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Can Workers Afford
A Higher Retirement Age?

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CAN WORKERS AFFORD A HIGHER RETIREMENT AGE?

Abstract

A higher retirement age is often proposed to reduce Social Security benefits and to cover an expected funding shortfall. Workers could theoretically compensate for this shortfall by either working longer or by saving more. The evidence suggests that a substantial minority of workers already have to retire early due to health considerations. In particular, African-American, women, and workers with less education are disproportionately affected. These are also workers that are likely to be already inadequately prepared for retirement. And a reduction in Social Security benefits is unlikely to be fully compensated for by higher savings.

I. Introduction

Social Security is the most important source of retirement income for older Americans. In 1998, Social Security benefits provided on average 58% of income for households over 65.

While the past success of Social Security is not in doubt, its future has become an issue of debate. According to the 2001 Trustees Report (SSA, 2001), Social Security's revenues will cover full benefits until 2038. Thereafter, it will be able to pay for more than two-thirds of promised benefits. To address this financing gap after 2038, some changes to Social Security are considered.

One of these changes is to cut Social Security benefits by raising the normal retirement age (NRA). The NRA is already scheduled to increase to 67 for workers born after 1959. To cover the expected shortfall it would have to increase beyond age 67. The Congressional Research Service (2001) estimated that raising the retirement age to 70 would reduce benefits by 11% for workers retiring in 2020.

A higher NRA does not necessarily mean that everybody has to wait longer to receive any benefits. But it does mean that early retirees will receive lower benefits than is currently the case. While the NRA rises, workers may still be able to retire as early as 62 – currently the Earliest Entitlement Age (EEA). However, recent proposals to increase the NRA have also included provisions to raise the EEA. In that case, workers would indeed have to wait longer before receiving any benefits.

Workers could offset the loss of benefits by saving more or by working longer. But these options are not available to everybody. Some may have to retire early because of their health, and they may not be able to compensate for the loss of benefits with their

savings. The paper relies on established and robust research findings on the health and wealth status of workers to see how different groups will likely fare from a benefit cut to Social Security in the form of a higher retirement age. Given the characteristics of these workers, it is possible to use the evidence on wealth to determine whether they have adequate retirement savings. The paper examines the evidence that changes in Social Security benefits will have an impact on private savings. The claim that a reduction in Social Security benefits may be more than compensated for by higher savings, thus maintaining the adequacy of retirement income following a benefit cut, is evaluated.

II. What is retirement?

Retirement describes the detachment from the labor force at the end of a career. Retirement is a rather modern idea. While around 60% of all men aged 65 and older were working in 1900, the share of men over 65 who worked for pay dropped to about 15% by the end of the century (Ransom and Sutch, 1986; Lumsdaine and Mitchell, 1999).

Even though Social Security's NRA is 65, most workers today retire earlier, usually at Social Security's EEA at 62. About one quarter of men and more than 10% of women received pensions at 61 in 1983 (Packard and Reno, 1983). Similarly, close to 25% of men who were retired in 1992 had retired at 62 (Lumsdaine and Mitchell, 1999). In 1999, 58.7% of all new retirees – excluding disability conversions -were 62 years old, 77% were younger than 65, and a total of 72 % of retirement beneficiaries had retired before reaching the NRA (SSA, 2000a). 78.6% of all new female retirees took early retirement compared to 75.6% for men in 1999 (SSA, 2000a). Consequently, the median retirement age declined from 64.2 in the late 1960s to 62.1 in the early 1990s for men and from 64.5 to 62.6 for women (Gendell, 1998).

The transition into retirement may be changing. Most people define retirement as complete withdrawal from the labor market (Gustman et al., 1995). Only 4% of men and 7-9% of women were easing into retirement by working reduced hours. However, the number of workers who use part-time jobs and self-employment as bridges into retirement appeared to increase rapidly (Quinn, 1999). The estimates suggest that possibly as many as one quarter of men and 40 % of women used bridge jobs in their transition to retirement (Quinn, 1999).

While labor force participation rates of older workers are relatively low, indicating a more or less abrupt transition into retirement, there may be reasons to expect an easing into retirement to become more prevalent in the future.

