REFORMING THE U.S. RETIREMENT INCOME SYSTEM: THE GROWING ROLE OF WORK

By Steven A. Sass*

Executive Summary

The U.S. retirement income system has two main components — Social Security and publicly subsidized and regulated employer plans. The federal government created Social Security in the Great Depression, when the problem of old-age poverty was especially severe. Social Security is an employmentbased social insurance program that assures older workers a basic replacement income if they can no longer work. Contributions are proportional to earnings up to a maximum level; benefits are based on a worker's earnings and contribution history, with a significant redistributive twist to assure a basic old-age income to low-wage workers.

Employer plans emerged in the late nineteenth century, but only became widespread after the Second World War when they grew to cover about half the U.S. labor force. These plans were overwhelmingly defined benefit pension plans that firms and unions used to shape the employment relationship: a pension induced workers to contribute a career of long and faithful service. Employer plans and Social Security then helped sever employment relationships at age 65 through "take it or lose it" benefits that gave workers little additional net income if they continued on the job.

In the decade 1965-1974, the creation of Medicare, a major increase in Social Security benefits, and a thoroughgoing revamping of employer-plan regulation expanded and strengthened the retirement income system. Many firms and unions then added additional sweeteners to reduce the supply of excess workers. The result was a significant

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This brief is the first in a series that profiles national retirement income systems and their response to the impending demographic transition. Modern retirement is an outgrowth of industrialization and the transfer of a nation's workforce from family and communal production to organized wage employment. The transition created an enormously productive economy. But wage workers face increasingly uncertain employment prospects as they age, and eventually a complete loss of earnings. Only rarely can a worker's savings offset this loss of wages. So governments, employers, and unions responded by organizing formal retirement income systems.

The maturation of these systems over the past halfcentury has made retirement a generally secure and welldefined stage of life. Thanks to extended longevity and ever-earlier withdrawals from the workforce, retirements now last about 20 years, on average, and have emerged as one of the great blessings provided by modern industrial society. But declining fertility and rising longevity have placed this blessing at risk.

Each nation's retirement income system has emerged out of its particular history and ideological commitments. Thus the roles played by social security, employer pensions, individual savings, and continued work vary dramatically. Each nation's response to the current challenge reflects its institutional set-up and its economic prospects, social commitments, and ability to reform large and complex institutions.

The retirement income challenge is generally framed as a financing problem, which requires benefit cuts, larger contributions, increased saving, and/or higher-yielding investments. But the challenge is fundamentally a labormarket problem, involving the work/retirement divide and even continued work when "retired." So, in addition to reviewing financial reforms, this series focuses on initiatives that redefine the labor market opportunities and incentives that older workers face and the role of work as a source of old-age income; whether the reforms to date are consistent with this redefinition; whether they are sufficient; and what remains to be done.

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increase in old-age incomes and a reduction in the average retirement age for men to 63.

Since 1980, reform efforts have focused on two key issues: solvency problems, caused primarily but not entirely by the transition to lower fertility and greater longevity, and the need to realign the system to shifts in the labor market.

Policymakers addressed the solvency problem in Social Security by raising the normal retirement age (to reduce benefits at any age) and by accelerating scheduled tax increases and building up the Social Security trust fund. They shored up weak employer pension plans by tightening funding and benefit insurance requirements. Despite these initiatives, major solvency problems remain.

In the labor market, the need for mobility among higher-income workers — the primary participants in employer plans - undercut the appeal of defined benefit pensions. As a result, they were replaced by defined contribution savings plans that allow mobility and make limited demands on employers. Changes in the labor market also redefined Social Security away from its initial insurance function. Due to improved health and extended longevity, essentially all workers expected to claim a pension while still capable of finding employment. They came to view the benefit not as insurance, but as compensation for a lifetime's contribution to the system. Policymakers responded by giving beneficiaries greater freedom to claim benefits and supplement their income through work or to increase their pensions by delaying retirement. These reforms eliminated most of the key severance incentives in the U.S. retirement income system.

Looking ahead, policymakers must address the continuing solvency problems in Social Security and employer defined benefit pension plans. In addition, the level of income provided by the retirement income system will clearly emerge as a serious concern. Future Social Security benefits will replace a smaller share of pre-retirement income. Employer defined benefit plans are becoming rare. And the limitations and risks in the employer defined contribution system all but guarantee that many retirees will not have the income they need to maintain living standards.

As the income provided by the retirement income system recedes, continued work must become a far more important source of support for older Americans. The reforms in both public and private programs facilitate continued full-time or part-time employment by reducing severance incentives and by allowing workers to shift their "retirement wealth" to older ages. The key to retirement income security will thus be the response of workers — and employers — to this new reality.

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Creating Retirement

In the United States, the first modern retirement income programs were created by employers in the last quarter of the nineteenth century. Most important were the pension plans established by the giant corporations that would characterize the twentieth-century U.S. economy.¹ These companies offered pensions for labor-market reasons — to improve their employment relationship with workers. They offered retirement income benefits to provide:

- *insurance* part of a larger program that provided basic stipends, generally scaled to earnings, in the event of accident, death, or disability, with being old akin to being disabled.
- *compensation* a reward for contributing a long and faithful career, with benefits replacing a significant portion of a worker's earnings.
- severance a payment allowing firms to terminate employment at an age when productivity typically fell well below the worker's wage.

