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**Work and Well-Being
Among the Self-Employed at Older Ages**

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The AARP Public Policy Institute, formed in 1985, is part of the Policy and Strategy Group at AARP. One of the missions of the Institute is to foster research and analysis on public policy issues of importance to mid-life and older Americans. This publication represents part of that effort.

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FOREWORD

More than 6.8 million workers aged 50 and older in the United States, or nearly 16 percent of the 50-plus workforce, are self-employed in incorporated or unincorporated businesses. This number is likely to increase as more boomers reach retirement age.

Self-employment increases with age. Most older self-employed workers were self-employed when they were younger, but about one-third become self-employed at or after age 50, according to *Self-Employment and the 50+ Population*, a 2004 study for AARP by Lynn A. Karoly and Julie Zissimopoulos of RAND. That study found that older self-employed workers are better off than older wage and salary workers as measured by household income and wealth, although they are less likely to have pension coverage on their current job.

Those who become self-employed at or after age 50 are more likely than the longer-term self-employed to be female, have lower income and wealth, have a work-limiting health condition, work part time, and have left their prior job involuntarily. Women who are self-employed later in life are younger, more racially diverse, less educated, less likely to be married, and in somewhat poorer health than their male counterparts.

The older self-employed population is not well studied, and the 2004 research by Karoly and Zissimopoulos was an important contribution to the literature on who transitions to self-employment at or after age 50. The research discussed in this report adds to that literature. In *Work and Well-being Among the Self-Employed at Older Ages*, Julie Zissimopoulos and Lynn A. Karoly build on their earlier research. Using 1992 to 2002 panel data from the Health and Retirement Study, they examine in greater detail the job characteristics of the self-employed as well their wealth and wealth changes. They compare a number of groups—aged 50 and older self-employed to aged 50 and older wage and salary workers; those who were self-employed before age 50 to those who became self-employed at or after age 50; and the self-employed with and without employees. Zissimopoulos and Karoly report considerable differences between the groups. In particular, the longer-term self-employed (self-employed before age 50) and those with employees most closely resemble each other, while those who became self-employed at or after age 50 are more similar to the self-employed without employees.

Of particular interest are the findings on wealth because of the obvious implications of wealth for retirement well-being. The aged 50-plus self-employed have higher levels of wealth than wage and salary workers in the same age group. Zissimopoulos and Karoly also observe that they have riskier financial assets. In addition, they are less likely to have annuities such as pensions.

Work and Well-being Among the Self-Employed at Older Ages provides a fuller understanding of transitions to and from self-employment at or after age 50 as well as transitions into and out of the labor force among the self-employed. The findings are particularly important

since a sizable proportion of boomers say that they expect to become self-employed in retirement. The self-employed retire later than wage and salary workers. If it is important to encourage a longer working life—and we think that it is—a better understanding of the aged 50 and older self-employed is clearly warranted.

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EXECUTIVE SUMMARY

About one in five workers age 50 and above are self-employed. Although some of these individuals have been self-employed much or all of their working lives, many older workers transition to self-employment after age 50 and for some, as part of a move to retirement. The self-employed tend to retire from the workforce later than their wage and salary counterparts and are also less likely to have traditional employment-based benefits (e.g., health insurance and pensions). Self-employment itself is diverse. Some self-employed workers work alone or with a spouse. Other self-employed workers own businesses with many employees. They work in a wide array of industries and occupations. Given the extent and diversity of self-employment at older ages, it is critical to understand the nature of self-employment among older workers and the consequences for retirement income security.

This study addresses some of the patterns of self-employment at older ages, focusing on:

- The characteristics of older self-employed workers and the nature of their jobs;
- Expectations about job changes and retirement, and actual retirement experiences among older self-employed workers;
- Transitions in and out of self-employment at older ages;
- The wealth accumulation and portfolio diversification of older self-employed workers; and
- The consequences of shifts to self-employment at older ages for retirement assets.

Our analysis draws on the rich panel data available from the Health and Retirement Study (HRS). The HRS offers biennial longitudinal data from 1992 to 2004 for respondents born from 1931 to 1941 and their spouses. Several additional cohorts were interviewed subsequently using the same or similar questionnaires. The 1993 and 1995 Assets and Health Dynamics of the Oldest Old (AHEAD) survey interviewed individuals born in 1923 or earlier and their spouses, and this cohort continued to be interviewed biennially from 1998 to 2004. In 1998 the HRS and AHEAD surveys merged and two additional cohorts were added: individuals born 1924 to 1930 (Children of the Depression Era or CODA) and 1942 to 1947 (War Babies). The 2004 data add an Early Baby Boomers (EBB) cohort born from 1948 to 1953. Data from 2004 are currently available only as a preliminary release.

This project uses final release data from 1992 to 2002. The HRS has information about the types of businesses operated by the self-employed, as well as high quality financial, housing, and business wealth data. Data on pension wealth from defined benefit and defined contribution plans are available, although the quality of these data is less well understood. The data are also extremely rich in terms of a number of characteristics available for the study population

including individual and family background, retirement expectations, and measures of attitudes and preferences such as aversion to risk. This report adds to the literature on self-employment new results on the factors influencing labor force transitions of older workers by class of employment (self-employment or wage and salary) and new results on the wealth levels and the composition of the wealth portfolios of older self-employed workers.

Personal and Job Characteristics of the Self-Employed

Overall, for workers age 51 and above, about one in every 5 is self-employed. About one-third of those self-employed workers made the transition at or after age 50. Most older self-employed workers (55 percent) work on their own or possibly with their spouse. Among married self-employed older workers, about 40 percent work with their spouse in their business. Notably, the self-employed depend heavily on profits from their business rather than a regular salary from their business—and some receive both. Just one-third of older self-employed workers receive a salary, while more than three-quarters are paid from profits. Although the HRS does not distinguish between the self-employed in incorporated and unincorporated businesses, those who receive a salary are more likely to be in incorporated businesses.

The HRS data confirm that older self-employed workers differ in important ways from their wage and salary counterparts. Compared with wage and salary workers, the self-employed in our sample are more likely to be male, older, and with a bachelor's degree or higher. As might be expected, they are also more willing to accept financial risks. In terms of their jobs, the vast majority of older self-employed workers have very small businesses (five or fewer employees), which is far different from wage and salary workers. Another key difference is that the self-employed are far less likely to have pension coverage on their job or employment-based health insurance. The self-employed work the same number of hours as wage and salary workers but fewer weeks per year. And they have longer tenure. The self-employed are more likely to be found in industries and occupations that are conducive to working for oneself such as agriculture, retail trade, and various services industries, and managerial positions, sales, and agriculture-based occupations.

Within the self-employed, there are distinct differences between those who have been self-employed since they were younger (those self-employed before age 50) and those who made the transition to self-employment at or after age 50; and also between the self-employed who work without or with additional employees (and possibly their spouse). By and large, the longer-term self-employed and those with employees most closely resemble each other, while those who made the transition to self-employment later in life share characteristics in common with the self-employed without employees. Indeed, there is overlap in these groups, as the longer-term self-employed are more likely to have other employees (other than their spouse) in their business, while those who became self-employed at older ages are more likely to be on their own (or with their spouse only).

The first two similar groups—the longer-term self-employed and those with employees, compared with their respective counterparts—are more likely to be men who are younger and have the highest education credentials (Ph.D., J.D., or M.D.). Only those with employees show a

tendency to be willing to accept more risk. At the same time, this is the group that is most likely to be paid a regular salary, consistent with being in a business with more employees. Although the self-employed with employees have more workers by definition, the median number of employees is just 5, and only about 19 percent have 16 or more employees. Just 7 percent have 51 or more employees. These two similar groups also work more hours per week and weeks per year, and have longer tenure. They are also similar in that they are more likely than the other self-employed workers to receive a pension on their job and to receive employment-based health coverage. The longer-term self-employed tend to be in the agriculture sector and mining and construction compared with those self-employed at or after age 50. Those with employees are disproportionately in retail trade while those without employees are in personal services.

Transition Plans for the Self-Employed

The HRS data provide some insight into differences in labor market transition plans between the self-employed at older ages and their wage and salary counterparts, as well as for the subgroups of the self-employed we focus on. The data also reveal aspects of how subsequent retirement is viewed between those who retired from self-employment versus wage and salary work, and within subgroups of the formerly self-employed.

Overall, among workers age 51 and above, the self-employed have somewhat more favorable ratings than wage and salary workers in terms of enjoying their work and the difficulty or stress involved. At the same time, they are also a group that shows a greater tendency to want to reduce their hours as they age—perhaps a more graduated transition to retirement rather than an abrupt change. Indeed, the self-employed are more likely to say they will be working at age 62 or 65 compared with wage and salary workers. This is despite the fact that they expect to have more retirement wealth by a factor of more than two. They are also more optimistic about the future of the stock market and less worried about retirement income.

When thinking about retirement, older self-employed workers place the most weight on being one's own boss, having time with a spouse, and the lack of pressure. Being one's own boss is much less important for wage and salary workers, who instead rate having time with their spouse as most important. The self-employed feel less strongly about potential unfavorable aspects of retirement, although not having enough income, dealing with cost-of-living increases, and being ill or disabled are of concern—factors that also worry their wage and salary counterparts. Far fewer individuals in either class of employment worry a lot about being bored or missing co-workers.

In terms of the actual retirement experience, those who retired from a self-employment job generally find retirement “very” or “moderately” satisfying. Just 1 in 10 say that retirement is not satisfying at all. Retirees from wage and salary positions have very similar ratings. The most important reasons given for retirement out of self-employment are poor health, a desire to do other things, and having more time with family. Only 5 percent of retirees from self-employment say an important reason for retiring was they did not like their job. Considering the same potentially favorable and unfavorable aspects of retirement asked of workers, those who have retired from self-employment likewise mention being one's own boss as a very important

aspect, more so than retirees from wage and salary jobs. No more than 1 in 4 retirees from self-employment worry a lot about not being useful; illness or disability; or not having enough income. These assessments are quite similar for retirees from the wage and salary sector. Although there is some variation across the subgroups of self-employed workers and retirees from self-employment that we consider, by and large the differences in future plans, retirement expectations, and retirement experiences are not that stark.

Labor Market Changes

In addition to labor market transition plans and expectations, we also study actual transitions between working and non-working labor force statuses differentiating workers by whether they are wage and salary workers, and self-employed workers with and without employees. We found that workers who move between wage and salary work and self-employment are more likely to be self-employed without employees. Some self-employed workers move from having no employees (other than their spouse) to having additional employees, while the reverse movement toward fewer employees also occurs. This indicates that there is both growth in businesses among older workers (in term of numbers of employees) and contractions in business size, perhaps as a movement toward retirement. Indeed, we find self-employed workers without employees are more likely to be retired two years later than those with employees. Among retired workers who return to the labor force, about one-third “unretire” into self-employment—the majority without employees. Most unemployed or disabled workers who return to work do so to wage and salary work although self-employment is chosen by about one-fifth of them.

Multivariate models of labor force transitions provide insight into factors that affect movements to and from self-employment and in and out of the labor force. Overall, we found that the pattern of effects across job characteristics, demographic variables, wealth measures, risk aversion, and health depends on the type of transition we model. When modeling transitions from self-employment to wage and salary employment or to not working at all, we found some differences in the job characteristics that were predictive of such transitions among the self-employed without and with employees. In general, a longer tenure in self-employment and having a salary in the form of profits only (versus a salary only) reduced the likelihood of leaving self-employment, either for wage and salary work or no work. For the self-employed without employees (other than possibly the spouse), having a spouse in the business also reduced the likelihood of leaving self-employment. For the self-employed with employees, having a mid-size business of 6 to 25 employees reduced the probability of moving to no work compared with the self-employed workers in the smallest businesses, i.e., those with 1 to 6 employees. For both types of self-employed, a higher wage reduced the likelihood of leaving self-employment for no work, while some occupation and industry groups also were more or less likely to make a transition out of self-employment. Notably, our indicator of pension coverage did not affect transitions for either group of self-employed to not working, in contrast to the retirement literature that has found such an effect for transitions to retirement for workers in general.

Among the demographic and other factors we included in our models, having higher wealth reduced the likelihood of leaving self-employment for wage and salary work but had no

effect on the transition to not working. This latter result is surprising given the general finding in the retirement literature that higher wealth is associated with a higher probability of leaving the labor force. The transition to not work from self-employment was affected by demographic and health variables, however, with men being less likely to leave self-employment while older workers and those with a work-limiting health condition were more likely to retire.

We also examine the factors that are correlated with movements back to work in the self-employment sector from either unemployment or disability and from retirement. Our results suggest that is more likely to be highly educated and wealthy individuals with previous self-employment experience who return to work in self-employment rather than unskilled workers with few options in the wage and salary sector. There were significant time trends in the transition back to work in self-employment compared to wage and salary employment. However, the pattern of the coefficients does not show that movements to self-employment were more likely between 2000 and 2002 when the economy experienced a downturn in comparison with earlier time periods. Indeed, the pattern of the estimated coefficients suggested the opposite relationship.

Our examination of movements into self-employment from wage work revealed that workers in high quality jobs with pensions and health insurance are less likely to become self-employed. We also find that risk-averse workers are less likely to make the transition into self-employment. In support of the liquidity constraint hypothesis is the result that choosing to cash out a pension and receipt of other lump sums from insurance and inheritance is positively correlated with movements from wage and salary work to self-employment. The correlation between pension cash out and self-employment is particularly notable in that the decision to cash out a pension to start a business may place retirement wealth at risk.

Wealth and Wealth Changes

Self-employment for long periods of time or near the end of the labor market career may have implications for income security during retirement. The self-employed may have different patterns of asset accumulation as a result of owning a business or as a result of differential coverage by employer-sponsored pension benefits. Some self-employed workers may experience high returns and therefore have high wealth accumulation, but others may not succeed in their business, which may have consequences for the wealth they accumulate for their retirement years. We find that self-employed workers are more likely than wage and salary workers to own all types of property and financial assets. There are large total non-pension wealth differences between self-employed workers and wage and salary workers consistent with the large differences in expected retirement wealth between these two groups.

These average differences are not due to a few successful businesses—at all points in the distribution self-employed workers have more non-pension wealth (wealth from assets excluding assets held in either defined benefit or defined contribution pension plans) than wage and salary workers. Wage and salary workers may hold less non-pension wealth than self-employed workers because they are also much more likely to have pension wealth. In addition, it is hypothesized that self-employed workers may also be more likely to have a bequest motive: that

is, a desire to leave wealth to their heirs. That said, we find that at the low points in the non-pension wealth distribution (10th and 25th percentiles), self-employed workers (like wage and salary workers) have very low levels of non-pension wealth and they may be even less prepared for retirement than wage and salary workers given the lower likelihood of having a pension. At this point, we have not been able to value pension wealth from defined benefit or defined contribution plans so differences in total wealth between wage and salary workers and self-employed workers remain a subject for future research.

We find results consistent with the hypothesis that wage and salary workers are more risk averse than self-employed workers. Comparing self-employed workers to wage and salary workers we found that self-employed workers are more likely than wage and salary workers to hold riskier financial assets, and such riskier assets are a larger percentage of their non-pension wealth portfolio.

Within self-employment types, we found that workers self-employed at or after age 50 and without employees are much less likely to have business assets than their respective comparison groups. This suggests that the types of businesses owned by these groups are quite different. We also found that self-employed workers without employees, in terms of asset ownership, are more similar to wage and salary workers (with the exception of business and real estate ownership) than to self-employed workers with employees. Self-employed workers who became so at or after age 50 and those without employees have lower wealth, from all assets, than those who became self-employed before age 50 or who have employees.

To understand the consequences of labor force transitions at older ages, we examined average changes in business wealth and total wealth associated with these transitions. We find evidence consistent with both business growth and failure for older self-employed business owners. Self-employed workers with employees who move to wage work have a substantial decline in business assets on average. Some self-employed workers without employees transition to having employees two years later. On average, the self-employed making this transition experience an increase in business wealth. Self-employed workers who retire experience a decline in business wealth on average, but far less than 100 percent suggesting that these workers may remain involved in the business as owners. On the other hand, it may be the case that liquidation of business assets and subsequent investment into other assets evolves over time, whether moving to wage work or retiring.

Transitions to self-employment from wage work are associated with increases in total wealth. Thus, it appears that this type of labor force transition does not necessarily put retirement assets “at risk,” at least in the short term. Retired workers who “unretire” to self-employment (that is, those who reenter the labor force as self-employed workers) have declines in total non-pension wealth on average. However, retired workers who “unretire” into wage and salary work have increases in non-pension wealth on average. This suggests that retired workers draw down on personal assets in order to re-enter the labor force as self-employed workers, which may affect resources for subsequent retirement.

Implications for Future Research

Our study invites future research in several areas:

- This research captures some of the diversity of the self-employed by studying long-term self-employed workers and those who become self-employed at or after age 50 separately. We also found self-employed workers without employees to be different along a number of lines from self-employed workers with employees. Although these differentiations are informative, there may be additional information that can be gleaned by examining self-employed workers by other characteristics such as type of occupation.
- The HRS provides unique information on the expectations of respondents. Here we study the expectations of retirement by type of worker and some actual retirement experiences. These retirement experiences are based on short-term realizations—at the most, two years after retirement. Future research on how expectations are or are not realized several years after retirement would provide additional insight into the retirement experience of different types of workers.
- Although we found that self-employed workers have greater levels of wealth than wage and salary workers, they also have riskier financial assets and fewer annuities such as pensions. This has potential long-term consequences on the retirement income security of this group of workers. In addition, the size and composition of the wealth portfolios of wage and salary workers and self-employed workers may vary tremendously over the life cycle. Future research should also incorporate the value of pension wealth from defined benefit and defined contribution plans so that total wealth available for consumption in retirement can be compared between the self-employed and wage and salary workers.
- Similarly, we study changes in labor force status and wealth between survey waves (approximately two years apart). The impact of a change in labor force status on wealth may not be realized until many years later. Using the HRS now and in the future can provide more insight into this area.

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ACRONYMS

Acronym	Definition
AHEAD	Assets and Health Dynamics of the Oldest Old (survey and cohort)
CD	Certificate of deposit
CODA	Children of the Depression Era (cohort)
CPS	Current Population Survey
DB	Defined benefit
DC	Defined contribution
EBB	Early Baby Boomers (cohort)
HRS	Health and Retirement Study (survey and cohort)
RHS	Retirement History Study
WB	War Babies (cohort)

1. INTRODUCTION

About one in five workers age 50 and above are self-employed (Karoly and Zissimopoulos, 2004a, 2004b). Although some of these individuals have been self-employed much or all of their working lives, many older workers transition to self-employment after age 50 and for some, as part of a transition to retirement (Zissimopoulos and Karoly, forthcoming). The self-employed tend to retire from the workforce later than their wage and salary counterparts and are also less likely to have employment-based benefits such as health insurance and company sponsored pension plans. Self-employment itself is diverse. Some self-employed workers work alone or with a spouse. Other self-employed workers own businesses with many employees. They work in a wide array of industries and occupations. Given the extent and diversity of self-employment at older ages, it is critical to understand the nature of self-employment work and the consequences for retirement income security.

This study addresses some of the patterns of self-employment at older ages, focusing on:

- The characteristics of older self-employed workers and the nature of their jobs;
- Expectations about job changes and retirement, and actual retirement experiences among older self-employed workers;
- Transitions in and out of self-employment at older ages;
- The wealth accumulation and portfolio diversification of older self-employed workers; and
- The consequences of shifts to self-employment at older ages for retirement assets.

Our analysis draws on the rich panel data available from the Health and Retirement Study (HRS). The HRS offers biennial longitudinal data from 1992 to 2004 for respondents born from 1931 to 1941 and their spouses. Several additional cohorts were interviewed subsequently using the same or similar questionnaires. The 1993 and 1995 Assets and Health Dynamics of the Oldest Old (AHEAD) survey interviewed individuals born in 1923 or earlier and their spouses, and this cohort continued to be interviewed biennially from 1998 to 2004. In 1998 the HRS and AHEAD surveys merged and two additional cohorts were added: individuals born from 1924 to 1930 (Children of the Depression Era or CODA) and from 1942 to 1947 (War Babies). The 2004 data add the Early Baby Boomers (EBB) cohort born from 1948 to 1953. Data from 2004 are currently available only as a preliminary release. This project uses final release data from 1992 to 2002.

The HRS has information about the types of businesses operated by the self-employed, namely whether the individual works with his or her spouse or has other employees in the business, as well as high quality financial, housing, and business wealth data. Data on pension

wealth from defined benefit or defined contribution pension plans are available, although the quality of these data are less well understood. The HRS is also extremely rich in terms of a number of characteristics available for the study population including individual and family background, retirement expectations, and measures of attitudes and preferences such as aversion to risk. The HRS data cover years of economic expansion and the beginning of the most recent business cycle. In our study of labor force transitions, we incorporate a time trend and look for trends consistent with business cycle effects.

The study builds on and extends a previous analysis we conducted of self-employment among older workers (Karoly and Zissimopoulos, 2004a; see also Karoly and Zissimopoulos, 2004b, and Zissimopoulos and Karoly, forthcoming). That earlier research used data from the Current Population Survey (CPS) to examine trends in self-employment for all workers and for workers age 50 and above. Self-employment rates for older workers and the characteristics of the self-employed at older ages were compared between the CPS and HRS, and the determinants of transitions from wage and salary employment to self-employment and retirement were examined in a multivariate framework. This study relies on the HRS data to analyze, in more depth, the nature of self-employment work, as well as the factors associated with various transitions to and from self-employment and other labor force statuses. We also place a spotlight in this analysis on the wealth and wealth portfolio of self-employed workers, along with changes in wealth that are associated with various labor market transitions at older ages.

To set the stage for our research, in the remainder of this chapter we briefly review prior research on self-employment at older ages, describe the features of the HRS sample that we have examined, and provide a roadmap for the remainder of the study.

Prior Research on Self-Employment Later in Life

Despite the importance of self-employment at older ages, it is a relatively understudied area. A substantial body of research on self-employment patterns and determinants has focused on the entire workforce or on young workers in particular.¹ For example, research has demonstrated that men are more likely to be self-employed than women, that self-employment rates generally rise with the level of schooling, and that self-employment is more prevalent among married persons and less prevalent among blacks and Hispanics (Devine, 1994; Bregger, 1996; Fairlie, 1996; Manser and Picot, 1999; Georgellis and Wall, 2000).

On average self-employed workers work more hours per week and more weeks per year than wage and salary workers, and they are overrepresented in certain industries and occupations such as the agricultural sector, construction, and services. The typical (or median) self-employed worker earns less than the typical wage and salary worker, and there is greater dispersion in the

¹ For a recent review of the self-employment literature, see Karoly and Zissimopoulos (2004a).

pattern of earnings compared with wage and salary workers (Hamilton, 2000). The self-employed are also less likely to have access to employee benefits like health insurance coverage and pensions. Nevertheless, they report higher rates of job satisfaction compared with their wage and salary counterparts, perhaps due to compensating non-pecuniary factors like the opportunity to be one's own boss (Blanchflower and Oswald, 1998; Hamilton, 2000; Blanchflower, Oswald and Stulzer, 2001; Hundley, 2001a).

