RESEARCH ONLINE

University of Wollongong
Research Online

Faculty of Commerce - Papers (Archive)

Faculty of Business

2006

Taxation and the Australian superannuation system: An international comparison

Corinne Cortese
University of Wollongong, corinne@uow.edu.au

John Glynn
University of Wollongong, jglynn@uow.edu.au

Publication Details

This article was originally published as: Cortese, CL & Glynn, J, Taxation and the Australian Superannuation System: An International Comparison, Australian Accounting Review, 2006, 16(2), 77-85. Copyright 2006 CPA Australia. The authors' manuscript version has been reproduced with permission from CPA Australia for educational purposes only and may not be further made available or distributed without permission. If reproduction is sought, permission to use the original article must be obtained from the Australian Accounting Review.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

RESEARCH ONLINE

Taxation and the Australian superannuation system: An international comparison

Abstract
This study demonstrates the taxation burden applied to Australian superannuation. The superannuation schemes and supporting taxation systems of five OECD countries are reviewed. A hypothetical scenario is applied to demonstrate the imbalance of the Australian system relative to comparable nations. Given concerns about the aging population, this research supports calls for further reforms to the taxation of superannuation in Australia, highlighting the need to make superannuation taxation policies more consistent with government efforts to encourage superannuation savings and self-funded retirement.

Keywords
Superannuation, taxation, Australia, international

Disciplines
Business | Social and Behavioral Sciences

Publication Details
This article was originally published as: Cortese, CL & Glynn, J, Taxation and the Australian Superannuation System: An International Comparison, Australian Accounting Review, 2006, 16(2), 77-85. Copyright 2006 CPA Australia. The authors' manuscript version has been reproduced with permission from CPA Australia for educational purposes only and may not be further made available or distributed without permission. If reproduction is sought, permission to use the original article must be obtained from the Australian Accounting Review.

This journal article is available at Research Online: http://ro.uow.edu.au/commpapers/153

TAXATION AND THE AUSTRALIAN SUPERANNUATION SYSTEM: AN INTERNATIONAL COMPARISON

Corinne Cortese, University of Wollongong[1]

Professor John Glynn, University of Wollongong

ABSTRACT

This study provides an examination of the Australian superannuation system and demonstrates the taxation burden applied to Australian superannuation. Using Canada, New Zealand, the UK, and the USA as a basis for comparison, the superannuation schemes and supporting taxation systems of each of the five countries of the study are reviewed. A hypothetical scenario is applied to demonstrate the imbalance of the Australian system relative to comparable nations. Given concerns about the ageing population, this research supports calls for further reforms to the taxation of superannuation in Australia, highlighting the need to make superannuation taxation policies more consistent with government efforts to encourage superannuation savings and self-funded retirement.

Classification code: J26 – Retirement, Retirement Policies

Key words: superannuation, retirement, taxation, Australia, international

[1] Correspondeing author: Corinne Cortese, Faculty of Commerce, University of Wollongong, Northfields Avenue, NSW 2522. Ph (02) 4221 5297. Email: corinne@uow.edu.au

Introduction

This study is intended to provide an examination of the Australian superannuation system and the taxation structure within which it is supported. The superannuation model used in Australia comprises government-funded pensions, compulsory contributory superannuation savings, and voluntary superannuation savings, which are known collectively as the "three pillars" of superannuation (Knox 1996, OECD 1998, World Bank 1994). This superannuation model is intended to partially shift the burden of the aging population away from government and onto individuals, with the emphasis on self-funded retirement rather than public pension arrangements.

However, although Australian governments strongly advocate superannuation savings and the resultant moves to self-funded retirement, which thereby reduce reliance on the public pension, they also benefit from the taxation revenue that is collected from superannuation savings. Until the recent superannuation taxation changes, proposed in the 2006-07 Federal Budget, under the Australian system, tax could be collected on superannuation contributions, earnings, and benefits paid out of the superannuation fund on retirement (Taylor 2006). Indeed, Australia was the only OECD country to tax superannuation at these three points, with most other countries taxing benefits only. Interestingly, despite industry demands to abolish taxation of superannuation contributions, which would more closely align the Australian system with that of similar nations, the superannuation taxation changes will instead see the elimination of taxation paid on superannuation benefits.

This study supports industry demands to eliminate superannuation contributions tax, providing further support for arguments that, despite the 2006-07 budget changes, the

taxation of superannuation in Australia is excessive and onerous relative to other countries. The following sections briefly review the three pillars of superannuation models, and provide an overview of the superannuation and supporting taxation structures of Australia, Canada, New Zealand, the United Kingdom (UK), and the United States (US).[2] These countries were selected because they are all OECD countries, have similar economic structures and systems, and a broad cross section of taxation mechanisms. The superannuation and taxation systems of Canada, New Zealand, the UK, and the US provide a comparative basis for the study of the Australian system and highlight the onerous taxation burden applied to superannuation savings in Australia.

The Three Pillars

In 1994, the World Bank published a recommendation to assist developing countries in establishing programs to minimize the adverse socio-economic and political consequences of population aging (Gavrilou and Heuveline 2003). The recommendation advocated a model for national superannuation policy known as the "three-pillar model" (Knox 1996, World Bank 1994). This model emphasises a move away from public pension arrangements and towards self-funded retirement (OECD 1998).

