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AUSTRALIA'S RETIREMENT INCOME
SYSTEM: IMPLICATIONS FOR
SAVING AND CAPITAL MARKETS

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ABSTRACT

Australia is in the early stages of introducing a system of self-provision for retirement through mandatory contributions to private superannuation funds. For most employees, the scheme will eventually replace, either fully or partially, the government age pension, currently relied upon by a large majority of retirees. The scheme has been implemented reasonably smoothly by building on existing financial infrastructure for voluntary superannuation. This paper summarizes the historical background of mandatory superannuation in Australia, reviews its potential impact on saving and capital markets, and highlights some remaining policy issues. Perhaps the most important of these is the impact of the system on retirement decisions. A number of features of the system contribute to incentives favouring early retirement and continued reliance on the government pension. Also important is the increasing complexity of the system, a result of the layering of rule changes and grandfathering of existing rights at each stage of the process.

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AUSTRALIA'S RETIREMENT INCOME SYSTEM: IMPLICATIONS FOR SAVING AND CAPITAL MARKETS

Malcolm Edey and John Simon

1. Basic Features of the Australian System

Australia is currently in the early stages of introducing a system of self-provision for retirement through mandatory contributions to private superannuation funds. The system will take several decades to mature but, when it does, will substantially replace the government age pension, currently relied upon by a large majority of retirees. Since the government pension is unfunded,¹ the overall transition represents a move from a predominantly unfunded to a predominantly funded basis for retirement incomes over the next few decades. In making this transition, Australia is one of relatively few countries moving towards a funded scheme, and is almost unique in adopting a system that is government-mandated but privately operated. The purpose of this paper is to outline the basic features of the Australian system and its historical background, and to give some analysis of its possible impact on saving and capital markets.

The current policy has been put in place through a series of initiatives, to be elaborated upon in Section 2, which began in the mid 1980s. The various initiatives did not follow a pre-announced plan, but nonetheless have progressively established an overall timetable for phased increases in mandatory saving which now has bipartisan political support. The first main step was the introduction of a mandatory employer contribution to approved superannuation funds on behalf of each employee, set initially at 3 per cent of salary. Subsequent policy decisions have provided for these to be increased, and to be supplemented by employee and government contributions, which together are scheduled to bring the total to 15 per cent of salary when the timetable is fully implemented in the 2002/03 financial year. Additional voluntary contributions are also possible. Although the maximum level of compulsory contributions is thus scheduled to be reached in only a few years from now, it will be some decades before the system matures in the sense of yielding maximum retirement incomes. Because final

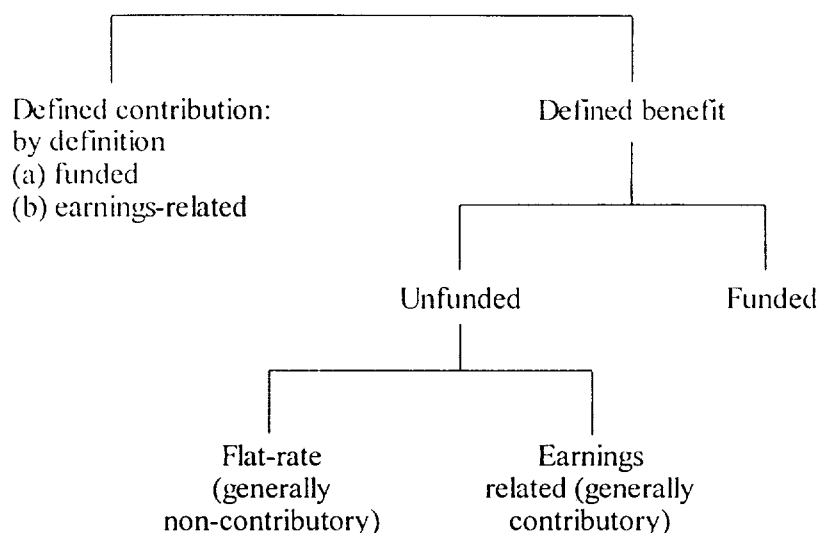
¹ That is, it is non-contributory and funded from general revenue.

benefits for each individual will depend on the amount of savings they accumulate, the maximum level of benefits accruing from the compulsory contributions will not be attained until retirement of the first generation with an entire working-life under the new system.

The superannuation funds which receive the compulsory contributions are, in contrast to many countries, privately run and managed. They are also typically defined-contribution plans. In introducing the new scheme, the government has been able to take advantage of the existence of an already-large superannuation sector, which handled voluntary savings of predominantly high income earners. This has meant that the compulsory scheme has been able to make use of a well-developed financial infrastructure already in place. In effect the government has decided to expand a savings vehicle in use by a minority through the introduction of mandatory contributions for all employees.

Traditionally, the main source of government provision for retirement income in Australia has been a flat-rate age pension, which provides a means-tested payment generally indexed to 25 per cent of average weekly earnings. This pension has existed for several decades and will remain in place as a safety net for those who do not accumulate sufficient private provision under the new system. The pension is funded from general government revenue and has never been contributory or related to an individual's previous income. Although the pension is means-tested and, in that sense, regarded as a safety net, it is currently the main source of income for more than 60 per cent of retirees.

To provide an international context for the Australian system the diagram below gives a simple taxonomy of possible retirement schemes.

Diagram 1: Taxonomy of Retirement Schemes

Many industrial countries have opted for various forms of unfunded but contributory defined benefit schemes. A common characteristic of such schemes is that end-benefits are related to an individual's contributions record, but that those benefits are not funded from contributions in an actuarial sense. This gives rise to a quasi-contractual set of unfunded liabilities of the social security system for future pensions. For countries with this type of system, an important consideration in any transition to a funded scheme concerns the treatment of these existing unfunded liabilities. In Australia, the transition envisaged is quite different, since the existing government pension is flat-rate and non-contributory, and does not involve unfunded liabilities in the same way as social security schemes in other countries.² The transition to a substantially reduced reliance on the government pension will occur as a gradual consequence of the accumulation of private savings as the new defined-contributions scheme matures. Application of the existing means test will eventually ensure reduced eligibility for the government pension, as privately provided retirement incomes are raised.

The country that bears the closest similarity to the new Australian scheme would seem to be Chile, which also requires compulsory contributions to approved private funds. However, in contrast to Australia, Chile had a pre-existing

² Governments, do however, have considerable unfunded superannuation liabilities to their own employees. The total unfunded liability to employees of all levels of government in Australia is estimated to be around \$100 billion, or around 20 per cent of GDP.

contributory pension with associated unfunded liabilities, and has therefore had significantly different transitional issues to deal with. Another important difference has been that Chile allows individual choice of the fund, whereas in Australia the choice is typically made by employers or unions; however, this is likely to change as the newly elected government has announced that it intends to give priority to allowing greater individual choice when future changes to the system are considered.