A study by the Heldrich Center for Workforce Development (2000) found that only 10% of workers want to completely stop working. Instead, 52% indicated that they would like to work part-time, and 19% wanted to start their own business.

Workers' desires and realities may differ due to institutional constraints. Institutional impediments to the employment of older workers, though, have been reduced (Herz and Rones, 1989). Changes to Social Security, such as a higher NRA or increased earnings limits, may offer incentives for continued work. Also, a growing number of workers are covered solely by 401 (k) plans (DoL, 2001)¹, which do not include formal retirement age provisions, unlike most defined benefit plans or Individual Retirement Account (IRA) regulation (Wiatrowski, 2001). Furthermore, voluntary part-time employment has become more prevalent in the labor market, thus potentially making it easier for workers to transition into retirement by working reduced hours.

¹From 1978 to 1997, the share of private wage and salary workers covered by defined contribution plans as their primary pension plan increased from 7 to 25% (DoL, 2001).

Finally, the age limit previously included in the Age Discrimination in Employment Act was eliminated in 1986 (Wiatrowski, 2001).

Also, demand for older, skilled workers may rise in the future. As baby boomers, born between 1946 and 1964, begin to retire, the need for skilled workers may rise (Dohm, 2000), thereby increasing the labor force participation of older, educated workers (Besl and Kale, 1996).

Over the past decades the actual retirement age declined. There are signs, though, that this trend leveled off (Quinn, 1999). Future workers may be able to work as long if not longer than workers in the past. To see whether this trend affects all workers equally, I now turn to the reasons for retirement. In particular, I examine whether some workers may experience health problems severe enough to prevent them from continuing to work.

III. Reasons for Retirement

A growing number of workers may want to transition into retirement through part-time work or self-employment. In reality, this may prove difficult. Companies have long been reluctant to let workers reduce hours on their current jobs or to create good quality part-time jobs. Low-wage part-time jobs are not an attractive alternative for most older workers. Moreover, it may be difficult to increase the labor supply of older workers, especially if their health conditions have not improved markedly. In other words, a higher NRA may not raise the labor supply, but it may lower retirement income adequacy, depending on workers' health and wealth.

Numerous studies have found the effects of Social Security changes on the labor supply of older workers to be small. Using the Retirement History Survey (RI-IS), Boskin and Hurd (1978) found that higher benefits increased the likelihood of retirement as a

thousand dollar annual increase in benefits resulted in a decrease of the probability of being retired by 8 % points. Also based on the RHS, Hall and Johnson (1980) found similar results in a study on planned retirement age; Sueyoshi (1989) found that benefit increases in the early 1970s raised the chance of early full retirement by less than 5% and reduced the chance of partial retirement by one to two percent; and Ruhm (1995) found that Social Security's early retirement provision affected the retirement decision of older men. Finally, Samwick (1998) found that a reduction of Social Security benefits from their 1983 levels by 20% would have resulted in just a 1 percentage point decline in the probability of being retired at age 70, based on combined data from the 1983 and 1986 Survey of Consumer Finances (SCF) and the companion Pension Provider Survey (PPS).

Since a higher retirement age is a benefit cut, the sensitivity of retirement decisions with respect to such a cut is important. Past Social Security changes, such as an increase in the NRA, liberalization of the earnings test and an increase in the credits for delaying retirement were designed as incentives to postpone retirement (Burtless and Moffitt, 1984; Leonesio, 1993). They have not had much success. The impact of the changes in Social Security on retirement decisions, while statistically significant, is small in practical terms (Fields and Mitchell, 1984; Leonesio, 1990).

Because private pension plans encourage early retirement, Social Security changes to achieve later retirement had little effect (Honig and Reimers, 1989; Stock and Wise, 1990; Lumsdaine et al., 1996)⁴. Research also confirmed that the labor supply varies with pension coverage. More generous pensions lead to earlier retirement (Lumsdaine and Mitchell, 1999; Samwick, 1998; Gustman et al., 1994; Burtless, 1987;

⁴More than 90 % of defined benefit plans offer early retirement in private industry (BLS, 2001).