The first pillar is a type of safety net that provides social security retirement benefits that are not conditional upon past employment (Bateman and Piggott 1996, Gollier 2000). These pension systems are typically government funded and administered,

[2] The terminology used by each of these countries in respect of their superannuation models varies and includes "retirement", "pension", and "superannuation". Therefore, the terminology may vary throughout the paper in order to ensure it is applicable to the country discussed.

and are subject to a means test with the aim of assisting lower income retirees (Barrett and Chapman 2000, Bateman and Piggott 1997).

The second pillar is made up of, often compulsory, employment related superannuation contributions, which are accumulated during a retiree's working life (Gallery 2003, Gollier 2000). Under compulsory arrangements, such as those that exist in Australia, a minimum level of employer contribution must be paid on behalf of all employees.

The third pillar comprises voluntary retirement savings contributed to a superannuation or pension fund (Bateman and Piggott 1997, Gallery 2003). These voluntary retirement savings may be amounts contributed by an employer over and above that required under the compulsory arrangements (Barrett and Chapman 2000). Additionally, employees may elect to sacrifice a portion of their pre-tax salary as voluntary superannuation savings (Barrett and Chapman 2000).

A major demographic change faces Australians in coming decades with more growth in the retired population than in the number of people currently regarded as of working age (Barrett and Chapman 2000, Piggott 2004). While the post-war "baby boom" is the main contributing factor to the aging population, lifestyle preferences and medical advances mean that Australians are increasingly retiring younger and living longer (Barrett and Chapman 2000).

In Australia, the response to the problem of population aging, and the inability of the social security system to support the aging population, is the Superannuation Guarantee scheme (SG) (Piggott 2004). Introduced in 1992 under the

Superannuation Guarantee (Administration) Act 1992, the SG requires employers to contribute a minimum level of superannuation support for each employee into a complying superannuation fund (Barrett and Chapman 2000, Randell et al 1996). The superannuation industry in Australia has since developed dramatically with almost $700 billion in assets currently under management and over 90% of employees covered by the superannuation system (Australian Prudential Regulation Authority 2005, Barrett and Chapman 2000, McDonald et al 2003).

The first pillar of the Australian superannuation system is known as the "old age pension" (Barrett and Chapman 2000). This is a publicly provided social security benefit which is funded by the federal government and is subject to a means test (Barrett and Chapman 2000, Khan 1999). The age pension represents a large proportion of most people's retirement income in Australia (Department of Family and Community Services 2005). At June 2004, the Australian Bureau of Statistics estimated that 2,817,120 Australians were over the qualifying age for pension benefits, with around 67% of these people receiving the aged pension at this time (Australian Bureau of Statistics 2004). Similar income support is paid by the Department of Veteran Affairs, bringing the total number of people receiving a government pension to 77% of the total aged population (Department of Family and Community Services 2005).

The second pillar of the Australian superannuation system, which comprises private retirement savings, is mandated by the Superannuation Guarantee. As noted, the Superannuation Guarantee (SG) is a compulsory, contributory superannuation savings scheme (Williams 1996). The SG requires employers to contribute a percentage,

currently nine percent, of their employees' wages to a superannuation fund for their benefit on retirement (Khan 1999).

The third pillar consists of voluntary superannuation and retirement savings (Khan 1999). Many employers and employees contribute voluntarily to their superannuation fund in excess of the mandatory level prescribed by the SG (Khan 1999). For example, employees may elect to sacrifice a portion of their pre-tax income and instead contribute this amount to their superannuation fund as a voluntary payment. This has the dual benefit of increasing retirement savings and lowering the taxable income of the employee. For the year to March 2004, the Australian Prudential Regulation Authority estimated that member contributions, which are largely voluntary, totaled $22.1 billion (Australian Prudential Regulation Authority 2005).

Superannuation and taxation in Australia

It is the second and third pillars of the superannuation system that give rise to taxing opportunities - when contributions are made to the fund, when earnings are made on the funds invested, and when benefits are paid out of the fund (Bateman and Piggott 1996, Gollier 2000). However, as noted, while Australia was the only OECD country to tax superannuation at each of these three points, when the changes to superannuation taxation take effect from 1 July 2007, taxation on superannuation benefits will be eliminated for persons aged 60 and over (Bateman and Piggott 1996, Gollier 2000, Koch 2004, Taylor 2006).

In terms of taxation on superannuation contributions, when an employer contributes an amount to a superannuation fund on behalf of an employee, the amount is tax

deductible for the employee provided they are within the age based contribution limits (Bateman and Piggott 1997). For employees aged less than 35, the tax deduction is limited to $A13,935. For those aged 35 to 49, the deduction limit is $A38,702, and for employees aged over 50, a deduction limit of $A95,980 applies (Australian Taxation Office 2005). The Australia government then taxes these superannuation contributions at the rate of 15% per annum. In addition, prior to 1 July 2005, a surcharge was also applied to contributions where the employee's income is greater than $94,691. Phased in at income levels over this amount, the surcharge increased until income reacheed $114,981.[3] At this point the full 15% surcharge was applied to contributions made to the fund (Australian Taxation Office 2005). The superannuation surcharge has since been abolished, with this change coming into effect from the 2005-06 financial year. Earnings on amounts contributed to Australian pension funds are also subject to tax at a statutory rate of 15%. However due to the imputation system applicable to some investments, and concessional treatment of capital gains, an effective tax rate of 6% is commonly assumed to be incurred on fund earnings (Australian Securities and Investments Commission 2005).

