Optimal Rules for Defined Contribution Plans: What Can We Learn from the U.S. and Australian Pension Systems?

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ABSTRACT

Both the United States and Australia have multipillar retirement systems that include a public component and a private component. Increasingly, the private component consists of a defined contribution plan. At the outset, this Article provides an overview of the retirement systems of the United States and Australia. Next, this Article compares the rules governing defined contribution plans in the United States and Australia. In particular, this Article focuses on the rules governing the contribution, accumulation, and distribution stages; and it discusses which public policies will best help workers maximize their defined contribution plan accumulations and, consequently, the retirement income that they will eventually receive. Ultimately, this Article develops recommendations for the optimal rules for defined contribution plans in the United States, Australia, and around the world.

I. Introduction

Both the United States and Australia have multipillar retirement systems that include a public component and a private component. Increasingly, the private component is an employer-provided defined contribution plan or other privately managed individual retirement savings account. To get adequate retirement income from these defined contribution plans, employees need to ensure that significant contributions are made to these plans (the contribution phase), that those contributions are invested well and retained until retirement (the accumulation phase), and that the accumulated retirement

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savings are used to provide benefits throughout retirement (the distribution phase).

At the outset, this Article provides an overview of the retirement systems of the United States and Australia. Next, this Article compares the rules governing defined contribution plans in the United States and Australia. In particular, this Article focuses on the rules governing the contribution, accumulation, and distribution stages; and it discusses which public policies will best help workers maximize their defined contribution plan accumulations and, consequently, the retirement income that they will eventually receive. Ultimately, this Article develops recommendations for the optimal rules for defined contribution plans in the United States, Australia, and around the world.

II. A Defined Contribution World

Both the United States and Australia have multipillar retirement systems that consist of (1) a government pension, (2) an occupational pension, and (3) personal savings.1 Retirement income is provided through a combination of a first-tier public system, a second-tier employment-based pension system, and a third-tier of supplemental voluntary savings. Increasingly, the second-tier and third-tier components take the form of individual retirement savings accounts in the nature of defined contribution plans, as opposed to the more traditional pensions that were structured as defined benefit plans.

A. Types of Pension Plans

Pension plans generally fall into two broad categories based on the nature of the benefits provided: defined benefit plans and defined contribution plans.

1. Defined Benefit Plans

In a defined benefit plan, the employer promises employees a specific benefit payable at retirement.2 To provide that benefit, the employer typically makes payments into a trust fund, funds contributed to the trust grow with investment returns, and eventually the employer withdraws money from the trust fund to pay the promised benefits. Employer contributions are based on actuarial valuations, and the employer bears all of the investment risks and responsibilities.

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Defined benefit plans often provide each worker with a specific annual retirement benefit tied to the worker’s final average compensation and number of years of service. For example, a plan might provide that a worker’s annual retirement benefit \( (B) \) is equal to two percent times the number of years of service \( (\text{yos}) \) times final average compensation \( (\text{fac}) \) \( (B = 2\% \times \text{yos} \times \text{fac}) \). Under this formula, a worker who retires after 30 years with final average compensation of $50,000 would receive a pension of $30,000 a year \( ($30,000 = 2\% \times 30 \times \text{yos} \times $50,000 \text{fac}) \). Final average compensation is often computed by averaging the worker’s salary over the last three or five years prior to retirement.\(^3\) While many defined benefit plans allow for lump sum distributions, the default benefit for many defined benefit plans is a retirement income stream in the form of an annuity for life.\(^4\)

2. Defined Contribution Plans

Under a defined contribution plan, the employer typically contributes a specified percentage of the worker’s compensation to an individual investment account for the worker.\(^5\) For example, contributions might be set at ten percent of annual compensation. Under such a plan, a worker who earned $50,000 in a given year would have $5,000 contributed to an individual investment account for her \( ($5,000 = 10\% \times $50,000) \). Her benefit at retirement would be based on all such contributions plus investment earnings.\(^6\)

Unlike traditional defined benefit plans, defined contribution plans usually make distributions in the form of lump sum or periodic distributions rather than life annuities. Indeed, relatively few defined contribution plans even offer annuity options, and relatively few participants elect annuities when they are available.\(^7\)

3. “Hybrid” Retirement Plans

So-called “hybrid” retirement plans mix the features of defined benefit and defined contribution plans. For example, a cash balance plan is a type of

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\(^3\) Alternatively, some plans use career average compensation instead of final average compensation. Under a career earnings formula, benefits are based on a percentage of an average of career earnings for every year of service by the employee.

\(^4\) In the United States, defined benefit plans are generally designed to provide annuities or definitely determinable benefits over a period of years, usually for life, after retirement. Reg. § 1.401-1(b)(1).

\(^5\) Forman, supra note 2, at 215.

\(^6\) Defined contribution plans are also known as “individual account” plans because each employee has her own account, as opposed to defined benefit plans, where the plan’s assets are pooled for the benefit of all of the employees. See 29 U.S.C. § 1002(34) (2006).

defined benefit plan that looks a lot like a defined contribution plan. Like other defined benefit plans, employer contributions are based on actuarial valuations, and the employer bears all of the investment risks and responsibilities. Like defined contribution plans, however, cash balance plans provide workers with individual accounts—albeit hypothetical individual accounts.

A simple cash balance plan might allocate ten percent of salary to each worker’s account each year and credit the account with five percent interest on the balance in the account. Under such a plan, a worker who earned $50,000 in a given year would get an annual cash balance credit of $5,000 ($5,000 = 10% × $50,000), plus an interest credit equal to five percent of the balance in her hypothetical account as of the beginning of the year in which the contribution is made.

B. The Dominance of Defined Contribution Plans

In recent years, defined contribution plans have come to dominate the pension landscape. For example, 50% of full-time private industry workers in the United States participated in defined contribution plans in 2011 (up from 40% in 1989–1990); meanwhile, participation in defined benefit plans fell from 42% in 1989–1990 to just 22% in 2011. In the aggregate, defined contribution plans held 57% of pension assets in the United States in 2011 (up from 52% in 2001). Similarly, 81% of pension assets in Australia were held by defined contribution plans in 2011 (down slightly from 83% in 2001), 60% in Switzerland (up from 49% in 2001), and 39% in the United Kingdom (up from just 8% in 2001). All in all, the era of the traditional defined benefit plan is largely behind us.
So far, however, our new defined contribution “world” appears to be producing lower rates of saving and retirement income than defined benefit plans did previously. Consequently, many analysts have expressed doubts as to whether current and future generations of retirees will have adequate retirement incomes.

III. Comparing the U.S. and Australian Retirement Systems

A. Overview of the U.S. Retirement System

The U.S. retirement system consists of a universal Social Security system, a voluntary occupational pension system, and supplemental voluntary savings.

1. Social Security

The Social Security system includes two major programs that provide monthly cash benefits to workers and their families. The Old-Age and Survivors Insurance (OASI) program pays monthly benefits to retired workers, to their dependents, and to survivors of insured workers; the Disability Insurance (DI) program pays monthly benefits to disabled workers who are under full retirement age and their dependents. A worker builds protection under these programs by working in employment covered by Social Security and paying the applicable payroll taxes. At retirement, disability, or death, monthly Social Security benefits are paid to insured workers and to their eligible dependents and survivors.

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13See, e.g., Jack VanDerhei, The Importance of Defined Benefit Plans for Retirement Income Adequacy, 32 Empl. Benefit Research Inst. Notes 7, 11 (2011) (showing that having a defined benefit plan at age 65 significantly reduces the risk that retirement income will be inadequate).


15See, e.g., Forman, supra note 2, at 184.
Social Security benefits are financed primarily through payroll taxes imposed on individuals working in employment or self-employment that is covered by the Social Security system. For 2013, employees and employers each pay a Social Security OASI tax of 6.2% on up to $113,700 of wages, for a combined OASI rate of 12.4%—the lion’s share of the total 15.3% collected for OASI, DI, and Medicare. Self-employed workers pay an equivalent OASI tax of 12.4% on up to $113,700 of net earnings.

