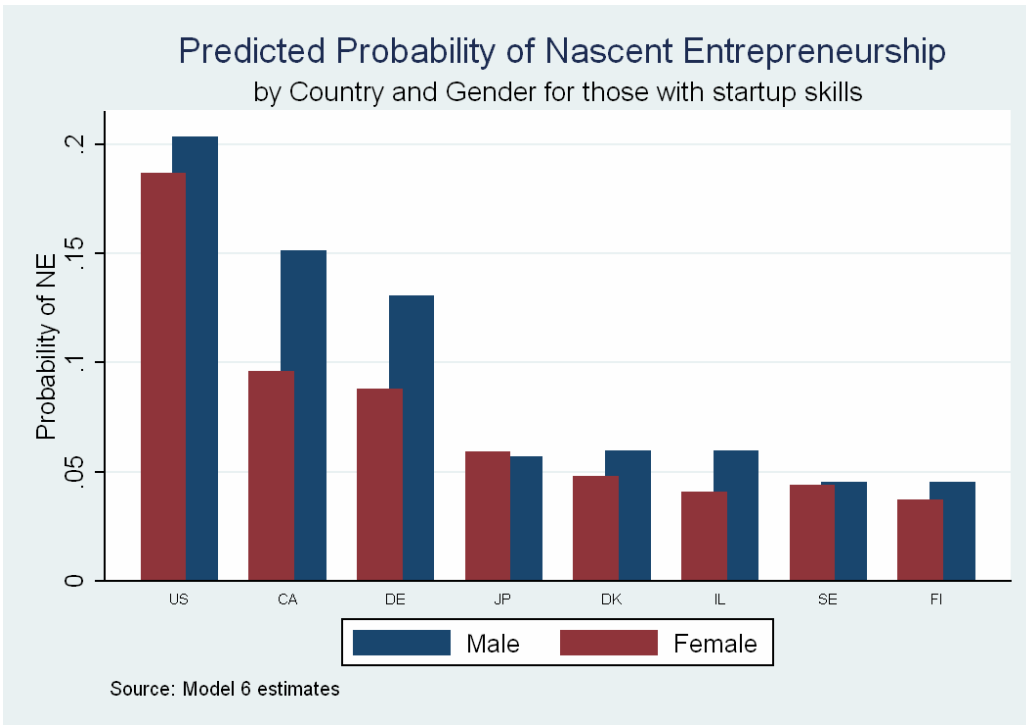


Figure 16: Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and No Perception of Start-up Skills

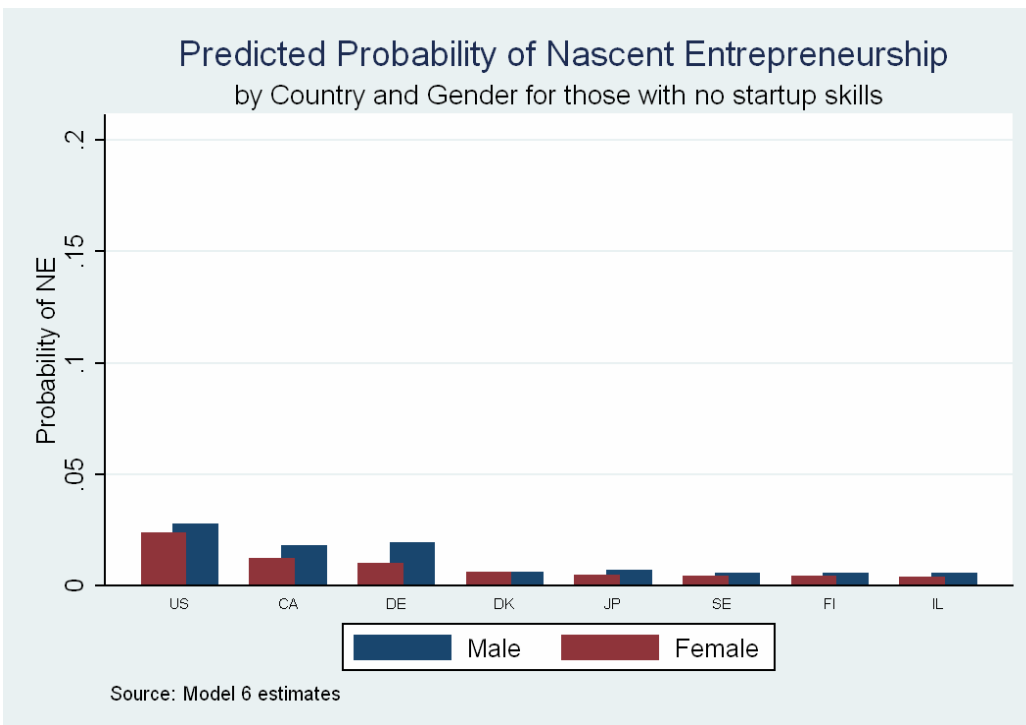


Figure 17: Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and No Fear of Failure

