Stratification, Economic Adversity, and Entrepreneurial Launch:

The Converse Effect of Resource Position on Entrepreneurial Strategy

ABSTRACT

Utilizing Social Stratification Theory and the Resource Based View, this paper analyzes how accumulated social and economic resource divergences have resulted in resource position barriers between high and low strata groups of entrepreneurial actors and tests if these barriers result in divergent strategies for high and low strata entrepreneurs within the same economic environments. I find economic adversity has no relationship with entrepreneurship in low or high strata groups, indicating the Simple Theory of Economic Choice may have been overgeneralized in entrepreneurship research; and that various resource position indicators have converse relationships with entrepreneurship in higher and lower strata groups.

INTRODUCTION

A preponderance of scholarly research has found a positive relationship between economic adversity and entrepreneurship (Knight, 1921; Oxenfeldt, 1943; Highfield and Smiley, 1987; Evans and Leighton, 1990; Faria, Cuestas and Mourelle, 2010). As unemployment is one

of the most common by-products of macro-level economic adversity (Bell and Blanchflower, 2010; Fee and Schweitzer, 2011; Kauppinen, Kortteinen, and Vaattovaara, 2011; Tasci and Zaman, 2010), it is a general assumption in entrepreneurship and economics literature that unemployment, or more specifically high unemployment rates or low labor participation rates, leads to increased entrepreneurship. However, does this finding hold true in all contexts or across all societal groups?

As a whole, entrepreneurs in the formal economy are wealthier and more educated than the general population and are less likely to be members of societally-labeled disadvantaged groups (De Nardi, Doctor, and Krane, 2007). As such, the advantaged are likely to be overrepresented in prior research studies on entrepreneurship, including those which have demonstrated a positive relationship between economic adversity and entrepreneurship. This study is motivated by this fact, and seeks to augment these studies with an empirical demonstration of the relationship between economic adversity and the entrepreneurial strategies of actors of different strata.

My theory is that the historical, system-wide effects of social stratification result in the enactment of divergent strategies for high strata and low strata entrepreneurs posited within the same environment. In particular, I propose that the structurally-advantaged position of higher strata groups enables them to accumulate greater entrepreneurship-facilitating resources than lower strata groups, and enables them to collectively enact resource position barriers which prevent the entry and/or hamper the "catch up" of lower strata entrepreneurs across industries. Ultimately, these resource position barriers create semi-impermeable advantages (Wernerfelt, 1984) enjoyed by all entrepreneurial actors of higher strata groups. Thus, it is status-based advantage and the resource accumulation it enables over time rather than cultural attributes that

explain the entrepreneurship strategy differences we observe between societal groups (Webb, Tihanyi, Ireland, and Sirmon, 2009).

As my data was collected from the U.S., which has a salient stratification system based largely on race[1] (Massey, 2007; Tilly, 1998; Mills, 1997), I anticipate that there will be an increase in entrepreneurship (self-employment rates) among structurally advantaged groups in the presence of economic adversity, and either no effect on or a decrease in entrepreneurship activity among structurally disadvantaged groups in the presence of economic adversity. I test several other related hypotheses, as well, to observe whether or not divergent responses to economic adversity exists by strata, and compare the effects of resource advantages (i.e. wealth, income, and education) on the entrepreneurship of high and low strata groups. In my model, the relationship between economic adversity and entrepreneurial strategy is moderated by strata position, and resource position, which includes three cumulative and related resource advantages: (1) status, (2) wealth, and (3) income, all of which are determined by strata position. (See Figure 2).

LITERATURE REVIEW

The Relationship between Entrepreneurship and Economic Adversity

According to numerous scholars, economic adversity and entrepreneurship are positively related; specifically, these scholars have found that economic adversity spurs business foundings because people innovate and necessarily create their own jobs (Knight, 1921; Oxenfeldt, 1943; Highfield and Smiley, 1987; Evans and Leighton, 1990; Faria, Cuestas and Mourelle, 2010) (See Figure 3). The Simple Theory of Income Choice, the basis for many of the studies indicating a positive relationship between unemployment and entrepreneurship, indicates that increased

[1] Social stratification in the U.S. is based upon the categories of race, gender, and economic status—in this order—as the degrees of resource access are most enabled or constrained by the category of race (Massey, 2007; Mills, 1997).

unemployment levels will spur increased entrepreneurial start-ups because opportunity costs for not starting firms (or the value of what these actors would have chosen if they had not started firms, which was continuing to work for someone else) have decreased for individuals confronted with entrepreneurial launch decisions (Audretsch, D.B., M.A. Carree, and A.R. Thurik, 2001). This has been called a "refugee effect" since the unemployed seek and find productivity in an arena of endeavor other than the labor market. In a 2008 study of 23 Organisation for Economic Cooperation and Development (OECD) countries from 1974 to 2002 based on the premise of the Simple Theory of Economic Choice, high unemployment rates were strongly positively correlated with subsequent "refugee effect" entrepreneurial start-ups (Thurik, Carree, van Stel, and Audretsch, 2008). Highfield and Smiley (1987) expanded on the theory that employment adversity and entrepreneurial activity are positively related by proposing that system-wide economic adversity or lagged economic growth could spur entrepreneurship. In such scenarios, opportunity oriented entrepreneurs recognize the ability to capitalize on overall reduced equipment and expansion expenditures of competitors in their industry, for example, by filling a vacuum in vacated niches; or they may recognize the ability to acquire skilled employees at lower compensation rates because of higher system-wide unemployment and a glut of workers in the market. A summary of the support they found for their theory on the relationship between economic adversity and entrepreneurship is as follows:

> "the macroeconomic climate that appears to be most conducive to the formation of small businesses is what might loosely be called sluggish. Lower rates of growth of GNP, lower inflation rates, and greater growth in the unemployment rate were followed by increases in the rate of new incorporations" (Highfield and Smiley, 1987).

The prevailing assumption of the research based upon the Simple Theory of Economic Choice is that its results are generalizable to the entire population of potential entrepreneurs. However, since not all entrepreneurs are subject to the same contextually-derived resource advantages, is this really the case? Furthermore, would the theory's key finding that entrepreneurship is spurred by economic adversity hold across cultures in societies that are saliently divided into groups with divergent status, and consequently, wealth levels that have accrued over time and that affect entrepreneurial launch?

Stratification as an Entrepreneurial Context

This research is motivated by the fact that many of the studies indicating a positive relationship between unemployment or economic adversity and entrepreneurial start-ups have unintendedly focused on the structurally advantaged. As a whole, entrepreneurs are wealthier and more educated than the general population and are less likely to be minorities (De Nardi, Doctor, and Krane, 2007). As such, the advantaged are likely to be overrepresented in prior research samples. Even in the study conducted by Thurik, Carree, van Stel, and Audretsch (2008) of diverse OECD countries, the results are likely to have strong majority effects, dimming insight into how unemployment affects "disadvantaged" minority entrepreneurs who are posited in environments with fewer resources.