Workers over the age of 62 generally are entitled to Social Security retirement benefits if they have worked in covered employment for at least ten years. Benefits are based on a measure of the worker’s earnings history in covered employment. Of note, however, the benefit formula is highly progressive—that is, it is designed to favor workers with relatively low lifetime earnings.

Historically, “full retirement age” was age 65, but it is currently age 66, and it is gradually increasing to age 67. In January of 2013, OASI paid benefits to more than 36.8 million retired workers, and the average monthly benefit paid to a retired worker was $1,264.03.

A worker’s benefits may be increased or decreased for several reasons. Most important, benefits are indexed each year for inflation as measured by the increase in the Consumer Price Index. Also, workers who retire before their full retirement age have their benefits actuarially reduced. On the other hand, benefits payable to workers who choose to retire after their full retirement age are actuarially increased (but only up to age 70). Finally, the “retirement earnings test” can reduce the benefits of individuals who have not yet reached full retirement age and who continue to work after starting to draw Social Security retirement benefits.

Spouses, dependents, and survivors of the worker may also receive additional monthly benefits. These family benefits are also based on the worker’s benefit. For example, a retirement-age wife or husband of a retired worker is

18 Id.
20 Id.
25 Id.
typically entitled to a monthly spousal benefit equal to 50% of the worker’s benefit.27 Also, a retirement-age widow or widower of the worker is entitled to a monthly surviving spouse benefit equal to 100% of the worker’s benefit.28

In addition, a means-tested Supplemental Security Income (SSI) program provides monthly cash benefits to certain low-income elderly, disabled, or blind Americans.29 In 2013, the maximum federal benefit for a single individual is $710 per month, and the maximum for a couple is $1,066 per month.30 In January of 2013, over two million elderly Americans received SSI benefits from the federal government, and the average monthly benefit was $422.17.31

2. The Pension System

The United States has a voluntary private pension system.32 That is, employers are not required to have pensions. However, when employers do provide pensions, those pensions are typically subject to regulation under the Employee Retirement Income Security Act of 1974 (ERISA).33

Most pension plans qualify for favorable tax treatment. Basically, an employer’s contributions to a tax-qualified retirement plan on behalf of an employee are not taxable to the employee.34 Moreover, the pension fund’s earnings on those contributions are tax-exempt.35 Workers pay tax only when they receive

31 Monthly Statistical Snapshot, supra note 22.
34 I.R.C. § 402.
35 I.R.C. § 501(a).
distributions of their pension benefits. Nevertheless, the employer is allowed a current deduction for its contributions (within limits). Figure 1 illustrates this “Exempt-Exempt-Taxable” (EET) approach.

Figure 1. U.S. Tax Treatment of a Simple Defined Contribution Plan

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36 I.R.C. §§ 72, 402. Pension benefits or annuity payments may be fully taxable or partially taxable. For example, a participant’s pension benefits will be fully taxable if the participant’s employer contributed all of the cost for the pension without any of the contributions being included in the employee’s taxable wages. Pension benefits would also be fully taxable if the participant has already received all of her previously taxed contributions tax free in previous years. See Dep’t of the Treasury, Internal Revenue Service, Publication No. 560, Retirement Plans for Small Business (SEP, Simple, and Qualified Plans) (2012), available at http://www.irs.gov/pub/irs-pdf/p575.pdf. On the other hand, if an individual made after-tax contributions to a pension or annuity, she can exclude part of her pension or annuity distributions from income. Under sections 72 and 402, the individual can exclude a fraction of each benefit payment from income. That fraction (the “exclusion ratio”) is based on the amount of premiums or other after-tax contributions made by the individual. The exclusion ratio enables the individual to recover her own after-tax contributions tax free and to pay tax only on the remaining portion of benefits that represents income. See I.R.C. §§ 72, 402.

Taxpayers who began receiving annuity payments from a qualified retirement plan after November 18, 1996, generally can use the so-called Simplified Method to figure the tax-free part of their benefits. Under the Simplified Method, the Code provides a table with a fixed number of anticipated payments that depends upon the annuitant’s age as of the annuity starting date. The taxpayer then divides the total cost over the applicable number of anticipated payments and excludes the amount so determined each year. See I.R.C. § 72.

37 I.R.C. § 404(a).

As already mentioned, pension plans generally fall into two broad categories based on the nature of the benefits provided: defined benefit plans and defined contribution plans; defined contribution plans are now the predominant mechanism for retirement savings. In the United States, there are a variety of different types of defined contribution plans, including money purchase pension plans, target benefit plans, profit-sharing plans, employee stock ownership plans (ESOPs), and stock bonus plans.\footnote{See, e.g., U.S. Dep’t of Labor, Bureau of Labor Statistics, \textit{Six Ways to Save for Retirement, in 3 Program Perspectives} 1, 2 (2011), available at http://www.bls.gov/opub/perspectives/program_perspectives_vol3_issue3.pdf.}

Of particular note, profit-sharing and stock bonus plans often include a feature that allows workers to choose between receiving cash currently or deferring taxation by placing the money in a retirement account according to section 401(k). Consequently, these plans are often called “401(k) plans,” and they are the most popular type of retirement plan in the United States.\footnote{See, e.g., U.S. Dep’t of Labor, Bureau of Labor Statistics, \textit{BLS Examines Popular 401(k) Retirement Plans, in 2 Program Perspectives} 1, 1 (2006), available at http://www.bls.gov/opub/perspectives/program_perspectives_vol2_issue6.pdf.}

The maximum annual amount of such elective deferrals that can be made by an individual in 2013 is $17,500, although workers over the age of 50 can contribute another $5,500 (for a total of up to $23,000).\footnote{IR-News Rel. 2012-77, 1, available at http://www.irs.gov/pub/irs-news/IR-12-077.pdf.}

Favorable tax rules are also available for certain individual retirement accounts (IRAs).\footnote{I.R.C. § 219.}

Almost any worker can set up an IRA with a bank or other financial institution. In 2013, individuals without pension plans can contribute and deduct up to $5,000 to an IRA, although individuals over age 50 can contribute and deduct another $1,000 (for a total of up to $6,000); spouses can contribute and deduct similar amounts.\footnote{I.R.C. § 219.}

If a worker is covered by another retirement plan, however, the deduction may be reduced or eliminated if the worker’s income exceeds $59,000 for a single individual or $95,000 for a married couple.\footnote{IR-News Rel., supra note 41 at 1.}

Like private pensions, IRA earnings are tax-exempt, and distributions are taxable.\footnote{Also, so-called “Keogh plans” give self-employed workers an ability to save for retirement that is similar to plans that employers sponsor, and Keogh plans allow self-employed workers to contribute more than they could otherwise contribute to a regular IRA. Dep’t of the Treasury, supra note 36, at 12.}

Since 1998, individuals have also been permitted to set up Roth IRAs.\footnote{I.R.C. § 408A.}

Unlike regular IRAs, contributions to Roth IRAs are not deductible. Instead, withdrawals are tax-free. Like regular IRAs, however, Roth IRA earnings are tax-exempt. And since 2006, employers have been permitted to set up Roth

\footnote{I.R.C. § 408A.}
401(k) plans that operate in a similar fashion. Figure 2 illustrates this “Taxable-Exempt-Exempt” (TEE) approach.

Figure 2. U.S. Tax Treatment of a Roth Defined Contribution Plan

Also, since 2002, certain low-income and moderate-income individuals have been able to claim a tax credit of up to $1,000 for certain qualified retirement savings contributions. The credit equals a percentage (50%, 20%, or 10%) of up to $2,000 of contributions. In effect, the credit acts like an employer match: the government matches a portion of the employee’s contributions. Employer matches encourage workers to contribute, at least up to the match level, and the saver’s tax credit seems to have similar pro-saving effects.