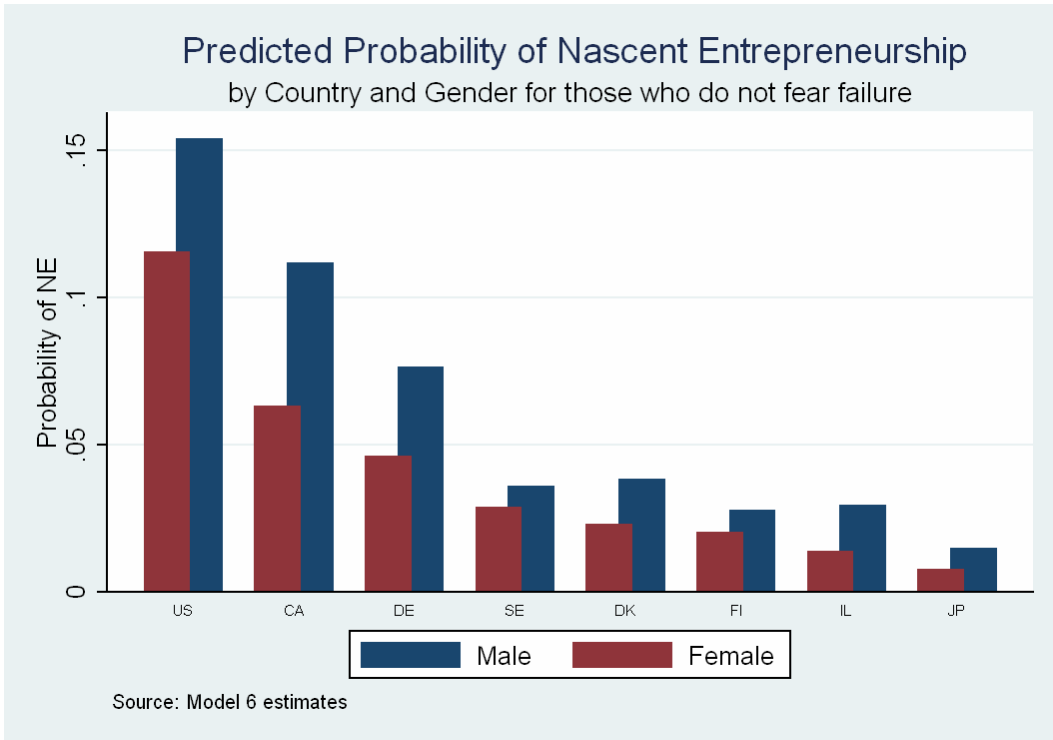


Figure 18: Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Fear of Failure

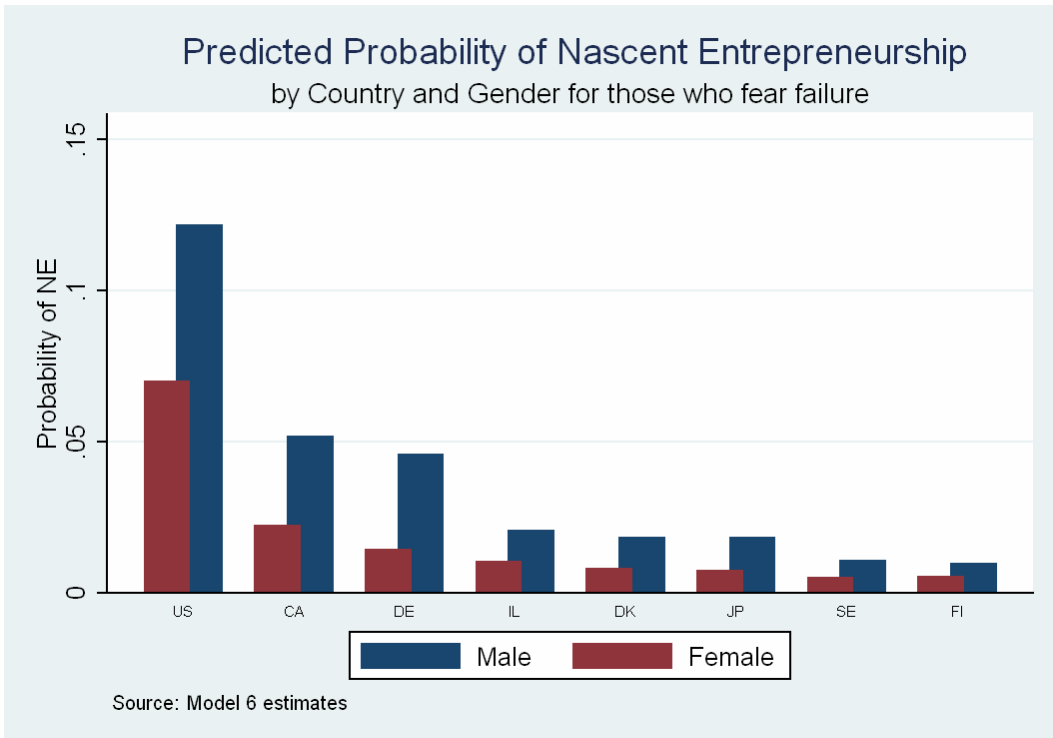


Figure 19: Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Expectation of Better Family Financial Future