The specific characteristics of entrepreneurial actors' environmental contexts influence their entrepreneurial strategy (Audretsch and Keilbach, 2007; Moss, Short, Payne, and Lumpkin, 2011; Webb, Tihanyi, Ireland, and Sirmon, 2009). For example, Audretsch and Keilbach (2007) demonstrate that an entrepreneurial environment in which multiple start-ups foster knowledge spillovers and facilitate a knowledge-rich context influences entrepreneurial opportunity for the firms posited within it and potential new entrants. Perhaps most applicable to this paper are the

links between environment and entrepreneurial strategy explicated by Moss, Short, Payne, and Lumpkin (2011) and Webb, Tihanyi, Ireland, and Sirmon (2009), who respectively indicate that an entrepreneurial firm's organizational identity is derived from its context and drives "how key issues are interpreted," "how decisions are made," and how these firms respond to "strategic issues;" and that institutional context plays a framing role in the emergence of divergent collective identities between groups of potential entrepreneurial actors—driven largely by institutionally-perpetuated differences in meso-level groups' resource access and perceptions/evaluations of opportunities—which results in divergent entrepreneurial strategies.

One highly relevant environmental context with characteristics that can result in the enactment of divergent entrepreneurial strategies between groups is social stratification. Social stratification is a macro-level institutional context characterized by inequality between groups of people across social categories in their "access to scarce resources" (Massey, 2007). Stratification is a concept related to Social Dominance Theory (SDT), which asserts that "human societies tend to organize as group-based social hierarchies in which at least one group enjoys greater social status and power than other groups. Members of dominant social groups tend to enjoy a disproportionate share of positive social value, or desirable material and symbolic resources such as political power, wealth, protection by force, plentiful and desirable food, and access to good housing, health care, leisure, and education. Negative social value is disproportionately left to or forced upon members of subordinate groups" (Pratto, Sidanius, and Levin, 2006). In social stratified systems, societies enact social structures that divide people categorically and assign them to groups based upon traits that are *achieved* or *ascribed* (Massey, 2007), and take their unique form based upon the societies in which they operate (Mills, 1997). These systems are enacted at the macro-institutional level (and are therefore diffuse, affecting

such societies at every level) and are maintained via group-based social dominance, in which one or more groups are designated as possessing higher status and power, and the converse is true for other groups, i.e. men vs. women (Loscocco and Robinson, 1991; Robinson, Blockson, and Robinson, 2007), white vs. black, or high economic vs. low economic class (Spenner, 1988) in the U.S., or Hindu vs. non-Hindu castes in India (Zacharias and Vakulabharanam, 2011; Darity, 2005).

In the U.S., race, gender, and economic class determine the allocation of social and economic resources, and features of American society at virtually every level have been organized to maintain this system (Massey, 2007; Mills, 1997). The primary strata categorization which has determined the allocation of social and economic resources in American society is race (Sidanius and Pratto, 1999). Because racial minority status is an ascribed rather than achieved trait, it clearly delineates a salient position in American society (Sidanius and Pratto, 1999) from which an entrepreneur's resource access stems. For this reason, it is the primary feature of U.S. stratification upon which I focus in this paper as it has primarily determined the differences in entrepreneurship-facilitating social and economic resources between high and low strata groups that result in actors from these two groups engaging in divergent strategies in response to economic adversity.

How Group-Based Resource Position Differences Lead to Divergent Entrepreneurial Strategies

Though traditionally used to explicate how unique resource possession and strategic deployment of these resources can lead to sustained competitive advantage for individual firms (Barney, 1991), the Resource-Based View also provides theoretical insight on how divergent, accumulated resource positions could emerge between groups of entrepreneurial actors based

upon their status position, and then result in divergent entrepreneurial strategies between these groups. According to Wernerfelt (1984) and Caves (1980), resources are both the tangible and intangible assets tied semi-permanently to firms. Yet, it is not solely the possession of such resources that contributes to firm advantage, but (1) the extent to which these resources are valuable, rare, inimitable, and non-substitutable (or protected from extraction by other firms via some isolating mechanism), and (2) the capacity to deploy these resources in a competitive environment in a self-beneficial manner (Barney, 1991). Both tangible resources, like in-house technologies, machinery, and capital, and intangible resources, like brand-name recognition and in-house of knowledge of technology or efficient procedures, can be wielded in a manner that enables these resources to contribute to a firm's competitive advantage. Of this resource bundle, however, resources that are both inimitable and non-substitutable are those that lead to the highest returns as their portability and replication is restricted (Wernerfelt, 1984). Such resources enable those who possess them to "maintain a relative position vis-a-vis other holders and third persons" because the fact that they have these resources "affects the costs and/or revenues of later acquirers adversely" (Wernerfelt, 1984). In such situations, a firm's "resource position directly or indirectly makes it more difficult for others to catch up," and consequently, "the holder can be said to enjoy the protection of a resource position barrier" (Wernerfelt, 1984).

Strata position serves as one such high-return resource for high strata entrepreneurial actors because of its importability and inimitability by lower strata groups. Strata benefits both individual entrepreneurs as well as organizations whose leadership and the majority of whose members are part of the same high strata group. Because stratification is a diffuse, difficult to dismantle, institutional system that benefits one group and affords detriment to others, it enables

the acquisition by the beneficiary group of other resources (like status, income, and wealth), which reinforces the resource positions of high strata entrepreneurial firms.

Furthermore, when stratification categorizations are based upon salient, ascribed traits (like race or gender) rather than more permeable, achieved traits (like economic status), strata position and the resource advantages it enables high strata firms to accumulate over time create semi-permanent resource position barriers. These barriers are strong isolating mechanisms preventing the "catch-up" of firms of lower strata, as long as high-strata groups continue to act rationally (Wernerfelt, 1984).

Thus, high strata position functions as a versatile, productive resource described by Penrose (1955) as "capable of being used in many different ways" and enabling those who possess it to obtain a range of other potentially productive resources. In effect, the limiting factor, which restricts the supply of other productive resources and prevents their full utilization due to costs and depletion issues associated with their use (Penrose, 1955), is removed with regard to the use of high strata position for groups of entrepreneurial actors who possess it as a resource. Consequently, additional benefits, like wealth, income, and status that fuel entrepreneurial activity, derived from this permanently possessed, freely obtained resource are "available at no extra cost" (Penrose, 1955) to high strata groups, while obtained at great cost by lower strata groups.

Wealth as a Resource Position Barrier

Perhaps the greatest resource position barrier preventing the catch up of lower strata entrepreneur groups from high strata entrepreneur groups is wealth. Wealth, unlike income and educational attainment both of which are more directly tied to individual employment, is largely the result of trans-generational wealth accumulation (Scholz and Seshadri, 2007; Keister and Moller, 2000). As such, wealth functions as a valuable, rare, and largely inimitable resource for

high strata groups whose first mover advantage and institutionally-enforced group based barrier enactments have prevented the diffusion of this resource throughout society to other groups. For example, in this study where I seek to explicate the entrepreneurial strategy differences that exist by strata with data on the highest (whites) and lowest strata (black) groups in the U.S., the wealth of individuals in high strata groups is an isolated resource that has been protected. As Civil Rights legislation was primarily enacted to directly reduce educational and employment disparities, not wealth inequality, the unevenly distributed resource of wealth continues to serve as a resource position barrier and provide an economic buffer to high strata groups. The buffering effect of wealth is evident when high strata groups' immediate employment income is affected by a macro or individual-level environmental disturbance (i.e. recession or unemployment) in the U.S., and they are still able to choose the option of entrepreneurship in lieu of seeking re-employment in spite of their circumstances (Campbell and Kaufman, 2006; Scholz and Seshadri, 2007; Thurik, Carree, van Stel, and Audretsch, 2008; Highfield and Smiley, 1987).

