11 Tax Expenditures on Pensions: Concepts, Concerns, and Misconceptions

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11.1 Introduction

Tax expenditures occur when the tax treatment favors a certain activity. The forgone tax is thought to be analogous to spending and can thus attract commensurate attention. This concept was first articulated some 50 years ago by Stanley Surrey of the US Treasury Department (Surrey 1969), but exemptions to tax are as old as tax itself.[1,2]

As governments around the world look at ways to balance their budgets, tax expenditures will increasingly and justifiably come under scrutiny. This is particularly the case in countries with expanding funded pensions that seek to encourage self-provision for retirement or to maintain neutrality between current and future consumption. Such arrangements can make the tax costs appear large and skewed toward the rich, while the benefits, which are far in the future, seem unsubstantiated.

However, much of the criticism of tax arrangements is based on inadequate analysis. This chapter contributes to the debate by explaining the basic concepts and practice, tackling concerns related to the scale and fairness of tax expenditures and presenting a policy reform that can improve fairness. This is done by way of illustrative examples of savings over the life cycle and across the earnings distribution, using the Australian retirement income system as a test case. The Australian system is a good subject for analysis because tax expenditures on pensions are prominent in the policy debate and because their scale is particularly large.

Indeed, in few countries do tax expenditure estimates garner as much media and public attention as in Australia. A key reason is the large amount of prefunding that takes place through superannuation—the main income-replacement pillar in Australia's retirement income

system.[3] As other countries expand their funded pension arrangements, they, too, will face similar concerns about the scale and equity of tax expenditures.

Under the current estimation methodology, tax expenditures on superannuation are generated because contributions and investment returns are exempt from personal income tax and are taxed at a flat rate (which is generally lower than the marginal rate), or not at all in the case of investment returns in the withdrawal phase. The lower rates compared to income tax generate perceptions about fiscal costs. In addition, the flat-rate nature of the taxing regime results in concerns about the overly generous treatment of high-income earners, who benefit from the lower tax rates of superannuation compared to their high marginal tax rates.[4] Both concerns are not atypical in discussions of tax expenditures in other jurisdictions.[5]

The added transparency hoped for in the Tax Expenditure Statement[6] has instead generated confusion. For example, the methodology for official estimates overstates the scale of tax revenues by ignoring behavior (see subsection 11.4.2), interactions with other tax expenditures (subsection 11.4.3), broader fiscal and economic impacts (subsections 11.4.5 and 11.4.6), and sensitivity to the benchmark (subsections 11.4.4 and 11.4.7). That a high share of tax expenditures accrues to high-income earners is unsurprising; it reflects a highly progressive tax system in which high-income earners pay a greater share of tax, which is only partly the result of disproportionate contribution tax concessions across the earnings distribution (subsection 11.4.7).

Australia's Commonwealth Treasury notes in its Tax Expenditure Statement several caveats and limitations of the estimates, but the exact methodology is not entirely transparent, the definition of the benchmark is subjective, and the caveats are demonstrably insufficient. In a recent review of the Tax Expenditure Statement by the House of Representatives Standing Committee on Tax and Revenue (2015, 45), the committee noted that the public misuses and misunderstands the estimates, suggesting that "the warnings in the document are not sufficiently clear to inform enough of its users."

These criticisms are not new. In 1992, when mandatory superannuation was first introduced, Bateman and Piggott (1992, 48) wrote that "in the debate over appropriate tax treatment of superannuation saving, there is perhaps no issue which generates more confusion than that of revenue costs."

With this background and motivation, section 11.2 explains the concepts and practice of measuring tax expenditures. Section 11.3 covers concerns often raised in relation to tax expenditures on pensions. Section 11.4 addresses flaws in these concerns, using novel illustrative examples. Section 11.5 discusses what a sensible equity-enhancing reform could look like. Section 11.6 presents our conclusions.

11.2 Concepts and Application

11.2.1 What Are the Options for Taxing Savings?

Saved income can be taxed at three points: (1) when it is saved, (2) when investment returns are generated, and/or (3) when it is withdrawn.

In theory, which of these three points attracts tax depends on whether an income tax or an expenditure tax is believed more appropriate. If income is chosen, defined as any consumption plus any increase in net wealth, then the comprehensive income tax would apply.[7] Under this concept, all forms of income, including the amounts saved and accrued through investment, would be taxed as if in the hands of the saver, while the income withdrawn is tax-free. In the context of retirement savings, this is known as a TTE system—contributions are taxed (T), investment returns are taxed (T), and benefits are exempt (E).

If consumption—the amount effectively devoted to spending—is chosen, then the expenditure tax would apply. That is, only income that is withdrawn is taxed. This is known as an EET system—contributions are exempt (E), investment returns are exempt (E), and benefits are taxed (T). It is also possible to prepay the expenditure tax by only taxing income at the point when it is saved (i.e., a TEE system). With a proportional tax rate, no excess returns on some investments, and no inflation, EET and TEE are equivalent, as are TTE and ETT (Bateman, Kingston, and Piggott 1993).[8]

11.2.2 What Is the Practice of Taxing Savings?

In practice, most advanced economies have a mixed system of taxation and aspire to neither a comprehensive income tax nor an expenditure tax base. Rather, taxation design plays out as a pragmatic mix, trading off issues of price distortion against equity and revenue accrual. With respect to pensions, an EET system is more often deployed; that is, a "deferred" or "postpaid" expenditure tax approach.

Often, even a TEE or EET system attracts further reductions relative to the prevailing tax schedule. For example, in the United Kingdom,

contributions and returns are exempt, and while benefits are taxed, a quarter of these benefits can be taken tax-free, which would be described as EET* (Johnson and Emmerson 2016).

Various permutations are in use in different countries.[9] Over the last few decades, Australia's superannuation scheme experienced almost every combination of exemption and taxation among the three possible taxing points (see Bateman, chapter 7, this volume).

Australian superannuation is taxed as a T*T*E system: employer contributions into a superannuation fund (up to a cap) are taxed at 15 percent for most workers (30 percent for those earning above A$300,000, which roughly corresponds to the top 1 percent of earners) and 15 percent for the investment returns within the fund (though the actual tax on returns is lower because of a discount on capital gains on assets held longer than 12 months and the operation of dividend imputation, which effectively credits tax on net-of-tax dividends of corporations).

But not all savings are taxed the same. In Australia, as in most countries, owner-occupied housing is taxed as TEE: a home is purchased using after-tax income, and the imputed rent and receipts from the home's sale are tax-exempt. Like the EET setup, a TEE arrangement is a form of expenditure tax because the tax accrues when income is spent. Bank account savings are made from after-tax income, returns incur tax at the marginal rate, but withdrawals are tax-free—a TTE arrangement. Other assets, such as shares or investment property, are taxed in line with a TT*E approach (capital gains are taxed at half the marginal rate).

11.2.3 How Is the Benchmark Decided?

To measure the extent to which each of these tax treatments departs from a given benchmark, one needs to decide on the benchmark. Should it align with the comprehensive income tax or the expenditure tax? Which other provisions of the existing tax structure should be included? The choice is subjective. It is also the most controversial part of any discussion of tax expenditures, since it leads to very different estimates (see subsection 11.4.4).

Two rules of thumb can guide the choice. First, one can ask what the ideal tax treatment of a given activity or taxpayer should be. A sensible tax treatment is likely to lead to sensible policy. It sounds like a normative question about "what ought to be" that needs to be answered by a political process, but it can be tackled by appealing to criteria from first principles of basic economics.

With savings, a reasonable criterion is neutrality between present and future consumption. That is, investment returns that represent the time value of money would be left untaxed, as is the case in a prepaid or postpaid expenditure tax.[10] Subsection 11.4.6 presents a further discussion of the economics of this.

The second option is to look at the most common tax treatment that currently applies to similar types of activity or taxpayers. This approach seems pragmatic, but it is ultimately idiosyncratic. In Australia, more household savings are held in assets that are taxed under an expenditure base than under a comprehensive income base (figure 11.1). Superannuation makes up 16 percent of household assets. By contrast, owner-occupied housing is the largest form of savings, making up 43 percent of all household assets, or 51 percent of nonsuperannuation assets. Since both the tax treatment and the benchmark for owner-occupied housing align with a consumption tax, the conclusion would be that superannuation assets' taxes should also be set against an expenditure tax benchmark.

The approach of looking at how other activities are taxed is purportedly taken by Australia's Commonwealth Treasury, yet it reaches the opposite conclusion and determines that a comprehensive income base should apply. Its rationale is that financial savings vehicles such as bank accounts are the best reference point and that "saving through owner-occupied housing is not comparable to superannuation, since the former is not simply a savings vehicle but also provides current consumption (i.e. a place to live)" (Commonwealth Treasury 2016, 5). This conclusion came in spite of the fact that few Australians accumulate any substantial fraction of their retirement income by saving in a bank account.

A recent report by the Standing Committee on Tax and Revenue (2015) recommended that the comprehensive income benchmark remain, basing its view on the review of Henry et al. (2009, 731), who recommended aligning savings taxation with an expenditure tax, and with respect to reporting said that "benchmarks should allow an objective evaluation of the effects of government policy, rather than represent that policy." Yet, an alternative interpretation of the Henry Tax Review is that tax expenditure reporting should objectively measure the departure of a T*EE treatment from a TEE benchmark.