3. Other Voluntary Savings Mechanisms

In addition to voluntary saving through 401(k) elections and individual retirement accounts, individuals can also save money outside of the retirement system. In general, investment income is subject to personal income tax rates of up to 39.6% in 2013; however, dividend income and capital gains are generally taxed at no more than 20%, and various tax advantages are also

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47 I.R.C. § 402A.
48 Forman, supra note 38, at 311.
49 I.R.C. § 25B.
51 I.R.C. § 1.
52 I.R.C. § 1(h).
associated with investments in homes,\textsuperscript{53} state and local bonds,\textsuperscript{54} annuities,\textsuperscript{55} and life insurance.\textsuperscript{56}

B. Overview of the Australian Retirement System

The Australian retirement system consists of a means-tested Age Pension, a mandatory universal superannuation system, and supplemental voluntary savings.

1. The Age Pension

The Age Pension is a means-tested income support benefit for seniors that is funded from general revenues.\textsuperscript{57} To qualify for an Age Pension, recipients must have lived in Australia for at least ten years.\textsuperscript{58} Effective September 20, 2012, workers who qualify for the full Age Pension receive a maximum of AU$712.00 every fortnight for singles and AU$1,073.40 for couples.\textsuperscript{59} The single benefit is designed to provide about 25\% of average male earnings.\textsuperscript{60} Benefits are reduced by both an income test and an asset test.\textsuperscript{61} For example, the income test reduces the Age Pension by 40 cents for each dollar of income over AU$152 per fortnight for singles and 40 cents for each dollar of income over AU$252 for couples.\textsuperscript{62}

\textsuperscript{53}For example, home mortgage interest is generally deductible, and the gain from the sale of a personal residence is often excludable. I.R.C. §§ 163(a), 121.

\textsuperscript{54}I.R.C. § 103 (interest exclusion).

\textsuperscript{55}Under section 72(b), the individual can exclude a fraction of each annuity payment from income. That fraction (the “exclusion ratio”) is based on the amount of premiums or other after-tax contributions made by the individual. The exclusion ratio enables the individual to recover her own after-tax contributions tax free and to pay tax only on the remaining portion of benefits, which represents income. The net effect is a deferral of taxation.

\textsuperscript{56}I.R.C. § 101(a) (excluding insurance proceeds paid by reason of the death of the insured).


\textsuperscript{59}Age Pension: Payment Rates for Age Pension, Australian Gov’t, Dep’t of Human Serv., http://www.humanservices.gov.au/customer/services/centrelink/age-pension (last updated Jan. 29, 2013). These amounts exclude the Pension Supplement amounts of up to AU$60.60 every fortnight for singles and AU$91.40 for couples. Id.

\textsuperscript{60}OECD, supra note 57, at 194.

\textsuperscript{61}Age Pension: Payment Rates for Age Pension, supra note 59.
over AU$268 per fortnight for couples. In 2008 just 56% of recipients received the maximum Age Pension.

The current qualifying age for the Age Pension is 65 years for men and 64 years and 6 months for women, but after July 1, 2013, it will be 65 years for both men and women. Also, starting on July 1, 2017, the pension age for both men and women will gradually increase until it reaches age 67 on July 1, 2023.

2. Superannuation (Pensions)

The Australian pension system is called superannuation, which can be defined as a regulated and low-taxed savings scheme that is designed to encourage taxpayers to save for their retirement. Working taxpayers, their employers, and the self-employed generally contribute to superannuation funds, which are administered by superannuation fund trustees. Generally, these superannuation savings cannot be accessed until retirement after reaching the “preservation age,” earlier death, or disability. At that time, the savings can be taken in the form of a lump sum, pension, or a combination of the two, depending on what the trust deed provides.

Contributions by employers for their employees were made compulsory in 1992. The superannuation guarantee consists of a mandatory employer contribution to a private pension plan. The pension plans may be operated by the employer, industry associations, financial service companies, or even by individuals themselves. The mandatory contribution rate has been nine percent of employee earnings since the 2002–2003 tax year. Employers do not have to make superannuation contributions for workers earning less than AU$450 a month (equivalent to AU$5,400 a year), but they can choose to contribute for those workers. There is also an upper limit: employers do not

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63 OECD, supra note 57, at 194.
64 See Eligibility for Age Pension, Australian Gov’t, Dep’t of Human Serv., http://www.humanservices.gov.au/customer/enablers/centrelink/age-pension/eligibility-for-age-pension (last updated June 29, 2012).
65 See id.
67 For an explanation of the preservation age, see infra notes 86–87 and accompanying text.
69 OECD, supra note 57, at 193.
have to make superannuation contributions for employees’ pay above this threshold. For the 2012–2013 tax year, this limit is AU$45,750 per quarter.71

The Australian Government recently enacted legislation to gradually increase the superannuation guarantee rate from 9% to 12%.72

**Increasing the Australian superannuation guarantee rate from 9% to 12%**

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<th>Year</th>
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<tr>
<td>2019-2020 and subsequent years</td>
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*Source: Superannuation Guarantee (Administration) Act of 1992 (Cth) § 19(2) (as amended by the Superannuation Guarantee (Administration) Amendment Act of 2012 (Cth) § 3).*

Employer contributions are deductible regardless of the amount, and employees are generally not taxed on those contributions.73 Employees can also make additional before-tax (concessional) contributions to their superannuation funds, and they can enter into salary-reduction agreements with their employers to exclude those contributions from tax up to certain limits.74 This can be advantageous, as the 15% tax on the superannuation fund is often less than the tax the employee would have paid if she had taken the money

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73 Income Tax Assessment Act 1997 (Cth) §§ 290-60 to 80 (Austl.).

as salary. However, if contributions are made for an employee in excess of AU$25,000 per year, the employee pays tax of 31.5% on that excess.76

Individuals can also make additional after-tax (nonconcessional) contributions to their superannuation funds of up to AU$150,000 per year.77 A person’s nonconcessional contributions are generally contributions that are not included in the assessable income of the superannuation fund; that is, they are not taxed at the superannuation fund’s 15% rate. However, the individual member is liable for tax on excess nonconcessional contributions that exceed the annual AU$150,000 cap at 46.5%.78 In addition, individuals can make additional so-called “bring-forward” contributions of up to AU$450,000 of nonconcessional contributions over any three-year period until the year after they turn 65 without incurring extra tax.79

The Australian government also provides two subsidies to assist low income earners in saving for their retirement (“low income super contribution” and “Government Co-contribution”).80 First, the government will contribute 15% of the amount that an individual contributes to her fund pretax, as long as her adjusted income is less than AU$37,000, up to a maximum of AU$500.81 Second, the government will contribute AU$0.50 for each post-tax $1 contributed up to a maximum of AU$500, as long as her adjusted income is less than AU$46,920.82

The superannuation fund typically pays tax at a 15% rate on the receipt of contributions made by employers and individuals who have claimed a deduc-

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75 For example, Tiffy works for a merchant bank and earns a wage of AU$300,000. She enters into a salary reduction agreement with her employer to reduce her salary to AU$275,000 and has AU$25,000 contributed into her self-managed superannuation fund. Tiffy's assessable wage income is reduced to AU$275,000. The AU$25,000 is taxed at 15% in the superannuation fund, but had it been paid as salary it would have been taxed at 45% plus the Medicare levy of up to 1.5%. See infra note 92 and accompanying text.


78 See *Income Tax Assessment Act 1997* (Cth) § 292-80 (Austl.).

79 *Key Superannuation Rates and Thresholds, supra note 77.*


81 *Id.*

tion, and the fund also has to pay tax at a 15% rate on the income it earns (just ten percent for capital gains on assets held for at least one year). Superannuation funds pay no tax on the income from assets that are used to support the payment of pension benefits once that income stream has commenced. Because of the Australian constitution, many pension funds run by government agencies do not pay tax on contributions or earnings. These make up about ten percent of all pension funds in Australia.

In the benefits phase, the contributions, plus earnings from investing them, are usually paid as benefits to the member when he or she retires after reaching preservation age. The preservation age is the earliest that retirement benefits can be paid from a superannuation fund and still get concessional taxation treatment. The preservation age was initially set at age 55, but for people born after June 30, 1964, the preservation age is age 60. If the member dies before retiring, the benefits are typically paid to the member’s dependents.

Where the superannuation fund has paid tax on contributions and earnings, benefits paid, either as a lump sum or pension, are generally tax-free for people age 60 and over. Figure 3 illustrates this “Taxable-Taxable-Exempt” (TTE) approach.

