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Access (Not) Denied: The Impact of Financial, Human, and Cultural Capital on Entrepreneurial Entry in the United States*

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ABSTRACT. Entrepreneurship contributes to business dynamics in all economies, and the individual benefits of starting a business are clear. Nonetheless, access to business start-ups may not be available to all people because of resource constraints. Using a unique new data set for the United States, we examine the relative importance of three forms of resources in pursuing start-up ventures: financial, human, and cultural capital. Our analysis of the Panel Study of Entrepreneurial Dynamics shows that neither financial nor cultural capital resources are necessary conditions for entrepreneurial entry. By contrast, potential entrepreneurs gain significant advantages if they possess high levels of human capital. Specifically, advanced education and managerial experience are significantly positively associated with entrepreneurial entry. Our findings suggest that attempts at entering entrepreneurship, at least in the short-term, may be increasing, as opportunities to acquire human capital are becoming more widespread.

KEY WORDS: Entrepreneurial entry, nascent entrepreneur, financial resources, human capital, cultural capital

JEL CLASSIFICATION: C21, J23, J24, M13

1. Introduction

In spite of numerous risks, the appeal of being self-employed lures many workers in the United States into attempts at starting new businesses. Buoyed by prospects of greater job autonomy and a chance to be their own boss, their pursuit of business ownership fits into the American ideal of grasping opportunities for advancement and upward social mobility without regard to one's current status (Chinoy, 1955). For example, Steinmetz and Wright (1989) noted that in 1980, "57% of all people in the American working class and two-thirds of all male workers say that they would like to be self-employed someday" (974). Aspirations for an entrepreneurial career cut across the occupational spectrum, reflecting the tradition of "ideological equalitarianism" in the United States – a belief in equal access to widely available opportunities (Lipset and Bendix, 1959). About 10 percent of the U.S. labor force is self-employed full time at a given time, and over their lifetimes, about 40 percent of U.S. adults will experience a spell of self-employment. Despite this evidence concerning widespread access, some scholars have nonetheless asked whether opportunities to become an entrepreneur are distributed evenly across workers or whether such chances fall disproportionately to those who are already advantaged. For example, nearly four decades of social mobility research, driven principally by Blau and Duncan's (1967) status attainment model, have shown that rates of recruitment into self-employment depend heavily upon the occupations of one's parents.[1]

In this article, we explore whether wealthy and high-income individuals are more likely to attempt transitions into entrepreneurship than less advantaged individuals. We know that factors other than wealth and income are important in business formation, and thus to avoid specification bias, we build a model of nascent entrepreneurship that includes human and cultural capital factors.

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First, with regard to financial capital, if prior wealth or high current income is necessary for starting a business, people who are already financially advantaged will be most likely to attempt entrepreneurship. Second, having sufficient human capital to begin the organizing process may embolden potential entrepreneurs. We focus on several dimensions of human capital, such as educational background and work experience that may give potential entrepreneurs necessary skills and qualifications. Third, individuals contemplating entrepreneurship might benefit from high levels of cultural capital. Obtaining key business skills, especially tacit knowledge, occurs most easily through direct exposure to an entrepreneurial environment, and thus individuals with family business backgrounds might have an advantage over others.

To fully see the impact of the three forms of capital on people's pursuit of entrepreneurship, we need to study people at the earliest stage of the process, when they are still trying to pull their ideas and resources together. We refer to this initial transition as *entrepreneurial entry*. Researchers have typically studied entrepreneurs fairly far along in the business formation process, despite the fact that questions about access to entrepreneurship really address behaviors and processes that occur very early in the process. Designs that fail to capture individuals in the early stages of planning their ventures have thus hampered investigators. Some researchers have used cross-sectional studies to compare self-employed persons with wage and salary workers, whereas others have used longitudinal designs and observed wage and salary workers making successful transitions into self-employment. Studying those who have succeeded, however, does not reveal the characteristics of those who were initially attracted to the role but subsequently failed. Thus, in this article, we refer to *entrepreneurial entry* as a decision to attempt a start-up, rather than the successful establishment of a new business.

Ideally, research should focus on *nascent entrepreneurs*, people still in the process of organizing and assembling the resources they need for a new business (Reynolds and White, 1997). By focusing on nascent entrepreneurs, we also avoid a common misperception that entrepreneurship is concerned only with large, successful firms. Instead, the study of entrepreneurship encompasses a much larger population of small and often unsuccessful start-ups. Studying nascent entrepreneurs requires overcoming a major data collection hurdle: only about 4–6 percent of the adult population enter the nascent entrepreneur pool each year (Reynolds and White, 1997). Identifying enough nascent entrepreneurs to ensure statistical power and finding them early in the planning process further compounds the difficulty of data collection. We use a unique dataset, the Panel Study of Entrepreneurial Dynamics (PSED) to overcome difficulties encountered in previous empirical efforts.

We begin by reviewing research on the relationship between financial, human, and cultural capital and entrepreneurship and develop a series of seven hypotheses. Then, we explain the design of the PSED, our operationalization of independent and dependent variables, and the logic of our statistical analysis. After presenting our results, we discuss how they compare with previous findings and conclude with some research and policy implications derived from our analysis.

2. Financial resources and entrepreneurial entry

Financial resources can be viewed along two dimensions: household wealth and household income. Given the moderate correlation between the two, typically around 0.5 or less, we contend both forms of resources affect attempts at transitions into entrepreneurship (Keister and Moller, 2000). We conceptualize financial resources at the household level. For example, a decision to pursue a start-up venture by a married couple may involve jointly owned resources (such as a home) to raise additional capital. Other household members can provide income while a nascent entrepreneur plans the new venture.

2.1. *Household wealth*

The possible benefits nascent entrepreneurs enjoy from wealth can be linked to a theory of *liquidity constraints* (Evans and Jovanovic, 1989). According to this theory, business start-ups often require substantial start-up capital. If personal financial resources are inadequate,

entrepreneurs must turn to credit markets to capitalize their new businesses. However, for several reasons, obtaining financing through bank loans or investors can be difficult. First, because these businesses are small and high risk clients, lenders are often unwilling to provide capital and some compensate by increasing borrowing costs (Jurik, 1998). Second, new businesses incur the cost of identifying potential financiers and undergoing bonding activities to ensure firm legitimacy. To overcome these barriers, nascent entrepreneurs often use personal capital from family wealth holdings as collateral. As another option, entrepreneurs can bypass the credit markets altogether by investing their own funds in the business venture to cover ongoing expenses until sufficient revenues are generated. In support of the liquidity constraint model, Holtz-Eakin et al. (1994) found a positive influence of family assets on transitions to self-employment. We note, however, that their research focused on successfully completed transitions, not attempts.