2. Background and Objectives

Australia first introduced an age pension in 1909. It was designed for poverty alleviation rather than as a comprehensive income support, and was tightly means-tested. Subsequently, however, the means tests were gradually relaxed and the system took on more of the nature of a general entitlement. The take-up rate increased substantially, from around 30 per cent when first introduced to a peak of around 85 per cent in the mid 1980s; this has since fallen slightly, partly as a result of various measures to tighten eligibility since that time.³ Although the pension provides a relatively low level of income support, its value is increased by a variety of health and public transport subsidies for which pensioners are also eligible, and there is some scope to earn supplementary private income. Also, in contrast to many countries, the large majority of elderly people own their own homes. The prominent role of the age pension across all but the highest income groups in the elderly population is illustrated by the summary of household characteristics presented in Table 1.

Voluntary superannuation has long been an important source of retirement income for a minority, comprising mainly high income earners and public-sector employees. As is common in many countries, voluntary superannuation savings benefited from generous tax treatment. Employer contributions, and earnings on accumulated contributions, were essentially tax-free prior to 1983, subject only to a final tax on 5 per cent of the accumulated lump-sum at retirement. The tax benefit was particularly valuable for taxpayers on high marginal tax rates, but was

³ For a discussion of this history, see Department of Social Security (1983) and Gruen (1985).

**Table 1: Households Where Head of Household is Over 65:
Characteristics by Income Quintiles**

| | 1 | 2 | 3 | 4 | 5 | Total |
|--|--------|--------|--------|--------|--------|--------|
| Average weekly household incomes(\$) | 129.16 | 196.73 | 273.21 | 351.19 | 790.81 | 348.68 |
| Proportion of income from government benefits (%) | 106.40 | 84.60 | 84.90 | 66.50 | 22.30 | 54.40 |
| Average no. of persons per household | 1.11 | 1.08 | 1.83 | 1.89 | 2.32 | 1.65 |
| Proportion of households in group which own house outright (%) | 71.00 | 67.30 | 80.00 | 79.70 | 87.70 | 77.10 |

Source: Household Expenditure Survey 1993-1994, ABS Cat. No. 6531.0.

not necessarily attractive for low income earners for whom a significant factor in savings decisions could be the potential impact on entitlement for the government pension. Tax concessions for superannuation were substantially curtailed in 1983 with the introduction of a 30 per cent tax on lump-sum benefits accrued after that date, and the system was further tightened by changes made in 1988 and subsequent years, including introduction of a tax on fund earnings. Nonetheless, the tax treatment of superannuation remains concessional in a number of ways that are discussed further below.

The move to a system of compulsory superannuation had its origin in centralised wage negotiations that took place in 1985 and 1986. The federal government agreed to support a claim by the ACTU for a 3 per cent employer-provided superannuation benefit to be incorporated in employment awards in lieu of a general wage increase. This was endorsed by the Industrial Relations Commission in June 1986. The move was advocated as a means of making superannuation more widely available, and it was also seen as furthering macroeconomic goals by promoting private saving. As a result of the decision, the 3 per cent superannuation benefit was gradually incorporated in employment awards as they came up for renegotiation. These payments were directed either into existing funds or into union-created 'industry' funds which in other respects were the same as those already in existence (ie managed by private funds management firms).

In 1991 the government announced a significant expansion of compulsory superannuation, along with the introduction of a new compliance mechanism known as the Superannuation Guarantee Charge (SGC), which gave the system the basic shape it has today.⁴ The SGC legislation established a timetable for employer contributions to be increased to 9 per cent in most cases by the 2000/01 financial year, with tax penalties for non-compliance.⁵ Further measures were announced in 1995 to encourage additional contributions of 3 per cent by employees, to be supplemented by a matching contribution from the federal government, thus bringing the total level of contributions eventually to 15 per cent; strictly speaking, these employee contributions were not legislated but to be implemented through industrial negotiations, with the government co-contribution acting as an incentive. The move to a legislated system for employer contributions was partly a response to problems of administrative complexity and slow compliance under the award-based system. Award superannuation did not cover some significant parts of the workforce (for example the self-employed and part-time workers) and was taking longer than anticipated to implement because of negotiation delays.⁶ As shown in Table 2, superannuation coverage has widened substantially as a result of these measures.

The broad parameters of the compulsory superannuation policy have bipartisan political support, with the newly-elected government in 1996 having endorsed the overall targets set by the previous government, although not necessarily the implementation method for employee contributions. The new government announced further changes in the 1996/97 Budget including the introduction of Retirement Savings Accounts and a number of changes to the taxation of superannuation.

⁴ Full details are set out in 'Superannuation Guarantee Levy: Information Paper' (1991).

⁵ Vesting and preservation requirements were also standardised. Benefits were now required to be fully vested in the employee immediately, and to be preserved in a superannuation fund until at least age 55.

⁶ 75 per cent of employees had superannuation coverage by 1991, five years after the initial decision by the Industrial Relations Commission.

Table 2: Superannuation Coverage

| | Public sector | | Private sector | | All employers | |
|---------|---------------|-------------------|----------------|-------------------|---------------|-------------------|
| | % covered | % of labour costs | % covered | % of labour costs | % covered | % of labour costs |
| 1985/86 | | | 32.3 | 3.3 | | |
| 1986/87 | 63.4 | | 31.8 | 3.4 | 41.6 | |
| 1987/88 | 68.0 | | 34.1 | 3.5 | 44.0 | |
| 1988/89 | 90.4 | | 40.7 | 3.2 | 54.8 | |
| 1989/90 | 91.7 | | 56.9 | 3.8 | 66.9 | |
| 1990/91 | 93.9 | 6.0 | 67.5 | 3.9 | 75.3 | 4.6 |
| 1991/92 | 94.6 | 6.4 | 70.7 | 4.2 | 77.6 | 4.9 |
| 1993/94 | 97.0 | 6.9 | 89.4 | 4.9 | 91.5 | 5.6 |

Source: ABS Cat. No. 6348.0.

Introduction of the compulsory superannuation plan reflected a combination of policy concerns broadly related to the issue of raising aggregate saving. Like a number of other industrial countries, Australia has an ageing population structure. However, the aged dependency ratio is still quite low and is not projected to rise as steeply as elsewhere (Table 3), so it is ironic that Australia has moved comparatively early to establish the basis for a funded scheme. The timing of the initial move to award-based superannuation was in a sense accidental, and reflected the intricacies of the wage-bargaining process at the time. Nonetheless, the general policy thrust reflected underlying objectives of raising aggregate saving (an important macroeconomic objective in its own right) and of providing funded retirement incomes for the majority of employees. Once the principle of mandatory contributions was established, subsequent extensions to the scheme were aimed at increasing those contributions to a level high enough to ensure these objectives could be adequately met.

