Retirement Decisions: Are Women and Men Different?

Using the beta release of 1992 Health and Retirement Survey, this study examined the contributing factors to retirement decisions of male (N= 2072) and female workers (N=1545) age 55 and over. The results of logit analysis indicated that disability status, poor health, pension benefits, and age were positively related to retirement status while earned income, the number of children at home, the number of times laid-off previously, and a better working environment tend to delay the timing of retirement. Further, the effects of these variables varied depending on the gender of older workers.

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Introduction

The proportion of older persons in the population has increased in recent years as the elderly live longer. The 1990 census shows that 31.2 million people are at retirement age (65 years and over), and another 10.6 million near retirement age (60 to 64) (Bureau of the Census, 1994). An average of 1.3 million older workers retired each year between 1985 and 1990. The median age of retirement was about 63 for both men and women between 1985-1990 while it was 67 between 1950-1955. Retirement is one of the most important lifetime decisions and involves complex choices. Health, mandatory retirement, Social Security, private pensions, earnings and wealth are found to be major factors affecting retirement decisions (Ruhm, 1989). Most of the existing studies, however, focused on either white married male workers (Quinn, 1977) or male workers (Gordon & Blinder, 1980; Henretta, Chan, and O'Rand, 1992; Myers, 1991). Women have been neglected in retirement studies even though they are going to be a high-growth group among elderly population in the labor market during the next decade or so (Doeringer, 1990).

Almost 75% of women, compared with 94% of men, were in the labor force in 1993. Unlike women in the earlier years, the work experiences and earnings of baby-boom women more closely resemble thoses of men. Employed women were almost as likely to be in pension plans as employed men; 67% of women wage and salary workers age 25 or older are covered by pension plans while 69% of men are covered in 1991 (Mergenhagen, 1994).

Life expectancy of women exceeds that of men. Women are also more vulnerable than men to chronic illnesses (Longino, 1994) and high health care costs can be a financial burden to older women. Financial security is one of the areas of most concern for older women due to their longevity and possible health problems (Smeeding, 1990). Women, thus, may stay longer in the labor market than they wish because of financial needs.

Marital status of women may affect their retirement decisions since their decisions are likely tied to the retirement decision of their husbands, but not vice-versa (Mergenhagen, 1994). Family-related responsibility may also affect retirement decisions of women. Having more dependent children may discourage women from leaving the labor force since the women's earnings can be helpful to support children's education and other needs (Henretta & O'Rand, 1980). The presence of family members who need daily living assistance may force women to leave the work force because women are likely to be a primary caretaker at home.

Despite the differences in the labor market experiences, financial status, and family-related responsibility of men and women, we know too little about retirement decisions of older women. A few studies examined the retirement decisions of women whose work, health, and pension experiences tend to differ significantly from those of male workers (Honig, 1985; Pozzebon & Mitchell, 1989; Gohmann, 1990). Women were examined as a spouse of male workers (Honig, 1985; Pozzebon & Mitchell, 1989) or only single women (Gohmann, 1990) were examined. This study examines factors contributing to retirement decisions of older workers using the 1992 Health Retirement Survey. Male and female workers will be examined separately and contrasted to identify the differences in factors contributing to their retirement decisions.

Related Literature

Earnings and Wealth

Most studies documented that higher wages were associated with later retirement (Burkhauser, 1980; Burtless & Moffitt, 1985; Honoch & Honig, 1983; Mitchell & Fields, 1984; Myers, 1991; Quinn, 1977). Although these studies found different magnitudes of the wage effect, the importance of the wage effect was recognized consistently. Because of the difficulty in obtaining information on asset holdings, the impact of asset holdings on retirement has not been examined extensively. Burtless and Moffitt (1984), Honoch and Honig (1983), and Myers (1991) indicated that asset holdings and retirement ages are inversely related, although the effect was quite small. Quinn (1977) also reported that labor force participation of older workers decreased by 0.9% as asset income increased by $1,000. In other words, workers with a high level of non-labor income were found to retire earlier than those with low.