Liquidity constraint arguments suggest a direct positive association between wealth and starting a business, but at very high wealth levels, people have other career options. Proponents believe that very high wealth individuals may be more inclined to fund other nascent entrepreneurs rather than be directly involved in pursuing their own entrepreneurial pursuit. The potential pecuniary gains from a successful venture for high wealth individuals may not be worth making the personal sacrifice required to plan a start-up. Based on previous theorizing and research findings from the liquidity constraints perspective, we propose that *household wealth has a positive curvilinear association with the likelihood of entrepreneurial entry (H1a)*.

Skeptics might note two potential difficulties with the liquidity constraints view as applied to the situation of nascent entrepreneurs. First, its empirical support comes entirely from studies carried out on people already in business, rather than people still working toward that goal. Whereas it might be the case that persons who succeed in establishing a viable business long enough to be interviewed indeed have more wealth than others, they represent the fortunate few. Only about half of nascent entrepreneurs succeed in founding a new firm, and fewer than one in ten new ventures grow (Reynolds and White, 1997).

Second, most businesses do not require large amounts of financial capital in their start-up phase. Data from the 1992 United States Census – Characteristics of Business Owners survey showed that the majority of business owners in the United States started their firms with less than $5,000 (Census, 1992). Home-based businesses, for instance, which accounted for half of all new businesses in 1992, often require little capital up front. Although certain industries such as technology and manufacturing have high capital requirements, start-up capital requirements are generally low across all industries. In addition to minimal start-up costs, most businesses do not have many employees. In the United States, 89 percent of the approximately 5 million firms have less than 20 employees (SBA, 1994). Even industries often thought of as having high capital requirements are dominated by small firms. For example, 73 percent of manufacturing firms in 2001 employed fewer than 20 employees (SBA 2004).

In contrast to the attractive dilemma facing high wealth individuals of whether to invest in their own startup or those of other people, low wealth individuals confront an altogether different situation. Although low wealth individuals cannot invest in other peoples' ventures, the low initial capital requirements for most types of business put a startup attempt within easy reach of most households. Many aspiring business owners use financial bootstrapping methods to decrease external capital needs in their start-up phase. Harrison et al. (2004) described three types of bootstrapping: reliance on internal funding sources; low cost acquisition of financial resources; and low cost acquisition of other start-up resources. For example, in the first category of bootstrapping, a second mortgage on a house – which is the single largest asset for most households – may generate enough funds to start an internet consulting business or a landscaping service. In the second category, informal credit sources such as credit cards and rotating credit associations provide short-term liquidity options. Family members serve as another source of funding, especially if capital needs are modest (Parker, 2004). In the third category, new

businesses often do not require a separate office location, as nascent entrepreneurs conduct initial operations in their homes. Given the low initial barriers to entry, we are thus somewhat skeptical of the liquidity constraint hypothesis with regard to *attempted initial entry*. We therefore propose an alternative hypothesis: *household wealth has no association with the likelihood of entrepreneurial entry (H1b)*.

2.2. *Household income*

Individuals may weigh their participation in a start-up venture in terms of the opportunity costs of reducing their present income from employment (Blanchflower and Oswald, 1998). A nascent entrepreneur makes two evaluations: prospects for additional income from a start-up relative to present income, and prospects for future income from current employment. At lower income levels, individuals may find the opportunity cost so low that they lose little or nothing by pursuing the uncertainties of income from a new venture. For example, if a venture fails, an individual may be able to find wage employment elsewhere at a similar income level. Or, the projected minimal income stream from a new venture may be similar, in the short-term, to an individual's current income stream. In such cases, an individual would pursue a new venture, given a higher projected long-term income stream. For example, Devine (1994) argued that many women choose self-employment as a response to a higher potential income from business ownership versus lower potential income from wage and salary work.

People in high paying occupations can undoubtedly invest more in the entrepreneurial process, but we propose that those individuals find entrepreneurship less appealing. Sørensen (2000) reasoned that some higher income labor force participants benefit from rents generated from firm-specific skills. He highlighted a key decision faced by individuals in well-paying occupations. By remaining in their existing employment relationship, these individuals build wealth by accumulating rents from specialized and firm-specific skills. Decisions to obtain advanced professional degrees or certifications are made with the intention of recouping the initial investment and securing higher, long-term income. Therefore, in higher income brackets, individuals may find that the loss of present and future income from their current place of employment outweighs prospective gains from an entrepreneurial venture.

Consequently, individuals at higher income levels may perceive future income streams from their present occupation more favorably than an uncertain outcome from an entrepreneurial venture. Supporting this perception, findings by Hamilton (2000) (using the 1984 panel of the Survey of Income and Program Participation) and Moskowitz and Vissing-Jorgensen (2002) (using the 1989–1998 Survey of Consumer Finances) showed that earnings generated from self-employment lagged behind wage and salary employment.[2]

For these reasons, we propose that *household income has a positive curvilinear association with the likelihood of entrepreneurial entry (H2)*.

3. Human capital and entrepreneurial entry

In addition to financial resources, theoretical models of entrepreneurial attempts should include the role and impact of human capital characteristics (Åstebro and Bernhardt, 2005). Education and work experience are the most common dimensions of human capital used in labor force participation analyses, and they have been associated with successful transitions into entrepreneurship. We believe these characteristics also apply to nascent entrepreneurs. We further differentiate these dimensions in order to clarify which types of human capital affect the prospects of nascent entrepreneurs.

3.1. *Education*

Formal education can affect the likelihood of entrepreneurial entry through (1) the acquisition of skills, (2) credentialing, and (3) sorting people by ambition and assertiveness. However, the association between education and entrepreneurship is not necessarily straightforward (Bates, 1997). General business and technical skills can guide nascent entrepreneurs in setting up basic business functions and avoiding

common mistakes; individuals are more likely to learn these in specialized courses and training, rather than in typical high school and college courses. Certain courses, such as vocational programs, enable students to learn specific trade and business skills. In other courses, students develop critical thinking, communication, teamwork, and other general skills that will be necessary as an entrepreneur. Formal education, as a credential, can also provide access to certain social networks (e.g., alumni network) or serve as a positive signal for nascent entrepreneurs when evaluated by resource providers (e.g., venture capitalists). The acquisition of skills and credentials may create valuable opportunities for individuals to work for others, rather than pursuing a new business venture.