In Australia, superannuation benefits may be taken as a lump sum, a pension, or a combination of the two (Bateman and Piggott 1997, Rothman 2003). Prior to the changes introduced in the 2006-07 Federal Budget, if the superannuation benefit was taken as a lump sum, it was subject to concessional tax rates up to a lump sum Reasonable Benefit Limit (RBL) of $588,056 for the 2004-2005 income year (seniors.gov.au 2005). Benefits paid in excess of the RBL were not taxed

[3] The amount of the surcharge increased at the rate of 0.001% of adjusted taxable income for every dollar earned above the lower threshold ($94,691) until income reached the upper threshold ($114,981) (Australian Taxation Office 2005).

concessionally, and were instead taxed at the highest personal marginal tax rate (Bateman and Piggott 1997). Within the RBL, the first $123,808 of the lump sum benefit was usually tax free (seniors.gov.au 2005), with the remainder, up to the RBL, taxed at 16.5% (Rothman 2003). If the benefit was taken as a pension, the amount was taxed as ordinary income for all types of superannuation schemes (Bateman and Piggott 1997). The RBL increased to $1,176,106 and a 15% tax rebate was available for superannuation pensions paid from a taxed source (seniors.gov.au 2005). Further, if part of the superannuation benefit paid out as a pension was contributed as a voluntary, after tax amount, it was not be subject to tax (seniors.gov.au 2005). In an effort to "streamline and simplify" superannuation taxation in Australia, the Federal Budget has proposed to eliminate RBLs to provide individuals "greater flexibility" regarding how and when to access their superannuation (Taylor 2006).

Superannuation and taxation in Canada

Canada's superannuation system, known as the retirement income system, comprises a publicly managed pension scheme, privately managed retirement savings schemes, and individual savings plans (Pearse 2001, Department of Social Development 2005). The publicly managed pension scheme includes the Old Age Security (OAS) pension, which is an unfunded federal pension paid to most Canadian residents on retirement (Pearse 2001). The Canada Pension Plan (CPP), and its sister program in Quebec, the Quebec Pension Plan (QPP), is an earnings-related government scheme which provides a social security pension to retirees similar to the OAS. The CPP and QPP, however, require contributions to have been made in order for a retiree to qualify for the benefits (Pearse 2001).

The privately managed superannuation system in Canada comprises occupational pension plans, employee sponsored plans, or registered pension plans (Pearse 2001). The superannuation plans are provided as part of an employment contract but, unlike the SG in Australia, are not compulsory. It is estimated that approximately 40% of Canadians are covered by an occupational superannuation scheme (Department of Social Development 2005). The individual savings plans that are available to Canadians are known as RRSPs. These are voluntary payments made by Canadian residents to accumulate retirement income. They are the most popular method of saving for retirement in Canada, and operate in a similar way to a general savings account (Department of Social Development 2005).

There is some taxation support provided in respect of the privately managed pension schemes and RRSPs. For these plans, tax owing on the contributions and investment income is deferred until income is paid out of the plan in the form of a pension, annuity or withdrawal (Pearse 2001). Contributions made to a superannuation fund are tax deductible and amounts up to eighteen percent of earnings are tax exempt (Gollier 2000). If a payout from a Canadian superannuation fund is taken as an annuity, the benefits are taxed as income. Lump sum payments are also taxed as income however C$20,000 can be withdrawn as a tax-free lump sum for the purposes of purchasing a principal place of residence or financing education (Pearse 2001). Further, funds can be withdrawn at any time from the RRSPs but taxes must be paid on the amounts withdrawn (Department of Social Development 2005, Pearse 2001).

Superannuation and taxation in New Zealand

New Zealand's approach to the provision of retirement income is unique relative to the other countries of this study and indeed to other nations generally (St John 1999). New Zealand has two tiers that provide the framework for its retirement income system (Ministry for Social Development 2003). The first pillar is a simple, universal, flat rate public pension paid to all New Zealand residents over the age of 65 (Ministry for Social Development 2003, St John 1999, McCollough and Frances 2003).

The second pillar of New Zealand's retirement income system comprises voluntary private savings by individuals to enhance their standard of retirement living above that enabled by the public pension (Ministry for Social Development 2003). There are no tax or other incentives to encourage saving for retirement and therefore no distinction is made between the tax treatment of retirement savings and other types of savings (Ministry for Social Development 2003, St John 1999).

Compulsory retirement savings schemes similar to that of the Australian SG received short-lived support in 1975 but were abolished with a change in government in 1976 (Ministry for Social Development 2003). Again, in 1997, the possibility of compulsory superannuation savings was raised but, with almost 92% of respondents voting against the proposal at a national referendum, the introduction of compulsory superannuation savings was not pursued (Ministry for Social Development 2003).