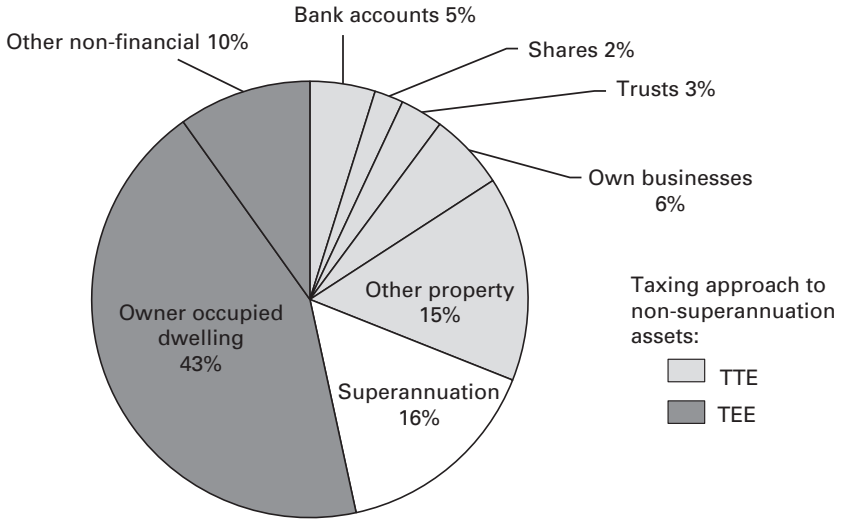

Figure 11.1
Composition of household assets in Australia (in percent) by taxing approach, 2011–2012. *Source*: Authors' analysis of Australian Bureau of Statistics (2013).

11.2.4 Combining the Tax Treatment and Tax Benchmark

Table 11.1 summarizes how tax expenditures arise for different savings vehicles and under each benchmark. For example, under the comprehensive income tax benchmark, current superannuation taxation appears concessional and generates tax expenditures.

Under the expenditure tax, concessional tax at the contribution stage is a tax expenditure, while taxing investment returns is a negative tax expenditure (i.e., a tax penalty). Thus, the official use of a comprehensive income tax benchmark for superannuation results in considerable revenue costs, while the use of an expenditure tax benchmark for owner-occupied housing does not.

11.3 Common Concerns

Early analyses by Surrey and others (Surrey 1969; Surrey and McDaniel 1980) deemed tax expenditures to be inferior policy instruments and advocated their repeal or replacement with direct expenditures. While various tax expenditure provisions are now a more accepted part of the tax system, some concerns persist and fuel calls for reform (Smith 2003; Xynas and Jaynes 2013; Ingles and Dennis 2009). Two of the most

Table 11.1
Tax on savings and tax expenditure that would apply under a given benchmark.

	Tax expenditures under pure comprehensive income tax benchmark			Tax expenditures under pure expenditure tax benchmark		
	Contributions	Returns	Benefits	Contributions	Returns	Benefits
TEE (e.g., owner-occupied housing in Australia; Roth 401(k) in US; ISAs in UK)	Taxed	Exemption counted as tax expenditure	Exempt	Taxed	Exempt	Exempt
EET (e.g., pension schemes in most OECD countries)	Exempt	Exemption counted as tax expenditure	Taxed	Taxed	Exempt	Taxed
TTE (e.g., personal saving accounts in Australia)	Taxed	Taxed	Exempt	Taxed	Taxed: Counted as negative tax expenditure	Exempt
T*T*E (e.g., superannuation in Australia)	Partial exemption counted as tax expenditure	Partial exemption counted as tax expenditure	Exempt	Partial exemption counted as tax expenditure	Partial exemption	Exempt
	Partly taxed	Partly taxed		Partly taxed	Part taxed counted as negative tax expenditure	

Source: Authors' compilation.
Note: Dark shading indicates a tax expenditure under a given benchmark (less than the specified norm is being taxed); grey shading indicates a negative tax expenditure (more than the specified norm is being taxed).

prominent concerns relate to fiscal sustainability and equity. Consistent with the rest of the chapter, the following discussion relies primarily on the Australian debate, institutions, and statistics to unravel these issues. In broad terms, though, the analysis is applicable to other jurisdictions.

11.3.1 Significant Fiscal Implications

According to official estimates, tax expenditures in Australia are large. If summed together and compared to those of other countries, as was done recently in a report by the International Monetary Fund (IMF) (Tyson 2014), Australian tax expenditures (at approximately 8 percent of gross domestic product—GDP) are the largest among developed countries. Similarly, according to the Organisation for Economic Co-operation and Development (OECD), Australian tax breaks for private pensions appear large, at approximately 2 percent of GDP, or A$30 billion (figure 11.2, panel A). The tax treatments of superannuation contributions and earnings are the third- and fourth-largest tax expenditures according to the Tax Expenditure Statement, following two tax expenditures related to capital gains taxation.[11]

International comparisons are inherently flawed, however, since they are the outcome of radically different methodologies—a point made by the IMF and OECD. Indeed, no international consensus exists for calculating tax expenditures, which in itself is a warning about being wedded to a single approach. For example, working tax credits are counted as tax expenditures in France but as direct spending in Germany. New Zealand does not tax capital gains and deems such treatment a part of its tax benchmark rather than a departure. Some countries, such as Belgium and the Scandinavian countries, tax capital income but do so within a dual taxation system that recognizes lower tax rates on capital as part of the benchmark. Australian reporting ignores subnational tax expenditures, which is not the case in Austria and Italy. Australian estimates focus on superannuation tax expenditures from current workers, unlike the United Kingdom and the United States, where EET pension arrangements incur tax expenditures on the exempt contributions and returns from current workers but reduce these amounts by tax receipts on benefits of current pensioners. Some countries tax public pension income, presumably spending more on it than if it was tax-exempt; in Australia, public pension income is less than the tax-free threshold for a senior citizen, which lowers outlays but results in tax expenditures. Whereas Australia includes the Medicare Levy as part of its tax benchmark, the United Kingdom does not

include National Insurance Contributions—yet both are unhypothecated and act as a tax (Polackova Brixi, Valenduc, and Swift 2004; Minarik 2009; OECD 2010; New Zealand Treasury 2015).

The upward trend is apparent when comparing Tax Expenditure Statement estimates over time (figure 11.2, panel B). Increases can be expected since tax parameters lack indexation, so nominal wage increases drag taxpayers into higher brackets and create greater gaps between marginal income taxes and superannuation taxes. The Temporary Budget Repair Levy, in place from 2014–2015 to 2016–2017, had a similar effect. Furthermore, recent and expected increases are also the result of a maturing superannuation system: a worker with a full career on the former full rate of contributions of 9 percent of earnings is not expected to retire until the late 2040s; a worker subject to the new full rate of 12 percent (expected by 2025) is not expected to retire until the 2070s.

11.3.2 Significant Equity Implications

General concerns about the inequity of tax expenditures are longstanding in Australia and elsewhere (International Fiscal Association 1976). The benefit of tax exemptions can be magnified by the higher tax base and/or marginal tax rates of high earners. The absolute value of tax expenditures increases steeply with income, but arguably more important is whether there is an increase as a proportion of the tax base. This can happen when the rate of tax concession increases with income.

For example, in Australia, the largely flat-rate superannuation taxes are divorced from the personal income tax schedule (figure 11.3, panel A). This means that workers earning 300 percent of average earnings receive a concession of 30 percent compared to the marginal tax rate (plus 2 percent exemption from the Medicare Levy and 2 percent exemption from the Temporary Budget Repair Levy). Workers earning about 25 percent of average earnings are effectively penalized by paying higher tax rates on superannuation contributions than they would on labor income. Counting tax expenditures on investment returns yields similar results, though the effective tax rate on super returns is below 15 percent. The overall outcome is that benefits, measured as a departure from a comprehensively levied income tax, accrue disproportionately to those with higher incomes (figure 11.3, panel B). For example, in 2011–2012, the top decile of earners (i.e., those earning above about 180 percent of the average) accounted for over 37 percent of total superannuation tax expenditures.[12,13]

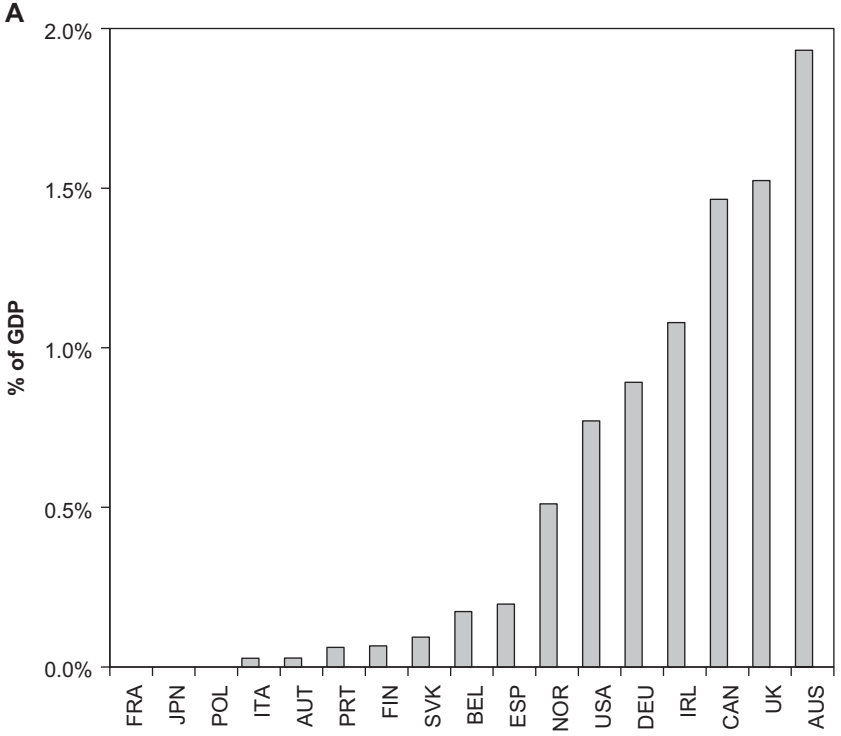

Figure 11.2
Australian tax expenditures on pensions appear large and increasing. *Sources*: (A) OECD (2015); (B) Authors' analysis based on Commonwealth Treasury (various years), Commonwealth of Australia (2015), and Australian Bureau of Statistics (2015). *Note*: As discussed in the text, comparability of estimates between countries and over time is problematic because of the radically different methodologies and nonadditivity of different tax expenditures and over time.