As the U.S. labor market has become increasingly service- and information-based, education has played an increasingly important role in facilitating new business formation in some but not necessarily all industries.[3] For example, in knowledge-based industries, such as technology, finance, real estate, and insurance, education is clearly relevant to business acumen. Even if the knowledge and skills gained in formal education are not directly relevant to entrepreneurship, educational achievements may be an indicator of someone's ambition, achievement motivation, and endurance, as well as their social class background. Formal education thus allows individuals to gain knowledge and skills, earn credentials valued by others in the business community, as well as sorting people by ambition and assertiveness. However, people who start small businesses in trades such as construction or carpentry have little need for advanced formal education. Instead, they draw on their acquired technical skills and on-the-job experience.

Thus, given the ambiguity about education's possible value to entrepreneurial entry, we offer no hypothesis concerning educational attainment.

3.2. *Work experience*

Previous research has shown that work experience may be a very important component of human capital for nascent entrepreneurs (Brüderl et al., 1992). Without sufficient work experience, individuals may encounter difficulties in taking the first steps toward becoming an entrepreneur. We believe that individuals may be influenced to pursue entrepreneurship through multiple forms of work experience (Parker, 2004). In particular, we focus on four types of work experience: general full-time work experience, managerial experience, previous start-up experience, and current self-employment.

In addition to generating wide-ranging business-related skills, general full-time work experience provides two important learning opportunities. If such work experience occurs within the new venture's industry, individuals can rely on the knowledge of their industry to identify potential opportunities and other industry-related conditions (Shane, 2003). Furthermore, individuals gain access to various social networks for market information, access to capital, hiring employees, establishing reputations, and developing supplier and customer relationships. Previous managerial experience can give people skills needed to coordinate and administer diverse activities in the early phases of a start-up (Boden and Nucci, 2000). In previous research using age as a proxy for accumulated human capital, age exhibited a curvilinear effect, peaking at a certain level, beyond which its effects decreased (Bates, 1997). *Accordingly, we expect positive curvilinear relationships for entrepreneurial entry due to general (H3) and managerial work experience (H4).*

Prior start-up experience and current self-employment are two additional ways in which nascent entrepreneurs develop relevant planning and managerial experience for a new start-up (Kalleberg and Leicht, 1991). Individuals with prior experience starting a new business may develop confidence in their ability to identify promising opportunities (Shane, 2003). The success of their earlier ventures may further enhance their confidence. Therefore, we expect that *individuals with prior start-up experience will have a higher likelihood of entrepreneurial entry than people without such experience (H5).*

Research suggests that those who are currently self-employed are more likely to be involved in other new business ventures than those who are working for others (Renzulli

et al., 2000). Studies also show that many business owners own more than one business. For example, Aldrich et al. (1983) found rates of multiple ownership among Asian and white shopkeepers ranging from 10 to 34 percent in four English cities, with the average around 19 percent. In Vancouver, Canada, Aldrich et al. (1998) found that 36 percent of business owners owned multiple businesses. People already in business have many opportunities to develop valuable contacts, as well as accumulate the additional wealth that can be used to begin a new venture. They are also well placed to spot new opportunities in their own or contiguous industries. Thus, we believe that *persons already in business will be more likely than others to attempt to start another one (H6)*.

4. Cultural capital and entrepreneurial entry

The children of entrepreneurial parents are more likely to become entrepreneurs in their adult careers (Blau and Duncan, 1967; Western, 1994). Steinmetz and Wright (1989) reported that among adults in 1980 in the U.S. labor force, "nearly 32% come from families in which the head of the household was self-employed most of the time while they were growing up, and 46% come from families in which the head of household was self-employed at least part of the time" (974). Butler and Herring (1991) and Hout and Rosen (2000) both found a positive association between father's self-employment and son's self-employment. Parents can pass down their businesses to their children upon retirement or provide capital for new businesses. These second-generation entrepreneurs benefit from exposure, perhaps at early ages, to an entrepreneurial environment, ranging from practical matters of running business operations to developing social networks to coping with the risks associated with entrepreneurship. Informal training and pre-market experiences are cultural capital resources that might increase interest in a start-up project (Lentz and Laband, 1990).

Parental role modeling of entrepreneurial values, such as autonomy and perseverance, provides a valuable cultural resource for future entrepreneurs (Hout, 1984; Miller and Swanson, 1958). These values may be transmitted to the children through direct encouragement and indirect cues by their parents. Children in a family business benefit from apprenticing with family mentors and as well joining business-related social networks. Some entrepreneurs devote considerable time and effort to sustaining this resource due to the high level of occupational commitment required establish a successful business (Blau and Duncan, 1967). For these reasons, we expect that *individuals with a parent as an entrepreneur will be more likely to attempt entrepreneurship than others (H7)*.

5. Data and methods

5.1. *The PSED data*

We analyzed data from the Panel Study of Entrepreneurial Dynamics (PSED). The PSED contains a nationally representative sample of nascent and non-entrepreneurs with detailed information about financial resources, work histories, and other individual and background traits. The PSED enhances our understanding of nascent entrepreneurs in three important ways. First, individuals qualified as a nascent entrepreneur based on a four-part definition, providing a more focused definition of self-employment than those used in other studies (e.g., Hamilton, 2000). Because of inconsistent definitions of self-employment used to categorize cases, previous findings are difficult to compare. Second, finding individuals early in their planning process minimizes the selection bias encountered by studies relying on small business databases that do not include entrepreneurs who have abandoned efforts prior to data collection (e.g., Bates, 1997). Third, key demographic variables, such as age, race, gender, and region are available, which were not included in earlier studies (e.g., Evans and Leighton, 1989). Over-sampling of minorities and women in the PSED enhanced the quality of the data in these respective groups. As a result of these enhancements, we are able to improve model specification in examining nascent entrepreneurs. A complete description of the study's background and sampling methodology can be found in Gartner et al. (2004b) and Reynolds et al. (2004).