Studies of the determinants of self-employment suggest that a number of factors are at work that the self-employed may be pulled into that type of work by its attractive features such as high rewards and non-pecuniary benefits, including job autonomy and hours flexibility, while others may be pushed into self-employment for more negative reasons like poor job prospects in the wage and salary market or bad health (Evans and Leighton, 1989; Fairlie and Meyer, 1996; Blanchflower and Oswald, 1998; Manser and Picot, 1999; Devine, 2001; Hundley, 2001b; Lombard, 2001; Moore and Mueller, 2002). Other individual characteristics have been found to play a role as well in workers who are self-employed including a willingness to accept risks, access to capital, and access to health insurance coverage through another source such as a spouse, although the latter is not a consistent finding (Evans and Jovanovic, 1989; Evans and Leighton, 1989; Holtz-Eakin, Joulfaian, and Rosen, 1994; Dunn and Holtz-Eakin, 1995, 2000; Blanchflower and Oswald, 1998; Bruce, 1999; van Praag and Cramer, 2001; Wellington, 2001). At the macroeconomic level, factors like technology and industrial mix, tax rates, and the generosity of Social Security benefits have also been linked to changes in self-employment rates over time (Blau, 1987; Bruce, 2000, 2002; Gentry and Hubbard, 2000; Schuetze, 2000).

Karoly and Zissimopoulos (2004a) conducted a recent study of self-employment patterns and determinants for workers age 50 and above using data from the Current Population Survey (CPS) and the HRS [(see also Karoly and Zissimopoulos, 2004b; and Zissimopoulos and Karoly, forthcoming). Like studies of the self-employed among the entire workforce cited above, they find that the self-employed at older ages are more likely to be male, white, more educated, and married.

The longitudinal HRS data analyzed by Karoly and Zissimopoulos (2004a) demonstrate that about one-third of older self-employed workers made the transition to self-employment at or after age 50. Indeed, the study confirmed findings by Fuchs (1982) using the Retirement History Study (RHS) of an increase in self-employment as workers near retirement, as wage and salary workers move into self-employment before retiring, and as the self-employed remain in the workforce until older ages. Karoly and Zissimopoulos (2004a) also examined the factors associated with transitions to self-employment among older workers, for both men and women. Household wealth, the receipt of an inheritance, having a work-limiting health condition, and being in an occupation that mirrors the skills required for self-employment (e.g., executive, managerial and professional occupations, as well as sales occupations) were among the strongest determinants of the movement into self-employment at older ages. The study found some evidence that access to retiree health benefits increased the likelihood of moving to self-employment, a finding consistent with results by Karoly and Rogowski (1997) but not supported in a study by Bruce, Holtz-Eakin, and Quinn (2000).

The HRS Data

The HRS, when appropriately weighted, is a nationally representative, longitudinal survey of middle-aged and older Americans. The HRS is a biennial survey that began in 1992 with a sample of the non-institutional population born between January 1, 1931 and December 31, 1941 and their spouses or partners.² Several other cohorts have been added to the HRS over time. In 1998, interviews that began in 1993 with the cohort born prior to January 1, 1924, known as the “AHEAD” (Assets and Health Dynamics of the Oldest Old) sample, were merged with the HRS. Two additional cohorts were added in 1998: the cohort born between January 1, 1924 and December 31, 1930 (known as the “Children of the Depression Era” or “CODA” sample), and the cohort born between January 1, 1942 and December 31, 1947 (known as the “War Babies” sample). In 2004 the Early Baby Boomers cohort (EBB), born from 1948 to 1953 was added. In each case, spouses have been interviewed along with the main age-eligible respondent.

We use data from the 1992 through 2002 waves for the HRS birth cohort and data from the 1998, 2000, and 2002 waves for the AHEAD, CODA, and War Babies samples. For the analysis, we pool the data from all waves and cohorts for a sample of 93,805 observations.

The HRS provides good information on the labor force behavior of the respondents. In terms of employment outcomes, workers are asked whether they are currently self-employed in their main job. Self-employed respondents are also asked about self-employment in a second job. For the purposes of this analysis, we define self-employment by employment status on their main job.³ In the HRS the distinction between incorporated and unincorporated self-employment is not made.⁴ Interviewers in the HRS are instructed to classify respondents who work in a

² The HRS collects information on married spouses and on unmarried partners. For simplification, we use the term “spouse” throughout the study to capture both married and unmarried partners.

³ Using this definition, the percentage of workers who were self-employed in 1998 in the HRS compares closely to the percentage of workers self-employed in unincorporated or incorporated businesses in the CPS for the same year. The distribution of the characteristics of the workers is also very similar. See Karoly and Zissimopoulos (2004a, 2004b) for the details of this comparison.

⁴ As noted in Karoly and Zissimopoulos (2004a), an unincorporated business (either a sole proprietorship or partnership) is the simplest form of business organization. An unincorporated business has no separate identity beyond the owner (or partners), the liabilities of the business are personal liabilities, and the income and expenses of the business are reported on the individual’s (or partners’) personal income tax return. The sole owner (or partners) is not considered to be an employee of an unincorporated business for legal purposes. In contrast, an incorporated business has a separate legal identity from its owners, defined as shareholders of the business. Owners may be paid as employees, and the profits of the corporation are taxed at the corporate tax rates. Dividends distributed to shareholders are taxed at the dividend tax rate on

business they own as self-employed. Respondents not in the labor force are asked about the employment status of previous jobs and this information is used in models of labor force transitions from not working to self-employment from one survey wave to the next.

Self-employed individuals are asked about whether the spouse also works in the business, as well as the number of employees of the business (not including the spouse).⁵ This information is used to categorize self-employed respondents into those with and without employees (other than the spouse). Responses to a query about the length of tenure at the current job is used to determine, among the self-employed, which workers were self-employed prior to age 50, and who transitioned into self-employment after age 50. Unfortunately, the retrospective information in the HRS does not allow us to determine precisely the number of years of self-employment for those who were self-employed prior to age 50. Thus, some will have truly been self-employed for much or all of their work lives, while others may have made the transition as recently as their late 40s.

The HRS is rich in terms of other job characteristics of self-employed workers including the industry in which they work, their occupation, the source of health insurance (if any), and whether they are covered by a pension. Self-employed respondents also report whether they receive a salary and/or profits from the business.⁶

In addition to job characteristics, we also examine workers' wealth reported separately for several different property and financial assets: homes, other real estate, businesses, vehicles, IRAs and Keogh accounts, stocks, bonds, checking and saving accounts, and certificates of deposit (CDs). We also study these components in several different aggregations. We include other retirement assets such as a measure of Social Security wealth, but we are not able to make a similar estimate of wealth associated with employer- or union-sponsored defined benefit or defined contribution pension plans.⁷ Computation of Social Security wealth is possible only for researchers with permission to use the restricted HRS data. These restricted data are currently

the individual income tax returns of the shareholders. Some corporate forms, such as Subchapter S corporations, can avoid double taxation (once to the corporation and again to the shareholders). See Karoly and Zissimopoulos (2004a) for additional discussion regarding the definition of self-employment used by the Bureau of Labor Statistics and the various forms of business ownership for legal and tax purposes.

⁵ As noted earlier, the spouse may be an unmarried partner. The HRS does not ascertain whether other family members (aside from the respondent's spouse/partner) also work in the business.

⁶ The HRS does not include other details about the individual's work arrangement such as whether he or she works from home all or part of the time.

⁷ The pension data in the HRS provide information on plan features but they are highly complicated to work with in order to derive a measure of expected pension wealth at any given age.

available for the original 1931 to 1941 birth cohort only. Using Social Security earnings records, we compute expected Social Security wealth at age 62, the age at which an individual first becomes eligible to receive Social Security retirement benefits (the so-called “early retirement age” or “early entitlement age”).

These data allow for a detailed analysis of the financial and housing wealth (exclusive of pension wealth from either defined benefit or defined contribution pension plans) of the self-employed compared with wage and salary workers, and the wealth of two subgroups of the self-employed: (1) workers who are self-employed with or without employees and (2) workers who became self-employed before age 50 or at or after age 50. By studying the wealth of the self-employed we can better understand how well prepared for retirement different types of self-employed workers are and how well prepared they are compared to wage and salary workers. These data also enable us to study changes in wealth associated with different labor market transitions such as movements to and from self-employment.⁸

The HRS includes a number of other characteristics available for the study population such as individual and family background, retirement expectations, actual retirement experiences, and measures of attitudes and preferences such as aversion to risk.

Organization of the Report

We begin our analysis of the HRS data in the next chapter by examining the characteristics of older self-employed workers and their jobs. This allows us to consider the types of individuals who take on self-employment at older ages and the nature of their work. In Chapter 3, we focus on transition plans for older self-employed workers—both plans for job changes and for retirement. We also examine the experiences of retirees from self-employment. These analyses shed light on the satisfaction with current employment, the motivations for possible changes, and whether retirement proves satisfying.

Chapter 4 describes labor force transitions between three working statuses (self-employed without employees, self-employed with employees, and wage and salary) and three not-working statuses (retirement, unemployment/disability, and other reasons for not working) over survey waves (approximately two years apart). We model labor force transitions from self-employment to wage work and to no work (out of the labor force), from not working to working, and from wage and salary work to self-employment. We focus on job characteristics and their impact on labor force transitions from self-employment to other working and not-working statuses. We also study factors that drive older workers back into the labor force as self-employed workers

⁸ The HRS data do not include detailed information on borrowing (beyond a measure of total indebtedness) or changes in borrowing between waves. Thus, we are not able to explicitly examine borrowing as a source of financing transitions into self-employment.

and the factors such as risk aversion and access to pension wealth that may affect movements from wage and salary work to self-employment.

Chapter 5 examines the wealth of older workers. We describe the level and diversification of the wealth of older self-employed workers and compare this to the wealth of wage and salary workers. We also examine differences in wealth among types of self-employed workers: long-term self-employed versus workers who transition to self-employment later in life, and self-employed workers with and without employees. In addition, we examine changes in business wealth and total wealth with entry into and exit from self-employment. By examining these aspects of wealth, we begin to understand how well prepared self-employed workers are for retirement by type of self-employed worker and compared to wage and salary workers, and how labor force transitions later in life may affect asset accumulation.

The final chapter summarizes our key findings and suggests directions for future research.

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2. PERSONAL AND JOB CHARACTERISTICS OF THE SELF-EMPLOYED

In this chapter we consider the personal and job characteristics of older self-employed workers based on the HRS in order to answer a number of questions about the types of individuals who take on self-employment at older ages and the nature of their work. For example, are the self-employed more willing to take on risk compared with individuals who hold wage and salary jobs? To what extent do older self-employed individuals work alone, with a spouse, or employ other workers? Do the self-employed at older ages have differential access to employment-based benefits such as pensions and health insurance? Are there differences in the characteristics of self-employed workers or their jobs depending on when individuals move into self-employment, or whether they are working alone or with other employees?

Our sample for the analysis is the 38,656 observations of individuals age 51 and above who reported that they were working in any given HRS wave between 1992 and 2002, with data pooled across waves for the same individuals. Within that sample, we focus on the 8,285 individuals who are self-employed, and we consider two divisions of the self-employed. The first separates the self-employed into those who were self-employed prior to age 50 versus those who were self-employed at age 50 or older. The second division is between those self-employed who work without other employees (other than their spouse) versus those who work with other employees (with or without their spouse). Although our primary interest is in the self-employed as a whole and these four subgroups, we present all tabulations for wage and salary workers as well so that the two major groups of workers defined by class of employment—self-employed and wage and salary—can be compared. We note that in making these comparisons across subgroups, we do not report statistical tests for differences in the levels, percentages, or percentage distributions.

Older Workers and Class of Employment

As seen in Table 2.1 (first column), among all workers in the HRS age 51 and above, slightly fewer than 21 percent are self-employed while the remaining 80 percent are wage and salary workers.⁹ Of the self-employed (second column), about 36 percent work on their own without their spouse or other employees, and 28 percent work with other employees but not with their spouse. Another 33 percent of the self-employed work with their spouse; 18 percent work

⁹ The percentage of workers who are self-employed is higher for older workers compared with the workforce as a whole. As of 2001, using a comparable definition of self-employment based on the CPS, just over 10 percent of workers age 16 and older were self-employed ([specifically in unincorporated and incorporated businesses] (Karoly and Zissimopoulos, 2004b).

only with their spouse, while 15 percent work with a spouse and other employees. In about 3 percent of cases, information on whether the spouse works in the business is missing.

Since working with a spouse only occurs among married persons, we further stratify all workers in Table 2.1 by whether they are married or not (last four columns). Among married workers, the percentage who are self-employed is higher compared with non-married workers (22 percent versus 16 percent) but the portion of married workers that work alone is much lower (30 percent versus 63 percent). Instead, two-thirds of married self-employed persons work with a spouse and/or other employees. In total, about 40 percent of married self-employed persons work with their spouse, with slightly more who work only with their spouse compared with those who also work with other employees (22 percent versus 18 percent). Fully 26 percent of married self-employed persons work with only other employees and not their spouse. Again, in a small fraction of cases (4 percent), information is missing on whether the spouse works in the business.

Table 2.1—Distribution of Workers by Class of Employment
(percent distribution)

Class of worker	Total		Married		Not married	
	All workers	Self-employed	All workers	Self-employed	All workers	Self-employed
Self-employed						
Self only	7.3	35.5	6.5	30.1	9.9	63.1
Self plus spouse	3.7	18.3	4.8	21.9	—	—
Self (and spouse data missing)	0.3	1.6	0.4	2.0	—	—
Self plus spouse plus employees	3.1	14.9	3.9	17.8	—	—
Self plus employees (and no spouse)	5.7	27.9	5.7	26.1	5.8	36.9
Self plus employees (and spouse data missing)	0.3	1.7	0.4	2.0	—	—
Total self-employed	20.5	100.0	21.7	100.0	15.8	100.0
Wage and salary	79.5	—	78.3	—	84.3	—
Total	100.0	—	100.0	—	100.0	—
Sample size (N)	38,182	7,811	30,062	6,533	8,120	1,278

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who report that they are employed in any given wave, pooled across all waves. Columns may not add to totals due to rounding. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is self-employment. "Spouse data missing" refers to data on whether the respondent's spouse also works in the respondent's business.

In considering the characteristics of self-employed workers and their jobs, we further stratify the self-employed two ways. First, we differentiate between older self-employed workers who were self-employed before reaching age 50 versus those who became self-employed at age 50 or older. The latter group may be different from the former in a number of

ways. For example, the longer-term self-employed may have had differential access to employment-based benefits (e.g., pension plans) or made different choices regarding asset accumulation and the composition of their wealth. Second, we also divide the self-employed into two groups based on whether they are self-employed without employees (other than their spouse for those who are married) versus those that have other employees (beside their spouse for those who are married). In other words, the six subgroups of the self-employed shown in Table 2.1 are combined into two subgroups: the first includes those who work by themselves or with only their spouse (the first three rows in Table 2.1); the second includes those who work with other employees and possibly also their spouse (the next three rows in Table 2.1).

Table 2.2 summarizes the distribution of workers across the categories that we consider in the remainder of this chapter: wage and salary workers versus the self-employed; and among the

Table 2.2—Self-Employment Categories
(percent distribution)

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Self-employment age						
Before age 50	–	66.2	100.0	–	60.3	74.0
At or after age 50	–	33.8	–	100.0	39.7	26.0
Employment type						
Self-employed without employees	–	55.5	50.2	65.3	100.0	–
Self-employed with employees	–	44.5	49.8	34.7	–	100.0
Wage and salary	100.0	–	–	–	–	–
Sample size (N) ^a	30,371	7,394	4,916	2,478	4,070	3,324

^a The sample size on self-employed reflects the number of individuals without missing information on both type of self-employment (with or without employees) and age became self-employed (before or at or after age 50).

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who report they are employed in any given wave, pooled across all waves. Columns may not add to totals due to rounding. A total of 466 workers are missing information on age at which they became self-employed. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Self-employed without employees may either work alone or only with their spouse. Self-employed with employees may also work with their spouse in addition to non-spousal employees. Cases where information is missing on whether the spouse is also an employee are classified based on whether other employees are present ("with employees") or not ("without employees").

self-employed, those who became self-employed before age 50 versus those who became self-employed at age 50 or older and those who do not work with (non-spousal) employees versus those who do. Overall, 34 percent of our sample of individuals age 51 and over who are self-

employed became self-employed at or after age 50. And the share of self-employed without employees versus those with employees is higher (55.5 percent versus 44.5 percent).

The tabulations that look across our two divisions of the self-employed also show an interesting pattern. Those who were self-employed before age 50 are relatively more likely to work with employees compared with those who became self-employed at or after age 50 (50 percent versus 35 percent). The corollary is that the self-employed without employees are relatively more likely to have become self-employed at or after age 50 compared with those who work with employees (40 percent versus 26 percent). This is consistent with an expectation that the longer-term self-employed will have had more time to expand their businesses to the point of taking on other employees compared with those who become self-employed later in their careers.

Characteristics of Self-Employed Workers and Their Jobs

We now consider the characteristics of self-employed workers and their jobs.¹⁰ For all tabulations in this chapter, we also include results for wage and salary workers in the first column so they can be compared with the self-employed in aggregate in the second column. The remaining four columns show the four subgroups of the self-employed delineated above.

Demographic Characteristics

Table 2.3 provides basic demographic information—sex, age, and education level—by employment class and self-employment category. Overall, compared with their wage and salary counterparts, the self-employed are more likely to be male, distributed toward older ages, and more likely to have a college degree and a doctorate (Ph.D.), law degree (J.D.), or medical degree (M.D.). Indeed, 66 percent of the self-employed age 51 and above are male compared with 49 percent of wage and salary workers. Just 31 percent of wage and salary workers age 51 and older are age 61 and above compared with 45 percent of the self-employed. While 26 percent of wage and salary workers have a bachelor's degree or higher, that share reaches 32 percent among the self-employed.

An examination of the subgroups of self-employed workers reveals that a larger percentage of workers who became self-employed before age 50 are male (68 percent) and are under the age of 61 (63 percent) compared to the percentage of workers who are male (61 percent) and are under age 61 (48 percent) among the group of worker who became self-employed at or after age 50. The percentage of workers with a college degree or higher is approximately the same between these two type of self-employed workers. The characteristics of self-employed workers without employees is similar to that of workers who became self-employed at or after age 50 while the characteristics of self-employed workers with employees is similar to that of workers who became self-employed before age 50.

¹⁰ For further detailed analysis of the characteristics of the self-employed and of transitions to self-employment, see Karoly and Zissimopoulos (2004a, 2004b).

**Table 2.3—Worker Characteristics by Employment Class
and Self-Employment Category**
(percent distribution)

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Male	48.5	65.6	68.2	61.0	61.1	71.5
Age group						
51 to 55	31.5	23.5	29.2	15.8	21.3	24.3
56 to 60	37.8	31.6	33.7	32.3	29.2	33.9
61 to 65	20.2	23.3	22.9	27.5	24.4	22.9
66 to 70	6.4	10.9	8.8	15.7	12.4	9.8
71 to 75	2.6	6.2	4.6	7.4	7.5	5.0
76 to 80	1.1	3.0	0.8	1.2	3.4	2.7
81 and above	0.4	1.6	0.0	0.2	1.7	1.5
Education level						
No degree	18.9	18.6	18.7	17.3	20.7	15.0
High school/G.E.D.	55.1	49.9	50.7	48.9	49.9	50.0
Bachelor's degree	16.2	18.9	17.7	21.9	18.2	20.2
Master's degree/M.B.A.	7.2	6.4	5.9	7.3	7.2	5.6
Ph.D./J.D./M.D. degree	2.6	6.2	7.1	4.7	4.0	9.2
Sample size (N)	30,371	8,285	5,180	2,639	4,335	3,476

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who report they are employed in any given wave, pooled across all waves. Columns may not add to totals due to rounding. A total of 466 workers are missing information on age at which they became self-employed. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Self-employed without employees may either work alone or only with their spouse. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

Risk Aversion

Given the different nature of self-employment compared to wage and salary work, notably the degree of risk borne by the individual, we also examine a measure of how willing individuals are to accept (or avoid) risk (Table 2.4). The HRS measure of risk aversion is derived from a series of questions that ask the respondent to choose between pairs of jobs where one guarantees current family income and the other offers the chance to increase income but carries the risk

of loss of income.¹¹ The scale of risk aversion is from one to four where one is the least risk averse. Given that workers who decide to become self-employed also decide to take on additional earnings risk, we expect this group to be less risk averse than wage and salary workers. Table 2.4 shows the percentage of workers in each of the four points of the scale by employment class and self-employment category. We find that 32 percent of self-employed workers are in the two least risk-averse categories (scale equals 1 or 2) compared to 22 percent of wage and salary workers. There is virtually no difference in risk aversion when comparing those who become self-employed before age 50 and those at or after age 50. Self-employed workers with employees are somewhat less risk averse than those without employees. Thus, the results from this scale suggest that the self-employed are more willing to accept risk compared with workers in wage and salary jobs.

Table 2.4—Individual Risk Aversion by Employment Class and Self-Employment Category
(percent distribution)

Degree of risk aversion	All workers		Self-employed			
	Wage and salary	Self-employed	By age of self-employment		By nature of self-employment	
			Before age 50	At or after age 50	Without employees	With employees
Scale = 1 (least risk averse)	12.9	20.8	21.0	20.4	18.0	24.4
Scale = 2	9.1	10.9	11.0	10.8	11.9	9.8
Scale = 3	16.5	11.7	11.5	11.8	11.7	12.2
Scale = 4 (most risk averse)	61.6	56.6	56.5	56.9	58.4	53.6
Sample size (N)	30,371	8,285	5,180	2,639	4,335	3,476

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who report they are employed in any given wave, pooled across all waves. Columns may not add to totals due to rounding. A total of 466 workers are missing information on age at which they became self-employed. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Self-employed without employees may either work alone or only with their spouse. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

Job Characteristics

Table 2.5 shows key job characteristics such as the number of employees, work effort (hours and weeks worked a year), tenure, industry, and occupation by employment class and self-employment category for individuals age 51 and above in the HRS. We found that the self-employed overall, compared with wage and salary workers, are much more likely to be in a smaller firm with an average of 132 employees compared with an average of more than 9,000 employees for wage and salary workers. Although workers in large businesses skew averages,

¹¹ For more details on this variable, see St. Clair, et al. (2006).