As noted, New Zealand's tax treatment of superannuation is unique with no tax incentives to encourage pensions or any other form of retirement saving (St John 1999). Voluntary contributions to retirement savings are made from after tax income,

thus contributors receive no benefit in the form of reduced taxable income as is the case in Australia (Ministry for Social Development 2003). These contributions are, however, exempt from tax (Ministry for Social Development 2003). Earnings made on private retirement savings are subject to tax at the rate of 33% (OECD 2001). Benefits paid out of retirement savings are exempt from tax (Ministry for Social Development 2003).

Superannuation and taxation in the UK

The superannuation system of the UK, known as the pension system, is traditionally seen as an example to others owing to the low social security burden it imposes and the high level of coverage of voluntary private schemes (Davis 2000). There are three tiers of the UK superannuation system comprising the public pension, contributory pensions, and private pension savings.

The first tier comprises the state pensions which include the Basic State Pension (BSP), a universal, flat rate pension and the Minimum Income Guarantee (MIG), which supplements the BSP. The BSP is a contributory scheme which requires that employees have paid, or been credited with National Insurance Contributions (NICs) (HM Treasury 2005). These Contributions are accumulated by working for, or being credited with, a number of "qualifying" years (HM Treasury 2005).[4] By contrast, the Minimum Income Guarantee (MIG) is a non-contributory benefit that is paid to poorer pensioners to provide a guaranteed minimum income that is higher than the

[4] The qualifying number of years, to receive the full pension, is currently 44 years for males and 39 years for females. A proportionate basic pension is paid to those who have worked for, or been credited with, fewer than these qualifying years (HM Treasury, 2005).

basic flat rate pension in order to ensure that the incomes of these pensioners keep pace with those of the wider population (HM Treasury 2005).

A State Second Pension (S2P)[5] comprises the second tier of the UK's pension system. The S2P is also a contributory scheme operating through NICs and provides partially flat rate benefit to supplement the BSP. It is designed to assist low and moderate income earners and is also available to those unable to work due to caring responsibilities, illness or disability (http HM Treasury 2005).

The third tier of the UK retirement income system comprises private pension savings. Private pension options include occupational pensions, stakeholder pensions, and personal pensions. Private pension savings is voluntary in the UK, however, tax concessions are in place to encourage retirement saving. The taxation system that supports the UK pension system allows employee contributions to be deducted from pre-taxable income (OECD 2001). Contributions are not subject to tax, as is the case in Australia, nor are earnings made on the retirement funds invested (OECD 2001). Pension benefits paid are taxed as income under the UK system (OECD 2001).

Superannuation and taxation in the USA

The superannuation system of the USA, known as the retirement security program, also rests on three tiers (Association of Private Pension and Welfare Plans 2000). The first tier, Social Security, is a mandated program which provides a minimum financial safety net for the majority of Americans (Association of Private Pension and Welfare Plans 2000, Calabrese 2001). This tier also consists of other social security

programs including Medicare, Medicaid long-term care, and Supplemental Security Income for the elderly (Steuerle 1999).

The second tier of the USA retirement security program is the employer-based retirement system. These plans are voluntary, although they are encouraged through the tax system (Association of Private Pension and Welfare Plans 2000). Similar to the second tier of the Australian system, contributions are made by employees or by the employer on the employee's behalf (Steuerle 1999). However, because these employer-based retirement savings are voluntary, less than half of the total American workforce is covered by such programs (Calabrese 2001). The third tier comprises personal retirement savings (Association of Private Pension and Welfare Plans 2000). These personal retirement savings are voluntary and privately managed (James 2001).

The taxation of superannuation in the USA is similar to the system of the UK. Voluntary contributions are deductible from pre-tax income (OECD 2001). These contributions along with any earnings made on the retirement savings invested are exempt from tax (OECD 2001). The eventual benefits paid out from retirement savings are taxed as income (OECD 2001).

Table 1 provides a brief summary of the taxation treatment of superannuation across the five countries of this study. As noted, while it is possible to tax superannuation at three points – when contributions are made to the fund, when earnings are made on the invested assets of the fund, and when benefits are paid out of the fund – prior to the changes to take effect from 1 July 2007, Australia was the only OECD country

[5] The S2P replaced the Government reformed State Earnings-Related Pension Scheme (SERPs) in

that taxes superannuation at each of these three points (Bateman and Piggott 1996, Gollier 2000, Koch 2004). Under the Canadian system and that of the UK and the USA, contributions made to pension plans are exempt from tax, as are earnings on the plan, with tax only incurred on the benefits paid out of the plan at retirement (OECD 2001). New Zealand pension plans are taxed only when earnings are made on the fund, with both contributions and benefits tax exempt. Table 1 illustrates the taxation treatment of superannuation in each of the five countries of this study.