Burtless and Moffitt, 1985). A 10% higher present value of total retirement income at age 60 could result in a worker retiring 1-2 months earlier (Lumsdaine and Mitchell, 1999).

The impact of private pensions on retirement decisions has to be seen in context, though. A large share of workers, especially low wage, part-time, and minority workers, are not covered by private pensions, indicating that other factors have to explain the retirement decision of these workers. The coverage rate of all private sector wage and salary workers was 44% in 1997 (DoL, 2000). Coverage of part-time, temporary and low-wage workers was especially low due to the proliferation of 401 (k) plans and the frequent requirement of employee contributions to such plans. Similarly, pension plan participation varied by race, with 47% of white workers participating, but only 27% of Hispanics. Also, 70% of unionized workers participated in a pension plan, whereas only 41 % of non-unionized workers did. Finally, only 6% of workers earnings less than \$200 per week participated in a pension plan, while 76% of workers earning \$1,000 or more per week participated (DoL, 2000).

Health limitations may be an important determinant of retirement age for workers less likely to have private pensions. Health limitations are of particular importance when considering retirement age increases since they determine whether a worker can work longer to compensate for the benefit cut.

The life expectancy at age 65 rose from 12.6 years in 1945 to 15.7 years in 2000 for men, and from 14.4 years to 19.1 years for women (SSA, 2001). However, health improvements for workers younger than 65 may not keep pace with mortality changes. Bailey (1987) reported that based on the Health Interview Survey (HIS) the share of men over 45 who indicate limitations in major activities rose and the respective share of

women remained relatively stable, albeit at a much lower level, since the 1960s. Ycas (1987) also summarized evidence that decreasing mortality rates have not necessarily meant improving health since the 1980s.

Also, health improvements of workers over the age of 65 did not necessarily improve, raising doubts about workers' ability to continue working at an older age if the NRA is raised. The share of men over the age of 65 who report limitations in major activities grew from a little over 20 % in the early 1960s to close to 30 % at the end of the 1970s, and the respective share of women remained around 8 % throughout the 1960s and 1970s (Bailey, 1987). Also, Liao et al. (2000) found that the health of men over 65, but younger than 84, during the last year of their life remained largely unchanged between 1986 and 1993, based on the 1986 and 1993 National Mortality Followback Surveys. At the same time, the health situation of women improved.

Reasons for this phenomenon include rising age-specific incidences of severe illnesses, and reduction, rather than elimination, of health limitations due to some diseases.

Health status is also an indicator of retirement (table 1). Burtless (1987) reported that about 26% of respondents in the 1969-1979 RHS³ indicated that they left a job due to health considerations. Several other studies based on the RHS confirmed that workers in poor health were more likely to retire than others (Quinn, 1977; Sammartino, 1987; Rust, 1989; Quinn et al., 1990). Similarly, Packard and Reno (1988) found, using the New Beneficiary Survey (NBS) that 24% of all new retired-worker beneficiaries indicated poor health as the primary reason for retirement. And 15% of new retired-worker beneficiaries indicated that their health would not have permitted them to do another job

(see also SSA (1986)). Ycas (1987) found that about one fifth of men aged 62 to 67 and one sixth of men aged 55 to 70 were retired due to health reasons in 1981 based on the National Health Interview Survey (NIHS)⁴. Further, Haveman, Wolfe and Warlick (1988) found using the Survey of Disabled and Nondisabled Adults from 1978 that 46% of early retirees indicated severe disabilities, and that workers with health problems were more likely to retire early.

While health considerations are an important determinant of early retirement for many people, most retirees still appear to be in good health. Leonesio et al. (2000) found that, based on the Survey of Income Program Participation (SIPP), the majority of early retirees were not in bad health. Similarly, Burkhauser et al. (1996) found that most early retirees are in good health. But Leonesio et al. (2000) also found that almost half of early beneficiaries had a health problem and 22% reported health problems severe enough to limit their ability to work.

Even though most early retirees appear to be in good health, a higher NRA may pose a hardship for some demographic or occupation groups if bad health is connected to specific characteristics.

