Determinants of Planned Retirement Age

Determinants of planned retirement age are analyzed to identify workers most likely to be affected by proposed increases in the age of eligibility for full Social Security retirement benefits. The prediction equation indicates that defined benefit pension ownership, employment in less-skilled occupations, lower levels of education, being Black or Hispanic, and higher levels of financial assets, nonfinancial assets, and other private pension funds are related to lower planned retirement age.

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Introduction

Elderly persons are increasing as a proportion of the population. The percent of the U.S. population made up of persons 65 years of age and over is 15% today, and is projected to increase to 20% over the next 30 years (U.S. Bureau of the Census, 1998). The demographic pressures of population aging will require forward-looking action from policy makers to preserve the financial viability of the Social Security program. One proposed change is to raise the age of eligibility for full retirement benefits further or more rapidly than the currently planned gradual increase from 65 to 67 over the next 25 years. The rationale for increasing retirement age is to reduce the long-term deficit in the Social Security Trust Fund by increasing the amount that individuals pay into the Trust Fund, and reducing the benefits they draw out. The primary justifications for the recommendation are longer life expectancy and improved health of the nation=s elderly. Raising the retirement age has implications for the financial solvency of the Social Security System, supply and demand in the labor market, and the economic well-being of individuals.

Previous research documents that a worker=s decision to retire is influenced by rules governing pensions and Social Security benefits, wealth, characteristics of jobs held by elderly workers, health insurance coverage, and social norms (Fields & Mitchell, 1984; Hurd, 1997). Social norms regarding Aacceptable@ retirement age have been changing. The passage of the Social Security Act of 1935 made persons eligible for retirement benefits at age 65. Subsequent legislation passed in 1956 and 1962 made retirement benefits available at age 62 for women and men, respectively. In 1978, mandatory retirement before age 70 was abolished, and mandatory retirement at any age was outlawed in 1986.

These legislative changes affecting retirement age were accompanied by a century long decline in male labor force participation rates at older ages, a decline that has leveled off since the mid 1980s. However, labor force participation among men 55 to 64 years of age tends to be part-time or in a different occupation following Aretirement.@ Rather than completely withdrawing from the labor force, many men leave long-term career jobs but continue to work often part-time or part-year. The term Abridge jobs@ has been coined to refer to these employment choices between full-time careers and complete retirement. Whether the leveling off in male labor force participation rates since 1985 represents a short term cyclical event or a new long term pattern remains a question. However, it is clear that men=s hours of work at older ages are still falling even if the percent of older men that participate in the labor force are not (Wiatrowski, 1993).

The focus of this research is to investigate the determinants of Aplanned@ retirement age. Planned retirement age is a crucial component of family financial planning. However, few studies have addressed this issue directly. Many previous studies on retirement behavior have focused on the observed retirement age of older workers instead of planned retirement age. Planned retirement age is a crucial issue both for financial planning for retirement by individuals and for public policy debates about Social Security reform and related issues. Even though an individual=s planned retirement age might change over time, the planned retirement age of pre retirees is a critical factor affecting saving and investment decisions during the working years.

The number of years until the planned retirement age typically serves as an Ainvestment horizon@ for retirement saving planning for pre retirees. The investment horizon influences both the choice of investment vehicles and the amount of savings needed to finance consumption during the retirement years. An individual facing a relatively longer investment horizon would be more likely to buy stocks and other more aggressive investment vehicles, while an individual much closer to retirement would choose more conservative, lower risk investment vehicles. Similarly, an individual who plans to retire at a younger age (thus receiving less than the maximum retirement benefit) and spend relatively more years in retirement will have a higher personal savings target than an individual who plans to retire at a later age.

Some recent studies (Mitchell & Moore, 1997; Bernheim, 1996) evaluating retirement wealth adequacy of pre retirees have assumed age 65 as the retirement age. Although age 65 is the age of eligibility for full retirement benefits under the Social Security

program today, the full retirement age is scheduled to gradually increase to age 67. The standardized assumption of retirement at 65 without allowing for individual differences might significantly overestimate or underestimate the adequacy of retirement wealth. Clearly, assumptions made about planned retirement age are critical in determining whether people have saved >enough= for retirement. Yuh, Montalto and Hanna (1998) found that planned retirement age has a substantial impact on the estimated adequacy of preparation for retirement. Even though about 75% of workers elect to retire before age 65, there are proposals to increase the minimum age to receive any Social Security retirement pension (Apfel, 1998). Therefore, it is worthwhile to study factors related to expected retirement age to see which types of workers would be impacted most by increases in the minimum age for receiving Social Security benefits. Additionally, planned retirement age is an important variable in developing rational savings plans for retirement, so improving understanding of planned retirement age has implications for financial planning. This study analyzes factors related to individuals= planned retirement ages.