Table 2.5—Job Characteristics by Employment Class and Self-Employment Category
(percent distribution unless otherwise indicated)

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Mean no. of employees	9,342.0	131.7	70.3	233.8	1.3	295.5
Median no. of employees	100	2	2	1	1	5
Number of employees						
0 to 5	11.8	79.2	75.5	85.3	100.0	53.3
6 to 15	13.3	12.6	14.8	8.7	—	28.2
16 to 25	6.4	2.7	3.3	1.8	—	6.1
26 to 50	9.3	2.6	3.2	1.8	—	5.9
51 and over	59.2	2.9	3.2	2.5	—	6.6
Hours/week (hours)	38.1	38.1	41.1	34.3	33.7	43.5
Weeks/year (weeks)	49.1	46.6	47.6	45.0	45.5	48.1
Tenure (years)	13.2	16.7	21.8	4.6	15.3	18.6
Industry						
Agriculture	1.8	10.3	12.4	5.6	10.5	9.7
Mining and construction	4.6	11.2	13.4	8.1	10.3	12.1
Manufacturing-non-durable goods.	7.3	2.7	2.2	3.5	2.4	3.3
Manufacturing-durable goods	10.9	3.9	4.1	3.4	2.9	5.5
Transportation	7.0	4.0	3.6	5.2	3.9	4.0
Wholesale trade	4.0	4.2	3.9	4.7	3.0	5.9
Retail trade	11.0	13.1	12.4	14.2	10.7	16.6
Finance, insurance, real estate	5.9	10.1	10.2	9.6	9.1	11.8
Business/repair services	5.3	12.6	11.5	15.6	14.5	10.2
Personal services	3.6	10.6	9.1	13.5	15.2	4.4
Entertainment	1.9	1.5	1.6	1.0	1.6	1.2
Professional services	30.9	15.3	15.5	14.9	15.5	15.1
Public administration	5.7	0.3	0.2	0.7	0.4	0.2

(Continued)

Table 2.5—Continued

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Occupation						
Managerial specialty operator	13.7	18.3	18.9	17.7	12.7	26.4
Professional specialty operator/technical support	16.7	15.9	16.4	15.0	16.6	15.0
Sales	8.1	19.9	18.2	22.5	17.3	23.5
Clerical/administrative support	18.3	4.6	4.9	3.9	3.7	6.1
Services: private household/cleaning/building services	1.1	2.8	2.1	4.2	4.5	0.4
Services: protection	2.2	0.1	0.1	0.3	0.2	0.1
Services: food preparation	3.7	0.5	0.3	0.9	0.3	0.8
Health services	2.8	1.0	0.4	1.9	1.5	0.3
Personal services	6.6	7.8	6.8	9.9	11.0	3.6
Farming/forestry/fishing	1.8	9.7	11.7	5.2	10.0	8.9
Mechanics/repair	3.4	3.2	3.5	2.9	3.7	2.5
Constr. trade/extractors	2.6	6.7	7.8	5.2	6.9	6.2
Precision production	3.3	2.7	2.6	2.5	3.6	1.4
Operators: machine	6.7	2.1	2.1	1.9	2.7	1.4
Operators: transport, etc.	6.1	3.4	3.2	4.1	3.9	2.5
Operators: handlers, etc.	2.8	1.5	1.1	2.0	1.7	1.2
Armed Forces	0.1	–	–	–	0.0	0.0
Sample size (N)	30,371	8,285	5,180	2,639	4,335	3,476

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who report they are employed in any given wave, pooled across all waves. Columns may not add to totals due to rounding. A total of 466 workers are missing information on age at which they became self-employed. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Self-employed without employees may either work alone or only with their spouse. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

the median number of workers also points to a large gap in business size. The typical wage and salary worker is in a business with 100 employees compared to the typical self-employed individual with just 2 employees. Looking further at the distribution of workers, just 12 percent of wage and salary workers are in companies with 5 or fewer employees compared with 79 percent of the self-employed. At the other extreme, nearly 60 percent of wage and salary workers are in firms with 51 or more employees compared with 3 percent of the self-employed.

In terms of work effort, wage and salary workers and the self-employed work the identical number of hours per week on average (38.1 hours), but wage employees work about 2.5 more weeks per year than their self-employed counterparts (49.1 versus 46.6). Average tenure on the

current job is shorter by more than 3 years for wage and salary workers compared with the self-employed (13.2 years versus 16.7 years). These differences are likely partly attributable to the fact that the self-employed are older on average and therefore are likely to have longer tenure on the job, but they are at a point in their careers where they are working fewer weeks per year.

In terms of industry, the self-employed are disproportionately represented in agriculture, mining and construction, retail trade, finance, insurance and real estate, business and repair services, and personal services. The self-employed are overrepresented in certain occupations as well, namely managerial positions, sales, farming, forestry and fishing, and the construction or extraction trades.

Considering the subgroups of self-employed shown in Table 2.5, the average number of employees in the business for those self-employed at or after age 50 exceeds that for those self-employed before age 50, an average of 234 employees versus 70 employees. Yet the median is just 2 employees for those self-employed before age 50 compared with just 1 for those self-employed at or after age 50. This reversal is the result of an outlier case among those self-employed at or after age 50, which pulls up the average. Considering the detailed distribution of the number of employees by the five categories shown in Table 2.5 indicates that those self-employed at or after age 50 are more likely to have 0 to 5 employees (85 versus 76 percent), while those self-employed before age 50 have a higher share in each of the larger employee size categories.

In addition to having more employees, the longer-term self-employed (i.e., those self-employed before age 50) work an average of 7 more hours per week (41 hours versus 34 hours), and almost 3 more weeks per year (48 weeks versus 45 weeks). As would be expected, their tenure is also longer (22 years versus 5 years). Compared with those who became self-employed at or after age 50, those self-employed before age 50 are more heavily represented in the agriculture sector, as well as mining and construction. The longer-term self-employed are also more likely to be in the parallel occupations, namely farming, forestry and fishing, and construction and extraction trades. Those who became self-employed later in their careers are more likely to be found in retail trade, business or repair services, and personal services. The corresponding occupations that are overrepresented include sales, private household and cleaning services, and personal services.

Differences are evident as well between the self-employment groups defined by whether or not they have employees. By definition, those working with employees are in larger firms on average. This group also works more than 10 additional hours per week than those without employees (44 hours versus 34 hours), and 2 additional weeks per year (48 weeks versus 46 weeks). Tenure on the job is also longer for those working with employees (19 years versus 15 years). Those with employees have a markedly higher share of the retail trade industry (17 percent versus 11 percent) and in managerial (26 percent versus 13 percent) and sales (24 percent versus 17 percent) occupations. In contrast, those with no employees have substantially higher shares in the industries of business and repair services (15 percent versus 10 percent) and personal services (15 percent versus 4 percent). The corresponding occupation with a large gap is personal services (11 percent versus 4 percent).

Earnings and Employment-Based Benefits

Table 2.6 focuses on differences by employment class and self-employment category in earnings and employment-based benefits, namely health insurance and pensions. The first rows of the table pertain to the way self-employed workers are paid and the role of their spouse in the business (if any), so there is no comparison with their wage and salary counterparts. Overall, about 34 percent of the self-employed are paid a regular salary, while 77 percent receive profits from their business. (Since some self-employed draw both a salary and a share of the profits, the percent associated with each can sum to more than 100 percent.) For the two groups defined by the age they became self-employed, there is little difference in the portion paid a salary, however, those self-employed before age 50 are more likely to draw on profits (80 percent versus 73 percent). Classified by whether or not they work with employees, the self-employed with employees are considerably more likely to be paid a regular salary (44 percent versus 26 percent) and less likely to receive profits from the business (73 percent versus 81 percent).

The tabulations also show that, among married self-employed workers, 42 percent of the self-employed work with their spouse. Those spouses who are employed in the business work an average of 24 hours a week, and about 23 percent receive a salary. Compared to those self-employed before age 50, those self-employed at or after age 50 are more likely to work with their spouse (47 percent versus 34 percent) and less likely to have their spouse paid a salary (16 percent versus 26 percent). Spouses in these two groups of self-employed work about the same number of hours. Differentiating the self-employed by the number of employees, those with and without non-spousal employees are about equally likely to also work with their spouse. However, spouses working in a business with other employees work an average of 9 more hours per week (29 hours versus 20 hours per week) and are more likely to be paid a salary (37 percent versus 13 percent).

Tabulations on pension and health insurance coverage in Table 2.6 apply to both wage and salary workers and the self-employed. Overall, compared with wage and salary workers, the self-employed are much less likely to have a pension on the current job (10 versus 61 percent). Despite this difference for those who have pension coverage, when the average number of pension plans on the current job is compared the self-employed have 1.2 plans versus 1.3 for wage and salary workers. If an individual has a pension plan, the self-employed are more likely to have at least one defined contribution (DC) plan (76 percent versus 55 percent) whereas wage and salary workers are more likely to have at least one defined benefit (DB) plan (61 percent versus 31 percent). Compared with their wage and salary counterparts, self-employed workers are much less likely to have employment based health insurance through their current or former employer (30 versus 66 percent) and the self-employed are more likely (28 percent versus 16 percent) to have health insurance through the government (i.e., Medicare or Medicaid), which is consistent with this group being older, on average. They are also more likely to receive coverage through other sources (28 percent versus 11 percent).

Table 2.6—Earnings and Benefits by Employment Class and Self-Employment Category
(percent distribution unless otherwise indicated)

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Earnings type						
Paid regular salary	–	33.5	34.1	34.3	25.7	44.0
Receive profits	–	77.2	79.7	73.1	81.5	72.6
Married self-employed						
Spouse works in business	–	41.8	33.6	46.6	42.9	40.9
Spouse's hours	–	23.7	23.8	23.4	19.8	29.0
Spouse paid salary	–	23.3	26.1	16.2	12.9	37.2
Pensions on current job						
Has pension	60.8	9.6	12.7	4.3	4.8	16.3
Number of pensions (N)	1.3	1.2	1.3	1.3	1.3	1.3
Has at least one defined benefit (DB) plan	61.4	30.5	28.3	39.1	34.2	29.1
Has at least one defined contribution (DC) plan	55.2	75.9	79.0	61.8	74.3	76.8
Has both DB and DC plans	10.9	10.6	11.6	5.5	10.9	10.4
Health insurance coverage						
Through government	78.22	61.78	60.05	60.12	58.33	67.8
Through current/previous employer	16.3	28.2	20.5	32.9	32.7	24.0
Through other	66.3	29.7	32.1	26.7	21.7	40.4
Sample size (N)	30,371	8,285	5,180	2,639	4,335	3,476

SOURCE: Authors' calculations based on 1992-2002 HRS.

NOTE: Sample is individuals who report they are employed in any given wave, pooled across all waves. Columns may not add to totals due to rounding. A total of 466 workers are missing information on age at which they became self-employed. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Self-employed without employees may either work alone or only with their spouse. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

Comparing across the subgroups of self-employed, pension and health insurance coverage vary considerably. Those who are longer-term self-employed and those with employees are more likely to have a pension on the current job, and more likely, when covered, to have a DC plan or both DB and DC plans (only for self-employed defined by transition age). There is no difference in the average number of pensions across any of the self-employed subgroups. In terms of health insurance, coverage through a current or former employer is higher for the longer-term self-employed and those with employees. Conversely, those who became self-employed after age 50 or who work without employees are more likely to have health insurance coverage through the government.

Summary of Personal and Job Characteristics of the Self-Employed

Self-employment is an important phenomenon at older ages. For workers age 51 and above, one in every five is self-employed. About one-third of those self-employed workers made the transition at or after age 50. Among the self-employed, a somewhat larger share work with no other employees or only with their spouse, compared with the share who work with other employees (other than their spouse). Overall, among older workers in self-employment who are married, about 40 percent also work with their spouse. Notably, the self-employed depend heavily on profits from their business rather than a regular salary (some receive both). Just one-third of older self-employed receive a salary, while more than three-quarters are paid from profits (34 percent versus 77 percent).

The impression offered by the HRS data is that older self-employed workers differ in important ways from their wage and salary counterparts. Compared with wage and salary workers, the self-employed in our sample are more likely to be male, older, and with a bachelor's degree or higher. As might be expected, they are also more willing to accept financial risks. In terms of the size of their business, the vast majority of older self-employed workers have five or fewer employees, whereas wage and salary workers are in businesses with many more employees on average. Another key difference is that the self-employed are far less likely to have pension coverage on their job or employment-based health insurance. The self-employed put in the same number of hours as wage and salary workers but work fewer weeks per year. And they have longer tenure. The self-employed are more likely to be found in agriculture, retail trade, and various services industries and in occupations such as managerial positions, sales, and farming that are conducive to working for oneself. There are distinct differences between those who have been self-employed since they were younger (those self-employed before age 50) and those who made the transition to self-employment at or after age 50; and between the self-employed who work without or with employees in addition to themselves (and possibly their spouse). By and large, the longer-term self-employed and those with employees most closely resemble each other, while those who made the transition to self-employment later in life share characteristics in common with the self-employed without employees. Indeed, there is overlap in these groups, as the longer-term self-employed are more likely to have other employees (other than their spouse) in their business, while those who became self-employed at older ages are more likely to be on their own (or with their spouse only).

The first two similar groups—longer-term self-employed and those with employees, compared with their respective counterparts—are more likely to be men who are younger and have the highest education credentials (Ph.D., J.D., or M.D.). These two similar groups also work more hours per week and weeks per year, and have longer tenure. In addition, they are more likely than the other self-employed workers to receive a pension on their job and to receive employment-based health coverage. The longer-term self-employed are more likely to be found in the agriculture sector and mining and construction, compared to those who became self-employed at or after age 50. Those with employees are disproportionately in retail trade while those without employees are in personal services. Only those with employees show a tendency to be willing to accept more risk. At the same time, this is the group that is most likely to be paid a regular salary, consistent with being in an incorporated business with more employees.

Although the self-employed with employees have more workers by definition, the median number of employees is just 5 and only about 19 percent have 16 or more employees. The percentage with 51 or more employees is just 7 percent.

Given these differences between the self-employed and wage and salary workers, and between subgroups of the self-employed, we might also expect them to have different paths to retirement and differential retirement income security. These are issues that we explore in subsequent chapters.

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3. TRANSITION PLANS FOR THE SELF-EMPLOYED: EXPECTATIONS FOR JOB CHANGES AND RETIREMENT

As workers near the later stages of their working career, they may consider changing jobs—including possible transitions between wage and salary work and self-employment. Another consideration may be a transition to retirement—either a complete withdrawal from the labor market or a more gradual transition accompanied by reduced hours of work or change to a less demanding job. In this chapter, we exploit information from the HRS on transition plans among older self-employed workers, both possible job changes and plans for retirement. These data allow us to determine how satisfied workers are with their current job, to see if they are looking for a new job, to find out whether they want to change the kind of work they are doing, or if they want to change where they work. We can also assess expectations about when workers plan to retire and the relative importance workers attach to various motives for retirement. Finally, because the HRS includes individuals who retire during the course of the ongoing survey, we can examine their experience with retirement. With all of these issues, we are interested in possible differences between the self-employed and workers in wage and salary jobs, and between different subgroups of the self-employed.

When examining both plans for job changes and retirement, we consider outcomes for the same subgroups of the self-employed examined in the last chapter (i.e., those who became self-employed before age 50 versus those self-employed at or after age 50, and the self-employed without employees versus those with employees), and also present results for wage and salary workers for comparison. The HRS sample we use is the same as in the last chapter, specifically the pooled sample of individuals interviewed between 1992 and 2002 who reported that they were working in the interview wave. In addition, to examine responses to questions concerning experiences with actual retirement, we focus on the sample of 3,641 individuals who retire (i.e., are no longer working) between interview waves (from 1992 to 2002). Since we observe these individuals one wave before retirement, we are able to classify them based upon their class of employment prior to retirement (a total of 2,955 individuals from a wage and salary job and 686 individuals from self-employment). For those who were self-employed before retirement, we can differentiate between those who became self-employed before or after age 50 and between the self-employed who worked without or with non-spousal employees.

For the subgroup comparisons presented in this chapter, we do not formally test for statistical differences between the groups. In many cases the small differences in levels, percentages, or percentage distributions would not pass conventional statistical tests so such differences should be interpreted accordingly.

Plans for Job Changes Among The Self-Employed

For those individuals currently working, the HRS asks several questions to ascertain the attitude toward the current job and any plans for changes in the future. Table 3.1 provides tabulations on several of these topics for wage and salary workers versus the self-employed and

Table 3.1—Work Features and Job Search Plans by Employment Class and Self-Employment Category
(percent and percent distribution)

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Work features (% agree)						
Job is more difficult now	45.7	38.0	41.5	32.6	33.1	45.3
Job is stressful	56.5	51.7	58.1	41.9	42.0	63.8
Enjoys work	88.0	93.4	92.9	93.9	93.9	92.6
Want to reduce hours as they age	54.1	68.0	73.9	59.2	62.9	75.2
Looking for job now (%)	8.1	5.9	7.3	5.5	6.9	3.8
Among those looking for work (% distribution):						
Area looking for work						
Jobs is in this geographic area	80.9	73.3	72.6	72.8	74.4	73.9
Jobs requires a move	7.5	8.5	8.9	8.6	7.6	9.6
Both/either one	11.6	18.2	18.4	18.7	18.1	16.5
Looking for a full-time or part-time job						
Full-time job	32.2	41.4	38.9	43.3	43.3	47.0
Part-time job	57.9	39.2	41.1	38.6	37.1	37.4
Full-time or part-time job	9.9	19.4	20.0	18.1	19.6	15.7
Kind of work looking for						
Same	36.4	31.8	36.1	28.8	32.9	25.9
Different	43.8	45.2	43.3	46.7	41.2	55.2
Same or different	19.8	23.0	20.6	24.5	26.0	19.0
Sample size (N)	30,371	8,285	5,180	2,639	4,335	3,476

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who report they are employed in any given wave, pooled across all waves. Columns may not add to totals due to rounding. A total of 466 workers are missing information on age at which they became self-employed. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Self-employed without employees may either work alone or only with their spouse. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

our two subdivisions of the self-employed. The first row records the percentage of respondents who agree that their job is more difficult now than in the past, a portion that is lower among the self-employed compared with wage and salary workers (38 percent versus 46 percent). Compared with their wage and salary counterparts, the self-employed are also less likely to say that their current job is stressful (52 percent versus 57 percent) and are more likely to report that they enjoy their work (93 percent versus 88 percent). In terms of the transition to retirement, the self-employed are more likely to say that they want to reduce their hours of work as they age compared with wage and salary workers (68 percent versus 54 percent).

Consistent with these responses, the currently self-employed are only slightly less likely to say that they are looking for a new job than their wage and salary counterparts (6 percent versus 8 percent. Among those looking for a new job, compared with wage and salary workers, the self-employed are somewhat less likely to restrict themselves to a job in the same geographic locale. In addition, the self-employed are more likely to say that they prefer full-time work or to report more flexibility about full- versus part-time work (i.e., they would accept either). The self-employed are somewhat less likely to say that they are exclusively looking for the same kind of work and instead say that they are looking for a different kind of work or would accept either the same or different work.

There are interesting differences in these responses across subgroups of the self-employed. Notably, those self-employed before age 50 are more likely to report that their job is more difficult now and also stressful, but the portion that enjoy their work is nearly identical with those self-employed at or after age 50. Those self-employed before age 50 are also more likely to desire to reduce their hours of work as they age. A similar pattern holds for the self-employed with employees compared with those with no employees. While the percentage of workers who report they are looking for a job is slightly higher among those who became self-employed before age 50, it is also higher among those without employees. Indeed, the lowest percentage looking for work among the four subgroups of the self-employed is for those with employees. Although this group is generally the least satisfied with their job in terms of relative difficulty and stress, the results on wealth accumulation we report in Chapter 5 suggest that this group may be well compensated for their efforts. Among those looking for work, the subgroups of the self-employed show few differences in terms of the geographic locale, preference for full- versus part-time work, and whether they report they are looking for a job that shares similar characteristics with their current job or is different. The largest divergence is between the self-employed without employees versus those with employees in terms of the kind of work they are looking for. Those without employees are more likely to be looking for the same job or to be flexible, while those with employees have the strongest preference for a different type of job.

The overall impression from these questions is that the self-employed generally view their jobs as easier, less stressful, and more enjoyable compared with wage and salary workers. They are also more likely to desire a gradual transition to retirement by reducing their hours over time. Within the self-employed, however, those who became self-employed before age 50 and the self-employed with employees look more like their wage and salary counterparts in that they find their jobs more difficult and stressful (although nearly the same share in all four subgroups report that they enjoy their work). On the other hand, the self-employed with employees are the least likely to be looking for a new job among the four groups of self-employed we examine, but those self-employed with employees who are looking for a new job are most likely to prefer something different.

Retirement Plans and Expectations Among the Self-Employed

Current workers in the HRS are also asked about plans for retirement and attitudes about motives for retirement. First, workers are asked about the probability that they will be working at age 62 and at age 65. As seen in Table 3.2 (first two rows), the self-employed report a higher

likelihood that they will be working at either age compared with their wage and salary counterparts (58 percent versus 47 percent at age 62 and 42 percent versus 24 percent at age 65). Among the self-employed, those who transitioned to self-employment before age 50, as well as

Table 3.2—Retirement Plans and Economic Expectations by Employment Class and Self-Employment Category
(percent distribution unless otherwise indicated)

Characteristic	All workers		Self-employed			
	Wage and salary	Self-employed	By age of self-employment		By nature of self-employment	
			Before age 50	At or after age 50	Without employees	With employees
Probability of working at age 62	46.9	57.5	59.1	53.9	53.8	61.9
Probability of working at age 65	24.2	41.7	43.0	38.7	40.0	43.5
Expectation that stock market will go up ^a	46.8	50.5	50.7	53.3	49.9	51.7
Expected retirement wealth ^b (\$)	\$89,651	\$236,143	\$277,687	\$144,647	\$180,326	\$358,281
Expected Social Security						
Expect to receive benefits	94.0	91.0	92.0	90.0	90.0	92.6
Age expect to receive (age)	63.7	64.2	64.3	63.9	63.9	64.5
Expected monthly amt. (\$)	\$733.69	\$736.95	\$749.8	\$709.31	\$670.5	\$810.1
Concerned regarding retirement income						
Worry a lot	35.4	32.0	33.6	32.0	29.6	20.8
Worry somewhat	26.1	25.8	24.2	25.8	28.5	25.2
Worry a little	14.4	13.8	12.9	13.8	22.6	26.7
Worry not at all	24.1	28.4	29.3	28.4	19.3	27.3
Sample size (N)	30,371	8,285	5,180	5,180	4,335	3,476

^a Question asked only in the 2002 wave of all cohorts.

^b Question asked only in the 1992 wave (1931-1941 birth cohort) and without specific reference to the year at which dollar amounts should be valued

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who report they are employed in any given wave, pooled across all waves. Columns may not add to totals due to rounding. A total of 466 workers are missing information on age at which they became self-employed. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Self-employed without employees may either work alone or only with their spouse. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

the self-employed with employees, are more likely to say that they will be working as of age 62 or age 65, an increase of 4 to 8 percentage points compared with the other two self-employed subgroups (see Table 3.2).