Screening of the United States adult population (18 years of age and older, within the contiguous 48 states) took place between July, 1998 and January, 2000, using random digit dialing (RDD) methodology. In the screening interview of 59,575 individuals, respondents were identified as nascent entrepreneurs using four qualifying questions to form a potential pool of respondents. Individuals qualified if they expected to be owners of a new business they have been actively trying to start within the last 12 months. Owners reporting firms with positive cash flow for at least three months or majority institutional ownership did not qualify. From this pool of 1,492 eligible individuals, nascent entrepreneurs were randomly drawn and invited for participation in the study. 830 nascent firms comprise the final Nascent Entrepreneur sample. Additionally, women and minorities were over-sampled. Collection for the Comparison Group sample also occurred in two phases. In this screening interview of 5,047 individuals, 639 qualified to participate in a survey of work and career patterns in the United States. After randomly drawing individuals from this pool, 431 respondents completed final interview to form the Comparison Group sample. These respondents answered the same set of basic background questions as the Nascent Entrepreneur sample. Only minorities were over-sampled for Comparison Group.

Ideally, the PSED would have interviewed respondents who did not qualify as nascent entrepreneurs when initially selected in the Nascent Entrepreneur sample, hence eliminating the need for a Comparison Group sample. However, financial considerations made that design infeasible. Therefore, we combined the Comparison Group sample with the Nascent Entrepreneur sample into one final data set for analysis.

We used individual case weights for both Nascent Entrepreneur and Comparison Group samples in our analyses to ensure representativeness. We relied on weights calculated by the Institute for Survey Research at the University of Michigan for the PSED. These weights accounted for differences in selection probabilities based on age, education, race, and sex (based on the Current Population Surveys conducted by the U.S. Census) and correct for differences due to differential non-response rates (Curtin and Reynolds, 2004). Weights were originally calculated using the respective samples, and we recalculated them so that each case accurately represents their actual proportion of the United States' population when both samples are combined into one.

5.2. *Dependent variable*

We coded our dependent variable (nascent entrepreneur = 1) if the respondent qualified based on the following criteria. A respondent must have answered yes to the following question: "Are you, alone or with others, now trying to start a new business?" In addition, we only included individuals as nascents if they expected to be owners or part owners in the firm, reported being active in trying to start the new business in the past twelve months, and were still in the start-up phase.[4]

5.3. *Independent variables*

We used two measures of financial resources. The correlation between household net worth and income was low (0.29), consistent with previous research and suggesting that these two variables, in combination, provide a composite picture of an individual's financial well-being. *Household net worth* includes the value of total assets (e.g., physical property and investments, including primary residence) net of outstanding debt (e.g., mortgage, home equity and car loans). These questions are also used in the Survey of Consumer Finances conducted by the Federal Reserve Board. We transformed the raw wealth variable into a quadratic term, anticipating a non-linear relationship. We retained all cases, including cases where wealth is less than or equal to zero, for a more accurate assessment of how wealth is associated with becoming an entrepreneur.[5] *Household income* includes income from work, government transfers, pensions, and all other sources before taxes in the previous year. We transformed the raw income value into a quadratic term as well.

Respondents who did not provide a value for total household wealth or income responded to

a series of questions in which they estimated their appropriate income and wealth range and provide information on specific wealth components. We recoded these responses based on a set of decision rules (Kim et al., 2004) and achieved complete information for 96 percent of the cases for the net worth and income variables. The median values for household net worth and household income are comparable to other survey data.[6]

We included five measures of human capital. *Education* is a categorical variable indicating the highest level of education completed. As Parker (2004) noted, "it is often informative to distinguish between different types of labour market experience" (70). He noted that results have been "scant but interesting." We included four indicators of work experience. We used *net full time work experience* with managerial experience subtracted (in years). *Managerial experience* is the number of years of managerial, supervisory, or administrative experience. We transformed both variables into their quadratic forms. We included a dichotomous indicator for *previous start-up experience*. We created three dummy variables for *current business ownership* based on a respondent's employment status: (1) people who said they were business owners or self-employed with no other jobs; (2) owners or self-employed persons who also worked for an employer for less than 35 hours per week; and (3) owners or self-employed persons who also worked for an employer for more than 35 hours per week. We reasoned that working for others, especially on a full-time basis, would interfere with current owners' ability to allocate time to starting a new venture. We believe these work experience measures improve the operationalization of the human capital concept for which previous studies relied on proxy measures, such as educational background and age (Bates, 1997; Dunn and Holtz-Eakin, 2000). We also followed other researchers who have measured work experience with multiple indicators (Bosma et al., 2004). To test for the effects of cultural capital resources, we included a dichotomous indicator of whether a *respondent's parents were business owners*.

We included four control variables in our models. We controlled for respondent's *age, gender, race, marital status, and region of residence*. We transformed raw age by taking its natural logarithm because previous research has shown that the likelihood of entrepreneurial entry increases up to a certain age and then plateaus (Evans and Leighton, 1989). We also controlled for whether the respondent was *foreign born* or the respondent's *parents were foreign born*. Descriptive statistics for the variables in our model appear in Table I.

6. Results

In Table II, we present the logit coefficients for our regression models.[7] We performed regression diagnostics to identify any potential outliers and influential cases.[8]

6.1. *Financial resources*

In Model A, neither financial resource variable had a statistically significant association with being a nascent entrepreneur, after controlling for other variables.[9] Our analysis thus supports the second of our two alternative household wealth hypotheses (H1b rather than H1a) and does not support H2, which predicted a positive association with household income. The insignificant finding for household income is consistent with Parker (2003).

These results contradict H1a, based on the expectation from liquidity constraint theory that financial resources limit transition attempts at entrepreneurship. Our findings are consistent with Hurst and Lusardi (2004) in their analysis of the Panel Study of Income Dynamics (PSID) and with Aldrich et al.'s study (1998) of business owners in British Columbia. Uusitalo (2001) also reported no relationship between net worth and transition attempts at entrepreneurship in Finland. Financial resources are not a barrier to attempting entrepreneurship for most individuals, allowing aspiring entrepreneurs to make voluntary attempts at a transition between formal wage employment and entrepreneurial activity (Parker 2004).