Literature Review

There have been many studies on retirement issues since the 1970=s, but most of these studies have focused on retirement behavior of older workers, and the observed retirement age, rather than on the planned retirement age of pre retirees. Typically, actual retirement has been treated as a choice variable in the literature, and various economic factors have been shown to play an important role in the retirement decision.

Boskin (1977) tried to explain the long-term decline in the labor-force participation of all male age-groups. Using data from the Panel Study of Income Dynamics for 1968 through 1972, he found that the value of current annual Social Security retirement benefits had a pronounced effect on the decision to retire. The level of net earnings had a strong negative effect on the probability of retirement. Quinn (1977) examined the microeconomic determinants of early retirement among white married men aged 58-63 using the 1969 Retirement History Study. Quinn investigated the relative impact of three sets of factors in explaining older men=s labor-force participation decisions: personal and financial characteristics, local labor market conditions, and certain attributes of the individual=s job. He found that health status and current eligibility for Social Security and other pensions were the most important determinants of retirement, and that there was a definite interaction between the two -- persons in poor health were more likely to retire in response to financial incentives from Social Security and other private pensions.

Diamond and Hausman (1984) examined factors that affect the actual retirement decision using the National Longitudinal Survey of Mature Men. The presence of pensions and Social Security benefits, the level of permanent income, and poor health had strong, positive effects on the probability of retirement. They argued that planned retirement dates change over time. In fact, while planned retirement age had some predictive power for actual retirement age, it left much variance unexplained. Burtless and Moffitt (1985) developed and estimated a model of the joint choice of retirement age and post retirement hours of work by the aged population using data from the Longitudinal Retirement History Survey (LRHS). They found that Social Security influenced both retirement age and choice of post retirement hours of work, but the magnitude of the effect on the age of retirement was small. They also found that earlier retirement age was related to poor health, lower levels of education, and higher pre retirement wage rates. Burtless (1986) also developed a retirement age model and estimated the model using the Longitudinal Retirement History Survey. Poor health, being married, household size, and wealth in excess of $25,000 all reduced the age of retirement.

Kotlikoff (1979) estimated a model for expected age of retirement using data from the National Longitudinal Survey (NLS) of Older Men. Private pension coverage was an important predictor of expected retirement age. Coverage under a private pension plan was associated with expected retirement 1.2 years earlier; for government pension coverage the impact was 1.8 years. Age had a positive and significant effect, and the health and employment attitudinal variables all had the anticipated negative effects. Honig (1996) used data from the first wave of the Health and Retirement Survey and found evidence that expected and observed retirement functions are similar. Honig (1996) suggests that retirement expectations may accurately forecast retirement behavior.