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84 Income Tax Assessment Act 1997 (Cth) § 301-10 (Austl.).


89 Income Tax Assessment Act 1997 (Cth) § 301-10 (Austl.).

90 Forman, supra note 38, at 315.
On the other hand, where the superannuation fund has not paid tax on contributions and earnings, such as in a constitutional fund, the benefits paid from such funds are taxed. For example, lump sum payments are taxed at a rate of 16.5% up to AU$1,255,000 and at 46.5% above that, and pensions are fully taxed, but these payments are entitled to a ten percent tax credit.

3. Other Voluntary Savings Mechanisms

In addition to voluntary concessional and nonconcessional superannuation contributions, individuals can also save money outside of the retirement system. In general, investment income is subject to the normal personal income taxation rates of up to 45% in 2012–2013, plus a Medicare levy of up to 1.5%. Of note, however, capital gains on investments that have been held at least 12 months are taxed at half the normal rate. Australia is unique, as tax losses incurred by individuals from investing in income-producing assets, such as residential housing or company equity, can

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91 Income Tax Assessment Act 1997 (Cth) §§ 301-95, 301-100 (Austl.); Hanegbi, Improving our Superannuation Regime, supra note 66, at 431.
92 Income Tax Assessment Act 1997 (Cth) § 301-100 (Austl.).
be offset against any other income, including employment income.95 Generally, these arrangements are called “negative gearing” because the financing and other capital cost deductions exceed the rental or dividend income annually on the expectation that, ultimately, the rental or dividend income and proceeds on sale will exceed those costs. The tax benefits are therefore two-fold: (1) the individual gets an immediate tax write-off on the annual tax loss, which reduces the cost of funding, and (2) only half the capital gain is taxed if the asset is owned for at least 12 months.96 Where the asset that is acquired with borrowed funds is a share in an Australian company, the individual gets a third tax benefit because of the tax credit imputed to those shares for the taxes that the company itself paid, and that tax credit is refundable if the individual is in tax loss for the year.

IV. The Life Cycle Model

Economists typically use a life cycle to model the work, saving, and retirement choices of individuals.97 The life cycle model assumes that workers try to maintain a consistent level of consumption over their lifetimes. Under the model, individuals start life with no inheritance and end it leaving behind no bequests. Individuals try to smooth out their average annual consumption by borrowing when they are young and earning enough during their working years to both repay their loans and save for retirement. Under the model, individuals have perfect foresight so they can save exactly enough so that they


96Changes were made in the mid-1980s to quarantine the annual tax loss for investing in residential housing such that it could only be recouped by the individual when the asset was sold. However, those changes lasted for only two years because the residential housing stock dried up as individuals ceased investing in residential housing. Nevertheless, the Australian government’s recent review of its tax and transfer system once again expressed concern about negative gearing. More specifically, the government recommended that investors be allowed to deduct only 40% of the annual losses from negatively-geared residential property and, also, that investors only be taxed on 40% of their rental income. That recommendation was qualified, however, with the caution that it not be introduced until there is greater certainty about the supply of residential housing stock. Australia’s Future Tax System, Report to the Treasurer, Part One Overview 83 (2009). The report is also known as the Henry Review because the review panel was chaired by Dr. Ken Henry, then the Australian Secretary to the Treasury.

can live off their savings until death and die exactly when they run out of money.98 See Figure 4.

**Figure 4. Stages of the Simple Economic Life Cycle**

![Figure 4](image)

**Major Life Periods:**
A. ‘Youth’: Period when consumption exceeds income (up to age 20–25).
C. ‘Retirement’: Period where consumption exceeds income (60–65 and beyond).


98 Of note, the life cycle model assumes relatively level spending by retirees throughout retirement, and for simplicity most of the discussion in this Article follows that assumption. In fact, consumption patterns in retirement are different at different ages and the overall pattern is U-shaped rather than flat. In the initial active phase, higher incomes may be needed to meet the expenses of travel and leisure activities. This is often followed by a less expensive passive phase when retirees are still living independently but reduce their spending as they have a more sedentary lifestyle. Finally, many retirees will fall into a frail phase of declining health when more income is needed to help pay for greater assistance. *See, e.g.*, Jack Jie Ding, *Annuitization with Phased Consumption Requirements: Who, When and How Much*, 3 (Dec. 2011), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2014453.
V. Optimal Contribution Rules

Ensuring that adequate contributions are made to defined contribution plans is perhaps the most critical mechanism for ensuring that people will have adequate retirement incomes. In that regard, Australia’s mandatory contribution system is virtually certain to ensure that adequate contributions are made for most workers. Under current law, almost all workers will see nine percent of salary contributed to their superannuation funds, and those with favorable union contracts can see even more contributed on their behalf. Moreover, the superannuation guarantee will gradually increase to 12% by 2019–2020.

Australia may also want to revise the tax treatment of superannuation contributions, accumulations, and distributions, perhaps along the lines of the Exempt-Exempt-Taxable approach that is commonly used in the United States and in so many other countries. In that regard, the current Australian system of 15% taxes on contributions and annual earnings means that only 85% of contributions and earnings can be accumulated for retirement. That approach is closer to comprehensive income taxation and results in over-taxing the retirement savings of Australians relative to the consumption tax treatment that is common in the rest of the world.

On the other hand, as already mentioned, the United States has a voluntary pension system. Only about half of U.S. workers have pension plans, and many Americans are just not saving enough in retirement plans or otherwise. To increase pension coverage, especially for low-wage and moderate-wage workers, it would make sense for the United States to follow Australia’s example and adopt a mandatory pension system. At present, however,

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100 See supra notes 34–38 and accompanying text; see also, e.g., OECD, supra note 57, at 122–23; Kwang-Yeol Yoo & Alain de Serres, Tax Treatment of Private Pension Savings in OECD Countries, available at http://www.oecd.org/dataoecd/19/0/35663569.pdf; Forman, supra note 38, at 304.

101 See supra note 32 and accompanying text.

102 See supra note 14.

103 See, e.g., Most Middle-Income Workers Saving Less Than Five Percent of Their Income for Retirement, Life Ins. & Market Research Ass’n (Oct. 31, 2012), http://www.limra.com/newscenter/NewsArchive/ArchiveDetails.aspx?prid=269 (finding that two-thirds of middle-income ($40,000–$99,999) American workers were saving less than five percent of their annual income for retirement, and nearly a quarter were saving nothing at all); see also sources cited supra note 14.

American politicians are unwilling to impose such a mandate on employers or workers.

To be sure, the United States has numerous tax incentives for retirement savings. As mentioned, amounts set aside for retirement and pension earnings are typically exempt from tax. This system certainly provides incentives for high-income, high-tax-bracket taxpayers to save for retirement, and the nonrefundable saver’s tax credit provides an incentive for moderate-income taxpayers to save for retirement. In that regard, however, many believe that making the saver’s tax credit refundable would increase the incentives for low-income workers to save for retirement. Another approach for encouraging more households to save for retirement would be to replace the current system of deductions—and exclusions—for contributions with a flat rate refundable tax credit that would be deposited directly into the saver’s retirement savings account.

Recently, the United States has been experimenting with automatic enrollment systems. For example, many 401(k) plans automatically enroll employees unless they choose to opt out. The plan will deduct a set contribution level from each employee’s pay check and put it into a predetermined investment. Studies have shown that automatically enrolling people into 401(k) plans can achieve higher levels of participation, and automatically escalating the level of their contributions can dramatically increase their amount of savings.

At present, however, not every worker has access to a 401(k) plan. As a starting point, the United States may want to require that every employer have a pension plan or at least offer their employees a 401(k) plan or a payroll-deduction IRA coupled with automatic enrollment features. In the end, however, the United States should eventually move towards a manda-

105 See supra Part III.A.2.
106 See supra notes 49–50 and accompanying text.
tory pension system, as tax incentives and automatic enrollment are unlikely to lead to universal coverage.\textsuperscript{111}

VI. Optimal Accumulation Rules

Funds contributed to defined contribution plans need to be invested well, protected from waste and fraud by strong fiduciary rules, and preserved in individual accounts until retirement.

