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Early Retirees As the Next Generation of Entrepreneurs

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In this article, we combine perspectives from labor economics and entrepreneurship to examine early retirees' decision to become self-employed. Many individuals leave career employment before the traditional age of 65 and return to the labor market for a period of time before they fully retire. This phenomenon is referred to in the labor economics literature as bridge employment. Initial research of bridge employment has identified entrepreneurial activities to be common. The authors argue that first early retirees have to make the decision whether to permanently retire or to continue their labor force participation. If they decide to return to work, then self-employment is one option. Using the theoretical foundations of entrepreneurship, the authors outline the factors that would influence the self-employment choice and the types of entrepreneurial paths emanating from that choice.

Introduction

The decision to become self-employed is likely to occur at various critical junctures in an individual's life course. Young individuals, for example, who have grown up in an entrepreneurial family, may choose to move directly from high school to self-employment (Shaver & Scott, 1991). Another group may enroll in an entrepreneurship program at a university, learn how to construct a business, and then make the transition to self-employment. Adults who leave labor market employment and move to self-employment are shown to have career anchors rooted in autonomy and innovation (Katz, 1994). Older workers who are downsized and subsequently become self-employed are less likely to be risk averse (Galbraith & Latham, 1996). Technology-oriented early retirees are more likely to start a business in which their technical skills are integral to the business venture (Baucus & Human, 1994). It seems as if the decision to become self-employed is affected by different factors at various stages of an individual's life course (Singh & Verma, 2001a).

Much research is done on the processes, paths, and antecedents of the first two transitions (school to self-employment, and career employment with an employer to self-employment). Only a handful of studies have concentrated on early retirees' transition to self-employment. Baucus and Human (1994) examine the process (e.g., punctuated equilibrium) by which an early retiree becomes self-employed. Galbraith and Latham (1996) a priori classify displaced older workers who become self-employed as "reluctant entrepreneurs" and show that they were different from "normal entrepreneurs" in terms of risk-taking behavior. Researchers in the field of entrepreneurship, therefore, have begun

to recognize the prospects of early retirees as the next generation of entrepreneurs (Baucus & Human, 1994; Galbraith & Latham, 1996).

For decades, researchers in the field of labor economics have focused their attention on individual transitions out of career employment. Using the income-leisure choice model, labor economists have successfully differentiated older workers into those that choose leisure or continued bridge employment by examining their backgrounds in terms of health, wealth, work history, and macroeconomic conditions (Singh, 1998). This traditional research lens does not adequately explain the postcareer bridge employment decision to pursue an entrepreneurial path. Given the increasing number of retirees opting for self-employment as a bridge employment option (Singh, 1998; Baucus & Human, 1994; Galbraith & Latham, 1996), it is important to develop a new model that deepens our understanding of this emerging phenomenon. Our article constructs a deductive model of the process by which an early retiree becomes self-employed and the antecedents of that decision. It also identifies three types of early-retiree entrepreneurs and their characteristics. Hence, it integrates past research on early retirees' transition to self-employment and paves the way for further research.

The article is divided into four sections. The next section lays out the fundamental theory of labor supply (regardless of types of employment obtained) and its implications for the self-employment option. This discussion is followed by a description of the theoretical drivers of entrepreneurship, of which self-employment is the simplest form (Blanchflower & Oswald, 1998). Using this information, we identify various critical antecedents of the transition of early retirees to self-employment and propose that early retirees who choose self-employment as their bridge option follow three types of entrepreneurial paths. We refer to these as constrained, rational, and reluctant entrepreneurs. We then propose several characteristics that define such entrepreneurs. In the final section, we provide concluding comments concerning possible directions for future research that tests our new deductive model and the practical implications for such research.

Early Retirement–Self-Employment Transition

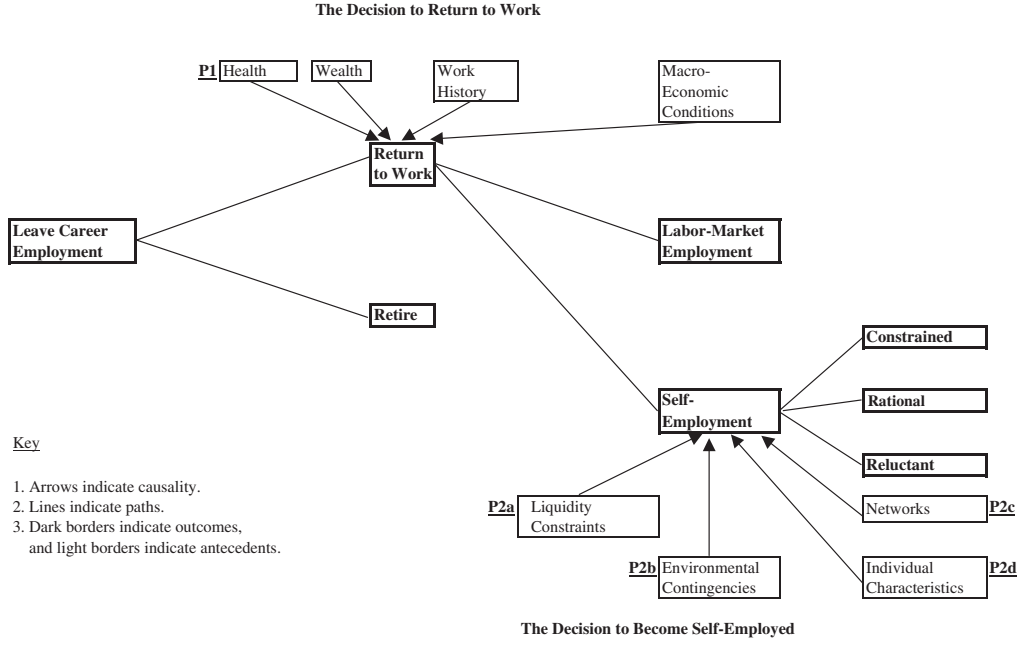
A large number of individuals between the ages of 55 and 64 (early retirees) left the labor force after World War II. Ninety percent of individuals 55 to 64 years old participated in the labor force in the late 1950s, while only 70 percent of them had done so in the early 1990s (Hardy & Hazelrigg, 1999). Some found the lure of generous employer-paid healthcare benefits and significant increases in public pension benefits too powerful to resist (Bazzoli, 1985; Boskin, 1977). Others capitalized on the opportunity to maximize their annuities at age 62 (Pesando, Hyatt, & Gunderson, 1992). The decision to retire early, therefore, is a rational choice for many older workers (Singh, 1998).

Conversely, many employers used early-retirement incentive programs to encourage employees to leave, in an effort to restructure or downsize (Davidson, Worrell, & Fox, 1996). Employees voluntarily decided to accept or reject the offer. Access to the incentives was based on age and years of service. Often only older workers qualified. Financial attractiveness and limited offers increased the probability of acceptance. The inducement encouraged many older workers to leave career employment before they would otherwise have done so (Singh, 1998).