By 1930, employer plans had become standard in mature big businesses and covered 15 percent of the private sector workforce. Some provided low *insurance* benefits and others high *compensation* benefits. Most were also part of a *severance* program that generally set the work/retirement divide at age $65.^2$

Many more employers established pension programs during and after the Second World War. One reason was the emergence of a non-labormarket rationale:

• *tax reduction* — a vehicle for deferring income taxes until retirement.

Pension plans have special income tax treatment: contributions are deductible; investment income exempt; and taxes are due only on benefits paid out in retirement. This treatment made pensions a highly attractive tax shelter for high-income professionals, managers, and business owners. The "anti-discrimination" requirements in the Revenue Act of 1942 forced employers to distribute benefits broadly and include the lower paid. The government thus traded tax shelters for the well-todo for expanded retirement income benefits for the rank-and-file. The larger factor in the spread of employer plans was the emergence of unions as key players in the nation's employment system.³ Unions had organized a third of the nation's workers by the mid-1950s. Older workers, who had fought the organizational battles and had significant influence in union politics, faced a difficult old age. They enjoyed good union wages. But the Depression and postwar inflation left many with little in the way of savings. So providing reasonably ample *compensation* pensions became a major union objective.⁴

Retirement income systems let the elderly quit work and draw income over ever-lengthening lifetimes.

By 1960, employer plans covered 40 percent of private sector workers.⁵ Including government workers, employer plans covered half the U.S. workforce. Despite this impressive growth, the federal Social Security program had become the foundation of the U.S. retirement income system.

The United States created its Social Security program in 1935, in the midst of the Great Depression. The sharp fall in the demand for labor, combined with a surge in the supply of older workers, had dramatically worsened the labor market problems of the elderly.⁶ A critical need for financial support thus emerged at a political moment especially conducive to major institutional innovation. The Social Security Act of 1935 addressed the immediate crisis with a means-tested welfare program called Old Age Assistance. The legislation also addressed the continuing problem providing income for the elderly who could no longer work or find employment, even in good times — by creating a bold new "social insurance" program called Old Age Benefits. This program is what we now think of as "Social Security."

The social insurance program enacted in 1935 covered all private commercial and industrial workers (excluding government, non-profit, agricultural, and domestic service workers). It mandated a two percent contribution, split equally between employer and employee, on earnings up to

¹ Other important early sponsors of employer plans were the armed forces, universities, religious organizations, and municipal governments.

² Sass 1997.

³ The Wagner Act of 1935 was primarily responsible for the growth of union influence.

⁴ Richard Ippolito (1998) notes that these collectively bargained pension plans also functioned as compensation from the employer to the union – provided in return for a cooperative labor-management relationship.

⁵ Sass 1997.

 $^{^{6}}$ The share of the population over 65 jumped 1.4 percentage points, or 25 percent, in the 1930s – the largest increase in the twentieth century.

\$3,000. Contributions were collected beginning in 1937; the sums collected went to build up a trust fund; and the program would pay pensions — to beginning in 1942. Allowances were based on contributions and years of participation. The program's primary function, however, was to provide insurance against the inability to work or find employment. The benefit formula thus gave disproportionately large allowances to workers with low wages and only a few years of participation.⁷ This concentration of resources on the needy reduced expenditures in the Old Age Assistance welfare program. It also protected the social insurance program against moral hazard: higher benefits would clearly induce retirements among those who could work and find employment.⁸

The U.S. system, combining Social Security and employer plans, matured in the mid-1970s.

The 1939 Social Security Amendments significantly revised the social insurance program. The legislation tied benefits even more closely to need — and less to contributions. It sped up the payment of benefits (to 1940); increased redistribution to workers with lower wages and fewer years of participation; and added benefits for spouses and survivors. The Amendments "paid" for these changes by reducing the program's funding ambitions and by cutting the eventual benefits paid to single workers when the program matured.⁹

Employer-provided pensions and the new Social Security program gradually jelled into a national retirement income system. In the 1930s, Congress explicitly defined Social Security as the nation's basic retirement income program, rejecting the notion that employers could "contract out" of Social Security by offering a benefit at least as generous. Congress did allow employers to "integrate" their plans by reducing benefits (most

⁸ DeWitt 1999; Social Security Administration 2003b.

⁹ After forty years of participation, the "average worker" would get a benefit equal to 40 percent of the current average wage. As the spousal benefit was one-half the worker's benefit (if greater than the spouse's own benefit), a married worker with a non-working spouse would get essentially the same replacement rate as in the 1935 plan (Myers 1993).

significantly for lower-paid workers) to account for pensions provided via the new social insurance program. Following the Second World War, liberals and labor leaders wanted to expand coverage, raise current and ultimate replacement rates, and thus reduce the role of employer plans. Conservatives and business leaders resisted. Inflation had undermined the value of social insurance benefits - which were denominated in nominal terms and the means-tested Old Age Assistance program had remained the primary source of support for the elderly. Conservatives wanted to use this increase in nominal prices to permanently reduce social insurance and elevate Old Age Assistance, or a universal flat-rate "demogrant," as the government's basic old-age income program. The outcome was a compromise: Congress in 1950 expanded coverage of the social insurance program, allowed current older workers to readily qualify for full benefits, and restored replacement rates to their actual (but not ultimate) 1939 level — 30 percent for the average worker.¹⁰ The major unions, assisted by the Truman Administration, also won supplementary employer pension benefits in the bitter 1949-1950 contract negotiations. Social Security thus retained its insurance function and soon surpassed Old Age Assistance in providing retirement income to older Americans. Employer plans now supplemented Social Security to offer higher compensation pensions, primarily to higher-paid workers.¹¹

Social Security and employer plans also acted as increasingly effective *severance* instruments, encouraging retirement at age 65. Employer plans that included mandatory retirement severed explicitly. Social Security and other employer plans did so indirectly, if not inadvertently: in these plans, work past the "normal retirement age" (NRA) would not increase a worker's pension. The additional income earned for working past the NRA was thus the worker's wage *less* the foregone pension; the retirement income system effectively slashed the incentive to work.¹² Because of these *severance* incentives, the limited demand for older workers, and the increasing availability of income from

¹¹ Sass 1997; Ball 1947.