The objective of increasing national saving in Australia has been on the policy agenda since at least the mid 1980s, when a chronically large current account deficit became apparent. The deficit reached 6 per cent of GDP at that time and has since continued to fluctuate mainly in the 3 to 6 per cent range, regarded by the government and many other observers as uncomfortably high. It is also the

Table 3: International Comparison of Aged Dependency Ratios

| | 1960 | 1990 | 2000 | 2010 | 2020 | 2030 |
|----------------|------|------|------|------|------|------|
| Australia | 13.9 | 16.0 | 16.7 | 18.6 | 25.1 | 33.0 |
| Canada | 13.0 | 16.7 | 18.2 | 20.4 | 28.4 | 39.1 |
| France | 18.8 | 20.8 | 23.6 | 24.6 | 32.3 | 39.1 |
| Germany | 16.0 | 21.7 | 23.8 | 30.3 | 35.4 | 49.2 |
| Italy | 13.3 | 21.6 | 26.5 | 31.2 | 37.5 | 48.3 |
| Japan | 9.5 | 17.1 | 24.3 | 33.0 | 43.0 | 44.5 |
| United Kingdom | 17.9 | 24.0 | 24.4 | 25.8 | 31.2 | 38.7 |
| United States | 15.4 | 19.1 | 19.0 | 20.4 | 27.6 | 36.8 |

Source: World Bank (from OECD Research Paper No. 156).

case that Australia is a relatively low-saving country, at both national and household levels, as discussed further in Section 5. This combination of facts created a powerful *prima facie* argument for policies to promote aggregate saving. One important dimension of the policy debate has related to the role of fiscal policy, where there has been considerable emphasis on the need to improve cyclically-adjusted budget balances.

There is also widespread agreement in Australia on the desirability of promoting private saving. Households are argued to undersave for a variety of reasons, including an inherent tendency to discount the future too heavily, and disincentives to private saving created by the government pension system. Regarding the latter, the system is argued to have created significant incentives for low and middle income earners to qualify for the age pension by not saving 'too much'.⁷ The high take-up rate of government pensions, discussed earlier, is often cited as support of this view. Purely incentive-based approaches to promoting private saving, as existed under the pre-1983 taxation arrangements, appeared to have little impact on saving by low and middle income earners. Given this background, and the objective of ensuring comprehensively-available retirement support, the move to a compulsory saving system seems a logical outcome. The existence of a significant private superannuation system when the policy was

⁷ For a review of these arguments, see Freebairn, Porter and Walsh (1989), Edey and Britten-Jones (1990), Robinson (1992), Bateman and Piggott (1993) and FitzGerald (1996).

introduced, and a desire to achieve maximum returns, were probably both important factors in ensuring that a privately-run system was the preferred option.

3. Tax Treatment

The tax rules for superannuation are extremely complex and can only briefly be outlined here. Important changes to the tax rules were made in 1983, 1988, 1992, and 1996, which generally reduced the tax benefits to superannuation, although the treatment remained concessional. These changes, and the current system, are described in detail in Appendix A. Changes were generally grandfathered at each stage, so that retirees would receive benefits taxed under a variety of rules depending on when contributions were made. The following description outlines basic features of the rules as they currently apply to new contributions.

The system distinguishes between contributions by employees (which are still largely voluntary) and those made by employers.⁸

Employee contributions are made from after-tax income. These contributions, in nominal terms and excluding the earnings they generate, are effectively available to be returned to the contributor after retirement without being further taxed. Earnings however are taxed in the same way as earnings from employer contributions, as outlined below.

Employer contributions, and earnings on contributions from either source, are taxed in the following way. Contributions are tax deductible to the employer, but are subject to a 15 per cent tax on entry to the fund. Following changes announced in the 1996/97 Budget, this tax rate rises to 30 per cent for high income earners (see Appendix A for details). Fund earnings are then subject to a 15 per cent tax each year as they accrue.⁹ The taxation of final benefits financed by employer contributions and earnings depends on the form in which the benefits are taken.

⁸ Special rules apply to the self-employed, effectively allowing them 'employer' tax treatment on part of their contributions, which is more favourable than 'employee' treatment.

⁹ The actual tax paid is much less because funds are able to benefit from imputation credits for company tax already paid on their dividend receipts. These credits can be applied against taxable income from other sources, substantially reducing the overall tax liability.

Annuities are subject to normal personal income tax as payments are made, less a 15 per cent rebate which is a form of compensation for the tax already paid on entry to the fund. Lump sum payouts are taxed at a standard rate of 15 per cent (plus the Medicare levy) on amounts in excess of a tax-exempt minimum. The relative attractiveness of the two types of benefit will depend on a number of factors including the size of the overall benefit and the retiree's income from other sources.¹⁰

All of the concessional treatment implicit in these arrangements is subject to Reasonable Benefit Limits (RBLs). These set the maximum amount of concessional tax benefits a person may receive in a lifetime, so that benefits exceeding those limits are subject to standard marginal tax rates. The limits are higher for benefits taken in the form of annuities than for lump sums, a mechanism for discouraging the use of lump sum benefits. Changes introduced in 1992 substantially reduced the RBLs for high income earners, by expressing RBLs as flat rates rather than as multiples of income.

In its broad structure the tax system for superannuation can be described as embodying a hybrid between expenditure-tax and income-tax principles.¹¹ Under a pure expenditure-tax treatment, saved income (that is, contributions and fund earnings) would be tax-free while post-retirement expenditure (roughly equivalent to the annuity payment) would be taxed at standard rates. The various concessional elements in the tax treatment outlined above go some way toward approximating such an outcome. For employer contributions, if we do the mental exercise of offsetting the contributions tax against the post-retirement rebate, then contributions would be viewed as tax-free, with annuity benefits taxed at the standard marginal rate. Since fund earnings are only lightly taxed during the accumulation phase, the overall treatment of employer contributions could therefore be said to resemble that of an expenditure tax. Employee contributions are less favourably treated, because they are made from after-tax income but still give rise to taxable earnings during the accumulation period and in retirement. Again, however, the taxation of earnings on these savings is considerably lower than would be the case outside the superannuation system.

¹⁰ For an analysis, see Atkinson, Creedy and Knox (1995).

¹¹ A similar view is expressed by Covick and Lewis (1993).