Additional expectations questions cover various financial aspects of retirement, such as whether respondents think the stock market will go up in the next year (asked only in the 2002 survey wave), expected retirement wealth (asked only in the 1992 survey wave), and expectations about Social Security retirement benefits. Respondents were also asked whether they are concerned about retirement income. Based on expectations regarding the stock market, the self-employed appear to be somewhat more optimistic than their wage and salary counterparts, with 51 versus 47 percent expecting the market to rise in the coming year. As we report in Chapter 5, self-employed workers are also more likely to be owners of stock and to have more wealth invested in the stock market. In terms of retirement wealth, the self-employed report more than two times the expected retirement wealth as wage and salary workers, an average of \$236,000 versus nearly \$90,000. However, the self-employed are somewhat less likely to expect to receive Social Security retirement benefits (91 percent versus 94 percent) and the mean age they expect to receive benefits is about half a year older (age 64.2 versus age 63.7). At the same time, the average expected benefits are about the same (more than \$730 per month). The bottom line is that the self-employed exhibit somewhat higher expectations of income security compared with wage and salary workers but the differences are modest. Approximately 35 percent of wage and salary workers “worry a lot” about retirement income compared to 32 percent among the self-employed. At the other extreme, the proportion that does not worry at all is higher for the self-employed (28 percent versus 24 percent).

Looking among the subgroups of self-employed defined in Table 3.2, there is a consistent pattern that those who become self-employed before age 50 and those with employees have higher expected retirement wealth, are somewhat more likely to expect to receive Social Security benefits and to begin receiving benefits at an older age, and report higher expected Social Security benefits. Expected retirement wealth is highest among the self-employed with employees (\$358,000), followed by those self-employed before age 50 (\$278,000). Concerns regarding retirement income are very similar for the subgroup of the self-employed defined by when they became self-employed. Compared to those without employees, the self-employed with employees are much less likely to worry “a lot” or “somewhat” about retirement income.

The HRS also ascertains attitudes about different aspects that may make retirement attractive or unattractive. Table 3.3 shows the factors that respondents rated that may make retirement good, namely: being one’s own boss (i.e., having control over one’s time), being able to take it easy, having a chance to travel, experiencing a lack of pressure, having more time with a spouse or with children (for those married or who have children), and having more time to pursue hobbies or to volunteer. In each case, respondents rated these factors from “very important” to “not important at all.” In several instances, as indicated in Table 3.3, the questions were only asked of HRS respondents in the 1992 wave for the 1931 to 1941 birth cohort, so the sample sizes for these factors are smaller than those shown at the end of the table.

Table 3.3—Expectations for Why Retirement Will Be Attractive by Employment Class and Self-Employment Category
(percent distribution)

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Be own boss						
Very important	32.4	57.4	59.0	54.1	57.5	57.7
Moderately important	22.0	18.4	17.6	20.1	18.2	18.6
Somewhat important	15.6	10.2	9.8	10.9	10.4	9.4
Not important at all	30.0	14.0	13.6	14.9	13.9	14.4
Take it easy						
Very important	39.2	38.0	39.8	34.7	36.8	38.7
Moderately important	27.7	28.0	27.7	28.7	29.1	27.0
Somewhat important	19.8	18.6	18.1	19.6	18.0	18.9
Not important at all	13.2	15.4	14.5	17.0	16.1	15.4
Chance to travel						
Very important	43.9	39.0	39.2	38.5	35.6	42.9
Moderately important	24.3	25.6	25.7	25.4	25.9	25.6
Somewhat important	16.7	17.0	17.9	15.5	17.5	15.7
Not important at all	15.1	18.4	17.2	20.6	21.0	15.8
Lack of pressure^a						
Very important	52.3	50.8	49.7	52.5	50.0	50.5
Moderately important	18.4	19.5	20.8	16.6	16.8	21.4
Somewhat important	16.0	17.2	16.8	18.5	20.1	14.2
Not important at all	13.2	12.5	12.7	12.4	13.1	13.9
Have more time with spouse^a						
Very important	62.1	54.0	52.7	57.0	55.8	53.3
Moderately important	22.2	25.7	27.8	21.1	25.8	25.3
Somewhat important	12.4	15.8	15.0	17.0	14.2	15.6
Not important at all	3.3	4.6	4.5	4.9	4.3	5.9
Have more time with children^a						
Very important	40.2	37.6	36.0	40.7	37.7	40.1
Moderately important	24.4	23.7	26.1	18.2	20.5	25.2
Somewhat important	21.0	22.1	22.0	22.9	25.8	19.9
Not important at all	14.3	16.7	16.0	18.2	16.0	14.8
Have more time for hobbies^a						
Very important	34.8	30.9	30.3	31.9	31.6	31.2
Moderately important	30.0	28.8	29.8	27.3	25.5	33.3
Somewhat important	23.0	26.4	26.5	26.5	29.5	24.1
Not important at all	12.3	13.9	13.5	14.2	13.5	11.4

(Continued)

Table 3.3—Continued

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Have more time to volunteer ^a						
Very important	19.3	15.3	13.8	18.1	16.7	15.1
Moderately important	23.8	21.1	19.9	23.5	21.8	20.4
Somewhat important	34.1	34.5	36.0	31.9	36.7	33.0
Not important at all	22.8	29.2	30.3	26.5	24.7	31.5
Sample size (N)	15,154	3,452	2,266	1,164	1,739	1,439

^a Question asked only in wave 1 (1931-1941 birth cohort).

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who report they are employed in any given wave, pooled across all waves. Columns may not add to totals due to rounding. A total of 466 workers are missing information on age at which they became self-employed. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Additional missing information is due to the fact that all questions are asked only once of respondents while working and once more upon retirement. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

First, comparing wage and salary workers and the self-employed, Table 3.3 shows that the biggest gaps occur in the very important category for being one's own boss and having time with a spouse. The self-employed place considerably more weight on being one's own boss as a favorable factor in retirement (57 percent versus 32 percent of wage and salary workers rating this factor as very important), but they place less weight on having more time with a spouse (54 versus 62 percent stating "very important"). The differences in the weights placed on the other factors are not as sharp. The self-employed place less weight on travel and time for children, hobbies, or volunteering as favorable aspects of retirement. This may suggest that they have different preferences for these activities or that they have already achieved the preferred level of time in these activities and thus the categories are not an important consideration in retirement.

Second, within the subgroups of the self-employed, there are other interesting differences but the contrast is not as sharp. Those who became self-employed before 50 rate being one's own boss somewhat more highly compared with those self-employed at or after age 50 (59 percent versus 54 percent). This same group also values being able to "take it easy" somewhat more highly, but places slightly less weight on time with a spouse or with children, or to volunteer. The differences are even smaller between the self-employed defined by whether or not they have employees. Those with employees are somewhat more likely to rate the chance to travel as very important or to have time with children as very important or moderately important.

Table 3.4 reports the ratings for six factors that might make retirement unattractive, namely: not being useful, experiencing illness or disability, not having enough income, being bored, missing co-workers, or being worried about cost-of-living increases. As with the favorable aspects of retirement, a subset of these questions was asked only of the 1992 HRS respondents so the sample sizes on those responses are smaller.

**Table 3.4—Expectations for Why Retirement Will Be Unattractive
by Employment Class and Self-Employment Category**
(percent distribution)

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Not being useful						
Worry a lot	19.7	27.3	27.5	26.8	27.4	29.4
Worry somewhat	18.9	18.1	17.5	19.4	17.7	18.8
Worry a little	13.3	10.5	10.8	10.0	10.7	9.2
Worry not at all	48.2	44.1	44.2	43.8	44.2	42.6
Illness or disability						
Worry a lot	28.0	29.5	30.5	27.9	30.2	30.5
Worry somewhat	26.2	25.3	26.0	24.1	23.9	26.0
Worry a little	18.5	16.3	16.3	16.3	16.4	16.3
Worry not at all	27.4	28.8	27.3	31.7	29.5	27.3
Not enough income						
Worry a lot	33.8	31.3	31.0	32.2	33.0	29.9
Worry somewhat	26.7	26.1	26.6	25.1	25.4	26.3
Worry a little	17.7	15.8	15.7	16.0	15.7	14.6
Worry not at all	21.8	26.8	26.7	26.7	25.9	29.2
Boredom^a						
Worry a lot	8.0	10.8	11.2	9.6	9.8	12.1
Worry somewhat	14.8	15.3	15.2	15.4	15.3	19.5
Worry a little	16.9	15.6	16.0	15.0	16.7	15.8
Worry not at all	60.4	58.4	57.6	60.0	58.2	52.6
Miss co-workers^a						
Worry a lot	6.8	7.5	6.9	8.8	9.4	7.1
Worry somewhat	23.5	21.6	22.5	19.7	18.7	26.4
Worry a little	29.6	20.2	20.0	20.1	19.5	20.8
Worry not at all	40.2	50.7	50.6	51.4	52.4	45.7
Cost-of-living increases^a						
Worry a lot	35.3	30.7	30.6	30.9	33.5	26.1
Worry somewhat	30.3	33.2	32.8	34.0	33.5	33.5
Worry a little	21.6	20.0	20.0	20.5	18.6	21.1
Worry not at all	12.9	16.1	16.6	14.7	14.6	19.3
Sample size (N)	15,169	3,457	2,272	1,164	1,738	1,447

^a Question asked only in 1992 wave (1931-1941 birth cohort).

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who report they are employed in any given wave, pooled across all waves. Columns may not add to totals due to rounding. A total of 466 workers are missing information on age at which they became self-employed. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Additional information is missing due to the fact that all questions are asked only once of respondents while working and once more upon retirement. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

Here again, the sharpest contrasts are between wage and salary workers and the self-employed. The biggest difference is in the percent responding that they “worry a lot” about not being useful, a share that is 20 percent among wage and salary workers and 27 percent among the self-employed. The self-employed are somewhat less likely to worry about cost-of-living changes, however 31 versus 35 percent of wage and salary workers report that they worry a lot about this factor. On the other factors, the ratings of wage and salary workers and self-employed workers are quite similar. The modest differences across the subgroups of the self-employed in their ratings of these potential unfavorable aspects of retirement make it difficult to attach any interpretation. A difference that does stand out is that the self-employed with employees are less likely to worry a lot about cost-of-living increases compared to their counterparts with employees.

Overall, when assessing potentially favorable aspects of retirement (Table 3.3), the self-employed place the most weight on being one’s own boss, having more time with a spouse, and experiencing a lack of pressure. In each case, at least 50 percent rated these factors as very important. At the bottom of the list are having time for hobbies and to volunteer (31 percent and 15 percent rated these items as very important, respectively). In terms of potential unfavorable aspects of retirement (Table 3.4), the self-employed show the most concern for not having enough income, dealing with cost-of-living increases, and being ill or disabled. But the portion rating these factors as very important is just about 30 percent, considerably less than the strength of opinion regarding the favorable aspects. The least amount of concern is attached to missing co-workers or being bored, where 12 percent or fewer rated these aspects as ones that they worry a lot about. Comparing across explanations, the various subgroups of the self-employed have the same general ranking.

Retirement Experiences Among Former Self-Employed Workers

Workers who retire between HRS waves are asked questions about their retirement experiences. We focus on the sample of workers whom we classify as self-employed versus wage and salary before they retired, and on the retirement of the four subgroups of the self-employed. We classify workers by the type of job they retired from in the prior wave. It is important to note that workers who retired from a wage and salary job and from self-employment can be expected to vary in terms of personal characteristics and other factors that affected their decisions to retire. Thus, the differences that we discuss in this section should be viewed as conditional upon being retired from the two classes of employment, and the differences themselves may be the result of factors that led to the retirement decision. In addition, the sample sizes for the subgroups we examine are smaller than in previous tables so the measured differences, especially when small, are not likely to pass conventional statistical tests.

Table 3.5 shows the ratings of retirement in terms of satisfaction and in comparison with the period before retirement. Overall, 57 percent of those who retire from self-employment say retirement is “very satisfying” and only 9 percent say it is “not at all satisfying.” The “very

satisfying” rating is a bit higher among those who were wage and salary workers (61 percent). When compared with the pre-retirement years, 48 percent of those who retired from self-employment rate the retirement years as “better,” while only 17 percent rate them as “not as good.” Again, these ratings suggest that retirees from self-employment (48 percent) are somewhat less satisfied compared to those who retired from wage and salary jobs (52 percent) who say that retirement is better. The differences by former employment class are relatively small on both of these questions, however.

Table 3.5—Overall Ratings of Retirement by Pre-Retirement Employment Class and Self-Employment Category
(percent distribution)

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Retirement is satisfying						
Very	60.8	57.0	58.0	57.9	58.1	54.7
Moderately	31.5	33.7	32.2	33.9	33.4	34.5
Not at all	7.7	9.3	9.9	8.2	8.5	10.8
Retirement years compared to before retirement						
Better	52.2	47.8	50.2	49.0	46.5	51.9
About the same	32.8	35.6	35.1	33.7	38.4	29.8
Not as good	15.1	16.6	14.8	17.3	15.1	18.3
Sample size (N)	2,955	686	291	306	430	208

SOURCE: Authors’ calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who are observed to retire between waves. Class of employment is based on job held prior to retirement. Columns may not add to totals due to rounding. Among retired workers, there are 100 missing observations due to missing self-employment information. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

We found that there are no substantial differences between retirees who were self-employed before age 50 versus those who retired at or after 50. However, retirees from self-employment who previously had employees are somewhat less likely to rate retirement as “very satisfying” compared to those without employees (55 versus 58 percent). Eleven percent of those with employees rate retirement as “not at all satisfying” compared to 9 percent of those without employees. When comparing retirement to the pre-retirement years, retirees from self-employment with employees have slightly higher shares at the extremes of “better” and “not as good” than do the former self-employed without employees (52 percent versus 47 percent and 18 percent versus 15 percent).

Table 3.6—Reasons for Retirement by Pre-Retirement Employment Class and Self-Employment Category
(percent distribution)

Characteristic	All workers		Self-employed			
			By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Poor health						
Very important	21.6	29.9	32.1	30.1	29.0	31.6
Moderately important	5.9	8.6	8.9	7.7	9.3	8.2
Somewhat important	6.6	5.9	5.9	5.1	5.9	5.9
Not important at all	65.9	55.6	53.2	57.1	55.9	54.4
Want to do other things						
Very important	33.6	29.0	28.3	34.2	28.3	31.8
Moderately important	19.5	19.4	18.1	17.9	19.0	18.8
Somewhat important	12.9	13.9	16.0	11.7	15.5	11.8
Not important at all	34.0	37.8	37.6	36.2	37.2	37.7
Did not like work						
Very important	6.1	5.5	4.7	8.2	5.5	4.7
Moderately important	8.2	8.0	7.6	8.7	7.6	8.2
Somewhat important	8.5	6.1	5.9	6.6	6.2	5.3
Not important at all	77.1	80.4	81.8	76.5	80.6	81.8
More time with family						
Very important	39.3	30.8	28.7	35.2	33.8	26.3
Moderately important	17.6	18.3	17.7	20.4	17.6	21.1
Somewhat important	11.3	11.4	13.1	9.2	11.7	9.9
Not important at all	31.8	39.5	40.5	35.2	36.9	42.7
Sample size (N)	2,673	491	237	196	290	171

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who are observed to retire between waves. Class of employment is based on job held prior to retirement. Columns may not add to totals due to rounding. Among retired workers, there are 100 missing observations due to missing self-employment information. Self-employed without employees may either work alone or only with their spouse. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

The importance of various reasons for retirement is ranked for the different groups of retirees in Table 3.6. Overall, the most important reasons for retiring among the self-employed

are poor health, a desire to do other things, and having more time with family—each item is rated as “very important” by around 30 percent of respondents. Only 6 percent of retirees from self-employment indicated that not liking their work was a very important reason. Wage and salary workers put less weight on poor health as a very important reason for retirement (22 percent) while wanting to do other things (34 percent) and having more time with family (39 percent) rate these factors as very important. Among the four subgroups of the former self-employed, those retirees who had been self-employed at or after age 50 place the strongest emphasis on wanting to do other things and having more time with family as explanations for retirement (34 percent and 35 percent, respectively). Those retired from self-employment with employees are less likely to rate having more time with the family as very important compared with those who retired from self-employment without employees (26 percent versus 34 percent, respectively).

Tables 3.7 and 3.8 show the relative importance retirees from different categories of jobs place on factors that make retirement an attractive or unattractive experience.¹² As with those contemplating retirement, those who retired from self-employment place more weight on positive factors such as being one’s own boss (i.e., having control over one’s time) compared with former wage and salary workers (46 percent versus 32 percent) (Table 3.7). The desire to take it easy or to travel is not rated as strongly by the former self-employed compared with those who retired from wage and salary work. Among negative factors (Table 3.8), the differences between former self-employed and former wage and salary workers are not as sharp although retired self-employed workers do tend to worry more about each of the factors tabulated (not being useful, illness or disability, and not enough income). Retired wage and salary workers consistently have the highest portion (at least 50 percent) who respond that they are not worried at all about these factors.

¹² These questions are asked only in certain waves so the sample size is reduced.

Table 3.7—Experience with Why Retirement Is Attractive by Pre-Retirement Employment Class and Self-Employment Category
(percent distribution)

Characteristic	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Be own boss						
Very important	31.9	46.2	51.2	39.4	45.8	43.1
Moderately important	18.5	18.7	18.1	19.2	18.3	20.0
Somewhat important	12.1	6.2	3.9	9.6	7.5	4.6
Not important at all	37.6	28.9	26.8	31.9	28.3	32.3
Take it easy						
Very important	43.6	38.8	38.3	37.2	42.2	36.9
Moderately important	22.7	26.0	28.1	23.4	25.6	23.1
Somewhat important	15.2	10.6	12.5	8.5	9.9	12.3
Not important at all	18.5	24.7	21.1	30.9	22.3	27.7
Chance to travel						
Very important	38.6	34.8	36.7	31.9	34.7	40.0
Moderately important	20.9	20.7	19.5	21.3	19.8	23.1
Somewhat important	12.7	13.7	15.6	11.7	13.2	15.4
Not important at all	27.7	30.8	28.1	35.1	32.2	21.5
Sample size (N)	1,218	225	127	94	120	65

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who are observed to retire between waves. Question is only asked of respondents in the wave in which they first report being retired. Class of employment is based on job held prior to retirement. Columns may not add to totals due to rounding. Among retired workers, there are 100 missing observations due to missing self-employment information. Self-employed without employees may either work alone or only with their spouse. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

Looking across different groups of former self-employed workers, the sample sizes are small enough that small differences between groups may reflect sampling error rather than true differences. Among the larger differences, those who became self-employed at or after age 50 are less likely to report being one's own boss as a "very important" factor (39 percent) (Table 3.7). Their counterparts—those who became self-employed before age 50—place more weight on this factor (just over 50 percent rate it as very important). Those with employees place relatively more weight on the chance to travel but less weight on being able to take it easy than those without employees. Among potential negative factors, those who were self-employed at or after age 50 place the greatest weight on all three factors as being very important, namely not being useful, not having enough income, and illness or disability (see Table 3.8).

Table 3.8—Experience with Why Retirement Is Unattractive by Pre-Retirement Employment Class and Self-Employment Category
(percent distribution)

Characteristic	All workers		Self-employed			
	Wage and salary	Self-employed	By age of self-employment		By nature of self-employment	
			Before age 50	At or after age 50	Without employees	With employees
Not being useful						
Worry a lot	15.9	18.9	16.4	23.4	18.2	20.0
Worry somewhat	14.4	21.2	19.5	23.4	22.3	18.5
Worry a little	11.6	13.2	10.2	18.1	14.1	13.9
Worry not at all	58.1	46.7	53.9	35.1	45.5	47.7
Illness or disability						
Worry a lot	21.5	24.7	24.2	26.6	24.0	23.1
Worry somewhat	12.5	17.6	17.2	17.0	19.0	16.9
Worry a little	8.5	9.3	7.0	11.7	9.1	9.2
Worry not at all	57.5	48.5	51.6	44.7	47.9	50.8
Not enough income						
Worry a lot	22.3	26.4	23.4	30.9	27.3	21.5
Worry somewhat	16.7	15.4	13.3	18.1	14.9	18.5
Worry a little	11.6	14.5	18.0	9.6	14.1	13.9
Worry not at all	49.5	43.6	45.3	41.5	43.8	46.2
Sample size (N)	1,218	225	127	94	120	65

SOURCE: Authors' calculations based on the 1992-2002 HRS.

NOTE: Sample is individuals who are observed to retire between waves. Question is only asked of respondents in the wave in which they first report being retired. Class of employment is based on job held prior to retirement. Columns may not add to totals due to rounding. Among retired workers, there are 100 missing observations due to missing self-employment information. Self-employed without employees may either work alone or only with their spouse. Self-employed with employees may also work with their spouse in addition to non-spousal employees.

Summary of Transition Plans

The HRS data provide some insight into differences in labor market transition plans between the self-employed at older ages and their wage and salary counterparts, as well as for the subgroups of self-employed that we are focused on. The data also reveal aspects of how subsequent retirement is viewed by those who retired from self-employment versus wage and salary work, and within subgroups of the formerly self-employed. Overall, among workers age 51 and above, the self-employed have somewhat more favorable ratings than their wage and salary counterparts in terms of enjoying their work and the difficulty or stress involved. At the same time, they are also a group that shows a greater tendency to want to reduce their hours as they age—perhaps with a more graduated transition to retirement rather than an abrupt change. Indeed, the self-employed are more likely to say that they will be working at age 62 or 65 compared with wage and salary workers. This is despite the fact that they expect to have more

than twice as much retirement wealth. The self-employed are also more optimistic about the future of the stock market and less worried about retirement income.

When thinking about retirement, the self-employed place the most weight on being one's own boss, having time with a spouse, and the lack of pressure. Being one's own boss is much less important for wage and salary workers who instead rate having time with their spouse as most important. The self-employed feel less strongly about the potentially unfavorable aspects of retirement, but not having enough income, dealing with cost of living increases, and being ill or disabled are of concern—factors that also worry their wage and salary counterparts. Far fewer individuals in either class of employment worry a lot about being bored or missing co-workers.

In terms of the actual retirement experience, those who retired from self-employment generally find retirement “very” or “moderately” satisfying. Just one in 10 views retirement as not satisfying at all. Retirees from wage and salary positions have very similar ratings. The most important reasons given for retirement out of self-employment are poor health, a desire to do other things, and having more time with family. Only 5 percent of retirees from self-employment say an important reason for retiring is not liking their job. More respondents who have retired from self-employment mention being one's own boss as a very important aspect compared to retirees from wage and salary jobs. No more than one in four retirees from self-employment worries a lot about not being useful, illness or disability, or not having enough income. These assessments are quite similar for retirees from the wage and salary sector.