We offer five explanations for these findings. First, most nascent entrepreneurs started their ventures with very little financial capital. Approximately 75 percent of nascent entrepreneurs

TABLE I
Descriptive statistics for Panel Study of Entrepreneurial Dynamics, 1998–2000

Variable	Mean	SD	Min	Max
$N = 1{,}050$				
Dependent variable				
Nascent entrepreneurs	6%	0.23	0	1
Independent variables				
Financial resources variables				
Household net worth	$199,389	$477,856	−$378,000	$13,300,000
Median	$82,000			
Non-positive	7%			
$0–$100,000	49%			
Household income (annual)	$53,303	$43,506	$0	$1,800,000
Median	$45,000			
Human capital variables				
Education				
Up to high school degree	24%	0.43	0	1
Technical/vocational	5%	0.22	0	1
Some college	38%	0.49	0	1
College degree	18%	0.39	0	1
Post college	14%	0.35	0	1
Work experience (net of managerial experience – years)	10.70	9.00	0	60
Managerial experience (years)	8.02	8.60	0	50
Helped start other business	48%	0.50	0	1
Current business owner and not working for others	11%	0.31	0	1
Current business owner and working for others less than 35 hours/week	5%	0.22	0	1
Current business owner and working for others 35 hours/week or more	8%	0.28	0	1
Either parent business owner	50%	0.50	0	1
Control variables				
Age	42.69	13.72	18	93
Male	47%	0.50	0	1
Race				
White	73%	0.44	0	1
Black	11%	0.32	0	1
Hispanic	7%	0.26	0	1
Other	8%	0.27	0	1
Foreign born	6%	0.25	0	1
Either parent Foreign born	16%	0.37	0	1
Married	54%	0.50	0	1
Region				
Northeast	20%	0.40	0	1
South	33%	0.47	0	1
Midwest	25%	0.44	0	1
West	22%	0.41	0	1

contributed $10,000 or less into their ventures, while 50 percent began with about $2,500 or less. Removing professional and service industries, the initial investment was only slightly higher: less than $3,000 for about 50 percent of nascent entrepreneurs and less than $12,000 for about 75 percent of nascent entrepreneurs. Second, 66 percent of nascent entrepreneurs reported developing their current venture at their residence or personal property, further reducing the need for start-up capital.

Third, we found few nascent entrepreneurs seeking funding from others for their ventures. As

TABLE II
Results from logistic regression analysis of being a nascent entrepreneur on financial resources, human, and cultural capital variables: Panel Study of Entrepreneurial Dynamics, 1998–2000

	Model A		Model B (24 month)†	
Financial resources				
Household net worth/$10,000	−0.007	[0.006]	−0.003	[0.006]
Household net worth^2	1.13E–05	[.0000117]	7.63E–06	[.0000134]
Household income/$10,000	−0.007	[0.044]	0.019	[0.049]
Household income^2	0.001	[0.001]	0.0002	[0.001]
Human capital				
Education				
Technical/vocation	0.333	[0.375]	0.491	[0.432]
Some college	0.364	[0.224]	0.34	[0.266]
College graduate	0.722**	[0.273]	0.807**	[0.318]
Post college	0.459	[0.319]	0.134	[0.389]
Work experience (net of managerial experience)	0.024	[0.032]	−0.013	[0.036]
Work experience^2 (net of managerial experience)	−0.001	[0.001]	−0.0003	[0.001]
Managerial experience	0.075*	[0.032]	0.083*	[0.041]
Managerial experience^2	−0.002*	[0.001]	−0.002*	[0.001]
Helped start other businesses	−0.704**	[0.190]	−0.655**	[0.226]
Current business owner and not working for others	1.724**	[0.283]	1.696**	[0.330]
Current business owner and working for others less than 35 hours/week	1.389**	[0.324]	1.049**	[0.384]
Current business owner and working for others 35 hours/week or more	0.954**	[0.305]	0.617*	[0.361]
Cultural capital				
Parents business owner	−0.085	[0.188]	−0.17	[0.221]
Control variables				
Age (LN)	−1.481**	[0.434]	−1.533**	[0.480]
Male	0.580**	[0.178]	0.325	[0.208]
Race				
Black	0.674**	[0.203]	0.608**	[0.233]
Hispanic	0.225	[0.302]	0.253	[0.378]
Other	−0.51	[0.374]	−0.920*	[0.509]
Foreign born	0.176	[0.380]	0.528	[0.473]
Either parent foreign born	−0.186	[0.380]	−0.401	[0.402]
Married	0.29	[0.184]	0.199	[0.218]
Region				
South	−0.112	[0.244]	−0.086	[0.284]
Midwest	−0.113	[0.269]	−0.133	[0.315]
West	0.249	[0.270]	0.09	[0.324]
Constant	1.193	[1.424]	1.836	[1.600]
−2LL	−205.25		−133.42	
DF	28		28	
$\chi 2$	117.9		93.91	
	$N = 1050$		$N = 684$	

*Significant at 5%; **significant at 1% (one-tailed test for primary independent variables; two-tailed test for control variables).
†Sample restricted to nascent entrepreneurs who thought about starting a business within the last 24 months.
Reference categories: education (up to high school degree); race (white); region (northeast). Standard errors in [ ].

shown in the last row of Table III, only about 56 percent of nascent entrepreneurs pursued external funding sources. Among the financing options, 33 percent of nascent entrepreneurs used credit cards most often and 16 percent turned to friends and other family members. Nascent entrepreneurs borrowed from banks as secondary options, and may have followed a financial

TABLE III
Funding sources of nascent entrepreneurs by industry: Panel Study of Entrepreneurial Dynamics, 1998–2000

	Distribution of nascent entrepreneurs (%)	Requested funding (%)	Credit cards (%)	Friends & family (%)	Bank loan (%)	SBA loan (%)	Second mortgage (%)	Venture capital (%)	Personal finance company (%)	Current employer (%)
Agriculture, forestry, fishery	2.88	63.26	36.71	9.37	33.45	0.00	8.05	6.18	0.00	4.13
Construction	4.27	43.85	29.65	9.69	8.43	7.05	0.00	1.73	0.00	2.79
Manufacturing	4.38	60.78	15.81	21.94	13.57	8.03	11.65	4.15	3.35	0.00
Transportation, communication, utilities	1.98	72.67	36.45	9.00	57.82	9.19	0.00	7.42	6.02	0.00
Wholesale	2.52	66.43	49.47	13.04	22.22	7.51	9.18	8.39	0.00	13.04
Retail	20.78	59.90	32.95	19.45	11.13	4.95	3.61	4.06	5.83	2.57
Business services	30.76	52.30	33.93	10.03	11.27	3.67	3.84	3.10	1.61	2.46
Consumer services	14.09	59.48	37.79	20.64	10.04	4.88	2.39	0.68	2.61	0.00
Health, education, medical, government services	18.35	42.54	24.23	18.31	7.74	4.16	0.00	3.24	0.00	3.81
Total	100.00	56.19	33.08	15.59	13.03	4.79	3.70	3.30	2.77	2.37

resources priority order by applying for bank loans only after other primary options had been pursued (Myers, 1984). Capital-intensive industries such as transportation, communications, utilities, and wholesale exhibited higher external funding requests, where a higher proportion of nascent entrepreneurs sought third-party financing, presumably due to larger funding needs. However, for the majority of nascent entrepreneurs who were in retail or service-related industries, funding requirements remained low.