The regressive nature of these tax arrangements was recognized in the Henry Tax Review (Henry et al. 2009), which proposed linking contribution taxes with the marginal tax rate but with a constant level of concession or rebate (e.g., 15–20 percent), designed to reflect retirees' lower income in retirement. The Henry Tax Review also recommended reductions in the superannuation returns tax that effectively transitioned superannuation to a prepaid expenditure tax.

These recommendations have not been acted on, but two ad hoc policy changes were made: the Low Income Superannuation Contribution (LISC), which offsets the contribution tax penalty for those in the bottom two tax brackets (i.e., by crediting the superannuation accounts so that their contribution tax becomes zero), and the doubling of the

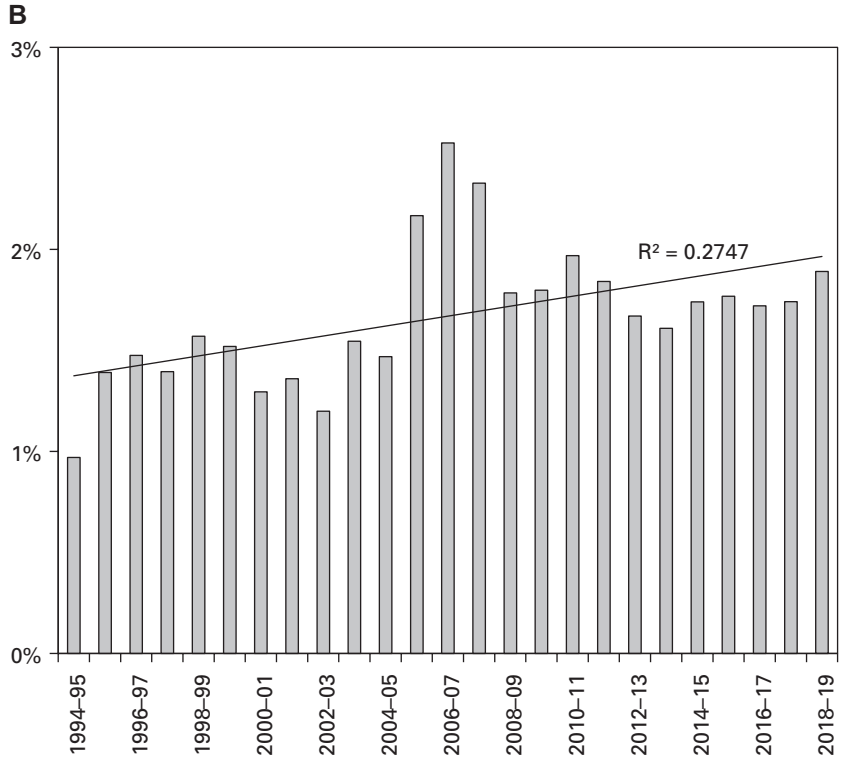

Figure 11.2 (*continued*)

contribution tax for very high earners (i.e., they pay contribution taxes of 30 percent on total income above A$300,000). Once this income exceeds by A$300,000 the amount of superannuation contributions, all contributions are taxed at 30 percent. Both are shown in figure 11.3 (panel A).

However, each measure came with design flaws. The Low Income Superannuation Contribution was implemented as a spending program, which made it easier to unwind by a subsequent fiscally conservative government, since its abolition was seen as cutting spending rather than increasing taxes on the poor. More recently, it was reintroduced as an offset. Also, the high-earner contribution rate added some progressivity, but it affected few people—only the top 1.2 percent in 2012–2013 (Shorten 2013). The more recent proposal is to reduce the threshold at which this takes effect.[14]

More generally, there have been calls for regular reporting of distributional effects of tax expenditures, including from Henry et al. (2009) and more recently from the Australian National Audit Office (2013) and

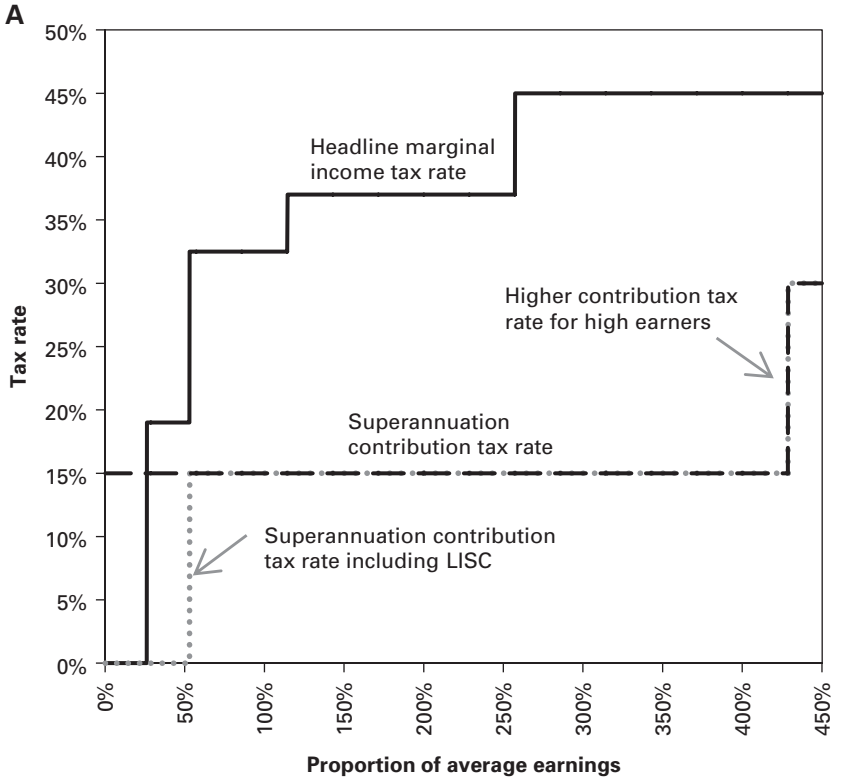

Figure 11.3
Commonly reported trend and distribution of Australian tax expenditures on pensions. *Sources*: (A) Authors' compilation; (B) Commonwealth Treasury (2014). *Note*: (A) Excludes Low Income Tax Offset and Medicare Levy. LISC denotes Low Income Superannuation Contribution. (B) Relates to pretax contributions and in-fund returns.

the Standing Committee on Tax and Revenue (2015). The point of such analyses would be to take account of the progressivity of the tax-benefit system as a whole, not look at specific parts of it in isolation.

11.4 Challenging the Basis of Concerns

The following sections seek to challenge and address concerns about the scale and inequity of tax concessions as measured by tax expenditure methodology. The common pitfalls are demonstrated by presenting a number of modeled examples of saving over the life cycle and across the earnings distribution. In some sense, tax expenditures are taken on their own terms, so illustrative calculations embody assumptions not necessarily supported by the authors.

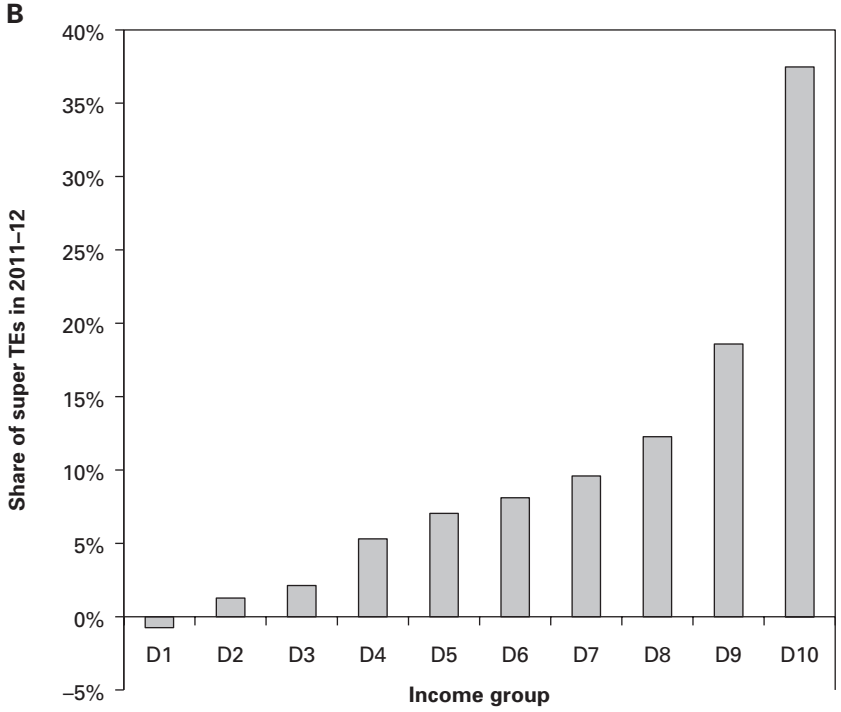

Figure 11.3 (*continued*)