Although there is some variation across the subgroups of self-employed workers and retirees from self-employment that we consider, by and large the difference in future plans, retirement expectations, and retirement experiences are not that stark, especially considering the small sample sizes for some of the comparison groups. As before, to the extent that there are differences, those who became self-employed before age 50 and the self-employed with employees tend to be more similar than those self-employed at or after age 50 and those without employees. For instance, these two groups are the most likely to say their job is more difficult now and stressful, although they are no different from the other self-employment subgroups in the share that agree they like their work (93 percent). At the same time, both groups are more likely to want to reduce their hours as they age and place a higher probability on working at age 62 or 65. We expect that workers who plan to work to older ages have less retirement wealth than those who plan to retire early although we find that the self-employed with employees and those who became self-employed before age 50 have the highest expected retirement wealth.

The findings in this chapter provide a perspective on labor market transition plans and expectations that may (or may not) correspond to what individuals actually do. Thus, in the next chapter we examine actual patterns of employment transitions and the factors that drive those changes.

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4. LABOR FORCE TRANSITIONS AMONG OLDER WORKERS TO AND FROM SELF-EMPLOYMENT

The retirement literature has recognized that labor market transitions at the end of workers' careers can be complex, with movement between jobs, between full- and part-time status, between sectors, and in and out of retirement (Quinn, 1980; Ruhm, 1990, 1992; Peracchi and Welch, 1994; Doeringer, 1995). In this chapter we focus on the labor market transitions that older workers make to and from self-employment and to or from other work statuses. Our goal is to understand the types of transitions made and the factors associated with the changes in labor force status and class of employment. For example, is the movement into self-employment driven by poor health or unemployment? Do workers "un-retire" into self-employment? Do the drivers of movements into and out of self-employment vary with the nature of the self-employment work, such as those without and with employees in their business? Do these circumstances differ for transitions between 2000 and 2002 when the economy worsened compared with earlier during the 1990s boom? We investigate these questions through both descriptive and regression analysis of the HRS data, relying on the longitudinal aspect of the data to examine changes over the six waves from 1992 to 2002.

Labor Force Transitions

Our analysis examines the labor force transitions of all HRS respondents from one wave to the next (approximately every two years) for six waves (i.e., five transitions). A respondent is categorized as being in one of four labor force statuses: working, retired, unemployed or disabled, or not working for other reasons (e.g., on leave). Respondents who state that they are working for pay are categorized into one of three types of workers based on their response to whether they are self-employed, whether their spouse works for the business, and the number of employees in the business: self-employed without employees (excluding a spouse), self-employed with employees (other than the spouse), and wage and salary workers.

To determine whether an individual is retired, unemployed, disabled or not in the labor force, we use responses from several questions. If respondents report "not working for pay" and in the self-reports mention retirement, they are classified as "retired." If the respondents report "not working for pay" and are looking for either a part-time or full-time job, the respondents are classified as "unemployed." If respondents are "not working for pay" and do not fall under our definition of retired or unemployed, and they report that they are disabled, the respondents are classified as "disabled." Otherwise if respondents are not working and not looking for work, and

no mention is made of retirement or disability, the respondents are classified as “not working—other.” In some cases, we group those classified as retired, unemployed, disabled, or other as “not working” in contrast to those working either in wage and salary jobs or in self-employment.

Table 4.1 shows the labor market transitions for all respondents based on their initial status at time t into one of six statuses at time $t+2$: (1) self-employed without employees, (2) self-employed with employees, (3) wage and salary employment, (4) retired, (5) unemployed or disabled, or (6) (not working) other.¹³ The row totals sum to 100 percent and show the percentage of those in a given status at time $t+2$ for a given status at time t .

Workers who are self-employed without employees are less likely to be in the same status 2 years later compared with self-employed workers who have employees (59 percent versus 66 percent). Self-employed workers without employees are more likely to retire (15 percent versus 9 percent) and more likely to be disabled, unemployed, or not working for other reasons than self-employed workers with employees. Self-employed workers without employees are slightly less likely to have employees two years later than self-employed workers with employees are to have no employees two years later. Both types of self-employed groups are more likely to move into wage work than wage and salary workers are likely to move into self-employment.¹⁴ Indeed, 80 percent of wage and salary workers remain in wage and salary employment 2 years later. Among wage and salary workers who do transition to self-employment (2.2 percent), 64 percent become self-employed without employees (1.4 percent out of 2.2 percent). Approximately 6 percent of workers “unretire”—that is, they were retired at time t and are working for pay at time $t+2$. About one-third of these “unretire” into self-employment, and among those who “unretire” into self-employment, 75 percent are self-employed without employees. Of the workers who are unemployed or disabled at time t , approximately 18 percent of those who are working 2 years later are self-employed at time $t+2$, the majority without employees.

¹³ Those classified as unemployed or disabled are combined into one category under “not working” because the sample sizes are too small to examine either group separately.

¹⁴ Although the rate at which wage and salary workers move into self-employment is just over 2 percent over 2 years, given the large base of workers in this class of employment (more than 27,000), the absolute number that move into self-employment over a 2-year period exceeds the absolute number of self-employed that move into wage and salary work over the same period (where the base is smaller but the transition rate is higher).

Table 4.1—Changes in Labor Force Status, Employment Class, and Self-Employment Category
(percent)

Employment status at time t	Employment status at time $t+2$					
	Self-employed			Not working		
	Without employees	With employees	Wage and salary	Retired	Unemployed or disabled	Other
Self-employed						
Without employees (N=3,371)	59.0	11.6	8.8	15.3	1.6	3.7
With employees (N=2,728)	14.0	66.2	7.2	9.4	1.0	2.2
Wage and salary (N=27,230)	1.4	0.8	80.0	13.7	2.4	1.8
Not working						
Retired (N=22,761)	1.5	0.4	3.8	82.7	4.3	7.2
Unemployed or disabled (N=3,371)	2.1	0.8	13.5	34.2	39.5	10.0
Out of the labor force (N=7,302)	1.8	0.8	5.9	20.6	5.1	65.8

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTES: Sample is respondents age 51 and older. A total of 474 self-employed workers are missing information on number of employees, 120 workers had missing information on whether the type of work is in self-employment.

Regression Analysis of Labor Force Transitions

In the remainder of this chapter, we analyze various labor force transitions into and from self-employment—labor market behavior that has generally not been analyzed in a multivariate framework in prior work.¹⁵ We begin by examining transitions from self-employment to wage work and to not working (i.e., either retired, unemployed, disabled, or other). Our main focus is on job characteristics and their impact on these transitions. We also analyze transitions back into the labor force from unemployment or disability statuses, and separately from retirement. We are particularly interested in understanding the factors that drive older workers back into the labor force as self-employed workers. It may be the case that wealthy retirees with professional skills that easily translate into independent contract work return to work as self-employed or, in contrast, it may be that unskilled workers with few options in the wage and salary sector return to work as self-employed. Finally, we study transitions from wage and salary work into self-employment. Our primary focus is studying how pension wealth may be used to start a business at older ages. In addition, we study measures of risk aversion and its relationship to movements to self-employment.¹⁶

¹⁵ See Zissimopoulos and Karoly (forthcoming) for related prior work although that study did not examine differences in labor market transitions for subgroups of the self-employed differentiated by the presence of employees.

¹⁶ Transitions from wage work to self-employment are also analyzed in Karoly and Zissimopoulos (2004a) and Zissimopoulos and Karoly (forthcoming).

Our descriptive analysis revealed interesting differences between self-employed workers with and without employees. Thus, in the multivariate analysis, we run separate models of labor force transitions of the self-employed by type of self-employed worker: with employees or without employees. Our main focus in the multivariate analysis is an examination of how the job characteristics of self-employed workers affect their labor force transitions to wage work and transitions to not working. In the models we also include other factors likely to influence labor force transitions: wealth, risk aversion, disability, and demographic variables.

We model labor force transitions in the general form:

$$Y_i^* = \beta_0 + \beta_1 B_i + \beta_2 D_i + \beta_3 W_i + \beta_4 R_i + \beta_5 H_i + \beta_6 T_i + u_i \quad (4.1)$$

where Y_i^* is the “propensity” for person i to transition from a given status at time t to a given status at time $t+2$ (one survey wave later or approximately two years later), B is a vector of business and job characteristics, D is a vector of demographic characteristics, W is a vector measuring wealth, R is a vector measuring risk aversion, H is work-related health status, T is a time trend, and u_i is the model error term. We do not observe Y_i^* ; instead we observe:

$$\begin{aligned} Y_i &= 1 && \text{if } Y_i^* > 0 \\ Y_i &= 0 && \text{otherwise.} \end{aligned}$$

We estimate this model using a probit model, and errors are assumed to follow a normal distribution. We examine transitions for up to 6 waves (5 transitions). Standard errors of the model estimates are adjusted for repeated observations on the same individuals. Statistical tests of significance are performed for continuous variables or single dummy variables (against an omitted group) using a t -test, while a chi-squared statistic is used to test the joint significance of categorical variables (i.e., a variable with two or more dummies and an omitted group). The psuedo- R^2 is reported for each regression model as a measure of goodness-of-fit.

The main focus of the regression analysis is on the vector of business and job characteristics. The vector B includes the number of employees in the business (categories 1 to 5, 6 to 25, and 26 and over, where the first group serves as the omitted category or reference group); tenure in the job (measured in years); whether the business owner receives profits only, profits and salary, or salary only (reference group); the wage rate on the job (calculated from the amount of earnings, hours per week, and weeks per year that the respondent works) categorized into four quartiles; an indicator for whether the spouse works in the business; an indicator for whether the spouse receives a salary; 6 occupational groups; 11 industry groups; an indicator for whether the self-employed worker has a pension; and an indicator for whether the worker has health insurance (and indicators for type of insurance).

Several demographic variables are included in the vector D measured as of time t : sex; an indicator for whether the respondent is married; sample birth cohort; and age categories of 51 to 55 (reference group), 56 to 60, 61 to 65, and 66 and older. Indicators for the highest educational degree achieved include: none; high school or GED (reference group); bachelor's degree; master's degree; and Ph.D., J.D., M.D. degrees.

The vector W contains a measure of total property and financial wealth: the sum of the net (of liabilities) value of an owner-occupied home; real estate and business assets; vehicles; and assets held in the form of checking accounts, savings accounts, stocks, bonds, and other financial assets. Total property and financial wealth enters the model non-linearly in quartiles with the first wealth quartile serving as the reference group. Quartiles are defined with respect to the sample being studied as of time t . Also in the vector W is an indicator for whether the respondent ever received a lump sum payment from any of four sources: insurance, pension, inheritance, or another source. Likewise, there is a separate indicator for whether the respondent received the lump sum payment since the last wave.

Two measures of risk aversion (R) are used. The first measure is an indicator for being the most and second-most risk averse in a four-point scale of risk aversion. The decision to categorize a worker as being risk averse is based on a series of questions that ask the respondent to choose between pairs of jobs where one job guarantees current family income and the other offers the chance to increase income (but carries the risk of loss of income). The other measure of risk aversion we use is whether the worker's household includes any risky financial assets (namely stocks, bonds, or IRA/Keogh accounts, the latter included because of the likelihood they are composed of stocks and bonds).¹⁷

Finally we include a measure of disability (H), which is an indicator for whether an individual's health status limits the work that he or she can perform. We also include indicators for the base year, t , to control for any time effects due to changes in the aggregate economy (1992 is the reference year). For example, we can determine if the patterns of transitions vary between the last two waves (2000 to 2002) when the economy experienced a downturn, compared with earlier waves when the economy was stronger. A number of other indicator variables are also developed for missing values. We do not report the results for these missing indicators as they each affect less than 1 percent of the sample.

¹⁷ As we discuss in the next chapter, the HRS does not allow us to differentiate between the riskiest financial assets in terms of stock and stock funds, bonds and bond funds, or the composition of IRAs and Keogh accounts.

Transitions from Self-Employment

Table 4.2 shows the marginal effects for four types of transitions. The first column shows the results for the probability of moving to wage and salary work relative to remaining in self-employment for self-employed workers without employees. The second column shows the results for the same transitions but now for the sample of self-employed workers with employees. The final two columns show the results for the probability of moving from self-employment to not working at time $t+2$ (i.e., the worker reports not working for pay at time $t+2$), conditional on self-employment without employees (column 3) and with employees (column 4) at time t . Marginal effects are calculated as the change in the probability of a given outcome for a unit change in the covariate. In the case of dummy variables, the change is from a value of 0 to a value of 1. The marginal effects in the tables, multiplied by 100, can be interpreted as the percentage point change in the probability of a given outcome for a unit change in the covariate. The discussion of results below focuses on statistically significant effects of job and business characteristics and briefly comments on demographic, wealth, risk aversion, and health effects.

Transitions from Self-Employment to Wage Work: Job Characteristics

As seen in the first two columns of Table 4.2, an increase in one year of the length of tenure in the current job decreases the probability of moving to wage work by 0.2 percentage points for both types of self-employed workers (i.e., those without and with employees). Because the baseline probabilities for the two groups are different, this translates into a smaller change relative to the baseline probability for self-employed workers without employees (a 0.2 percentage point change with a baseline probability of 11 percent shown at the bottom of the table) than with employees (a 0.2 percentage point change with a baseline probability of 8.2 percent).

In terms of how labor earnings are received, for both types of self-employed workers (those with and without employees), relative to receiving a salary only, receiving profits only is associated with a negative probability of moving to wage work, and receiving profits and salary is associated with a positive probability of moving to wage work. For self-employed workers, relative to receiving a salary only, receiving profits decreases the probability of moving to wage work by 5 percentage points (no employees) and 3.7 percentage points (with employees). Receiving both profits and salary increases the baseline probability by 3.5 percentage points for self-employed workers without employees relative to receiving salary only. The effect is in the same direction for workers with employees, but it is not statistically significant. The HRS survey does not ask self-employed workers if the business is incorporated or unincorporated. The self-employed who receive a salary only may be more likely to work in an incorporated business and those who receive profits only may be more likely to work in an unincorporated business. If this is so, our results suggest that workers in incorporated businesses may be more likely to move to wage work than workers in unincorporated businesses. It may be the case that unobserved job characteristics of work in incorporated businesses closely mimic those of wage and salary work and thus facilitate this transition.

Table 4.2—Determinants of Labor Force Transitions from Self-Employment to Wage and Salary Work or Not Working
(marginal effects from probit models)

Covariate	Probability of transitioning from self-employed at t to wage and salary at $t+2$		Probability of transitioning from self-employed at t to not working at $t+2$	
	Self-employed without employees	Self-employed with employees	Self-employed without employees	Self-employed with employees
	(1)	(2)	(3)	(4)
Job characteristics				
Number of employees (<6)				
6-25		-0.006		-0.028*
26 and above		0.018		-0.003
Tenure (years)	-0.002**	-0.002**	-0.002**	-0.001**
Compensation (salary only)	††	†	†	††
Profits only	-0.050*	-0.037**	-0.054**	-0.005
Salary and profits	0.035*	0.023	0.011	-0.052**
Wage rate quartile (Quartile 1)			††	†
Quartile 2	-0.001	-0.021	-0.088*	-0.037
Quartile 3	0.005	-0.010	-0.150**	-0.075*
Quartile 4	0.005	-0.019	-0.133**	-0.043
Spouse works in business	-0.036**	0.083	-0.046**	0.140
Spouse receives salary	0.027	-0.001	-0.029	-0.027
Occupation (professional and managerial)				
Sales	-0.023	0.004	-0.020	0.007
Clerical/administrative support	0.011	0.039	0.062	0.072*
Services	0.035	0.004	0.064	0.002
Farming/forestry/fisheries	0.036	0.163**	0.029	-0.016
Mechanic, construction, operator	-0.020	0.009	0.017	0.002
Industry (agriculture)				†
Mining and construction	0.063	0.170*	0.057	0.000
Manufacturing	0.082	0.132*	0.017	-0.035
Transportation	0.037	0.185*	-0.012	-0.013
Wholesale and retail trade	0.038	0.162*	0.021	-0.018
Finance, insurance, and real estate	0.043	0.153*	-0.022	-0.066
Business and repair services	0.049	0.126	-0.020	-0.032
Personal services	0.005	0.134	-0.011	-0.043
Entertainment and recreation	0.009	0.165	-0.064	0.087
Professional and related services	0.018	0.172*	-0.014	-0.040
Public administration	0.244	0.194	0.024	0.000
Has pension on current job	-0.010	0.044**	0.010	0.006

(Continued)

Table 4.2—Continued

Covariate	Probability of transitioning from self-employed at t to wage and salary at $t+2$		Probability of transitioning from self-employed at t to not working at $t+2$	
	Self-employed without employees	Self-employed with employees	Self-employed without employees	Self-employed with employees
	(1)	(2)	(3)	(4)
Demographics and other covariates				
Male	0.010	-0.010	-0.063**	-0.071**
Married	0.017	-0.018	0.044*	-0.004
Cohort	0.028	0.006	-0.029	0.023
Age group (51-55)			††	††
56-60	0.000	-0.011	0.012	0.068**
61-65	0.018	0.014	0.120**	0.102**
66 and above	-0.032	0.020	0.092*	0.128**
Education level (high school degree)				
No degree	-0.027	-0.012	0.041**	0.032
Bachelor's degree	0.003	-0.010	-0.029	-0.022
Master's/M.B.A. degree	0.020	-0.010	-0.006	-0.027
Ph.D./J.D./M.D./ degree	-0.012	-0.025	-0.045	-0.017
Wealth quartile (Quartile 1)		††	†	†
Quartile 2	-0.017	-0.035*	-0.022	0.008
Quartile 3	-0.026	-0.043**	0.027	0.011
Quartile 4	-0.074**	-0.045**	0.049	0.020
Ever received lump sum from various sources	-0.017	0.012	-0.020	-0.018
Received lump sum since last wave	0.019	-0.019	-0.014	0.020
Least risk averse	0.013	-0.006	0.014	-0.031
Holds riskier financial assets	-0.021	-0.002	-0.016	-0.003
Health limits work	-0.004	0.016	0.084**	0.074**
Has health insurance	0.024	-0.007	0.003	0.004
Has government-provided health insurance	0.005	0.013	0.058	0.066*
Has employer-provided health insurance	0.002	0.013	0.002	-0.014
Has other health insurance	-0.022	0.001	-0.023	-0.016
Survey wave at t (Wave 1 = 1992)				
Wave 2 (1994)	0.016	0.018	0.052	0.002
Wave 3 (1996)	0.010	0.010	0.036	0.036
Wave 4 (1998)	-0.002	0.009	0.040	0.011
Wave 5 (2000)	-0.004	0.002	0.023	0.024
Sample size (N)	2,708	2,398	3,400	2,710
Pseudo-R ²	0.077	0.071	0.100	0.132
Baseline probability	0.110	0.082	0.220	0.131

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTES: Sample for model 1 is workers who are self-employed without employees at time t and working at time $t+2$; sample for model 2 is workers who are self-employed with employees at time t and working at time $t+2$; sample for model 3 is workers who are self-employed without employees at time t and not working at time $t+2$; sample for model 4 is workers who are self-employed with employees at time t and not working at time $t+2$. Statistical significance determined using Huber standard errors. Statistically significant at the **1 percent level, *5 percent level or jointly significant at the ††1 percent level, †5 percent level.

The self-employed who have a spouse working in the business are 3.6 percentage points less likely to move into wage and salary work, but only when there are no other employees. No other job characteristics are statistically significant for self-employed workers without employees, but several additional occupation and industry groups may explain transitions to wage work for self-employed workers with employees. Workers self-employed as farmers with employees are more likely to transition to wage work than professionals or managers (16 percentage points). Several industry groups (relative to agriculture industry) have a positive and statistically significant impact on transitions to wage work for self-employed workers with employees: mining and construction; manufacturing; transportation; wholesale and retail trade; finance, insurance, and real estate; and professional and related services. Having a pension on the current job increases the probability of transitioning to wage work by 4 percentage points. Workers with pension plans may be more likely to be self-employed in incorporated businesses and work in these types of businesses may more closely mimic wage and salary work than work in an unincorporated business.

Transitions from Self-Employment to Wage Work: Demographics, Wealth, Risk Aversion, and Health

None of the demographic characteristics in Table 4.2 are statistically related to transitions from self-employment to wage and salary employment. Likewise, there is no effect of poor health or risk aversion on transitions to wage and salary employment. For self-employed workers with and without employees and regardless of when they became self-employed, higher wealth is associated with a lower probability of transitioning to wage work. For workers self-employed without employees, being in the fourth quartile of the wealth distribution (among self-employed workers) decreases the probability of transitioning to wage work at time $t+2$ by 7.4 percentage points. For those with employees, the negative effect of wealth on the probability of moving to wage and salary work gets somewhat larger in moving from the second wealth quartile to the third and fourth quartiles. In the fourth quartile, relative to the first, the effect is a 4.5 percentage point decrease in the probability of transitioning to wage employment.

Transitions from Self-Employment to No Work: Job Characteristics

As seen in the last column of Table 4.2, the effect of the number of employees on movements to not working is non-linear: self-employed workers with 6 to 25 employees are 2.8 percentage points less likely to be not working at time $t+2$ than workers with less than six employees—but there is no difference for workers with more than 25 employees. For both types of self-employed workers, tenure decreases the probability of moving from self-employment to not working (see the last two columns of Table 4.2). An increase in 1 year of the length of tenure in the current job decreases the probability of not working at time $t+2$ by 0.2 and 0.1 percentage points for self-employed workers without and with employees, respectively. These are relatively small changes given the baseline probability of 22 and 13 percent for self-employed workers without and with employees, respectively, to transition to not working.

In terms of how labor earnings are received, receiving compensation through profits only (relative to receiving only a salary) is associated with a 5.4 percentage point decrease in the probability of not working for self-employed workers without employees, and has no statistically

significant effect on workers with employees. Receiving both profits and salary, relative to receiving salary only, has no statistically different effect on not working for the self-employed without employees but decreases the probability of not working by 5.2 percentage points for self-employed workers with employees. For both types of self-employment, the wage level also affects transitions to not working.

In general, higher wage rates are associated with a decrease in the probability of not working at time $t+2$ for both groups of self-employed workers. The effect is larger for workers without employees than for those with employees. For example, having a wage rate in the third quartile relative to the first reduces the probability of not working by 15 percentage points or a 74 percent decrease from the baseline probability for the self-employed without employees and 7.5 percentage points or 57 percent for the self-employed with employees. This is consistent with what we know from the retirement literature based on wage and salary workers, namely that a higher opportunity cost of time, measured by the wage rate, is associated with lower retirement rates.