It is likely that some of these workers will return to work (Singh, 1998). The period of employment between career employment and full retirement is referred to as bridge employment (Singh & Verma, 2001b; Rhum, 1990; Doeringer, 1990). Beck (1986) estimated that in the United States 33 percent of those who retire subsequently return to

Figure 1

A Path Diagram of Early Retirees' Decision to Become Self-Employed



work. Bridge employment is likely to continue to be a labor market characteristic for primarily two reasons: the cap on earned income is being removed (i.e., there will be no penalty to work for those in receipt of Social Security) and the population is expected to live longer and healthier. Traditionally, bridge jobs tended to be part time in nature, in a different sector and industry than career jobs, and paid at a lower level than career jobs (Doeringer, 1990). Although we have begun to understand bridge employment, many unanswered questions loom. One such question involves the issue of "types" of employment obtained (Singh & Verma, 2001b). While some older workers will choose to stay in the labor force as employees, others will choose to pursue a more entrepreneurial path. One study reports that 32 percent of early retirees who return to work after retirement become self-employed (Singh, 1998). As a result of these factors, we argue that it is important to develop newer models that can better explain and predict this emerging entrepreneurial behavior. Self-employment activities can be as simple as forming one's own consulting practice, or as complex as creating a new business organization either in related or unrelated markets. Such activities can easily run counter to the prevailing labor economics view of the part-time, less stressful nature of the bridge situation.

The model we developed of early retirees' transition to self-employment is composed of two stages (Figure 1). First, an early retiree has the option of permanently and completely withdrawing from work or continuing to participate in the market. Second, once an early retiree decides to remain active, he or she must decide on the "type" of work activity. Forming one's own business venture represents a viable option (Singh, 1998).

The Decision to Return to Work

According to labor economists, an individual's decision to return to work is based on his or her reservation wage relative to market wage. Reservation wage is the rate at which an individual is indifferent about participating or not participating in the labor force. Market wage is the rate that the individual could command in the labor market. If an individual's reservation wage is below market wage, then the individual will return to work (Gunderson & Riddell, 1993; Robbins, 1930; Reynolds, Masters, & Moser, 1991).

Personal wealth is the most widely studied predictor of later life labor force participation. It can be accumulated through savings, inheritance, or a public or private pension. The lack of wealth as a result of no inheritance or pension benefits decreases the appeal of leisure and this in turn decreases an individual's reservation wage and encourages him or her to return to work (Boskin, 1977; Burkhauser & Turner, 1982; Burtless & Moffitt, 1985; Fields & Mitchell, 1984; Gustman & Steinmeier, 1991; Rhum, 1990; Wise, 1989). Other known predictors of later-life labor force participation include health, work history, and macroeconomic conditions. Poor health makes leisure more attractive, which increases one's reservation wage and discourages the decision to return to work (Breslaw & Stelcner, 1987; Anderson & Burkhauser, 1985). An individual who derives identity from work (work attachment) is attracted to work or "resents" retirement (Fontana & Frey, 1990). Work attachment, as such, lowers his or her reservation wage and encourages the return-to-work choice (Singh, 1998). Finally, the unavailability of jobs as a result of high unemployment lowers an individual's reservation wage and encourages the choice to return to work (Clark & Barker, 1981).

> **Proposition 1:** Early retirees are likely to return to work if they do not have wealth to substitute for lost income from career employment, if they are in good health, if they are attached to work, or if they face low unemployment macroeconomic conditions.

The theory of labor supply is designed to predict whether an early retiree will retire or return to work (or continue to work) and if he or she returns, his or her hours of work (10, 15, 20, or 80 hours per week). This approach, however, does not help to differentiate employment with employers from self-employment. Within the income-leisure choice model, starting a business is considered to be work (not leisure). Thus, given the overall population's increasing life expectancies and the increasing trends of older workers to form independent business ventures, we need to look beyond traditional labor supply theory to explain this behavior. Many more forces than the need to manage short-term income requirements or the need simply to occupy one's time with low-level work activities drive entrepreneurs, even in simple ventures. Accordingly, in the following section of this article, we draw upon the entrepreneurship literature to demonstrate that other factors can influence the self-employment decision.

The Decision to Become Self-Employed

Entrepreneurship is a multidisciplinary field that benefited significantly from economics and social psychology. Each of these disciplines offers insights on the decisions and processes leading to the pursuit of an entrepreneurial endeavor (Bygrave & Hofer, 1991), and thus can offer insights into the self-employment decision of early retirees.

Theory and Research

Economics. Regarding entrepreneurial decisions, microeconomics is concerned with an individual's choice within constraints. As such, microeconomists have assessed entrepreneurship in terms of access to capital (Fuchs, 1982; Rees & Shah, 1986; Evans & Jovanovic, 1989; Evans & Leighton, 1989). They argue that a constraint to self-employment is a lack of access to capital resources often formally referred to as a liquidity constraint (Evans & Leighton, 1989; Evans & Jovanovic, 1989). Thus, from this perspective, individuals with greater access to capital would be more likely to pursue a self-employment option. Blanchflower and Oswald (1998) illustrated this point in a study they conducted on the relationship between the decision to become self-employed and inheritance. Using data from two waves of the National Child Development Study in Great Britain, they show that the self-employment choice is positively related to inheritance. While they recognize that inheritance is not exogenously determined, Blanchflower and Oswald (1998, p. 50) conclude that "[t]he receipt of an inheritance or gift seems to increase a typical individual's probability, cateris paribus, of being self-employed."

As it relates to entrepreneurial decisions, the twin macroeconomic issues of unemployment and inflation are most relevant. Unemployment rates influence opportunity costs. Galbraith and Latham (1996) use this argument in explaining the behavior of "reluctant entrepreneurs" who pursue the self-employment option primarily because they perceive that no other viable alternatives exist. Given a diminished set of other viable work-related alternatives, the self-employment option becomes more attractive. In a similar vein, the Office of Advocacy for the U.S. Small Business Administration comments on the decline in self-employment between 1997 and 1998: "Entrepreneurial spirit has not necessarily decreased, but the opportunity cost of being self-employed has increased as employers are offering good job opportunities."

Inflation represents another macroeconomic factor that can influence entrepreneurial activities. Thus, under conditions of high inflation, interest rates tend to rise (having the dual effect of making savings more attractive while diminishing access to capital due to higher costs of borrowing). Therefore, it can be argued that inflation (and high interest rates) reduces the likelihood of entrepreneurship (Hudson, 1989).

As is illustrated in the above labor economics and economics discussions, the issue of wealth is central to the analysis of early retirees' postcareer employment behavior. However, each of these perspectives leads to different conclusions. Labor economists, on one hand, demonstrate that an individual who has wealth is more likely to be attracted to the leisure option. With a higher reservation wage, the individual will likely retire. Microeconomists, on the other hand, argue that individuals without liquidity constraints (or wealth) are more likely to become self-employed (see Blanchflower & Oswald, 1998). A pressing question as such is: are individuals with wealth more likely to retire or to pursue entrepreneurship?

One possible explanation for these inconsistent conclusions is that some early retirees may view the distinction between work and leisure as artificial. Self-employment, for some, is viewed as leisure (Singh, 1998). Thus, in contrast to the income-leisure choice model that predicts that wealth increases an individual's probability, cateris paribus, of retirement, we must look in other directions for plausible explanations. It may be that individuals with entrepreneurial tendencies are more likely to pursue self-employment regardless of their wealth status. In this situation various social psychological antecedents of entrepreneurial behavior become more relevant.