Health

The health status of older workers has been found to be one of the important factors in explaining retirement decisions. Health deteriorates as an individual becomes older. If it reaches the point that older workers can no longer work, they leave the work force. Burtless (1987) found that deterioration of health varies among occupations and industries. Men who reported poor health retired an average of 1.1 years earlier than those who reported average or above average health in Burtless's study (1986). Burkhauser (1980) found a 10 % decrease in the number of weeks worked during a year as a result of poor health. Using data of white-married male age 58-63, Quinn (1977) reported that health status is one of the important reasons for the early retirement decision. Those with a health limitation had a lower labor force participation rate than those who were healthy.

Private Pensions

Private pensions have become an important source of retirement income in the last decade. Studies found that pension systems encourage early retirement. Mitchell and Fields (1984) surveyed ten pension plans and found different retirement ages across the ten plans. The average retirement age was 63.7 and it ranged from 61.8 to 65.7. Pension incentives also varied depending on the length of service and age of retirement. Furthermore, they observed that a 10 % increase in pension wealth reduced average retirement age by one month. In a study examining retirement reasons and process, Henretta, Chan and O'Rand (1992) found that a pension encourages voluntary and compulsory retirement. Myers (1991), and Quinn (1977) also found a positive association between pension coverage and retirement.

Mandatory Retirement

Mandatory retirement provisions tend to force older workers to leave the labor market. They prevent employers from possible charges of discrimination, favoritism, or bias in the termination process (Schultz, 1992). A worker's productivity tends to fall after a given number of years of work but earning profiles often do not change. Employers might try to lay off workers selectively. This, however, imposes morale problems and age discrimination. Mandatory retirement rules set criterion for layoffs to avoid problems. To induce efficient retirement flows, employers institute mandatory retirement (Gustman, Mitchell, & Steinmier, 1994). The minimum age at which employers could impose mandatory retirement was recently eliminated for most workers. Labor statistics show that mandatory retirement rules have very little effect on retirement decisions (Ruhm, 1990).

Other Factors

Family-related factors have been receiving the least attention in retirement studies since data used in previous studies was obtained from employers. Marital status may affect the retirement decision, especially for women. Since women tend to be a secondary worker in the family and they tend to marry a man older than they are, a husband's retirement is likely to induce retirement of the wife. The number of dependent children may affect the timing of retirement. Retirement can be delayed because of parental responsibility for children. This might be especially true for men or women who are the head of household. Having either elderly parents or family members with illness may also affect the retirement decision, especially for women. In general, women are likely to be a caretaker when caregiving is needed at home. Women are also likely to be low wage-earners. Women's traditional caregiving role at home and low earnings in the labor market may encourage them to quit market employment.

Methods

The Model and hypotheses

Based on previous research, a model is developed to examine the major factors affecting worker's retirement decisions.

Work-related variables are whether they have participated in any pension plans or not (1=yes, 0=otherwise), number of times laid-off previously, and a

general work condition index reflecting respondents' satisfaction of the work environment (0=least satisfied, 9=most satisfied). When pension benefits are available, workers are provided with economic security after retirement, and they are expected to be more likely to retire. If a person has been laid-off before, he or she must be concerned with job security. Therefore, individuals who were laid-off may postpone retirement. The general work condition index is obtained along five dimensions using principal component analysis: whether the pay is fair, whether the pay is related to the work they have done, employer promotion preferences, whether co-workers pressure older workers, and whether the