¹² More precisely, the additional income was the worker's wage *plus* non-pension benefits *less* income and payroll taxes, out-of-pocket expenses, other costs of working *and* the foregone pension (less additional income taxes, which were zero on Social Security benefits). As early-retirement pensions were actuarially reduced, work prior to the NRA was "fairly" compensated by an increase in benefits.

⁷ The character of the 1935 program would clearly change as the program matured over time and workers retired after contributing for forty years (the maximum period leading to an increase in benefits). The "average" worker, someone who consistently earned the average wage, would then retire on a benefit equal to 58 percent of the current average wage – a relatively high replacement ratio (Myers 1993).

¹⁰ Congress would subsequently raise replacement rates modestly, to about 35 percent of the average wage for the average beneficiary, and allow early retirement at age 62, on actuarially reduced benefits, for women in 1956 and for men in 1961 (Myers 1993).

maturing Social Security and employer pension programs, the average retirement age for men dropped from 70 in 1950 to 66 in 1960, as shown in Figure 1.¹³

Figure 1: Average Retirement Age of Men, 1910-2001



Source: Burtless and Quinn 2002.

Note: The average retirement age is the youngest age at which at least half of men have left the labor force.

Many, however, saw the nation's retirement income system as inadequate. Older Americans, increasingly without income from earnings, failed to fully share in the unprecedented rise in per capita incomes after the Second World War. Thirty-five percent of elderly households were poor in 1959, compared to 17 percent of non-elderly households. Providing a more adequate income for the elderly became an important objective in the nation's "War on Poverty." Rising longevity also increased the importance of employer plans as a reliable and broad-based source of old-age income.¹⁴

The key advances came in the decade 1965 to 1974:¹⁵

- In 1965, Congress created Medicare to cover health care costs of the elderly. This program assumed a major expense and reduced a key financial risk.
- In 1972, Congress increased Social Security cash benefits by 20 percent, to about 40 percent of the average wage, and replaced ad hoc benefit adjustments with a fixed formula that 1) pegged benefits to lifetime earnings, indexed by wage growth; and 2) maintained their purchasing power by indexing benefits to prices.¹⁶
- \cdot In 1974, Congress enacted the Employee

¹³ Diamond and Gruber 1999; Stock and Wise 1990; Burtless and Quinn 2002.

¹⁵ The only significant improvement in the program prior to the mid-1960s was the change that allowed early retirement on reduced benefits at age 62.

Retirement Income Security Act (ERISA) that set new standards in employer plans for vesting, funding, and fiduciary conduct and created the Pension Benefit Guaranty Corporation (PBGC) to protect beneficiaries in private pension plans that terminate with insufficient assets. ERISA was designed to protect vulnerable participants, enlarge the system, and make employer pensions a reliable second-tier source of retirement income — atop Social Security — for the majority of middle-income Americans.¹⁷

This newly expanded retirement income system was immediately tested by a decade of sharp economic shocks: the entry into the labor market of the enormous baby boom generation; the OPEC oil price jumps of 1973 and 1978; and a surge of overseas competition, first in non-durables (e.g. textiles, shoes) and then in mass-produced durables (e.g. autos, steel). These shocks sparked the nation's steepest peacetime inflation and its worst recessions since the Great Depression, in 1973-75 and 1980-82.

Despite this weakness in the nation's economy, the retirement income system significantly improved the living standards of the elderly. Their poverty rate fell to 14.6 percent by 1974 compared to 8.3 percent for non-elderly individuals — and by the early 1980s had converged to the rate for all non-elderly individuals.¹⁸

The retirement income system also became an instrument for relieving the pressure on the nation's economy, which was responding to not only oil shocks and stiff overseas competition, but also to the huge influx of baby boomers and women into the labor force. It did so by acting as a *severance* instrument, offering pathways out of the labor force and into retirement to three important groups:

- Low-wage workers. Less educated older workers faced increasingly difficult prospects in the U.S. labor market. Many thus exited the labor force at age 62, on Social Security's increased earlyretirement benefits.¹⁹
- Workers covered by employer plans in hardpressed industries. In industries facing stiff competition from overseas or cheaper baby-boom workers, employers and unions added sweetened early-out benefits, atop Social Security's expanded allowances, to induce retirements and shrink their existing workforce.²⁰

¹⁹ A mistake in the new Social Security indexing formula led to an unintended rapid rise in benefits in the high-inflation economy of the 1970s. While this error was corrected in 1977, the overly generous benefits increased incentives to exit the labor force.

²⁰ Sweeteners included "thirty and out" provisions (which allow workers to retire with full pension benefits after 30 years of service); extremely mild benefit reductions for early retirement; and the addition of fictitious years of service (to increase benefits) or years of age (to expand eligibility) during special early-retirement windows.

²¹ Burtless and Quinn 2002.

¹⁴ Sass 1997; U.S. Bureau of the Census 2002.

¹⁶ U.S. House of Representatives 1996.