Social Psychology. The behavioral antecedents of entrepreneurship are well documented in the social psychology literature. McClelland (1961) pioneered research on the

relationship between the creation of a new venture and the need for high achievement (preference for challenge, acceptance of personal responsibility for outcomes, and innovativeness). At test was the assumption (proposition) that entrepreneurs are distinguished from nonentrepreneurs based on personality (McClelland, 1987; Solomon & Winslow, 1988). However, in some studies entrepreneurial behaviors were significantly linked to personality (Dunkelberg & Cooper, 1982; Hornaday & Aboud, 1971). In other studies, entrepreneurial behaviors were not significantly related to personality (Brockhaus, 1980; Brockhaus & Horwitz, 1986; Carsrud, Olm, & Eddy, 1986). Gartner (1988), using this body of research, concluded that it is not useful to examine entrepreneurship in terms of personality. Shaver and Scott (1991), in defense, argue that the personal variables examined (e.g., risk-taking propensity, locus of control, and achievement motivation) were not appropriately used. Psychology, according to Shaver and Scott (1991), is useful in predicting entrepreneurship by focusing on the choice a person makes in a given context. "Economic circumstances are important; social networks are important; entrepreneurial teams are important; marketing is important; finance is important; even public agency assistance is important. But none of these will, alone, create a new venture. For that we need a person, in whose mind all of the possibilities come together, who believes that innovation is possible, and who has the motivation to persist until the job is done" (Shaver & Scott, 1991, p. 39).

The belief set that sustains an individual through the uncertainties and challenges of forming an entrepreneurial venture is also captured in the entrepreneurial self-efficacy (ESE) literature. Self-efficacy refers to a person's assessment of his or her capability to accomplish a certain level of performance. According to Bandura (1977), self-efficacy provides a prescriptive formula and process for successful action. Organizational behavior and management researchers have identified several sources of self-efficacy beliefs, such as prior experience, behavior models by significant others, and persuasion or encouragement among others (Bandura, 1986). Self-efficacy as such arises from the gradual acquisition of complex cognitive, social, linguistic, and/or physical skills through experience. Some researchers argue that the relationship between self-efficacy and performance is a cyclical one. The efficacy and performance cycle can spiral upward toward success or downward toward failure (Lindsley, Brass, & Thomas, 1995). Given the complex challenges confronting an entrepreneur, it is clear that one would need to develop a strong will and persistence to overcome the inevitable anxieties that surface during the initial start-up process (DeNoble, Jung, & Ehrlich, 1999; Chen, Greene, & Crick, 1998). An entrepreneur with a high level of confidence in his or her capability to successfully execute the required tasks would have more positive outcomes (i.e., successful venture creation, innovative product offering) than others. Throughout this process, self-efficacy beliefs may help determine the direction, intensity, and persistence of the entrepreneur's behavior.

On a macro level, sociologists point to the importance of social contexts for the pursuit of entrepreneurship (Reynolds, 1991). First, as a society we expect our life courses to correspond to established events (O'Rand & Krecker, 1990; Singh & Verma, 2001a). Reynolds & Miller (1990), using two representative samples in the United States, show that entrepreneurship is more prevalent among men, mid-career adults (18–44), and the postsecondary educated. Second, as a society we assign roles to individuals within groups. Often entrepreneurs use this contact/network to establish and sustain their activities (Aldrich & Zimmer, 1986). Third, the high rate of self-employment among minorities has spurred research on the issue (see Aldrich & Waldinger, 1990; Waldinger, Aldrich & Ward, 1990). It is often argued that minorities turn to self-employment because they are denied employment opportunities in the regular labor market (Waldinger, Aldrich

& Ward, 1990). Fourth, population ecologists have argued that entrepreneurship results from the life cycle stage of the industry (Brittain & Freeman, 1980; Romanelli, 1987, 1989). In biotechnology, for example, as the industry undergoes a transition from research and development to commercialization, entrepreneurial events that are tied to commercialization are likely to emerge (Singh, 2001). "The distinctive contributions of the sociological enterprise reflect the emphasis on the interdependence of the various sectors and institutions in society and how these relationships change with shifts in the social actors (individuals and organizations)" (Reynolds, 1991, p. 67).

Models that combine psychology and sociology to predict entrepreneurship have received the most success (Kets de Vries, 1996; Bygrave & Hofer, 1991; Shaver & Scott, 1991). In this regard, research on the relationship between entrepreneurship and attitude is exemplary. "[A]ttitude is defined as the predisposition to respond in a generally favorable or unfavorable manner with respect to the object of the attitude" (Robinson et al., 1991, p. 17). Responses can be based on affection (Fishbein & Ajzen, 1975) or they can be related to affection, cognition, and conation (Allport, 1935; Breckler, 1983). While personality is stable, attitude dynamically changes to reflect contexts (Abelson, 1982). Robinson et al. (1991) develop a psychometrically appealing scale for Entrepreneurial Attitude Orientation (EAO). "The EAO was created: its reliability was within acceptable standards; entrepreneur and nonentrepreneur groups were significantly different for each of the four subscales [achievement, self-esteem, personal control, and innovation]; and when submitted to discriminant analysis, three of the four subscales contributed significantly to the discriminant function" (Robinson et al., 1991, p. 24).

Movement beyond the antecedents of entrepreneurship research has begun on entrepreneurial careers (Dyer, 1994; Katz, 1994; Baucus & Human, 1994; Ronstadt, 1986). Dyer (1994), for example, built a theory of entrepreneurial careers from four subtheories involving choice, socialization, orientation, and progression. Within this broad view, career anchors are included. Career anchors define a pattern of self-perceived talents, motives, and values that combine to guide, constrain, stabilize, and integrate an individual's career (Schein, 1978). Past research has recognized the instrumentality of skills, talents, values, and interests with respect to entrepreneurship (March & Simon, 1958; Hollenbeck & Whitener, 1988; Cromie, 1994), but the connection has never been made to career anchors (Katz, 1994). Self-employment is anchored by "autonomy/independence" and "creativity/entrepreneurship" (Schein, 1978). Exploring the relationship between entrepreneurship and career anchors holds promise. In the context of his or her career trajectory, an individual determines his or her career anchors (Schein, 1978). An individual's interpretation of the anchors is, therefore, influenced by cognition (Shaver & Scott, 1991). Thus from both psychological and social psychological perspectives, we are able to discern viable arguments that can help shed light on why some early retirees might choose a self-employment path. These explanations clearly go beyond the more simplistic income-leisure choice models offered by labor economists, and the access to capital and opportunity cost explanations offered by micro- and macroeconomists.

Using Theory and Research from Entrepreneurship to Construct a Deductive Model of the Early Retirement–Self-Employment Transition

Theory and research of entrepreneurship are well developed. Yet only a handful of studies have examined the early retirement–self-employment transition (Baucus & Human, 1994; Galbraith & Latham, 1996; Singh, 1998). One reason for this outcome is the assumption that retirement means no more work (O'Rand & Krecker, 1990; Singh & Verma, 2001a). This is no longer the case (Singh, 1998). Early retirees becoming self-

employed can be studied from two perspectives. With respect to the antecedents of self-employment, early retirees are probably in a better position than the rest of the population (those that are younger than 55 years old) to become self-employed. They have worked for a lifetime. This can translate into wealth, which can then be used to secure bank loans to realize self-employment. Early retirees also have the experience and track record they accumulate during their active work years that may significantly impact their perceived level of confidence in being able to form and manage their own venture after leaving their primary career employment. Although this line of analysis is interesting and fruitful (and should be pursued), it does not inform the objectives of our article—to develop a deductive model of the early retirement–self-employment transition. Our model only includes early retirees who return to work (Figure 1). Some will retire, while others will return to labor market work and others will become self-employed.

