

The Retirement
Security Project

**National
Retirement
Savings Systems
in Australia, Chile,
New Zealand
and the United
Kingdom:
Lessons for the
United States**

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The Retirement Security Project

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Introduction

Financial security in retirement is an important goal for working families not only in the United States. Retirees across the globe typically rely on a combination of public pensions (such as the U.S. Social Security system), private savings, and corporate pensions to pay their way after their paychecks have stopped. Modern industrialized countries, embracing the three-pillar philosophy advocated by the World Bank and others, have created complex pension landscapes that combine public and private provisions of old-age income.¹

However, achieving this security is an increasing challenge at a time when structural and demographic trends are putting ever-rising strains on government-paid income programs for the retired. Over the last several decades, many national pension systems have shifted some of the financial risk of retirement from society to the individual. Employers have shifted from defined benefit (DB) pensions, which guarantee retirees a regular payment every month no matter how long they live, to defined contribution (DC) retirement savings plans, which leave it to retirees to put aside enough money during their working lives to last them through their retired years.

Demographically, multiple factors are at play. As life expectancy increases, pension accumulation must be larger to fund longer retirement. Entrance into the

labor force is increasingly delayed by prolonged higher education, thus shortening the number of years that a worker saves for old age. Although a good argument can be made for restoring those lost years by delaying retirement, such a move is controversial and in many countries has yet to be effectively implemented. In the United States pressures on the pension system began to grow as the oldest of the baby-boomer generation (those born between 1946 and 1964, became eligible for early retirement in January 2008. The number of boomers who reach retirement will steadily increase until 2030, when the entire boomer generation will be eligible for full retirement benefits. Because succeeding generations will be smaller, there will be fewer workers to pay boomers all promised Social Security and health care benefits at the same time that health care and other costs are growing.

As a result, Americans today face precarious retirement prospects that have only been made worse by the recession that began in 2007. In 2008, 64 percent of Social Security recipients depended on the program for half or more of their income.² The program provided 90 percent of income or more for about one-third of recipients. Facing both funding pressures on Social Security and the results of the shift from defined benefit to defined contribution plans, it is only logical that a growing proportion of Americans lack confidence in their ability to live comfortably in

retirement. The Gallup Economy and Personal Finance Poll indicates that only 46 percent of American workers in 2007 expected to have sufficient funds to live comfortably in retirement, compared with 59 percent five years earlier.³

These trends are not unique to the United States. Facing similar dilemmas, the rich countries of the Organization for Economic Cooperation and Development (OECD) have cut their public pension promises by an average of 22 percent since 1990 through various pension reforms.⁴ These cuts have been implemented in a variety of ways, many of which are so complex that their full effect will not be apparent to workers until they retire.

A few countries have coped with projected rises in public pension costs by adding a personal savings element that either supplements or in a few cases replaces the tax-financed public pension. The rationale behind these savings systems is that individuals should bear a greater portion of the cost of their own retirements. Because it is naïve to expect every worker to become a financial expert, these countries have created systems that make it easier for workers both to participate in investment decisions and to make appropriate investment choices. Using either mandatory participation or automatic enrollment, the national savings systems studied in this paper attempt to ensure that individuals will see their savings grow without having to acquire extensive knowledge or pay for expensive individualized investment advice.

This paper examines the current and planned retirement savings plans of four countries with unique pension systems—Australia, Chile, New Zealand, and the United Kingdom—and attempts to draw lessons for U.S. policymakers to use in their efforts to build a more sustainable pension system that can provide increasing retirement security for future generations.

Chile

In 1981 Chile replaced its pay-as-you-go Social Security system with a fully funded private pension system based on individual accounts managed by private pension fund managers known as AFPs (Administradoras de Fondos de Pensiones). All new wage and salary workers joining the workforce after 1981 had to join the AFP system, while existing workers as of that date had the option of either moving to the new system or accepting whatever benefit the old system would be able to pay. Aided by major incentives to switch to the post-1981 system, 97 percent of Chileans who contributed to a pension plan were in the new system by 2004.

Structure of the System

In the individual accounts system, all formally employed workers are required to have 10 percent of their earnings automatically deducted to fund their retirement as well as disability and survivor insurance. In addition, workers have an additional 2–3 percent of pay deducted to cover administrative costs of their accounts, for a total deduction of 12–13 percent.⁵ Employers are required to send the employees' contributions to

the pension administrator of the employee's choice, which in turn credits it to the fund or funds chosen by the employee. Currently employees can choose from among five pension fund administrators, each of which offers the four types of funds that are approved by the government regulator.⁶

In addition to the mandatory contribution, workers are allowed to make voluntary contributions to either their AFP account or another voluntary retirement savings account. Employers are not required to make any contribution. Only about 10 percent of workers make voluntary contributions.⁷ Self-employed workers may participate in the system voluntarily.

The transition to the fully funded system in Chile was aided by a fiscal surplus resulting in large part from the sale into the private sector of companies that had formerly been nationalized and from the large number of working people relative to retirees.⁸ The government continued to fund the defined benefit pensions of the workers in 1981 who chose to remain in the old system and gave recognition bonds to the workers who switched to the new system. These bonds, which mature when the individual reaches retirement age, pay a lump sum into their account that is based on their last twelve monthly contributions to the old system adjusted for both the number of years they participated in that system and an annuity factor.⁹ The switch to the fully funded system is now nearly complete; by 2025 the defined benefit pensions will be fully phased out.

However, to date, few if any retirees have financed their pensions solely through contributions. Almost all of those who have retired under the 1981 system had at least a portion of their pensions financed through recognition bonds.

Recent Changes

Until a reform enacted in 2008, the public pillar guaranteed a minimum pension for participants whose pension income after twenty years of contributions fell below 80 percent of the statutory minimum salary. The minimum pension was paid on top of the worker's regular pension to bring it to a certain level. In January 2009 the minimum monthly salary was 159,000 pesos (\$254.40), and the minimum pension was 127,000 pesos (\$203.50).¹⁰ Additionally, for workers who did not qualify for the minimum pension, a means-tested basic pension, called PASIS, gave benefits equal to 50 percent of the minimum pension regardless of an individual's contributions to the system.

The 2008 reform came in response to concerns raised in a 2006 report about coverage of both private and public pensions, as well as about high costs among the five pension administrators. Passed in March 2008, the Sistema de Pensiones Solidarias revamped the public pillar, increased participation in the AFP system, and addressed several other problems with the system. The basic PASIS pension, renamed the basic solidarity pension (Pensión Básica Solidaria (PBS)), was increased from 48,000 to 60,000 pesos per month in 2008, and

eligibility was broadened to workers in the bottom 40 percent of the income distribution with twenty years of residency in Chile. This is a noncontributory, means-tested pension paid to workers who have no other pension.

The old minimum pension guarantee was replaced by the Aporte Previsional Solidario (APS) for those who have contributed to a pension plan. The new program removes the former requirement that a worker must contribute to a pension account for twenty years in order to qualify for the guarantee. The solidarity contribution provides up to 17,000 pesos a month for individuals who have a self-financed monthly pension of between 50,000 and 70,000 pesos in 2008.¹¹ That amount gradually rises to 255,000 pesos a month by 2012.

The new solidarity pension and other reforms are projected to cost 2.9 percent of GDP annually starting in 2008, falling to 1.3 percent of GDP by 2025. These costs are to be financed by a new pension reserve fund, which receives both part of the budget surplus (8.7 percent of GDP in 2007) and revenues from the production of copper. The fund had about 1.1 billion pesos in 2008.

Other reforms to the pension system passed in 2008 include mandating participation of the self-employed and eliminating monthly fixed administrative fees that exist in addition to earnings-based fees. The law also assigns new labor force entrants automatically to the

fund with the lowest fees and allows funds to contract out the administration of individual accounts. To increase the number of funds and competition in the industry, insurance agencies will be able to set up pension fund administrators as subsidiaries. To encourage voluntary contributions to private accounts among middle-income workers, those who enroll in and contribute to voluntary accounts will be eligible for a subsidy of 15 percent of annual contributions up to 1.5 million pesos. Finally, a fund was set up for financial education to create a network of advisers for account holders.