Table 1
Descriptive Statistics of the Variables

Variable	Total (n=3572)	Male (n=2027)	Female (n=1545)
Continuous variables' mean & S. D.			
#LAYOFF	0.57 (2.81)	0.70 (3.56)	0.40 (1.27)
WORKCON	3.30 (3.04)	3.12 (3.08)	3.54 (2.97)
SHEALTH	2.59 (1.19)	2.62 (1.20)	2.55 (1.17)
PHEALTH	0.19 (1.01)	0.18 (0.98)	0.22 (1.04)
EARNED	21,904 (37,037)	24,562 (45,009)	18,416 (22,203)
UNEARENED	24,567 (26,198)	25,501 (26,323)	23,343 (25,991)
#CHILDREN	0.17 (0.50)	0.02 (0.22)	0.37 (0.67)
CAREGIVING	12.49 (182.43)	0.11 (3.36)	28.73 (276.58)
AGE	59.19 (3.72)	59.96 (4.27)	58.17 (2.49)
Categorical variables' frequency & %			
RETIRED	992 (27.8)	640 (31.6)	352 (22.8)
PENSION	2008 (56.2)	1169 (57.7)	839 (54.3)
DISABLED	325 (9.1)	210 (10.4)	115 (7.4)
GENDER	2027 (56.7)	NA	NA
NAMARRIED	2731 (76.5)	1731 (85.4)	1000 (64.7)

employer allows older workers to move to less demanding jobs. It is hypothesized that workers who are satisfied with working conditions are less likely to retire.

The second factor examined is the health conditions of the respondents, which include both the subjective and objective measures of health as well as the disability status of the respondent. Self-reported health is used as a subjective indication of the health status (1=poor 5=excellent). Number of days missing from work in the last 12 month because of health reasons was used to measure physical health. Disability status is measured by whether the respondents are disabled or not (1=yes, 0=otherwise). Disability limits productivity at the work place (Grossman & Benham, 1974) and it is hypothesized that disability status is positively related to retirement.

The economic factors include respondents' earned and unearned income. Earned income reflects respondent's market wage (including pay or salary, bonus or tips, professional income, and other earned income). Individuals with a higher wage may substitute consumption for leisure by postponing retirement. It is, therefore, hypothesized that a higher earned income will lead the respondent to stay in the labor force. Unearned income reflects family financial resources that are not contributed to by the respondent's earning power (i.e., spouse's earning, interest, property income, etc.). It is expected that workers with more unearned income are more likely to retire.

Family-related responsibilities are reflected by the number of children at home and care-giving to family members (number of hours spent helping parents or parents-in-law per year). The reason for choosing these two variables is that family members tend to have a very significant impact on a person's retirement decisions. If the respondent needs to spend a lot of time to care for family members such as parents or parents-in-laws, it might prevent him or her from participating in the labor force. Also, the concern for children's education and development may give the parents a great incentive to postpone their retirement. It is hypothesized that people who have to give care to their parents or parents-in-law are more likely to retire while those who have dependent children at home are less likely to retire.

The demographic factor includes age, marital status (1=married, 0=otherwise), and gender of the respondent (1=male, 0=female) for the total sample, age and marital status only for the male and female sub-samples. Age is certainly an important factor that workers would consider when making retirement decisions (Gordon & Blinder, 1980). It is hypothesized that as age increases, people are more likely to retire. The presence of a spouse can have a very significant impact on a person's retirement decision because the decision tends to be a joint decision in this case.

Table 2
Estimated Coefficients for Probability of Retirement by Older Male and Female Workers Age 55 and Over