¹⁷ Sass 1997.

¹⁸ U.S. Bureau of the Census 2002.

• Industrially displaced workers. Where the competitive pressures were too great — as in the steel industry — the PBGC provided pensions to workers displaced by the bankruptcy of their employer and the failure of its pension plan.

Between 1969 and 1985, the average retirement age for men in the United States declined from 66 to 63, as shown in Figure 1. This drop was in part the product of these attractive severance benefits. However, the declining age of retirement also reflected the growth of income after the Second World War and decisions to use this increased wealth, largely via increased Social Security and employer pension benefits, to purchase more leisure, instead of more goods and services. The significance of this increased wealth and "taste for retirement" is seen in the last two decades of the century, when the return of prosperity did not produce a return to a higher average retirement age.²¹ In fact, fewer than one quarter of older Americans were working in 2000, essentially the same share as in 1980.

As life expectancy at age 65 was also rising rapidly, retirement now emerged as a stage of life lasting about 20 years. Figure 2 shows the share of retirement income that aged households received by different sources. Clearly Social Security had become the dominant income source, with employer pensions, work, and assets (including housing) comprising most of the remaining income. The expansion of retirement, and its emergence as a well-defined and reasonably comfortable stage of life, thus was directly tied to the workings of the nation's retirement income system.

Figure 2: Percent of Retirement Income for Aged Households from Various Sources, 1980 and 2000



The Reform Agenda: Solvency and Labor Market Incentives

In the early 1980s, serious concerns emerged over two main issues: the retirement income system's solvency and its alignment with a changing U.S. labor market.

Solvency

The stagflation of the 1970s, various technical faults in the design of the Social Security program, and the recession of the early 1980s created an imminent cash-flow crisis that had to be addressed. More critical, however, was the program's long-term problem. The baby boom had ended abruptly in 1965, and by 1980 the implications were becoming clear. The decline in fertility, along with the steady rise in longevity, had created a fundamental solvency problem. Beginning around 2010:

- The number of beneficiaries would rapidly swell as the baby boom began to retire and longevity continued to rise.
- The number of contributors would stagnate as the labor force would essentially stop growing.

The sharp slowdown in real wage growth in the 1970s raised an additional concern: if real wage growth remained sluggish, the system would have greater difficulty paying benefits, which were indexed to prices after initial eligibility, out of its primary revenue stream — the proportional tax on wages.

The Social Security actuary estimated the program's deficit over the 75-year planning horizon at 1.8 percent of taxable payroll (i.e., the tax rate needed to be raised 1.8 percentage points to deliver promised benefits for the full 75 years).²² A calculation that peered further into the future, moreover, would have shown an even deeper shortfall.

Certain employer plans also had serious solvency problems. Like Social Security, most sponsors gave older workers credit for "past service" when starting or improving a plan. They thereby created liabilities that far exceeded pension fund assets. ERISA, unlike earlier federal mandates, required sponsors to extinguish these unfunded past service obligations over a 30-year period. It also required sponsors to backstop any shortfalls with up to 30 percent of their net worth and to participate in the new PBGC insurance program.

Many plans nevertheless entered the tough years of the early 1980s seriously underfunded. As the PBGC took over plans in hard-hit industries, most notably steel, the premiums it levied on other plans jumped from the initial \$1 to \$8.50 per participant by 1986. Reformers thus called for tough new measures to protect the PBGC and other plan sponsors.

Labor Market Incentives

The second item on the reform agenda addressed the system's alignment with the changing U.S. labor market. The Appendix (on page 15) summarizes provisions of Social Security and private pensions that relate to work and retirement incentives.

Employer plans had the most serious problem, as the incentives in traditional defined benefit pension plans ran counter to the needs of an emerging "new economy." Over the last two decades of the twentieth century, employment relationships were reshaped by (I) the massive entry into the labor force of two important new groups: highly educated workers and married women; and (2) a sharply increased technological and market instability. Employers shifted from static, capitalintensive, and hierarchic production systems (think railroads, the telephone company, and mass production manufacturing) to the use of semicontingent workers (think Wal-Mart) or project teams that developed and marketed innovative goods and services (think high tech and "what's your business model?"). The defined benefit pension was an instrument for developing and ending career employment relationships in stable, hierarchic enterprises. Its back-loaded compensation and severance benefits encouraged long tenures that terminated at a specific age. But these incentives impeded what employers and workers in the new production systems most valued — mobility and flexibility.

Social Security, as a universal and portable pension program, easily accommodated the "new economy." Nevertheless, its role in the U.S. labor market had evolved to the point where the program also required significant readjustment.

Social Security had always functioned as an *insurance* program. It protected workers who grew old and were no longer able to find employment. By the early 1980s, however, Social Security had become something else. As a result of increased longevity and better health, essentially all workers now expected to claim a pension while still capable of finding employment, and then to live in retirement for an extended period of time. Social Security benefits thus were no longer seen as

insurance, but as *compensation* — an income claimed in return for a lifetime's contribution to the system.²³ This shift in the role of Social Security created pressure to reform key elements of the program, as outlined below:

The retirement earnings test. Because Social Security was designed as *insurance* against the inability to work or find employment, it only paid benefits to participants who earned less than a very small annual "exempt amount" (equal to about onefourth of the wages earned by a full-time minimumwage worker when the provision was included in the 1939 Amendments).

Both public and private programs faced funding shortfalls and more fluid and varied work patterns.