Participation and Coverage

A major criticism of the 1981 law was that the new system failed to cover significant portions of the Chilean workforce. Although the reform included a mandatory contribution rate for all wage and salary workers, only 55 percent of the labor force actively contributed in 2004, slightly below the pre-1981 participation rate of around 63 percent.¹² In both the old system as well as the 1981 savings based system which replaced it, the self-employed, who had the option of participating or not, made up a significant share of the nonparticipants. In 2007 the self-employed constituted an estimated 28 percent of the workforce, but only about a quarter of them regularly contributed to an account managed by a pension fund administrator. Only about 60 percent of the self-employed were affiliated with an administrator at all, and only 40 percent of those workers contributed regularly.¹³

In addition, many Chileans work in the formal economy for just part of the year or spend some time in the informal economy, and they do not contribute in months when they are not formally employed.¹⁴ A growing proportion of the labor force is employed in temporary, seasonal, or part-time jobs rather than in year-round, full-time jobs for the same employer. Thus, while 55 percent of the labor force participated in 2004, it is unlikely that the same 55 percent contributed for all twelve months of that year. One study found that only 20 percent of workers contributed 90 percent of the time, while a similar proportion contributed only 10 percent of the time.¹⁵

Sporadic work histories also limited the effectiveness of the publicly financed safety net before the 2008 reforms. A large proportion of contributors to managed pension accounts had a pension financed by their savings that was lower than the minimum pension guarantee. Unfortunately, a large and growing number of these workers would also have fewer than the required twenty years of contributions, thus making them ineligible to receive the minimum pension even though it was designed to assist lower-income workers. In 2006 one study showed that 45 percent of pension fund contributors had savings that would result in a retirement benefit that was below the guaranteed level. The study further predicted that by 2025 virtually all workers with pensions below that level would not have accumulated the required twenty years of savings necessary to receive the guaranteed amount.¹⁶

Returns and Costs

Rates of return on pension fund assets have improved since the new system began in 1981. A 2006 study found that accounts managed by pension fund administrators had earned an annual average rate of return of 6.8 percent during the previous ten years.¹⁷ When the system began in 1981, these funds were limited to investments in Chilean assets, with a large proportion going into Chilean government bonds. However, as the size of the funds grew, the supply of bonds and other domestic investments was unable to absorb all of the savings. As a result, allowable investments were liberalized to include non-Chilean assets, a development that contributed to increasing the return on the funds. However, investment regulations remain quite complex.

The pension funds are allowed to offer only four types of investment funds, which differ in the percentage of total assets that they may invest in equities and government bonds. Chilean workers are allowed to place their contributions in a maximum of two of the four funds. Each of the four types of funds has a performance standard equal to the average rate of return of all of the funds of that type over the previous three years. Each fund also has reserves it must use if it fails to meet the performance standard. The government dissolves any fund whose reserves are exhausted.

Fees and other costs imposed on savers have been another source of controversy. Despite efforts to increase competitiveness

of the pension funds, average costs rose 5 percent between 1982 and 2003.¹⁸ Until 2008 two types of monthly fees were allowed—fixed administrative fees, and variable fees based on earnings—although only two funds maintained their fixed fee. As noted, the fixed fees were eliminated in the 2008 reforms. The average earnings fee in 2008 was 1.71 percent of a workers' salary, a rate that was higher than all but two of the Latin American countries with a Chilean-style individual accounts system.¹⁹

Because they compete by offering gifts and other incentives to potential members, the pension funds have had little incentive to lower fees. Fees have also remained high, because until 2008 it was very difficult for new funds to be formed, thus eliminating another level of potential competition. The law requires that the funds charge the same fees to all members regardless of the size of their accounts, a structure that effectively subsidizes members with larger accounts. Needless to say, the fixed fees have had a greater effect on the smaller account balances of low-wage earners. Decreasing costs and increasing administrative simplicity of the pension funds were among the main goals of the 2008 legislation.

Retirement Income

Despite problems with relatively low coverage and high administrative costs, the Chilean system's average income replacement rates are projected to be on par with OECD countries. Estimates show that after 2020, retirees will on average replace 44 percent of their

preretirement income. These high average replacement rates are likely the result of the relatively high mandatory saving rate of 10 percent. However, because the same savings rate is applied to all income levels, the system also has very limited progressivity. A more serious problem is that the average replacement rate for women is projected to be nearly twenty percentage points below that for males.²⁰ On the plus side, the 10 percent contribution rate may have contributed to the increase in national saving after the 1981 reform: as a proportion of GDP, national saving grew from less than 1 percent in 1981 to 25 percent in 1990 and more recently to 60 percent.²¹

Once pensioners reach retirement age, which is 65 for men and 60 for women, they can choose to annuitize their retirement immediately, take programmed withdrawals, or take a deferred annuity with programmed withdrawals in the interim. Early retirement is allowed for workers whose savings can fund a retirement benefit equal to a set proportion of their average earnings over the previous ten years. The benefit also must exceed the minimum pension by a certain level. Initially, workers had to have a retirement benefit equal to at least 50 percent of their earnings and 110 percent of the minimum guaranteed pension. Starting in 2004 these thresholds are gradually being raised; they will reach 70 percent and 150 percent by August 2010.²² Previously nearly 65 percent of men took early retirement, with their average retirement age being 56.

Before 2004 high transaction costs may have discouraged some individuals from taking their income as an annuity, but even so in 2000, more than half of retirees chose annuities.²³ Retirees could purchase an annuity from either an insurance company or through an intermediary. Fees were unregulated and reached up to 6 percent of the value of the annuity.²⁴

Reform in 2004 required providers to have an electronic bidding system so that the costs of different products were clear for retirees. In addition, fees were capped at a level that is reviewed every two years, a move that reduced the fees by more than half. Still, retirees who purchase annuities tend to have larger accounts than those who choose programmed withdrawals. This discrepancy occurs in part because individuals whose accounts near the minimum pension level are required to take a programmed withdrawal so that a small proportion of their accounts will be paid as fees rather than as retirement income.²⁵ Pension funds also charge a fee for programmed withdrawals.

Australia

Australia's mandatory superannuation guarantee (SG) retirement savings system requires employers to contribute an amount equal to 9 percent of employee earnings to individual retirement account funds. In addition, there is a means-tested, tax-financed Age Pension for all individuals whose income and assets are below certain statutory levels. The Age Pension has been in place since 1909, while the SG system's universal mandate

for contributions was enacted in 1992. It was built upon a superannuation system created in 1986 through a centralized wage settlement that resulted in an employer contribution of 3 percent of earnings into individual retirement accounts.²⁶ Contributions to an SG account are taxed when money goes into the account, as earnings accumulate, and when savings are withdrawn before the worker reaches the minimum distribution age of 55 to 60 depending on a worker's birth year. Before 2007, all distributions were taxed. By one estimate, taxes at various stages of the process effectively reduced the mandatory 9 percent contribution rate to 7.65 percent before 2007.²⁷

How the System Works

Superannuation is available to all workers between the ages of 18 and 65 who earn more than \$450 (in Australian dollars) per month, although employers can also choose to contribute on behalf of lower-earning workers. The earnings threshold for low-income workers was put in place to reduce the number of small accounts that would be subject to proportionally high administrative fees, although the threshold has not been changed since the SG system began. In 2006 only 7 percent of employees earned less than \$450 per month.²⁸ Since 2007 annual tax-advantaged contributions have been capped at \$50,000; individuals may also make additional voluntary contributions of up to \$150,000 annually, but with no tax advantage. Individuals do not pay taxes on mandatory contributions, although the investment fund they go into pays taxes at a rate of

15 percent on both contributions and earnings. Contributions above \$50,000 annually are taxed at a rate of 31.5 percent.

The system for choosing investment funds changed substantially in 2005, when employees were given the ability to choose which superannuation fund and investment portfolio to use. Employees were also allowed to decide whether to add voluntary savings over the 9 percent rate. If an employee fails to make an active choice, no additional savings are contributed, the money goes to a superannuation fund determined by the relevant industry or employer, and an investment portfolio is chosen by a fund trustee.²⁹ The savings in all superannuation funds are fully vested, portable, and preserved until the contributor turns age 55, the earliest age at which they can be withdrawn.