A. Investment Rules

A key investment issue has to do with how participants in defined contribution plans invest the money held in their individual accounts. On average, individual workers tend to be pretty poor investors. They tend to invest too heavily in bonds and guaranteed investment contracts.\textsuperscript{112} Also, when they do invest in stocks, individual employees often tend to invest too heavily in the stock of their employers, as the Enron scandal in the United States showed.\textsuperscript{113} Individuals also tend to invest too heavily in stocks of their home country as opposed to foreign stocks.\textsuperscript{114} High and hidden administrative costs and management fees can also reduce investment returns, particularly on individual accounts.\textsuperscript{115} All in all, one study of U.S. pensions found that traditional defined benefit plans managed by investment professionals tend to get annual returns 1.9 percentage points higher than defined contribution plans where individuals tend to choose the investments.\textsuperscript{116} Accordingly, pension rules need to encourage better investments by participants and need to help participants minimize the fees associated with their accounts.

1. Improving Investment Choices

Both the United States and Australia have made steps to improve the investment decisions made by participants. Both countries have limits on how individual account assets can be invested, and both countries are tak-


\textsuperscript{112} Moreover, individuals tend to reduce their equity holdings as they get older, while large defined benefit plans typically continue to collect the equity premium in perpetuity.


ing steps to encourage individuals to make better investment choices, for
example, by encouraging better default investments.

a. *Current Limits on Investment Assets.* Both the United States and
Australia impose at least some limits on the kinds of investments that partici-
pants can make.

i. *Investment Limits in the United States.* While the United
States government does not provide a list of approved investments for retire-
ment plans, ERISA contains many rules that apply to retirement plan invest-
ments.\(^{117}\) In general, plan sponsors are treated as fiduciaries, and, in investing
plan assets, they are required to exercise the judgment that a prudent investor
would use in investing for her own retirement.\(^{118}\) Of note, however, plans,
such as 401(k) plans, that permit participant-directed investment, can avoid
at least some fiduciary responsibilities if participants are offered at least three
diversified options for investment, each with different risk–return factors.\(^{119}\)

Also of note, under the “exclusive benefit” rule, a qualified retirement plan
must be maintained for the exclusive benefit of employees and their benefi-
ciaries, the assets of the plan must be held in a trust or custodial account for
the exclusive benefit of employees and their beneficiaries, and the plan must
prohibit the diversion of assets for purposes other than the exclusive benefit
of employees and their beneficiaries.\(^{120}\)

In addition, various investment limits apply to specific types of plans. For
example, some plans are limited in the amount of employer stock and
employer real property that they can hold.\(^{121}\) Also, neither participant-
directed accounts nor IRAs can invest in collectibles, such as art, antiques,
gems, coins, or alcoholic beverages; they can invest in certain precious met-
als only if they meet specific requirements.\(^{122}\) Also, IRAs are not permitted
to invest in life insurance.\(^{123}\) Finally, IRA trustees can impose additional
restrictions on investments.\(^{124}\) For example, while U.S. pension law does not
prohibit investing in real estate, to avoid administrative burdens, many IRA
trustees bar their IRA account holders from investing in real estate.

In addition, prohibited transaction rules prevent “disqualified persons”
from engaging in certain transactions with pension plans, and similar rules
apply to transactions between an IRA and its owner or beneficiary.\(^{125}\) For
example, an employer usually cannot sell, exchange, or lease any property to

\(^{117}\) See Retirement Plans FAQs Regarding Plan Investments, Internal Revenue Service,
(last updated Dec. 12, 2012).


\(^{120}\) I.R.C. § 401(a); 29 U.S.C. § 1104(a).

\(^{121}\) 29 U.S.C. § 1107.

\(^{122}\) See I.R.C. § 408(m); see also Retirement Plan FAQs Regarding IRAs, Internal Revenue Ser-

\(^{123}\) I.R.C. § 408(a)(3).

\(^{124}\) Retirement Plan FAQs, supra note 122.

a pension plan; similarly, an IRA owner cannot sell property to her IRA. Disqualified persons include employers, unions, fiduciaries, and persons providing services to a plan, such as lawyers and accountants. An exception permits plan participants to borrow from their defined contribution accounts under certain circumstances, but borrowing from an IRA is always a prohibited transaction.126

ii. Investment Limits in Australia. The regulations governing pension funds in Australia do not mandate the investments to be made by the superannuation funds. However, there are a number of broad investment principles that govern how funds are invested, and, in addition, there are a number of specific prohibitions with respect to fund investments.

Fundamental to any investment by a superannuation fund is that the trustee must comply with the “sole purpose” test.127 Even though that test refers to “purpose” in the singular, in fact the test covers multiple purposes, such as providing for retirement, disability, and death. In terms of compliance, the sole purpose test is most relevant when members of the fund can get access or some other benefit from investments by the fund.

Trustees of pension funds are obligated to prepare and to give effect to an investment strategy of the fund, taking into account:

- the risk of each investment of the fund,
- diversification of investments,
- the fund’s liquidity, and
- the fund’s ability to discharge its current and future liabilities.128

The trustees are also required to invest the funds with “the same degree of care, skill and diligence as a prudent superannuation trustee would exercise in relation to an entity of which it is trustee and on behalf of the beneficiaries of which it makes investments.”129

In terms of specific prohibitions on the investments made by pension funds:

- they cannot invest more than five percent by market value with employers or related parties or with members and related parties (the “in-house asset” rule);130

- they cannot intentionally acquire assets from members of the fund, with four exceptions. In particular, pension funds are permitted to

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127 See Superannuation Industry (Supervision) Act 1993 (Cth) § 52 (Austl.).
128 Superannuation Industry (Supervision) Act 1993 (Cth) § 52(2)(f) (Austl.).
129 Superannuation Industry (Supervision) Act 1993 (Cth) § 52(2)(b) (Austl.); see also Superannuation Industry (Supervision) Act 1993 § (Cth) 52A(2)(b) (Austl.). Trustees are also required to regularly review the investment strategy and each investment option, and they are also required to offer investment options that allow beneficiaries to be adequately diversified. Superannuation Industry (Supervision) Act 1993 (Cth) § 52(6) (Austl.).
130 Superannuation Industry (Supervision) Act 1993 (Cth) §§ 71, 83D (Austl.).
acquire real property that is used for business purposes (business real property);\textsuperscript{131}

- they cannot lend money or give financial assistance to members;\textsuperscript{132}
- all investments by the fund must be at arm’s length;\textsuperscript{133}
- trustees cannot charge the assets of the fund;\textsuperscript{134}
- pension funds are generally prohibited from borrowing, although funds are permitted to borrow provided, among other things, that the rights of the lender on default are limited to the asset that was acquired with the borrowings;\textsuperscript{135} and
- if the investment of the fund is a “collectible”, it must be held in the name of the fund, cannot be used by a member of the fund, and must be insured.\textsuperscript{136}

b. Recent Efforts to Encourage Better Investment Choices. Both the United States and Australia are in the midst of reforming their pension systems to promote better investment choices by participants.

i. Recent Efforts in the United States. In the United States, for example, in recognition of the historically poor investment choices made by individual employees, the Pension Protection Act of 2006 amended ERISA section 404(c) to improve the default investments for workers who do not otherwise direct their own investments.\textsuperscript{137} The new law encourages employers to replace their low-yield, stable-value bond funds with balanced funds (funds with an unchanging mix of stocks and bonds) and life-cycle funds (funds that gradually shift their investments from stocks towards bonds as workers age). More specifically, the final regulation provides for four types of so-called “qualified default investment alternatives” (QDIAs):

- A product with a mix of investments that takes into account the individual’s age or retirement date (an example of such a product could be a life-cycle or target date fund);
- An investment service that allocates contributions among existing plan options to provide an asset mix that takes into account the individual’s