Viewing Social Security as *compensation* made the earnings test seem patently unfair. Participants who had an employer pension or significant savings could claim their benefit at age 62 and retire in comfort. But those without an employer pension or ample savings were denied the opportunity to claim their government pension and augment it with work to achieve an adequate income. The earnings test forced these participants to choose between Social Security and employment. It induced unnecessary retirements (for those who chose Social Security) or denied participants what they saw as rightfully theirs (for those who chose work).

These concerns led Congress to relax the earnings test in various ways. Most significant could be the adjustment made with the introduction of early retirement on reduced benefits. If early retirees lost benefits due to the retirement test, Social Security would increase their pension to reflect this period of non-receipt — it would recompute their benefit as if they retired at a later age. Most workers, however, seemed to view the initial benefit loss as a tax — as a loss without a compensating gain — and responded accordingly.²⁴

Adjustments for delayed retirement. When Social Security was *insurance*, eligible participants were given a benefit whenever they became unemployed or unable to work: it made no sense to give larger benefits to participants. But the new view of Social Security as *compensation* led to a call for actuarially fair adjustments for delayed retirement. Like the

²⁴ Congress first relaxed Social Security's absolute earnings test in 1950, raising the exempt amount and exempting workers over 75, and in 1954 exempted retirees over 72. In 1960, to prevent the earnings test from cutting off all benefits to those who earned just a bit more than the exempt amount, Congress deducted \$1 for each \$2 in earnings above that amount. In 1977, Congress raised the exempt amount for retirees over 65 and fully exempted those over 70.

²³ Workers retiring in the early 1980s were the first to contribute to Social Security over their entire working lifetimes.

actuarial adjustments for early retirement prior to attaining the NRA, this would equalize expected lifetime benefits irrespective of the age at which they were claimed. By maintaining the value of a participant's accrued "Social Security wealth," workers could retire on an actuarially adjusted pension at an age that suited their particular needs.²⁵

The age 65 Normal Retirement Age. The NRA was critical to the entire set of incentives in the system. Participants who worked up to the NRA were then induced to retire by the lack of meaningful benefit increases for delayed retirement. Early-retirement benefits, which had become the norm, were approximate actuarial reductions from the NRA amount. So raising the NRA would cut benefits for the majority of recipients — significantly reducing the financial pressure on the system. Given the rise in longevity, the older average age of entry into the labor force, improved health, and the reduced physical demands of work, raising the NRA seemed a reasonable realignment to an aging American life course.

The rising contribution rate. In 1980, the Social Security contribution rate stood at 10.16 percent (including disability insurance), split evenly between workers and employers. This compared to the two percent combined rate in 1935. Benefits, however, had grown at a much slower pace and were weakly tied to contributions. This undermined the political support for the program, which presented Social Security benefits as earned by the worker, rather than granted by the government. And if workers did not see a clear link between contributions and benefits, the tax could also create a disincentive to work.

Social Security reforms in 1983 and the steady shift to defined contribution employer plans has restructured the U.S. system.

The Reformed National System

Introducing reforms that reduce or realign retirement income benefits is notoriously difficult. Social Security is known as the "third rail" of American politics — zapping anyone foolish enough to tinker. Altering employer plans is also difficult in that changes that harm the interests of certain workers can damage the employer's relations with these workers.

When the U.S. Social Security program runs into trouble, the standard approach has been to create a commission to sort through the issues and lay out a viable, consensus plan. The National Commission on Social Security Reform, headed by Alan Greenspan, was such a commission. Its 1983 report presented a series of reforms endorsed by the whole Commission, or by a majority of its members, that were then enacted into law:

- Adopt various financial measures to address immediate and long-term problems:
 - · Accelerate scheduled future tax increases.
 - Increase the payroll tax paid by the selfemployed to equal the total employer-employee tax on employed workers.
 - Subject half the benefits of higher income beneficiaries to income taxation, with the proceeds returned to the Social Security system.
 - Extend coverage to non-profit and new Federal government workers.
 - Build up a large Social Security Trust Fund, invested in government bonds, which would increase national saving and investment, expand future output and wages, and make it easier to pay future benefits.
- Increase the NRA.²⁶ Congress scheduled a rise in the NRA from 65 for those reaching 62 in 2000 to 67 for people reaching 62 in 2022. The reform significantly improved the solvency of the system while realigning Social Security to the shifting American life course. The age of earliest eligibility remained 62, so workers could still retire at that age, though on even lower benefits. Raising the NRA, however, sent a signal advising "normal" workers to leave the labor force at a later age.²⁷

²⁵ The 1972 amendments first introduced adjustments for delayed retirement: participants who worked past the normal retirement age and were denied benefits due to the retirement earnings test were granted a one percent benefit increase for each year denied. As the true actuarial adjustment was about eight percent, the 1972 adjustment remained far below the true *compensation* amount. In 1977, the one percent adjustment for delaying retirement was increased to three percent per year, effective in 1981.

²⁶ Seven of the 12 Commission members endorsed an increase in the retirement age while five proposed an increase in the contribution rate to cover the remaining shortfall over the 75year planning horizon.

²⁷ Burtless and Quinn 2002.

- Adjust the program to its new role in the labor market:²⁸
- Ease the earnings test on recipients who work past the NRA by reducing benefits by \$1 for every \$3 earned (as opposed to every \$2).
- Raise the delayed retirement credit (DRC) for those who work past the NRA to the actuarially fair eight percent per year by 2008.
- Increase benefits to needy groups such as surviving spouses and SSI recipients.