11.4.1 Modeling Used in Illustrative Examples

The modeling is based on legislated superannuation and pension rules (including Age Pension means-test changes) as of late 2016. It follows hypothetical and stylized savers across the earnings distribution, from when they enter the labor force in 2017 at age 20, through a full career, retirement at age 67, and death at age 95. This includes superannuation saving at the mandatory level and subject to a cap. The modeling makes standard assumptions about inflation (2.5 percent), real wage growth (1.5 percent), and real investment returns during accumulation (4.5 percent) and during the (annuitized) pension phase (1.5 percent). Pension and tax thresholds are necessarily assumed to be indexed with wage growth, and results are in today's wage terms. The income tax benchmark is in line with the personal income tax schedule (figure 11.3, panel A).[15]

The analytical exercise accounts for total tax expenditures mechanically ascribed to an individual at a given earnings level, as shown for an average earner over the life cycle in figure 11.4 (panel A) and in the

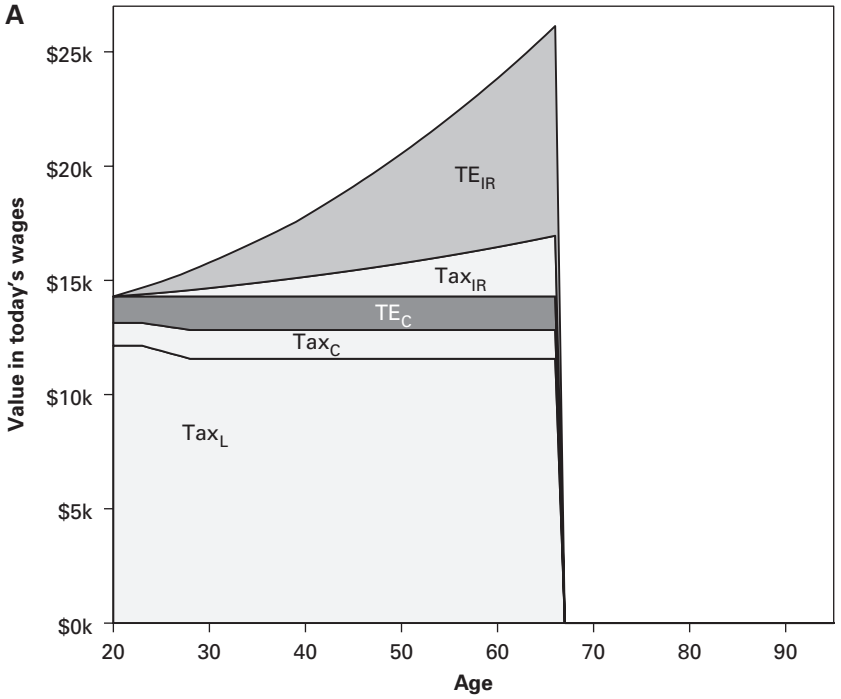

Figure 11.4
Modeling over life cycle and in single year. *Source*: Authors' analysis. *Notes*: Tax_L, Tax_C, and Tax_{IR} denote tax paid on labor, contributions, and investment returns, respectively. TE_C and TE_{IR} denote tax expenditures on contributions and investment returns, respectively. τ_y, τ_C, and τ_{IR} denote the personal income tax, contribution tax, and investment return tax functions, respectively. τ_{IR} assumes the tax rate is reduced by the operation of capital gains discounts and imputed tax. *Y*, *C*, and *IR* denote the amounts, in a given year, of total income (labor income before contributions plus investment income), contributions, and investment income, respectively. Panel B refers to the last year of work.

final year of work (panel B). The calculations are expressed over the life cycle by the formulas

$$TE_{IR}(y) = \sum_{n=20}^{66} (\tau_y(y_n) - \tau_y(y_n - IR_n) - \tau_{IR}(IR_n)) \tag{11.1}$$

and

$$TE_C(y) = \sum_{n=20}^{66} (\tau_y(y_n - IR_n) - \tau_y(y_n - IR_n - C_n) - \tau_C(C_n)), \tag{11.2}$$

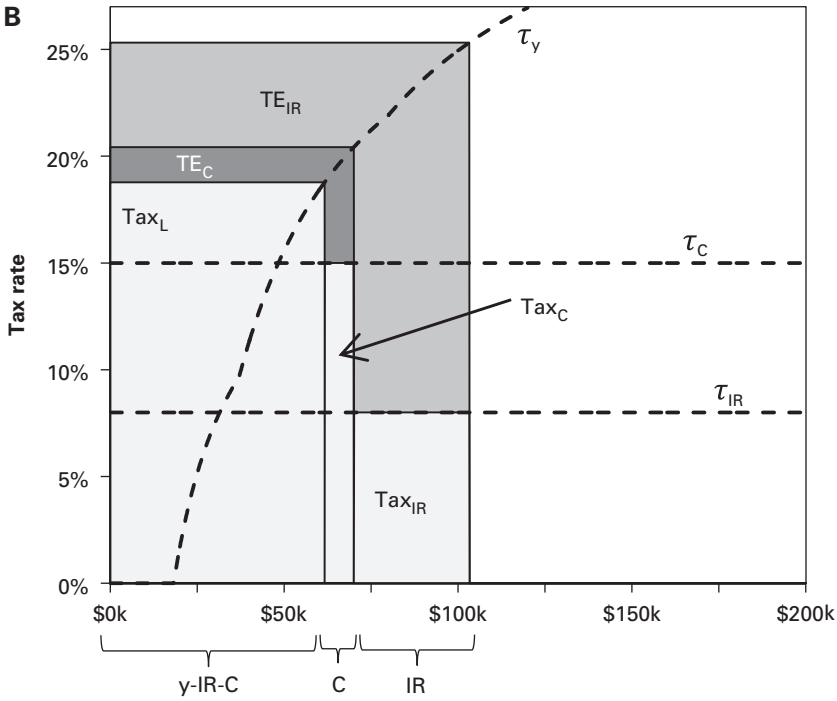

Figure 11.4 (*continued*)

where TE_C and TE_{IR} denote tax expenditures on contributions and investment returns, respectively; τ_y, τ_C, and τ_{IR} denote the tax functions for personal income, contributions, and investment returns, respectively; and y, C, and IR denote the amounts, in a given year, of total income (labor income before contributions plus investment income), contributions, and investment returns, respectively.

The intuition is that TE_{IR} equals the tax that would have been notionally paid had all income been taxed at the individual's marginal rate (the largest rectangle in panel B), minus the tax that would have been paid on precontribution labor income (second-largest rectangle), minus the tax actually paid on investment returns.[16]

In turn, TE_C equals the tax that would have been paid on precontribution labor income (second-largest rectangle), minus the tax actually paid on labor income and contributions.

At the outset, it is important to note that this strawman mechanical approach mimics the way that tax expenditures are currently

conceived, but subsequent sections will expose flaws in the methodology (e.g., behavioral change, nonadditivity, and benchmark specification).

11.4.2 Fiscal Implications Can Change with Behavior

Intuitively, it would seem that when government abolishes a given program, the fiscal savings will equal the costs of that program. This is not always the case. For example, cuts to the Age Pension can result in a greater number of people seeking a disability pension, which offsets the original savings. Tax provisions may be even more prone to such behavioral effects.

For superannuation, behavioral effects depend on alternative tax-preferred options, mandated rates, and elasticity of the response. Abolishing tax advantages of superannuation would leave a number of low-tax options to redirect savings into, including trusts, negatively geared property (where rent is lower than interest repayments, allowing tax offsets), owner-occupied housing (which is purchased out of net-of-tax income but is thereafter not taxed at all in Australia), and international investments.

The majority of workers receive only the mandatory superannuation contribution (currently 9.5 percent of earnings), but additional contributions occur as part of remuneration packages or salary sacrifice arrangements. Surveys suggest that in addition to mandatory savings, about 10 percent of workers make pretax contributions via salary sacrifice and 20 percent make personal after-tax contributions. Such participation increases with age and income (Feng, Gerrans, and Clark 2014).[17]

The potential behavioral impact of abolishing tax expenditures is illustrated by comparing a scenario where workers contribute an additional 5 percent of earnings to one with only mandatory contribution rates (figure 11.5, panel A). This hypothetical behavioral change results in a decline in tax expenditures attributable to an average earner (under a comprehensive income benchmark) of 44 percent, to about A$240,000 over the life cycle, or A$5,000 over an average working year. Someone earning twice the average earnings sees a life cycle decline of 42 percent, to about A$570,000.

The behavioral impact can have other fiscal effects, such as an increase in the cost of the Age Pension (see subsection 11.4.5). Here, 5 percentage points less saving can more than double the total cost of the Age Pension for an average earner and more than triple it for an earner making twice the average earnings (figure 11.5, panel B).

The example shows how dramatically the fiscal implications can change with behavior. Since only a small proportion of workers make an additional contribution, aggregate impacts would be smaller.