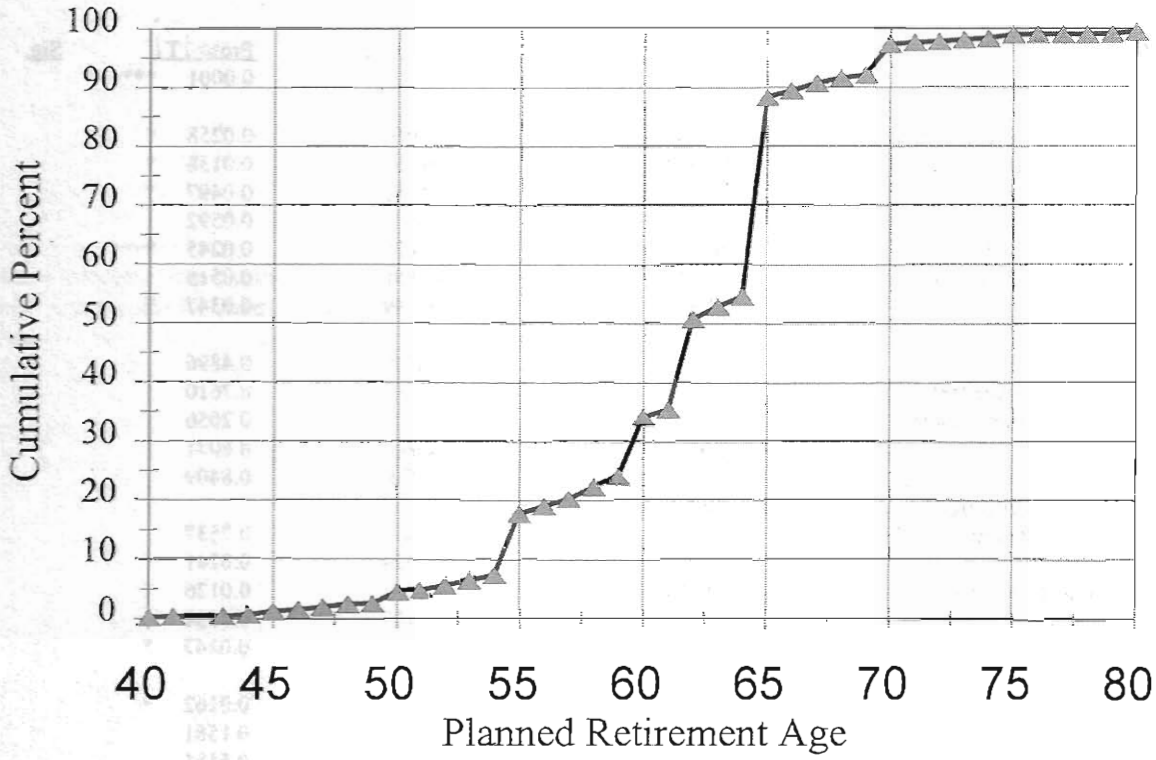
Most of the previous research focuses on the observed retirement age using a work-leisure model or a life cycle labor supply model. Typically, data on actual retirement behavior is used to estimate the probability of being retired as a function of Social Security and pension benefits, and other demographic characteristics. In addition, most of the economic retirement research conducted since the late 1970=s has used data from the RHS. A major limitation of the RHS is its minimal information about private pension plans for the RHS respondents (Leonesio, 1996).

A definition of retirement is required before the determinants of planned retirement age can be analyzed, however, there is no consensus in the literature on the definition of retirement (Gustman, Mitchell, & Steinmeier, 1995). Various definitions of retirement have been used by economists and other social scientists, including: self-reported retirement; completely stop working or looking for work; stop working full-time; working less than a given number of hours; leaving the main employer (a long-term job); and receipt of an employer-provided pension or Social Security benefits. This study defines retirement as occurring when an individual stops working full-time B the definition most commonly used in empirical studies (Sickles & Taubman, 1986; Diamond & Hausman, 1984).

Methods

The data for this study are drawn from the public use tape of the 1995 Survey of Consumer Finances (SCF). The Survey of Consumer Finances is a triennial survey sponsored by the Federal Reserve with the cooperation of the Department of the Treasury. The purpose of the SCF is to provide comprehensive and detailed information on the financial characteristics of U.S. households. The SCF was chosen for this study because it provides information on a broad age-range of the U.S. population, and it specifically asks respondents when they plan to stop working full-time C planned retirement age. Households with a head age 35 to 70 years who was currently working full-time were selected, resulting in a sample of 1,703 households. Figure 1 shows the cumulative distribution of the planned retirement age. About 18% of the sample planned to retire by age 55, 36% planned to retire before age 62, and 51% planned to retire by age 62. Almost all respondents (88%) planned to retire by age 65, and 91% planned to retire by age 67.Ordinary least squares regression analysis was used to examine determinants of planned retirement age. The dependent variable was the planned retirement age of the householder. Predictors of the planned retirement age were selected based on review of empirical models of retirement behavior and are classified into three groups: financial variables, demographic variables, and perception variables.

