CHAPTER 1

Overview: Life Context, Personal Background

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he central purpose of the Panel Study of Entrepreneurial Dynamics (PSED) is to answer the question

Where do new firms come from? or put another way,

What are the major processes that lead to the emergence of new firms?

There are a plethora of hypotheses, theories, conceptualizations, ideas, and hunches about the factors that lead to new firm creation. A large proportion of these factors or processes are reflected in the conceptual scheme and data collection processes developed for the PSED. But, as with any complex phenomenon, one cannot discuss all of it at once. The handbook has been organized to provide a systematic overview of the major topics and issues that were the basis for the data collection procedures. It also provides the actual measures developed to provide indicators of the various causal processes.

The relationship between the PSED data collection scheme and the organization of the handbook is presented in Figure 1.1. This is based on the conceptualization of the entrepreneurial process and two major transitions. The first transition is the entry into the start-up process and the second transition is the exit from the start-up process—either with a new firm birth or abandoning the effort itself. The major factors or processes that affect these transitions are indicated in the four dashed-line boxes. Two are seen as operating in parallel, perhaps with substantial interaction: the life context and personal background, and individual cognitive characteristics or dispositions. These are covered in Parts I and II of the handbook. The actual nature of the start-up process itself, which can be quite complex, is

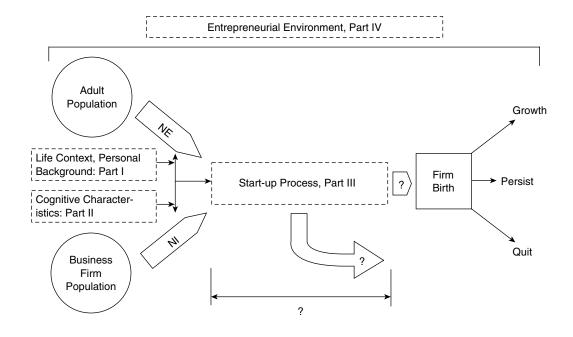


Figure 1.1 The Start-up Process and Handbook Organization

covered in Part III. The environmental context in which all these processes operate is the focus of Part IV.

Perhaps the most critical and poorly understood feature of the process is the "choice point" at which individuals elect to enter the start-up process. There is little question that their previous background, experience, and current context (Part I topics), as well as their personal cognitive capacity and dispositions (Part II topics), can influence their behavior at this juncture. The current economic, social, and political environment (Part IV) may also have an impact. Understanding the complex interactions at this choice point is a major challenge.

Focus of Part I

The chapters in Part I provide an overview of the rationale for selecting various measures and indicators of the individuals' background and current context. There are two major reasons for developing precise measures of the life context and personal background of those involved in business start-ups. The first is the most obvious: they may have a major influence on whether or not individuals choose to enter the start-up process as well as how and when they experience the transition out of the process. These are discussed in the next section of this chapter. The second major reason for assembling data on basic personal characteristics is to facilitate estimates of the amount of participation in entrepreneurial efforts in the U.S. adult population.

Capacity for Population Estimates

The capacity to develop a representative sample of U.S. adults involved in a business start-up is a critical feature of the PSED research program. It involves, among other things, gathering data in the initial screening process to provide comparisons with precise measures of the population to develop appropriate weights for each respondent. A properly weighted representative sample of U.S. adults can be used to create estimates for the entire U.S. adult population. For this reason, developing complete data on basic sociodemographic characteristics is an important feature of the initial screening procedure in which 64,000 individuals were asked about their personal participation in a new firm start-up.

The screening sample was developed by a commercial marketing research firm that provided weights for each of the 64 samples of 1,000 based on age, gender, region of residence, and household income. New sample weights were developed by the University of Michigan Institute for Social Research using the complete sample and based on age, gender, ethnic background, and educational attainment. These procedures are described in handbook Appendix B. The critical point for this discussion is that these six sociodemographic variables—age, gender, ethnic background, household income, educational attainment, and region of residence—were gathered in such a way as to facilitate comparison with descriptions in federal data sets, specifically the Current Population Survey (www.bls.census.gov/cps/cpsmain). Information for the first five variables was provided by respondents during the interview, and the last, region of residence, was based on knowing the state and county of each household based on the telephone number.

The benefit of accurate information on these sociodemographic variables is illustrated by the capacity to estimate the total activity in the U.S. population. From 10.6 to 13.2 million individuals were probably engaged in business start-ups at any given time between 1998 and 2000 (Appendix C, Table C.6). Age and gender of those in the sample were critical for this estimate. Other information gathered for the PSED suggests that from 475,000 to 669,000 new employer firms are established each year; the total annual U.S. new registrations in a comparable federal data set was 581,000 per year during this period (Chapter 23, Figure 23.1). These two measures of start-up activity outcomes are remarkably close, giving confidence that the PSED is providing an accurate measure of a national phenomenon.