Based on the income-leisure choice model, early retirees are likely to return to work if they do not have wealth, they are in good health, they have an attachment to work, or they are faced with conditions of low unemployment levels. For early retirees who return to work, what are the factors that distinguish those who return to self-employment from those who return to labor market work? The antecedents of self-employment among early retirees can be divided into two groups—those that are necessary for the entrepreneurial choice regardless of age cohort and those that are specific to the early-retiree population.

One general antecedent of self-employment regardless of the age or life course stage of the individual is access to financial resource. Microeconomists argue that individuals make choices within constraints. Self-employment is one such choice made within liquidity constraints. Past research shows a positive relationship between the decision to become self-employed and access to financial resources (Blanchflower & Oswald, 1998; Fuchs, 1982; Rees & Shah, 1986; Evans & Jovanovic, 1989; Evans & Leighton, 1989). Thus, access to financial resources provides the rational basis for the decision to become self-employed.

Proposition 2a: Early retirees who have access to financial resources are more likely to become self-employed.

This proposition suggests that regardless of the type of self-employment path early retirees ultimately take, having a strong financial base serves as a powerful springboard and incentive to pursue self-employment versus employment with an employer.

Another general antecedent of entrepreneurship concerns the environmental contexts. At a very broad level, the life cycle of an industry can be tied to entrepreneurship (Brittain & Freeman, 1980; Romanelli, 1987, 1989; Singh, 2001). One of the most favored regional economic planning strategies is based on cluster analysis (see Singh & Rey, 2000). Cluster analysis involves the allocation of industries into clusters (e.g., biotechnology). Gains or growth are maximized if a cluster is integrated. Industries that are missing links in the value chain receive subsidies. Such assistance encourages self-employment (Staber & Bogenhold, 1993). Interest rates can also affect self-employment (Hudson, 1989). Under conditions of low interest rates, a logical choice can be investments in one's own business with the expectation of higher returns. A low interest rate can, in addition, encourage an individual to seek a bank loan to start his or her own business. Thus, industry life cycle (and subsidies) and low interest rates offer a rational base to become self-employed.

Proposition 2b: Early retirees are more likely to become self-employed if they live in a region of integrated clusters of firms and if they have access to lower costs of capital and relevant subsidies.

Other antecedents are more specific to the early-retiree population. Work history can provide the base for self-employment. Baucus and Human (1994) argue that perceptions of career departure are linked to the decision to become self-employed. Early retirees with management skills are more likely to view their departure as voluntary, and to use business-related networks to start desired businesses. Early retirees are also likely to develop social networks to sustain their own business (Aldrich & Zimmer, 1986; Verma & Singh, 1996). Early retirees who are dissatisfied with their jobs may switch to self-employment hoping that job satisfaction will improve (Casson, 1982; Scase & Goffee, 1982). Thus, while dissatisfaction with a present job may motivate an individual to retire early, access to networks will influence the decision to become self-employed.

Proposition 2c: Early retirees are more likely to become self-employed if they have in place established strong networks.

Baucus and Human (1994) identify the importance of entrepreneurial experience (e.g., role model) and career orientation (e.g., career anchors) in early retirees' decision to become self-employed. However, none of the nine propositions they examine relates to these important inputs. Neither deductive nor inductive logic rules out individual level determinants of self-employment among early retirees. Individual level factors, therefore, should continue to define entrepreneurial tendencies (Shaver & Scott, 1991).

Critics would immediately query the reasons for the nonexecution of such personal choice. If an individual is endowed with entrepreneurial tendencies, then why isn't he or she self-employed? How come he or she ended up in career employment with an employer? Two sets of explanations warrant attention. Dyer (1994) identifies both as business dilemmas. First, borrowing from microeconomics, liquidity constraints or the lack of financial resources is a reality (see Blanchflower & Oswald (1998) for a detailed discussion). Moreover, collateral to secure a bank loan is likely to be unavailable earlier in one's career. Second, constraints exist with the growth of a family. Most entrepreneurs start their new ventures when they are 20 or 30 years old (Reynolds & Miller, 1990). This is also the time when one gets married and has children (O'Rand & Krecker, 1990). Once children are in the picture, they command security. Many parents will forego their needs or desires (e.g., to open a business) so that the children's needs are not compromised. A competition exists for business and family time. Many entrepreneurs in late career lament that they did not manage this dilemma well (Dyer, 1994).

Early retirees are likely to be freed from these constraints. Their children are no longer dependents. Many who are 45 to 64 years old have children that are 20 to 30 years old with their own careers and families. Thus, when family constraints are relaxed, individual tendencies toward entrepreneurship may reemerge.

Proposition 2d: Given the absence of family constraints, early retirees with greater entrepreneurial tendencies (defined in terms of entrepreneurial attitudes, perceived entrepreneurial self-efficacy, and innovation career anchors) are more likely to become self-employed.

Types of Early-Retiree Self-Employment

The first proposition (P1) identifies the main antecedents of the decision to return to work after early retirement. The next set of propositions (P2a–P2d) states that the decision to become self-employed is related to financial resources, environmental contingencies, work history, and individual characteristics. Our next set of propositions concentrates on the types of entrepreneurship (Figure 2). P3a1–P3a3 concerns constrained entrepreneurs,

Figure 2

Types of Entrepreneurship, Path, Relatedness, and Tendency

Types of Entrepreneurship/ Characteristics	Constrained	Rational	Reluctant
Path	**P3a1** Punctuated Equilibrium	**P3b1** Incremental Path	**P3c1** Punctuated Equilibrium
Relatedness	**P3a2** Aggressive in Related and Unrelated Fields	**P3b2** Less Aggressive in Related Fields	**P3c2** Low Risk in Related Fields
Entrepreneurial Tendency	**P3a3** High on Entrepreneurial Attitude, Self-Efficacy, and Innovation Career Anchor	**P3b3** Lower on Entrepreneurial Attitude, Self-Efficacy, and Innovation Career Anchor	**P3c3** Lowest on Entrepreneurial Attitude, Self-Efficacy, and Innovation Career Anchor

P3b1–P3b3 rational entrepreneurs, and P3c1–P3c3 reluctant entrepreneurs. Past research is integrated with our own views to build these constructs (Baucus & Human, 1994; Katz, 1994). Our primary objective in this section is to propose items that would help with the construction of valid measures of types of entrepreneurship. It is not our intention to propose antecedents of types of entrepreneurship. As we outline later in the concluding section, that is an area for further research.

Baucus and Human (1994) examine the process by which seven early retirees moved into self-employment from career employment with employers. This careful analysis identifies several important points. First, the authors identify two processes—incremental changes and punctuated equilibrium—distinguished by the number of stages, identifiable inception, relatedness to corporate jobs, and types of business. Retirees who follow an incremental process do so in fewer steps, develop products and skills before leaving career jobs, and move in small steps to start lifestyle-related businesses. Individuals who follow a punctuated equilibrium path use more steps, abruptly break from corporate life, and start an unrelated business for investment and growth. Second, technology-oriented retirees follow an incremental process, while management-oriented retirees follow a punctuated equilibrium process. Retirees with technical skills viewed their departure as involuntary and used their skills acquired at the company to start a related business. Retirees with management skills claimed that the departure was voluntary and used networks to start desired businesses. Others relate the choices made by entrepreneurs to career anchors (Katz, 1994). An individual, for example, who has a technical career anchor, is more likely to use these skills as the basis to start a related business. One who has a managerial career anchor is more likely to use that knowledge to start an unrelated venture.