Among the remaining job-related variables, only a few are significant in the models of transitioning to not working. A spouse working in the business decreases the probability of not working at time $t+2$ for self-employed workers without employees by 4.6 percentage points. One occupation, the clerical occupation group, is associated with an increase in the probability of not working two years later for self-employed workers with employees. For this group, being in a clerical occupation increases the probability of not working by 7.2 percentage points relative to being in a professional or managerial occupation. Finally, having government health insurance raises the likelihood that a self-employed worker with employees will transition to not working. To the extent that the outcome of not working includes formal retirement, it is notable that having a pension (holding wealth constant) has no effect on the probability of moving from self-employment to no work for either group of self-employed workers.

Transitions from Self-Employment to No Work: Demographics, Wealth, Risk Aversion, and Health

Of the demographic variables shown in Table 4.2, being married and having no degree increase the probability that the self-employed without employees are not working at time $t+2$. For self-employed workers without and with employees, men are less likely than women to be not working at time $t+2$, while those in the older age groups are more likely to be not working at time $t+2$. Although there is no statistically significant relationship between wealth and the decision to not work two years later for the self-employed with employees, we test the joint significance of wealth and find that wealth is significantly related to such transitions for the self-employed without employees. This former result is surprising given the general finding in the retirement literature that higher wealth is associated with a higher probability of leaving employment. Consistent with this literature is the result that disability, in the form of a work-limiting health condition, is associated with an increase in the probability of self-employed workers without and with employees transitioning to not working at time $t+2$ (increases of 8.4 percentage points and 7.4 percentage points, respectively).

Transitions from Not Working to Self-Employment

Table 4.3 shows the results from the models of movements from not working to working in self-employment relative to movements from not working to working in the wage and salary sector. That is, all workers in the samples are not working at time t and are working at time $t+2$. Thus, we are modeling the effect of covariates on the class of worker (self-employed versus wage and salary), conditional on returning to work. We follow the general model as described by equation (4.1) but instead of current job and business characteristics, we include the characteristics of the prior job (i.e., the worker's last job before entering the status of not working). The first column of the table reports results for the sample that is unemployed or disabled at time t and the second column reports results for the sample that is retired at time t . We are particularly interested in understanding the factors that drive older individuals back into the labor force as self-employed workers compared to wage and salary workers. Due to the small sample sizes, we cannot analyze the decision to become self-employed with employees and without employees separately, but we know from Table 4.1 that the majority of respondents not working who return to the labor force as self-employed workers do so without employees.

Transitions from Not Working to Self-Employment: Job Characteristics

As seen in Table 4.3, respondents not working at time t were much more likely to be self-employed at time $t+2$ than wage and salary workers if their previous job was in the self-employment sector. For individuals who were classified as unemployed or disabled at time t , there is a 33 percentage point increase in the likelihood of being self-employed instead of a wage and salary worker, and for those classified as retired at time t , there is a 39 percentage point increase. No occupation or industry groups have a statistically significant effect on the class of employment given movements back to work among those unemployed or disabled. The sales or farm occupations, relative to work as a professional or manager in a prior job, have a negative effect on "unretirement" into self-employment rather than wage and salary employment. Compared to those in agriculture, those in the transportation sector are also less likely to become self-employed compared to wage and salary employment.

Health insurance is generally positively related to movements back to work. For those unemployed or disabled, relative to having no insurance, having publicly provided health insurance increases the probability of transitioning to self-employment ($0.209 - 0.155 = 0.054$). In contrast, having health insurance through a former employer has no effect on these transitions. Other health insurance (not provided through the government or through a former employer) also increases the probability of transitioning to self-employment ($0.209 - 0.060 = 0.149$). The positive effect of having health insurance, relative to no insurance, on movements into self-

Table 4.3—Determinants of Labor Force Transitions from Not Working or Retired to Working in Self-Employment Versus Wage and Salary Employment
(marginal effects from probit models)

Covariate	Probability of transitioning from unemployed/ disabled at t to self-employed at $t+2$	Probability of transitioning from retired at t to self-employed at $t+2$
	(1)	(2)
<u>Job characteristics</u>		
Prior job: self-employed	0.328 **	0.385 **
Prior job: full time	0.062	- 0.090
Prior job: pension coverage	- 0.014	- 0.030
Prior job: hours/week	0.001	- 0.002
Prior job: weeks/year	0.001	0.003
Prior job: tenure	- 0.001	0.003
Prior job: occupation (professional and managerial)		
Sales	- 0.072	- 0.151 *
Clerical/administrative support	- 0.045	- 0.045
Services	- 0.020	- 0.086
Farming/forestry/fisheries	- 0.024	- 0.239 *
Mechanic, construction, operator	0.085	0.020
Armed Forces	N/A	- 0.133
Prior job: industry (agriculture)		†
Mining and construction	- 0.054	- 0.003
Manufacturing	0.044	- 0.161
Transportation	0.079	- 0.239 *
Wholesale and retail trade	0.102	- 0.126
Finance, insurance, and real estate	0.072	- 0.145
Business and repair services	0.029	- 0.079
Personal services	0.045	- 0.001
Entertainment and recreation	0.107	- 0.194
Professional and related services	0.027	- 0.195
Public administration	- 0.125	- 0.129
<u>Demographics and other covariates</u>		
Male	- 0.049	0.071 *
Married	0.044	0.081 *
Cohort	0.117 **	- 0.082 *
Age group (51-55)		
56-60	0.077 *	- 0.046
61-65	0.078	- 0.109 *
66 and above	0.281 *	- 0.072
Education level (high school degree)		†
No degree	0.046	0.081 *
Bachelor's degree	0.078	0.103 *
Masters degree	- 0.055	0.132 *
J.D./M.D./Ph.D. degree	0.332	0.055

(Continued)

Table 4.3—Continued

Covariate	Probability of transitioning from unemployed or disabled at t to self-employed at $t+2$	Probability of transitioning from retired at t to self-employed at $t+2$
	(1)	(2)
Wealth quartile (Quartile 1)		††
Quartile 2	0.059	- 0.001
Quartile 3	0.070	0.106 *
Quartile 4	0.126 **	0.240 **
Ever received lump sum from various sources	0.081 *	- 0.049
Received lump sum since last wave	- 0.048	0.098
Least risk averse	- 0.017	0.068
Holds riskier financial assets	- 0.055	- 0.053
Health limits work	0.023	0.030
Household income quartile (Quartile 1)		
Quartile 2	- 0.023	0.006
Quartile 3	- 0.002	0.004
Quartile 4	0.093	- 0.042
Has health insurance	0.209 *	0.001
Has government-provided health insurance	- 0.155 *	- 0.065
Has (former) employer-provided health insurance	- 0.209 **	- 0.075
Has other insurance	- 0.060	- 0.001
Survey wave at t (Wave 1=1992)		†
Wave 2 (1994)	- 0.050	- 0.079
Wave 3 (1996)	- 0.065	- 0.114 *
Wave 4 (1998)	- 0.138 **	- 0.164 **
Wave 5 (2000)	- 0.110 *	- 0.085
Sample size (N)	1,186	1,402
Pseudo-R ²	0.139	0.180
Baseline probability	0.260	0.350

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTES: Sample for model 1 is workers who are unemployed or disabled at time t and working in $t+2$; for model 2 is workers who are retired at time t and working in $t+2$. Using Huber standard errors. Statistically significant at the **1 percent level, *5 percent level or jointly significant at the ††1 percent, †5 percent level.

employment may suggest that it is the least disadvantaged among the self-employed and disabled who make this transition.

Transitions from Not Working to Self-Employment: Demographics, Wealth, Risk Aversion, and Health

Among the demographic characteristics included in Table 4.3, those who are male and those who are married are more likely to move from being retired to being self-employed instead of to the wage and salary sector. For those moving back to work from unemployment or disability, age and cohort are positively related to movements to self-employment over wage and salary work, while the reverse is true for those coming out of retirement. In addition, education is associated with moving from retirement to self-employment over wage and salary

employment, although the relationship is non-linear. Relative to having a high school diploma, those with no degree, and those with a bachelor's or master's degree are all more likely to transition to self-employment over wage and salary work.

Respondents with wealth in the fourth quartile of the wealth distribution, relative to respondents with wealth in the first quartile, are more likely to return to work as self-employed workers than as wage and salary workers. This is true for both unemployed or disabled workers and for retired workers. The effect is also positive, but not as large, for the third wealth quartile for those moving from retirement. In addition, unemployed or disabled workers who received a lump sum payment from either pensions, insurance, inheritance, or other sources since the last wave are more likely to return to the labor force as a self-employed worker than a wage worker. This is evidence in support of the hypothesis that limited access to financial resources may impede the propensity to start a business or become self-employed (generally referred to as liquidity constraints in the literature on entrepreneurship).

Finally, examining the time trend, we find that for transitions that occurred between 1998 and 2000, individuals were less likely to return to the labor force as self-employed workers compared with wage and salary workers relative to the transitions that took place between 1992 and 1994. For individuals moving from unemployment or disability, this same pattern of a lower probability of returning to self-employment over wage and salary work also holds between 2000 and 2002 (again compared with the base year), while the same pattern holds for individuals moving from retirement between 1996 and 1998. There is no indication that transitions back to work among either unemployed or disabled individuals or retired individuals that took place between 2000 and 2002 (when the economy experienced a downturn) were more likely to result in movements to self-employment instead of wage and salary work compared with prior periods when the economy was stronger. In fact, the negative coefficients on the Wave 5 dummy variable (and significant coefficient in the first model) point to the opposite result.

Transitions from Wage Work to Self-Employment

Table 4.4 reports results from a model of movements from wage and salary work to self-employment relative to staying employed in the wage and salary sector. Again, we follow the general model as described by equation (4.1). We are particularly interested in understanding the job characteristics that drive older wage and salary workers into self-employment as well as the effect of a worker's risk tolerance. In this analysis we are also interested in examining the effect of pension cash-outs on transitions to self-employment. Not only does this provide a source of cash for self-employment start-up, it also places assets "earmarked" for retirement at risk should the business fail. We also examine other sources of "unexpected" (in timing or otherwise) wealth from lump sum income transfers from inheritance and insurance.

Transitions from Wage Work to Self-Employment: Job Characteristics

As seen in Table 4.4, wage and salary workers from firms with six or more employees are less likely to move into self-employment than those in firms with five or fewer employees. For workers in firms with 6 to 25 employees there is a 1.1 percentage point decrease in the

Table 4.4—Determinants of Labor Force Transitions from Wage and Salary Work to Self-Employment
(marginal effects from probit models)

Covariate	Probability of transitioning from wage and salary work at time t to self-employed at time $t+2$
<u>Job characteristics</u>	
Number of employees (<6)	††
6-25	-0.011**
26 and above	-0.025**
Tenure (years)	0.000
Wage rate quartile (Quartile 1)	††
Quartile 2	0.000
Quartile 3	0.002
Quartile 4	0.012**
Occupation (professional and managerial)	††
Sales	0.013**
Clerical/administrative support	-0.006*
Services	-0.001
Farming/forestry/fisheries	0.000
Mechanic, construction, operator	-0.004
Industry (agriculture)	†
Mining	0.031
Manufacturing	0.008
Transportation	0.009
Wholesale and retail trade	0.006
Finance, insurance, and real estate	0.017
Business and repair services	0.013
Personal services	0.026
Entertainment and recreation	0.002
Professional and related services	0.006
Public administration	0.007
Has pension on current job	-0.017**

(Continued)

Table 4.4—Continued

Covariate	Probability of transitioning from wage and salary work at time t to self-employed at time $t+2$
<u>Demographics and other covariates</u>	
Male	0.013**
Married	-0.004
Cohort	-0.005
Age group (51-55)	†
56-60	0.000
61-65	0.008*
66 and above	0.001
Education level (high school degree)	
No degree	-0.002
Bachelor's degree	0.003
Master's/M.B.A. degree	0.007
Ph.D./J.D./M.D. degree	0.006
Wealth quartile (Quartile 1)	††
Quartile 2	0.004
Quartile 3	0.008*
Quartile 4	0.020**
Ever received pension cash-out	0.014*
Received pension cash-out since last wave	0.003
Ever received inheritance	0.007**
Received inheritance since last wave	-0.002
Ever received insurance settlement	0.002
Received insurance settlement since last wave	0.002
Least risk averse	0.007*
Holds riskier financial assets	0.001
Health limits work	0.011**
Has health insurance	-0.013*
Has government-provided health insurance	0.000
Has employer-provided health insurance	0.000
Has other insurance	0.010*
Survey wave at t (Wave 1 = 1992)	†
Wave 2 (1994)	0.001
Wave 3 (1996)	-0.004
Wave 4 (1998)	-0.007*
Wave 5 (2000)	-0.002
Sample size (N)	22,404
Pseudo-R ²	0.090
Baseline probability	0.029

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTES: Sample for model 1 is workers who are wage and salary workers at time t and working at time $t+2$. Using Huber standard errors. Statistically significant at the **1 percent level, *5 percent level or jointly significant at the ††1 percent level, †5 percent level.

probability of becoming self-employed two years later relative to a baseline probability for this transition of 2.9 percentage points. For workers in firms with more than 25 employees there is a 2.5 percentage point decrease in the baseline probability. Wage rates in the fourth quartile of the wage distribution (among wage and salary workers) are associated with an increase of 1.2 percentage points in the probability of moving to self-employment.

Occupation is a significant predictor of transitions from wage and salary work to self-employment. Workers in sales are 1.3 percentage points more likely to transition to self-employment than workers in professional or managerial occupations, while being in clerical occupations is associated with a small reduction in the probability of moving to self-employment relative to those in professional or managerial occupations. Having a pension on the job and health insurance decrease the probability of becoming self-employed (1.7 percentage points and 1.3 percentage points, respectively). Leaving a wage job that has health insurance coverage and pension benefits may imply a loss of these benefits, and thus expectedly is correlated with a decline in the probability of moving to self-employment.¹⁸

Transitions from Wage Work to Self-Employment: Demographics, Wealth, Risk Aversion, and Health

Only two demographic characteristics are associated with transitions to self-employment from wage and salary work—sex and age. Men are 1.3 percentage points more likely to transition to self-employment than women and workers age 61 to 65 are 0.8 percentage points more likely to make the move than workers ages 51 to 55.

We examine both total wealth and the receipt of lump sum income (from pensions, insurance, or an inheritance) for any indication that liquidity constraints impede movements to self-employment. Wealth may be used to start a business, and indeed workers in the third quartile of the wealth distribution are 0.8 percentage points and workers in the fourth quartile are 2 percentage points more likely to move to self-employment. Wealth, however, is a result of accumulation and it may be that workers who save more are also more likely to be self-employed for reasons other than the level of wealth. We also examine the receipt of a lump sum from a pension cash-out, insurance payment, or an inheritance because this may be unexpected, or at the least the timing of the receipt may be somewhat unexpected. There is a positive correlation between ever receiving an inheritance and moving from wage and salary employment to self-employment: there is a 0.7 percentage point increase in the probability of becoming self-employed. Having ever received a pension cash-out increases the probability of transitions to self-employment by 1.4 percentage points.

¹⁸ For more detailed analysis of the effects of pensions and health insurance on transitions from wage and salary work to self-employment see Zissimopoulos and Karoly (forthcoming).

Workers who become self-employed take on additional earnings risk, thus we expect this group to be less risk averse than wage and salary workers. Indeed, we find that workers who are the least risk averse (indicator for the first two points on our four-point scale) are 0.7 percentage points more likely to become self-employed. Having a work limiting health condition increases the probability of becoming self-employed by 1.1 percentage points. This result may indicate that it is easier to accommodate disability in the work environment when self-employed compared to being an employee.

Finally, there is a modest time trend in transitions to self-employment: For the intervals between 1996 and 1998, 1998 and 2000, and 2000 and 2002, workers were less likely to move to self-employment relative to the 1992 to 1994 time period, although only the 1998 to 2000 period is statistically significant. Again, there is no indication that the likelihood of a transition from wage and salary employment to self-employment was different in the 2000 to 2002 period when the economy experienced a downturn, relative to the earlier time periods when the economy was stronger.

Summary of Labor Force Transitions

In this chapter we examined transitions between labor force statuses, differentiating workers by whether they are wage and salary workers, self-employed workers without employees, or self-employed workers with employees. We found that workers who move from wage and salary work to self-employment are more likely to become self-employed without employees. While 60 percent or more are in the same subgroup two years later, between 12 percent and 14 percent experience a change in whether or not they have employees. This suggests that there are both growth and contractions in the size of businesses owned by older workers. Indeed, we find that self-employed workers without employees are more likely to be retired two years later than those with employees. About 6 percent of retired workers return to the labor force two years later, where about one-third of those who “unretire” do so into self-employment—the majority without employees. Most unemployed or disabled workers who return to the labor force become wage and salary workers, although self-employment is chosen by about one-fifth of them.

When we examine the factors associated with transitions to and from self-employment and other labor force statuses, the pattern of effects across job characteristics, demographic variables, wealth measures, risk aversion, and health varies depending on the type of transition we model. Few job characteristics explain movements to wage work among self-employed workers without employees. Tenure in self-employment, receiving profits, and having a spouse working in the business are negatively correlated with movements to wage work among the self-employed without employees. These three job characteristics also have the same effect on transitions for the self-employed with employees. In addition, for those with employees, several occupation and industry groups are positively correlated with movements to wage and salary work. Holding industry constant, being in the farming occupation group (relative to professional and managerial) increases the likelihood of moving to wage and salary work. Holding occupation constant, those in the industries of mining and construction; manufacturing; transportation; wholesale/retail trade; finance, insurance, and real estate; and professional services (relative to agriculture) are more likely to move to wage employment. Also, for the self-employed with employees, having a pension on the current job is associated with an increased likelihood of

moving to wage and salary employment. No demographic variables are correlated with labor force transitions to wage work for the self-employed without or with employees. Nor is there an effect of health or risk aversion. For both self-employment subgroups, those with higher wealth have a lower probability of transitioning to wage work.

With transitions from self-employment to not working, some of the same job factors come into play with a similar effect. Among the self-employed without employees, tenure in self-employment, receiving profits, and having a spouse work in the business all reduce the probability of leaving self-employment for no work, just as they did for leaving self-employment for wage employment. In addition, the higher the wage of the self-employed, the lower the likelihood of moving to no work. For the self-employed with employees, the patterns are the same except that a spouse in the business has no effect. When differentiating by the number of employees, we find that the self-employed with mid-size businesses of 6 to 25 employees are less likely to move to not working compared with the self-employed with the smallest number of employees (1 to 6). Contrary to the findings in the literature that examines transitions to retirement more generally, having a pension has no effect on the probability of moving to not working for self-employed workers without or with employees.

Of the demographic variables, for the self-employed without or with employees being male lowers the probability of moving to no work, while being older raises the likelihood of transitioning to work. For the self-employed without employees only, being married and not having a high school education are associated with increases in the probability of moving to not working two years later. There is no statistically significant relationship between wealth and the decision to not work two years later for the self-employed with employees, although the categorical wealth variable is significant as a group for such transitions for the self-employed without employees. This wealth result is surprising given the general finding in the retirement literature that higher wealth is associated with a higher probability of leaving the labor force. Consistent with this literature is our finding that work-limiting health conditions are associated with an increase in the probability of not working.

When considering transitions from not working to working—either for those unemployed or disabled, or those retired—we find that having prior experience in self-employment and the length of time in self-employment are predictive of movements to self-employment instead of wage and salary work. We also found that health insurance is generally positively related to movements back to work. For those unemployed or disabled, having health insurance from an employer has no additional effect on movements into self-employment—but having government insurance or privately obtained insurance (not government or employer) has an overall positive effect relative to having no insurance.

Among the demographic characteristics we examined, retirees who are male and married are more likely to “unretire” to self-employment instead of the wage and salary sector. In addition, there is some evidence consistent with the hypothesis that liquidity constraints impede movements to self-employment. Respondents with wealth in the fourth quartile of the distribution relative to respondents with wealth in the first quartile, are more likely to become self-employed when they return to work than wage and salary workers. Further, an unemployed or disabled worker who received a lump sum payment from either pensions, insurance, inheritance, or another source since the last wave is more likely to return to the labor force as a

self-employed worker than as a wage worker. There were significant time trends in the transition back to work in self-employment compared to wage and salary employment. However, the pattern of the coefficients does not show that movements to self-employment were more likely between 2000 and 2002 when the economy experienced a downturn in comparison with earlier time periods. Finally, we analyzed movements into self-employment from wage and salary employment. Wage and salary workers from larger firms are less likely to move to self-employment. Having a pension and health insurance on the job decreases the probability of becoming self-employed. Leaving a wage job that has health insurance coverage and pension benefits may imply a loss of these benefits and thus expectedly is correlated with a decline in the probability of moving to self-employment.

Our results suggest that risk averse workers are less likely to make the transition into self-employment than workers who are more risk tolerant. We find that wage and salary workers with more wealth are more likely to transition to self-employment. In further support of the liquidity constraint hypothesis are the results for pension cash-out and receipt of other lump sums from insurance and inheritance. Receipt of these windfalls is positively correlated with movements into self-employment. The correlation between pension cash-out and self-employment is particularly notable. The decision to cash-out a pension to start a business may place retirement wealth at risk. In the next chapter, we examine this issue more closely by focusing on the wealth holdings of the self-employed and the wealth changes of workers over time.

5. WEALTH AND WEALTH CHANGES

Self-employment for long periods of time or near the end of the labor market career may have implications for income security during retirement. The self-employed may have different patterns of asset accumulation as a result of owning a business or as a result of differential coverage by employer-sponsored pension benefits. Some self-employed workers may experience high business returns and therefore high wealth accumulation, but others may not succeed in their business—with consequences for the wealth they accumulate for their retirement years. Some older workers may draw down assets or borrow against assets in order to finance a new business start-up.

This chapter examines the wealth and wealth changes of older workers with a particular focus on the self-employed. We study wealth reported separately for several different property and financial assets (all reported as net of any debt): homes, other real estate, businesses, vehicles, IRAs and Keogh accounts, stocks, bonds, checking and saving accounts, CDs, and other savings.¹⁹ In addition, we are able to examine some aspects of retirement wealth. For instance, we can estimate the expected wealth from Social Security retirement benefits received at age 62, the earliest age that these benefits are available. Although we are able to measure whether an individual is covered by an employer-sponsored defined benefit or defined contribution pension plan, we are not able to place a value on the pension plan wealth.²⁰

In this chapter we consider several different wealth aggregates. First, we combine the property and financial wealth components listed above into a measure we refer to as “non-pension wealth” where we have excluded the value of both Social Security retirement benefits and employer-sponsored pension wealth. Note that in some cases, the non-pension wealth components may have been directly derived from employer-sponsored retirement savings. For example, some IRAs contain the proceeds from a lump-sum pension distribution, and Keogh accounts are a form of tax-deferred savings for the self-employed. Second, we measure “non-housing wealth” as non-pension wealth less the value of housing wealth. Third, we capture “business wealth” as the value of wealth holdings in businesses (which also includes farm businesses), net of any debt. Fourth, we define “liquid wealth” as the sum of IRAs and Keogh accounts, stocks, bonds, checking and saving accounts, and CDs. Finally, we combine IRAs and Keogh accounts, stocks, and bonds into a measure of “riskier financial assets.” Ideally, we would be able to separately identify the financial wealth holdings in the riskiest stocks, bonds, or stock and bond funds. However, the HRS does not contain sufficient detail regarding stock or bond holdings. Thus, our measure will capture riskier, but not the riskiest assets.