Figure 1
Cumulative Distribution of Planned Retirement Age



Findings

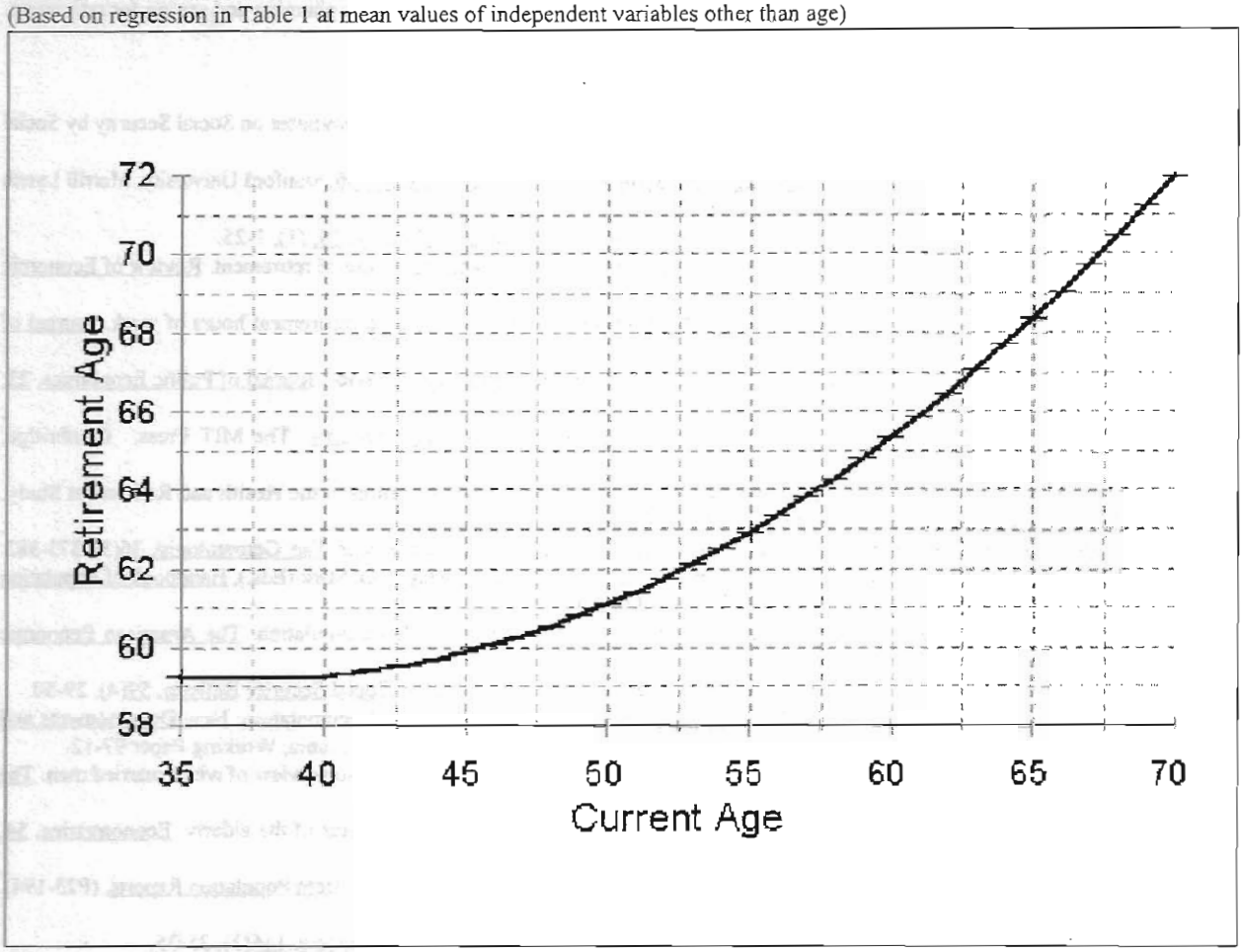
The retirement age prediction equation had an adjusted R-square of 0.21, and 13 of the 28 variables were significant at the 0.05 level or better (Table 1). The levels of financial assets, nonfinancial assets, and other private pension funds significantly lowered the planned retirement age. Levels of financial assets and nonfinancial assets lowered the planned retirement age relatively more than levels of IRA/Keogh accounts or defined-contribution pension plans. Ownership of a defined-benefit pension significantly decreased the planned retirement age. Being employed in less-skilled occupations (service, production/repair, farming/fishing), lower levels of education, and being Black or Hispanic decreased the planned retirement age significantly. If the householder had less than a high school diploma, the planned retirement age was 1.6 years lower than that of otherwise similar householders with a college degree. If the householder was Black or Hispanic the planned retirement age was 2.2 years lower than that of otherwise similar householders that were nonBlack and nonHispanic. On the other hand, non-investment income, anticipated life expectancy of the householder, and the combined effect of linear and quadratic age variables significantly increased the planned retirement age. The magnitudes of the income effect and the total age effect are relatively large. Figure 2 illustrates the large effect of age on the expected retirement age controlling other factors at mean levels. The age pattern suggests that adjustment in the planned retirement age occurs as workers= working years become longer. The effect of age on planned retirement age is also related to a survival effect B someone who is 60 would not be in the sample, and cannot plan to retire at an age less than 60.