Table 1: Summary of the superannuation taxation systems of Australia, Canada, New Zealand, the UK, and the USA

Country	Contributions	Superannuation fund earnings	Retirement benefit income
Australia	Taxed @ 15%	Taxed @ 15% (effective rate 6%)	Exempt (from 1 July 2007)
Canada	Exempt	Exempt	Taxed (as income)
New Zealand	Exempt	Taxed @ 33%	Exempt
UK	Exempt	Exempt	Taxed (as income, with some exceptions)
USA	Exempt	Exempt	Taxed (as income, with some exceptions)

Adapted from Horne, 2002

A comparative scenario

To demonstrate the effect of Australia's superannuation taxation system, relative to that of the other countries of this study, a hypothetical scenario has been devised. In the scenario, we consider the case of a 25 year old Australian male who has recently entered the workforce. Using the Australian Securities and Investments

April 2002 (HM Treasury 2005).

Commission's superannuation calculator, FIDO[6], we have calculated the retirement benefit our employee could expect to receive had he been subject to the superannuation taxation structures of each of the five countries of this study (Australian Securities and Investments Commission 2005). To perform this calculation, the assumptions of the FIDO calculator have been used, in addition to those specified in the hypothetical scenario. A summary of these assumptions appears in Table 2.

Table 2: Assumptions

Characteristics of our hypothetical employee	
Gender	Male
Nationality	Australian
Current age	25
Expected age of retirement	65
Years to retirement	40
Life expectancy	82
Years in retirement	17
Annual starting salaries	$30,000, $60,000, $90,000, $120,000
Characteristics of the suerpannuation fund	
Annual superannuation contribution (Superannuation Guarantee Levy)	9%
Inflation	2.5%
Rise in community living standards	1%
Earnings rate before management costs and tax	8.5%
Taxation of superannuation contributions and earnings	
Australia	
Contributions tax	15%
Effective earnings tax	6%
Canada, United Kingdom, United States	
Contributions tax	0%
Effective earnings tax	0%
New Zealand	
Contributions tax	0%
Effective earnings tax	13.2%

As shown in Table 2, our 25 year old male is expected to retire at age 65 and, according to the Australian Life Tables, have a life expectancy of 82 years of age

[6] FIDO is the consumer website of the Australian Securities and Investment Commission, the consumer protection regulator for the financial services industry in Australia (Australian Securities and

(AMP 2005). The scenario has been constructed so that the taxation of superannuation can be studied at varying levels of income. Thus, the starting salary of our hypothetical employee will range from $30,000 per annum to $120,000 per annum. Table 2 also provides the assumptions and characteristics of the superannuation fund. In accordance with current Australian legislation, this man's employer contributes 9% of his pre-tax salary to a superannuation plan on his behalf.[7] It is assumed that there are no additional contributions paid to the fund and that, annually, the fund averages earnings of 8.5% on the amounts invested. Inflation is set at 2.5% per annum and the rise in community living standards is assumed to be 1% per annum. Given that the purpose of this scenario is to demonstrate the amount of tax paid on superannuation contributions and earnings, administrative fees and charges have been excluded from these calculations.

To apply this scenario to the superannuation taxation systems of the five countries in the study, these assumptions are held constant and the superannuation tax rates of each of the countries are applied to examine the effect of the differences in the tax treatments of superannuation. Thus, as shown in Table 2, the Australian superannuation contribution and effective earnings tax rates of 15% and 6% respectively are used. The assumptions were applied to the Canadian superannuation taxation structure, which attracts no contribution and earnings taxes. This is also the situation for the UK and the US. Superannuation taxation in New Zealand is only

Investments Commission 2005).

[7] This is the required contribution percentage as at 2004/05 financial year (Australian Taxation Office, 2005).

applied to earnings made on a superannuation fund, which is an effective tax rate of approximately 13.2%.[8]

Using FIDO, a calculation was performed to determine the retirement accumulation that would be available to our hypothetical employee at age 65 across each income stream and across each country of the study. The results are presented in Table 3.

Table 3: Retirement accumulation across each salary level, by country

Starting salary	$30,000	$60,000	$90,000	$120,000
	Accumulated retirement amount at age sixty-five			
Australia	$215,000	$430,000	$645,000	$758,000
Canada	$283,000	$566,000	$849,000	$1,017,000
New Zealand	$222,000	$443,000	$665,000	$797,000
United Kingdom	$283,000	$566,000	$849,000	$1,017,000
United States	$283,000	$566,000	$849,000	$1,017,000

As shown in Table 3, the retirement amounts accumulated by our hypothetical employee vary significantly depending on which country's superannuation taxation system is applied. If our employee had a starting salary of $60,000, under the Australian system, the amount available to him on retirement is estimated to be $430,000. However, if the retirement accumulation is calculated using the tax structures of Canada, the UK, or the US, the amount would be a substantial $136,000 or 31.6% greater. Applying the superannuation taxation structure of New Zealand, our employee would have $13,000, or 3%, more available to him on retirement.

These differences in end retirement accumulation available to our employee may have significant implications once he reaches retirement age. For example, assume

[8] The actual tax rate on earnings is 33% however when adjusted for imputation credit and returns, the real rate is approximated to be 13.2%.

that our hypothetical employee has now reached retirement age and is seeking to determine how much income he might expect to be able to draw from his savings in retirement. Using the assumptions specified in Table 2, he is expected to live until the age of 82, and inflation and expected increases in living standards are 2.5% and 1% respectively. To enable an effective comparison, it is also assumed that he requires an annual benefit rather than a lump sum payment. Calculated using a retirement income calculator (AMP 2005), Table 4 shows the annual retirement benefits that would be available to our employee during his retirement.