\textsuperscript{131} Superannuation Industry (Supervision) Act 1993 (Cth) § 66 (Austl.).
\textsuperscript{132} Superannuation Industry (Supervision) Act 1993 (Cth) § 65 (Austl.).
\textsuperscript{133} Superannuation Industry (Supervision) Act 1993 (Cth) § 109 (Austl.).
\textsuperscript{134} See Superannuation Industry (Supervision) Act Regulations 1994 (Cth) § 13.15 (Austl.).
\textsuperscript{135} Superannuation Industry (Supervision) Act 1993 (Cth) §§ 67, 67A (Austl.).
\textsuperscript{136} Superannuation Industry (Supervision) Act 1993 (Cth) § 62A (Austl.).
age or retirement date (an example of such a service could be a professionally managed fund);

• A product with a mix of investments that takes into account the characteristics of the group of employees as a whole, rather than each individual (an example of such a product could be a balanced fund); and

• A capital preservation product for only the first 120 days of participation (an option for plan sponsors wishing to simplify administration if workers opt out of participation before incurring an additional tax).138

The final regulation also clarifies that a QDIA may be offered through variable annuity contracts or other pooled investment funds.139

ii. Recent Efforts in Australia. New legislation enacted by the Australian government in 2012 creates a new single, low-cost default superannuation product called MySuper to replace existing default products.140

Of the almost 12 million Australians who held a superannuation account when the legislation was proposed, approximately 80% had their compulsory superannuation contributions paid into a default fund.141 These are the funds to which the employers pay the compulsory contributions for employees who have not directed their employer to pay to a nominated fund.

The Australian government has recognized that many workers do not have the interest, information, or expertise required to make informed choices about their superannuation investments. Consequently, the government wants to give those workers access to a safe, low-cost and simple default superannuation product to replace the existing default funds. Under the new legislation, superannuation funds will be allowed to provide these new MySuper products, and the government expects that most superannuation funds will


139 U.S. Dep’t of Labor, supra note 138.


decide to offer these new products. Superannuation funds will still be able to offer other products and will not be compelled to offer a MySuper product. These new MySuper accounts will have a simple set of features, irrespective of who provides them. These simple features will allow members to easily compare funds based on such key differences as cost, investment performance, and the level of insurance protection. These new products will also ensure that members do not pay for unnecessary “bells and whistles” that they do not use.

In addition, the trustees of these new MySuper products will be subject to higher performance standards, which will be enforced by the Australian government, including a specific duty to deliver value for money. Failure to meet these standards could lead to revocation of the license to offer superannuation products.

These new products will also be the default product that receives the contributions of employees who have not chosen a fund.

The key features of MySuper will be:

- “a specific duty to deliver value for money as measured by long-term net returns, and to actively consider whether the fund has sufficient scale;
- “a single diversified investment strategy, suitable for the vast majority of members who are in the default option;
- “comparable data on long-term net returns published by [the Australian government regulator];
- “restrictions on unnecessary or excessive fees, including:
  - “banning commissions in relation to retail investment products and group insurance;
  - “new standards for the payment of performance fees to fund managers;
  - “a ban on entry fees charged to new members;
  - “exit fees limited to cost recovery; and
  - “switching fees not payable to the trustee in their personal capacity;
- “a fair and reasonable allocation of costs between it and other products;
- “standardized reporting requirements written in plain English;
- “a requirement to accept all types of contributions; and

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142 Id.
143 Id.
144 Id.
145 Id.
• “life, and total and permanent disability (TPD) insurance (where available, depending on occupational and demographic factors) offered on an opt-out basis.”146

The Australian Government claims that MySuper reforms “will improve outcomes for the majority of members who do not wish to be actively involved in choosing their superannuation arrangements, while maintaining freedom of choice for those members who do.”147 Moreover, the Australian Government estimates that MySuper will save superannuation fund members around AU$550 million per year in total fees in the short term and around AU$1.7 billion per year in the long term.148 For a 30-year-old worker with average weekly earnings, that means that MySuper could result in another AU$40,000 in retirement savings.149

c. Optimal Investment Rules. Clearly, changing plan default funds can result in better returns and larger defined contribution plan accumulations. Providing investment guidance for participants can also increase their investment returns. In that regard, for example, a recent study of 401(k) accounts found that workers who got investment help improved their annual returns by about three percentage points.150 Over 20 years that could mean the difference between having $10,000 grow to $71,400 as opposed to just $42,100 for those who handled their own affairs. For purposes of the study, help was defined to include target date funds, professionally managed funds, or online advice.

Pertinent here, pursuant to a prohibited transaction exemption under the Pension Protection Act of 2006, the U.S. Department of Labor recently finalized regulations that make it easier for plan sponsors to give investment advice to plan participants.151 To qualify for the exemption, the investment advice must be given through the use of an unbiased computer model or through an advisor compensated on a “level-fee” basis.

Also, as more fully discussed in Part VII below, greater attention should be paid to the policies relating to annuities and other lifetime income options. In that regard, while defined benefit plans typically paid benefits in the form of a life annuity, defined contribution plans typically make benefits available

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146 Id.
147 Id.
148 Id.
149 Id.
in the form of a lump sum distribution that can be all too easily dissipated. It might make sense to encourage—or to require—individuals to allocate a portion of their contributions or investments to annuities or other lifetime income products.

2. Minimizing Fees

Minimizing fees can also help increase investment returns and defined contribution plan accumulations. More specifically, high fees clearly reduce the rate of return on individual account investments, and over the course of a lifetime, high fees can reduce retirement savings significantly. For example, imagine a 45-year-old employee who plans to leave $20,000 in a 401(k) account until retirement at age 65. If those assets earn a 6.5% net annual return—a seven percent investment return minus a 0.5% charge for fees—that $20,000 will grow to $70,500 at retirement. On the other hand, if fees are instead 1.5% annually, that $20,000 investment will grow to just $58,400. That additional one percent annual fee will reduce the account balance at retirement by around 17%.

Accordingly, government regulation of the fees and expenses associated with defined contribution plans is critically important. In that regard, it would make sense to apply the fiduciary rules to more of those involved in managing investments, as the United States is trying to do by expanding its definition of who is a fiduciary. Also, as already discussed, pension rules should be designed to help ensure that participants who do not select their own investments are defaulted into funds with very low fees, such as index funds and appropriate target date funds.

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152 Indeed, one study found that 54% of those who took lump sum distributions from their retirement plans had exhausted their savings within three years of retirement. Martha L. Tejera, Retirement Income in DC Plans: What Our Experience with DB Plans Tells Us, 3 Inst. Ret. Council Update 1202, at 1, 3, available at http://www.iricouncil.org/docs/Volume%203,%20Number%2021.pdf.


154 See Forman, supra note 115; Stewart Neufeld, The Tyranny of Compounding Fees: Are Mutual Funds Bleeding Retirement Accounts Dry?, 24 J. of Fin. Planning 60, 67 (2011), available at http://www.fpanet.org/journal/CurrentIssue/TableofContents/TheTyrannyofCompoundingFees/ (recommending “plan fiduciaries be required to select default investments that track broad market indices (equity, money, bonds) and that have total fees (MERS [management expense ratios]) as low as possible, ideally not more than 10 bps” [10 basis points {bps} equals 0.1 percent]).


156 See supra Part VI.A.1.
In Australia, the MySuper legislation also limits the fees that funds can charge.\textsuperscript{157} The fees that can be charged in MySuper products will be limited to an administration fee, an investment fee, a buy-sell spread, a switching fee, an exit fee, and an activity fee.\textsuperscript{158} All fees charged for MySuper products will have to fall within these standard descriptions. This should make it simpler for members to understand what they pay and to compare fees against other MySuper products.