The design of the system has changed little since these reforms. Perhaps the most important change since 1983 was the elimination of the earnings test in 2000 for workers older than the NRA.

Congress also addressed the solvency problems in employer plans encountered by the PBGC. It raised premiums; sped up funding requirements and imposed supplementary "risk-adjusted" premiums on underfunded plans; denied coverage to benefit increases granted for a period prior to insolvency; increased employer liability for plan deficits to 100 percent of net worth; and made it more difficult to exit underfunded multi-employer plans.

However, the fundamental change in employer plans since 1980 was the result of employer initiatives, not legislation. It was a dramatic shift from defined benefit (DB) pension plans to defined contribution (DC) savings plans. DC plans provide workers with an individual account and are by definition fully advance funded and technically solvent — their liabilities (and assets) are the account balances. More importantly, these plans are far more compatible with the new flexible and contingent employment relationships. Their rules and benefits bear no relationship to length of tenure, other than perhaps a relatively short vesting period. Account balances are also completely portable as separating workers can "roll" their balances into another employer plan or into a taxfavored Individual Retirement Account (IRA).

Because changing retirement plans is difficult, and because the flexibility of DC plans was more important in newer U.S. industries, the shift to DC plans was led by new employers that did not have DB plans. They were most attracted to the new 401(k).²⁹ This program gives workers a great deal of discretion over the amount saved, the investment allocation, and the drawdown in retirement. Most plans also allow loans and withdrawals. Employers are far less involved in DC than in DB plans. They administer the program and often provide a matching contribution (typically 50 percent). Employers get some personnel benefits, attracting more thrifty and presumably more diligent workers.³⁰ But these plans are primarily driven by *tax reduction* motives and the government's efforts to increase retirement saving. As tax reduction has greater value for higher-paid owners and managers, the government primarily relies on anti-discrimination regulations to expand participation.

Figure 3 illustrates the substantial growth in defined contribution plan coverage over the past two decades and the sharp drop in coverage under defined benefit plans. Among those who had coverage under both types of plans, the DB pension was assumed to be the "primary" plan in 1980. This was no longer the case by the late 1990s. Many older sponsors in fact have been shifting their traditional DB pension plans to the new "cash balance" format, which actually replaces the worker's pension benefit with an individual DC account.³¹ As the government clarifies the rules governing cash balance conversions, more sponsors are expected to adopt this DC format for their "DB" program.



Figure 3: Individuals Covered by a Pension, by Pension Type, 1980 and 1998

Source: Form 5500 data from the U.S. Department of Labor 2002.

³⁰ Ippolito 1998.

 31 In a cash balance plan, unlike the now standard 401 (k), employers contribute the full amount, equal to a set percentage of salary, and increase the balance by a rate of return they set. Like a DB plan, the pension fund, the sponsor, and the PBGC stand behind these balances.

²⁸ These reforms increased costs since the prior design denied benefits to those who continued to work. Congress delayed their introduction until 1990 to help overcome a short-term fiscal problem and then began raising the delayed retirement credit gradually.

 $^{^{29}}$ Nonprofit and governmental organizations have shifted towards 403(b) plans, which are very similar to 401(k)s.

Will the Reforms Succeed?

Solvency

The aging population will significantly increase the demands on the nation's retirement income system, as shown in Table 1. While the reforms to date have shored up the ability of Social Security and employer plans to meet these obligations, serious problems remain.

In Social Security, the increase in the normal retirement age and the build-up in the Social Security Trust Fund clearly improved the system's finances. Nevertheless:

- The decision to delay the rise in the NRA for twenty years diminished the policy's impact on solvency.
- The positive effect of Social Security's funding program on government saving, and thereby overall U.S. saving and investment, was undercut by the huge federal operating budget deficits of the 1980s.³²
- The 1983 reformers only partially solved Social Security's solvency problem because they strictly adhered to the system's 75-year planning horizon. In subsequent solvency calculations, "bad" years have replaced "good" years and the post-2010 deficits have carried increasing weight.

Commissions established under the Clinton and the second Bush Administrations thus had to revisit the problem. These commissions, however, failed to define a national consensus as conflicts emerged over:

- \cdot The overall size of the program.
- The definition of adequacy. A key element in this debate is whether adequacy should be viewed in terms of earnings replacement rates, which was the program's traditional approach since at least 1950, or whether some absolute level of real income is more appropriate.
- Privately funded individual accounts. Such accounts provide the likelihood of higher returns and a direct link between contributions and benefits. But they introduce significant risk —

especially as employer plans have also adopted individual account formats — and a "carve-out" individual account plan would likely push the remaining public program toward flat, nonearnings-related demogrant pensions.

In employer plans, the reforms in the PBGC program clearly reduced overall deficits. But two regulatory changes, and the dramatic softening of the U.S. economy in the early 2000s, created new solvency problems in employer DB plans:

- The Omnibus Budget Reconciliation Act of 1987 limited current pension funding to help control federal revenue loss during a period of huge deficits.
- A rule issued by the Accounting Standards Board in 1987 defined a single procedure for reporting corporate pension expense, and the adoption of this procedure for funding as well as accounting back-loaded pension funding to the latter years of a worker's career.

The reforms only partially restored financial health, but realigned labor market incentives.

These two changes reduced pension funding and expensing when the baby boom was young, meaning sharply higher contributions and expense recognition as the baby boom ages.