Table 4: Annual retirement benefit paid to employee by country (pre-tax)

Starting salary	$30,000	$60,000	$90,000	$120,000
	Annual retirement benefit			
Australia	$18,421	$36,843	$55,264	$64,946
Canada	$24,247	$48,495	$72,743	$87,138
New Zealand	$19,021	$37,957	$56,978	$68,288
United Kingdom	$24,247	$48,495	$72,743	$87,138
United States	$24,247	$48,495	$72,743	$87,138

Consistent with the results presented in Table 3, the annual retirement benefit is substantially lower under the Australian system, as shown in Table 4. Again assuming that our employee had began work with a starting salary of $60,000, the annual retirement benefit payable to him under the Australian system is estimated to be $36,843, compared to the $48,495 (31.6% more) available to him under the Canadian, UK, and US systems.

The calculations presented in Table 4 do not take into account the taxation liability that may be incurred on the annual retirement benefits because of the many and varied tax minimisation vehicles that are available for managing retirement incomes. However, theoretically, the retirement benefits will be subject to the individual tax rates of the applicable country, with the exception of New Zealand, which does not

tax retirement benefits, and Australia, which, from 1 July 2007, also does not tax retirement benefits. It should be noted that, prior to the changes resulting from the Federal Budget, taxation incurred on superannuation benefits attracted a 15% rebate, which largely offset the amount of tax incurred on retirement benefits.

To facilitate and simplify the calculation and analysis of tax incurred on annual retirement benefits, the theoretical amount of tax which may be incurred on these retirement benefits, according to each country's tax rates, have been calculated and are presented in Table 5. The individual income rates of each country, except for New Zealand and Australia, which do not tax superannuation benefits, are presented in Appendix 1.

Table 5: Annual retirement benefits and tax liability, by country

Starting salary	$30,000	$60,000	$90,000	$120,000
Australia				
Annual retirement benefit	$18,421	$36,843	$55,264	$64,946
Income tax applied to benefit (from 1 July 2007)	$0	$0	$0	$0
Annual retirement benefit net of tax	$18,421	$36,843	$55,264	$64,946
Canada				
Annual retirement benefit	$24,247	$48,495	$72,743	$87,138
Income tax applied to benefit	$3,880	$10,669	$18,913	$22,656
Annual retirement benefit net of tax	$20,367	$37,826	$53,830	$64,482
New Zealand				
Annual retirement benefit	$19,021	$37,957	$56,978	$68,288
Income tax applied to benefit	$0	$0	$0	$0
Annual retirement benefit net of tax	$19,021	$37,957	$56,978	$68,288
United Kingdom				
Annual retirement benefit	$24,247	$48,495	$72,743	$87,138
Income tax applied to benefit	$5,334	$19,398	$29,097	$34,855
Annual retirement benefit net of tax	$18,913	$29,097	$43,646	$52,283
United States				
Annual retirement benefit	$24,247	$48,495	$72,743	$87,138
Income tax applied to benefit	$3,280	$8,861	$14,995	$19,026
Annual retirement benefit net of tax	$20,967	$39,634	$57,748	$68,112

As shown in Table 5, even once the annual retirement benefit has been subject to the income tax provisions of each country, across most income streams, Australians are still worse off relative to the other countries of this study. Using the example of our employee with a starting salary of $60,000, his theoretical annual retirement benefit

net of tax would be $36,843 under the Australian system, compared to $37,826 in Canada, $37,957 in New Zealand, $29,097 in the UK, and $39,634 in the US.

Discussion and conclusions

Despite the introduction of the SG in 1992, which led to compulsory superannuation savings, there are fears that many Australians will be unable to support their retirement, instead continuing to rely on the government funded pension (Australian Chamber of Commerce and Industry 2000). This fear is more serious for some individuals, such as women who have taken time out of the workforce to raise a family and those aged 45 years and over, who have less time available in the workforce to accumulate adequate superannuation savings. Those individuals who do not contribute voluntarily to their superannuation fund, that is, over and above the amounts required under the SG, are likely to face an inadequate savings base for retirement (Australian Chamber of Commerce and Industry 2000). Therefore, the focus of Australian government policies has supposedly been on increasing measures that promote the self-funding of retirees to ensure that the retirement income system in Australia is viable in the long term (Australian Chamber of Commerce and Industry 2000).

Although taxation concessions have been the primary incentive scheme used to encourage retirement savings, it is evident from this study that Australia's taxation of superannuation contributions and earnings is onerous relative to the systems of our other four chosen countries, despite the proposed elimination of superannuation

benefits tax.[9] While Australian governments have espoused the view that superannuation taxation was never intended to be a revenue source, it is not difficult to see some merit in claims that superannuation taxes are in fact considered a "honey pot" of revenue with the Government collecting $5.8 billion in superannuation taxes paid on contributions and fund earnings in 2003-04 (Laurence 2004: 13). It is also worth noting that, from its inception in the 1997-98 financial year, the superannuation surcharge alone had collected $4 billion in taxation revenue for the government to 2004 (Laurence 2004).