(Figure 1 – Insert about here)

Evidence of wealth's buffering capacity for high strata groups and its use as a collective resource position barrier is also demonstrated in the wealth differences that persist in the 21st century between low and high strata groups in the U.S. as illustrated in Figure 1, a difference which holds even when the two groups have comparable education and income (Campbell and Kaufman, 2006). Despite the gains of the Civil Rights Movement that have reduced income and educational attainment differences across strata groups in the U.S., wealth differences between high and all lower strata racial groups[2] have remained (Campbell and Kaufman, 2006) and the

[2] Including Asians, African-Americans, and Hispanics (Campbell and Kaufman, 2006).

gap between the two most historically polar racial strata groups—blacks and whites—has heightened (Shin, 2010; Ariel Mutual Funds, 2008; Campbell and Kaufman, 2006).

Many scholars attribute such differences, particularly when they are found present among comparably educated and employed members of divergent strata groups, to structural barriers like institutionally-diffused and practiced discrimination (Keister and Moller, 2000; Oliver and Shapiro, 1995; Campbell and Kaufman, 2006). However, Oliver and Shapiro (1995), elucidate that discrimination is not the sole cause of wealth inequities that exist between high and low strata groups. They explain that historically cumulative disadvantage in concert with present discrimination cements low strata groups (in the U.S. case, African-Americans) to the lowest rung of the socio-economic hierarchy via a process they refer to as "sedimentation." Wealth is an ideal gauge of the effects of sedimentation between high and low strata groups because of the considerable amount of time it takes to accumulate and because it is often transferred generationally (Oliver and Shapiro, 1995; Campbell and Kaufman, 2006).

Furthermore, wealth is directly tied to high strata groups' ability to obtain and maintain other resource position advantages, including income and educational attainment. Most social scientists concur, for example, that the historical exclusion of low racial strata groups (African-Americans most adversely) in the U.S. from home equity wealth derived from home ownership adversely affected these groups' subsequent attainment of educational attainment and the enhanced employment opportunities that educational attainment typically provides (Keister and Moller, 2000). Conversely, the long-term possession of wealth as a buffer to economic downturn or unemployment has buoyed the lifetime income of the high racial strata group households (whites) who are only weakly affected by "an earnings downturn or medical expense large

enough to cause the household to seek welfare support" (Hubbard, Skinner and Zeldes, 1995; Scholz and Seshadri, 2007).

The manner in which wealth is utilized as a group based resource for high strata groups to obtain other resources is perhaps best explicated in Campbell and Kaufman's (2006) intra-generational status attainment framework. In the U.S., for example, the inheritance accumulated by high strata groups based on their socioeconomic hierarchy position enables them to transfer the promise of better housing, income, and educational opportunities to their children which begets more wealth and has served as a manner of reproducing inequality post slavery's end (Campbell and Kaufman, 2006). And, even though inheritance is estimated to account for less than 20% of wealth in some previous studies (Modigliani, 1988b; Hurd and Mundaca, 1989; Gale and Scholz, 1994), inter vivos transfers that occur during a person's lifetime (Gale and Scholz, 1994), which are often largely ignored as an explanation of wealth differences between high and low strata groups (Campbell and Kaufman, 2006), account for another full 20% of wealth (Gale and Scholz, 1994), which is largely possessed by high strata groups. Because the wealth accumulation of high strata group members' descendants is determined in large part by intra-generational wealth attainment passed down both via inheritance and via inter vivos transfers, inter-strata "wealth disparities indirectly reproduce themselves as racial inequalities in education, occupation, and income" between high and low strata groups in the U.S. because of the differences that exist in the initial status hierarchy positions of transferors (Campbell and Kaufman, 2006). In addition, the vast wealth difference that exists between high and low strata groups leads to differences in investment portfolio composition and value. This is because the lack of intergenerational wealth accumulation for investment requires low portfolio groups to

meet their household needs “from disposable income, reducing how much is available for investment and savings” (Campbell and Kaufman, 2006).

Finally, the combination of wealth transfer disparities explicated above and labor market inequalities has relegated the low strata group in this study, African-Americans, with equivalent educational and experience credentials as compared with the high strata group, whites, “to less desirable, less stable and lower paying jobs and/or jobs with fewer benefits and prospects for advancement” (Campbell and Kaufman, 2006). As a result, household income has a lower overall effect on wealth accumulation for low strata groups in the U.S. than for high strata groups. In fact, research by Oliver and Shapiro (1995) has shown that there are “very different effects for Blacks and Whites of household education, occupation and income on net worth, with Black households receiving either smaller or no significant wealth return to these attainments” (Campbell and Kaufman, 2006).

Consequently, I anticipate that there will be distinct differences between the strategies of groups of high strata and low strata individuals in response to economic adversity and unemployment because of their divergent resource positions, and test the following related hypotheses, intended to demonstrate the divergent effects of strata position and the resource advantages it affords (i.e. wealth, income, and education) on entrepreneurship.

HYPOTHESES

For high strata entrepreneurs, the possession of resource advantages derived from their conferred status, including higher wealth, income, and education, enables their entrepreneurship in the presence of economic adversity by providing insulating buffers from the effects of economic adversity and facilitating their freedom to choose entrepreneurship or employment (Oliver and Shapiro, 1995; Campbell and Kaufmann, 2006). In addition, because of the diffuse

nature of stratification beliefs and practices, and the salient resource-access it provides for higher status groups within a society, resource advantages are conferred throughout vast realms of society and institutions, and are able to accumulate over time (Massey, 2007; Campbell and Kaufman, 2006). These advantages enable high strata groups to maintain relative advantage compared to other lower strata incumbents and potential new entrants across industries by providing a semi-impermeable "catch-up" barrier—or resource position barrier, particularly as it relates to wealth (Wernerfelt, 1984). Low strata entrepreneurs are also conferred a certain status in society, a lower one that affects their access to and ability to accumulate resources across institutions and realms (Massey, 2007), which in turn affects their entrepreneurial strategy.

As a result of their different resource positions and the divergent strategic responses these positions elicit, in the following groups of hypotheses, I anticipate converse findings for the relationship between entrepreneurship and economic adversity, measured as business cycles (recessions) and unemployment rates, for high and low strata entrepreneurial actors.

Economic Adversity and Entrepreneurial Strategy

H1a: There is a positive relationship between economic adversity and entrepreneurship among high strata groups.

H1b: There is a negative relationship between economic adversity and entrepreneurship among low strata groups.

H1c: The entrepreneurship of high strata groups is greater in the presence of economic adversity than that of low strata groups.

H1d: High strata groups engage in entrepreneurship more than low strata groups.

Unemployment and Entrepreneurial Strategy

H2a: There is a positive relationship between unemployment and entrepreneurship among high strata groups.

H2b: There is a negative relationship between unemployment and entrepreneurship among low strata groups.

Simple Theory of Economic Choice

H3: There is a positive relationship between economic adversity and entrepreneurship across all groups.

H4: There is a positive relationship between unemployment and entrepreneurship across all groups.