The tax concessions for superannuation have a significant revenue cost, estimated in 1994/95 to be \$7.3 billion, or around 1.6 per cent of GDP. Most of this cost is accounted for, in roughly equal amounts, by the concessional tax rates applying to employer contributions and to fund earnings. These estimates are calculated relative to a baseline under which superannuation is taxed in the same way as other financial saving, which in Australia is essentially an income-taxation system. Some commentators such as Bateman and Piggott (1996) and FitzGerald (1996) argue that this is not the appropriate baseline and that the revenue costs are therefore overstated.

4. Role of Superannuation in the Financial Sector

Assets of superannuation funds and life insurance offices have fluctuated mainly in a range of around 20 to 25 per cent of the Australian financial system in recent decades.¹² They are currently around 26 per cent, having risen strongly in recent years, and this share could be expected to increase further in future decades as compulsory contributions accumulate. The historical importance of these institutions reflected the significant use of superannuation as a voluntary savings vehicle, as has been discussed above, and was in part a result of their tax-favoured status. There are currently over 100,000 superannuation funds in Australia, which range from the very large (the ten largest fund managers control around 60 per cent of the assets) to the so-called do-it-yourself (DIY) funds with only a few members.¹³

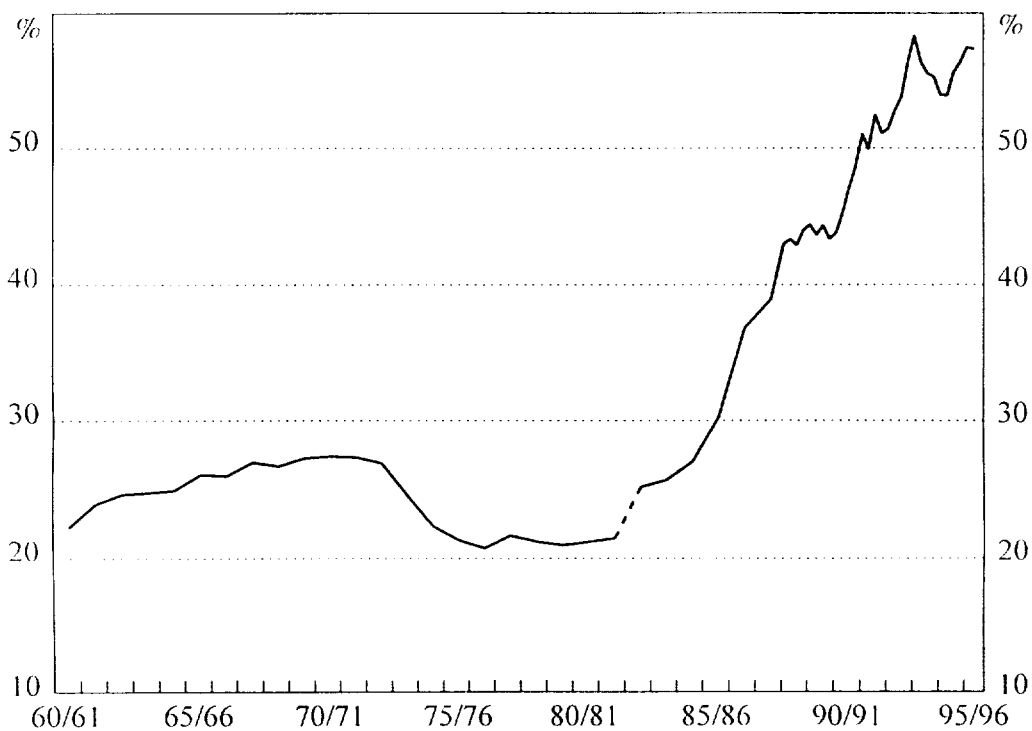
Trends in the superannuation sector's overall size and its sources of funds are summarised in Figures 1 and 2. Broadly, the historical growth of the superannuation sector can be divided into three phases. The first phase, which ended in the early 1970s, was one of moderate and fairly steady growth. In the second phase, which comprised most of the 1970s, superannuation assets shrank relative to nominal GDP, largely reflecting poor earnings performance and high

¹² For statistical purposes it is useful to treat life insurance and superannuation funds as a single aggregate because their activities are similar and much of the historical data does not distinguish between the two.

¹³ The situation is complicated by the fact that the major fund-management groups can run large numbers of separately constituted superannuation funds.

inflation. The third phase, from the early 1980s onward, has been one of rapid expansion in which total assets more than doubled as a ratio to GDP, although this may have slowed down in the latest few years. The data presented in Figure 2 divide the sources of superannuation asset growth between net new contributions and a residual representing earnings on existing assets and capital gains. Although net contributions have fluctuated significantly in some periods, it is apparent that most of the variation in overall growth performance is attributable to variation in the earnings and capital gain component, rather than in contributions.¹⁴ The three growth phases outlined above correspond broadly to periods of moderate, negative, and high real rates of return on financial assets, as summarised in Table 4.

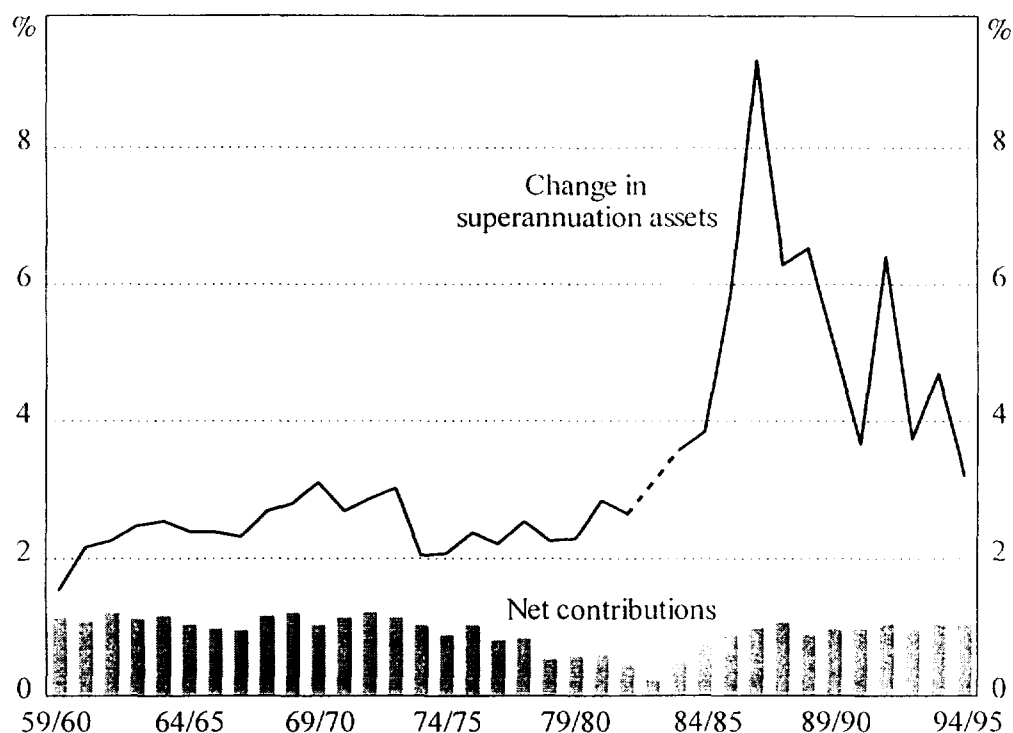
Figure 1: Assets of Life Offices and Superannuation Funds
Per cent of GDP



Source: ABS Cat. No. 5232.0 and Reserve Bank of Australia Occasional Paper No. 8.