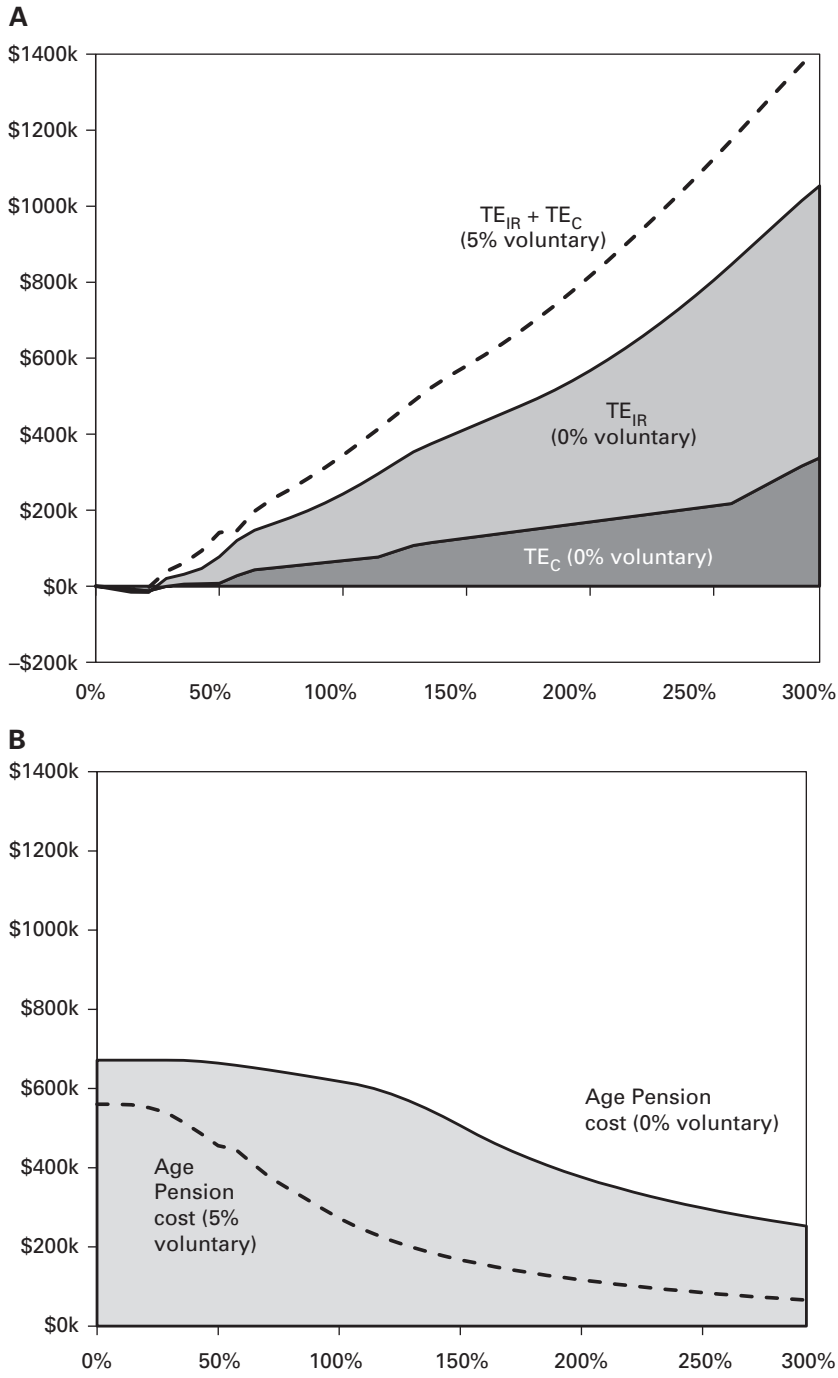

Figure 11.5
Effect of reducing voluntary pretax superannuation contributions by 5 percent. *Source*: Authors' calculations. *Note*: Top earners receive considerable Age Pension because no other savings or income is assumed, contributions are restricted up to the contributory cap, and all super savings are drawn down by the age of death.

Since 2009–2010, the Commonwealth Treasury has published figures incorporating behavioral effects, in which all voluntary superannuation contributions are assumed to be redirected to alternative investments. These "revenue gain" estimates are published alongside the main, "revenue forgone" estimates, but they receive less public attention. Since revenue gain estimates were first reported for superannuation, they have been between 4 percent and 31 percent lower than the revenue forgone numbers (Commonwealth Treasury, various years).

Revenue gain figures are an improved way to understand the fiscal impact of tax expenditures, but these, too, are uncertain. Indeed, empirical evidence of behavioral savings responses to tax incentives is mixed (OECD 2007; Johansson et al. 2008; New Zealand Treasury 2010; Chetty et al. 2014; Feng, Gerrans, and Clark 2014). This is not to say that tax-minimization efforts can be ignored. For example, major superannuation tax changes in 2007 can be held responsible for a doubling in contributions in a single year (Australian Prudential Regulation Authority 2016).

11.4.3 Fiscal Implications Are Not Additive

Unlike direct expenditures, tax expenditures cannot be added to each other and over time. This is because they represent independently calculated hypotheticals. As discussed earlier, the removal of a tax expenditure in superannuation would likely increase the utilization of tax expenditures on other tax-preferred savings but not symmetrically. In fact, since 2012, the Tax Expenditure Statement no longer reports aggregate figures.

The interactions can become more confounding over time. If government were to tax contributions at the marginal rate to reduce tax expenditures, there would be fewer funds on which to calculate the subsequent tax expenditure on investment returns (under a comprehensive income benchmark). Such technical flaws render trend analysis of official tax expenditures problematic.

This effect is demonstrated in figure 11.6 (panel A), where funds are adjusted by the lower levels of net contributions in previous periods. For example, over the life cycle, total tax expenditures credited to an average worker would decline by 16 percent to A$200,000; for a worker earning twice the average earnings, the decline is 20 percent, to A$455,000. Revenue gain estimates attempt to account for such interactions (presumably over the four years of reported projections).[18]

Despite the warnings, commentators continue to refer to the aggregate superannuation figure of approximately A$30 billion. A recent review by the Standing Committee on Tax and Revenue (2015) asked that Treasury consider offering an overall sum of tax expenditures. Such estimates, as one response to the review noted, could "adopt a targeted approach, investigating the interactions for large tax expenditure items when it is likely to make a material difference to the estimate or for items that generate significant public interest." One option is for this to also be taken up in the proposed periodic reviews, which would look at interactions over extended periods, as done illustratively here.

11.4.4 Fiscal Implications Change with the Benchmark

The current choice of benchmark can be considered arbitrary. By contrast, sensible arguments exist that an expenditure tax benchmark is superior since it respects intertemporal and interasset neutrality (see subsection 11.4.5). But what is the effect of using an expenditure benchmark?

This is demonstrated in figure 11.6 (panel B). Since an expenditure benchmark embodies zero taxation of investment returns, the taxation receipts recorded over the individual's lifetime are counted as a negative tax expenditure, or tax penalty. When netted out against the concessionary treatment of contributions, it reveals tax expenditures much lower than shown in the charts so far. For example, total expenditures attributable to an average earner become relatively trivial, at about 6 percent of the tax expenditures under a comprehensive income tax benchmark; for a worker earning twice the average earnings, the figure is 11 percent of the comprehensive income tax benchmark result.[19]

The 2013 Tax Expenditure Statement reported experimental estimates under an expenditure tax benchmark compared to the income tax benchmark. While tax expenditures on contributions were A$16 billion in both cases, tax expenditures on investment returns were shown to be A$ –4.7 billion under the former, compared to A$16.1 billion under the latter. Unfortunately, this reporting has not been continued.

11.4.5 Fiscal Implications Change When Interactions with Transfers Are Included

Tax expenditure estimates are not designed to take account of interactions with the transfer system. As a result, they do not capture the actual impacts on current or future budgets. The obvious example is