Fourth, as shown in Table IV, we found no substantively significant association between respondents' household net worth and whether they had pursued a bank loan or been approved for one. Although nascent entrepreneurs with zero or negative net worth applied for a bank loan slightly more often than higher net worth individuals, they were only slightly less likely to be approved, compared to positive wealth nascent entrepreneurs.[10] Although not a study of entrepreneurial loan approval rates, our descriptive findings point toward a credit market willing to fund individuals who do not have significant wealth. Our findings indicate that many aspiring business owners used financial bootstrapping methods to decrease external capital needs in their start-up phase (Harrison and Mason, 1997).

We ran one additional test to explore whether the relationship between financial resources and being a nascent entrepreneur was conditioned by the length of the organizing period. In their analysis of entrepreneurial motivation using the PSED, Gartner et al. (2004a) found differences when restricting the sample to nascent entrepreneurs who started organizing within the last 24 months. To see if our results still held under this restricted condition, we reduced our sample to those respondents who reported they had begun thinking about starting a new venture within the twenty-four months prior to the interview. We thus focused on "determined" nascent entrepreneurs who began their start-up project more recently, rather than nascent entrepreneurs who may have been "tinkering" with an idea over a longer period. When we tested our model on the reduced sample of the "determined" nascent entrepreneurs (Table II, Model B), our results were unchanged. Financial resources did not have a significant association

TABLE IV
Pursuing bank funding by wealth of nascent entrepreneurs: Panel Study of Entrepreneurial Dynamics, 1998–2000

Household net worth (in percents)	Will pursue bank loan	Approved bank loan
Zero or less	18.81	40.64
$1–$50,000	12.62	47.62
$50,001–$100,000	13.87	45.49
$100,001–$250,000	11.97	58.85
Over $250,000	11.12	48.13
Total	12.99	48.59
p value	0.71 (ns)	0.18 (ns)

with being a nascent entrepreneur, even for the ''determined'' group.

The statistically insignificant relationship for household income (H2) supports an inference suggested by Parker's (2003) results from his study of the 1994 British Household Panel Survey and Family Expenditure Survey. Parker examined whether individuals are more likely to pursue self-employment because of opportunities to increase their income through schemes for tax avoidance. Based on his results, Parker argued that individuals do not pursue entrepreneurship solely for potential tax incentives and other income maximization reasons, a position also argued by Hamilton (2000).

Endogeneity of our financial resources and human capital variables may create a possible threat to the validity of these findings. Ideally, with longitudinal panel data on these variables, we could verify whether our results remain robust after accounting for possible reciprocal relationships with appropriate instrumental variables (e.g., Hurst and Lusardi, 2004). However, we believe that potential biases due to endogeneity are limited for two reasons. First, when we ran our models with the net worth and income variables separately, neither variable was statistically significant when included by itself. Thus, we concluded that even if income often generates additional wealth and even if wealth produces additional income, their reciprocal association was not causing us to underestimate their individual impact on entrepreneurial entry. Only if either financial resource variable, by itself, had a direct and statistically significant association with being a nascent entrepreneur would we be concerned.

Second, we argue that if biases were present, our results actually may overstate the impact of wealth. A critique of our analysis based on a concern for endogeneity implies that a possible causal association between human capital (experience and education) and financial resources produces a situation in which including human and financial capital in the same equation leads to problems. Ideally, we should know much of the impact of ''income'' and ''wealth'' is really due to significant experience or advanced educational credentials. Absent that knowledge, some of the impact of ''income'' and ''wealth'' is really due to the (unmeasured) effects of human capital. With our cross-sectional data, we cannot decompose the effects of financial capital into the ''true'' effects of income and wealth nor the specific effect of human capital's impact on these financial resource variables. As we interpret this situation, our statistical analysis thus should, if anything, overstate the impact of the financial resource variables.

6.2. *Human capital*

In contrast to our results for financial resources, several human capital variables were significantly associated with being a nascent entrepreneur. Advanced formal education had a positive association with being a nascent entrepreneur. College graduates were twice as likely (i.e., $100 * e^{0.722}$) to be nascent entrepreneurs as people with high school degrees or less, but post-college education made no additional contribution to being a nascent entrepreneur. Our results thus suggest a curvilinear impact of education: both too little and too much education discourages attempted entrepreneurship.[11]

Two of the four work experience variables were significantly positively associated with being a nascent entrepreneur. Full-time work

experience was not positively associated with being a nascent entrepreneur (H3), whereas managerial experience was positively associated (H4). The positive effect of managerial experience rose at a decreasing rate, peaking at approximately 19 years. We believe that our measures of work experience improve upon previous proxy indicators, such as education and age, which have conflicting effects on nascent entrepreneurship. Age is negatively associated with being a nascent entrepreneur, whereas both education and managerial work experience are positively associated.[12] Clearly, aging workers face an intersection of conflicting forces if they are in managerial positions.

Individuals with previous start-up experience (H5) were actually about 50 percent less likely to attempt another startup, compared to individuals without start-up experience. Individuals who were currently business owners or self-employed were about 2.6–5.6 times more likely to be nascent entrepreneurs, depending on the hours they spent working for others (H6). The three current-owner coefficients form the logical hierarchy that one would expect if working for others dampened the potential gains from owing one's own business or being self-employed. People who reported they were self-employed or a business owner but who also worked 35 hours or more a week clearly faced greater time and resource constraints than those reporting business ownership as their sole occupation. Our results support Ronstadt's "corridor principle" wherein current business owners perceive more opportunities than non-owners through what they have learned from their initial successful attempts to start a business (Ronstadt, 1988).