Life Context, Personal Background Factors Affecting the Entrepreneurial Process

The other major reason for collecting this information is directly related to understanding the entrepreneurial process. These life context, personal background variables may reflect processes that have a major influence on whether or not individuals chose to enter the start-up process. They may also affect how they develop and implement a business start-up as well as their success in completing the process with a new firm birth.

Increased understanding of entry into and success in the start-up process has led to a number of items reflecting the past and current lives of the participants. Some are related to the background and experience of the individual, others reflect their current personal, social, and economic context. Many may actually reflect both. For example, an individual's gender may be an indicator of prior life and work experience as well as current family, work, and social context. Current age is both a reflection of past experiences (older individuals have had more opportunity to accumulate experiences and personal wealth) and current situation (older individuals may have less energy and reduced career aspirations).

A listing of the major personal measures reviewed in Part I is presented in Table 1.1, which indicates both the chapter in which it is discussed and to what extent the measure may be considered a reflection of prior experiences or current context. In most cases, a feature is emphasized in one chapter, but several are discussed in slightly different ways in two chapters (encouragement to pursue a start-up in Chapters 4 and 8). Other aspects are treated in complementary but different ways in several chapters (labor force participation in Chapter 6, work experience in Chapter 7, and work participation history in Chapter 10). These multiple treatments—based on different aspects or different sections of the interview schedules—provide a rich description of the participants. In almost all cases, data is available on both those identified as active in starting a new firm (nascent entrepreneurs) and the comparison groups (those randomly selected to represent typical adults not involved in the entrepreneurial process).

Age. Age is so fundamental and ubiquitous that no chapter was devoted to this personal feature. Measurement of age is straightforward. Individuals are asked either their current age or the year of their birth. Those unwilling to respond (very few people do not know their age) may be asked to select an appropriate age range: 18–24 years, 25–34 years, and so forth. Age is available for 96.8% of the 64,622 individuals screened to locate nascent entrepreneurs and 96.8% of the 1,261 individuals in the detailed data file. The relationship to participation in the entrepreneurial process and business start-ups is well established—the activity peaks for those in their early 30s, is rather low for those in the late teens and early 20s, and drops off to almost nothing for those in their late 50s (Appendix C, Table C.6).

This pattern has been widely reported in every study of a representative sample of nascent entrepreneurs, including prior studies in the United States (Reynolds, 1997) and Canada (Menzies, Gasse, Diochon, & Garand, 2002), Netherlands (Wolters, 2000), Norway (Alsos & Kolvereid, 1998), and Sweden (Delmar & Davidsson, 2000), as well as an annual series of cross-national surveys that have included 38 countries sampled over 4 years (Reynolds, Hay, & Camp, 1999; Reynolds, Hay, Bygrave, Camp, & Autio, 2000; Reynolds, Camp, Bygrave, Autio, & Hay, 2001; Reynolds, Bygrave, Autio, Cox, & Hay, 2002). Although there are the occasional exceptions (Colonel Sanders was establishing the Kentucky Fried Chicken franchise when he was in his 60s), the impact of age is so powerful that it must be controlled for any assessment of any other factor—gender, ethnicity, educational attainment, household income—associated with entering the start-up process.

Table 1.1 Major Life Context, Personal Background Variables

| Variable | Part I Chapter | Prior Experience | Current Context |
|--|-------------------|---------------------|--------------------|
| Age | | Х | Х |
| Gender | 2 | Х | Х |
| Ethnic Background | 3 | Х | Х |
| Marital Status | 4 | | Х |
| Household Structure: Size, Composition | 4 | | Х |
| Household Income | 5 | | Х |
| Household Net Worth | 5 | Х | Х |
| Labor Force Participation | 6 | | Х |
| Residential Tenure | 6 | Х | Х |
| Educational Attainment | 7 | Х | |
| Work Experience | 7 | Х | Х |
| Functional Expertise | 7 | | Х |
| Family Background: Role Models | 8 | Х | |
| Household, Family Encouragement | 4, 8 | Х | Х |
| Time Use (current activity allocation) | 9 | | Х |
| Work Participation History | 10 | Х | Х |

Perhaps more significant, it would appear that those in their late 30s and early 40s are more successful in creating a new firm than those in their late 20s and early 30s. Both work experience and access to networks and financial assets may increase in this decade of work experience and reduce the risk of a stillborn start-up effort (Reynolds & White, 1997).