Resource Position

I anticipate that the following group of hypotheses will demonstrate differences in the relationship between entrepreneurship and resource position advantages between low and high strata groups. For low strata groups, the lack of resource advantages (higher education, higher income and wealth) in addition to their exposure to resource position barriers results in lower strata entrepreneurs' overall greater vulnerability in the presence of economic adversity (Gale and Scholz, 1994, Campbell and Kaufmann, 2006). In addition, despite opportunities afforded lower strata groups since the Civil Rights Movement, little of this legislation has directly addressed the differences in wealth that exist between low and high strata groups (housing discrimination legislation emanating from the Civil Rights Movement, which is perhaps the most targeted manner to redress historically accumulated wealth differences, has historically been difficult to enforce). Despite increases in education and income among low strata groups, their considerably less wealth compels them to rely upon employment derived income as their primary funding source for entrepreneurship, which further increases their vulnerability in times of

economic adversity or in the presence of high unemployment (Oliver and Shapiro, 1995; Hubbard, Skinner and Zeldes, 1995; Campbell and Kaufmann, 2006; Scholz and Seshadri, 2007). Conversely, the economic buffering effect that the strata privileges of higher education, higher income, and higher wealth afford high strata groups propels their entrepreneurship, and serves as resource position barriers for lower strata entrepreneurs.

Income

H5a: There is a positive relationship between income and entrepreneurship (self-employment rates) among high strata groups.

H5b: There is a positive relationship between income and entrepreneurship among low strata groups.

Wealth

H6a: There is a positive relationship between wealth and entrepreneurship among high strata groups.

H6b: There is a negative relationship between wealth and entrepreneurship among low strata groups.

Education

H7a: There is a positive relationship between education and entrepreneurship among high strata groups.

H7b: There is a negative relationship between education and entrepreneurship among low strata groups.

DATA COLLECTION AND METHODS

Variables

My unit of analysis is the group of high and low strata actors in each U.S. Market Statistical Area (MSA) for 2003, 2004, 2008, and 2009. My dependent variable is self-employment rate (entrepreneurship) and my independent variables are as follows: economic adversity (recession dates established by the Bureau of Economic Analysis [BEA]), unemployment rate, adjusted gross income, wealth measured by the presence of rental income (which indicates ownership of property assets other than one's primary residence); wealth measured by the presence of interest income (which indicates ownership of interest bearing assets including stocks); wealth measured as average home equity; educational attainment (for which I created a variable measuring the percentage of those with associates degrees or higher); and market strata (which I measured as low strata and coded as 0 if the percentage of low strata individuals met or exceeded the national percentage of members of that group indicating diversity in the market or an overrepresentation of low strata individuals; and as high strata and coded as 1 if the percentage of low strata individuals was below their national percentage and the percentage of high strata individuals represented a majority [50% or more] of the total).

Data Sources

I obtained my data for all variables from the Census Bureau's Data Ferret tool which statistically combines data from various Census Bureau, Bureau of Labor Statistics (BLS), and other primarily governmentally sponsored surveys. The annual data that I extracted from Data Ferret was derived from the Current Population Survey March estimates. I established recession and non-recession years based on data compiled by the Bureau of Economic Analysis (BEA), the entity which establishes business cycles (official national recessions). I considered recession years as those in which business cycles consumed 6 months or more of the year, as in such cases it is rational that all of the variables in my study would have been affected by the impending or

immediately preceding recession during that year. Data for all of my variables was not consistently collected by the Census Bureau and BLS for each MSA until after 2000. Consequently, I selected the only two consecutive recession years after this date, 2008 and 2009, and, for comparison, I selected two non-recession years also after 2000—2003 and 2004. Since these years were at least two years away from any other officially-established recession years, my variable data for these years should accurately represent entrepreneurial response by low and high strata actors during periods with non-adverse macro-economic conditions. My initial data extraction included annual data for four observation years (2003,2004,2008,2009) for each MSA where there were enough CPS participants to yield statistical results resulting in an n of 1029 each for the total population in the MSA's, the high strata, and the low strata group for a total N of 3087. However, CPS Design and Methodology (Design, 2006) indicates that in MSA's where the total population is estimated to be under 500,000, researchers should use the data with caution, as the data is less reliable. Consequently, in order to maximize the reliability of my data, I eliminated all MSA's for each year from my data set with populations under 475,000 resulting in a total N of 1287, including an n of 430 for the total population in each MSA, an n of 430 for the high strata group, and an n of 427 for the low strata group, as there were also some MSA's that had to be excluded because there were not enough low strata residents to provide reliable data for observation.

Methods

To test my hypotheses, I employed three separate multiple regression analyses, one for the total population (including all strata groups) to predict the general relationship between self-employment rates and economic adversity/unemployment, and resource position indicators (wealth, income, and education), and one each for low and high strata groups. This method has

previously been employed by several social scientists performing parallel comparisons of salient groups of actors with divergent social positions, as in the U.S. case with gender, race, and economic groups.[3] To ensure greater validity of my results, I adjusted my annual financial figures, adjusted gross income and home equity, by the GDP deflator using 2002 as my base year to take into account the rate of inflation (Kumaranayake, 2000; Concepts and Methods, 2009). In addition, I ran an independent means test to assess several of my hypotheses.

RESULTS

Table 1 shows the regression results for the relationship between entrepreneurship and all independent variables for the total population in M.S.A.'s, and for high and low strata groups. Tables 2 and 3 provide regression model summaries and descriptive statistics, and tables 4, 5, and 6 show the correlation matrices for each group for which I ran a regression. As none of my dependent variables are highly correlated with my independent variable or each other[4], my results should be valid. Tables 7 and 8 show descriptive statistics and results of a two-sample t-test comparing the entrepreneurship means of high and low strata groups. H1a is not supported. In fact, there is no statistically significant relationship between economic adversity (recession events) and entrepreneurship among high strata groups *(p= 0.424)*. This finding is in direct contradiction to the Simple Theory of Economic Choice and seems to indicate that even groups with superior resource positions and the capability to launch entrepreneurial efforts refrain from doing so in the midst of economic adversity. H1b is not supported as the regression results were not statistically significant at the 95% confidence level *(p=0.404)*, though directionally there was a negative relationship between economic adversity and entrepreneurship among low strata

[3] One such study employing a method similar to the one used in this paper was conducted by Phillips (2002). Three separate regressions were performed using MSA/PSMA data to predict White, Black, and Latino homicide and crime rates based on different structural opportunity characteristics that affected each group, i.e. income and education.

[4] With the exception of an expected moderate/strong relationship between adjusted gross income (AGI) and most of my wealth measures; AGI and educational attainment; and wealth from interest income (stocks) and educational attainment. See Table 4.

group individuals, as predicted. H1c is strongly supported (*p<.0001)*. This is rational considering the resource advantages that higher strata groups typically possess that can serve as buffers to recessionary events compared to lower strata groups, who typically possess lower wealth resources and are more reliant upon employment income. Support for H1c provides evidence that high strata groups are statistically more inclined to engage in entrepreneurship in the presence of economic adversity than low strata groups, as well as evidence that individuals in high and low strata groups enact different responses to macro-level events based on their different resource positions. H1d is strongly supported using a two-sample t-test comparing the means of the self-employment rates of high and low strata groups. With H1d0 assuming there was no difference between the entrepreneurship rates between the two samples and H1d assuming that high strata entrepreneurship>than low strata entrepreneurship, H1d is supported *(p< .0001)*. Perhaps most compellingly, this affirms my analysis that strata position and the resource advantages and resource position barriers it enables or prevents are key moderators explaining the different entrepreneurial strategies enacted by high and low strata entrepreneurs.