Variables	Total (n=3572)	Male (n=2072)	Female (n=1545)
PENSION	2.05***	2.51***	1.63***
	(0.16)	(0.23)	(0.23)
#LAYOFF	-0.10**	-0.07	-0.35**
	(0.04)	(0.04)	(0.10)
WORKCON	-0.98***	-0.94***	-1.26***
	(0.05)	(0.06)	(0.17)
SHEALTH			
(poor)	0.73**	1.08**	0.24
	(0.28)	(0.38)	(0.42)
(fair)	0.45	0.62	0.19
	(0.27)	(0.36)	(0.41)
(good)	0.64*	0.83*	0.29
	(0.26)	(0.34)	(0.48)
(very good)	0.29	0.48	-0.01
	(0.26)	(0.35)	(0.39)
(excellent)	reference group		
PHEALTH	-0.10	-0.07	-0.18
	(0.16)	(0.15)	(0.27)
DISABLED	2.01***	1.97***	2.13***
	(0.22)	(0.29)	(0.36)
EARNED[a]	-0.01***	-0.02***	-0.005
	(0.003)	(0.004)	(0.004)
UNERNED[a]	-0.0004	-0.006	-0.0005
	(0.002)	(0.003)	(0.003)
#CHILDREN	-0.46***	-0.60	-0.53***
	(0.14)	(0.40)	(0.15)
CAREGIVING	-0.00	0.02	-0.00
	(0.00)	(0.01)	(0.00)
AGE	0.24***	0.24***	0.19***
	(0.02)	(0.02)	(0.04)
GENDER	-0.17	NA	NA
	(0.14)		
MARRIED	0.13	0.31	-0.05
	(0.16)	(0.25)	(0.23)
Intercept	9.81**	9.66***	7.70***
	(1.22)	(1.46)	(2.21)
Log-likelihood	-804.03	-444.00	-338.27

Note
a. in $1,000.
* $p < 0.05$ ** $p<0.01$ *** $p<0.001$

Descriptive statistics are presented in Table 1.

Data and Sample

The data are from beta release of the 1992 Health and Retirement Study (HRS) collected by the Survey Research Center of the University of Michigan in cooporation with federal agencies. The HRS survey follows a longitudinal design to provide useful information for researchers to study the economic and behavioral processes occurring at older ages. Detailed information on labor force participation, pensions, health conditions and health status, family structure, social support, and mobility, economic status, and demographic characteristics is presented for 12,656 individuals (Juster & Suzman, 1994). Because the focus of this study is to examine people's retirement decisions, only respondents who are older than 55 years old in 1992 are included, resulting in a total sample size of 3,570.

Analysis

Means and frequencies are first obtained to study the characteristics of the sample. Then, a logistic analysis is conducted to examine the probability of retirement (SAS Institute Inc.,1989).

Results and Discussion

The results of logit analysis are presented in Table 2. A pseudo-Chow test was performed to test whether significant differences exist between the dichotomized subsample models and the total sample model. The test indicates that using the dichotomized sample is more appropriate than using the total sample because the retirement decisions made by older male and female workers are different.

Consistent with the findings of the previous studies (Burkhauser, 1980; Burtless & Moffitt, 1984; Honoch & Honig, 1983; Quinn, 1977), earned income has a negative, but quite small, effect on the retirement of male workers and the total sample. Workers with higher earnings are likely to work longer years, holding other factors constant. Earnings, however, had no significant effect on retirement decisions of older women. This difference in wage effects may reflect the earning gap between male and female workers. Female workers may not have an incentive to substitute consumption for leisure since their average market wage is much lower than that of male workers. Consequently, female workers' earnings are not an important factor to be considered in the retirement decision.

Job stability is also found to be an important factor in explaining retirement decisions of older workers. For women and the total samples, those with a high number of lay offs are likely to postpone their retirement. Women are likely to work in low wage jobs that tend to be subject to lay off (Bayes, 1988). Low earning profiles of women and the lack of job stability may have contributed to a

woman's decision to delay retirement. Henretta et al (1992) also found that workers who had uninterrupted employment were likely to delay retirement.

Pension benefits, as a source of retirement income, encourage older workers to quit market employment. Workers who have pension coverage are likely to retire regardless of gender of the workers. These results are consistent with the findings of the studies by Gustmann and Steinmier (1984), Hanoch & Honig (1983), Mitchell and Fields (1984) and Myers (1991). However, Henretta and O'Rand (1980) found a negative effect of pension coverage on older women's labor force participation.