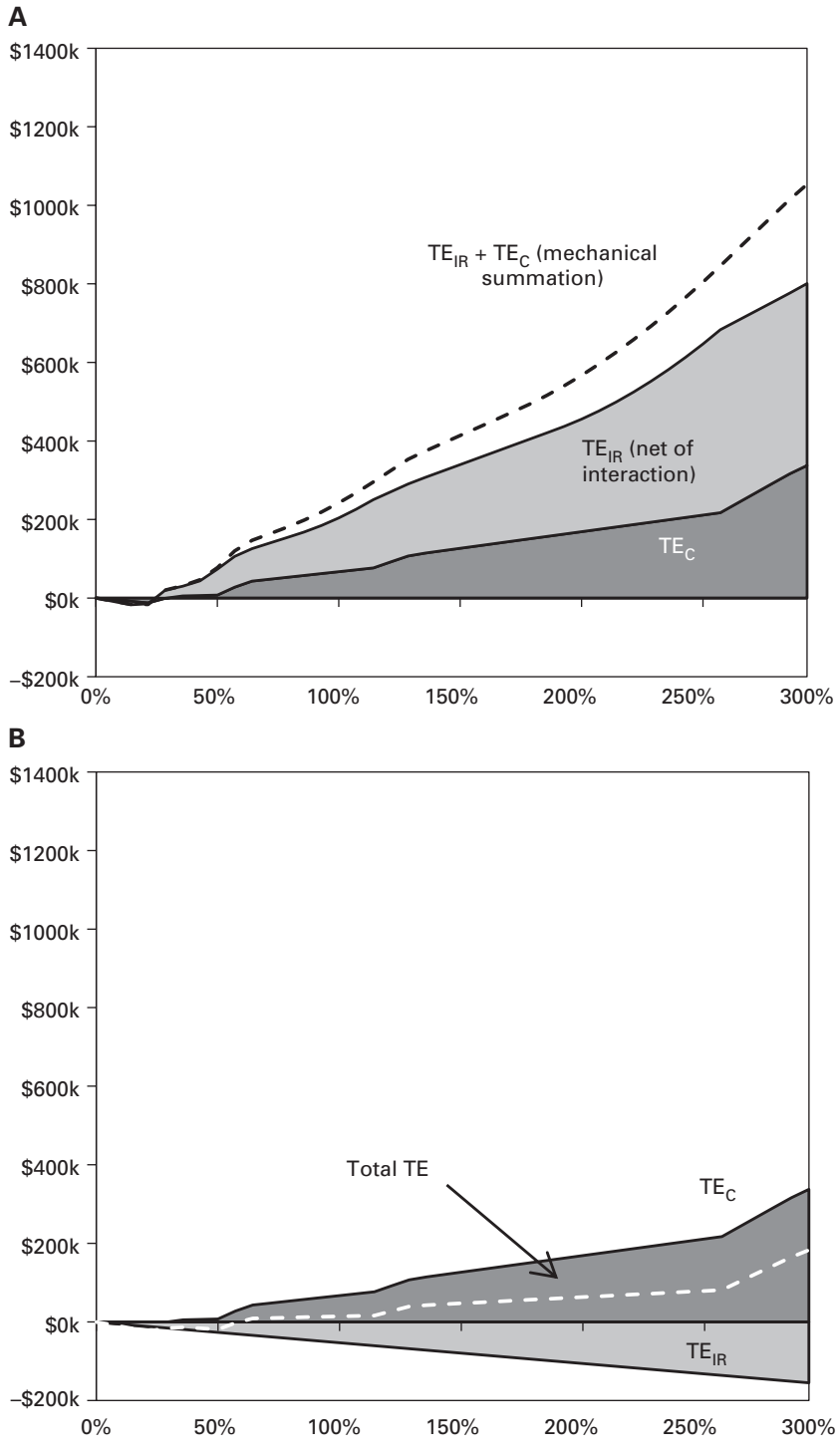

Figure 11.6
Accounting for interactions and different benchmarks. *Source*: Authors' calculations.

that higher taxes on superannuation would lead to lower self-funded retirement incomes and higher spending on Australia's means-tested Age Pension (already mentioned with respect to additional, voluntary contributions in subsection 11.4.2).

Figure 11.7 shows the impact of measuring tax expenditures net of Age Pension costs. Under a comprehensive income tax benchmark (panel A), the additional inclusion of Age Pension costs reduces tax expenditures by about one-fifth for an average worker and by about one-half for someone earning twice the average wage. Under the expenditure tax benchmark (panel B), including Age Pension costs reduces tax expenditures to nearly zero for an average worker and makes them negative for someone earning twice those earnings.

While standard tax expenditure reporting does not take account of the net effects of superannuation policy, occasional analyses do (Commonwealth Treasury 2013). Such total costings are helpful when evaluating policy effectiveness, though admittedly few programs are ever subject to them. For example, how health spending early in life reduces health spending in old age is rarely taken account of. Both Henry et al. (2009) and the Standing Committee on Tax and Revenue (2015) recommended that the Treasury publish regular reports on the long-run economic effects of tax expenditures, including interactions with the Age Pension.

11.4.6 Official Estimates Ignore Economic Efficiency Implications

In addition to fiscal impacts, it is important to take account of broader economic impacts. Any assessment of the efficacy of a major part of the tax system, such as the taxation of savings, needs to recognize how it influences prices and consequently economic outcomes. Two important price distortions are associated with savings taxation and especially pension taxation.

First, a comprehensive income tax benchmark for lifetime savings, or retirement savings, distorts the price of present consumption relative to future consumption. This was first formalized nearly a century ago by Pigou (1928). Taxing the return to net-of-tax savings under the income tax regime is sometimes termed the "double taxation" of savings. This is often cited as an argument in favor of an expenditure tax benchmark.

However, an expenditure tax can also cause distortions, since it affects the choice between labor and leisure, so the argument is not clear-cut. But consumption through working life and consumption in

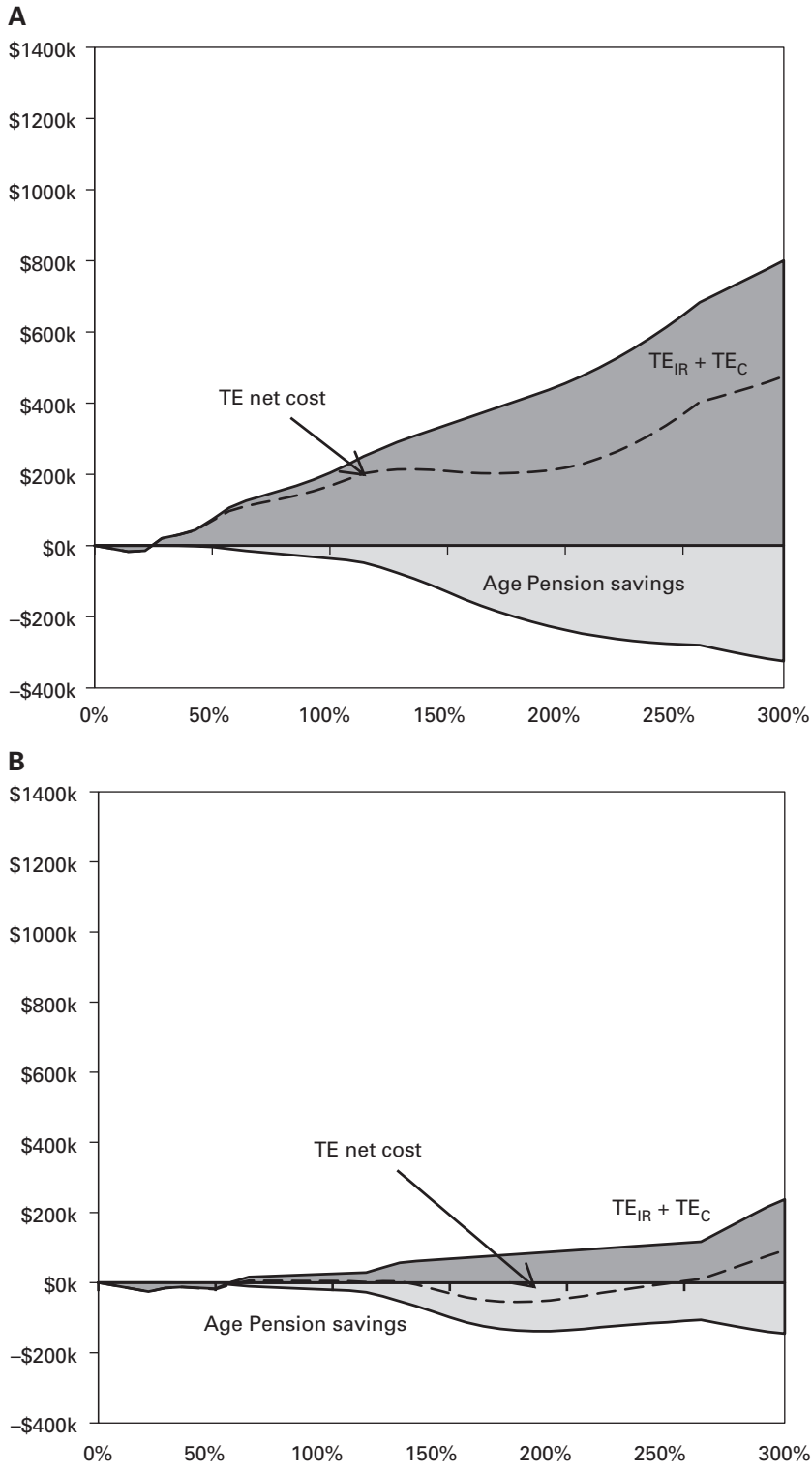

Figure 11.7
Taking account of interactions with the Age Pension. *Source*: Authors' calculations.

retirement can be seen as two major commodity bundles, and introducing a major price distortion that alters their relative prices will likely have negative consequences for economic efficiency.

Another reason why the argument is not clear-cut is that intertemporal neutrality could be delimited to the individual life cycle, wherein consumption during work is treated as equal to consumption during retirement. It may not necessarily apply over multiple life cycles, wherein bequests are used to pass on untaxed capital to future generations. The existence of bequests justifies some capital taxation (Piketty and Saez 2013), for example, via inheritance tax or a reasonable lifetime limit on capital exemption, but this is an argument in favor of limits on tax-preferred saving.

Second, and perhaps more pragmatic, is how differential taxation of assets distorts the relative prices of those assets. It is sometimes argued that many developed economies with income taxes at the center of their fiscal systems are already partway to a consumption tax system. Owner-occupied housing, which constitutes a major slice of privately held wealth and is accumulated over a lifetime, is typically taxed under what is effectively an expenditure tax regime (as is the case in Australia; recall figure 11.1). Pension accumulations are often given a similar tax preference. While capital taxation applies elsewhere, these two key channels of tax-preferred saving are seen as a partial move toward expenditure taxation, albeit through specific savings deductions from an income tax base, and therefore constitute a welfare improvement since they limit interasset distortions.