Not all early retirees will choose the same form of self-employment. Individuals differ in their outlook and risk-taking propensities. As previously stated, we see early retirees belonging to three groups (i.e., constrained, rational, and reluctant). Our model suggests that each of these types of early-retiree entrepreneur will lead to different manifestations of postcareer self-employment.

Constrained Entrepreneurs. We define constrained entrepreneurs as individuals who have relatively high (as compared to other early-retiree peer groups) entrepreneurial

tendencies but have been unable to act on such tendencies earlier in their careers because of established or perceived constraints. An individual in this group would argue that "I always wanted to be an entrepreneur, but liquidity and family constraints were too high." It is highly likely that this group is deciding to pursue an entrepreneurial path as a matter of personal accomplishment. Individuals in this group may choose to consider a wider range of entrepreneurial options. For them, timing is everything. At a macroeconomic level, conditions need to be conducive (i.e., more and easier access to external capital and receptive target markets) to marshalling the necessary resources to form their own new venture. They also would probably need to have accumulated a significant personal wealth cushion and be unencumbered by family financial demands (i.e., high mortgage and education expenses). Once these initial hurdles are addressed, such individuals are likely to follow a punctuated equilibrium path to early retirement. Thus, the timing of the decision to retire is driven more by the emergence of a perceived new business opportunity than by an emerging desire and need to leave a career employment situation.

Our definition of a constrained entrepreneur contains both entrepreneurial tendencies and the absence of established or perceived barriers. What tendencies can be regarded as entrepreneurial? This question must be answered with caution (and latitude) given the development of the literature on entrepreneurship as personal choice. Skills, talents, and interests are well-known determinants of entrepreneurship (March & Simon, 1958; Hollenbeck & Whitener, 1988; Cromie, 1994). Research on traits cannot be dismissed (McClelland, 1961; 1987; Solomon & Winslow, 1988; Dunkelberg & Cooper, 1982; Hornaday & Aboud, 1971). Studies that have not shown a significant relationship between entrepreneurship and personality (Brockhaus, 1980; Brockhaus & Horwitz, 1986; Carsrud, Olm, & Eddy, 1986) contain serious methodological problems (Shaver & Scott, 1991). Personological variables, such as skills, talents, interests, and traits (risk-taking propensity, locus of control, and achievement motivation), are crucial to the entrepreneurship decision (Shaver & Scott, 1991). Thus, constrained entrepreneurs are individuals who probably have harbored a desire to form their own venture for many years throughout their main careers. Accordingly, we offer the following proposition:

> **Proposition 3a1:** Constrained entrepreneurs will follow a punctuated equilibrium path from career employment to self-employment.

This proposition suggests that when the economic or family constraints are lifted, this group of early retirees will act very quickly to abandon their career employment situation in order to pursue their dream of forming a new venture. The decision will tend to be punctuated in that constrained entrepreneurs will react to opportunities as they present themselves.

> **Proposition 3a2:** Constrained entrepreneurs are likely to pursue more aggressive entrepreneurial opportunities in either related or unrelated fields.

This proposition suggests that constrained entrepreneurs will consider entrepreneurial opportunities both within the industry segment of their primary career or in a completely different industry segment. In this case, choice of industry is secondary to the chance to act on an opportunity to become an entrepreneur. This is a chance to prove that one can still take risks and run a company. It is a matter of personal pride and achievement. It is an opportunity to act on a long-suppressed desire. Hence, we expect that:

> **Proposition 3a3:** Constrained entrepreneurs are likely to score higher than other early-retiree entrepreneurs (rational and reluctant) with respect to entrepreneurial attitude, self-efficacy, and entrepreneurial and innovation orientation.

Rational Entrepreneurs. Our second group covers individuals who decide to become self-employed as a rational choice. The decision is essentially based on a comparison of a person's current position with self-employment. While the comparison can be based on several outcomes (e.g., prestige, respect, or honor), it is generally reduced to financial prosperity. Knight (1921), in a classic view, argues that the decision to become self-employed is driven by the view that future returns will be greater than current ones. Hence, rational entrepreneurs are distinguished from constrained entrepreneurs in many ways. Rational entrepreneurs are less likely to see self-employment as personal accomplishment, and more likely to pursue self-employment for income stream considerations. Rational entrepreneurs will tend to minimize risks and maximize short-term returns in their choice of self-employment. A desire to pursue an entrepreneurial venture probably never played a big role in the rational entrepreneur's earlier career mindset. Instead, these individuals would place more emphasis on building a steady and reliable income stream to support the lifestyles they had established. Hence, when confronted with an early-retirement option, they would tend to weigh the choice based upon the opportunity to maintain or enhance their existing lifestyles. Thus, we would expect that high-risk venture options are likely to be less acceptable to rational entrepreneurs.

Considering the above description of early retirees acting as rational entrepreneurs, we offer the following propositions:

> **Proposition 3b1:** Rational entrepreneurs will follow an incremental path from career employment to self-employment.

Given their drive to maintain current income and lifestyle patterns, we expect this type of early retiree to carefully prepare for the transition by building solid bridges from their career employment networks of customers, suppliers, and other professional allies. They will engage in a careful preretirement opportunity search and build their necessary business infrastructures before making the move.

> **Proposition 3b2:** Rational entrepreneurs are more likely to pursue less aggressive entrepreneurial opportunities (relative to constrained entrepreneurs) in related fields.

With an emphasis on risk minimization and maximizing short-term returns, we would not expect rational entrepreneur–early retirees to stray far from the industries that served to build their careers. They will tend to leverage who and what they know from their primary career experiences into some form of a related venture.

> **Proposition 3b3:** Relative to constrained entrepreneurs, rational entrepreneurs are likely to score lower on entrepreneurial attitude, self-efficacy, and innovation career anchors.

As stated earlier, we do not believe that rational entrepreneurs are necessarily motivated by a need for achievement in starting a new venture. Thus while they may exhibit some aptitude for entrepreneurship according to the above scales, we would expect their scores on such measures to be significantly less than those of their constrained-entrepreneur counterparts.

Reluctant Entrepreneurs. Self-employment is often construed as a positive outcome. Personal or rational choice is consistent with this view. In the international community, self-employment is favored as an alternative to unemployment (Aronson, 1991). It is also seen as a primary source of economic prosperity (Wit, 1993).

We propose that self-employment can also be a negative outcome. For some individuals, the decision to become self-employed is based on the lack of employment oppor-

tunities in the primary labor market. We refer to this group as reluctant entrepreneurs (Galbraith & Latham, 1996). Indeed, early retirement is often viewed as the basis for reluctant entrepreneurship (Baucus & Human, 1994). In labeling early retirees who had become self-employed as reluctant entrepreneurs, Galbraith and Latham (1996) show that they are not characterized by entrepreneurial qualities (e.g., propensity to take risk, need for achievement, and drive to innovate). Hence, given the "reluctant" nature of their retirement decision, the transition will be characterized by punctuated equilibrium. Reluctant entrepreneurs are more likely to pursue low-risk ventures in highly related industries that can be closed if job opportunities should become available elsewhere (Singh, 1998).