¹⁴ Capital gains are likely, however, to be understated in the 1960s and 1970s, and overstated in the early 1980s, as a consequence of the widespread use of historical-cost valuations prior to the 1980s.

Figure 2: Net Contributions and Growth in Superannuation Assets
Per cent of GDP



Source: ABS Cat. No. 5204.0.

Table 4: Superannuation Fund Earnings Rate

| | Average earning rate | Inflation rate |
|-------------|----------------------|----------------|
| 1960s | 5.2 | 2.5 |
| 1970s | 6.8 | 9.8 |
| 1980s | 14.9 | 8.4 |
| Early 1990s | 6.8 | 3.0 |

Source: ABS Cat. Nos 5204.0 and 6401.0.

On the basis of currently available data, aggregate net contributions to superannuation funds do not yet show the upward trend expected to result from the compulsory plan.¹⁵ A number of possible reasons can be given for this. First, there is likely to be a strong cyclical influence on net contributions. They fell substantially in the recession of the early 1980s, when withdrawals related to early retirements were likely to have been particularly important. This may again have

¹⁵ These data should be interpreted cautiously, however, as they have in the past been subject to substantial revision.

been a factor in the early 1990s. In addition, many voluntary schemes contain a tranche of employee-contributed funds which do not have to be preserved to retirement but can be withdrawn on leaving a job.¹⁶ There is also provision to allow early withdrawal of funds in cases of hardship. For all these reasons, recessions can be expected to result in significantly increased withdrawals from superannuation funds as jobs are lost. Second, many employers were already satisfying, at least partly, the requirements of the compulsory plan under pre-existing voluntary arrangements. This has allowed some scope for absorption of the compulsory scheme into existing arrangements, and has meant that the aggregate effect of the new compulsory schedule has so far been relatively small; but it can be expected to increase as the mandatory contributions rate increases significantly above levels currently prevailing. Third, an important factor in the second half of the 1980s was the phenomenon of overfunding of existing defined-benefit schemes. High rates of return meant that surpluses were accumulated in many of these schemes, enabling the employers who sponsored them either to withdraw funds, or to finance their superannuation liabilities with reduced contributions. Finally, it is possible that increased tax rates on superannuation savings after 1983 have discouraged voluntary contributions.¹⁷

These factors provide a useful qualitative explanation for the behaviour of aggregate contribution rates. However there is no direct way of measuring their quantitative impact and thus arriving at some measure of an ‘underlying’ trend in contributions. This is an important issue for further investigation since, as discussed below in Section 5, the capacity of the scheme to meet its objectives hinges critically on its compulsory nature and on the ability to discourage unintended leakages.

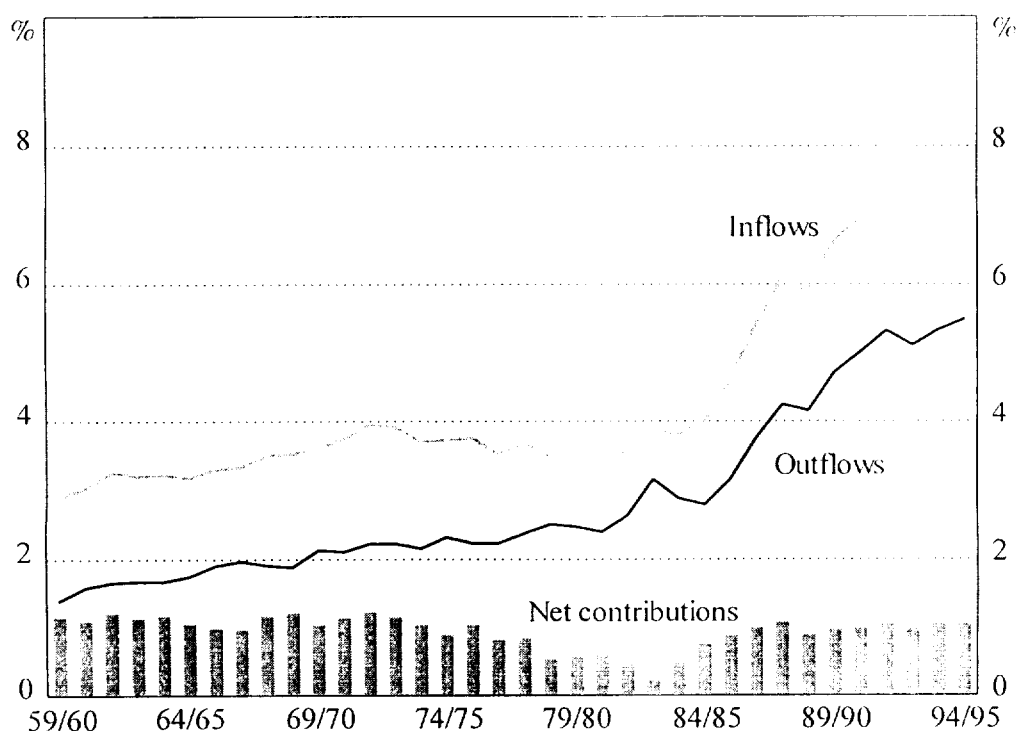
One important dimension of this issue is the growth of ‘rollover’ funds, created in 1983 as a vehicle for deferring tax liabilities by preserving withdrawn benefits

¹⁶ Recent regulatory changes restrict this right of withdrawal, subject to grandfathering of existing withdrawable amounts.

¹⁷ There is also a serious longer-term policy concern: the potential for funds to leak from the compulsory scheme due to incentives favouring early retirement and dissipation of accumulated savings. See FitzGerald (1996).

within the tax-favoured system.¹⁸ Funds withdrawn as a result of leaving a job can be deposited in a rollover fund until required to be drawn upon, and continue to be treated for tax purposes like other superannuation funds. They can also be moved from one such fund to another at the discretion of the member. Rollover funds are a relatively small component of the superannuation system by assets (around 5 per cent in 1995) but, because they are mobile at the member's discretion, they are responsible for a large part of the gross flows illustrated in Figure 3. Part of the impetus for this increased turnover in the early 1990s probably came from increased redundancies and early retirements.