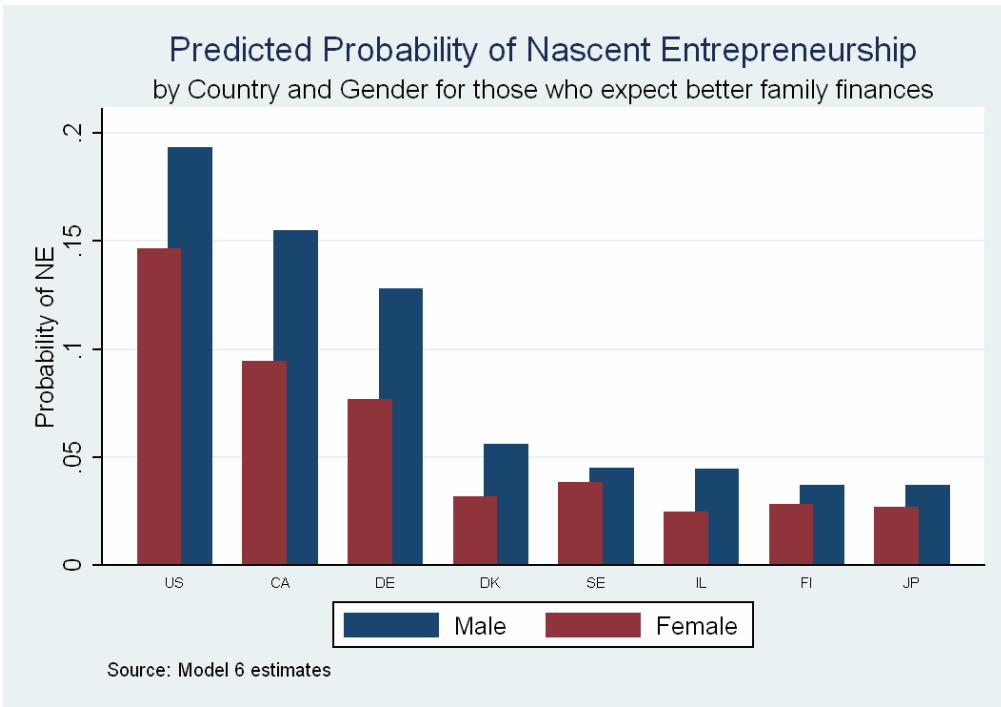


Figure 20: Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and No Expectation of Better Family Financial Future

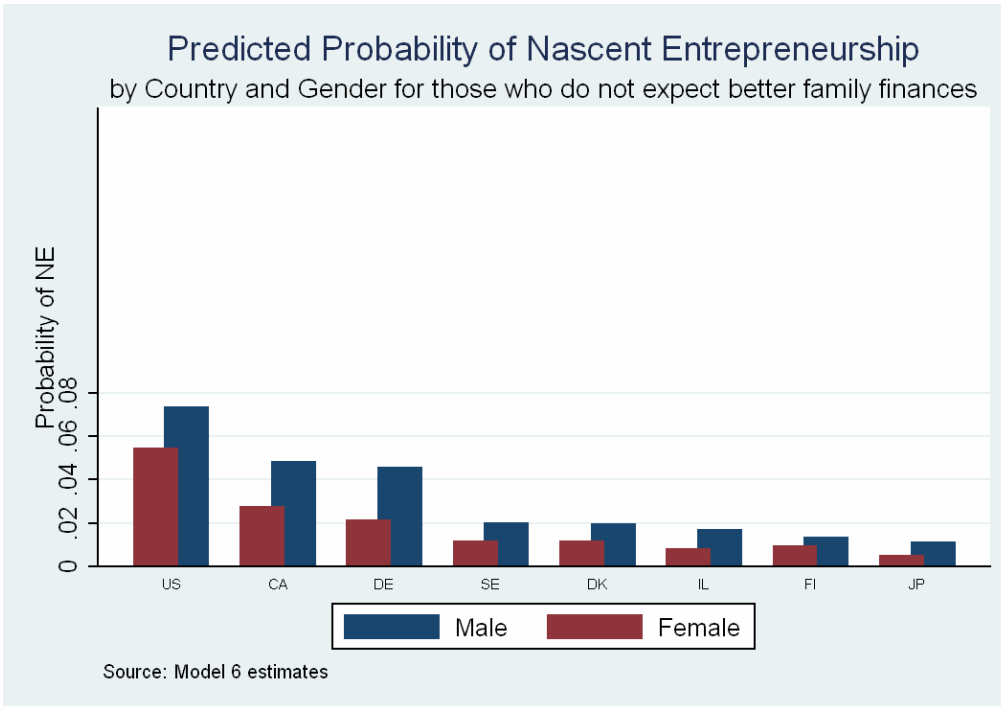




Figure 21: Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Knowing an Entrepreneur