If an income tax benchmark is adopted, the pursuit of minimizing interasset distortions would suggest that income tax treatment should apply to both owner-occupied housing and pension savings. While such a position has its advocates, this reform is not seriously on the policy agenda. There is therefore an argument born of political constraint that would support the expenditure tax treatment of superannuation savings.[20]

11.4.7 Fairness Implications Change with the Progressivity of the Personal Income Tax

The fact that a large amount of tax expenditures go to high earners should not in itself be a cause for reform. A good deal of the apparent inequity is in fact a result of the progressive nature of the tax system. This can be demonstrated by considering tax expenditures under alternative tax schedules. If a proportional tax system were to apply (such

as in the Czech Republic), then tax expenditures would be smaller and have a flatter gradient as earnings increased.

Figure 11.8 (panel A) shows the results under a 20 percent rate across all earners above the zero tax bracket. This less progressive system results in a more equal distribution of tax expenditures. In the base Australian system, someone earning twice the average earnings receives 2.3 times the tax expenditures of an average earner, compared to a proportional system where the earner receives exactly twice the tax expenditure level.

By contrast, increasing the progressivity of the current system (figure 11.8, panel B) makes tax expenditures appear "less fair," despite the fact that such a change would see more overall taxes levied on top earners.[21] Furthermore, such changes to the base would not affect Age Pension spending, since actual super contributions and returns are unaffected.

The analysis emphasizes that the progressivity of the benchmark has a considerable impact on the calculation of tax expenditures, but a remaining concern is that the separation of superannuation tax rates from the personal income tax schedule creates contribution tax penalties for low earners and excessive concessions for high earners. Section 11.5 addresses this.

11.5 What Would a Sensible Reform Look Like?

In seeking to address basic principles of tax neutrality and equity, a sensible reform would align the tax treatment of most savings, including pensions, with an expenditure tax (either TEE or EET) and offer any concessions (either T*EE or EET*) on at least a proportional basis.

This was the recommendation for superannuation taxation reform of the Henry Tax Review (Henry et al. 2009), which suggested a system with a rebate for contributions that was of the same proportional value across the earnings distribution (i.e., so that the contribution tax was effectively the personal income tax rate minus a 15 percent or 20 percent rebate) in addition to low taxation of returns (effectively zero after imputed tax and capital gains discounts). Such a reform would do two things: avoid higher tax advantages to those with higher marginal tax rates and espouse an expenditure tax approach by avoiding taxation of investment returns.

The effect of such a reform is shown in figure 11.9, where the contribution tax is 15 percentage points lower than the marginal rate and

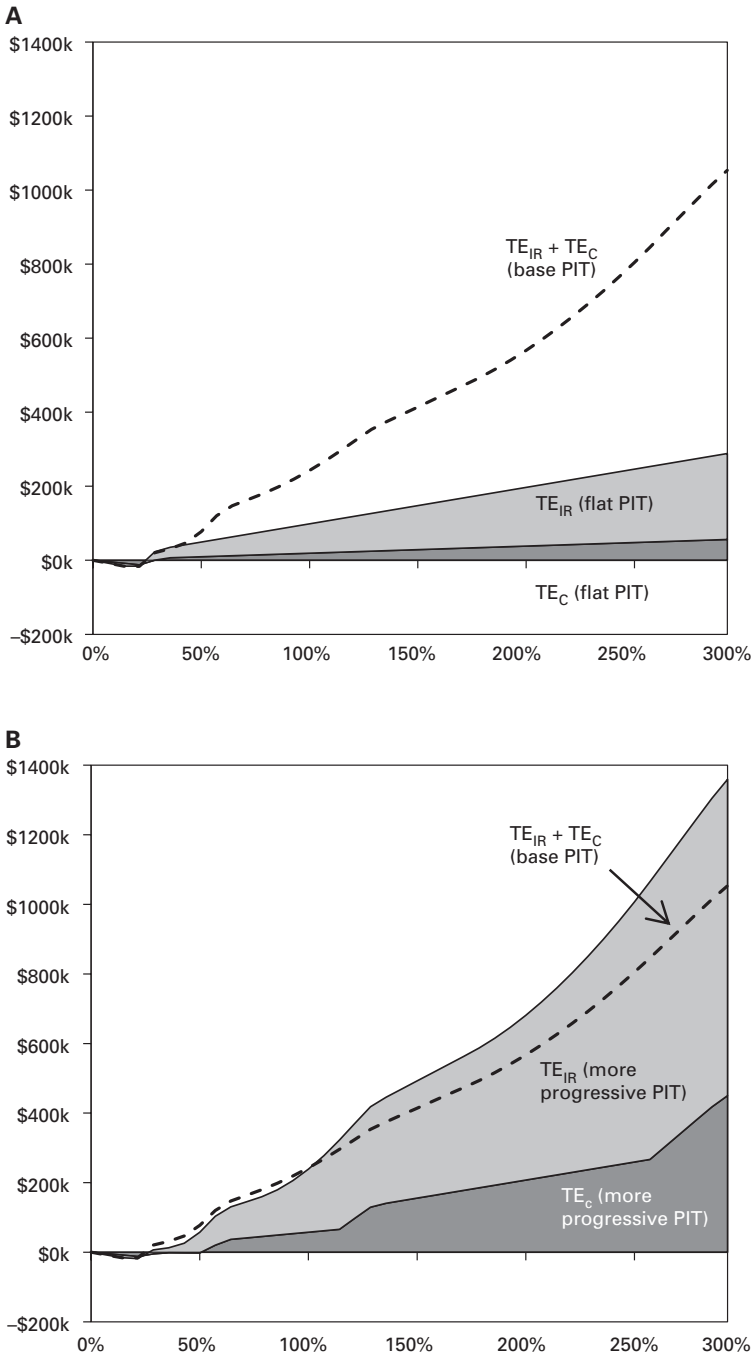

Figure 11.8
The more progressive a tax system, the more tax expenditures. *Source*: Authors' calculations. *Note*: PIT denotes personal income tax, negative TE not shown, comprehensive income tax benchmark, interactions not accounted for. (A) Tax of 20 percent. (B) Tax bracket changes, from top to bottom bracket (in percentage points): +10, +5, –2.5, –5.

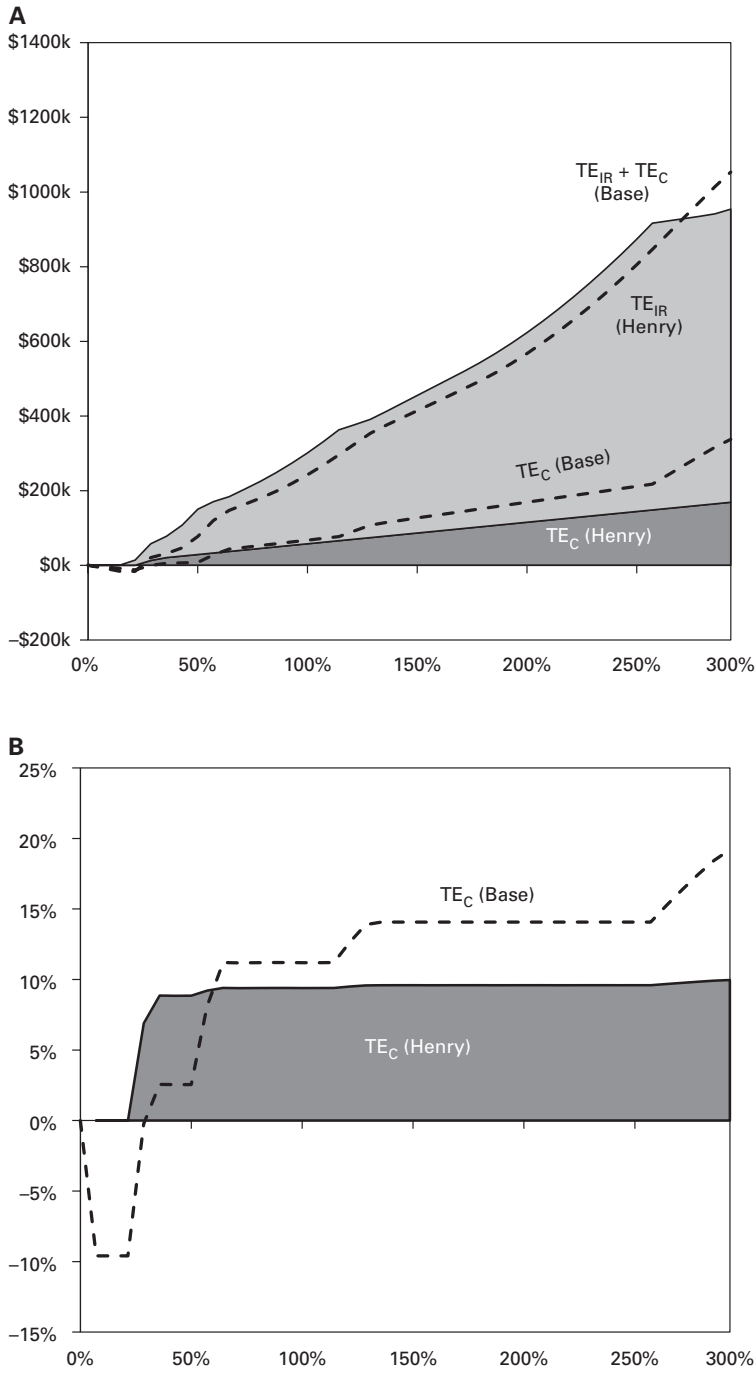

Figure 11.9
Contribution tax linked to personal income tax with a 15 percent concession and no effective tax on investment returns. *Source*: Authors' calculations. *Note*: The Henry Tax Review assumes a 15 percent rebate to all taxpayers. Gross savings consists of present value of total super accumulation and taxes paid on contributions.

the investment tax is effectively zero. Panel A shows that against an income tax benchmark, the reform causes tax expenditures on contributions to be lower and flatter, those on returns to be higher, and tax expenditures overall (though not accounting for interactions) to be higher, except for top earners.