¹⁹ Although these wealth components are all measured net of any debt, and there is a measure of total debt in the HRS, there is no explicit measurement of new borrowing between waves.

²⁰ As noted earlier, the calculation of pension wealth in the HRS is not feasible within the scope of this study.

The first part of the analysis in this chapter continues to rely on data from the HRS, in this case the pooled data across waves examined also in the descriptive analyses in Chapters 2 and 3. We describe the level and diversification of wealth of older self-employed workers and compare this to the wealth holdings of older wage and salary workers. We also examine differences in wealth holdings among types of self-employed workers: long-term self-employed (i.e., those self-employed before age 50) versus workers who transition to self-employment later in life (i.e., those who become self-employed at or after age 50) and self-employed workers with and without employees. As in Chapters 2 and 3, we do not report formal statistical tests for the differences across the subgroups we examine. Small differences between groups are less likely to pass conventional tests of statistical significance.

In the second part of the chapter, we use panel data from 1992 through 2002 to examine changes in business wealth and non-pension wealth as workers move into and out of self-employment. By examining these aspects of wealth we begin to understand how well prepared self-employed workers are for retirement by type of self-employed worker and compared to wage and salary workers, and by how labor force transitions later in life may affect asset accumulation.

Asset Ownership

Table 5.1 shows the percentage of workers who own 10 types of assets, as well as those who hold debt and riskier financial assets (as defined above), who have a pension plan on the current job, and who expect Social Security retirement income. The percentages are given for all wage and salary workers, for all self-employed workers, and for our four types of self-employed workers: those who became self-employed before age 50, those who became self-employed at age 50 or older, self-employed workers without employees (but possibly with a spouse working for the business), and self-employed workers with employees.

Overall, self-employed workers are more likely than wage and salary workers to own all types of assets. There are large differences in ownership of real estate other than the primary residence (39 versus 21 percent) and business wealth (48 percent versus 8 percent, respectively). The self-employed are slightly more likely to own vehicles, CDs, and checking and savings accounts. Self-employed workers are generally assumed to be less risk averse than wage and salary workers and thus we may expect more stock ownership. That said, their earnings are riskier and thus they may choose to hold fewer risky assets. Table 5.1 shows that self-employed workers, compared with wage and salary workers, are 9 percentage points more likely to hold stocks (42 versus 33 percent) and 6 percentage points more likely to hold riskier financial assets (68 percent versus 62 percent). One asset the self-employed are much less likely to hold compared to wage and salary workers is a pension plan. Sixty-one percent of wage and salary workers have a pension plan on their current job compared to only 10 percent of the self-employed. Almost all workers (both wage and salary and self-employed) expect to receive Social Security retirement income (94 percent and 91 percent).

Table 5.1—Asset Ownership by Employment Class and Self-Employment Category
(percent)

Wealth component	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Owens a house	83.2	89.3	90.2	87.3	87.2	92.4
Owens other real estate	21.0	38.7	43.3	31.7	31.2	48.3
Has business wealth	7.5	47.6	54.6	36.0	35.6	63.9
Owens a vehicle	92.6	94.2	94.4	94.0	93.9	94.6
Owens IRAs/Keogh account	44.8	50.3	51.9	50.2	44.9	58.3
Owens stocks	32.9	41.9	42.3	40.7	37.8	47.9
Owens bonds	6.6	10.3	10.6	9.1	8.3	13.0
Has checking and/or savings accounts	86.7	89.5	89.8	89.0	88.5	91.5
Owens CDs	24.1	25.7	26.6	22.7	23.3	28.3
Has other savings	18.0	24.7	26.2	23.3	23.0	27.6
Has debt	38.1	33.4	33.3	36.0	34.8	31.7
Owens riskier financial assets	62.1	68.3	68.8	68.3	63.8	74.5
Covered by any employer-sponsored pension plan on current job	60.8	9.6	12.7	4.3	4.8	16.3
Expects to receive Social Security retirement benefits	94.0	91.0	92.0	90.0	90.0	92.6
Sample size (N)	30,371	8,285	5,180	2,639	4,335	3,476

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTES: Sample is respondents age 51 and older. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Riskier financial assets are the sum of IRAs/Keogh accounts, stocks, and bonds.

There are also interesting differences in asset ownership of self-employed workers by category of self-employment. Those self-employed at or after age 50 are much less likely to have business assets than those who become self-employed before age 50 (36 percent versus 55 percent). This suggests that the types of businesses owned by these two groups are quite different. Self-employed workers at or after age 50 are slightly less likely to own a home (87 percent versus 90 percent), which is arguably one of the most valuable assets that most retirees possess. Comparing self-employed workers without employees to those with employees reveals substantial differences in asset ownership. Self-employed workers without employees are much less likely to have business assets (36 percent versus 64 percent) again suggesting differences in the types of businesses these two groups own. The self-employed without employees are also less likely to own all other types of assets and are more likely to have debt. Again, differences in home ownership (87 percent versus 92 percent) may suggest differences in wealth available at retirement.

Table 5.1 shows that self-employed workers without employees are more than 10 percentage points less likely to hold riskier financial assets than those with employees, which may suggest differences in risk aversion between these two types of groups. It is interesting to note that self-employed workers without employees are about equally likely to own IRAs/Keogh accounts, checking and or savings accounts, and bonds as wage and salary workers and are only about 5 percentage points more likely to own stocks, other savings, and houses. Indeed, in terms of asset ownership, those without employees have asset ownership characteristics that are more similar to wage and salary workers (with the exception of business and other real estate ownership) than to self-employed workers with employees.

Although few self-employed workers have pension plans on their current job, workers self-employed before age 50 are more likely to have a pension plan than workers who became self-employed at or after age 50 (13 percent versus 4 percent). This difference is also notable for self-employed workers with and without employees (16 percent versus 5 percent). Although pension ownership among categories of self-employed workers is low overall, the differences between groups reinforce the general finding that self-employed workers with employees and workers who became self-employed before the age of 50 are more likely to have a pension plan than those without employees or those who became self-employed at or after age 50).

Wealth Value

Table 5.2 shows the net value (in dollars) of the non-pension assets described in the previous table for all groups of workers. In addition, we show average net values of several wealth aggregates: total non-pension wealth (not counting Social Security retirement benefits), non-housing non-pension wealth, liquid wealth, and riskier financial wealth. Also included in Table 5.2 is the expected value of Social Security wealth at age 62. The value of Social Security wealth is calculated from restricted data using Social Security earnings records and is only available for the 1931-1941 original HRS birth cohort.

“Liquid wealth” is analyzed in order to study the differences in non-business-related wealth accumulation that can be easily accessed to finance consumption in retirement. There are several reasons why self-employed workers may hold more liquid wealth than wage and salary workers. First, they are less likely to have pension wealth. Second, business owners desiring that their business continue after their death may choose to hold sufficient liquid assets to cover the taxes that their heirs will pay. While the inheritance tax is scheduled to decrease over time and be eliminated in 2010, it is slated to be reinstated in 2011.

As seen in Table 5.2, the net value of every type of asset is larger for self-employed workers than for wage and salary workers. On average, the largest asset for self-employed workers is their business wealth (almost \$169,000), followed by net housing wealth (nearly \$130,000), and other real estate wealth (almost \$124,000). Self-employed workers may own

Table 5.2—Wealth Levels by Employment Class and Self-Employment Category
(dollars)

Wealth component	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Non-pension wealth component values						
Housing (net)	\$76,931	\$129,969	\$140,553	\$104,665	\$107,728	\$163,179
Total housing	105,379	170,258	183,318	145,076	141,410	213,301
Mortgages	25,854	35,513	37,207	36,618	31,066	42,505
Other loans	2,594	4,776	5,559	3,793	2,617	7,617
Businesses (net)	16,157	168,769	224,809	66,243	76,284	296,593
Other real estate (net)	24,868	123,736	159,471	62,325	75,492	186,971
Vehicles (net)	14,179	23,985	26,930	19,981	18,517	31,878
IRAs/Keogh accounts (net)	33,794	60,864	62,399	61,382	48,714	79,789
Stocks (net)	32,189	73,245	84,677	49,835	50,673	108,300
Checking/savings	15,473	32,980	38,712	21,662	21,876	48,516
CDs	5,931	12,859	15,068	7,483	9,899	17,107
Bonds	3,489	12,642	14,413	7,636	7,414	19,986
Other savings	8,479	16,788	19,122	13,679	14,242	20,894
Debt	3,553	5,661	6,467	4,634	4,742	7,245
Non-pension wealth aggregate values						
Total non-pension wealth	227,937	650,176	779,687	410,258	426,097	965,967
Total non-housing/non-pension wealth	151,007	520,207	639,134	305,593	318,369	802,788
Liquid wealth	99,355	209,377	234,392	161,677	152,818	294,591
Riskier financial wealth	69,472	146,750	161,488	118,853	106,801	208,074
Expected Social Security wealth at age62	141,916	149,224	148,189	151,319	141,542	157,362
Sample size (N)	30,371	8,285	5,180	2,639	4,335	3,476

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTE: Sample is respondents age 51 and older. A total of 474 self-employed workers are missing information on number of employees, and 120 workers had missing information on whether the type of work is in self-employment. Liquid wealth is the sum of IRA/Keogh accounts, stocks, bonds, checking/savings, CDs, and other savings. Riskier financial assets are the sum of IRA/Keogh accounts, stocks and bonds. Social Security wealth is calculated at age 62 and for the 1931-41 birth cohort only and those eligible for benefits.

more non-housing real estate wealth than wage and salary workers because they may own the building from which they run their business. The largest asset (net value) of wage and salary workers is their house (about \$77,000), followed by IRAs/Keogh accounts and stocks (approximately \$34,000 and \$32,000, respectively).

There are large differences in total non-pension wealth between self-employed workers and wage and salary workers (around \$650,000 versus \$228,000). It is not surprising to find that wage and salary workers hold less wealth than self-employed workers because they are also much more likely to have pension wealth (see Table 5.1). As mentioned above, we hypothesize that self-employed workers may also be more likely to have a desire to leave wealth to their heirs. As we hypothesized, we find that self-employed workers on average have a greater amount of liquid wealth than wage and salary workers (about \$209,000 versus \$99,000). Finally, self-employed workers have only slightly more Social Security wealth than wage and salary workers (approximately \$149,000 compared to \$142,000, respectively).

Workers who became self-employed at or after age 50 have lower wealth from all property and financial assets than workers who became self-employed before age 50. They have much less business wealth (\$66,000 versus \$225,000), and almost 50 percent less total non-pension wealth. Workers self-employed at age 50 or older have wealth levels similar to workers who are self-employed without employees. That is not particularly surprising given that the majority of workers self-employed at age 50 or older do not have employees. Comparing workers who are self-employed without and with employees, those without employees have lower net asset values for all assets compared with their self-employed counterparts with employees. Their business wealth is 26 percent that of self-employed workers with employees. Their total non-pension wealth is less than half that of self-employed with employees. That said, they still have, on average, almost twice as much non-pension wealth as wage and salary workers (\$426,000 versus \$228,000).

Average values are sensitive to outliers, that is, average wealth may be the result of a few very successful businesses and therefore not reflective of the wealth of the median business owner. Thus, Tables 5.3, 5.4, and 5.5 show 5 points in the distribution of total non-pension wealth, liquid wealth, and net housing wealth, respectively: the 10th, 25th, 50th, 75th, and 90th percentiles. We look separately at housing wealth because of the relative importance it plays in the composition of total wealth and its potential importance for retirement wealth. At all five points in the distribution of total non-pension wealth, self-employed workers (of all types) hold substantially more wealth than their wage and salary counterparts (see Table 5.3). At the 10th percentile, the non-pension wealth of wage and salary workers is only 32 percent of the wealth of self-employed workers without employees (the group with the lowest wealth holdings) but is approximately 60 percent at the median (i.e., 50th percentile). At all points in the distribution, workers self-employed at age 50 or older have less non-pension wealth than workers self-employed before age 50. Workers self-employed without employees hold substantially less non-pension wealth at each percentile point tabulated than self-employed workers with employees.

Table 5.3—Points in the Distribution of Total Non-Pension Wealth by Employment Class and Self-Employment Category
(dollars)

Total non-pension wealth percentile	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
10 th percentile	\$6,300	\$31,000	\$38,200	\$19,697	\$19,420	\$62,900
25 th percentile	42,900	104,200	126,000	74,500	74,200	179,400
50 th percentile	114,000	274,000	329,273	204,000	202,000	442,000
75 th percentile	254,000	672,000	789,750	459,400	455,300	1,056,500
90 th percentile	514,600	1,458,000	1,713,500	1,011,219	982,000	2,082,771
Sample size (N)	30,371	8,285	5,180	2,639	4,335	3,476

SOURCE: Authors' calculations using the HRS 1992-2002.

It may be that the differences in non-pension wealth among the self-employed are being driven by business wealth. As seen in Table 5.4, however, the same patterns found for total non-pension wealth hold for total liquid wealth (i.e., the sum of IRAs/Keogh accounts, stocks, checking/savings, CDs, bonds, and other savings): wage and salary workers have the lowest wealth at all points in the distribution followed by self-employed workers without employees. At the median (50th percentile), the value of liquid wealth held by wage and salary workers is 46 percent of the wealth held by all self-employed workers and is approximately 64 percent of the amount held by self-employed workers without employees.

Table 5.4—Points in the Distribution of Liquid Wealth by Employment Class and Self-Employment Category
(dollars)

Liquid wealth percentile	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
10 th percentile	\$11	\$354	\$500	\$220	\$100	\$2,000
25 th percentile	2,100	7,000	8,000	5,000	4,000	15,000
50 th percentile	22,900	50,000	54,000	41,000	36,000	80,000
75 th percentile	93,000	186,000	200,000	160,000	144,000	260,500
90 th percentile	253,000	508,000	552,000	401,000	375,800	696,000
Sample size (N)	30,371	8,285	5,180	2,639	4,335	3,476

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTE: Liquid wealth is the sum of IRAs/Keogh accounts, stocks, checking/savings, CDs, bonds, and other savings.

Table 5.5 shows that at all five points in the distribution of net housing wealth, self-employed workers (of all types) also have more housing wealth than their wage and salary counterparts. The differences are smaller than the differences in total non-pension wealth. For example, both groups have zero housing wealth at the 10th percentile, and at the median the housing wealth of wage and salary workers is 68 percent of the wealth of self-employed workers. As with the other wealth aggregates, the self-employed without employees have lower housing wealth than those with employees and workers self-employed after age 50 have lower housing wealth than workers self-employed before age 50. Thus looking at the distribution of wealth, there are patterns that mimic what we found when examining averages: self-employed workers have more wealth than wage and salary workers while self-employed workers without employees have the lowest wealth among the types of self-employed workers. We also find that at the low points in the non-pension wealth distribution (10th and 25th percentiles), self-employed workers, like wage and salary workers, have very low levels of non-pension wealth and they may be even less prepared for retirement than wage and salary workers given the lower likelihood of having a pension (see Table 5.1).²¹

Composition of Wealth Portfolio

The composition of wealth holdings as well as the level of wealth holdings will affect the standard of living of workers in retirement. For example, if most of the wealth portfolio is held in riskier financial assets such as stocks and bonds, then wealth available at retirement will vary with the stock and bond markets. Or, if housing wealth is the majority of wealth holdings, accessing this wealth requires the sale of the house with most likely downsizing. Figure 5.1 shows the composition (percentage distribution) of our measure of total non-pension wealth (excluding Social Security retirement benefits and wealth held in employer-sponsored defined benefit or defined contribution pension plans) for wage and salary workers and the self-employed, as well as for the subgroups of the self-employed.

As Figure 5.1 illustrates, self-employed workers hold almost half of all of their non-pension wealth in business and housing (see the first two segments of each bar) (26 percent and 20 percent, respectively). Including real estate, this accounts for 65 percent of all non-pension wealth. Workers who became self-employed at or after age 50 have a lower percentage of wealth held as business wealth compared to workers who became self-employed before age 50 (16 percent versus 29 percent). Similarly, those self-employed without employees hold 18 percent of the total non-pension wealth as business wealth compared to 31 percent for the self-employed with employees. Self-employed workers who became self-employed at or after age 50 hold 26 percent of all of their wealth in housing—substantially more than workers who became self-employed before age 50 (18 percent). Workers who are self-employed without employees

²¹ As noted earlier, we were not able to compute the value of pension wealth held by respondents so we cannot compare the value of all retirement assets across the groups of workers examined in this study.

Table 5.5—Points in the Distribution of Net Housing Wealth by Employment Class and Self-Employment Category
(dollars)

Net housing wealth percentile	Self-employed					
	All workers		By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
10 th percentile	\$0	\$0	\$0	\$0	\$0	\$4,000
25 th percentile	18,000	37,000	40,000	30,000	30,000	49,000
50 th percentile	55,000	81,000	88,000	72,000	75,000	100,000
75 th percentile	100,000	150,000	163,000	140,000	140,000	188,000
90 th percentile	170,000	275,000	300,000	250,000	240,000	325,000
Sample size (N)	30,371	8,285	5,180	2,639	4,335	3,476

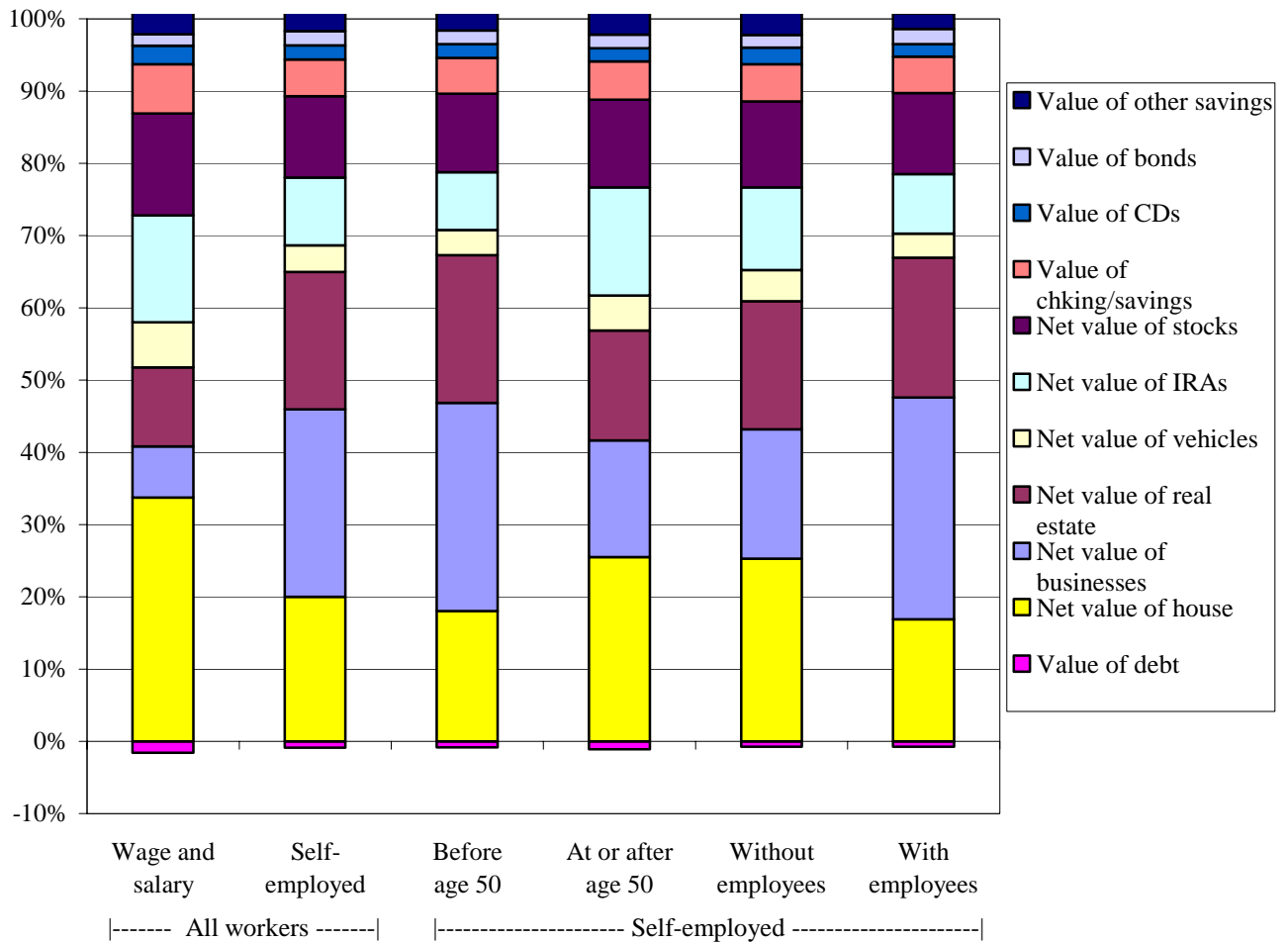
SOURCE: Authors' calculations using the HRS 1992-2002.

have 25 percent of all non-pension wealth in housing versus 17 percent held by self-employed workers with employees. Wage and salary workers hold proportionately more housing wealth: 34 percent of their total non-pension wealth is in housing. In terms of riskier financial assets (stocks, bonds, and IRAs/Keogh accounts), self-employed workers hold more riskier assets as a percentage of their wealth portfolio than do wage and salary workers (39 percent versus 31 percent). This finding is consistent with the hypothesis that wage and salary workers are more risk averse than self-employed workers. Among the self-employment categories, there is little difference in the percentage of wealth held in riskier assets. Overall, self-employed workers, particularly workers who became self-employed before age 50 and those with employees, hold less liquid wealth as a percentage of their non-pension wealth portfolio than wage and salary workers. As a percentage of total non-pension wealth, liquid wealth is only 32 percent of total wealth for self-employed workers and it is 44 percent of total wealth for wage and salary workers.

Changes in Wealth

The tables described above give us a snapshot of wealth at a point in time but do not inform us of how wealth is changing over time for the self-employed and wage and salary workers. Table 5.6 examines the difference between wealth at time t and wealth two years earlier at time t by category of worker. The table shows results for total non-pension wealth and two components of that wealth aggregate: housing and non-housing non-pension wealth. With the exception of self-employed workers without employees, all groups experienced growth in non-pension wealth (i.e., the change in wealth is a positive amount) over two years in total and for the two wealth components. The growth in average housing wealth experienced by self-employed workers without employees (an increase of almost \$12,000) is almost completely offset by a decline in non-housing wealth (a decline of nearly \$8,000) for a net change of about \$4,000. In contrast, all other groups experienced increases in both housing and non-housing wealth.