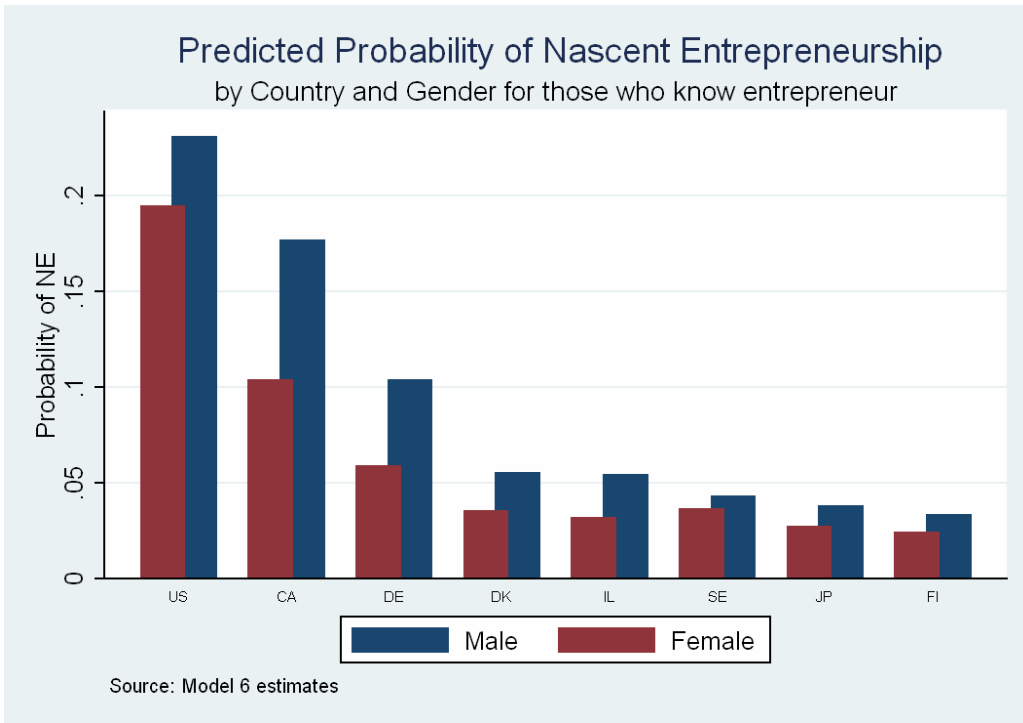
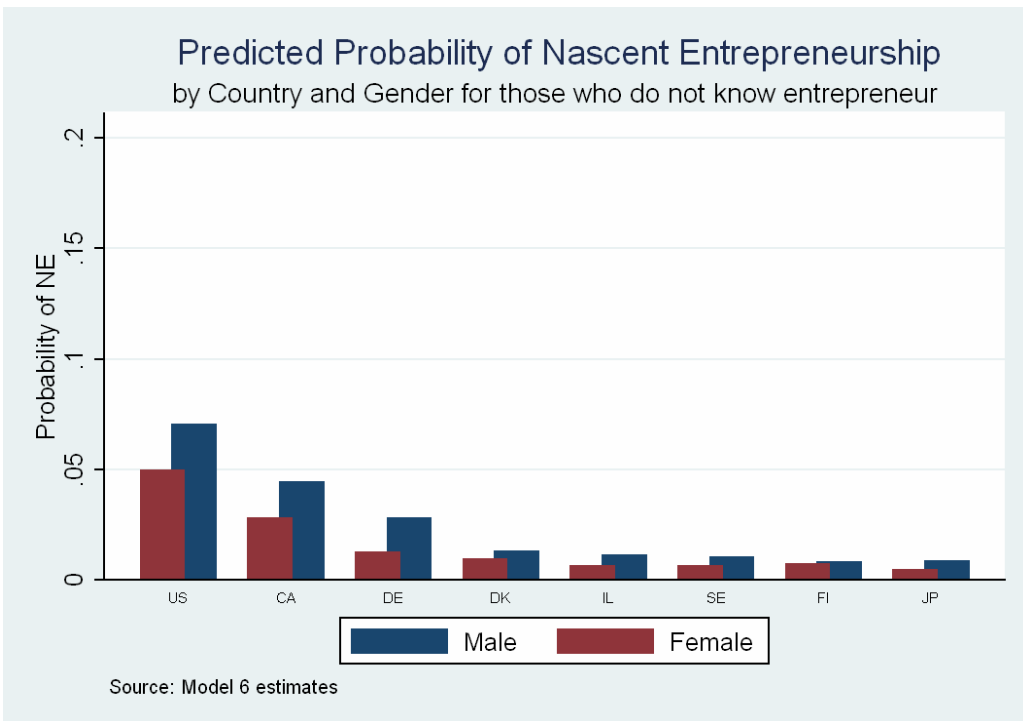


Figure 22: Predicted Probability Estimates for Nascent Entrepreneurship by Country, Gender and Not Knowing an Entrepreneur



Additionally, I suggested earlier that the interactions between gender culture, fear of failure, and gender of respondent in the regression analysis suggests that fear of failure is less of a barrier to men than to women in those countries. These findings, in fact, confirm that finding in that fearing failure appears to increase the gender gap in probability of start-up in the U.S., but shrinks the gap in other countries. In some sense then, it seems that men are generally either better positioned to, or more inclined to, exploit their positive perceptions and social capital than women. That question bears further inquiry.

As for why Canada and Germany's overall probabilities shrink relative to the US in the general chart, we can one possible explanation in Figures 17 and 18. Fear of failure appears to be a bigger deterrent to business start-up in these countries compared to the U.S. Again another finding emerges that indicates a path of fruitful future investigation.

## DISCUSSION

The results of the regression analysis strongly support my practice theory model of entrepreneurship. To begin with, the habitus, or, perception measures were tremendously and significantly predictive of nascent entrepreneurship for all respondents, consistently across all models. My findings confirm Arenius & Minniti's (2005) GEM research, wherein they found that perceptions were the most important predictors of nascent entrepreneurship, net of all other individual-level factors, and wherein they confirmed the presence of country effects on the decision to start a business.

Of particular importance, are perceptions of start-up skill and fear of business failure. Perception of start up skill increased the odds of being a nascent entrepreneur for this sample of data by as much as 5 or 6 times for all respondents. This finding suggests that business education, start-up experience, and expert mentoring are an incredibly important focus for entrepreneurship and small business programming. Fear of failure was also highly predictive of start-up, decreasing the odds of being a nascent entrepreneur by about 70% in

the final model, even after controlling for two interactions with gender and with national gender culture. The implications are huge for countries where business failure is harshly sanctioned and widely feared, as well as for women who are much more likely to fear failure on average across all countries.

Taken together these perception measures also suggest the importance of confidence and optimism to the adventure of business start-up. Perhaps that is really what the entrepreneurial spirit is all about – the belief in economic possibilities and the future looks bright – and not so much about risk-taking or internal locus of control. Other scholars have addressed the importance of optimism and confidence for entrepreneurs and business start-ups (for reviews, see Aldrich and Ruef 2006; Aldrich and Kim forthcoming 2007). I believe this is one area worthy of further development, especially in terms of the relationship to cultural definitions of legitimacy.

My one social capital measure, knowing an entrepreneur, was also a key predictor of nascent entrepreneurship significantly and consistently across models. Knowing an entrepreneur more than doubled the odds of starting a business in this sample. Moreover, it appears that knowing an entrepreneur may be linked to perceptions of start-up skills. Studies of social networks and entrepreneurship have shown that social ties are exceedingly important for budding entrepreneurs and for all sorts of reasons (Aldrich 1989; Aldrich 1999; Aldrich, Elam, and Reese 1997; Aldrich, Reese, and Dubini 1989). Entrepreneurs with most diverse ties tend to do better, perhaps, because they are able to tap into a broader resource base. We know that having an entrepreneur in the family is a very good thing for entrepreneurs (Aldrich and Kim forthcoming 2007), but we know little how entrepreneurs use these ties and for what purposes. My findings further suggest that having social ties to entrepreneurs boosts confidence and optimism possibly through the demystification of the start-up process, no mean feat in modern bureaucratic economic systems. In this sense, having prior ties to entrepreneurs may be doubly important for women. The fact that women

in this sample were less likely to feel confident and optimistic about the prospect of business start-up is compounded by the fact that they were also less likely to know entrepreneurs.