With respect to performance-based fee arrangements with fund managers of MySuper products, trustees will generally have to include the following provisions:

- "a reduced base fee that reflects the potential gains the investment manager receives from performance-based fees, taking into account any fee cap;"
- "measurement of performance on an after-tax (where possible) and after-costs basis;"
- "an appropriate benchmark and hurdle for the asset class reflecting the risks of the actual investments;"
- "an appropriate testing period; and"
- "provisions for the adjustment of the performance-based fee to recoup any prior or subsequent underperformance (for example, high water marks, clawbacks, vesting arrangements and rolling testing periods).\textsuperscript{159}"

B. \textit{Fiduciary Rules}

1. \textit{Fiduciary Rules in the United States}

The United States has extensive rules governing fiduciaries. In general, fiduciaries are expected to:

- "Act[] solely in the interest of plan participants and their beneficiaries and with the exclusive purpose of providing benefits to them;"
- "Carry[] out their duties prudently;"
- "Follow[] the plan documents (unless inconsistent with ERISA);"
- "Diversify[] plan investments; and"
- "Pay[] only reasonable plan expenses."\textsuperscript{160}

\textsuperscript{157} See sources cited supra note 140.

\textsuperscript{158} AUSTRALIAN GOV'T, supra note 140, at 5–6; Revised Explanatory Memorandum, \textit{Superannuation Legislation Amendment (MySuper Core Provisions) Bill (Cth) 2012 35–36 (Austl.).}

\textsuperscript{159} AUSTRALIAN GOV'T, supra note 140, at 6.

These fiduciary rules help to ensure that retirement savings are protected and grow for the benefit of participants.

2. **Fiduciary Rules in Australia**

As more fully described above, trustees of superannuation funds are also charged with meeting certain fiduciary standards that are largely similar to those that apply in the United States.161 Plan trustees are expected to comply with the “sole purpose” test, and they are required to invest the funds with the same care, skill, and diligence that an ordinary prudent person would exercise in dealing with investments on behalf of beneficiaries.162

3. **Optimal Fiduciary Rules**

Toughening the fiduciary standards that govern pension fund managers should result in marginal gains in investment returns. In that regard, the U.S. Department of Labor is developing regulations that would impose fiduciary duties on brokers and financial advisors who provide investment advice for a fee to retirement plans and IRA holders.163 Along the same lines, the MySuper legislation in Australia establishes the Australian Prudential Regulatory Authority’s ability to make prudential standards for superannuation funds.164

C. **Preserve Benefits Until Retirement**

Another major problem with defined contribution plans is that they can be leaky. While defined benefit plans typically provide lifetime annuities for retirees and their spouses, defined contribution plans in the United States typically allow participants to withdraw all or a portion of their individual accounts, and many plans allow participants to borrow against their accounts.165

To be sure, section 72(t) generally imposes a ten percent tax on pension distributions made before an individual reaches age 59½, but there are numerous exceptions. For example, there is an exception for distributions that take the form of a lifetime annuity, and there are exceptions for distributions on account of disability or to cover high medical expenses.166 Distributions from individual retirement accounts can also be used for health expenses and even for education and first-time homebuyer expenses.167 All in all, a significant

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161 See supra Part VI.A.1.a.
162 Superannuation Industry (Supervision) Act 1993 (Cth) § 52(2)(b) (Austl.).
163 See supra note 155 and accompanying text.
164 See, e.g., Revised Explanatory Memorandum, Superannuation Legislation Amendment (MySuper Core Provisions) Bill (Cth) 2012 2–3 (Austl.).
portion of these premature distributions and loans will be dissipated before retirement.\footnote{See, e.g., Lucas, supra note 165, at 4; Timothy (Jun) Lu, Olivia S. Mitchell & Stephen P. Utkus, An Empirical Analysis of 401(k) Loan Defaults 9 (Fin. Literacy Ctr., Working Paper WR-799-SSA, 2010), available at http://www.rand.org/content/dam/rand/pubs/working_papers/2010/RAND_WR799.pdf (finding that about 20% of 401(k) plan participants had loans and that about one in ten loans resulted in a default; of those employees who terminated employment, the loan default rate was nearly 80%).} Accordingly, it could make sense to prohibit premature distributions and loans from defined contribution plans and IRAs.\footnote{See, e.g., Forman, supra note 2, at 233.}

Australia approached the issue of preserving benefits until retirement by using tax incentives. When the superannuation system started, workers could get their pension fund benefits any time after age 55.\footnote{See supra notes 87–89 and accompanying text.} Since 2007, however, workers have been able to access their funds tax-free, but only if they wait until after age 60 (provided that the fund itself has paid tax).\footnote{Cf. supra notes 87–89 and accompanying text.} As a result, workers generally stay in their funds until at least age 60.\footnote{See supra notes 87–89 and accompanying text.}

**VII. Optimal Distribution Rules**

Distribution rules should encourage retirees to take their defined contribution plan distributions in the form of annuities or other lifetime income products that can insur against longevity risk (the risk of outliving one’s retirement savings).\footnote{See, e.g., Jonathan Barry Forman, Optimal Distribution Rules for Defined Contribution Plans: What Can the United States and Australia Learn from Other Countries?, in N.Y. Univ. Rev. of Empl. Benefits & Executive Compensation 3-1, 3-3 (2012).}

**A. The Decline of Annuitization**

1. **In the United States**

The United States has a well-developed annuity market.\footnote{Anthony Webb, The United States Longevity Insurance Market, in Securing Lifelong Retirement Income: Global Annuity Markets And Policy 63, 63 (Olivia S. Mitchell, John Piggott & Noriyuki Takayama eds., 2011).} Nevertheless, over the years, there has been a significant decline in annuitization of retirement savings by American workers. The shift to defined contribution plans is a large part of the story, as defined contribution plans typically distribute benefits in the form of lump sum distributions rather than as annuities.\footnote{Towers Watson, International Pension Plan Survey: Report 2011 15 (2011), available at http://www.towerswatson.com/assets/pdf/6036/TW-EU-2011-22755-IPP-survey.pdf (stating that lump sum distributions are by far the most prevalent form of distribution for defined contribution plans).}

Indeed, relatively few defined contribution plans even offer annuity options,
and, in any event, relatively few participants elect those annuity options.\textsuperscript{176} The problem for many retirees is that lump sum distributions can be all too easily dissipated. All in all, people rarely choose to buy annuities voluntarily, even though purchasing annuities could rationally help maximize their expected retirement incomes. That is, the demand for annuities is lower than expected, and this shortfall has come to be known as the “annuity puzzle.”\textsuperscript{177}

No doubt, there are many reasons for this low demand for annuities. Financial literacy is often low among consumers.\textsuperscript{178} Moreover, relatively few retirees are willing to give up control over their retirement savings by buying an annuity: they would just rather have money in the bank. Many also want to leave money to their children (economists call this a bequest motive). Also, because of adverse selection—those that voluntarily purchase annuities tend to live longer than those that do not—annuities may not be priced very well for those with normal life expectancies. Finally, it is important to note that Social Security and SSI already provide inflation-adjusted monthly benefits that may crowd out private annuities.\textsuperscript{179}

Of note, the Service and the U.S. Department of Labor recently mounted a joint effort to improve lifetime income options for retirement plans.\textsuperscript{180} In that regard, the Treasury and the Service recently released a package of proposed regulations and rulings intended to make it easier for plans to offer

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lifetime income options for retirement plans. More specifically, that guidance makes it easier for plans to offer the option of partial annuities, makes it easier for plans to offer the option of longevity annuities, clarifies how 401(k) participants can be offered the option of purchasing an annuity from their employer’s defined benefit plan, and clarifies how 401(k) participants can be offered the option of a deferred annuity.

2. In Australia

Australia does little to encourage or mandate annuities, and, not surprisingly, annuitization rates in Australia are quite low. For example, in 2009, just 17 life annuity policies were sold in Australia. As in the United States, the Age Pension probably crowds out annuities. Of note, however, the Australian government has expressed the need for expanding the range of lifetime income products.