More importantly, panel B illustrates the effect under an expenditure tax benchmark as a proportion of gross savings. Whereas the current system is shown to be regressive, the reform results in a proportional allocation of concessions, thereby restoring the progressivity of the personal income tax scale.[22]

11.6 Conclusions

The concept of tax expenditures was developed in the mid-twentieth century. Since then, estimates of these expenditures have been produced by a range of governments, and to some degree by international organizations. In the absence of more sophisticated tax evaluation instruments, they provide a readily calculable means of measuring the degree of arbitrary or politically motivated erosion of standard taxation bases.

Fundamental to the usefulness and validity of these estimates is their basis of calculation. Rather than being considered on their merits, in much public debate the choice of base has become a kind of ideological battleground. This serves to give greater prominence to the estimates of tax expenditures than they deserve in a mature policy discussion. As noted in a recent review in Australia, "the fact that Treasury's estimates of tax expenditure are often used inappropriately in public debates as a proxy for the budget impact of tax concessions points to a significant unmet demand in the community" (Public Budget Office 2015).

This chapter contributes to the debate by explaining the concepts and concerns via illustrative examples of savings over the life cycle and across the earnings distribution, using the Australian retirement income system as the basis for analysis.

The chapter demonstrates that policy makers in countries with large and/or expanding prefunded private pensions should be cautious about the methodology of calculating tax expenditures and comparing them between countries and over time. Public debates in which tax expenditure estimates are quoted are liable to overstate the scale of tax revenues forgone by ignoring behavior, interactions with other tax expenditures

and transfers, and economic efficiency, as well as the sensitivity of results to the benchmark used.

Indeed, official tax expenditure reporting should only be a starting point for good tax-benefit policy design. Additional analysis should include more comprehensive taxation modeling that casts behavior and the impact of tax imposts on choice within a holistic economic modeling structure. Prioritized reviews, meaningful aggregates of tax expenditures, and longer-term costs and benefits of tax treatment of pensions should be developed along the way.

In Australia at least, and probably elsewhere, the debate also focuses on the inequity of pension taxation rather than considering the equity of the overall system. In fact, the high share of tax expenditures that accrues to top earners mostly reflects a progressive tax system in which those earners pay a greater share of tax. Nonetheless, in instances such as Australia's, the proportional nature of contribution taxes can result in concessions that are regressive when compared to the personal income tax schedule. The chapter presents an example of a reform that reverses this regressivity by linking contribution taxes with the progressive personal income tax schedule, along the lines suggested in the Henry Tax Review (Henry et al. 2009).

Addressing basic tax principles of intertemporal neutrality is important for ensuring that consumption today is treated equally to consumption in the future. Broadly speaking, pension tax structures in developed countries are approximated by an expenditure tax regime. This can be given effect by taxing either contributions or benefits (but not both) under the personal income tax and exempting fund investment earnings from taxation—taxation patterns that have earned the acronyms TEE and EET, respectively. This structure is prevalent despite these same jurisdictions taxing savings held for shorter time periods. The details of pension taxation are complex, however, including various limits and thresholds. Tax expenditure calculations that take this widely held structural design as given, and focus on anomalies within this structure, would highlight the need for more detailed, specific analysis of particular features of these regimes.

But how far should intertemporal neutrality extend? While an economic argument for neutrality exists when capital is transferred from working age to retirement, this breaks down when untaxed capital is transferred to the next generation via bequests. In the absence of an inheritance tax or capital transfer tax, it would be justifiable to implement reasonable lifetime limits on the amount of capital exempt from

the tax base—probably a better policy reform than annual contribution limits. This would serve to limit the exploitation of retirement income structures for estate management purposes.

Notes

This chapter was prepared for two CEPAR CESifo workshops on "Pension Taxation, Population Ageing and Globalisation," first in Sydney on November 13–14, 2014, and then in Munich on September 3–4, 2015. The chapter benefited from comments by the participants of the workshop and reviewers Robert Holzmann and Bernd Genser. The chapter also benefited from discussions with Robert Holzmann, for which the authors are particularly grateful. Responsibility for any errors of omission or commission remains with the authors.

1. The Rosetta Stone, for example, records that in ancient Egypt priests and some nobles were exempt from taxes on labor and grains (Adams 2001).

2. Departures from a benchmark tax can take several forms, including (1) exemptions, which exclude certain items from the tax base, (2) deductions, which reduce an amount of the assessable tax base before the tax rate is applied, (3) concessions, which reduce the tax rate, (4) offsets, which reduce tax payable by a given amount after the tax rate is applied, and (5) deferrals, which delay the tax calculation or liability to a later period.

3. The system is made up of a large means-tested public pillar; the mandatory, defined contribution superannuation pillar; and voluntary superannuation contributions.

4. Not all tax expenditures related to retirement incomes are considered regressive. For example, the Seniors and Pensioners Tax Offset effectively reduces tax liabilities related to the means-tested Age Pension.

5. For example, see Joint Committee on Taxation (2015) and Emmerson (2014) on policy debates in the United States and the United Kingdom.

6. First published in 1980, detailed estimates are now a legislative requirement, with the express purpose of informing policy making and public debate.

7. This is the Schanz-Haig-Simons definition of income.

8. In some situations, equivalence will only be approximate; for example, when a tax schedule is progressive and replacement rates are below 100 percent. That is, higher income at the time of contribution compared to the time of withdrawal can result in more tax (or tax expenditure) being ascribed to prepaid (TTE and TEE) systems than to postpaid (ETT and EET) systems. Prepaid and postpaid systems will also not be equivalent when the nominal return or tax brackets are not adjusted for inflation. Equivalence will also be compromised where investments benefit from excess returns (e.g., resource rents), where the rate of return differs significantly from the discount rate.

9. For example, see Polackova Brixi, Valenduc, and Swift (2004), OECD (2010), and other chapters in the present volume.

10. Separately, concessions that incentivize savings may offset behavioral biases such as myopia and hyperbolic discounting, which is consistent with maintaining intertemporal neutrality.

11. In addition to the two main tax expenditures on pensions, others relate to retirement provision. Only two-thirds of any nominal capital gain made from a capital gains tax

event occurring on or after September 21, 1999, is included in the assessable income of a fund, provided the fund has held the asset for at least 12 months. According to Commonwealth Treasury (2016), in 2015–2016, the tax revenue forgone from this measure was worth A$580 million. Senior Australians also benefit from a tax expenditure related to the means-tested, public Age Pension, which is effectively provided tax-free via the Senior Australians' and Pensioners Tax Offset, worth A$720 million in 2015–2016.

12. Note that caps on contributions from gross income act to limit excessive regressivity.

13. It is worth recognizing that overall, probably because of the influence of nonlabor income, about 50 percent of income tax in Australia is paid by those in the top decile (Phillips and Stewart 2015). This underlines the point that equity needs to be considered as a whole, not necessarily with every possible element of the tax-benefit system.

14. Since then, others have called for reforms in line with the Henry recommendations (e.g., Australian Council of Social Service 2012; Deloitte as reported in Martin and Bourke 2015). The ACOSS proposal went further by suggesting a budget-neutral, capped, two-tiered rebate that was higher for those on low incomes.

15. The analysis excludes the Low Income Tax Offset, affecting those in the first two tax brackets, and the Medicare Levy of 2 percent, which applies separately to most taxpayers' taxable income. The tax rate on investment returns is assumed to be 8 percent, so tax expenditures under the comprehensive income benchmark will include an amount attributable to dividend imputation and capital gains discounts.

16. As part of the annuitization, the small tax expenditures associated with investment returns in the pension phase are ignored. Inclusion would not change results for average earners, since their taxable income ends up in the zero tax bracket. For a worker earning twice the average earnings, tax expenditures under a comprehensive income tax benchmark would be 5 percent higher.

17. High earners, who have more discretionary income and more to gain from superannuation tax arrangements, have tended to invest in Self-Managed Superannuation Funds, which make up about one-third of total superannuation assets (Australian Prudential Regulation Authority 2016) and on average have balances 14 times higher than for standard member accounts (Australian Tax Office 2016).

18. In addition to these technical calculation flaws, comparisons over time can be problematic because of methodological changes. Australia's Commonwealth Treasury notes that "estimates may change between editions as benchmarks are modified, tax expenditures are modified, revised or new data becomes available, or changes in modelling methodology are made" (Commonwealth Treasury 2016, 5). Which changes were made between different editions is not clear.

19. For comparability, calculations under both benchmarks ignore the types of interactions introduced earlier.

20. A related issue is how the Age Pension means test compounds the tax system's differential treatment of assets (Chomik and Piggott 2016).

21. This would have been the effect of the Temporary Budget Repair Levy of 2 percent on the incomes of those in the top tax bracket between 2014–2015 and 2016–2017.

22. As noted previously, a proposal by the Australian Council of Social Service (ACOSS) went further by suggesting a two-tiered rebate that was higher for those on low incomes. Such a measure could also be designed to provide a negative tax to those in the zero tax bracket.

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