Table 1.
Descriptive Statistics and Regression of Planned Retirement Age (N=1,703)

Variable	Mean or percent	Estimate	Prob>|T|	Sig.
Intercept		73.136	0.0001	***
Financial Variables				
Log(non-investment income)	65,149	0.359	0.0258	*
Log(financial assets)	64,602	-0.161	0.0158	*
Log(nonfinancial assets)	215,816	-0.153	0.0497	*
Log(debt)	64,173	0.071	0.0592	
Log(IRA/KEOGH)	16,523	-0.076	0.0245	*
Log(Defined Contribution)	22,273	-0.058	0.0515	
Defined Benefit Ownership	32.8%	-0.699	0.0347	*
Demographic Variables				
Employed spouse	46.3%	0.239	0.4896	
Respondent in excellent health	36.0%	0.100	0.7610	
Spouse in excellent health	24.7%	0.461	0.2056	
Household size	2.97	0.065	0.6071	
Respondent self-employed	12.2%	0.076	0.8409	
Respondent occupation (reference category: managerial/professional)				
Technical/administrative	25.1%	0.123	0.7537	
Service	9.5%	-1.494	0.0241	*
Production/repair	12.8%	-1.447	0.0126	*
Operator/laborer	19.6%	-0.197	0.7134	
Farming/fishing	1.8%	-2.625	0.0147	*
Respondent education (reference category: college graduate or more)				
Less than high school	10.6%	-1.621	0.0162	*
High school graduate	30.0%	-0.617	0.1581	
Some college	25.2%	-0.243	0.5581	
Age of respondent	46.05	-0.897	0.0001	***
Age of respondent squared		0.012	0.0001	***
Male respondent	77.5%	0.253	0.6644	
Black or Hispanic respondent	16.1%	-2.170	0.0001	***
Married respondent	68.7%	-0.546	0.3728	
Perception Variables				
Life expectancy (years)	80.45	0.039	0.0060	***
Very satisfied with expected pension	5.8%	-0.806	0.1170	
Retirement is a saving goal	33.6%	-0.309	0.3136	
Model F-statistic (p-value)	17.565 (0.0001)			***

R-square=0.2271. Adjusted R-square=0.2142
Note: *p<.05, **p<.01, ***p<.001

Figure 2
Predicted Retirement Age by Current Age
(Based on regression in Table 1 at mean values of independent variables other than age)



Summary and Implications

The regression results suggest that financial capabilities to finance consumption in retirement as well as demographic characteristics and perceptions, including current age and anticipated life expectancy, strongly affect planned retirement age. The results also suggest that adjustments to planned retirement age take place over time. These adjustments may be in response to the realization that accumulated resources are not adequate to meet needs in retirement, thus causing workers to postpone retirement.

The ability of workers to adapt to further increases in Social Security retirement age depends on their capacity to extend their working lives and to accumulate enough savings to offset a delay or reduction in Social Security income. Alternatively, workers face retirement with reduced income. Adequacy of retirement resources is influenced by family income and wealth. Policies to increase pension coverage as well as increase private savings would help counter the negative effects of a decrease in Social Security income. The ability to extend the working life is influenced by health status as well as characteristics of the job. Some workers will have difficulty extending their working lives. Important questions to address with additional research include: Will employers be willing to retain and/or hire older workers? What will happen to older men and women who are not healthy enough to work full-time or who are unable to find jobs? What will happen to older workers in physically demanding jobs? What about older workers who prefer Abridge jobs@?

This study focused on financial and demographic characteristics as determinants of planned retirement age. However, attitudinal and psychological factors might also affect planned retirement age. In reality, individual responses to work and retirement incentives often vary substantially even among persons who appear to have much in common in terms of background characteristics and financial circumstances. Thus, unobserved, unmeasured individual differences might play an important role in retirement decisions. A comprehensive theory of work and retirement should be able to explain the substantial variations in retirement decisions

that are observed among apparently similar individuals (Leonesio, 1996). Research that improves our understanding of factors related to planned retirement age will improve our ability to analyze policy issues, including proposed changes to the Social Security program, as well as provide better insight into how to influence individual behavior related to planning and saving for retirement.

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Endnotes

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