For H2a, there is no statistically significant relationship between entrepreneurship and unemployment in the high strata group, though the direction of the regression results between the two variables was positive *(p=0.411)*. This seems to indicate that unemployment rates themselves have little impact on the entrepreneurship of high strata groups. This could be because high strata group individuals' resource position is primarily accumulated via trans-generational wealth in lieu of employment income. Conversely, as noted above, economic adversity, which adversely impacts high strata entrepreneurs' resource positions, demonstrates a negative (though non-significant) relationship with entrepreneurship in this group [rental property and stock assets (*r=-.214 and -.210*, respectively)]. H2b is not supported and there was

not a statistically significant relationship between unemployment and entrepreneurship in the low strata group *(p=0.722),* though the regression results are in the direction predicted as was the case for H2a.

H3 is not supported as there is no statistically significant relationship between economic adversity and entrepreneurship *(p=0.84)*. H4 is not supported as there is no statistically significant relationship between unemployment and entrepreneurship *(p=0.662)*. Based on these results for the entire population, and the lack of statistical significance found in the relationships between economic adversity or unemployment and entrepreneurship for both strata groups, I find no support for the Simple Theory of Economic Choice.

H5a is supported, as expected, as income is one of the key resource position components propelling the entrepreneurship of high strata groups and enabling them to accumulate advantage over low strata entrepreneurs *(p=0.021)*. H5b is also supported and there is a positive relationship between income and entrepreneurship among low strata groups as predicted *(p=0.034)*, though the strength of the relationship between income and entrepreneurship is slightly less significant for low strata groups than for high strata groups. This finding supports my theory that resource position barriers possessed by high strata groups, including income advantage, bolsters their entrepreneurship and prevents the catch up of lower strata groups.

The regression results for the relationship between wealth and entrepreneurship among high strata groups are significant and H6a was strongly supported when wealth is measured by secondary property ownership *(p=0.015)*. Wealth, because it is typically transferred generationally and more cumulative than employment income which is spent on daily needs, is a primary resource position component enabling high strata entrepreneurs to accumulate advantage over low strata entrepreneurs. However, a unique finding in my regression for high strata groups

is that not all types of wealth have a positive relationship with entrepreneurship. This is evidenced by my finding that wealth measured as interest income from stocks and other security assets has a strong, negative relationship with entrepreneurship among high strata groups *(p=0.002)*. In addition, there is no statistically significant relationship between entrepreneurship and wealth measured as average home equity among high strata groups. H6b is not supported with statistically significant results when wealth is measured by secondary property ownership in the low strata group, though the direction of the results is in the direction predicted *(p=0.516)*. H6b is supported when wealth is measured as interest income from stocks and other security assets as this type of wealth has a strong, negative relationship with entrepreneurship among low strata groups, though not as strong of a negative relationship as with high strata groups *(p=0.013)*. Based on the similar findings regarding wealth from stocks and interest bearing assets among both high and low strata groups, this particular type of wealth seems to serve as a replacement for entrepreneurship income among both groups. However, unlike the negative, non-statistically significant relationship between wealth when measured as home equity in the high strata group, among low strata groups there is a positive, statistically significant relationship between wealth when measured as home equity and entrepreneurship *(p=0.015)*. These results, though not expected, provide strong evidence of converse relationships between wealth and other resources and entrepreneurship among high and low strata groups. In addition, when one considers that home equity wealth is inclined to be used differently by high and low strata groups in regards to entrepreneurship, these results provide valuable information for economic development agencies on the type of programs that these entities should seek to implement in order to promote entrepreneurship and spur economic growth strata-wide. Perhaps, home

ownership initiatives should be paired with entrepreneurship programs, for example, when initiated in either urban or middle class low strata markets.

H7a is strongly supported *($p \leq 0.001$)* and there is a significant, positive relationship between entrepreneurship and educational attainment among high strata groups. H7b, though not supported since there was no statistically significant relationship between education and entrepreneurship in the low strata group *($p=0.44$)*, provides strong support for my theory that high and low strata individuals enact divergent entrepreneurial strategies, and demonstrates that some of the most popular entrepreneurship findings, including ones that persistently report strong, positive relationships between entrepreneurship and education, are over-generalized.

(Insert Tables 1-9 - about here)

DISCUSSION

Generally, my findings demonstrate that there are distinctly different relationships between entrepreneurship and resource position variables, including wealth, education, and income, for high and low strata groups. In addition, they demonstrate that there are differences between the entrepreneurship strategies of high and low strata subsets of the population and the entire population as a whole. Perhaps the greatest insight that can be derived from my findings are shown in the converse relationships between wealth measured as home equity and entrepreneurship (which was positive and highly significant for low strata groups but negative though non-significant for high strata groups); and education and entrepreneurship (which was positive and highly significant for high strata groups while entirely non-significant for low strata groups) (See Table 1). Such results provide clear indications that one-size fits all research agendas are inappropriate in the entrepreneurship field. Further, they demonstrate that templated

economic policies intended to spur entrepreneurial activity even within the same region, are likely to be ineffective, as the resource positions of different strata groups of entrepreneurial actors necessitate different incentives. My data indicates, for example, that primary residence home equity is likely to spur entrepreneurship among low strata groups but have no effect on the entrepreneurship of high strata groups. As such, home ownership, neighborhood improvement, and credit education/enhancement programs that increase the potential for new home ownership, and increase equity values and buffer the resource positions (wealth) of existing homeowners may be best suited for spurring entrepreneurship in markets with high percentages of low strata individuals. In contrast, my data demonstrates a highly significant positive relationship between wealth measured as rental income and entrepreneurship among high strata individuals (while a negative though non-statistically significant relationship exists between entrepreneurship and rental income in the low strata group.) As such, incentives to increase multi-family, apartment, and other non-primary residence real property development may be more effective at encouraging increase the number of high strata groups in MSAs.

The primary theory of this paper that divergent entrepreneurial strategies would be employed by high and low strata groups is supported by my results demonstrating that there is no statistically significant relationship between education and entrepreneurship among low strata groups (negative relationship) while there is a highly statistically significant positive relationship between these variables among high strata groups. Such clear evidence of divergent entrepreneurial responses between strata groups highlights the needs for tempering overgeneralization of common findings, increased efforts to diversify samples, and the development of more group-based studies to analyze entrepreneurship in various large subsets of the population.

Perhaps the most surprising finding from this research is that there appears to be no support for the Simple Theory of Economic Choice. I found no statistically significant relationship between entrepreneurship and economic adversity measured as recession events in the total population, or in high and low strata groups. Even if economic adversity is measured by unemployment, as it has been in some studies, my research demonstrates that the theory does not appear to apply to the general population, or to subsets of it. The findings seem to indicate that something else, perhaps less tangible like entrepreneurial motivation (Shane, Locke & Collins, 2003; Locke and Baum, 2007), in addition to the possession of various resources, may be propelling the entrepreneurship activity of most groups.