Figure 3: Life Offices and Superannuation Funds
Inflows and Outflows
 Per cent of GDP



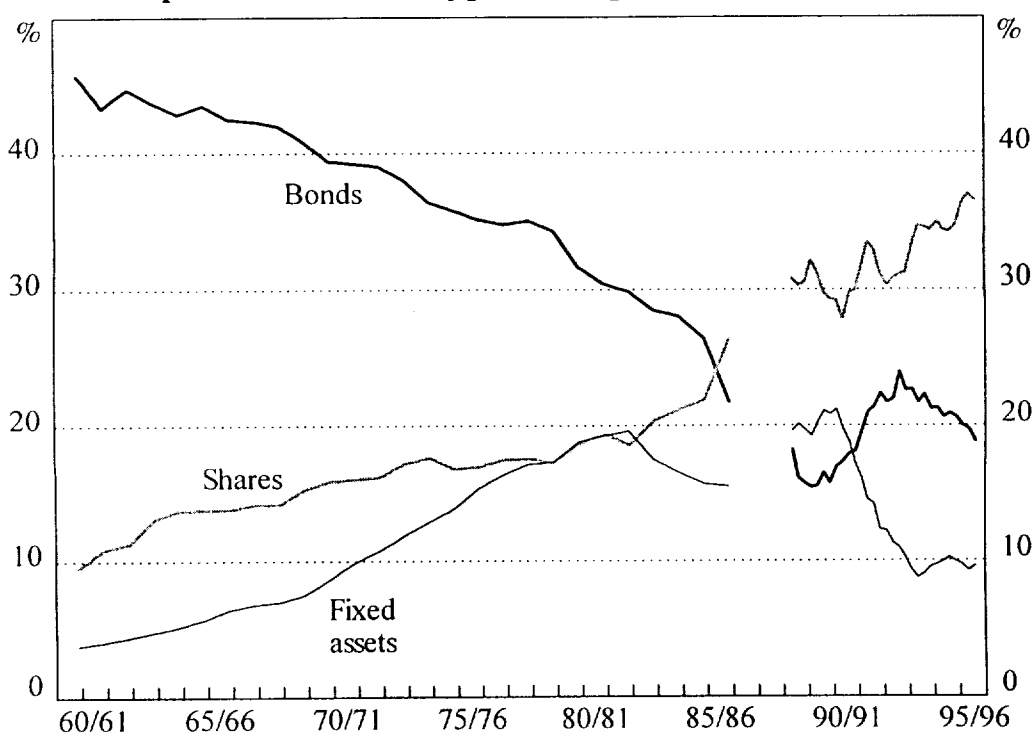
Source: ABS Cat. No. 5204.0.

Assets of superannuation funds are invested across a wide spectrum of traditional investments, with no important portfolio restrictions other than a limit of 10 per cent on the proportion of funds that can be invested with the sponsoring employer. Investments in the broad categories of equities, bonds and property are

¹⁸ Following rule changes in 1992, rollover-fund operations as described here can now be carried out within ordinary superannuation funds.

shown in Figure 4. The predominant trends have been a substantial reduction in the portfolio share of bonds and a rise in that of equities over the past three decades. Property investments had also been on an upward trend over much of the period but fell sharply at the end of the 1980s and in the early 1990s, largely reflecting valuation effects following the collapse of the property market. The long-term reduction in bond portfolios is likely to have been a consequence of removal of earlier portfolio restrictions setting minimum holdings of government bonds,¹⁹ along with a trend decline in public sector debt ratios which reduced the available supply. Holdings of foreign assets are not separately shown on the figure as consistent data are unavailable for much of the period. However, their portfolio share has grown rapidly in recent years and is currently around 13 per cent. A more detailed snapshot of the asset allocation as at end 1995 is presented in Table 5.

Figure 4: Superannuation Funds Asset Allocation
Proportion of Asset Types in Superannuation Funds



Source: ABS Cat. No. 5232.0 and Reserve Bank of Australia Occasional Paper No. 8.

¹⁹ Until 1981, funds were required to hold at least 30 per cent of their assets as government bonds.

Table 5: Assets of Superannuation Funds
December 1995

| | \$ billion | % |
|--------------------------------------|--------------|------|
| Cash and short-term bank instruments | 40.4 | 14.5 |
| Loans | 20.7 | 7.4 |
| Fixed interest | 53.7 | 19.2 |
| Equities | 99.2 | 35.6 |
| Property | 24.2 | 8.7 |
| Foreign | 37.2 | 13.3 |
| Other | 3.4 | 1.2 |
| Total | 279.0 | |

Source: ABS Cat. No. 5232.0.

The superannuation sector is projected to expand considerably in future decades as the compulsory increases in contributions take effect. One estimate suggests an approximate doubling of the sector in relation to GDP, from 40 to 76 per cent of GDP by the year 2020.²⁰ This policy-induced expansion raises a number of issues concerning the competitive position of superannuation within the financial system and the size of superannuation funds in the markets in which they operate. Some observers have argued that growth of the superannuation sector will in some degree occur at the expense of banks, or will occur in a way that increases competitive pressure on banks.²¹ Another issue is the possibility that the superannuation funds will 'run out' of domestic assets to purchase as they expand, or that their holdings of such assets will grow to a point where they significantly change the characteristics of domestic asset markets. These issues are closely related to the question of how effective compulsory superannuation will be in generating additional saving rather than displacing existing forms of saving. To the extent that new saving is generated, it could be expected to lead to a general expansion of the financial system and of the supply of domestic assets, along with an accumulation of foreign assets, rather than drawing funds from other domestic financial institutions.

²⁰ Knox (1995). The estimates are for the superannuation sector excluding life-office business.

²¹ See, for example, Thom (1992).

A good general case can be made that there has in the past been relatively little competitive overlap between banks and the superannuation sector, although in some respects this competitive separation seems to be breaking down, particularly on the liabilities side. On the asset side of these institutions' balance sheets, the competitive separation has been strong. Superannuation funds invest primarily in securities while the traditional core business of banks is in non-securitised lending.²² Banks' traditional lending activities now represent a declining proportion of their balance sheets and profits, but this is part of a worldwide phenomenon related to improvements in financial technology associated with securitisation,²³ and does not particularly seem to reflect competition arising from the growth of superannuation funds. While the trend of increasing securitisation seems likely to continue, the potential erosion of banks' competitive position with respect to traditional lending can easily be overstated. As noted by Tease and Wilkinson (1993), banks continue to have a natural specialisation in borrower risk assessment, and this is likely to remain important even when loans are increasingly in securitised form.