We propose that a combination of financial hardship, macroeconomics, and discrimination could lead to reluctant entrepreneurship (Waldinger, Aldrich, & Ward, 1990). A precondition for early retirees becoming reluctant entrepreneurs is the lack of financial resources. At their station of the life course, early retirees who have financial resources are more likely to choose retirement than be forced into an entrepreneurial venture (as a result of a higher-reservation wage). As previously articulated, financial resources, though, are not the only determinant of labor market employment or self-employment. If a person decides on self-employment because of entrepreneurial tendencies or the absence of family constraints (constrained entrepreneurship) or as a rational choice (rational entrepreneurship), then he or she cannot be regarded as a reluctant entrepreneur. However, if an individual decides on employment with an employer, cannot find an employment opportunity, and decides on self-employment, then he or she should be regarded as a reluctant entrepreneur. Reluctant entrepreneurship, in other words, is a last-choice option.

An important element of reluctant entrepreneurship is the lack of employment opportunities. Early retirees are likely to face fewer employment opportunities under two scenarios. First, under conditions of high unemployment, fewer jobs are available on the whole. Second, often employers discriminate against older workers, which stems from stereotypes. Older workers are stereotyped to be less productive, more prone to injuries, and more likely to leave than younger workers (Mazerolle & Singh, 1999). Older workers (early retirees), therefore, are likely to have less access to employment opportunities (Hutchens, 1988).

> **Proposition 3c1:** Fewer financial resources and a lack of access to employment opportunities as a result of high unemployment or discrimination will cause reluctant entrepreneurs to follow a punctuated equilibrium path from career employment to self-employment.

In this case, reluctant entrepreneurs will pursue self-employment as a last-resort option. They will employ little to no prelaunch preparation before leaving career employment. Thus, they may not be able to effectively leverage career relationships into new-venture opportunities.

> **Proposition 3c2:** Reluctant entrepreneurs are more likely to pursue less aggressive entrepreneurial opportunities (relative to constrained and rational entrepreneurs) in related fields.

Early retirees thrust into self-employment for lack of better career-related options will choose a form of self-employment that involves little to no entry barriers, and requires modest capital investments. Exposure to market and financial risks will be kept to a minimum since these individuals will likely close their business as soon as other gainful employment opportunities become available.

Since reluctant entrepreneurs tend be more victims of circumstances (i.e., an unfavorable macroeconomic environment or unfavorable social contexts) they probably never exhibited the desire or tendencies to be self-employed. In a sense, entrepreneurship has been foisted upon them. Accordingly, we would expect that these individuals would exhibit the lowest levels of entrepreneurship in accordance with the above-mentioned scales.

Proposition 3c3: Relative to constrained entrepreneurs and rational entrepreneurs, reluctant entrepreneurs are more likely to score the lowest on entrepreneurial attitude, self-efficacy, and innovation career anchors.

Concluding Comments

After an early retiree leaves his or her career job, he or she must decide whether to permanently retire or return to work. Based on the theory of labor supply, we argue that this decision is based on the individual's reservation wage that is affected by wealth, health, work history, and macroeconomic conditions. For those who return to work, one group will pursue an entrepreneurial path. We propose three types of entrepreneurs: constrained, rational, and reluctant. The group that follows a constrained path will likely do so as a result of entrepreneurial tendencies and the lack of liquidity constraints. The next group of rational entrepreneurs will likely have greater financial resources, have business networks, be driven by job dissatisfaction, have social networks, have access to lower cost of capital, and have access to relevant subsidies. The final group of reluctant entrepreneurs will likely have fewer financial resources and a lack of access to employment opportunities. The remainder of this article discusses the implications of the early retirement–self-employment transition.

We purposely steered away from two important areas of early retirees as the next generation of entrepreneurs. The first area concerns the comparison of early retirees with other cohorts (e.g., 18 to 44 years old) in terms of the general antecedents of self-employment (e.g., access to capital, self-efficacy, networks, attitudes, and career anchors). Our justification for this choice is that the comparison falls outside of our model (Figure 1). Only early retirees are included. An immediate area for further research would be to articulate the reasons that early retirees are better suited for the entrepreneurship option than younger cohorts. Our preliminary investigation suggests that early retirees have access to capital, and they are likely to score high on self-efficacy and entrepreneurial attitude. They may also have more established networks. Early retirees, therefore, may logically become self-employed.

The other area of concern deals with the types of entrepreneurs. We did not offer an operational definition for the types of entrepreneurs, and we did not identify the antecedents of them. Our choice is to provide characteristics that can distinguish the three types of entrepreneurs. Two streams of research should flow from our discussion. First, the characteristics we propose should be used to design operational definitions. The most likely strategy would be to take the "face validity" of the constructs, create a series of questions to operationalize the constructs, and then use a data reduction technique (e.g., factor analysis) to summarize the results. The end result should be validated measures of constrained, rational, and reluctant entrepreneurs. Second, what we offer as characteristics of the types of entrepreneurs could be antecedents. This distinction should be empirically clarified. It is an appropriate example of how deductive and inductive research must be used in conjunction to create knowledge of an emerging subject, such as the entrepreneurial choice of the early retiree cohort.

The model we provide, though, is adequate to take us to the next stage of research on early-retiree entrepreneurs. An important challenge of the two-stage model we propose is a methodological issue. Our definition of the process is that the type of employment decision follows the one on whether to retire or not to retire. As such, we caution against dummy comparisons (logit models). For example, one must resist the temptation to compare self-employment with retirement without regard for full-time or part-time labor market employment. Self-employment is too generic, and does not account for unique variations (e.g., reluctant) of entrepreneurship. In addition, the comparison should not be made between self-employment and all other forms of labor market behavior. In such an approach, retirement, full-time employment, and part-time employment would be included in the comparison group. At a minimum, it is clearly shown that partial retirement is a distinct state from full retirement (Honig, 1985; Honig & Hanoch, 1985). Another temptation is to define employment outcomes into nominal categories, such as retirement, self-employment, and labor market employment. Self-employment can then be compared to retirement, holding labor market employment constant (multinomial logit models). While this strategy is appropriate in a univariate or bivariate context, it is inappropriate in a multivariate one. In essence, the three groups (retirement, self-employment, and labor market employment) are not mutually exclusive (see Green, 1990).

Our model contains a decision tree. Ideally, one would account for this by estimating a nested logit model. The decision to return to work or to retire would be regarded as the "trunk," the decision to become self-employed or employed with an employer the "branch," and the decision to pursue a particular path to self-employment (related vs. unrelated; more vs. less aggressive; punctuated equilibrium vs. incremental) the "twig." Inclusive values that reflect satisfaction with the "branch" and the "twig" would, subsequently, be entered as instrumental variables with respect to the "trunk" decision. Subsequent self-employment, for example, can be a powerful deterrent to retirement (Singh, 1998).

Baucus and Human (1994) provide a grounded theory of early retirees becoming self-employed. Ours is a deductive model. Hence, we consider it useful to compare and contrast the two models. The idea of entrepreneurial tendencies is consistent in the two models. Baucus and Human (1994) show that skills are significantly related to entrepreneurial processes. For example, early retirees with technical skills open related businesses. In addition, Baucus and Human (1994) find that early retirees with management skills use networks to open unrelated businesses. In our typology, such individuals would be regarded as constrained entrepreneurs.