Health status of workers near retirement is linked to occupation. Burtless (1987) reported that workers in professional occupations are one-third less likely to experience work limitations than the average worker and 57% less likely than laborers. Moreover, health status determines retirement as men aged 62 have an 82% probability of working if in good health and 63% if not. Chirikos and Nestel (1991) found, based on the National Longitudinal Survey (NLS) that workers in blue-collar and service jobs are more likely to

³For a detailed overview of data sets on aging see Hanushek and Maritato (1996) or NIA (1998)

⁴Ycas (1987) also suggested that the health situation worsened during the early and mid-1970s.

lack the functional capacity to delay retirement. Also, blue collar workers, which comprise about 1/3 of workers between the ages 53 and 63 in the HRS were found to be 80% more likely to experience health problems that affect their ability to work than white collar workers (BLS, 1994; Bovbjerg, 1998). Workers aged 53 to 63 in some occupations, such as mechanics and repair personnel, construction and mining workers, machine operators, transportation operators and material handlers were more than twice as likely than white collar workers to experience pain that affected their ability to do normal work (Bovbjerg, 1998). Also, Leonesio, Vaughan, and Wixon (2000) reported that OASI beneficiaries between 62 and 64 who worked in managerial and professional or technical, sales or administrative jobs were less likely to have health problems than workers in other occupations.

Race also determines health status of near-retirees. Burtless (1987) found that African-Americans were more likely than whites to report that health limited their ability to work. Chirikos and Nestel (1991) estimated that "black men are significantly less likely than white men to retire functionally capable" (p. 13). Crimmins, Hayward, and Saito (1996) found based on the Longitudinal Study on Aging, that African-Americans may be more likely to experience disabling health limitations than non-Blacks. Workers with bad health were also more likely to retire early (Burtless and Moffitt, 1985; Blau, 1994; Leonesio et al. 2000). While Blacks and Hispanics comprised 10% of the total population in the SIPP among those aged 62 to 64, they were 13% of all early retirees with some health problems, and 15% of early retirees who reported severe disabilities (Leonesio, Vaughan, and Wixon, 2000).

Older workers' health differs by sex. Based on the NHIS men aged 62 to 67 seemed more likely than women to experience health limitations (40.3% compared to 34.3%), and men are more likely than women to retire early due to bad health (Ycas, 1987). Also, Leonesio, Vaughan, and Wixon (2000) report that 63% of OASI beneficiaries 62 to 64 without health problems were women.

Education is a good predictor of health and retirement. Poterba and Summers (1987) found, based on the 1969-1973 RHS, that one additional year of schooling reduces the chance of experiencing health limitations by 2%, and the chance of retirement by 1%. Similarly, Burtless (1987) found that more than 13 years of schooling lower health limitations of older workers. Further, Crimmins, Hayward and Saito (1996) found that less education raises the likelihood of deteriorating health conditions. Also, less educated workers were found, based on the 1969-1973 RHS, to retire earlier than better educated workers (Burtless and Moffitt, 1985). Similarly, workers with more than 13 years of schooling were also more likely than workers with less schooling to work full time (Burtless, 1987). Blau (1994) found, based on the 1969-1979 RHS, that workers with lower educational attainment are more likely to transition out of the labor force. Finally, Leonesio, Vaughan, and Wixon (2000) reported that workers with less than 12 years of schooling constituted 25% of OASI recipients with no health problems, and 37% with health problems.

Finally, income is yet another determinant of health and retirement status. Burtless (1987) includes a measure for the earnings an older worker could typically hope to earn in 1969 and a measure for pension coverage to control for his permanent income. The results indicated that higher income as well as pension coverage lowered the chance

of health limitations. Chirikos and Nestel(199 1) include pension wealth and found that men with more pension wealth are less likely to be work-disabled. Also, men with higher pre-retirement income and higher expected retirement income are more likely to retire early in better health than others (Burtless and Moffitt, 1985; Burtless, 1987). Similarly, Samwick (1998) found that the accrual of private pensions increased early retirement based on the RHS⁵. Also, Anderson, Gustman, and Steimneier (1999) estimated that changes in pension plans together with changes to Social Security account for one fourth of the reduction of full-time work by men in their early sixties based on the 1969-1979 RHS, and the 1983 and 1988 SCF. Finally, Leonesio, Vamghan, and Wixon (2000) report that the median family income of OASI beneficiaries 62 to 64 without health problems was \$10,399, whereas it was \$7,689 for workers with health problems.