The Age Pension, the public pillar of the Australian pension system, provides a means-tested benefit for all individuals of retirement age, regardless of their contributions history. The amount of the benefit is determined by both an asset and an income test. In addition, recipients must have lived in Australia for at least ten years and for five consecutive years prior to applying.³⁰

Workers who qualified for the full Age Pension received a maximum fortnightly payment in 2008 of \$562 for singles and \$939 for couples. This is equal to about 25 percent of average male earnings. Payments are indexed to inflation and are usually adjusted twice annually. In addition, if the maximum benefit falls

below 25 percent of male weekly earnings, it is adjusted upward at the same time. Benefits are not taxed.

The income test reduces Age Pension payments by 40 cents for each dollar earned above the “free area” amount equal to \$138 per fortnight for singles and 20 cents for each dollar of income above \$240 per fortnight for couples. Adjustments are made for children.³¹ The asset test differs for homeowners and non-homeowners, though 90 percent of the pensioners who did not receive the Age Pension in 2004 were made ineligible by their income rather than their assets.^{32, 33} Because home values are not part of the asset test, there have been charges that the system is tilted toward benefiting wealthier individuals who are more likely both to own a substantial home and to be able to adjust their assets to receive a benefit. Because receiving the Age Pension brings with it additional government-provided benefits, workers try to adjust their retirement incomes to qualify for at least a minimal amount.

Participation and Coverage

Roughly two-thirds of retirees currently receive the full value of the Age Pension, and just under 50 percent of all pension wealth is publicly provided.³⁴ These numbers, however, are expected to decrease over time as the superannuation guarantee system matures. The existing mandatory saving rate of 9 percent was reached only in 2002, and the proportion of Australian workers with superannuation guarantee

accounts has increased from under 50 percent in 1988 to over 90 percent in 2004.³⁵ As more of these accounts grow, the government expects fewer people to be eligible for the Age Pension, thus reducing government outlays.

In recent years, Australian pensioners have on average seen large increases in their account balances: by 49 percent between 2004 and 2006 for men; and by 30 percent for women. In the aggregate, superannuation funds increased from \$135 billion in 1991 to \$625 billion in 2004. Australia now has more money per capita invested in managed funds than any other country, in part because of the new system.³⁶ Projections show that by 2020 the total value of superannuation fund assets will exceed 110 percent of GDP.³⁷ However, these projections were made before the global financial outlook worsened, and in 2008, the average value of SG funds declined by about 19.7 percent.³⁸

One weakness in the SG system is that the self-employed are exempt from the mandatory savings requirement. Policymakers hope that a new superannuation clearinghouse (discussed below) will help increase participation among these workers. Another problem is the large number of “lost accounts” created when participants switch jobs without consolidating their accounts. By 2008 there were over 6.4 million lost accounts³⁹ containing \$12.9 billion in assets⁴⁰, accounting for one in five SG accounts or one lost account for every two Australian workers. A government discussion paper released in November 2008

seeking comments on how to reduce lost participants was the first step toward creating a system to track and automatically consolidate lost accounts.

Additionally, the mandatory nature of the system may mean that superannuation fund contributions crowd out private household saving. A study by Connolly and Kohler using annual data from 1966 to 2002 found that every dollar saved by households as part of the 9 percent mandatory contribution reduced voluntary saving by 38 cents. Therefore, net new saving as a result of the SG system is about 62 cents per dollar saved.⁴¹

Returns and Costs

Before the sharp drop in world markets that began in the second half of 2008, the average five-year nominal returns on balanced SG retirement funds in 2008 were roughly 8 percent, an increase over the 5 percent yields from 2004 and 2005.⁴² But even before the market drop, some concerns were expressed that returns were too low. Although employees were given a choice regarding which superannuation fund to join starting in 2005, there remain no performance standards or regulations such as the US Qualified Default Investment Alternative to specify how an employee’s retirement savings in a 401k-type account should be invested if the employee does not designate a fund. Thus, each fund could have a different mix of investment types, making direct comparisons between funds difficult.

There are four major types of SG

investment alternatives in the market:

- Industry funds, set up by unions and groups of employers, run by trustees, and open only to members
- Public-sector funds, limited to government employees
- Corporate funds, also known as wholesale funds, run by financial institutions for groups of employers
- Retail funds, open to individual investors.

Individual retail funds have been available since the first superannuation reform in 1986. By 2008 self-managed and other retail funds held nearly 50 percent of all assets, while industry funds accounted for 17 percent of assets, public sector funds 15 percent, and corporate funds 5 percent.⁴³

Administrative costs charged by these funds remain a concern. Annual expense rates on corporate funds between \$50 million and \$250 million in size were roughly 1 percent of assets in 2001, while smaller retail funds were more expensive at around 2 percent of fund assets. Retail funds have higher total administrative costs because many of them charge both entry and exit fees as well as additional annual management fees; these funds also pay more taxes than public sector funds.⁴⁴ Even today, fees are higher than those charged for comparable investments in other countries, averaging 1.25 percent of assets according to Sen. Nick Sherry, Australia's Assistant Treasurer.⁴⁵ Sherry says that his government hopes to see fees decline over time to 1 percent or less.

The 2005 legislation allowing employees to choose their preferred superannuation fund and investment portfolio was intended in part to improve the net investment returns by using competition to put downward pressure on unnecessarily high fees. However, initial signs were discouraging. In a survey by the Australia and New Zealand Banking Group after the reform passed, only 55 percent of respondents were aware of their ability to choose a fund and investment portfolio. Additionally, while 77 percent of respondents could identify the best indicator of fund performance as returns minus fees, only 37 percent indicated that they would take fees and charges into account when choosing a fund.⁴⁶

A new superannuation clearinghouse, scheduled to begin operation on July 1, 2009, may help to reduce fees and will almost certainly make it easier for employers to encourage their employees to choose which SG fund to join.⁴⁷ Employers will be able to send all of their employees' SG contributions to the clearinghouse, which will allocate the individual contributions to the individual employee's chosen fund. According to the government, use of the new clearinghouse will be optional and free to all employers with fewer than 20 employees.⁴⁸ Operation of the clearinghouse will be contracted out to the private sector.

Retirement Income

At the time of retirement, which is 65 years for men and 63 years for women, pensioners can choose to take their benefits as a lump sum or as an income stream.⁴⁹ Despite tax incentives for retirees to take an income stream, a large majority opt for a lump sum. Of those who retired in 2000, 75 percent of new retirees chose a lump sum.⁵⁰ Since July 1, 2007, retirees 60 or older may receive funds in any form from their account tax free if it was invested in an SG fund that paid taxes during the accumulation stage. Almost all SG funds are subject to these taxes. Workers who retire early can begin to receive SG funds as soon as age 55 if they were born before July 1, 1960. This minimum distribution age gradually increases for those born after that date until it reaches age 60 for those born after July 1, 1964.⁵¹

For the average male Australian earner in 2007, average retirement income was 43 percent of preretirement income, while the replacement rate net of taxes was 56.4 percent. These are somewhat lower than the OECD averages of 59 percent and 70 percent. Although cross-country comparisons of relative replacement rates are complex, Australians' retirement incomes on average are negatively affected by the degree to which they rely on the Age Pension. Two-thirds of retirees receive the full amount of the public benefit, and only 21 percent are able to live principally off of the proceeds of their SG accounts, although this proportion mainly reflects the fact that the SG

system is still relatively new. The net replacement rate of an average earner relying on the Age Pension is only 37 percent, and so average replacement rates should clearly increase as the SG system continues to mature.⁵²

The distribution of retirement wealth is also important in preventing old-age poverty. The OECD uses a measure of progressivity of the pension system that relates the distribution of pension earnings to the distribution of preretirement lifetime earnings.⁵³ On this measure the reference points are a pure basic scheme that would give a flat-rate pension to all retirees (100 on the index) and a pure insurance scheme that would simply aim to provide a 100 percent replacement rate of preretirement income (0 on the index). Australia scores a 73 on this measure, which compares favorably to the OECD average of 37 and the U.S. score of 51. The progressivity of the Australian system results in part from the size of benefit given by the Age Pension; in 1991 it was surpassed only by Canada among the Group of Seven countries when comparing minimum pension values.⁵⁴