Figure 5.1—Net Value of Asset as Percent of Total Non-Pension Wealth by Employment Class and Self-Employment Category



SOURCE: Authors' calculations using HRS 1992-2002.
 NOTE: Sample is respondents age 51 and older.

Table 5.6—Two-Year Changes in Non-Pension Wealth and Wealth Components by Employment Class and Self-Employment Category at Time t (dollars)

Characteristic	Changes in wealth between time t and time $t - 2$					
	All workers at time t		Self-employed at time t			
			By age of self-employment		By nature of self-employment	
	Wage and salary	Self-employed	Before age 50	At or after age 50	Without employees	With employees
Total non-pension wealth	\$29,168	\$49,178	\$67,434	\$33,616	\$3,976	\$106,068
Housing wealth	9,683	14,925	16,470	12,455	11,824	18,618
Non-housing non-pension wealth	19,486	34,253	50,964	21,161	- 7,848	87,450
Sample size (N)	22,950	6,449	3,951	2,061	3,597	2,770

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTE: Changes are reported in nominal dollars.

We are also interested in the changes in wealth levels associated with different labor force transitions. First, to understand better the changes in wealth associated with self-employed workers, it is necessary to examine changes in business assets. The average change in business wealth level is studied at time t and time $t+2$ for labor force transitions between two survey waves. There are five possible labor force statuses: self-employed without employees, self-employed with employees, wage and salary workers, and not working (retired, and unemployed or disabled).²² We study changes in business wealth and report the levels at time t (Table 5.7) and the percentage change between time t and time $t+2$ (Table 5.8). We are particularly interested to see if business loss is associated with changes in labor force status. For example, are movements from self-employment to wage and salary work due to business failure, and how does that affect wealth levels? Although these tables do not indicate the causes, the descriptive correlations suggest the potential impact of labor force change on the wealth available for consumption at retirement.

Consider first self-employed workers without employees at time t (shown in the first row of Tables 5.7 and 5.8). Among this group of self-employed, those who remain self-employed but now have employees at time $t+2$ have higher business wealth at time t than those who make any other labor force transition (\$127,170), and they increase their business wealth by 13.2 percent. This suggests that some older self-employed workers continue to grow their businesses and add to job creation. Those who remain in the same status (i.e., self-employed without employees) have a slight decline in business wealth (2.9 percent). Labor force transitions out of self-employment without employees to wage and salary employment, retirement, or

²² We do not report results for the small sample of workers who move to or from the “not working for other reasons” status.

unemployment/disability are all associated with low levels of business wealth at time t and decreases in business wealth between waves. The declines are to be expected if businesses are sold or are closed when moving out of self-employment (either to wage work or not working). Interestingly, self-employed workers without employees who retire, on average, have a decrease of business wealth of only 9.1 percent, which is smaller than expected if the business is sold or closed. Indeed, this may be evidence of a form of partial retirement. In contrast, those self-employed workers without employees who are not working two years later and report either being unemployed or disabled have low business wealth levels at time t and two year later have less than half of the business wealth they had before (a decline of 51.4 percent).

Table 5.7—Business Wealth at Time t by Changes in Labor Force Status, Employment Class, and Self-Employment Category
(dollars)

Employment status at time t	Employment status at time $t+2$				
	Self-employed		Wage and salary	Not working	
	Without employees	With employees		Retired	Unemployed or disabled
Self-employed					
Without employees	\$100,582	\$127,170	\$19,688	\$68,577	\$12,800
With employees	265,481	362,297	125,962	240,791	97,217
Wage and salary	34,659	82,866	—	—	—
Not working					
Retired	45,223	247,448	—	—	—
Unemployed or disabled	22,702	44,214	—	—	—
Sample size (N)	3,305	2,602	24,028	25,794	3,583

SOURCE: Authors' calculations using HRS 1992-2002.

NOTES: Cells with no values were not computed because changes in business wealth are most relevant for transitions to and from self-employment. Dollars are Consumer Price Index (CPI) adjusted.

Table 5.8—Changes in Business Wealth from Time t to Time $t+2$ by Changes in Labor Force Status, Employment Class, and Self-Employment Category
(percent change from level at time t)

Employment status at time t	Employment status at time $t+2$				
	Self-employed		Wage and salary	Not working	
	Without employees	With employees		Retired	Unemployed or disabled
Self-employed					
Without employees	– 2.9	13.2	– 8.3	– 9.1	– 51.4
With employees	– 64.0	15.4	– 58.8	– 40.5	– 27.8
Wage and salary	– 9.7	20.7	–	–	–
Not working					
Retired	– 16.4	– 24.2	–	–	–
Unemployed or disabled	20.9	24.4	–	–	–
Sample size (N)	3,305	2,602	24,028	25,794	3,583

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTES: Cells with no values were not computed because changes in business wealth are most relevant for transitions to and from self-employment. Dollars are CPI adjusted.

Turning to self-employed workers with employees (the second row in Tables 5.7 and 5.8), those who remain self-employed with employees have higher levels of business wealth at time t than those who make any transition—and they are the only group to experience an increase in business wealth over time (15.4 percent). Those workers who transition to self-employment without employees have a 64 percent decline in business wealth. These transitions and the corresponding declines may be the result of a planned downsizing of the business or unexpected negative shocks to the business. The self-employed workers with employees who move to wage work have a decline in business assets of 58.8 percent. This may indicate business failure. Self-employed workers with employees who retire have a decline in business wealth of 40.5 percent, far less than a 100 percent decline, which suggests that these workers may remain business owners or that the liquidation of business assets into other assets evolves over time whether moving to wage work or retiring. If this is the case, we would expect less of a decline in total wealth (see the discussion of Table 5.10 below). In contrast to self-employed workers without employees, those with employees who are unemployed or disabled two years later reveal only a 27.8 percent decline in business wealth. This may suggest that the transition is temporary.

Wage and salary workers who transition to self-employment (row 3 in Tables 5.7 and 5.8) have different changes in business wealth depending on whether they move to self-employment with or without employees. Wage and salary workers who become self-employed without employees have a decline in business wealth of 9.7 percent over 2 years. In contrast, wage and salary workers who become self-employed with employees have an increase in business wealth of 20.7 percent. This suggests that these may be two different types of labor force transitions. In the case without employees, this may be a movement towards retirement and this may not be so in the case with employees. Transitions from retirement into self-employment are associated

with a decline in business wealth. In contrast, transitions into self-employment from unemployment or disability are associated with increases in business wealth.

Finally we examine changes in total non-pension wealth (as previously defined) associated with labor force transitions (see Tables 5.9 and 5.10). We are particularly interested in whether movements from wage and salary employment to self-employment are associated with a decline in total wealth.

Table 5.9 shows that self-employed workers (both with and without employees) who transition to wage work have lower non-pension wealth than self-employed workers who remain self-employed. As seen in Table 5.10, self-employed workers with employees who have moved to wage work two years later have a decline in total non-pension wealth of 10.4 percent. Retirement is associated with a decline in wealth only for self-employed workers without employees.

Our main focus is on transitions from wage work to self-employment. Here we find that wage and salary workers who make this transition have higher non-pension wealth at time t than wage and salary workers who remain in this status (Table 5.9). Furthermore, transitions to self-employment are associated with increases in total non-pension wealth: an increase of 11.9 percent for self-employment with employees and 26.7 percent for self-employment with employees. Thus, it appears that this type of labor force transition is not necessarily associated with a decline in assets. Retired workers who “unretire” into the labor force as self-employed workers have declines in total non-pension wealth but increases in total non-pension wealth if they move into wage work (8.7 percent). This suggests that retired workers may draw down personal assets in order to re-enter the labor force as self-employed workers.

Table 5.9—Total Non-Pension Wealth at Time t by Changes in Labor Force Status, Employment Class, and Self-Employment Category
(dollars)

Employment status at time t	Employment status at time $t+2$				
	Self-employed		Wage and salary	Not working	
	Without employees	With employees		Retired	Unemployed or disabled
Self-employed					
Without employees	\$463,334	\$545,347	\$262,486	\$554,419	\$195,228
With employees	789,260	1,140,052	610,213	879,412	504,971
Wage and salary	353,622	499,364	231,777	268,428	155,324
Not working					
Retired	405,281	864,800	267,231	316,823	95,565
Unemployed or disabled	216,174	272,076	161,401	94,822	66,265
Sample size (N)	3,305	2,602	24,028	25,794	3,583

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTE: Wealth excludes the value of pensions and Social Security.

Table 5.10—Changes in Total Non-Pension Wealth from Time t to Time $t+2$ by Changes in Labor Force Status, Employment Class, and Self-Employment Category
(percent change from level at time t)

Employment status at time t	Employment status at time $t+2$				
	Self-employed			Not working	
	Without employees	With employees	Wage and salary	Retired	Unemployed or disabled
Self-employed					
Without employees	8.6	1.9	5.1	- 8.9	- 19.1
With employees	- 27.9	15.4	- 10.4	3.8	- 19.3
Wage and salary	11.9	26.7	15.0	19.6	17.7
Not working					
Retired	- 3.2	- 7.8	8.7	7.2	- 1.2
Unemployed or disabled	3.4	9.0	28.3	23.7	3.4
Sample size (N)	3,305	2,602	24,028	25,794	3,583

SOURCE: Authors' calculations using the HRS 1992-2002.

NOTE: Wealth excludes the value of pensions and Social Security retirement benefits.

Summary of Wealth and Wealth Changes

In summary, we find self-employed workers at older ages are more likely than wage and salary workers to own all types of property and financial assets. There are large total non-pension wealth differences between self-employed workers and wage and salary workers. These average differences are not due to a few successful businesses: at all points in the distribution self-employed workers have more non-pension wealth than wage and salary workers. Wage and salary workers may hold less wealth than self-employed workers because they are much more likely to have pension wealth. In addition, we hypothesize that self-employed workers are more likely to have a desire to leave wealth to their heirs. That said, we also find that at the 10th and 25th percentiles of the non-pension wealth distribution, self-employed workers (like wage and salary workers) have very low levels of non-pension wealth, and that they may be even less prepared for retirement than wage and salary workers who may have pensions. At this point, we have not been able to value pension wealth held in defined benefit or defined contribution plans so differences in total wealth between wage and salary workers and self-employed workers remain a subject for future research.

We find results consistent with the hypothesis that wage and salary workers are more risk averse than self-employed workers. The self-employed are more likely than wage and salary workers to hold riskier financial assets, and such riskier assets are a larger percentage of their wealth portfolios.

Within self-employment types, workers who became self-employed at or after age 50 have lower wealth from business (and all other) assets than workers who became self-employed before age 50. Self-employed workers without employees have lower net values for all assets, and are much less likely to have business assets than those with employees. This suggests that

the types of businesses owned by these two groups are quite different. Further, we found that self-employed workers without employees, in terms of asset ownership, are more similar to wage and salary workers (with the exception of business and real estate ownership) than they are to self-employed workers with employees. Looking at changes in wealth and changes in labor force statuses, the evidence is consistent with both business growth and failure. Self-employed workers with employees who move to wage work have a substantial decline in business assets. Some self-employed workers without employees have employees two years later and an increase in business wealth. Self-employed workers who retire have declines in business wealth far less than 100 percent suggesting that these workers may remain involved in the business through continued ownership (although they may no longer be directly employed). Our results suggest that the transformation of business assets into others assets, which may involve liquidation, evolves over time whether moving to wage work or retiring.

Transitions to self-employment from wage work are associated with increases in total non-pension wealth. Thus, it appears that this type of labor force transition does not necessarily put retirement assets “at risk.” Retired workers who reenter the labor force as self-employed workers have declines in total non-pension wealth. In contrast, retirees who move into wage and salary work have increases in total non-pension wealth. This suggests that retired workers draw down on personal assets in order to re-enter the labor force as self-employed workers, which may affect resources for subsequent retirement.

6. CONCLUSIONS

Our study of the nature of work of older self-employed workers and their retirement assets was motivated by the importance of self-employment among older individuals and the lack of research about the types of businesses they run, their expectations for retirement, their actual retirement experiences, and how their labor force experiences translate into retirement wealth. This study adds to the literature on self-employment new results on the factors influencing the labor force transitions of older workers by class of employment (self-employment or wage and salary) and new results on the wealth levels and the composition of the wealth portfolios of older self-employed workers. Our results are based on six waves of the HRS study and provide insight into these issues.

Personal and Job Characteristics of the Self-Employed

Overall, for workers age 51 and above, about 1 in every 5 is self-employed. Approximately one-third of those self-employed workers made the transition at or after age 50. Most older self-employed workers (55 percent) work on their own or possibly with their spouse. Among married self-employed older workers, about 40 percent work with their spouse in their business. Notably, the self-employed depend heavily on profits from their business rather than drawing regular salaries (some receive both). Just one-third of the older self-employed receive a salary, while more than three-quarters are paid from profits.

The HRS data confirm that older self-employed workers differ in important ways from their wage and salary counterparts. Compared with wage and salary workers, the self-employed in our sample are more likely to be male, older, with a bachelor's degree or higher, and more willing to accept financial risks. The vast majority of older self-employed workers have very small businesses (five or fewer employees). They are less likely to have pension coverage or employer-provided health insurance than wage and salary workers. The self-employed have longer tenure on their current job than wage and salary workers. They work the same number of hours as wage and salary employees but work fewer weeks per year. The self-employed are more likely to be found in industries and occupations that are conducive to working for oneself such as agriculture, retail trade, and various services industries, and managerial positions, sales, and agriculture-based occupations.

Within the self-employed, there are distinct differences between those who have been self-employed since before age 50 and those who made the transition to self-employment? at or after age 50; and between the self-employed who work without or with employees besides themselves (and possibly a spouse). By and large, the longer-term self-employed and those with employees most closely resemble each other, while those who made the transition to self-employment later in life share characteristics in common with the self-employed without employees.

The first two similar subgroups—the longer-term self-employed and those with employees, compared to their respective counterparts—are more likely to be men who are

younger and have the highest education credentials (Ph.D., J.D., or M.D.). Only those with employees tend to accept more risk. At the same time, this is the group that is most likely to be paid a regular salary, consistent with being in a business with more employees. Although the self-employed with employees have more workers by definition, the median number of employees is just 5 and only about 19 percent have 16 or more employees. The portion with 51 or more employees is just 7 percent. The longer-termed self-employed and those with employees are more likely than the other self-employed workers to receive a pension on their job and to receive employment-based health coverage. The longer-term self-employed are more likely to be found in the agriculture or mining and construction sectors compared to those who became self-employed at or after age 50. Those with employees are disproportionately in retail trade while those without employees are in personal services.

Transition Plans for the Self-Employed

We found that the self-employed age 51 and above have somewhat more favorable ratings than wage and salary workers in terms of enjoying their work and the degree of difficulty or the level of stress involved. At the same time, they are also a group that tends to want to reduce their work hours as they age—perhaps with a more gradual transition to retirement rather than an abrupt change. Indeed, the self-employed are more likely to say that they will be working at age 62 or 65 compared to wage and salary workers. This is despite the fact that they expect to have greater retirement wealth by a factor of more than two. They are also more optimistic about the future of the stock market and less worried about retirement income.

When thinking about retirement, older self-employed workers place the most weight on being one's own boss, having time with a spouse, and the lack of stress. Wage and salary workers rate having time with their spouse as the most important aspect of retirement. The self-employed feel less strongly about potential unfavorable aspects of retirement, although not having enough income, dealing with cost-of-living increases, and being ill or disabled are of concern—factors that also worry their wage and salary counterparts. Far fewer individuals in either class of employment worry a lot about being bored or missing co-workers.

In terms of the actual retirement experience, both retirees from wage and salary work and from self-employment generally find retirement “very” or “moderately” satisfying. The most important reasons given for retiring from self-employment are poor health, a desire to do other things, and having more time with family. Considering the same potentially favorable and unfavorable aspects of retirement, more workers who have retired from self-employment rate being one's own boss as a very important aspect, compared to retirees from wage and salary jobs. No more than one in four retirees from self-employment worries a lot about not being useful, illness or disability, or not having enough income. These assessments are quite similar for retirees from the wage and salary sector. Although there is some variation across the subgroups of self-employed workers and retirees that we consider, by and large the differences in future plans, retirement expectations, and retirement experiences are not that stark.

Labor Market Transitions

Self-employed workers without employees are more likely to transition to wage and salary jobs two years later than self-employed workers with employees. Some self-employed workers move from having no employees (other than their spouse) to having additional employees, while the reverse movement toward fewer employees also occurs. This indicates that there is both growth in businesses among older workers (in term of numbers of employees) and contractions in business size, perhaps as a movement toward retirement. Indeed, we find that self-employed workers without employees are more likely to be retired two years later than those with employees. Among retired workers who return to the labor force, about one-third “unretire” into self-employment—the majority without employees. Most unemployed or disabled workers who return to the labor force do so to wage and salary work, although self-employment is chosen by about one-fifth of them.

Multivariate models of labor force transitions provide insight into the factors that affect movements to and from self-employment and in and out of the labor force. Overall, the pattern of effects across job characteristics, demographic variables, wealth measures, risk aversion, and health varies depending on the type of transition we model. When modeling transitions from self-employment to wage and salary employment or to not working at all, we found some differences in the job characteristics that were predictive of such transitions among the self-employed without and with employees. In general, a longer tenure in self-employment and having salary in the form of profits only (versus salary only) reduced the likelihood of leaving self-employment—either for wage and salary work or for no work. For the self-employed without employees, having a spouse in the business also reduced the likelihood of leaving self-employment. For the self-employed with employees, having a mid-size business of 6 to 25 employees reduced the probability of moving to no work compared with the self-employed workers in the smallest businesses (i.e., those with 1 to 6 employees). For both types of self-employed, higher compensation reduced the likelihood of leaving self-employment for no work, while some occupation and industry groups also were more or less likely to make a transition out of self-employment. Notably, our indicator of pension coverage did not affect transitions for either group of self-employed to not working. This is contrary to the retirement literature, which has found such an effect for transitions to retirement for workers in general.

Among the demographic and other factors we included in our models, having higher wealth reduced the likelihood of leaving self-employment for wage and salary work but had no effect on the transition to not working. This latter result is surprising given the general finding in the retirement literature that higher wealth is associated with a greater probability of leaving the labor force. The transition to not working from self-employment was affected by demographic and health variables, however, with men being less likely to leave self-employment than women, while older workers and those with a work-limiting health condition were more likely to leave self-employment.

The factors that are correlated with movements back to work in the self-employment sector from either unemployment/disability or from retirement were investigated. Our results suggest that highly educated and wealthy individuals with previous self-employment experience

are more likely to return to work in self-employment rather than unskilled workers with few options in the wage and salary sector. There were significant time trends in the transition back to work in self-employment over wage and salary employment. However, the pattern of the coefficients does not show that movements to self-employment were more likely between 2000 and 2002 when the economy experienced a downturn, compared to earlier time periods. Our analysis of movements into self-employment from wage work revealed that workers in high-quality jobs with pensions and health insurance are less likely to become self-employed. Further, risk averse workers are less likely to make the transition into self-employment. Choosing to cash out a pension and receiving other lump sums from insurance and inheritance is positively correlated with movements from wage and salary work to self-employment and supports the liquidity constraint hypothesis. The correlation between pension cash out and self-employment is particularly notable—the decision to cash out a pension to start a business may place retirement wealth at risk.

WEALTH AND WEALTH CHANGES

We find that self-employed workers are, on average, much better prepared for retirement than are wage and salary workers—they are more likely than wage and salary workers to own all types of property and financial assets and to have much higher levels of all types of non-pension wealth. This is consistent with the large differences in the expected retirement wealth between these two groups. The average differences are not due to a few successful businesses—at all points in the distribution self-employed workers have more non-pension wealth than wage and salary workers. Social Security wealth is, on average, equal between the two groups. Given the much higher likelihood of pension wealth among wage and salary workers, some of this difference would decrease once the value of pension wealth was accounted for. At the low points in the non-pension wealth distribution (10th and 25th percentiles) self-employed workers, like wage and salary workers, have very low levels of non-pension wealth. The self-employed may be even less prepared for retirement than wage and salary workers considering the lower likelihood of having a pension. At this point we have not been able to value pension wealth, so differences in total wealth between wage and salary and self-employed workers remains a subject for future research.

When measured on a risk tolerance scale, we found that self-employed workers are more likely to hold riskier financial assets, and such riskier assets are a larger percentage of the non-pension wealth portfolio of the self-employed compared to wage and salary workers.

Within self-employment subgroups workers who became self-employed at or after age 50 and the self-employed without employees are much less likely to have business assets than the self-employed before age 50 and those with employees. This suggests that the types of businesses owned by these subgroups are quite different. In terms of asset ownership, our research shows that self-employed workers without employees are more similar to wage and salary workers (with the exception of business and real estate ownership) than to self-employed workers with employees. Those workers who became self-employed at or after age 50 and those without employees have lower wealth, from all assets, than workers who became self-employed before age 50 or who have employees.

We are able to draw some conclusions as a result of our research. To understand the consequences of labor force transitions at older ages, we examined changes in business wealth and total wealth as the self-employed moved into retirement. We found evidence consistent with both business growth and failure for older self-employed business owners. Self-employed workers with employees who move into wage work have a substantial decline in business assets on average. Some self-employed workers without employees transition to having employees two years later. On average, the self-employed making this transition experience an increase in business wealth. Self-employed workers who retire experience a decline in business wealth, but far less than 100 percent suggesting that these workers may remain involved in the business as an owner. On the other hand, liquidation of business assets and subsequent investment into other assets evolves over time, whether moving to wage work or retiring.

Transitions to self-employment from wage work are associated with increases in total non-pension wealth. Thus, it appears that this type of labor force transition does not necessarily put retirement assets “at risk,” at least in the short term. Retired workers who “unretire” to self-employment have declines in total non-pension wealth. However, retired workers who “unretire” into wage and salary work have increases in non-pension wealth. This suggests that retired workers draw down on personal assets in order to re-enter the labor force as self-employed workers, which may affect resources for subsequent retirement.

Directions for Future Research

Our study invites future research in several areas:

- Additional information may be gleaned by examining self-employed workers by type of occupation or differentiating those who work in agriculture from other industries.
- The retirement experiences we investigated are based on short-term realizations—at most, two years after retirement. Future research on how expectations are or are not realized several years after retirement would provide additional insight into the retirement experiences of different types of workers.
- The self-employed have riskier financial assets and fewer annuities such as pensions than wage and salary workers. There are potential long-term consequences on the retirement income security of self-employed workers. Future research could examine longer-term patterns in the wealth disposition of wage and salary workers and self-employed workers over the life cycle, including the value of pension wealth.
- We suggest using the HRS now and in the future to study long-term changes in labor force statuses and wealth. The impact of a change in labor force status on wealth may not be realized for many years and this could provide more insight into this area.

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