Descriptive analyses revealed the expected general relationships between nascent entrepreneurship and measures of economic capital and institutionalized cultural capital (a.k.a. human capital), but those patterns were diminished and often altered in the regression analyses when controls for other factors were put in place. The measure of economic capital, household income, did not stand up to the importance of the other capital factors. Class position is an important determinant of overall capital holdings from a practice theory perspective. It may be that for business start up, cultural capital is much more predictive. Recalling Figure 2 from Chapter 2, Bourdieu's conception of the spread of occupational categories across social space according to total volume and type of capital, I note that he tended to place the bureaucrats on the left and the business owners on the right. It is not the first time I have wondered if fiscal conservatives are not really more optimistic and confident about the marketplace as compared to those with opposing views. In any case, the relationship between education and perceptions relating to business start-up are another area worthy of exploration.

As for the country-level variables, positive correlations were found between nascent entrepreneurship and national income, income inequality, and national culture supportive of entrepreneurship. Those relationships were positive and not necessarily small. The effects and significance disappeared, however, net of the other factors, as predicted. I hypothesized that the individual level factors would largely account for the importance of any macro-level factors – local context being much more predictive of behavior than global trends. The fourth country-level factor surprised me, however. The measure for national gender culture – belief in traditional gender division of labor – turned out to have a significant, positive effect when all other factors but the micro-macro interactions were accounted for. The belief in a traditional gendered division of labor was highly correlated

with nascent entrepreneurship, in spite of all the other factors, in Model 5. That effect, however, disappeared when interactions were added for household income and fear of failure, offering strong support for my argument that macro factors work through individual-level factors, namely capital structures, to influence the decision to start a business. Moreover, national gender culture appears to directly influence gendered rates of entrepreneurship through both economic capital and the fear of failure!!

As illuminating as these findings are, there is, as always, room for improvement. It would be very worthwhile to test this theory with better data. The measures of economic capital were disappointing. It may be that household income is simply a poor proxy for the economic resources critical to business start-up. It might be helpful to test measures of personal savings and available equity/debt capital. The measures of institutionalized cultural capital could also be improved significantly. Age is certainly a good measure of life experience, but is not the same as work experience, especially start-up experience.

Education is another form of institutionalized cultural capital that may have different implications for men and women and rates of startup. Men and women tend to pursue very different *types* of education. It would have been good to capture the importance of type of education for business startup. Experience and education related to business skills and industry are particularly important. Unfortunately for this study, there were no measures of the character of education and experience or even of the respondents industry, although some the effect may have been picked up by the measure of the perception of start-up skills. Nevertheless more precise measures of the character of the respondents' education and experience would have helped isolate the sex-segregation effects of those factors. It is hard to emphasize enough the importance of industry for the study of gender and entrepreneurship. As research on gender and work has repeatedly shown, industries and occupations are highly salient for questions of gender (Charles and Grusky 2004).

Occupational and industrial sex segregation, for example, accounts for a significant portion of gender wage gap in the United States and other Western Industrialized countries.

Also important for understanding the occupational choices that women make are measures of family demands. Again, research on gender and work has demonstrated repeatedly the importance of family situation for the occupational choices that women, if not men. Status expectations state research has suggested that motherhood serves as a status in and of itself, triggering evaluations and judgments of performance that are particularly salient in the context of paid work (Ridgeway and Correll 2004a). It may be that parenthood for women triggers the decision to start a business for women. Without the data, however, we cannot parse out the effects of parenthood.

Data quality issues have resulted in inadequate measures, missing cases, and even a lack of key determinants in this project. In this sense, only future studies will confirm the validity and significance of these findings. Despite the limitations, however, these results go far to support my practice theory argument that cultural, social, and material factors work together largely at the local level, and largely through the habitus, to produce gender-specific and country-specific patterns of entrepreneurship. Disentangling the web of effects and interactions is difficult, of course. However, I believe that my research model as tested has offered a tremendous start for unpacking the ways in which a practice theory view can inform our understandings of how nascent entrepreneurship varies across gender and countries.

## CHAPTER 6

### IMPLICATIONS AND CONCLUSIONS

The work of understanding crossnational patterns of entrepreneurship has only just begun. Early research efforts have identified a pattern of difference between countries that tends to hold rank order over time and over short-term economic fluctuations (Acs, Arenius, Hay, and Minniti 2005) . The consistency of these comparative rates over time suggests that cultural factors may play an important role in determining national rates of entrepreneurship (Schramm, Litan, and al. 2005). Patterns of gender difference in rates of entrepreneurship across countries also follow this pattern of consistency over time (Arenius and Minniti 2005; Minniti, Arenius, and Langowitz 2005), again suggesting that culture plays an important role. Few studies exist, however, concerning gendered patterns of entrepreneurship across countries. Consequently, understandings about both crossnational patterns of entrepreneurship and gendered patterns of entrepreneurship across countries are very limited.

The effort to expand our understandings of entrepreneurship is further constrained by some important trends and biases in the existing literature on entrepreneurship. In chapter one, I discussed these problems at some length, arguing that they pose a serious threat to current and future research efforts, especially for research on gender and crossnational patterns of entrepreneurship. Current findings are fragmented, disconnected, and often contradictory. I attribute these mixed findings to the limits and biases of the data and methods used to create them and, ultimately, to the lack of a comprehensive,

conceptual framework for the study of entrepreneurship. What is missing, I argue, is a perspective that effectively integrates the classic theoretical oppositions and successfully incorporates social, cultural, and material determinants of entrepreneurship. It is only through the incorporation of all three sets of determinants that key sociological principles – ideas, relationships, and power – can be effectively mainstreamed into theory and research about entrepreneurship.