Options for increasing retirement income through the SG system include encouraging higher workforce participation by reducing early retirement and increasing the number of hours worked among 55- to 64-year-olds. Currently labor force participation rates are ten percentage points lower for this age group than for the rest of the working-age population, and many older workers are part-time employees. Keeping contributors in the workforce until age 65 would increase

their balances significantly, although nearly 40 percent of Australians aged 55 to 64 suffer from at least one major health problem, making it difficult to maintain working hours.⁵⁵

This and other changes may be possible after an Australian government commission reviewing the nation's tax system reports in March 2009. That panel is charged with reviewing the SG system to determine if it meets the objectives of being broad and adequate; acceptable to individuals; "robust" in dealing with investment, inflation and longevity risk; simple and approachable; and sustainable.⁵⁶

New Zealand

New Zealand's KiwiSaver program is the world's first nationwide, automatically enrolled, government-sponsored, voluntary retirement saving system. Launched on July 1, 2007, the program supplements the New Zealand Superannuation system, which pays a flat-rate individual pension currently financed from general tax revenues to all who have lived in New Zealand for at least ten years. By using an automatic enrollment system based on behavioral economics, KiwiSaver takes advantage of workers' natural inertia to increase rates of retirement saving and direct workers into more appropriate investment choices than they might have made under a traditional savings system.

The Structure of KiwiSaver and New Zealand Superannuation

After KiwiSaver's launch, all employees were automatically enrolled in a saving plan upon starting a new job, while

existing employees and self-employed individuals could join the plan voluntarily. Workers who are automatically enrolled may opt out of the system completely as long as they do so between the fourteenth and fifty-sixth day of their employment. Those who remain in KiwiSaver automatically save 4 percent of their income through April 1, 2009 and 2 percent after that date⁵⁷ unless they choose a higher savings rate⁵⁸. In addition to the 2 percent and 4 percent savings rates, there is an 8 percent option. The plan does not allow any other savings levels, but a worker can change from one level to the other at any time.

Participants can direct their savings into any of the investment funds that have been registered with the government. Employees who do not actively make an investment choice are moved into an employer-chosen fund. If the employer has not selected a default fund, the government randomly assigns the individual to one of six very conservatively managed default funds.⁵⁹

The earnings on an individual's retirement contributions are taxed, although balances are not taxed upon removal. Contributions are locked into the system but are portable across jobs and funds. Early withdrawal of KiwiSaver funds is allowed only for serious illness, significant financial hardship, or absence from New Zealand (presumably on a semi-permanent basis) for at least twelve months. In addition, after three years of contributions, a member can make a one-time withdrawal for the down payment on a first home.

In normal circumstances, KiwiSaver contributions may be removed at the later of either age 65 or five years after membership began. Members who have been participating for twelve months or longer may interrupt their contributions for anywhere from three months to five years as a “contributions holiday.” Additionally, some employer-sponsored plans allow members to divert up to half of their contribution to pay a mortgage under the theory that mortgage-free homeownership contributes to future retirement wealth.⁶⁰

Although participation in KiwiSaver initially was to be encouraged only through automatic enrollment techniques, the government later decided to add a series of financial incentives. Available through April 1, 2009, the employee-targeted incentives are:

- A “kick-start,” \$1,000 tax-free government contribution to each KiwiSaver account upon enrollment,
- A tax credit matching up to \$20 of contributions per week between age 18 and retirement,
- A fee subsidy of \$20 every six months, and
- A first home deposit (down payment) subsidy of up to \$5,000 after three years of contributing to a KiwiSaver account.

Beginning in April 2008 employers were also required to match employees’ KiwiSaver contributions at a rate initially equal to 1 percent of income, to be increased to 4 percent by 2011.⁶¹ Employers are rewarded as well for both their compliance with the match and any

optional additional contributions to KiwiSaver. Up to 4 percent of an employee’s gross pay, when contributed to a KiwiSaver plan, is exempt from the Specified Superannuation Contribution Withholding Tax, which is paid by the employer. Employers also receive a tax credit of up to \$20 a week per KiwiSaver employee.⁶²

The public portion of the retirement saving system is called New Zealand Superannuation (NZS). This program aims to provide more than a basic pension but less than complete replacement of preretirement earnings. Put in place in 1977, the NZS provides a universal, flat-rate pension that is required to fall between 65 percent and 72.5 percent of the net average earnings of employed New Zealanders.⁶³ Eligibility is based simply on whether a worker has been a legal resident of New Zealand for ten years; there is no income or asset test used in determining eligibility. Benefits are subject to income tax. Because it continues for the entire life of a New Zealander after retirement, NZS also protects against the risk of outliving one’s assets.

Faced with estimates that the cost of NZS will rise to a point that future governments will be unable to fund it through general revenues alone, New Zealand created a buffer fund in 2001 that is in theory much like the U.S. Social Security trust fund. The government invests roughly \$2 billion annually (in New Zealand dollars) into the fund. No withdrawals are to be made until 2027; thereafter the fund will begin to pay for roughly 15 percent of the cost of NZS benefits.

Changes as of April 1, 2009

On December 15, 2008, a newly elected government changed the incentives to savers in order to reduce the overall cost of the program. At the same time, minimum savings levels were changed to make it easier for lower-income workers to participate. The changes went into effect on April 1, 2009.⁶⁴

The revised law eliminated the annual government subsidy of \$40 to defray administrative charges on the KiwiSaver accounts, abolished the weekly \$20 subsidy for employers, and reduced from 4 percent to 2 percent of gross pay the exemption from the Specified Superannuation Contribution Withholding Tax of contributions to a KiwiSaver plan. At the same time, the mandatory employer contribution was frozen at 2 percent of employee gross income, eliminating the scheduled rise to 3 percent in 2009 and 4 percent in 2011. Employers were also prohibited from reducing employees' pay to offset the matching contribution to KiwiSaver.

In addition, the December 2008 law addressed concerns that the minimum savings rate of 4 percent discouraged lower-income workers from participating by lowering the default savings rate to 2 percent. Existing KiwiSaver members could reduce their savings to the 2 percent level at that time. It appears that in the future, workers will be able to choose from three savings rates, with 2 percent joining the previously existing 4 percent and 8 percent options.

Participation and Coverage

Since KiwiSaver is still very young, it is difficult to say how the program will affect retirement saving patterns in the future. Thus far, however, it appears that the participation rates among workers are exceeding the assumptions made by the Treasury before the program began. At that time, the Treasury predicted only a 7 percent participation among workers aged 18 to 64 in 2008, rising to 25 percent in 2014.⁶⁵ However, 39 percent of respondents to a survey conducted in June 2008 reported that they participated in some workplace saving scheme, an increase from 27 percent in October 2007.

Of the 500,000 KiwiSaver members as of March 20, 2008, approximately 32 percent had been automatically enrolled and another 16 percent had opted in through an employer. The remainder opted in through a financial services provider. An additional 99,000 people had been auto-enrolled but opted out of the system. Just over half of the members were female, and about 20 percent were 55 or older.⁶⁶

There is some question about how much of KiwiSaver accounts represents new saving or reduced consumption and how much substitutes for other forms of private saving.⁶⁷ Additionally, as a result of the contribution holiday, it is possible that some participants will contribute for only twelve months to receive the initial \$1,000 "kick-start" incentive and then cease making any contributions for the following five years.

In 2007 NZS was still the primary source of retirement income for over 70 percent of the population aged 65 and up. Although that proportion is likely to drop as KiwiSaver accounts mature, the cost of providing NZS will not be affected since all workers are covered, regardless of income. Moreover, the proportion of the 65-and-over population is projected to double by 2050, so the cost of providing NZS will rise from its current level of 4.6 percent of GDP to over 6 percent of GDP. Options that have been mentioned to decrease the costs of the program include targeting benefits, increasing the residency requirement, increasing the eligibility age, or reducing the average replacement rate of benefits.