These studies suggest that health problems may make it difficult for a substantial subgroup of workers to continue to work to a later age than current retirees.

IV. Adequacy of Retirement Savings

A substantial minority of workers – between 15% and 35% - are prevented from working to age 65. Men, African-Americans, low wage workers, blue-collar workers and less educated workers are most affected by bad health. A higher NRA will affect these groups more than others. They cannot work the additional years.

While the choices of some workers may be more limited than for others, the question is whether workers with limited choices have sufficient savings to compensate for reduced benefits. To know whether retirement savings are adequate, a measure of

⁵Ruhm (1996) found that pension coverage increased the likelihood of continued work. But he also found that the age of entry into pension employment is positively related to retirement. Thus, his results did not contradict the findings that pension wealth accrual matters for early retirement. Workers who entered pension employment later will have to work longer to accrue the same amount of pension wealth.

adequacy needs to be defined. Commonly, a replacement ratio of expected retirement income relative to pre-retirement income is calculated based on expected consumption needs of retiree households. The replacement ratio individualizes the adequacy standard and does not address the question of whether retirement income meets certain absolute standards. In other words, workers who were poor during their careers could still remain poor and yet, by this definition, have an adequate retirement income.

A replacement rate of about 80% is considered adequate (Henle, 1972; Engen, Gale, and Uccello, 1999; RETIRE, 2001). The income needs of retirees are likely to be lower than those of workers. First, the need to save for retirement is reduced. Second, taxes are lower because payroll taxes are no longer due and because of extra tax exemptions. Third, work related expenses for clothing and commuting disappear. Fourth, the family size of retirees is generally smaller than the family size of workers as children leave and as spouses die. Fifth, households eventually pay off their mortgages, which reduces housing costs (Engen, Gale, and Uccello, 1999; McGill et al., 1996).

Recent research indicates that households are not adequately prepared for retirement and that the shortfalls are often quite substantial (table 2). Single households have less adequate retirement savings than married couples, more education results in higher adequacy, and nonwhites have less adequate savings than whites.

Bernheim (1993, 1994, 1997) used a simulation model to calculate the adequacy of retirement savings for the baby boom generation. He found that the average baby boomer household needed to triple its savings to reach adequate wealth levels, based on private survey data from ICR Survey Research Group. Retirement savings of baby boomers range from 16.3% to 49.0% of adequate savings, depending on a household's

characteristics, with married couples, higher earners and workers with pensions better prepared than their counterparts.

Using the 1992 HRS, Moore and Mitchell (1997, 2000) found that the median household would have to save an additional 16% of earnings if it were to retire at age 62, and an additional 7% for retirement at age 65. Actual savings rates were about one third of the savings rates prescribed by their model. Subsequently, Mitchell and Moore (1998) reported that the shortfall was substantially larger for single households than for married couples. Further, higher income earners were less adequately prepared as the replacement ratio of households retiring at age 62 was 85% for the second decile and 58% for the tenth decile. In comparison, adequacy rose with wealth, *with a replacement rate of 49 % for households in the first decile (if retiring at age 62) and a 100 % replacement rate for households in the tenth decile. Moreover, Mitchell, Moore and Phillips (2000) found that black and Hispanic married households experienced a larger shortfall than whites, and that more education resulted in improved adequacy.

Also, Gustman and Steinmeier (1999) show that retirement savings are likely to be inadequate. Using the 1992 HRS, they found real replacement rates of 41-89% relative to lifetime earnings. Moreover, their calculations showed that for one fourth of the sample, real replacement rates were 33% or less compared to lifetime earnings.

Finally, Engen, Gale and Uccello (1999) use the 1992 HRS and the 1983, 1992, 1995 and 1995 Survey of Consumer Finances (SCF) found that 52-61% of households exceeded their simulated wealth to earnings ratio. Lower education increases the chance to fall below the target, whites are more likely to reach the target than nonwhites or

Hispanics, and higher income earners have also a higher chance of missing the target wealth to earnings ratio.