One possible explanation for the failure of H5 centers on what people learn from previous business startup experience. In retrospect, our H5 presumed a cycle of positive feedback that clearly cannot be sustained over the life course of most entrepreneurs. If it were, a far greater proportion of the working population would be small business owners. Given the difficulties entrepreneurs generally face, people who have been involved in previous startups, especially abandoned ones, may become discouraged and thus less likely to take part in another startup. Indeed, due to the high mortality rate of new ventures, abandoned attempts must comprise the majority of previous attempts reported by our respondents (Reynolds and White, 1997). By learning from experience, these discouraged or disillusioned former entrepreneurs become more likely to opt for a wage and salary career. Therefore, our negative coefficient probably reflects the discouraging effects of previous experience and an assessment that another try would not reward the effort required.[13]

6.3. *Cultural capital*

Somewhat surprisingly, levels of entrepreneurial involvement among family had no association with being a nascent entrepreneur (H7). Although the proportion of entrepreneurial parents in our sample – 50 percent – was similar to earlier findings (e.g., 46 percent – Steinmetz and Wright, 1989), the presumed advantages of having at least one entrepreneurial parent were not apparent in our results – these people were no more likely than the children of wage and salary workers to be nascent entrepreneurs. We found no evidence to match previous findings of intergenerational immobility. We offer four possible explanations. First, perhaps this confirms that a goal of entrepreneurial parents was finally achieved in the last decade of the 20th century: to have their children pursue careers that do not involve the difficulties of starting and running a business (Aldrich et al., 1998). The prospects for working long hours and enduring economic uncertainties may dissuade children of entrepreneurial parents from following in their footsteps. Second, the limitations of impoverished cultural capital may only become obvious after a business begins operations, rather than at the planning and organizing stage. Third, our parental business ownership measure does not distinguish between parents who ran a successful business venture versus those for whom the enterprise was a miserable failure. We would need more information about parents' businesses to determine whether the transmission of cultural capital depends upon the achievements of one's mentors. Fourth, having parents in business may not sufficiently motivate children to enter entrepreneurship, but it is still possible that

they provided help to their children via wealth transfers, which we did not capture in our data (e.g., Dunn and Holtz-Eakin, 2000).

6.4. *Control variables*

Among the control variables, we highlight the significant results for African-Americans. Fairlie (1999) argued that African-American men were one-third as likely to be self-employed as white men, citing lower asset levels and rate of self-employed fathers. Similarly, Butler and Herring (1991) and Hout and Rosen (2000) reported that African-Americans and Latino men were less likely to pursue self-employment after controlling for father's self-employment status. In contrast to previous results, we found that blacks were twice as likely as whites to be nascent entrepreneurs, net of other variables. This may be a leading indicator that foreshadows a shift in the rate of entrepreneurship in these minority groups, relative to whites. Fairlie (2004b) reported a growth rate of 87 percent in the number of self-employed blacks between 1979 and 1998, compared to a growth rate of 36 percent for whites, based on the Current Population Survey. However, it could also reflect special circumstances during a period when mass media outlets, politicians, and others trumpeted "entrepreneurship."

Women were less likely than men to be a nascent entrepreneur, as men were 1.8 times as likely as women to pursue a new venture in the full sample. These findings are consistent with previous research; after controlling for other factors, men are more likely than women to be entrepreneurs. In a Wisconsin study with a similar design to the PSED, Reynolds and White (1997) found that women were 60 percent less likely than men to be nascent entrepreneurs. Thus, although the rate of women attempting to start businesses increased between 1975 and 1990 (Devine, 1994), it still lags behind that for men.

7. Discussion

We examined whether lack of financial, human, and cultural capital resources poses a barrier to entrepreneurial entry. Previous findings on attempts at transitions into entrepreneurship have been inconclusive because of poor data quality and the limited availability of information on people attempting to become entrepreneurs. We found that net worth did not have a statistically significant association with being a nascent entrepreneur, contrary to what liquidity constraint theory predicts. Rather than the wealthy having greater opportunities for creating additional wealth through business startups and the less-privileged having fewer opportunities, we found a human capital effect. Educational background and work experience (managerial experience and current business ownership) were positively associated with being a nascent entrepreneur, whereas previous start-up experience had a negative effect. Although lack of advanced education and lengthy managerial experience potentially pose obstacles to entrepreneurial entry, opportunities to invest in these forms of human capital are widely available. Additionally, experience with entrepreneurial family members, as a form of cultural capital, did not promote a transition to entrepreneurship. These findings suggest that intergenerational immobility among entrepreneurs, at least in the short-term, could be declining, as budding nascent entrepreneurs encounter semi-permeable rather than impermeable barriers. With appropriate human capital, transitions into entrepreneurship are possible, without significant financial resource constraints or having come from an entrepreneurial family background.

7.1. *Comparison with previous findings*

Our results take into account some of the shortcomings of previous research and thus contrast with previous findings in several ways. First, we employed a fairly stringent set of criteria to qualify an individual as a nascent entrepreneur. In previous studies, the concept of "entrepreneurship" depended on more general indicators for the dependent variable, such as "self-employment" or "small business owner." Definitions established by researchers varied from survey to survey, lacking a clear baseline for reference. Previous researchers have mostly examined people who are *already* running an operating business. In contrast, the PSED focused on nascent entrepreneurs who were in

the initial phase of pursuing a start-up venture. Specifically, we examined individuals actively involved over the last twelve months in a start-up, securing ownership rights and operating with a degree of autonomy. These individuals cannot be directly compared to successful entrepreneurs and small business owners because a significant proportion of nascent entrepreneurs do not survive the start-up phase (Reynolds and White, 1997). In this respect, our findings speak to the factors involved in drawing people into entrepreneurship, rather than those enabling them to succeed at it.

Second, the PSED was specifically designed to study the nascent entrepreneurial population. We thus were able to include more precise measures of financial resources, work histories, and various socio-demographic characteristics of potential entrepreneurs than previous studies. Such measures reduced the model misspecification problems encountered in other data sets. For example, we believe that having separate measures of self-employment experience, past and current, as well as differentiating among owners with varying degrees of employee obligations to other firms, advances the measurement of this concept. Previous studies simply treated start-up experience and business ownership/self-employment as single variables.

Third, we disaggregated the process of a founding a new business by differentiating between the attempt at transitioning into entrepreneurship and running a viable new venture. Although we found that lack of income or wealth did not inhibit people from taking action to start new businesses, financial resources may play a major role in the subsequent success of the established entities. However, research suggests that the relationship between startup capitalization and subsequent success is not straightforward (Ruef, 2002). High capitalization does not guarantee business success. New firms face high levels of mortality because they must learn effective practices, adapt to competitors, and gain legitimacy. Therefore, we would expect a significant proportion of nascent entrepreneurs to disband their new ventures during the early phases of the start-up process. Future research will address that question.