There is also a clear difference between the liability structures of these two classes of financial institutions. Superannuation fund liabilities are the long-term savings of their members, whereas bank liabilities are a combination of transaction balances, short-term savings and marketable debt instruments. As is documented by Edey, Foster and Macfarlane (1991), the banking system in Australia has not traditionally been an important vehicle for longer term saving, and the shorter-term balances held by households with banks bear a fairly stable relationship with household income. These balances do not seem likely to be closely substitutable by compulsory superannuation balances. Nonetheless, the competitive separation between banks and superannuation funds on the liabilities side seems to be breaking down at the margin. One important aspect of this is the growth of rollover funds, which are tax-favoured superannuation vehicles but which do have some of the characteristics of shorter-term savings, since their funds are highly mobile and not necessarily locked in for long periods. Also important is that the superannuation sector is itself an important provider of funds to other parts of the financial system. From Table 5, around \$40 billion, or

²² This distinction is discussed in the Australian context by Tease and Wilkinson (1993).

²³ For a recent analysis of this global trend, see Bisignano (1995).

15 per cent of superannuation assets are currently held as bank securities or deposits with financial institutions, a significant proportion of these institutions' liability base. Growth of these 'wholesale' sources of funds to the banks represents a potential source of upward pressure on their average cost of funds. However, the role of superannuation in this process should not be overplayed because it is part of a trend that would be likely to occur anyway, through the growth of money market mutual funds and the increasing sophistication of retail depositors.

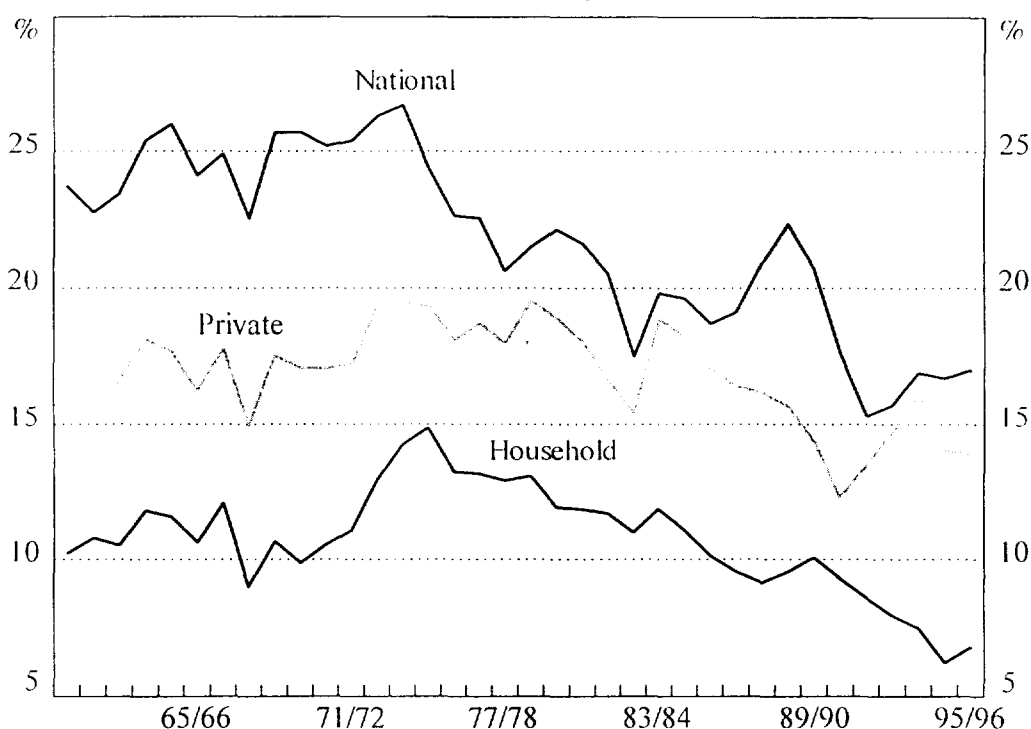
These competitive issues have led some banks to move into the superannuation area by establishing life-office subsidiaries or forming partnerships with existing major life offices. More recently it has been announced that banks will be allowed to participate directly in some superannuation business by offering retirement savings accounts. Further issues concerning institutional distinctions between different parts of the financial sector, and their regulatory-policy implications, are the subject of a current government inquiry.

5. Impact on Saving

As has already been noted, Australia's gross national saving rate has historically been below OECD averages and has declined substantially in the past two decades. Much of this decline, illustrated in Figure 5, is attributable to reduced saving by the public sector. Gross private saving, as conventionally measured, has also been declining, though at a lesser rate, while household saving declined somewhat faster than the private sector total. In interpreting private-sector saving trends, Edey and Britten-Jones (1990) argued for a focus on aggregate private saving rather than on the separate household and corporate-sector components, since the exact boundary between them is somewhat arbitrary and there has historically been a high degree of offset between the two forms of saving. They also calculated an inflation adjustment of the private saving aggregate which corrects for the wealth transfers between public and private sectors effected by inflation. The adjustment has the effect of lowering the peak in private saving recorded in the 1970s and produces an estimate of the gross private saving rate that has been fairly flat, at least until recently. Net private saving, however, has

still shown a trend decline, reflecting an upward trend in the ratio of depreciation to income.²⁴

Figure 5: Household, Total Private Saving and National Saving
Gross savings measures, per cent of GDP



Source: ABS Cat. No. 5204.0.

Since there has not yet been a sustained increase in superannuation contributions, for the reasons described in the previous section, the historical data do not provide any direct basis for inferring what is the likely impact of compulsory superannuation on aggregate saving. The answer to this question will depend critically on the extent to which superannuation displaces other forms of saving. A historical estimate of the degree of offset between the two categories of saving, reported by Morling and Subbaraman (1995), obtained the rather high figure 0.75, implying around three-quarters of a given change in superannuation saving would be offset elsewhere. But this estimate is derived from a historical sample dominated by the voluntary contributions of mainly high income earners, and is unlikely to have much bearing on behaviour under the compulsory scheme, as the authors themselves acknowledge. The move to compulsory contributions and the

²⁴ Edey and Britten-Jones (1990) also argue that the depreciation estimates may be unreliable, so they prefer a focus on the gross figures.