Gender. Few topics associated with entrepreneurship receive as much attention as gender, perhaps because women are a large minority of those starting new firms (4.4 of 11.8 million) but less likely to be involved than men, 4.2 per 100 compared to 7.6 per 100 (Appendix C, Table C.6). Chapter 2, by Carter and Brush, review in some detail the basis for interest in gender differences among those starting new firms. Gender differences were of such importance that supplemental funding was received from the National Science Foundation to enhance the number of women in the entrepreneur sample, and topics associated with gender were introduced throughout the data collection schedule, such as time-use diaries to track allocation

of activities, reviewed in Chapter 9. Ironically, a major feature of business start-ups is that over half are team activities and this leads to different respondents on successive contacts for interviews. It was a major undertaking to establish the gender of many nascent entrepreneurs.

Ethnicity. As entrepreneurship is seen as a way for all to participate in the "American dream" of economic advancement and the good life, many are concerned that all citizens have the potential to participate, particularly those from different ethnic backgrounds. One of the unexpected findings from the original screening of 16,000 for those active as nascent entrepreneurs was the discovery of much higher rates of start-up participation among Blacks and Hispanics compared to Whites, particularly for men. This led to a second supplemental grant from the National Science Foundation for an oversample of both nascent entrepreneurs and the comparison group to enhance the number of Blacks and Hispanics. In Chapter 3, Greene and Owen review the major reasons for this interest in ethnic entrepreneurship, how ethnicity was established, and some of the major aspects affected by ethnic background.

Household Structure. Measures of three aspects of household structure are reviewed in Chapter 4 by Brush and Manolova: start-up capital, social desirability and encouragement to pursue entrepreneurial options, and household commitments (which includes marital status and the number in the household—children and adults). Much of this is a result of efforts to develop more precise information about the unique situation of women.

Household Income and Net Worth. For many, the "liquidity effect" is a major factor affecting the decision to pursue a firm start-up. It refers to an assumption in economics that only those with sufficient available financial resources are able to get involved in creating a new firm. But how should financial resources be measured; it turns out that household income and household net worth reflect two aspects of financial well-being, and they are not highly correlated. For this reason, a substantial effort was made to develop precise estimates of both household income and household net worth for all respondents; usable data is available on 90 to 95% of the respondents in the detailed samples. The interview items and procedures involved are reviewed in Chapter 5 by Kim, Aldrich, and Keister.

Labor Force Participation and Residential Tenure. Two myths pervade many discussions related to entrepreneurship—that entrepreneurs are unemployed or new immigrants or both. While the basis for these myths is hard to establish, there is no question that both of these personal characteristics are rare among those starting new firms in the United States. Chapter 6, by Reynolds, reviews how current labor force activity and both international and intranational immigrations were measured for the PSED. This analysis goes somewhat further by presenting how self-employment is determined in major U.S. federal data collection efforts—the decennial census, Current Population Survey. This makes clear that identifying the "unincorporated self-employed" is a very poor indicator of participation in new business start-ups.

Personal Background Variables. Most citizens participate in the world of work, and develop their personal "human capital" in several dimensions: through participating in educational programs, developing skills and experiences related to organizations, and becoming specialized in unique functions in work organizations. In Chapter 7, Brush and Manolova consider work experience, educational attainment, and functional expertise and the relevant indicators available in the PSED data set. The data allow the development of a multidimensional portrayal of functional skills.

Family Background. Many assume that those from entrepreneurial families, or at least small business families, are more likely to become involved in entrepreneurial activity. In Chapter 8, Matthews and Human review these perspectives and the PSED items related to the personal business experiences of the respondent's parents. They are also able to review those indicators of encouragement to start new businesses provided by family and friends.

Time Use (Activity Allocation). Many in social science have found that measures of what people say (attitudes, dispositions) are not as useful in predicting future behavior as measures of what people actually do. But it is much easier to ask individuals what they think, much harder to ask them what they are doing. Measures of time use involve reports on the allocation of all time for a 24-hour period; the most challenging feature of such efforts is not counting the minutes but keeping track of the wide diversity of activities people pursue. Time use among very busy individuals can be very revealing—as they become more careful about how they invest their time. There are, after all, only 24 hours in a day, and nascent entrepreneurs are among the busiest people in the United States. In Chapter 9, Owen and Greene review the time use section from the PSED self-completed mail questionnaire and how activity allocation varies for nascent entrepreneurs and those in the comparison group.