7.2. *Implications*

Based on our findings, we propose two implications for research and theorizing on the factors affecting who becomes involved in trying to start a new business. First, the prospects for entrepreneurial entry do not appear to be concentrated among those financially advantaged. The lack of liquidity constraints and importance of education and work experience for nascent entrepreneurs might help explain the persistence of entrepreneurship during the late 20th century. Findings by Steinmetz and Wright (1989) and Wong (1992) indicated that the proportion of entrepreneurs in the labor force and the rate of entrepreneurship ceased their long-term decline during the late 20th century. In our sample, over one-half of the nascent entrepreneurs were attempting their first new venture – a strong sign of a resurgent entrepreneurial segment in the labor force. Indeed, opportunities for wealth accumulation among successful entrepreneurs are increasing. In 2000, small businesses accounted for over 40 percent of the total wealth within the U.S. business sector (SBA, 2002). Moreover, extensive government funding of educational institutions has created widespread opportunities to invest in and obtain human capital. Such democratization of the process of acquiring human capital may have lessened the importance of financial resources.

Second, structural changes within the environment, especially the diffusion of technical innovations, have created new opportunities for individuals which may not require significant start-up resources. Notably, a new generation of entrepreneurs has emerged using internet-based infrastructure to create home-based business with virtual storefronts (Pratt, 1999). For example, eBay transformed from just a website for people to sell miscellaneous items through online auctions into a platform for merchandising online. Rapid technological changes in digital media and communications have promoted a convergence of telecommunications, entertainment, and other forms of commerce that has opened up many new niches to innovative entrepreneurs with fresh ideas.

Policymakers should recognize the importance of distinguishing between policies that

encourage more startup attempts and policies that assist emergent firms further along the start-up process. Policymakers may decide to encourage more people to pursue entrepreneurship in anticipation of several benefits. First, additional start-up attempts lead to more opportunities for innovative organizational forms to emerge. Second, an increasing start-up rate enhances the public's perception of an economy open to ambitious people who want to strike out on their own. By contrast, policymakers who wish to invest more resources in developing emergent firms would devote their attention to assisting them to survive and succeed as viable, operating firms, rather than spurring additionally attempts. Benefits from this approach include the generation of additional employment opportunities in successful start-up firms.

Our results suggest that entrepreneurial entry does not depend upon wealth or income, but instead, education and managerial experience promote entrepreneurial attempts. Higher education is a generalized public good and thus need not be targeted by policy makers. Policies promoting entrepreneurship should focus on developing managerial experience. Providing meaningful and responsible positions for workers inside organizations promotes the kind of experience that apparently gives employees entrepreneurially-relevant skills and confidence. For example, ten years of managerial experience approximately doubles the likelihood of someone trying to start their own business. Encouraging employers to create internal labor markets in which job ladders provide cumulate managerial experience for workers can lead to some of them leaving to start their own businesses. As the global economy spawns more knowledge-based occupations, experienced managers with specialized skill sets may find opportunities to exploit these skills if they start their own firms. Thus, policies designed to enhance the quality of working life carry the added benefit of potentially increasing the supply of nascent entrepreneurs in the American economy.

As a caveat, we must acknowledge that the data collection for the PSED took place during a period of strong economic growth within the United States. Our results should be interpreted within the context of low unemployment, significant returns from equity markets, and greater access to both credit markets and venture capital funding. During this period of "irrational exuberance," nascent entrepreneurs may have been drawn into the prospects of a starting a successful new venture. Given these macroeconomic conditions, especially in terms of increasing household wealth, any possible relationship between financial resources and entrepreneurial intentions may have been attenuated. However, in 2003, the rate of entrepreneurship in the United States remained steady at about 12 percent (Reynolds et al., 2004), undermining simple macroeconomic cyclical explanations of our results. Even when the Internet boom ended, the promise of an entrepreneurial career still attracted people, just as Lipset and Bendix described for workers in the 1950s. Therefore, even though our data were gathered during extraordinary economic times, we believe our findings would also hold during less economically robust times.

Notes

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[1] Blau and Duncan (1967) reported high self-recruitment (i.e., a high concentration of inflows along the diagonals of mobility tables) as well as low outflow among entrepreneurs. Within the European context, Erikson and Goldthorpe (1992) also described highest immobility among entrepreneurs.

[2] However, Fairlie (2004a) discovered that earnings from self-employment were higher than wage and salary employment for African-American and Hispanic men. They may thus have an incentive to start a new venture, even at high income levels.

[3] To the extent that educational attainment is related to business performance, we would expect a stronger relationship between education and business survival than between education and trying to start a business (Gimeno et al., 1997).

[4] A start-up firm was considered an infant firm if the start-up had a positive monthly cash flow that covered

expenses and the owner-manager salaries for more than three months. Such firms were excluded from further analyses. We focused on independent start-ups and excluded any respondents who reported starting their new businesses with their current employers.

[5] In contrast, Evans and Jovanovic (1989) deleted negative net worth cases in their analysis.

[6] 2001 Survey of Consumer Finances vs. PSED (in parentheses) – Median net worth: $86,000 ($82,000); household income: $39,900 ($45,000).

[7] We also analyzed our data using a complementary log-log model, which is suitable for analyzing rare events. Based on the Akaike's Information Criteria (AIC) values, the complementary log–log model (AIC = 467.92, df = 29) fit slightly better than the logistic regression model (AIC = 468.51, df = 29). However, because coefficient estimates were very similar between the two models, we relied on the logistic regression approach since it is more widely used.

[8] Based on the distribution of the Cook statistic, we reviewed one case more closely that appeared influential. Upon further inspection, we discovered a coding error leading to a miscalculation of the wealth variable. We reran our analysis with the corrected wealth variable.

[9] The financial resource variables were also not significant when included in a model with only the control variables.

[10] The correlation between net worth and pursuing a bank loan was 0.04 (p value = ns) and the correlation between net worth and approval was 0.21 (p value = 0.07).

[11] We thank one of our reviewers for pointing this out to us.

[12] We also explored whether age exhibited a quadratic effect, but did not find a statistically significant effect.

[13] We believe the negative effect of previous startup attempts may have been missed in other studies because of a failure to control for factors associated with trying to start a business, and also because studies examined only outcomes that produced operating businesses, rather than attempts.

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