On top of the NZS, the cost of incentives for consumers to join KiwiSaver is projected to add roughly \$2 billion (20 percent of the net costs of the NZS) to the cost of government retirement saving programs by 2016.⁶⁸ The high cost of incentives to encourage participation raises the question of whether KiwiSaver membership should be made compulsory, as is the Superannuation Guarantee in Australia, or whether the NZS and KiwiSaver should be coordinated in some way that might allow some recapture of all or a portion of those incentives from upper-income workers. Another question is whether the incentives are really necessary in the long run, or whether automatic enrollment alone would be sufficient to ensure optimal participation.

Returns and Costs

Average five-year returns on balanced funds in New Zealand have been roughly 4.5 percent in nominal terms.⁶⁹ Currently, 30 KiwiSaver providers offer participants over 180 funds of varying investment strategies and risk. To be registered with KiwiSaver, a fund must meet certain regulations regarding asset allocation, but there are no performance guarantees. The government negotiates the level of fees and other costs funds may charge, but determining the cost for a particular fund can be complex, because up to ten different types of fees may be imposed. These include an annual fee measured as a percentage of the total assets in the fund, a membership fee, entry or exit fees, and occasional legal or audit fees. Multiple reported cost numbers may make choosing a preferred fund more difficult for employees. The Retirement Commission, an autonomous government entity that provides financial education and guidance estimates that conservatively managed funds have total annual fees of between 0.3 percent and 0.6 percent of assets, while more actively managed funds have fees of around 1 percent.

The six government-designated default funds are required to be invested primarily in cash, with only about 20 percent of the total amount invested in growth assets. However, fees charged by the default funds vary, raising an equity question because workers who do not choose another fund are randomly assigned to a default fund.

Financial education in New Zealand, which has been used as a model for other countries, is important both for maximizing individuals' retirement incomes and for maintaining competition and low costs among the investment funds. The website *Sorted*, started by the New Zealand government in 2001, provides a number of easy-to-use financial planning calculators and guides.⁷⁰ Additionally, there are plans to include financial education, which is already available in the workplace, in school curricula as well.

Retirement Income

Replacement rates in New Zealand are low relative to Australia and the OECD, at around 39.7 percent gross and 41.7 percent net of taxes.⁷¹ A study done by the New Zealand Treasury suggests that under conservative assumptions about spending changes and consumption patterns after retirement, roughly 40 percent of couples and 30 percent of individuals aged 45 to 64 are not saving enough for retirement. Under less conservative retirement income assumptions (which require a lower saving rate to achieve), estimates show that closer to 20 percent of New Zealanders still have inadequate savings.⁷² There are also concerns regarding the saving patterns of younger cohorts, although such patterns are difficult to measure empirically. Some analysts believe that younger New Zealanders have greater access to credit and thus will have more debt than did their parents' generation.

That said, labor force participation rates among those aged 50 and older have been increasing significantly, with workers in this category accounting for half of the total growth of the labor force from 1991 to 2005.⁷³ In 2006, 43 percent of men and 25 percent of women aged 65 to 69 were in the labor force, one of the highest participation rates among older people in the OECD.

In 2007 pension wealth contributed only 2 percent of total net wealth of couples aged 45 to 54. Other financial assets made up 44 percent of wealth and housing equity was 22 percent, with the value of NZS benefits making up the balance (32 percent).⁷⁴ The small role played by pension wealth helps to explain the paucity of annuities that are taken in New Zealand. Individual retirement accounts are also relatively small in size. The thin annuities market may begin to grow once KiwiSaver members start to accumulate significant levels of retirement savings and need a source of permanent retirement income. Several barriers to the development of the annuities market exist on both the supply and demand side. These include risks to the insurance companies that increasing life expectancies will make annuities more costly, the fact that annuity income is taxed at a higher rate than other income, the perception that the NZS makes annuities, and the fear of dying before receiving the full benefits of the annuity.

The distribution of retirement income in New Zealand is flat relative to preretirement income. The progressivity index calculated by the OECD is 100 for New Zealand, meaning that the income disparities between the highest and the lowest earners among retirees are among the lowest in the 30 OECD countries. Retirement income replaces 81 percent of pre-retirement income for New Zealanders who earned an average amount equal to half the country's average male earnings level, nearly double the replacement rate paid to retirees who earned average earnings. The degree of equity in retirement income is likely because pension wealth, which is linked to preretirement earnings, makes up such a small percentage of total retirement wealth, and because the NZS is universal.

United Kingdom

The pension system in the United Kingdom is exceptionally complex, with two levels of public pensions supplemented by a two-part, means-tested program. The interaction between the differing public programs is often confusing, especially when the worker also has additional defined contribution or defined benefit plans of some form. The one constant in the public pension system over the last several decades has been change. To some extent this is the result of the country's tax system, under which taxes and tax preferences appear, change, and disappear almost annually. In addition, over the last few decades, the benefits calculation under the two public pension benefits has changed several times, and

the two means-tested benefits have been created. These changes have confused British workers, and the interaction between the various public plans has discouraged nongovernmental pension saving.

Now, the system is evolving again. If recently proposed reforms are put into place as planned, the United Kingdom will offer its citizens a major new pension saving system that should greatly increase retirement security. Recent history suggests that future governments may continue to tinker with the system.

Structure of the System

In the current public pension system, the first tier, known as the Basic State Pension (BSP), is a flat-rate pension. Men who make a National Insurance contribution (NIC) for at least forty-four years and women who contribute for thirty-nine years receive the full value of the pension, and those who contribute for fewer years receive a proportionally lower amount.⁷⁵ Through April 2009, a full basic weekly pension was 90.70 British pounds for individuals and 145.05 pounds for couples.⁷⁶

Initially, the BSP was indexed to growth in average earnings, but in 1981 that was changed to indexation by inflation. The result has been a gradual but dramatic decline in the amount of preretirement income that the BSP replaces. At the time indexation was changed in 1981, the BSP amounted to just below 30 percent of average income at age 50. By 2000 it had declined to 20 percent, and if inflation indexation

remains in place, it would reach 10 percent by about 2040.⁷⁷

To supplement the BSP, a means-tested Pension Credit was introduced in 2003 to benefit pensioners with low or zero personal savings. The credit has two parts. First is a universal credit regardless of the amount or years of National Insurance contributions paid by the worker. It is intended to raise the pensioners' weekly income to roughly 20 percent of average wage and salary earnings, an amount equal to 124 pounds for individuals and 189 pounds for couples in 2008. Individuals over age 65 can also benefit from the second part of the Pension Credit: an additional payment known as the Savings Credit, which pays retirees an amount equal to the value of 60 percent of all their privately financed retirement income.⁷⁸ This second part of the Pension Credit, which in theory rewards retirees for having saved, pays up to 20 pounds a week for individuals and 26 pounds for couples.

The Pension Credit is controversial for several reasons. First, British workers must apply for it, and the application is somewhat detailed. At the time that it went into effect, there was concern that some older pensioners would be unable to understand the process or might be discouraged by the amount of information it required. Second, because the second part of the Pension Credit effectively reclaims about 40 pence per pound of savings, there are fears that in practice, it would discourage workers, and especially moderate-income

workers, from saving for retirement. Finally, there were fears that because of the declining value of the BSP, an ever-growing proportion of future retirees would qualify for the Pension Credit. This last concern was potentially dealt with in the 2007 Pensions Act, which is intended to increase retirement savings.

In addition to the BSP, a second tier, now known as the State Second Pension (S2P), is the earnings-related portion of the public pension system. Initially created by a Labor Party government in 1978 and known then as the State Earnings Related Pension System, this program pays workers a benefit based on earnings between a "lower earnings limit" and an "upper earnings limit." In 2009 S2P benefits were based on earnings between 4,680 and 40,000 pounds, a range that is adjusted regularly. Before 2003 the S2P provided a replacement rate of 20 percent of average lifetime earnings for workers between the earnings limits.⁷⁹ That rate, set in 1988, was a reduction from the 25 percent replacement rate set when the program was adopted in 1978. Government actuaries belatedly discovered that using the 25 percent replacement rate would far exceed what the government would be able to pay.