This call for a grand theory view of entrepreneurship is not intended to discount the important contributions that more middle-range type theories can offer. The intent is to overcome the problems inherent in the study of a social phenomenon from a multitude of contrasting theoretical perspectives – namely, the fragmented, disconnected, and often biased and contradictory views of entrepreneurship that plague the field at this time. Grand theory, I contend, is an important conceptual tool for researchers and theorists alike. This type of “big picture” theoretical view can reveal the relationships between more particular theories and findings, reminding us about the relative importance of various sets of factors and placing those middle-range theories in proper relation to one another. In this sense, grand theoretical views can also inspire us all as researchers and theorists to see how our ideas may apply metaphorically to other contexts or social phenomena -- that is, to other parts of the puzzle that is social life.

Yet another impetus for supporting the development of a comprehensive conceptual framework for the study of entrepreneurship is the clear need for multilevel theories for crossnational studies. Multilevel research needs multilevel theory (DiPrete and Forristal 1994). Currently there is no comprehensive theoretical framework for the study of entrepreneurship across countries. And we need one badly. Before we dig into these crossnational patterns, we need a big picture view of where we are now and where we are going in terms of our theory development and research efforts. I believe, further, that grand theory in the form of a comprehensive theoretical framework does not have to be so abstract



that it is empirically useless. On the contrary, I believe grand theories can be filled in, fleshed out, or synthesized with other theories in ways that improve their testability and provide a firm basis for social inquiry.

In response to this lack of conceptual framework, I proposed a practice theory view of gender and entrepreneurship. A practice theory view, I argue, not only does a good job of integrating classic theoretical oppositions, such as structure and agency, structure and culture, micro- and macro-levels, but also can show particular sensitivity to issues of class, gender, race and other status characteristics. The practice theory view that I develop in Chapter 2 is inspired heavily by the works of Pierre Bourdieu (Bourdieu 1986; Bourdieu 1990; Bourdieu 2001), Gerhard Lenski (Lenski 1966; Lenski 2005), and by status expectations state theory (Foschi 2000; Ridgeway and Smith-Lovin 1999; Webster, Whitmeyer, and Rashotte 2004).

In essence, practice theory argues that what one does for a living determines to a large extent one's outlook on the world, and that, in turn, one's outlook on the world determines one's decisions and actions in ways that tend to reproduce one's circumstances. The way out of this cycle of social reproduction, if change is in fact the goal, is to effect a change in either worldviews, or practices, or capital holdings. These insights help us to better understand Marx's argument that the potential social change is constrained by a lack of (working class) consciousness and by the fact that the capitalist class will always resist a full consciousness of their privilege and power because it works against their class interests.

Practice theory also helps us to understand Weber's distinctions between class, status, and party. Women as a social group qualify as a status group, not a class, and face serious barriers to achieving effective qualification as a party because they face serious structural barriers to achieving and maintaining solidarity, as de Beauvoir (de Beauvoir 1952) so eloquently pointed out and as Ridgeway and Smith-Lovin (1999) have argued from a status expectations state and social networks perspective. Women are spread across the

social status structure in a way that results in repeated patterns of interaction where they are placed in lower status roles. If culture, or more specifically status beliefs, are constantly negotiated and confirmed or disconfirmed through interactions, then these interaction patterns will generally result in the reproduction of existing status beliefs.

The practice theory view of gender and entrepreneurship, proposed herein, attempts to bridge common theoretical divisions between cultural and structural sources of explanations, macro- and micro-levels of analysis, and male versus female experiences of entrepreneurship. I proposed 10 theoretical propositions. There are four points concerning those propositions that I would like to emphasize here. The first is that social actors generally strive to maximize returns of social legitimacy. For some actors, this may mean economic maximization. For other actors, it may mean the maximization of social approval from others or the satisfaction of other personal desires or needs.

A second point is that the social definitions that govern the exchange rate values for various forms of capital assign values based upon both the status characterization of the field, the practice, and the individual. Gender is one such status that dictates the distribution of legitimacy rewards and shapes practice within particular fields of practice, or play. As such, gender serves as a potential reward/penalty of symbolic capital or power. The processes through which the reward/penalty of legitimacy occurs, I further argue, are self-selection in the case of analyses of choice, and discrimination, or preset expectations of competency, in the case of the analyses of outcomes.

A third point is that culture influences social action through organization and reproduction of capital holdings, cognition, and social ties. These capital resources include notions of practice and habitual cognition (i.e., understandings of how to act and how to use available resources to act) as well as economic, social, and institutionalized cultural capital. Social capital not only serves as sources of money capital and task-specific know-how, but also as sources and sanctioning agents of understandings of legitimate behavior. Women

might be more inclined to make work choices that maximize their economic return, if they were rewarded for those decisions in the same way that men are. For example, a successful female professional is very likely to hear comments about who is raising her children while she works, while her equally successful husband hears nothing.

Ideas about who can appropriately, or successfully, pursue a given practice within a particular field of play are part of the cultural schemas that we hold in our minds and largely take for granted. Ideas about gender, for example, shape the ways we think, feel, and do things in ways that we seldom question. As such, cultural patterns result in differences in self-perpetuating patterns of cognition, identity construction, communication, and interaction for males and females in every culture. These cultural ideas, or schemas, are set to some extent at a young age, but are open to adjustment through experience and education.

As studies of career trajectories teach us, key decisions tend to set people on particular trajectories. Where you start is everything. In the game of economic success, women start at a disadvantage. Social changes in many modern countries have brought about changes in life course patterns that serve women very well. Social patterns, such as postponed childbearing and continued education, place women in much better positions for economic participation and social equality.