These authors join with other superannuation commentators in suggesting that Australian taxation policies as they relate to superannuation are in dire need of reform (Bateman and Piggott 1997, King et al 1999, Knox 1996, Koch 2004, Laurence 2004, Piggott 2004, Price 1994). Indeed, a recent Senate Select Committee on Superannuation was formed to conduct an inquiry into "the adequacy of the tax arrangements for superannuation and related policy to address the retirement income and aged and health care needs of Australians" (Commonwealth of Australia 2002, cited in Horne 2002: 2). This inquiry received one hundred and fifty two submissions containing various reform proposals (Horne 2002). Reform suggestions often centre on the reduction of taxes on superannuation contributions and fund earnings and, recently, a reform package was passed which included tax cuts for high-income earners and superannuation co-contributions for low-income earners.

[9] As shown in Table 5, once the end benefits are taxed according to the superannuation taxation systems of each of the five countries of this study, the annual retirement incomes become more closely aligned. However, in this paper, the argument is against the Australian government's taxation of superannuation contributions and earnings, which (as shown in Table 4) have a substantial impact on the end benefit available to Australian retirees.

The high-income earners will benefit as a result of the abolition of the superannuation surcharge, effective from the 2005-06 financial year, and all retirees will benefit from the elimination of tax on amount withdrawn from superannuation funds from 1 July 2007. However, considering that the other countries of our study do not tax superannuation contributions at all, and that our hypothetical employee is adversely affected by the superannuation taxation structure of Australia even in the absence of the surcharge and benefits tax, the author's would argue that any taxation of superannuation contributions should be eliminated in full.

These reforms have been criticised for not providing benefits to the majority of Australians receiving average incomes (Koch 2004). The elimination of the superannuation surcharge, for example, means little to those within ten years of retirement and affects only five percent of high-income-earning Australian employees (Laurence 2004). To provide wider-reaching encouragement for superannuation savings, we support suggestions that the taxation on contributions and earnings should be eliminated altogether (Koch 2004).

Front loaded contributions taxes are counterproductive to encouraging Australians to plan for self-funded retirement. It would be far better to let contributions invested by being compounded forward and then tax future superannuation benefits at a fair marginal rate once the contributor retires. Such an approach would save money, encourage greater investment, and drastically reduce the complexity of the current tax system.

Appendix 1

Appendix 1: Individual income tax rates by country

Canada federal tax rates for 2005

Taxable income	Tax on this income
$0 - $35,595	16%
$35,596 - $71,190	22%
$71,191 - 115,739	26%
Over $115,739	29%

United Kingdom tax rates for 2004-05

Taxable income	Tax on this income
£0 - £2,020	10%
£2,021 - £31,400	22%
Over £31,400	40%

United States tax rates for 2004-05

Taxable income	Tax on this income
$0 - $7,150	10% of the amount over $0
$7,150 - $29,050	$715.00 plus 15% of the amount over 7,150
$29,050 - $70,350	$4,000.00 plus 25% of the amount over 29,050
$70,350 - $146,750	$14,325.00 plus 28% of the amount over 70,350
$146,750 - $319,100	$35,717.00 plus 33% of the amount over 146,750
Over $319,100	$92,592.50 plus 35% of the amount over 319,100

References

AMP, 2005, viewed 8 June 2005, <http://www.amp.com.au/au/1column/0,2340,CH3534%255FSI56,00.html>.

Association of Private Pension and Welfare Plans (APPWP), 2000, "Looking to the Future", viewed 8 June 2005, <www.americanbenefitscouncil.org/ newsroom/securereform.pdf>.

Australian Bureau of Statistics, 2005, viewed 8 June 2005, <http://www.abs.gov.au/ausstats/abs@.nsf/94713ad445ff1425ca25682000192af2/95560b5d7449b135ca256e9e001fd879!OpenDocument>.

Australian Chamber of Commerce and Industry (ACCI), 2000, "National Strategy for an Ageing Australia", viewed 8 June 2005, <http://www.acci.asn.au/text_files/submissions/Ageing_Australia_submission.pdf >.

Australian Prudential Regulation Authority, 2005, viewed 8 June 2005, <http://www.apra.gov.au/Statistics/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=8608>.

Australian Securities and Investment Commission, 2005, viewed 8 June 2005, <http://www.fido.asic.gov.au/fido/fido.nsf/byheadline/Superannuation+calculator?openDocument>.

Australian Tax Office, 2005, viewed 8 June 2005, <http://www.ato.gov.au/super/pathway.asp?pc=001/007/122&mfp=001/007&mnu=2213&st=tp#001_007_122>.

Barrett, J., and K. Chapman, 2000, "The Australian superannuation system", *Australian Prudential Regulation Authority*, pp.1-11.

Bateman, H., and J. Piggott, 1997, "Private pensions in OECD countries – Australia", *OECD Occasional Papers*, 23, pp. 1-89.