Since 2003 S2P benefits have depended on earnings on the job. For purposes of calculating their eventual pension benefit, workers with 2009 earnings greater than 4,680 pounds but less than 13,500 pounds would be credited with a 40

percent replacement rate for earnings between those amounts. Workers would receive credit at a marginal 10 percent rate for earnings between 13,500 and 31,100 pounds, and 20 percent for earnings between 31,100 and 40,040. The same calculation would be made for each year of earnings to determine the S2P benefit. The 2003 reforms, which were intended to increase benefits for moderate-income workers, represent an intermediate stage before the S2P becomes a flat benefit. Starting in 2010, the upper two bands will merge and provide a 10 percent replacement rate, before it is replaced with a flat rate benefit by approximately 2030.⁸⁰

Since its creation in 1978, one of the S2P's signature features has been the ability of participants to "contract out" through participation in an employer-sponsored retirement plan. If they do so, both the employer and the employee pay lower National Insurance contributions. Individuals who are not covered by a pension plan or retirement saving plan at work may also contract out of this part of the public system plan by choosing a stakeholder pension or a personal pension. In that case the NIC rates are not decreased, but the government rebates the contributions by placing them directly into the individual retirement account. All private retirement account contributions are pretax. Some individuals may choose to have a "rebate-only" private pension—that is, one that consists only of the NIC rebates and is worth roughly the same as the State Second Pension.

The ability to contract out caused a major "mis-selling" scandal in the late 1980s and early 1990s after the government passed a law forbidding employers to require workers to participate in their pension plan. Instead, employees had the ability to withdraw from the employer's plan and start their own personal retirement savings plan. Companies immediately started to market to employees, urging them to join a personal plan, but failing in many cases to disclose that workers who did so would lose any contributions that the employer would have made, thus leaving the employee worse off. The ensuing scandal and several other mis-selling scandals forced financial services companies to make reparations to affected workers and to greatly increase the advice given before a worker could invest with them. Although apparently caused as much by insurance and other sales agents who had previously sold other types of products and may have been honestly unfamiliar with the details of retirement savings products as by intentional deception, the scandals greatly weakened public trust in retirement savings plans.

At one time, the United Kingdom had a large system of employer-based retirement plans. In 1979 almost 65 percent of all workers were enrolled in an employer-based plan, but since then, the rate of participation rate has declined, falling to roughly 55 percent in 2004. There were 2 million fewer members in 2004 than in 2000.⁸¹ This decline is closely related to the closure of many

large and small defined benefit plans, in part because employers shifted to defined contribution plans to escape the increasing cost of DB plans caused by rising life expectancies.

Previous reforms sought to increase retirement savings through a system of stakeholder pensions, which can be employer-based or owned by an individual whose employer does not offer any form of retirement plan.⁸² Offered starting in 2001, stakeholder pensions are extremely simple and have administrative fees capped at a maximum of 1 percent of balances. Employers with more than five employees were required to offer their employees these accounts, but enrollment was not automatic and many employers did not promote them, so relatively few stakeholder accounts were opened. In addition, most financial institutions complained that the fee cap, which included all advertising costs, made stakeholder accounts unprofitable and so did not promote them. The failure of stakeholder pensions resulted in the personal accounts plan enacted in 2007.

Recent Reforms Taking Effect in 2010

In response to the continuing debate over pensions, the U.K. government passed the Pensions Act of 2007, which will make substantial changes beginning in 2010. The reforms are intended to simplify the private saving system, increase saving, and avoid undersaving among moderate and low earners. The law:

- Reduces the number of years of contributions necessary to qualify for

full Basic State Pension benefits to thirty years for both men and women.

- Allows pensioners to claim state pension benefits based on their spouse's qualifying years of contributions and earnings at any time after retirement age, rather than only after the spouse claims his or her pension.
- Indexes the basic state pension to average annual earnings rather than to prices (although the exact date that this will happen is uncertain).
- Simplifies the State Second Pension so that the lowest income band will accrue benefits at a flat rate of 1.40 pounds weekly and the top two bands of earnings will be combined so that they both accrue benefits at 10 percent of earnings.
- Increases the state pension age by one year per decade between 2020 and 2050 (reaching 68 eventually) for everyone born after April 1959.
- Abolishes contracting out of the S2P into employer-sponsored defined contribution and stakeholder plans (but not defined benefit plans).

Personal Accounts

Perhaps most important, the 2007 law established a system of voluntary, automatic enrollment, private retirement accounts that will begin in 2012. The personal accounts system will enable all workers to have an occupational pension plan that has low fees and charges. The plan would be administered by an independent administrative body.

All employees and workers between 22 and the state pension age who are not already in an occupational pension plan and whose annual earnings exceed a specified amount—5,035 pounds in 2007—will be automatically enrolled in an account.⁸³ Enrollees may opt out of the plan, subject to automatic reenrollment every three years.

Nonworkers, below-threshold earners, and the self-employed may opt in but will not be eligible to receive an employer contribution. Employees will contribute an amount equal to 4 percent of pay, which will be combined with a mandatory 3 percent contribution by employers, while the government will provide roughly 1 percent through tax relief, for an overall default contribution of 8 percent.⁸⁴ Annual earnings over a specified limit— 33,540 pounds in 2007— will not be subject to personal account contributions, and annual contributions are limited to not more than 5,000 pounds per year. Individuals may not consolidate other retirement savings into their personal accounts.

The personal accounts system is intended to increase private retirement saving, lower the government's liability for state pension payments, and raise average replacement rates. As is the case with automatic enrollment in New Zealand, the U.K. system intends to take advantage of employee inertia to increase participation rates. Estimates produced by the Department for Work and Pensions based on survey data of individuals' attitudes toward the new program suggest that nearly 70 percent

of individuals are likely to remain in their employer's plan or participate in the personal accounts system.⁸⁵ If this participation rate is accurate, 6 million to 9 million workers would be saving more in their workplace pensions than they do now; 4 million to 8 million of these would be new savers. Evidence from other U.K. automatic enrollment schemes has shown that individuals who save as a result of the automatic feature tend to have lower-than-average incomes.

The new U.K. system will continue to use employer-based plans as its foundation. Employers with more than two employees and no other pension plan are required to participate in the personal accounts system. At start-up, however, it would cover only large employers and then gradually be extended to small employers. Employers may be exempt from the personal accounts system and regulations associated with it if they choose to automatically enroll employees in a pension plan of equal or better value.⁸⁶

Mandated matching employer contributions will increase costs for an estimated 670,000 employers that currently do not offer a pension plan and for an additional 240,000 employers that contribute at a rate below 3 percent of income. The total cost of additional employer contributions is projected to be between 1.8 billion and 2.9 billion pounds a year once the mandatory 3 percent level is fully phased in.⁸⁷ Some of these costs may be offset by lower National Insurance contributions, although employers indicate that some

of their costs may be covered by price increases or wage deductions.⁸⁸

In the aggregate, the government projects that the reform will generate up to 10 billion pounds per year by 2015 in additional pension savings. Because of tax relief that is provided to savers, these additional savings will cost the government an estimated 1.3 billion pounds in 2020 and 2.4 billion pounds in 2050. Another cost will be corporate tax losses as a result of decreased corporate profits stemming from higher total employer retirement contributions. A portion of these tax expenditures and losses will be offset by higher receipt of taxes on pension income; the increase in self-provision for retirement will also decrease the cost of the means-tested Pension Credit.

These results are questioned by a number of private sector retirement professionals who believe that the personal accounts system will encourage employers that contribute more than 3 percent of workers' income to a retirement plan to reduce their contributions. Still other employers may choose to close their plans and to rely instead on the personal accounts system.

Returns and Costs

The administration of the personal accounts system will be centralized to keep costs low. A clearinghouse collects the contributions and allocates them to large aggregate investment funds, where they will be managed by private-sector investment managers. A separate

administrative body manages the marketing, customer contact, and information, and issues statements to participants. The goal of the Pensions Commission is to run the entire personal accounts system at a total cost of 0.3 percent of assets per year. Regulating the types of funds that qualify under the personal accounts scheme will also help to ensure adequate returns. Low fees will especially help in early phases of the personal accounts system when the funds are relatively small and low fees will translate into higher returns on investments.⁸⁹

However, the 0.3 percent administrative fee is substantially lower than that charged by many retirement plans, and it may be difficult to achieve. Some studies suggest that an annual fee closer to 0.5 percent of assets is more realistic.