Still I believe the disadvantages that women face economically begin early in life and are hard to change later on. It is no mistake, in my mind, that women tend to start businesses at a later age than men. The early life training many women receive leaves them ill equipped to compete in the marketplace on the same terms as men, not because they are unable, but simply because they have not learned how or because they come to the marketplace with very different worldviews and priorities. If those “female” worldviews and practices are not there to begin with, they tend to be triggered by major life transitions such as marriage and childbearing. These events culturally send men and women in very different directions.

The fourth and final point is that macro factors are most often just aggregate measures of individual-level phenomenon. In effect, practice theory suggests that social action is determined largely by local context and that the influence of more global factors operate indirectly through the local factors - the capital resources - that constitute that local context or social position. It is all well and fine to study correlations at the macro-level, but policy making should never be based on those kind of findings -- at least not without strong support from multilevel studies of the interactions between macro- and micro-level determinants.

Some critics might find it odd to apply practice theory to a multilevel study using quantitative methods. I can understand that point. Bourdieu's theory in particular is well loved among cultural theorists and ethnographers. However, I have to point out three things. The first is that Bourdieu himself used quantitative methods in his studies of education. In fact, correspondence, or, factor analysis was his quantitative method of choice. Second, Bourdieu was by nature a fence-straddler. He appreciated the insights he gained from all sources – classic social philosophy, ethnographic experience, multiple types of methods, etc. The very fact that he proposed an integrated theory suggests his desire for synthesis and a balanced view of social life. And, third, according to Wacquant, Bourdieu himself gave his theory up for inspiration and manipulation (Bourdieu and Wacquant 1992). I believe Bourdieu, like Lenski and others still practicing today, took the job of knowledge production very seriously and understood that he was making one contribution of many throughout history. Consequently, he was, in fact, very willing to have his theory serve as the inspiration for new theories of social life.

In chapter 3, I applied the proposed practice theory view to the case of gender and business start up. The application of this practice theory view of social action to entrepreneurship resulted in the definition of entrepreneurship as a male-type practice and largely unconscious strategy of action. A review of the literature showed that a practice

theory view fits well with existing entrepreneurship literature, especially with the findings on gender and entrepreneurship. It further showed how this perspective can help to resolve inconsistencies and contradictions in the literature and lead the way toward better theory and research on entrepreneurship.

Current theory development efforts in the field of entrepreneurship are moving in the right direction. Several scholars have very recently offered comprehensive conceptual frameworks of entrepreneurship. Unfortunately, those views still tend to be biased in one way or another and offer limited views of the decision to start a business, particularly across gender. Gender perspectives on entrepreneurship do a much better job of explaining and predicting current patterns of entrepreneurship across gender. In fact, the closest fit between the practice theory view I propose and current theorizing on gender can be found in gender theories of entrepreneurship.

One particular conundrum that the proposed practice theory view helps to resolve is the motivation puzzle. Studies of motivations for starting a business have generally found at least a few gender differences. Men, for example, are more likely to start businesses for money and women for flexibility. However, the reason most often stated by both genders is autonomy or independence. From a practice theory view even the contradictions make sense. Autonomy can mean something very different for different people. For those who seek flexibility, it can mean the freedom from bureaucratic work schedules. For those who seek profit and innovation, it can mean the freedom to create and market a product or service in one's own way. These goals are not mutually exclusive. I expect most entrepreneurs would admit to the attraction of an assortment of motivations, but prioritize them in some fashion or another according to their interests and desires. It is those interests that drive the ranking.

Women, especially mothers, come to the decision to start a business from very different circumstances. As practice theory predicts and the research shows, differences in

start-up rates, personal characteristics, and business characteristics are explained to a large extent by the different capital holdings that women tend have. Women tend to start businesses at about the half the average rate of men in the United States and around the world. These rates vary across cultures and across class position, suggesting the importance of social, cultural and material factors for the decision to start a business.

Women start businesses that are generally very different from those men start. Women are more likely to start smaller businesses that stay small. They are less likely to incorporate, more likely to see modest revenue streams, and less likely to employ others than men. Women-owned businesses are more often found in the service sector, which accounts for many of these differences in business characteristics. Some scholars have concluded that businesses processes are gender neutral, the implication being that women are simply not approaching business start-up or management the right way in order to succeed. I argue that the disadvantages that women face in business have everything to do with their social positions and the worldviews that correspond with those social locations.

Around the world women are more likely to start business out of necessity and less likely to start them in order to pursue opportunities than men. Certainly starting a business may serve as a path out of poverty for women in less developed countries, but the evidence from more advanced economies is not so rosy. Self-employment studies from the United States further suggest that there is a growing class division among self-employed women, where women at the top of economic and social ladder are have very different goals, motivations and capital resources (including social networks and human capital) than women at the bottom. Furthermore the returns to self-employed across all income groups are the lowest for poor women who are self-employed and this pattern is increasing.

The proposed practice theory is well positioned to make sense out of all these findings, in large part because it places a strong emphasis on the importance of culture, gender culture especially, for explanations of gendered patterns in entrepreneurship. I

wonder, in fact, that as economies become more advanced and women gain material and social structural advantage relative to men, if the explanation of gender difference does not simply reduce to a question “symbolic violence” or cultural manipulation that preserves the remaining male advantage. It may be that functional and material imperatives hold more sway over gender arrangements in less developed economies, while basic gender essentialism wins the day in more advanced economies. This idea is supported to some extent by studies such as the one by Cliff, Langton and Aldrich (Cliff, Langton, and Aldrich 2005), showing no real difference in management practices, but very definite gender patterns in talking about personal approaches to those practices. It is all about culture wars and that is definitely one topic where practice theory holds a serious theoretical advantage over other views of entrepreneurship.