Through the 1990s, the booming securities markets lifted employer pension fund assets well above measured liabilities. Problems suddenly emerged when the economy deteriorated in the early 2000s. The prolonged fall in the equity markets sharply reduced plan assets while the steep decline in interest rates sharply raised liabilities. As a result, underfunding again became endemic in employer DB plans. However, because of the shift to DC plans, most employer plans have avoided such solvency problems since DC liabilities automatically equal assets.

Table 1: Overview of the Retirement Income System 1980 2000 2030 Dependency Ratio (workers to Social Security beneficiaries) 3.2 to 1 3.4 to 1 2.2 to 1 Social Security Benefits/GDP 3.9% 3.6% 5.5% Employer-Sponsored Pension Benefits/GDP^a 1.6% 1.7% 2.6%

Source: Social Security Administration, 2003a and 2001.

a. Author's calculations using ratio of Social Security benefits to employer pension benefits from Social Security Administration, 2002 and 1998. 2030 projections rely on the same ratio as 2000.

³² Whether Social Security's funding operation encouraged or facilitated the huge federal deficits of the 1980s is the subject of some debate. Smetters (2003) argues that they did, on the other hand, Diamond and Orszag (2004 forthcoming) review the existing evidence and conclude that the two were essentially unrelated.

Labor Market Incentives

The reforms made far more progress aligning the retirement income system to the evolving U.S. labor market, as shown in the Appendix. The shift to DC plans made the employer programs much more compatible with "new economy" employment relationships. The adjustments in Social Security made the public system conform to the new perception of the program as *compensation* for a lifetime's contributions.

The reforms in public and private retirement income programs sharply reduced the *severance* incentives to retire at a particular age. In employer plans, this resulted from the shift to DC savings arrangements. In Social Security, this involved the end of the earnings test after reaching the NRA and the introduction of actuarially-fair delayed retirement credits.

The impact of the retirement system on individuals' retirement decisions can be seen in Figure 4. The first panel shows the share of active workers retiring at a given age in 1940, shortly after Social Security was established. By 1970, the incentives in both Social Security and employer plans clearly produced a surge in the popularity of retirement at age 65. Since then, the availability of early retirement produced a surge in "age 62" retirements with a substantial drop in "age 65" retirements. With the reforms that have occurred in the past two decades, which reduced or eliminated incentives to retire at particular ages, it is likely that the peak at age 65 will flatten out in the future as workers have more flexibility in choosing their retirement age.

Worker claims in both Social Security and employer plans have now become "retirement wealth" that workers can freely manage. An additional year of work means more earnings, potentially more contributions and investment income, no drawdown of retirement assets, and greater Social Security and DC wealth for later life. These reforms give older workers far greater freedom to augment their retirement wealth or to use these assets to offset a loss of wages during full or partial retirement.

Consistent with the announced increase in the NRA, this realignment has cleared away obstacles impeding the use of work as a source of income for older workers. As the shift to DC employer plans and the new Social Security work incentives took hold, the long-term trend toward retiring at earlier ages halted in the mid-1980s. Since then, the average retirement age for men has remained roughly constant at 63.³³ Labor force participation rates for workers aged 55 to 64 have also risen

steadily. Participation in the labor force then jumped sharply in the recession years 2001 and 2002 — a highly unusual occurrence. This increase coincided with a bear market and major declines in DC retirement wealth, and individuals seemed to compensate by seeking employment to shore up their financial position.³⁴

The 1983 reformers might have raised the NRA as a politically expedient way to cut benefits. But with Social Security benefits scheduled to decline and the system's solvency issues unresolved, work could well become far more significant as a source of old-age income.

Figure 4: Percent of Male Workers Retiring by Age, 1940-2001



Source: Burtless and Quinn 2002.

Note: Percent retiring each year is a constructed number reflecting the number of men leaving the workforce at the designated age as a percent of men in the labor force at age 55.

Conclusion

The U.S. retirement income system enters the new century in an unsettled state. Social Security, the primary source of income for the majority of Americans over age 65, has yet to fix its solvency problem. Fierce political divisions have prevented progress and these conflicts show no signs of dissipating soon.

While the deadlock continues, the problem of assuring all Americans an adequate retirement income has emerged on the horizon. For workers who become eligible (age 62) in 2022 or later, the scheduled rise in the NRA will cut Social Security benefits at all retirement ages by about 13 percent. Assuming Medicare premiums rise as currently projected; that beneficiaries bear half the financial shortfall in the Social Security system (and contributors bear the other half); and that inflation rises as projected and subjects the benefits of more older households to income taxation, then the government pension paid to the average beneficiary who retires at age 65, net of Medicare and income taxes, will fall to 27 percent of the average wage.³⁵ In real terms, the purchasing power of benefits will not decline. But in terms of earnings replacement, the entire expansion of Social Security benefits enacted in 1972 would come undone.

Nor are the nation's employer plans prepared to shoulder a larger share of the burden. Only half of the workforce is covered at any one time under their current employers, a serious problem now that Social Security benefits are set to fall sharply.³⁶ The amount of retirement income workers can expect from employer plans is also highly uncertain. Even if the current financial problems in employer DB plans are manageable, the importance of these plans is shrinking. Many sponsors actually seem intent on adopting the cash balance format, thereby transforming their defined benefit plan into an individual account program.