Calabrese, M., 2001, "Retirement security: the need for universal savings accounts", viewed 8 June 2005, <http://www.newamerica.net/Download_Docs/pdfs/Doc_File_67_1.pdf >.

Davis, E.P., 2000, "Is there a pensions crisis in the UK?", viewed 8 June 2005, <www.geocities.com/e_philip_davis>.

Department of Family and Community Service, 2005, viewed 8 June 2005, <http://www.facs.gov.au/internet/facsinternet.nsf/seniors/nav.htm>.

Department of Social Development, 2005, "Canada's Retirement Income System", viewed 8 June 2005, <http://www.sdc.gc.ca/en/isp/common/ris/rismain.shtml>.

Gavrilov L.A., and P. Heuveline, 2003, Aging of Population. In Demeny, P. and G. McNicoll, (Eds), *The Encyclopaedia of Population*, New York, Macmillan Reference, USA.

Gallery, N., 2003, "Forced saving: mandating private retirement incomes. Review of Forced saving: mandating private retirement incomes", *Economic Record*, 79, 244: 144-146.

Gollier, J., 2000, "Private pensions: regulatory issues", *Insurance and private pensions compendium for emerging economies*, 2, 2:1(d): 1-95.

HM Treasury, 2001, "Country Fiche on pension projections – UK", viewed 8 June 2005, <http://www.hm-treasury.gov.uk/documents/uk_economy/fiscal_policy/ukecon_fisc_index.cfm>.

Horne, J., 2002, "Taxation of superannuation in Australia: an assessment of reform proposals", Working paper, Macquarie University Australia.

James, E., 2001, "Reforming social security in the U.S.", *Business Economics*, January: 16-31.

Khan, Q., 1999, "Australia's retirement income system: an example of sustainable cost-effective coverage", Working paper presented at the Policy Implications of the Ageing of Australia's Population Conference.

King, A., A. Walker, and A. Harding, 1999, "Social security, ageing and income distribution in Australia", Working paper presented at the International Conference on Family, Social Policy and Financial Strategy.

Koch, D., 2004, "It's time to sort out this super mess", *The Sun-Herald*, 1 February: 4.

Knox, D.M., 1996, "Contemporary issues in the ongoing reform of the Australian retirement income system", *The Australian Economic Review*, 114: 199-211.

Laurence, M., 2004, "The fatal flaws in super", *Business Review Weekly*, March 25-31: 12-14.

Ministry for Social Development (MSD), 2003, "A description of New Zealand's current retirement income framework", *Periodic Report Group 2003 Working Paper:* 1-15.

McCulloch, B., and J. Frances, 2003, "Governance of public pension funds: New Zealand superannuation fund", Working paper presented at the 2nd Public Pension Fund Management Conference.

McDonald, H., J. Vieceli, and P. Darbyshire, 2003, "An analysis of the antecedents of satisfaction for superannuation fund members", *Journal of Financial Services Marketing*, 8, 1: 11-21.

Nicholson, A., 2000, “Self-Managed Superannuation Funds”, viewed 15 August 2004, <www.taxinstitute.com.au>.

Organisation for Economic Co-operation and Development (OECD), 1998, “Retirement income systems: the reform process across OECD countries”, *Aging Working Papers*, AWP 3.4: 1-83.

Organisation for Economic Co-operation and Development (OECD), 2001, “Comparative tables on private pension schemes”, *Insurance and private pensions compendium for emerging economies*, 2, 2:1(a): 1-55.

Pearse, J., 2001, “Overview of the Canadian Private Pension System”, viewed 28 July 2004, <www.inprs.org/data/countries/ reports/canadacountryreport.pdf>.

Piggott, J., 2004, “Super reform needs some serious action”, *Australian Financial Review*, 22 May: 70.

Price, M., 1994, “Australia’s pension maze”, *Pensions and Investments*, 22, 8: 21.

Randall, J., R. Higgins, and L. Goddard, 1996, *Superannuation*, Australian Tax Practice, North Ryde.

Rothman, G., 1993, “Tax Advantages of Investment in Superannuation –In Bad Times as well as Good”, viewed 8 June 2005, <http://rim.treasury.gov.au/content/rtf/CP03_1.rtf>.

Seniors.gov.au, 2005, viewed 8 June 2005, <http://www.seniors.gov.au>.

St John, S., 1993, “Tax and welfare reforms in New Zealand”, *The Australian Economic Review*, 104: 37-43.

St John, S., 1999, “New Zealand’s unique approach to retirement income”, Working paper presented at the 6th Asia/Oceania Regional Congress of the International Association of Gerontology.

Steuerle, C.E., 1999, “The Administration’s USA Account Proposal - Part Two: What’s Right About It”, viewed 5 August 2004, <http://taxpolicycenter.org/publications/template.cfm?PubID=8011>.

Tayor, M., 2006, “Budget pares back super tax regime”, viewed 23 May 2006, < http://www.superreview.com.au/articles/62/0c03fe62.asp>.

Williams, G., 1996, “Comparative accountability”, *Charter*, 67, 10: 50-51.

World Bank, 1994, *Averting the old age crisis*, Oxford University Press, USA.