The main results on the adequacy of current retirement savings appear to be robust⁶. First, while studies of the adequacy of retirement savings vary in terms of the categories of retirement savings included, the assumed work life and life expectancy, and the treatment of earnings uncertainty⁷, they reach similar conclusions. A substantial share of households is inadequately prepared for retirement.

Second, a large degree of heterogeneity exists leaving a substantial share of workers with inadequate retirement income. The chances of being inadequately prepared are higher for single households than for married couples, larger for nonwhites than for whites, and greater for workers with less education.

Third, the evidence on the connection between income and adequacy is mixed and often counterintuitive. Several studies found that higher income earners are less prepared than lower income earners. In comparison, higher wealth or larger inheritances, significantly lower the likelihood of being ill prepared for retirement. One observation is that earnings and wealth are not directly correlated (Moore and Mitchell, 2000, 1997). Further, higher income earners need to rely more heavily on non-social security wealth in retirement because of the progressive structure of Social Security's benefits.

As current retirement savings are inadequate for most households the question arises as to what happens to retirement savings if benefits are reduced from their current levels. It is conceivable that lower Social Security benefits may be more than offset by

⁶Kotlikoff, Spivak and Summers (1982) found, based on the 1971-1973 RHS, that more than 90% of married couples could afford retirement consumption levels that were equal to or greater than 80% of their lifetime consumption levels. However, more recent data point in the direction of greater inadequacy.

higher savings. Whether households will completely offset the loss in benefits with increased savings depends on the elasticity of savings with respect to changes in Social Security benefits. Some economists argue that reduced benefits will lead to higher savings, but the evidence suggests that the increase in savings is insufficient to compensate for the loss of benefits.

Retirement is one of the most important savings goals for households. While Social Security benefits are the most important source of retirement income, they could have two distinct effects on savings. Higher Social Security benefits may substitute for expected retirement income from private savings, thereby reducing savings. Alternatively, Social Security's benefits may allow individuals to retire earlier than otherwise, thereby inducing them to save more. The net effect and the size of any possible effect have remained controversial since the 1970s.

The original debate rested on two propositions regarding the link between Social Security benefits and other savings. First, Feldstein (1974, 1976, 1977) argued that mandatory savings through Social Security resulted in more consumption and fewer savings based on an extended life-cycle model. Barro (1974, 1976, 1978) argued that neither workers nor retirees will alter their consumption, and thus their savings behavior. Instead, beneficiaries will directly or indirectly transfer e.g., in the form of inheritances, to the generations that will have to pay for higher benefits through their payroll taxes. Consequently, lower Social Security benefits should not result in more savings.

Empirical studies have found only small effects of Social Security on savings, if any at all. Munnell(1974) found that the two countervailing effects of Social Security on

⁷Engen, Gale and Uricello (1999) discussed the comparability of the results of different studies. The main finding remained that the inclusion of earnings uncertainty would leave researchers to conclude that about

savings offset each other, and that there is no substitution between Social Security and savings. In contrast, Feldstein (1996) re-estimated earlier results using additional data, and found that an additional dollar of Social Security wealth translated into a reduction of private savings by 2-3 percent.

Feldstein's (1974; 1996) results on the substitution effect of changes in Social Security benefits on private savings have been put in question, though. As a result, the effect of Social Security on savings are likely to be smaller. Meguire (1998) found that correcting for wealth mismeasurement and for structural breaks the effect of Social Security on savings is reduced by more than 90%. Also, Coates and Humphreys (1999) found that the findings are sensitive to model specifications, and that the average impact of Social Security on savings is likely to be smaller than estimated by Feldstein. Further, Wolff (1988) found no substitution effect based on the 1983 SCF. Finally, Bernheim and Levin (1989) using data from the RHS found no relationship between Social Security and private savings for couples.

The relationship between Social Security and savings is, at best, weak. Lower Social Security benefits may, in the best case scenario, result in a small increase in savings. However, the overall impact of a reduction in Social Security benefits on retirement income will be lowered retirement income.