Retirement Income

Participants in both the BSP and S2P are eligible to retire at age 65 for men and 60 for women. Those ages are set to equalize gradually to 65 over the period of 2010–20 and then to rise to 68 by 2050. Deferral of a state pension benefit is also allowed, and additional benefits accrue from the statutory retirement age at a rate of 10.4 percent of earnings subject to National Insurance contributions per year. Upon retirement, all balances in the public system (mainly those in the S2P) are automatically annuitized. Balances accrued in individual or occupational private accounts must be annuitized by age 75 to the extent that they are funded by NIC tax rebates. Seventy-five percent of any additional retirement contributions must also be

annuitized by age 75, with the remaining 25 percent being available for withdrawal in a tax-free lump sum. Pension annuity income is taxed at the same rate as other income.

Although pensioner income in the United Kingdom has been increasing over the past forty years, 44 percent of retirees still rely almost entirely on state-provided benefits, and the old-age dependency ratio is projected to double by 2030. State pensions are likely to provide lower replacement rates in the future, and before the 2007 reform, declining participation in occupational plans further depressed projections of future retirement income. Without change, the participation-based state pensions would have led to very low retirement incomes for individuals who did not contribute consistently to an employer-based retirement plan over their working lives. Reliance on the means-tested Pension Credit would have created a higher implicit tax on saving for an increasing percentage of the population.⁹⁰ The gross replacement rate in 2007 for mean earners was only 30.8 percent, the lowest in the OECD. Net of taxes, the United Kingdom ranked a bit higher, with a replacement rate of 41.1 percent at the mean of earnings. The OECD pension progressivity index for the United Kingdom was relatively high at 81.1, although this is a result of the low levels of participation in occupational pensions.⁹¹

If the predicted levels of participation in the personal accounts system after it goes into effect in 2012 are accurate,

they will translate into increased retirement saving for future retirees. Baseline predictions suggest that with the minimum automatic contribution levels, pension incomes for individuals aged 68 to 75 will have increased by 12 percent in 2050. The replacement rate for individuals who are 22 years old in 2012 will be roughly 68 percent by the time they reach retirement, and for those who are 40 years old it will be roughly 40 percent.⁹² If individuals contribute more than the automatic 4 percent of income into a personal account, their replacement rate will be higher; survey data suggests that nearly half of those who stay enrolled in a private pension plan will contribute at a higher rate than the minimum.

The impact of the reforms on pension progressivity will depend largely on participation rates among low earners. This group is the most likely to benefit from the automatic enrollment mechanism in the system. However, the contribution from the government based on tax relief will slightly disproportionately benefit higher-bracket earners.

The mandatory annuitization system aims to ensure that retirees' savings last for the remainder of their lives. The regulation seeks to overcome market barriers that otherwise might suppress the use of annuities: potential behavioral biases that lower demand and adverse selection, and changing mortality risks that would raise costs of annuities. Additionally, a portion of the retirement savings that must be used to purchase an annuity is funded by tax rebates, which

the government believes should be used for income, and not to fund bequests.

The annuities market in the United Kingdom tripled between 1991 and 2006 and is projected to increase further as private retirement funds shift toward defined benefit plans.⁹³ With the increase in demand has come an increase in flexibility for annuitants. Retirees are able to delay annuitization until age 75, and providers have developed numerous products that are specific to differing lifestyles, health statuses, and number of dependents. Additionally, retirees now have the ability to choose an open market option for purchasing an annuity. Under this option, they can use an online tool that lists all potential annuities that meet their personal conditions and are available to them, the costs of each option, and the weekly income each would provide. This enables retirees to search for the best value on the market rather than being tied to the same company that handled their savings.⁹⁴

Challenges Facing the U.S. Retirement Saving System

In the coming years, the United States is likely to grapple with a number of challenges as Social Security and private pensions evolve. Social Security has been technically insolvent for twenty of its nearly seventy-five years, and the Congressional Budget Office projects that Social Security will be solvent only until 2019, after which it will spend more in benefits than it will receive in payroll and other taxes.^{95, 96} Although the

present value of total lifetime Social Security benefits will be higher under current law for future retirees than for current retirees, the share of preretirement income that Social Security will replace will decrease.

Social Security's impending insolvency highlights the increasing significance of private sector accounts for future retirees. Unfortunately, while participation in employer-provided private plans has increased significantly over the last sixty years, from roughly 24 percent in 1950 to almost 50 percent in 2000, it has remained relatively stable since the late 1980s. Additionally, the creation of individual retirement accounts (IRAs) in 1974 and reforms in 2001 have made saving for individuals without an employer-sponsored plan feasible and attractive through tax incentives.⁹⁷ However, a large proportion of IRAs have been opened by workers rolling over a 401(k) plan sponsored by a former employer after leaving the job. Only about 10 percent of workers whose employers do not sponsor a retirement plan regularly contribute to an IRA. About 37 percent of workers have neither an employer-sponsored pension plan nor an IRA.⁹⁸ Coverage rates are lowest among low-income workers, 15-to-24-year-olds, and Hispanic workers. Many of these workers are employed in a small business. Involving these groups in private accounts is one of the main challenges for pension policy.

Employer-sponsored retirement plans have continued to shift toward defined contribution plans, in which workers

contribute a portion of earnings into an investment account and receive benefits that are equal to their contributions plus investment returns. From 1975 to 2000 the number of DC plans more than tripled to almost 700,000 accounts, while the number of private-sector defined benefit plans fell from 170,000 to under 50,000. In 2003, 58 percent of workers with a retirement plan participated in a DC plan, and that proportion is expected to increase as time goes on. Small employers with fewer than 250 employees account for a major part of the decline in DB plans.⁹⁹ The shift to DC plans combined with the need to increase participation and the recent drop in asset values during the recession will frame much of the coming discussion about the future of the U.S. retirement system.

Lessons for the United States

Mandatory Savings vs. Automatic Enrollment

Increasing the participation rate in retirement savings accounts can be accomplished through either mandatory participation or automatic enrollment mechanisms.

Evidence suggests that while a mandatory system clearly works, automatic enrollment may achieve similar participation rates at a lower political cost. Two of the four countries (Australia and Chile) in this study have a mandatory savings structure, while New Zealand uses automatic enrollment, and the United Kingdom is starting an automatic enrollment system.

Both countries with mandatory systems have the expected high participation rates.

As noted above, Chile's participation rate is less than optimal, but this is explained more by the makeup of the workforce than by anything else. One disadvantage of the mandatory system is that it must allow people some ability to choose their own contribution rates. In Australia, the effort to find a least-common-denominator contribution rate has led to a decrease in savings rates for some participants.

It is too early to determine how the new automatic enrollment systems in New Zealand and the United Kingdom will work. However, evidence from the United States shows that automatic enrollment can boost participation of eligible employees from roughly 75 percent to between 85 and 95 percent.¹⁰⁰ The greatest increase comes from those with the lowest participation in the current system. One study shows that with automatic enrollment employees with under \$20,000 in earnings increase participation rates from 13 percent to 80 percent, and Hispanic workers' rates increase from 19 percent to 75 percent.¹⁰¹ Additionally, making enrollment eligibility universal would allow participation by the 50 percent of workers who currently have no access to a 401(k) plan.¹⁰²

Default Investment Choices

Setting appropriate default investment options is a critical part of improving retirement income. Overall, limiting investment options works much better than providing a long list of choices. Even in Chile, where there was a measure of consumer choice and competition among providers, the actual investments were limited to a select few

fund types, and their structure was dictated by a government agency. Similarly, New Zealand randomly places participants who do not choose an investment fund into one of six default funds, and the coming individual accounts system in the United Kingdom will also have both a default and a very limited menu of other choices. This is also true in the industry funds of Australia, where most participants remain in a trustee-selected balanced portfolio of investment choices.