The disability status of older workers is positively associated with retirement status. Those who reported that their health status was either poor or good are also likely to be retired compared to those with fair, very good, or excellent health in the total and male samples, but not for the female sample. No previous study examined the influence of women's health on their retirement decision. The importance of health on retirement found in this study is consistent with the previous studies (Burkhauser, 1980; Burtless, 1986, 1987; Quinn, 1977).

The working environment is a significant factor affecting retirement decisions for all older workers. A better environment measured by the level of pressure for older workers to retire, fair pay, and age discrimination induce older workers to stay in the labor force longer regardless of gender.

Women with more dependent children under 18 are likely to stay in the labor force longer than those with fewer young children. Having more children indicates a greater need for income to meet children's needs in the family. The financial needs may lead women to stay in the work force. Henretta et al (1980, 1992) and Gustman and Steinmier (1984) also reported that no responsibility for children induces older male workers to leave the labor force. Female workers were not included in their studies. It is, however, noteworthy that the number of children had no effect on male worker's retirement decision in this study.

As expected, age of older workers has a positive effect on the likelihood of retirement. The studies by Burtless and Moffitt (1984) and Myers (1991) also found a positive relationship between age and retirement status. Since individuals are expected to make retirement decisions to maximize their lifetime utility, age must be a significant factor that needs to be considered along with other factors.

Conclusion

This study examined the contributing factors to retirement decisions of male and female workers age 55 and over. Disability status, pension coverage, working environment, and age are related to the retirement decisions of all workers. Health status and earned income have significant effects on male worker's decision to retire, but not females. The number of children at home and the number of times laid-off are related to female worker's retirement decision, but not males.

Overall, factors contributing to retirement identified by this study, disability status, pension coverage, and working environment, are consistent with previous studies. Although many previous studies (Burkhauser, 1980; Burtless & Moffitt, 1985; Honoch & Honig, 1983; Mitchell & Fields, 1984; Quinn, 1977; Burtless, 1986, 1987) found that wages or earned income and health status are important retirement reasons, the results of this study suggest that these factors play a role in men's retirement decisions only. The factors contributing to women's retirement found by this study, the number of children at home and the number of times laid-off previously, are seldom reported in previous studies. This suggests that women's retirement decisions might be very different from those of men. Further studies on women's retirement are definitely needed.

Women's retirement decisions are not wage-sensitive, while men's are. This confirms that men are still the primary bread-earners and assume more of the economic responsibility than women in a family. A higher wage would induce them to stay in the labor force in order to get the economic benefit. For women, wage is less significant in making retirement decisions because they tend to be more influenced by non-economic factors such as children, spouse, or other family members. The results of this study suggest that the number of children at home significantly affect women's retirement decision. The reason might be that women still bear most of the responsibility of taking care of the children, both physically and economically. Therefore, it can be said that men are more economically-driven while women are more household-driven when making retirement decisions.

Health status, which was identified by some other studies (Burkhauser, 1980; Burtless, 1986, 1987) as an important factor in retirement decisions, is not significant in this study for women. The reason might lie in the different nature of men and women's illness. Men tend to have very serious health problems that may force them to leave the labor force, while women's illness tend to be chronic and are less likely to affect their working ability.

Women's retirement decisions are also sensitive to the number of times they were laid off before. This result suggests that the job characteristics for men and women may be different and men's job tend to be more stable than women's. Because of this difference in job nature, women tend to be more concerned with job security when making retirement decisions. Faced with uncertainties related to whether they want to re-enter the labor force, women are less likely to leave the job they currently have. For men, they are less concerned with this issue because they tend to re-enter the labor force easily.

These differences in factors affecting men and women's retirement decisions have implications for those who are making employee benefits decisions and those who are responsible for pension programs. When estimating the length of the employees' working life in making benefits or pension decisions, the employers need to be aware of the differences in men and women. For example, they need to incorporate more economic-related factors in estimating men's working life while more household related factors for women's. In addition, they might pay more attention to the health status for men and the concern for job stability for women in the process of predicting when these workers are going to leave the labor force.

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