V. Concluding Remarks

Social Security is predicted to experience a revenue shortfall in 2038 and thereafter. Most of the policy debate has centered on increasing revenues or reducing expenditures by either raising taxes or by cutting benefits. One proposed benefit cut is a higher retirement age. All retirement age proposals raise the NRA, and a fair number of

half of all workers are inadequately prepared for retirement.

proposals also increase the early retirement age. Whereas an increase in the NRA is equivalent to an across the board benefit cut, a higher early retirement age moves any access to Social Security benefits further into the future. In principle, workers could respond to a higher early retirement age by either working longer or by substituting for the loss of Social Security benefits with higher private savings.

For a substantial number of workers, these options are not available. A review of the evidence reveals several important lessons. First, many workers will not be able to extend their working career due to health reasons. Most estimates indicate that about 20% of current early retirees face severe limitations to their ability to perform their major activities. Another 30% may face limitations to some of their activities that may impede their ability to continue working. Second, despite the fact that longevity has increased, the health situation of older workers does not appear to have improved along with it. The claim that a higher retirement age is justified by the improving health situation of older workers is not supported by the evidence. Third, not all older workers are equally likely to experience health problems. Low wage workers, men, workers in physically demanding occupations, low skilled workers, and African-American workers are more likely to experience health problems than their counter parts. Fourth, the groups of workers who are more likely to experience health problems in the later years of their career are also more likely to be inadequately prepared for retirement. Fifth, only a small fraction of the lost Social Security benefits will be offset by increased savings. Thus, an increase in the retirement age, not unlike other Social Security benefits, will likely exacerbate the problem of inadequate retirement savings, especially for low-wage workers, African-American workers, or workers with little education.

Appendix

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TABLE 1
OVERVIEW OF SELECTED STUDIES ON HEALTH STATUS OF OLDER
WORKERS

Study	Data Source	Minimum share of disabled (and definition used)	Maximum share of disabled (and definition used)
Burtless (1987)	RHS	20% of all workers aged 58 to 63 (worse than average health, 1969)	35% of all workers aged 58 to 63 (some health limit to working, 1969)
Baily (1987)	HIS	11% for men and 2% for women aged 45 to 64 (unable to perform their major activity)	25% for men and 23% for women aged 45 to 64 (limited in some activity); 28 % for men and 9% for women aged 65 and above (limited in major activity).
Ycas (1987)	HIS	15% of men and 1% of women aged 55 to 70 (retired for health reasons, 1981)	20% of men and 2 % of women aged 62 to 67 (retired for health reasons, 1981)
Packard and Reno (1988)	NBS	15% of all new retired-worker beneficiaries left last job because they could no longer work	24% of all new retired-worker beneficiaries left last job because of health considerations
Haveman, Wolfe, and Warlick (1988)	SDNA	46% of early retirees aged 62 to 64 (severely disabled, 1978)	N/A
Leonesio, Vaughan, and Wixon (2000)	SIPP	22% of early retirees aged 62 to 64 (severely disabled, 1990-1992)	48% of early retirees aged 62 to 64 (one or more health problems, 1990- 1992)

Notes: RHS is the Retirement History Survey, HIS the Health Interview Survey, NBS the New Beneficiary Survey, SDNA the Survey of Disabled and Non-Disabled Adults, and SIPP the Survey of Income Program Participation.

TABLE 2
OVERVIEW OF SELECTED STUDIES ON RETIREMENT SAVINGS ADEQUACY

Study	Data Source	Wealth definition	Findings
Bernheim (1993, 1994, 1997)	ICR Survey Research Group	Private wealth, no housing wealth	Retirement savings of baby boomers range from 16% to 49% of adequate savings
Gustman and Steinmeier (1999)	HRS	All wealth	Average household can expect a real replacement rate of 60%
Engen, Gale and Uccello (1999)	HRS and SCF	Different definitions, including none, part or all of housing wealth	39% to 48% of households fall short of target wealth to earnings ratio.
Moore and Mitchell (2000)	HRS	All wealth	Median households would have to save an additional 16 % to retire at age 62

Notes: HRS is the Health and Retirement Survey, and SCF is the Survey of Consumer Finances.