Though my findings demonstrate no support for the Simple Theory of Income Choice, the findings do illustrate noteworthy differences between the entrepreneurship of high and low strata groups in response to macro-economic conditions. They also provide support for my theory that the divergent resource positions that high and low strata groups of entrepreneurs have accumulated over time derived from their institutionally-assigned strata positions affects their entrepreneurship. In addition, my results demonstrate that the Resource Based View's concept of resource position barriers can be applicable to groups of firms, since strata position, as a collective resource for high strata enterprises, can serve as an acquisition mechanism for obtaining additional entrepreneurship-facilitating resources (like wealth, income, and/or education). These, in turn, can be collectively enacted by groups of high strata entrepreneurial actors as barriers increasing the costs of other entering or incumbent lower strata entrepreneurial actors (Wernerfelt, 1984). This was demonstrated by the fact that primary residence home equity appears to be a primary source of funding for the entrepreneurship of low strata groups, while this asset remains virtually untouched by high strata group members in their pursuit of

entrepreneurship, and rental property equity (or revenues derived from secondary property ownership) seems to be a key impetus for entrepreneurship among the high strata group. (There is a positive relationship between wealth measured as home equity and entrepreneurship within the low strata group while there is no significant relationship between entrepreneurship and wealth measured as home equity among high strata groups. In addition, there is no relationship between wealth measured as rental income and entrepreneurship among the low strata group, while there is a positive and highly statistically significant positive relationship between these variables in the high strata group.) Such findings affirm research on entrepreneurial context, much of which demonstrates that entrepreneurial actors derive their identities from their environment, and consequently, enact strategies based upon this identity and the conditions to which they are exposed (or, in this case, assigned) in their contexts (Welter and Smallbone, 2011; Moss, Short, Payne and Lumpkin, 2011).

(Insert Figure 2 – about here)

LIMITATIONS

There are limitations to this study. Though I was fortunate enough to obtain a rich dataset including self-employment rates and demographic characteristics of most U.S. M.S.A.'s with help from the Census Bureau's Data Ferrett team, statistically-reliable samples were not available for most other minority groups so they could be included in my regression analysis. This is due to patterns of immigration which have concentrated more recent arrivals of non-white ethnic groups to certain geographic areas, specifically to Southern and Western states proximal to Mexico and Latin America for Hispanics, and to California and the New York M.S.A. for significant numbers of Asians. Though it is unclear as to whether or not it would have been

appropriate to categorize either of these groups as low, mid, or high strata in America's stratification system, not having them in my regression analysis limits the ability of these results to be generalized to other groups who have now entered this system and are actively engaging in entrepreneurship. Further research is necessary to better reflect the outcomes of resource position, economic adversity, and unemployment on the entrepreneurship of all strata groups.

CONCLUSION

The findings in this study contribute to the entrepreneurship and strategy fields in several ways. First, they demonstrate that sample selection matters and that previous research indicating a significant, positive relationship between entrepreneurship and economic adversity, or entrepreneurship and unemployment may have been inappropriately generalized since this paper demonstrates that the relationship between these variables appears to be non-existent across groups within a society. In addition, though the results disconfirm a popular entrepreneurship research finding, they affirm the significant and positive relationship many entrepreneurship researchers have found between wealth and entrepreneurship, as strong support for this was found in the general population, and among both high and low strata groups. Still, however, this paper's findings demonstrate the caution with which even highly significant results should be generalized without a diverse sample selection. This especially the case when one considers that this paper finds that the type of wealth that has a positive relationship with entrepreneurship varies substantially by strata group. This divergence affirms the relevance of research on stratification to the entrepreneurship field.

The insight that entrepreneurial strategies and relationships between commonly used variables can vary vastly by strata is relevant to all entrepreneurship researchers. This is especially the case since globalization has increased the potential of observing diverse groups of

entrepreneurial actors within both developed and developing nations. It is also relevant to researchers in countries like the U.S. where historically shaped, institutionally-salient stratification systems have assigned resource positions to entire groups of entrepreneurial actors creating path dependence for their entrepreneurial strategies and success, and where immigration has increased the diversity of entrepreneurial actors fitting into the existent stratification system. This paper's empirical findings elevate the consideration of structural position as a primary explanatory factor for variation in entrepreneurial strategy and success by societal groups, and limits the validity of claims which attribute inequality of entrepreneurial performance by race or gender exclusively or primarily to the rational choice and inherent attributes of individual entrepreneurial actors.

Finally, this research affirms the important link between entrepreneurship and strategy research by demonstrating that accumulated resource advantages and resource position barriers, as theorized in the literature on the Resource Based View, can lead to sustained competitive advantage *for groups* of entrepreneurial actors and not just for individual entrepreneurial actors or firms. In addition, it demonstrates that diffuse and shared status advantage is itself a resource that can actually collectively benefit groups of entrepreneurial firms from the same strata across heterogeneous industries.

The global economic climate has simultaneously been amalgamated with the blessings of expansive entrepreneurial activity, including economic and institutional development, and the curse of increasing inequality. The goal of this research was to provide, at least in part, some knowledge of what constrains and enables entrepreneurial actors of different strata. Knowing this can enable governments and private institutions to enact strategies and academics to generate relevant research resulting ultimately in the increase of entrepreneurial opportunity across all

groups, the reduction of inequality, and the stability of our increasingly global economic climate. Additional research that examines the relationships between entrepreneurship and various micro and macro variables by strata is warranted to further advance our understanding of entrepreneurship across groups.

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TABLES AND FIGURES

Figure 1
Source - U.S. Census Bureau, Survey of Income and Program Participation, 2008 Panel, Wave 10 (Survey, 2011).

Figure 1: Mean Value of Assets for Households by Type of Asset Owned and Selected Characteristics: 2011

Characteristic	Net Worth	Net Worth (Excluding Equity in Own Home)	Interest Earning Assets at Financial Institutions	Other Interest-Earning Assets	Regular Checking Accounts	Stocks and Mutual Fund Shares	Equity in Business or Profession	Equity in Motor Vehicles	Equity in Own Home	Rental Property Equity	Other Real Estate Equity	U.S. Saving Bonds	IRA or KEOGH Accounts	401K & Thrift Savings Plan	Other Assets
TOTAL	338,950	255,843	22,170	803,641	2,659	228,643	180,046	8,418	127,290	370,013	171,529	6,103	166,451	119,799	154,524
RACE AND HISPANIC ORIGIN OF HOUSEHOLDER															
White Alone (Not of Hispanic Origin)	435,169	336,435	25,410	881,816	3,057	247,389	178,840	9,126	135,932	389,995	178,338	6,070	184,725	139,762	160,322
Black Alone	84,378	49,119	8,628	(B)	1,193	93,997	194,077	5,384	80,523	286,671	88,731	7,255	39,423	45,274	(B)

NOTE: In dollars. Excludes group quarters. (B) - Base is less than 200,000 households. Individual outliers that highly influenced the mean value for asset categories were excluded. "Other Assets" includes mortgages held for sale of real estate, amount due from sale of business or property, and other financial assets. Federal surveys now give respondents the option of reporting more than one race. There are two basic ways of defining a race group. A group such as Black may be defined as those who reported Black and no other race (the race-alone or single-race concept) or as those who reported Black regardless of whether they also reported another race (the race alone-or-in-combination concept). This table shows data using the first approach (race-alone). The use of the single race population does not imply that it is the preferred method of presenting or analyzing data. The U.S. Census Bureau uses a variety of approaches. Because Hispanics may be any race, data in this table for Hispanics overlap slightly with data for the Black population. Data for American Indians and Alaska Natives are not shown because of their small sample size. The race or Hispanic origin of the householder designates the race or Hispanic origin of the household. The estimates in this table are based on responses from a sample of the population and may differ from the actual values because of sampling variability and other factors. As a result, apparent differences between the estimates for two or more groups may not be statistically significant. For information on sampling and non-sampling error see: http://www.census.gov/sipp/source.html
Source: U.S. Census Bureau, Survey of Income and Program Participation, 2008 Panel, Wave 10

Internet Release Date: 3/21/2013

Updated: May 13, 2013. Estimates for income quintiles were updated after correcting for an inconsistency in how the cut-off points for income quintiles were set.