B. Longevity Risk and Lifetime Income Products

Retirees face numerous risks in managing their assets through retirement. Pertinent here, longevity risk—the risk of outliving one’s retirement savings—is probably the greatest risk facing current and future retirees with defined contribution plans. As life expectancy increases, accumulated retire-
ment savings in individual accounts will need to finance an ever-greater portion of retirees’ ever-longer retirements. At present, a 65-year-old woman in the United States has a 50% chance of living past age 86, while a 65-year-old man has a 50% chance of living past age 84.187

The joint life expectancy of a 65-year-old couple is even more remarkable. There is a 50% chance that at least one 65-year-old spouse will live to age 91, and there is a 25% chance that at least one will live to 95.188 That means married couples can easily have 25 or 30 years in retirement. Pertinent here, one study estimated that “three out of five middle-class retirees [in the United States] can expect to outlive their financial assets if they attempt[] to maintain their current pre-retirement standard of living.”189

Retirees can use a variety of approaches to help manage their longevity risk.190 One approach is for retirees to commit to systematic withdrawals of, say, four percent of their account balances each year—a strategy that has a relatively low risk of ruin (running out of money before death). Alternatively, traditional lifetime annuities offer another approach for spreading retirement savings out over a lifetime. Another alternative involves buying longevity insurance—for example, buying a deferred annuity at age 65 that starts making annual payments only if the annuitant lives past age 85. Finally, retirees can invest in products like variable annuities with guaranteed lifetime withdrawal benefits—funds that provide guaranteed systematic withdrawals for life, with guaranteed minimums that kick in if the underlying investment funds are ever depleted due to long life or poor investment returns. Depending on each retiree’s specific circumstances, the best strategy may involve a combination of these financial products and approaches.


C. Optimal Distribution Rules

Clearly, there are a number of possible approaches for helping retirees insure against longevity risk. While lump sum distributions can be quickly exhausted, annuities and similar products can last a lifetime. Government policy should almost certainly be designed to encourage retirees to purchase such lifetime income products. ¹⁹¹

1. Encourage Annuitization

   a. Mandatory Annuitization. One approach for promoting lifetime retirement income would be for the government to require retirees to purchase annuities or similar lifetime income guarantees. ¹⁹² In that regard, President George W. Bush’s Commission to Strengthen Social Security recommended that at least a portion of the balances in individual accounts should be annuitized. ¹⁹³ More specifically, the Commission recommended that lump sum distributions be permitted only to the extent that the individual’s Social Security benefit plus the required annuity exceeded the amount that would protect the individual from falling below the poverty line during retirement. On the plus side, if everyone had to buy an annuity with all or part of their retirement defined contribution plan savings, annuity prices would fall, both because the larger annuity market would be more efficient and because adverse selection would decline as virtually every retiree would buy an annuity, not just those who expected to live a long time.

   b. Defaults. Alternatively, the government might just want to take steps to encourage annuitization. ¹⁹⁴ For example, the government could require defined contribution plans to make annuity options available to plan participants. ¹⁹⁵ The government could also require plans to default partici-


¹⁹⁵ See, e.g., U.S. Gov’t Accountability Office, supra note 191, at 38–39.
pants into annuities or trial annuities unless plan participants affirmatively elect otherwise.\textsuperscript{196}

The government might also try to encourage individuals to allocate a portion of their contributions to annuities.\textsuperscript{197} Such “in-service” annuities would enable workers to obtain streams of lifetime income each year that they work, just as workers with traditional defined benefit plan pensions already do.

For that matter, the government could get into the market of selling annuities and other lifetime income products or, alternatively, guaranteeing products sold by private companies.\textsuperscript{198} Finally, the government could use tax incentives to encourage people to take their distributions as annuities. For example, the government could exempt annuity payouts from taxation or favor them with a reduced tax rate.\textsuperscript{199}

c. Employer Plan Default Options. Government regulations could also encourage employers to offer lifetime retirement income solutions. For example, the government could require plans to offer a menu of investment choices that include annuities and other lifetime income products.\textsuperscript{200} To be sure, even if the government imposes no new requirements, plan sponsors should want to develop lifetime retirement income solutions as a way to help their employees prepare for retirement.


The government also has a role in promoting financial education about annuities and other lifetime income products. For example, in addition to showing the total balance in a defined contribution account, benefit statements could be required to include an estimate of the “annuity equivalent”


\textsuperscript{197} See, e.g., Brown, supra note 194, at 199–200.


lifetime income stream of payments. More specifically, individual benefit statements could be required to show the monthly annuity payment that would be made if the employee’s total account balance were used to buy a single life annuity that commenced when the employee reaches age 65, and, for married employees, these individualized statements would also show the monthly annuity payments under a qualified joint and survivor annuity.

3. Asset Tests

Another problem has to do with the treatment of pensions under the asset tests used in means-tested public programs, such as Medicaid, food stamps, and SSI in the United States and the Age Pension in Australia. The stringent asset tests under those programs often require low-income workers to withdraw the balances in their defined contribution plans and “spend down” those assets before they can qualify for benefits. Consequently, these asset tests can encourage individuals to dissipate retirement savings and may even discourage them from saving for retirement in the first place. While distributions from retirement accounts should probably count as “income” in determining eligibility for these means-tested benefits, modest amounts held in defined contribution plans and annuities should probably be excluded from the asset tests.

4. Other Things Government Can Do

In passing, it is worth noting that in addition to promoting annuities and other lifetime retirement income options, there are many other steps that government could take to help improve lifetime retirement incomes.

a. Encourage People to Work Longer. The government should probably do more to discourage early retirements. Working longer increases retirement savings and reduces the number of years that retirement savings

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202See, e.g., Bütler, supra note 179, at 1–2.

need to cover.\textsuperscript{204} One way to encourage later retirements would be to raise the retirement age. In the United States, for example, the section 72(t) penalty on premature withdrawals only applies to distributions made before an individual reaches age 59½. It would make sense to toughen this penalty and raise the eligibility age to age 62, the early retirement age for the Social Security system.

Similarly, it would make sense to raise the normal retirement age for pensions. In the United States, ERISA defines “normal retirement age” as the earlier of the time specified in the plan or the later of age 65 or the fifth anniversary of the time the employee commenced participation in the plan.\textsuperscript{205} Meanwhile, “full retirement age” under the Social Security system is currently age 66, but it is gradually increasing to age 67.\textsuperscript{206} It would make sense to increase gradually the normal retirement age for pension plans to 67 and to keep it tied to the Social Security’s full retirement age, even if that full retirement age is eventually increased.\textsuperscript{207}

Australia also has a higher retirement age for its Age Pension than for its Superannuation Guarantee, and better coordination is called for.\textsuperscript{208}

b. \textit{Make It Easier to Annuitize Housing and Other Forms of Wealth.} The government might also want to help people find ways to annuitize housing and other forms of wealth. For example, the government might want to do more to encourage reverse mortgages.\textsuperscript{209} Along the same lines, facilitating the sale or annuitization of life insurance policies could also provide additional lifetime retirement income for retirees.\textsuperscript{210}

\begin{footnotesize}
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\item \textsuperscript{205}I.R.C. § 411(a)(8); 29 U.S.C. § 1002(24) (2006).
\item \textsuperscript{206}See supra note 21 and accompanying text.
\item \textsuperscript{208}See, e.g., \textit{Australia’s Future Tax System}, supra note 185, at 35.
\end{itemize}
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VIII. Conclusion

Over time, both the United States and Australia are looking to defined contribution plans to provide the lion’s share of retirement income for their citizens. Consequently, both countries are considering ways to increase the contributions made to those plans and to maximize the accumulations in them. Ultimately, public policy needs to be designed to ensure that workers build up large nest eggs to eventually generate adequate incomes throughout their retirement years. Pertinent here, both the United States and Australia are moving to improve retirement outcomes, but there is more to be done.

Ensuring that adequate contributions are made to defined contribution plans is critical. Here, we think that the optimal system should probably combine mandatory contributions and tax incentives for retirement savings. For example, an ideal defined contribution system might collect contributions of 10 or 12% of compensation from every worker and defer taxation on those contributions (and on investment returns) until retirement.

Maximizing investment returns on those contributions is the other key to building up significant nest eggs. The optimal defined contribution system should have strong fiduciary protections; it should encourage participants to make good investment choices; it should minimize fees; and it should preserve accumulations until a reasonably old retirement age.

Finally, retirees will need to use their retirement savings to provide income over retirements that can be expected to last 20 years and more. Retirees can best manage that longevity risk if they take their defined contribution plan distributions in the form of annuities and other lifetime retirement income products, and government policies should be designed to encourage the use of those financial products.