The two models are different in a number of ways, highlighting our contributions. Baucus and Human (1994) examine process in terms of incremental changes and punctuated equilibrium. We describe the process in terms of retirement/return to work and then types of self-employment. Our approach allows us to incorporate the labor economics literature that is very consistent on older workers' labor force participation. Baucus and Human (1994) sensibly divided self-employment into related and nonrelated ventures. We divide entrepreneurship into types of entrepreneurs as well as the idea of relatedness. In our deductive model, we are more concerned with a broader view of early retirees' decision to become self-employed. Our model includes far more antecedents that Baucus and Human's (1994) model, providing a stronger base to assess early retirees' decision to become self-employed.

Available now are an inductive and a deductive model of the process by which early retirees become self-employed. They provide a base for empirical research. Similarities and differences between the two models also contain assumptions that should be put to empirical tests.

Our article deals with labor market outcomes of early retirees. Those who rejoin the labor market are likely to have a specific profile (e.g., less wealthy, healthy, attached to work, or want to take advantage of a supportive economic climate). Similarly those who become self-employed are likely to have a specific profile (e.g., more wealthy, have networks, and are endowed with an entrepreneurial tendency). These profiles have several practical implications to various constituencies in the community. For example, many employers have adopted a resilient career model (Singh, 1998). An important part of this model is to council employees of their employment options as the employer prepares to sever the employment tie. The early retirement–self-employment transition is one such critical juncture. Institutions such as the nation's community college systems, local chambers of commerce, and the Small Business Administration can use these profiles to target and train this segment of the market. Various entrepreneurial foundations, such as the Kauffman Foundation through their support of the FastTrac Program, and the Coleman Foundation through their support of many entrepreneurship education programs can also use these profiles to offer specialized programs to educate this new generation of entrepreneurs. Finally, organizations such as the National Council on Aging may wish to direct their able-bodied and able-minded constituents to these various entrepreneurial training forums through such vehicles as their *www.benefitscheckup.org* Web site.

Another important implication for practitioners (those identified above) is to recognize that there are different types of entrepreneurs. Entrepreneurship cannot be cast in one mold. Constrained entrepreneurs are different from rational entrepreneurs who are different from reluctant entrepreneurs. Our zest for the promotion of entrepreneurship may not be well received by reluctant entrepreneurs (Aronson, 1991; Wit, 1993). After all, they have become entrepreneurs as a last choice. It would be better to offer these early retirees an opportunity for employment with an employer (Singh, 1998).

We conclude our article by stating that the intersection of self-employment, early retirement, and the aging population provide rich ground for research. We have taken an initial step in this direction. Research in this area, we believe, will benefit from a healthy mix of inductive (Baucus & Human, 1994) and deductive reasoning, such as the material presented in this article.

REFERENCES

Abelson. (1982). Three models of attitude-behavior consistency. In M. Zanna, E. Higgins, & C. Herman (eds.), *Consistency in social behavior*. Hillsdale: Erlbaum.

Aldrich, H. & Waldinger, R. (1990). Ethnicity and entrepreneurship. *Annual Review of Sociology*, 16, 111–135.

Aldrich, H. & Zimmer, C. (1986). Entrepreneurship through social networks. In D. Sexton & R. Smilor (eds.), *The art and science of entrepreneurship*. 3–24 Cambridge: Ballinger.

Allport, G. (1935). Attitudes. In C. Murchison (ed.), *Handbook of social psychology*. 5–26 Worcester, MA: Clark University.

Anderson, K. & Burkhauser, R. (1985). The retirement health nexus: A new measure of an old puzzle. *Journal of Human Resources*, 20, 315–330.

Aronson, R. (1991). *Self employment: A labor market perspective*. Ithaca, NY: ILR Press.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1986). *The social foundations of thought and actions.* Englewood Cliffs, NJ: Prentice Hall.

Baucus, D. & Human, S. (1994). Second-career entrepreneurs: A multiple case study analysis of entrepreneurial processes and antecedent variables. *Entrepreneurship Theory and Practice*, 19(2), 41–60.

Bazzoli, G. (1985). The early retirement decision. New empirical evidence on the influence of health. *Journal of Human Resources*, 20(2), 214–234.

Beck, S. (1986). Mobility from preretirement to postretirement job. *The Sociological Quarterly*, 27, 515–531.

Blanchflower, D. & Oswald, A. (1998). What makes an entrepreneur? *Journal of Labor Economics*, 16, 26–59.

Boskin, M. (1977). Social security and retirement decisions. *Economic Inquiry*, 5, 1–25.

Breckler, S. (1983). Empirical validation of affect, behavior, and cognition as distinct components of attitude. *Journal of Personality and Social Psychology*, 47, 1191–1205.

Breslaw, J. & Stelcner, M. (1987). The effect of health on the labor force behavior of elderly men in Canada. *Journal of Human Resources*, 22, 490–517.

Brittain, J. & Freeman, J. (1980). Organizational proliferation and density-dependent selection. In J. Kimberly & R. Mills (eds.), *The organizational life cycle*. San Francisco: Jossey-Bass.

Brockhaus, R. (1980). Risk taking propensity of entrepreneurs. *Academy of Management Journal*, 23, 509–520.

Brockhaus, R. & Horwitz, P. (1986). The psychology of the entrepreneur. In D. Sexton & R. Smilor (eds.), *The art and science of entrepreneurship*. Cambridge: Ballinger.

Burkhauser, R. & Turner, J. (1982). Labor market experience of the almost old and implications of income support. *American Economic Review*, 72, 304–308.

Burtless, G. & Moffitt, R. (1985). The joint choice of retirement age and postretirement hours of work. *Journal of Labor Economics*, 3(2), 209–236.

Bygrave, W. & Hofer, C. (1991). Theorizing about entrepreneurship. *Entrepreneurship Theory and Practice*, 16, 13–22.

Carsrud, A., Olm, K., & Eddy, G. (1986). Entrepreneurship: Research in quest of a paradigm. In D. Sexton & R. Smilor (eds.), *The art and science of entrepreneurship*. Cambridge: Ballinger.

Casson, M. (1982). *The entrepreneur and economic theory.* Totowa: Barnes and Noble.

Chen, C.C., Greene, P.G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13, 295–316.

Clark, R. & Barker, D. (1981). *Reversing the trend toward early retirement.* Washington: American Enterprise Institution for Public Policy Research.

Cromie, S. (1994). Entrepreneurship: The role of the individual in small business development. *IBAR*, 15, 62–73.

Davidson, W., Worrell, D., & Fox, J. (1996). Early retirement programs and firm performance. *Academy of Management Journal*, 39, 970–984.

De Noble, A., Jung, D., & Ehrlich, S. (1999). Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurial action. *Frontiers of Entrepreneurship Research*. Boston: Babson College.

Doeringer, P. (1990). Economic security, labor market flexibility, and bridges to oretirement. In P. Doeringer (ed.), *Bridges to retirement.* Ithaca: ILR Press.

Dunkelberg, W. & Cooper, A. (1982). Entrepreneurial typologies. In K. Vesper (ed.), *Frontiers of entrepreneurial research*. Wellesley: Babson College.

Dyer, W. (1994). Toward a theory of entrepreneurial careers. *Entrepreneurship Theory and Practice*, 19(2), 7–20.

Evans, D. & Jovanovic, B. (1989). An estimated model of entrepreneurial choice under liquidity constraints. *Journal of Political Economy*, 97, 808–827.