A Simple Savings Platform to Keep Administrative Fees Low

International experience shows that the best way to keep administrative costs low is to provide a simple investment platform with default investment funds and a high proportion of index-type funds. Chile, the only country studied in this paper without such a structure, has higher fees than its neighbors that have adopted similar individual account systems. While rival administrators in Chile do compete among themselves, they try to lure depositors with gifts rather than more economically priced services.

Costs in New Zealand, which does have a simple investment platform with a default investment option, appear to be fairly low, although that will only be clear after the system has been in operation for a longer time. Australia's superannuation clearinghouse, which started operations on July 1, 2009, and will help to direct contributions to investments, was created in response to complaints about fee levels in that system.

Meanwhile, the personal accounts reform in the United Kingdom will use a centralized administrative body to help keep costs well below those that can be found in other parts of the country's financial system, but its target level for administrative costs of 0.3 percent of assets was chosen by a governmental body and may not be achievable for some time, if at all. A simple centralized investment mechanism appears to have a better chance of keeping fees low in much the same way as the U.S. Thrift Savings Plan (TSP) has kept costs down for federal employees. The TSP has a centralized administration and record-keeping agency that tracks participants' contributions and allocates them to chosen funds. Fees and expenses for TSP funds have been very low since their inception; in 2007 expenses were only .015 percent of assets.¹⁰³ Both New Zealand's KiwiSaver and the coming U.K. system are based on the TSP.

A simple retirement system also increases the ability of workers to understand it and to be able to predict their retirement income. An extremely simple system such as that in New Zealand is probably the easiest for participants to understand, while the very complex U.K. system has left many workers both confused and nervous that their retirement income will be inadequate.

Changeable Savings Systems

A clear lesson from the United Kingdom is the need to avoid constant changes in retirement savings systems. Since the creation in 1978 of what came to be

known as the State Second Pension, successive governments have changed returns on contributions and the overall structure of the system itself. Returns were reduced for everyone in 1988, and were changed into a progressive system in 2003, with further changes coming that will turn the system into a flat benefit. Admittedly, the first change was necessitated by poor actuarial work that provided workers with more for their savings than the government could afford. But British governments have been unclear about the purpose of S2P and who should benefit from it. The result has been to confuse potential savers about what their retirement benefits will be and, in many cases, whether they should even save at all.

More recently, New Zealand's KiwiSaver plan had a series of incentives added to it just before the plan opened, only to have the incentives pared back and other changes made shortly after the government changed hands. If these sudden shifts continue, they could damage public support for the plan. On the other hand, recent reforms in Chile were clearly made after serious consideration of the plan's shortcomings. Clearly, plans must change with the nation's economy, but changes should come only after serious consideration of long-term consequences.

Ensuring an Adequate Safety Net

While augmenting public pensions with retirement income funded by private saving is desirable and even necessary, adequate income guarantees remain

crucial. New Zealand's universal pension, indexed to wage growth and restricted only by residency, is the most progressive and simple sort of old-age guarantee considered in this paper. It covers all retirees and does not create disincentives to save through means testing, and its fiscal costs are straightforward. In Australia, once a significant proportion of the workforce has participated in the superannuation guarantee system for another few decades, the means-tested public pension appears able to serve as an adequate safety net with few disincentives to save. The situation would be greatly helped if some level of annuitization were required to eliminate the incentive to spend SG funds in order to qualify for a public pension.

Conversely, the experience of Chile shows that a low means-tested basic pension in conjunction with a participation-based minimum pension leaves portions of the population uncovered by public old-age income security. Although the minimum pension was supposed to serve as a safety net, its original structure failed to cover a significant proportion of those who needed it.

The U.K. system as it exists now is also deeply flawed by a basic public pension whose value continues to drop as a proportion of preretirement income because it is indexed to inflation rather than wage growth. The complex, means-tested Pension Credit really only serves to mask the poor formulation of the Basic State Pension, and the growing proportion of British workers

who would have to rely on it emphasizes the point. While the coming personal accounts system and a return of the Basic State Pension to wage indexing will improve the situation, more work remains to be done.

Encouraging Annuitization

A retirement savings system is only really successful if it both allows participants to build enough savings to provide lifetime retirement income. The United Kingdom requires the annuitization of at least 75 percent of a worker's pool of retirement savings, while Chile requires either annuitization or a phased-withdrawal system. Neither Australia nor New Zealand has any such requirement, and efforts by Australia to encourage annuitization through favorable tax treatment have been less than satisfactory. New Zealand's program is too new to have any retirees as yet, and the country's existing pension system features minimal use of annuities.

Annuities pool longevity risk to insure annuitants against running out of resources before death. Otherwise, with increasing longevity, there is a very real risk that a growing number of retirees will run out of assets and end up living in poverty. This issue is a key concern in the United States, where 80 percent of defined contribution plans do not offer an annuity¹⁰⁴. However, establishing mandatory annuitization such as in the United Kingdom requires the same political consensus that a mandatory saving program does, and that is not easily achieved. Additionally, for many

lower-income retirees in the United States, an annuity may not be the optimal choice given income security provided by Social Security.

Instead, it would be better to consider some form of system based on behavioral economics that guides retirees to annuitization but does not require it. While there is early work on such an approach, it does not exist in practice. As a result, there is also no guarantee that behavioral approaches in pensions' spending stage operate as they have in the accumulation stage. In the interim while these policies are being developed, one avenue that should be encouraged in the United Kingdom is the type of annuity comparison mechanism available in Chile and the United Kingdom, where consumers can see the available choices and costs of each. This at least allows consumers to make an educated choice.

The worst approach to the spending stage is to assume that the retirees are able to make appropriate decisions on their own. While the United States may not be ready for mandatory annuitization, it does not have the option of ducking a decision on some form of annuitization policy.

Is a National Retirement Savings System Needed?

The United States simply cannot afford to have about half of its workforce unable to take advantage of a simple, low-cost system of retirement saving. Most workers cannot afford to live in retirement on just Social Security

benefits, and that program's coming fiscal problems make it very unlikely that benefits will increase. If younger workers are to have the same retirement security as their parents and grandparents, they must save for retirement from the time they first enter the workforce until they reach retirement age.

This does not imply that the United States should adopt one of the systems studied in this paper. Each system developed according to the specific culture and political realities of the individual country, and each is a mixture of features that may make sense only for that country. However, each of the four national systems offers positive and negative lessons that are relevant to U.S. policymakers. A U.S. system needs to reflect American political and financial realities, but it can adopt certain components that have worked elsewhere.

This does not imply that the U.S. system must have a centralized mechanism styled after KiwiSaver or the coming UK personal accounts system, nor does it have to be mandatory like Chile's or Australia's. Automatic enrollment seems to offer a better solution for the United States than does a mandatory system. If it proves not to greatly increase enrollment over time or if certain ethnic, gender, or income groups end up being underserved, the United States could consider moving to a mandatory system.

Similarly, a decentralized system combined with some form of on-line component that could match employers with a financial-services provider

interested in their business may be more efficient and faster to implement. However, if some segments of the market are underserved and cannot get access to a cost-effective retirement savings product, then some more formal and centralized system of providing accounts will have to be created. Somewhat similar problems resulted in Australia's new clearinghouse.

Regardless of what system is chosen, it must operate in tandem with the existing employer-sponsored system, and not as an alternative to it.

Companies that offer their employees 401(k)-type plans or traditional defined benefit pension plans should not be required to replace them with a new system. Instead, any additional system should apply only to companies that do not offer any type of retirement savings plan or pension and to the self-employed. That is not to say that 401(k)-type plans are perfect. The results of the current economic downturn show otherwise. However, nothing to date indicates that those workers would be better off in some new plan.

Each of the four countries surveyed here recognizes that increased retirement saving is essential to improving retirement security and reducing the potential cost of a taxpayer-financed pension system. None of their systems are perfect, but all of them have positive features. As U.S. policymakers seek to increase the proportion of workers who save for retirement, they can learn a great deal from exploring overseas systems.

Endnotes:

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Mission Statement

The Retirement Security Project is dedicated to promoting common sense solutions to improve the retirement income prospects of millions of American workers.

The goal of The Retirement Security Project is to work on a nonpartisan basis to make it easier and increase incentives for middle- and lower-income Americans to save for a financially secure retirement.

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