Figure 2: Model Depicting Findings

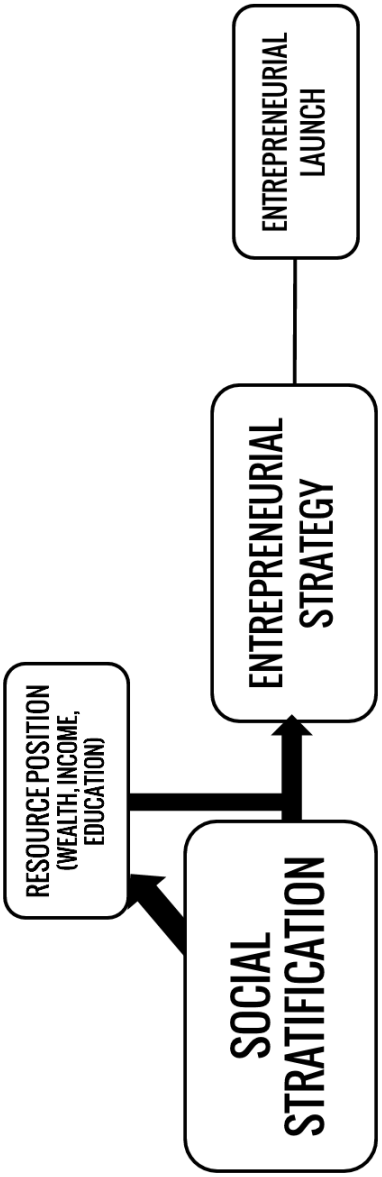

Table 1: Regression Results Showing the Relationship Between Entrepreneurship and Economic Adversity, and Other Variables By Strata Group in U.S. M.S.A.'s and for Total Population in M.S.A.'s

Table 1: Regression Results Showing the Relationship Between Entrepreneurship and Economic Adversity, and Other Variables By Strata Group in U.S. MSA's and for Total Population in MSA's															
Independent Variables	**Total MSA Population Entrepreneurship++**					**High Strata Entrepreneurship++**					**Low Strata Entrepreneurship++**				
	Unstandardized Coefficients		**Standardized Coefficients**			**Unstandardized Coefficients**		**Standardized Coefficients**			**Unstandardized Coefficients**		**Standardized Coefficients**		
	B	Std. Err.	β	t	Sig.	B	Std. Err.	β	t	Sig.	B	Std. Err.	β	t	Sig.
Constant	0.022	0.005		4.851	≤ .001	0.014	0.005		2.678	0.008	0.009	0.008		1.217	0.224
Economic Adversity (Recession 0 [No]; 1 [Yes])	0	0.001	0.011	0.202	0.84	-0.001	0.001	-0.043	-0.8	0.424	-0.003	0.004	-0.041	-0.835	0.404
Unemployment %	-0.016	0.036	-0.023	-0.437	0.662	0.037	0.045	0.042	0.823	0.411	-0.009	0.024	-0.018	-0.356	0.722
AGI+	1.18E-07	0	0.032	0.414	0.679	7.23E-07	0	0.168	2.313	0.021**	9.29E-07	0	0.132	2.125	0.034**
Wealth-% with Interest Inc.	-0.01	0.009	-0.067	-1.008	0.314	-0.033	0.01	-0.201	-3.189	0.002***	-0.054	0.022	-0.151	-2.508	0.013**
Wealth-Average Home Equity+	-1.79E-07	0	-0.017	-0.316	0.752	-2.73E-07	0	-0.022	-0.406	0.685	3.48E-06	0	0.122	2.437	0.015**
Wealth -% with Rental Inc.	0.099	0.047	0.113	2.088	0.037**	0.12	0.049	0.126	2.435	0.015**	-0.065	0.1	-0.032	-0.651	0.516
Educational Attainment-% with college degree+	0.037	0.012	0.211	3.034	0.003***	0.05	0.013	0.246	3.742	≤ .01***	0.016	0.021	0.047	0.773	0.44
Total Group Population	-5.68E-10	0	-0.111	-2.227	0.026**	-5.58E-10	0	-0.063	-1.309	0.191	-2.37E-09	0	-0.026	-0.533	0.594
N	430					430					427				
Abbreviations: AGI-Adjusted Gross Income, Inc.-Income; *p ≤ .10 **p ≤ .05 ***p ≤ .01															
AGI and Home Equity adjusted for inflation based on 2002 dollar values.+															
Dependent variable, Entrepreneurship, was measured by self-employment rate. ++															
Unstandardized coefficients (B) shown.															

Table 2: Regression Model Summaries										
					Change Statistics					
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
Total Populations in MSA's	.268	.072	.054	.011	.072	4.062	8	421	.000	2.051
High Strata Pop. in MSA's	.341	.116	.099	.013	.116	6.920	8	421	.000	2.053
Low Strata Pop. in MSA's	.200	.040	.021	.039	.040	2.167	8	418	.029	1.993
Strata measured by race. Entrepreneurship measured by self-employment rate. N=1287, n=430 for the total population in all MSA's, n=430 for the High Strata group, and n=427 for the Low Strata group.										

Table 3: Descriptive Statistics By Strata Group in MSA's and for Total Populations in U.S. MSA's						
	Total MSA Population Entrepreneurship		**High Strata Entrepreneurship**		**Low Strata Entrepreneurship**	
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**
Entrepreneurship	.0381	.0110	.0437	.0137	.0245	.0395
Economic Adversity (Recession 0 [No]; 1 [Yes])	.4860	.5004	.4900	.5000	.4900	.5000
Unemployment %	.0340	.0155	.0312	.0155	.0599	.0822
AGI+	$22,335	$2957	$23,375	$3,176	$17,489	$5,627
Wealth-% with Interest Inc.	.3340	.0768	.3694	.0823	.1722	.1105
Wealth- Average Home Equity+	$2,878	$1,058	$3,067	$1,099	$1,913	$1,390
Wealth -% with Rental Inc.	.0338	.0126	.0380	.0144	.0134	.0198
Educational Attainment-% with college degree+	.4110	.0626	.4287	.0675	.3272	.1155
Total Group Population	1,800,242	2,146,157	1,391,376	1,548,023	264,863	428,199
n	**430**		**430**		**427**	
Strata measured by race. Entrepreneurship measured by self-employment rate. N=1287, , n=430 for the total population in all MSA's, n=430 for the High Strata group, and n=427 for the Low Strata group.						