Work Participation History. There is much evidence of substantial variation among individuals in their work careers. Some have one or two jobs over a single 40-year work career while others may change situations several times a year. The self-administered mail questionnaire completed by nascent entrepreneurs and the comparison group allowed them to indicate their workforce behavior for the decade preceding the interview itself. In Chapter 10, Davis and Aldrich review the rationale for attending to the history of the work participation and review some issues in providing useful descriptions.

Commentary. There are many factors or processes that affect entry into and completion of a business start-up process. The PSED is the first serious effort to identify and track those U.S. adults who have elected to become involved in starting a business. A serious effort was made to capture the major aspects of their personal background and current life context. A preliminary analysis of a range of these factors has been provided in the chapters in Part I. Early indications suggest that many important life context, personal background features have been captured with reliable measures that are valid constructs. A summary of selected univariate

 Table 1.2
 Univariate Differences Between Nascent Entrepreneurs and the Comparison Group

| Variable | Part I Chapter | Nascent Entrepreneurs vs. Comparison Group | |
|--|-------------------|---|--|
| Age | | More young adults (25–44 years old) | |
| Gender | 2 | More men | |
| Ethnic Background | 3 | Minorities more active, especially men | |
| Marital Status | 4 | More often married | |
| Household Structure: Size, Composition | 4 | Slightly larger, more kids, more likely to be married or living with partner | |
| Household Income | 5 | No major differences | |
| Household Net Worth | 5 | No major differences | |
| Labor Force Participation | 6 | More likely to be working | |
| Residential Tenure | 6 | Long-term residents more active | |
| Educational Attainment | 7 | Uneducated less involved, not much difference post high school | |
| Work Experience | 7 | More work experience | |
| Family Background: Role Models | 8 | Fathers have run larger businesses, but respondent feels less encouragement to start business from family and relatives | |
| Household, Family Encouragement | 4 | Entrepreneurship more accepted as career choice | |
| Time Use (Current Activity Allocation) | 9 | Spend less time on leisure, personal activities, and care of elderly, more time on child care | |
| Work Participation History | 10 | Hold more work roles, especially women | |

(each factor taken in isolation) patterns is provided in Table 1.2. Most of these differences are both statistically significant and with modest impact.

It is clear then that more complete analysis will require careful attention to the interaction between these and other variables. A fuller understanding of the entrepreneurial process is likely to occur when the relationship between the personal background and the disposition and cognitive orientation of the individual (reviewed in Part II), and the environmental context (reviewed in Part IV), are taken into account.

There is much work to be done; all readers are invited to join in.

References

- Alsos, G. A., & Kolvereid, L. (1998). The business gestation process of novice, serial and parallel business founders. *Entrepreneurship Theory and Practice*, 22(4), 101–114.
- Delmar, F., & Davidsson, P. (2000). Where do they come from? Prevalence and characteristics of nascent entrepreneurs. *Entrepreneurship & Regional Development*, 12, 1–23.
- Menzies, T. V., Gasse, Y., Diochon, M., & Garand, D. (2002, June). *Nascent entrepreneurs in Canada: An empirical study*. Paper presented at the 47th meeting of the ICSB World Conference, San Juan, PR.
- Reynolds, P. D. (1997). Who starts new firms?—Linear additive versus interaction based models. *Small Business Economics*, *9*, 449–462.
- Reynolds, P. D., Bygrave, W. D., Autio, E., Cox, L., & Hay, M. (2002). *Global entrepreneurship monitor: 2002 executive report.* Kansas City, MO: Kauffman Center for Entrepreneurial Leadership.
- Reynolds, P. D., Camp, S. M., Bygrave, W. D., Autio, E., & Hay, M. (2001). *Global entre-preneurship monitor: 2001 executive report.* Kansas City, MO: Kauffman Center for Entrepreneurial Leadership.
- Reynolds, P. D., Hay, M., Bygrave, W. D., Camp, S. M., & Autio, E. (2000). *Global entre-preneurship monitor: 2000 executive report.* Kansas City, MO: Kauffman Center for Entrepreneurial Leadership.
- Reynolds, P. D., Hay, M., & Camp, M. (1999). Global entrepreneurship monitor: 1999 executive report. Kansas City, MO: Kauffman Center for Entrepreneurial Leadership.
- Reynolds, P. D., & White, S. (1997). The entrepreneurial process: Economic growth, men, women, and minorities. Westport, CT: Quorum Books.
- Wolters, T. (2000). Nascent entrepreneurship in the Netherlands: A glance behind the scenes of business start-ups. In *Entrepreneurship in the Netherlands: Opportunities and threats to nascent entrepreneurs* (pp. 3–16). Zoetermeer, The Netherlands: EIM Small Business Research & Consultancy.