In Chapter 4, I discussed the data and model specification I chose for the empirical test of the practice theory theoretical model. I also discussed the challenges inherent in the practice of crossnational research. Data quality issues – availability, comparability, reliability – are a tremendous challenge for crossnational research efforts. Better measures are needed – especially background data, including more thorough demographic information, measures of family situation, type of education and experience, and industry. These measures are particularly important to the study of differences across social groups in the decision to start a business and, if available, would have improved this study. More countries are needed as well, especially countries with characteristics that set them apart from the most developed countries. Better documentation of existing data and education in the basics of crossnational research would help researchers right now, as would more funding opportunities for crossnational research and the study of entrepreneurship. In the end, crossnational research will always face these challenges. The evidence produced is so valuable, however, that it is worth all the risks of poor data quality, including measurement

error, weakened comparability, and questionable reliability. Time will lead us to improvements in best practice and confirm or disconfirm the findings we produce today.

I presented the results of the analysis in Chapter 5. The results strongly support the proposed practice theory view of entrepreneurship. In brief, my findings offer support for the notion that culture works largely through cognitions and social ties to influence the decision to start a business. Perceptions that reflect an entrepreneurial mindset (e.g., confidence and optimism) and knowing an entrepreneur are the most important correlates with nascent entrepreneurship, net of all other factors. The effect sizes are large, increasing the odds of being an nascent entrepreneur by 2 to 5 times. The findings also offer support for the notion of gender as a source of symbolic capital independent of key capital resources. The gender effect was still strong despite the control of key capital resources, macro-level factors and important interactions. There were other variables missing, of course, that may have offered further explanation of the overall gender differences. Including measures of industry might have produced different results, but I doubt they would have changed the importance of the perceptual variables.

In addition to the importance of perceptual factors at the individual level, my results suggest that gender culture is an important determinant at the macro level, net of all other factors. I further find that gender culture is important insofar as it interacts with individual - level measures of economic capital and perceptual factors, in particular fear of failure. This finding is particularly notable in light of the interaction between gender and fear of failure at the individual level. The conclusion I draw is that men are motivated to start businesses in highly masculine cultures, defined by a belief in a traditional gender division of labor, whereas women are dissuaded from starting businesses and perhaps other highly masculine pursuits.

This research builds on one particular crossnational study of gendered rates of entrepreneurship. Arenius & Minniti (2005) ran a similar analysis, producing findings that



are confirmed by the results presented in the last chapter. I took the analysis one step further in that, where Arenius & Minniti (2005) reported the presence of country differences, I have attempted to identify variables that best explain the variation across country and across gender. The capital measures explain a large part of the cross country variation and the macro-level measures explain an additional portion of the random effect of countries. However, a substantial amount of variation persists in the full model, suggesting that additional variables are needed. The only significant macro-level factor was income inequality, although the model also included measures for national wealth and national cultural respect for entrepreneurship. Future research should include more macro-level measures, especially those pertinent to national culture and gender-related ideals. Data collection efforts will have to include more countries in order to do this effectively.

This study holds important implications for future research efforts, policy-making, and for the general practice of entrepreneurship. Several fruitful lines of inquiry were revealed in the development of the practice view of entrepreneurship and through the multilevel analysis of the relative effects of and interactions between individual- and macro-level factors. More multilevel analysis is needed. Multilevel analysis should be grounded firmly in multilevel theories of entrepreneurship. More attention should be spent exploring the ways in which cultural, social, and material factors combine to create patterns of entrepreneurship. In particular, we need to develop better understandings of the ways in which the habitus interacts with wider social currents, with social ties, and with material factors to shape patterns of business start-up and success. This work will not be easy. Multilevel analysis is typically very complex as are the data quality challenges inherent in crossnational research, but I look forward with great excitement to the knowledge that future research efforts will produce.

This study also holds important implications for economic and social policy. The findings suggest that policy makers tread carefully with policies that frame income inequality

and aggressive business tactics as good for stimulating business creation. The relationships between the social, cultural, and material factors that influence entrepreneurship are complex. We are only beginning to understand the correlations, never mind the causal pathways. One truth rings clear, however, and that is the ever-promising effectiveness of propaganda machines. Changing behavior can be as simple as changing people's minds.

As for the general practice of entrepreneurship, this study indicates that confident, optimistic attitudes and the cultivation of social ties with experienced entrepreneurs are critical for serious start-up efforts. In the absence of formal training in the practice of entrepreneurship and the negotiation of complex state regulations and processes, knowing and drawing upon the expertise of other entrepreneurs is key. The cultivation of such ties may also help bolster confidence and optimism in the face of often overwhelming challenges to effective start-up and growth.

As demonstrated, the theory, methodology, and results presented here offer a very promising foundation for future research efforts. Entrepreneurship is widely considered an important source of economic growth (Wennekers and Thurik 1999) and recent findings indicate that the rate of a country's economic growth is directly related to the level at which women are participating in the economy as entrepreneurs (Reynolds, Bygrave, and Autio 2004). Because the fair distribution of opportunities and rewards is important to the healthy functioning of society and can contribute in significant ways to economic growth, it is important to understand how entrepreneurship works for women and other disadvantaged groups as defined by class, race, family roles, etc. Women and minorities serve as important sources of innovation, new markets, and new employment. Members of disadvantaged groups are more likely to hire people like themselves, creating jobs in economic sectors where work is most needed. The bottom line is that market forces, as in Adam Smith's invisible hand, are not fair all on their own, but are socially and culturally driven. Attention to the social, cultural, and material factors (and processes) that underlie

the ways in which ideas, relationships, and power influence market mechanisms is critical to understanding entrepreneurship and other socio-economic phenomena.

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