The major unresolved issues in the employer sector lie in the DC programs. Here the workers, not the sponsors, bear the risks and responsibilities for retirement income planning. Only about 75 percent of covered workers participate in plans their employers offer, and many withdraw their balances well before retirement. Workers rarely adjust their investment allocations as they age or as their financial position changes. And upon retirement, they face the daunting challenge of converting an account balance into a reliable stream of income. Very few buy annuities; a significant portion die leaving much of their retirement wealth as an unintended bequest; others burn through their assets and have nothing left but perhaps a house and Social Security. Unlike their employers, workers have little or no access to financial planning and are poorly equipped to pool mortality, wage-growth, or inter-temporal financial risks. So the likely outcome is widely varying, but generally inadequate retirement income streams.³⁷

Given the scheduled cuts in Social Security and the program's remaining funding shortfall, the decline of traditional employer pensions and the unreliability of 401(k)s and other retirement savings accounts, a great deal rides on expanding employment as a source of old-age income.

The adequacy of future benefits has emerged as a critical concern, with longer careers an attractive response.

Government has clearly signaled the need for extended employment by raising the "normal" retirement age. The reforms in both Social Security and employer plans facilitate the extension by allowing workers to freely shift their "pension wealth" to later ages. This flexibility is a critical advance in the design of the nation's retirement income system. Much now depends on the decisions of individual workers and employers.

Many workers still retire at or soon after Social Security's age of earliest eligibility — age 62. This could be a reasonable decision if workers have sufficient assets, in addition to Social Security, to provide for retirements lasting 20 years or more. But because of disability, age discrimination, or a lack of job opportunities, many could have little choice but to retire while others underestimate the challenge of financing two decades or more of retirement.³⁸

As Social Security benefits fall and fewer workers have lifetime employer pensions, workers *should* respond by pushing the work/retirement divide to an older age, which would allow them to

³⁵ Munnell 2003.

³⁶ Munnell, Sundén, and Lidstone 2002.

³⁷ From the contributor's vantage point (including the government, which contributes tax preferences), the current setup thus appears highly inefficient (Munnell and Sundén 2003 forthcoming).

³⁸ A much larger percentage of individuals (66 percent) say they plan to work at older ages than actually do (24 percent) (Employee Benefit Research Institute 2002). Health problems and a lack of job opportunities are the primary explanatory factors.

augment their retirement wealth, and/or supplement their "retirement" income through parttime or occasional employment. Much of the recent increase in labor force participation among older workers has taken the form of "bridge jobs" — parttime or part-year employment that serves as a bridge between full-time career jobs and full-time retirement. This growth of bridge jobs suggests that "retirement" will likely become a less well-defined stage of life.³⁹

The greatest burden in many ways lies with employers — not as plan sponsors but as providers of jobs. The leading edge of the baby boom is now age 57. So the nation's labor markets are about to see a surge in the supply of older workers seeking employment. And because of the decline in fertility and limited labor-force growth, older workers will, for the foreseeable future, make up a much larger share of the nation's labor force.

Employer demand for the labor of older workers, however, has steadily declined for well over a century. Their production systems and social environments are not designed to accommodate a significantly older labor force. These workers have special skills (experience and maturity), deficits (strength, stamina, and health care costs) and demands (respect and reduced hours or travel). Developing work opportunities in response to this increased demand for employment — opportunities that reward the employer as well as the worker will be the nation's most critical "retirement" income challenge in the decades ahead.

³⁹ Social Security's age of earliest eligibility remains 62, so the risk of retiring too early will rise. There is little in the current system to protect workers against their own myopia and premature retirement (Burtless and Quinn 2002).

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Incentive	1980: Social Security and defined benefit plan		2001: Social Security and defined contribution plan	
I. Benefit accrual for				
<u>additional work</u> Social Security:	Additional tax payment and an increase in benefits that is often small toward the end of one's career.		Additional tax payment and an increase in benefits that is often small toward the end of one's career.	
Employer plan:	Additional years' benefit as per formula, an estimated 1.5 percent of wages, plus accrued benefit rises by the rate of growth of the worker's wage.		Additional contribution and investment earnings and delayed drawdown of retirement assets.	
II. Benefit adjustment for				
early retirement:	At age: Benefits reduced:		At age: Benefits reduced:	
Social Security:	62 6.7% per year 62 (approx. actuarial reduction)		62 6.7% per year up to 3 years before normal retirement age. 5% per year for each additional year.	
Employer plan:	59-62 less than actuarial reduction		N/A No adjustment in account balances for age of retirement. A 10% tax on withdrawals prior to age 59½.	
III. Benefit adjustment for				
delayed retirement:				
Social Security:	1% per year, rising to 3% per year after 1981.		6.5% per year, rising to 8% (approx. actuarial reduction) for workers age 62 after 2004.	
Employer plan:	No increase for delayed retirement. Many plans cap the years of service for which pension credits can be accrued or stop accruals at age 65.		N/A; same as benefit accrual for additional work.	
IV. Benefit reduction on				
income from earnings:				
Social Security:				
at ages:	Benefits reduced by: ¹	<u>On annual earnings</u> over:	Benefits reduced by: ^{1, 2}	² <u>On annual earnings</u> <u>over:</u>
62-64	50%	\$7,994 (2001 dollars)	50%	\$10,680
65-71	50%	\$10,745 (2001 dollars)	no reduction	
72 and over	no reduction		no reduction	

Appendix: Labor Market Incentives in U.S. Retirement Income Programs, 1980 and 2001

Source: Social Security Administration (2001, 2000, and 1999).

Notes:

¹ However, reductions are converted into periods of "non-retirement," which increases future benefits by raising the worker's effective age of retirement.

² A portion of Social Security benefits are subject to tax if taxable income (earnings + interest on taxable bonds + 50 percent of benefits) exceeds \$25,000 for an individual or \$32,000 for a married couple.

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