Table 4: Correlation Matrix – Total Population in U.S. MSA's									
	Entrepreneurship	**Economic Adversity (Recession 0 [No]; 1 [Yes])**	**Unemployment %**	**AGI+**	**Wealth-% with Interest Inc.**	**Wealth-Average Home Equity+**	**Wealth -% with Rental Inc.**	**Educational Attainment-% with college degree+**	**Total Group Population**
Entrepreneurship	1.000	.020	-.041	.151	.104	.043	.165	.218	-.077
Economic Adversity (Recession 0 [No]; 1 [Yes])	.020	1.000	.242	-.153	-.217	.046	-.209	.165	.051
Unemployment %	-.041	.242	1.000	-.169	-.043	.229	.000	-.069	.004
AGI+	.151	-.153	-.169	1.000	**.636+**	.360	.398	**.657+**	.161
Wealth-% with Interest Inc.	.104	-.217	-.043	**.636+**	1.000	.302	.370	**.505+**	-.074
Wealth-Average Home Equity+	.043	.046	.229	.360	.302	1.000	.301	.274	.168
Wealth -% with Rental Inc.	.165	-.209	.000	.398	.370	.301	1.000	.325	-.024
Educational Attainment-% with college degree+	.218	.165	-.069	**.657+**	**.505+**	.274	.325	1.000	.135
Total Group Population	-.077	.051	.004	.161	-.074	.168	-.024	.135	1.000

+Moderate/strong relationship. Strata measured by race. Entrepreneurship measured by self-employment rate. N=1287, n=430 for the total population in all MSA's, n=430 for the High Strata group, and n=427 for the Low Strata group.

Table 5: Correlation Matrix – High Strata Population in U.S. MSA's									
	Entrepreneurship	**Economic Adversity (Recession-0 [No]; 1 [Yes])**	**Unemployment %**	**AGI+**	**Wealth-% with Interest Inc.**	**Wealth-Average Home Equity+**	**Wealth -% with Rental Inc.**	**Educational Attainment-% with college degree+**	**Total Group Population**
Entrepreneurship	1.000	-.011	-.010	.229	.070	.062	.208	.267	-.019
Economic Adversity (Recession 0 [No]; 1 [Yes])	-.011	1.000	.222	-.164	-.214	.034	-.210	.152	.052
Unemployment %	-.010	.222	1.000	-.156	-.063	.277	.005	-.087	.023
AGI+	.229	-.164	-.156	1.000	**.620+**	.350	.375	**.629+**	.144
Wealth-% with Interest Inc.	.070	-.214	-.063	**.620+**	1.000	.282	.292	**.508+**	-.069
Wealth-Average Home Equity+	.062	.034	.277	.350	.282	1.000	.245	.213	.186
Wealth -% with Rental Inc.	.208	-.210	.005	.375	.292	.245	1.000	.292	-.032
Educational Attainment-% with college degree+	.267	.152	-.087	**.629+**	**.508+**	.213	.292	1.000	.062
Total Group Population	-.019	.052	.023	.144	-.069	.186	-.032	.062	1.000

+Moderate/strong relationship. Strata measured by race. Entrepreneurship measured by self-employment rate. N=1287 , n=430 for the total population in all MSA's, n=430 for the High Strata group, and n=427 for the Low Strata group.

Table 6: Correlation Matrix – Low Strata Population in U.S. MSA's									
	Entrepreneurship	**Economic Adversity (Recession 0 [No]; 1 [Yes])**	**Unemployment %**	**AGI+**	**Wealth-% with Interest Inc.**	**Wealth-Average Home Equity+**	**Wealth -% with Rental Inc.**	**Educational Attainment-% with college degree+**	**Total Group Population**
Entrepreneurship	1.000	-.019	-.044	.085	-.053	.118	-.027	.072	-.012
Economic Adversity (Recession 0 [No]; 1 [Yes])	-.019	1.000	-.019	.011	-.059	.037	-.009	.169	.035
Unemployment %	-.044	-.019	1.000	-.147	.098	.112	.009	-.152	-.060
AGI+	.085	.011	-.147	1.000	**.528+**	.086	.100	**.508+**	.042
Wealth-% with Interest Inc.	-.053	-.059	.098	**.528+**	1.000	.124	.219	**.401+**	-.038
Wealth-Average Home Equity+	.118	.037	.112	.086	.124	1.000	.129	.245	.022
Wealth -% with Rental Inc.	-.027	-.009	.009	.100	.219	.129	1.000	.205	.023
Educational Attainment-% with college degree+	.072	.169	-.152	**.508+**	**.401+**	.245	.205	1.000	.027
Total Group Population	-.012	.035	-.060	.042	-.038	.022	.023	.027	1.000

+Moderate/strong relationship. Strata measured by race. Entrepreneurship measured by self-employment rate. N=1287, n=430 for the total population in all MSA's, n=430 for the High Strata group, and n=427 for the Low Strata group.

Table 7: Descriptive Statistics High Strata and Low Strata Entrepreneurship Rates

	Mean	N	Std. Deviation	Std. Error Mean
Entrepreneurship High Strata	0.044	427	0.014	.001
Entrepreneurship Low Strata	0.024	427	0.039	.002

Strata measured by race. Entrepreneurship measured by self-employment rate. N=854, n=427 for the High Strata group, and n=427 for the Low Strata group.

Table 8: Paired Samples Test High Strata Compared to Low Strata

t-test for Equality of Means (Difference Between Means ≠ 0)

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Entrepreneurship High Strata Entrepreneurship Low Strata	.019	.042	.002	.015	.023	9.533	426	.000

Strata measured by race. Entrepreneurship measured by self-employment rate. N=854, n=427 for the High Strata group, and n=427 for the Low Strata group.

Table 9: Results Summary Table

Table 7: Results Summary Table

Hypothesis	Group	Independent Variable	Dependent Variable	Statistic	Hypothesis Supported?*
H1a	High Strata	Economic Adversity (Recession)	Entrepreneurship	Regression	No
H1b	Low Strata	Economic Adversity (Recession)	Entrepreneurship	Regression	No
H1c		Social Strata	Entrepreneurship (During Economic Adversity)	Regression	Yes^{++}
H1d		Social Strata	Entrepreneurship (Generally)	Regression	Yes^{++}
H2a	High Strata	Unemployment	Entrepreneurship	Regression	No
H2b	Low Strata	Unemployment	Entrepreneurship	Regression	No
H3	All Actors	Economic Adversity (Recession)	Entrepreneurship	Regression	No
H4	All Actors	Unemployment	Entrepreneurship	Regression	No
H5a	High Strata	Resource Position-Income	Entrepreneurship	Regression	Yes^{++}
H5b	Low Strata	Resource Position-Income	Entrepreneurship	Regression	Yes^{++}
H6a	High Strata	Resource Position-Wealth (2nd property ownership)	Entrepreneurship	Regression	Yes^{++}
H6a	High Strata	Resource Position-Wealth (Stocks & Investments)	Entrepreneurship	Regression	No^{++}***
H6a	High Strata	Resource Position-Wealth (Home Equity)	Entrepreneurship	Regression	No
H6b	Low Strata	Resource Position-Wealth (2nd property ownership)	Entrepreneurship	Regression	No
H6b	Low Strata	Resource Position-Wealth (Stocks & Investments)	Entrepreneurship	Regression	Yes^{++}
H6b	Low Strata	Resource Position-Wealth (Home Equity)	Entrepreneurship	Regression	No^{++}***
H7a	High Strata	Resource Position-Wealth (Education)	Entrepreneurship	Regression	Yes^{++}
H7b	Low Strata	Resource Position-Wealth (Education)	Entrepreneurship	Regression	No

*Based on statistical significance $^{++}p \leq .05$; ***In opposite direction.