Evans, D. & Leighton, L. (1989). Some empirical aspects of entrepreneurship. *American Economic Review*, 79, 519–535.

Fields, G. & Mitchell, O. (1984). The effects of Social Security reforms on retirement ages and retirement incomes. *Journal of Public Economics*, 25, 143–159.

Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading: Addison-Wesley.

Fontana, A. & Frey, J. (1990). Postretirement workers in the labor force. *Work and Occupations*, 17, 355–361.

Fuchs, V. (1982). Self-employment and labor force participation of older males. *Journal of Human Resources*, 17, 339–357.

Galbraith, C. & Latham, D. (1996). Reluctant entrepreneurs. *Frontiers of entrepreneurial research*. Babson Park: Center for Entrepreneurial Studies.

Gartner, W. (1988). Who is an entrepreneur? is the wrong question. *American Journal of Small Business*, 12, 11–32.

Green, W. (1990). *LIMDEP*. Bellport: Econometric Software.

Gunderson, M. & Riddell, C. (1993). *Labour market economics.* Toronto: McGraw-Hill Ryerson.

Gustman, A. & Steinmeier, T. (1991). Changing the social security rules for work after 65. *Industrial and Labor Relations Review*, 44, 733–745.

Hardy, M. and Hazelrigg, L. (1999). A multilevel model of early retirement among autoworkers in plants with different futures. *Research on Aging*, 21, 275–304.

Hollenbeck, J. & Whitner, E. (1988). Reclaiming personality traits for personal selection. *Journal of Management*, 14, 81–91.

Honig, M. (1985). Partial retirement among workers. *Journal of Human Resources*, 20(4), 613–621.

Honig, M. & Hanoch, G. (1985). Partial retirement as a separate mode of retirement behavior. *Journal of Human Resources*, 20, 21–46.

Hornaday, J. & Aboud, J. (1971). Characteristics of successful entrepreneurs. *Personnel Psychology*, 24, 141–153.

Hudson, J. (1989). The birth and death of firms. *Quarterly Journal of Economics and Business*, 29, 68–86.

Hutchens, R. (1988). Do job opportunities decline with age. *Industrial and Labor Relations Review*, 42(1), 89–99.

Katz, J. (1994). Modeling entrepreneurial career progressions: Concepts and considerations. *Entrepreneurship Theory and Practice*, 19(2), 23–36.

Kets de Vries, M. (1996). The anatomy of the entrepreneur: Clinical observations. *Human Relations*, 7, 853–869.

Knight, F. (1921). *Risk, uncertainty and profits.* New York: Houghton and Mifflin.

Lindsley, D.H., Brass, D.J., & Thomas, J.B. (1995). *Efficacy-performance spirals: A multilevel perspective. Academy of Management Review*, 20, 645–678.

March, J. & Simon, H. (1958). *Organizations*. New York: John Wiley and Sons.

Mazerolle, M. & Singh, G. (1999). Older workers' adjustments to plant closures. *Relations Industrielles*, 54, 313–336.

McClelland, D. (1961). *The achieving society.* Princeton: Van Nostrand.

McClelland, D. (1987). Characteristics of successful entrepreneurs. *Journal of Creative Behavior*, 21, 219–233.

O'Rand, A. & Krecker, M. (1990). Concepts of the life cycle: Their history, meanings, and uses in the social sciences. *Annual Review of Sociology*, 16, 241–262.

Pesando, J., Hyatt, D., & Gunderson, M. (1992). Early retirement pensions and employee turnover. *Research in Labour Economics*, 13, 321–337.

Rees, H. & Shah, A. (1986). An empirical analysis of self-employment in the U.K. *Journal of Applied Econometrics*, 1, 95–108.

Reynolds, L., Masters, S., & Moser, C. (1991). *Labor economics and labor relations.*Englewood Cliffs, NJ: Prentice Hall.

Reynolds, P. (1991). Sociology and entrepreneurship: Concepts and contributions. *Entrepreneurship Theory and Practice*, 16(2), 47–70.

Reynolds, P. & Miller, B. (1990). Race, gender, and entrepreneurship: Participation in new firm start-ups. Paper presented at the American Sociological Association Annual Meeting, Washington, D.C.

Rhum, C. (1990). Bridge jobs and partial retirement. *Journal of Labor Economics*, 8, 482–501.

Robbins, L. (1930). On the elasticity of demand for income in terms of effort. *Economica*, June, 123–129.

Robinson, P., Stimpson, D., Huefer, J., & Hunt, H. (1991). An attitude approach to the prediction of entrepreneurship. *Entrepreneurship Theory and Practice*, 16(2), 13–31.

Romanelli, E. (1987). New venture strategy in the minicomputer industry. *California Management Review*, 30, 160–175.

Romanelli, E. (1989). Organizational birth and population variety: A community perspective on origins. In B. Staw & L. Cummings (eds.), *Research in Organizational Behavior*, 11, 211–246.

Ronstadt, R. (1986). Exit, stage left: Entrepreneurs end their entrepreneurial careers before retirement. *Journal of Business Venturing*, 3, 323–339.

Scase, R. & Goffee, R. (1982). *The entrepreneurial middle class.* London: Croom Helm.

Schein, E. (1978). *Career dynamics: matching individual and organizational needs*. Reading: Addison-Wesley Publishing Company.

Shaver, K. & Scott, L. (1991). Person, process, choice: The psychology of new venture creation. *Entrepreneurship Theory and Practice*, 16(2), 23–45.

Singh, G. (1998). Work after early retirement. Ph.D. Dissertation, School of Graduate Studies, University of Toronto.

Singh, G. (2001). Skills requirements of the biotechnology industry. *International Journal of Biotechnology*, 3(3/4), 244–256.

Singh, G. & Rey, S. (2000). *Workforce issues of the biotechnology industry of San Diego*. San Diego: San Diego Workforce Partnership.

Singh, G. & Rey, S. (2002). *Workforce issues of the biotechnology industry cluster of San Diego.* San Diego: San Diego Workforce Partnership.

Singh, G. & Verma, A. (2001a). Patterns of employment and working time among early retirees of a telecommunications firm. In S. Houseman & A. Nakamura (eds.). *Working time in comparative perspective, volume II: Studies of working time over the life cycle and nonstandard work.* Kalamazoo: Upjohn Institute for Employment Research.

Singh, G. & Verma, A. (2001b). Is there life after career employment? Labour market experience of early retirees. In V. Marshall, W. Heinz, H. Krueger, & A. Verma (eds.), *Restructuring work and the life course.* Toronto: University of Toronto Press.

Solomon, G. & Winslow, E. (1988). Toward a descriptive profile of the entrepreneur. *Journal of Creative Behavior*, 22, 162–171.

Staber, U. & Bogenhold, D. (1993). Self-employment: A study of seventeen OECD countries. *Industrial Relations Journal*, 24, 126–137.

Verma, A. & Singh, G. (1996). Do managers and workers have different labour market experiences after early retirement? Paper presented at the annual meeting of the Canadian Industrial Relations Association, St. John's, Newfoundland.

Waldinger, R., Aldrich, H., & Ward, R. (1990). *Ethnic entrepreneurs: Immigrant business in industrial societies*. Newbury Park: Sage.

Wise, D. (1989). *The economics of aging.* Chicago: University of Chicago Press.

Wit, G. de (1993). *Determinants of self-employment.* New York: Physica-Verlag.

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