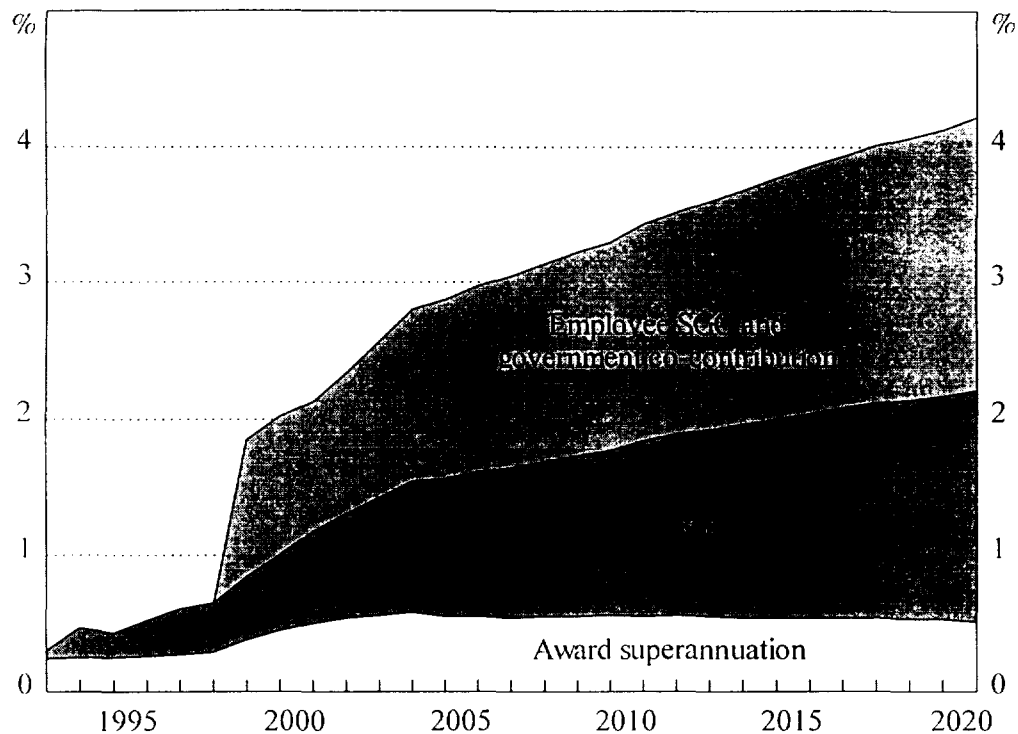
expansion of coverage of the system among low income earners, who are more likely to be liquidity constrained, can be expected to reduce substantially the degree of substitution between superannuation and non-superannuation saving in the future. Other studies have cited lower offset coefficients. FitzGerald (1993) uses a coefficient of 0.5 while Covick and Higgs (1995) estimate a figure of 0.37 and cite international evidence for figures of around one-third.

Projections of the effect of the compulsory scheme have been made by the Retirement Income Modelling Task Force, using an assumed offset-coefficient of one-third.²⁵ A summary of these projections is presented in Figure 6, which shows the estimated additions to saving relative to a baseline scenario.²⁶ A sharp increase in aggregate saving is projected at the end of the current decade when the employee and government co-contributions come into effect. By the year 2003, when the schedule is fully implemented, saving is projected to have increased relative to the baseline by around 3 per cent of GDP. The peak effect is reached much later, reflecting subsequent reinvestment of fund earnings and the fact that significant increases in retirement rates do not occur until some time later. The projections take into account the fiscal revenue cost of superannuation tax concessions as applied to the increased contributions, and also the beneficial effect of reduced government pension outlays; these are eventually projected to fall by around one per cent of GDP when the system matures. However, a point of caution is that the funding for the government co-contribution in these projections comes from *not* proceeding with tax cuts that were already announced, but not yet implemented, when this component of the scheme was adopted. These tax cuts are included in the baseline scenario. Also included in the baseline is the cost of tax concessions applied to the existing level of voluntary contributions.

²⁵ The Task Force is jointly sponsored by the Treasury, Department of Finance, and Department of Social Security. Non-official estimates of the impact of employer contributions give broadly similar results. See Bateman and Piggot (1992), AMP (1995), Corcoran and Richardson (1995) and Covick and Higgs (1995).

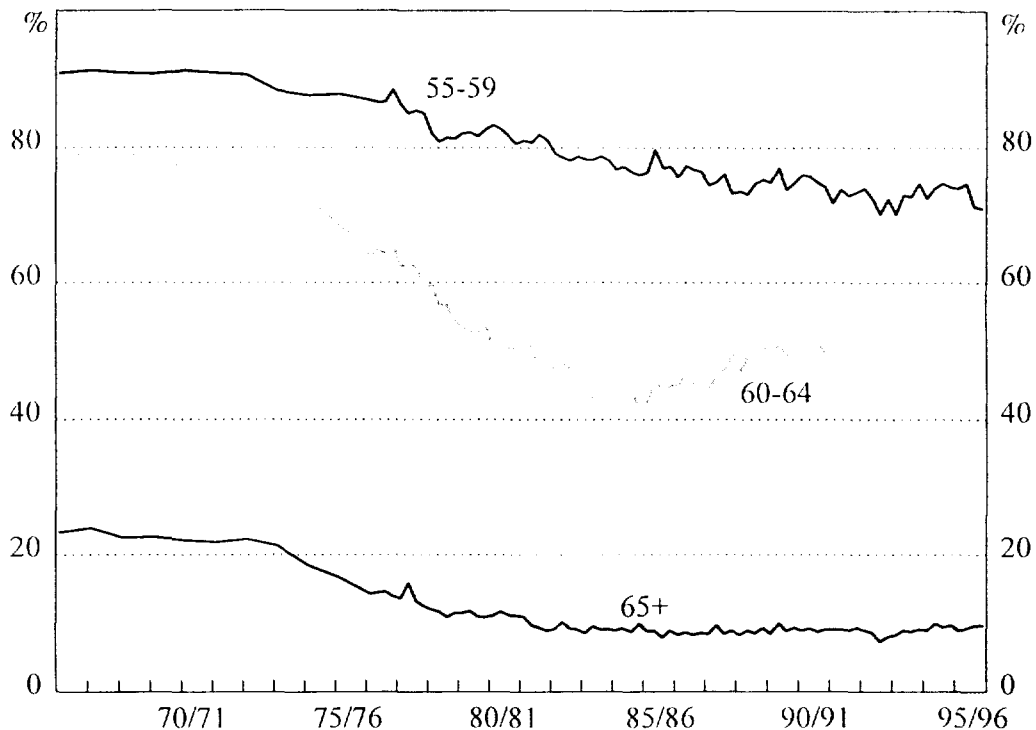
²⁶ The projections are discussed in 'Saving for Our Future' (1995).

Figure 6: RIM Projections
Addition to National Savings
 Per cent of GDP



Source: RIM Task Force.

An important dimension of the overall impact of compulsory superannuation concerns its likely impact on behaviour of those around the retiring age. In Australia there was a substantial increase in the rate of early (that is, pre-65) retirement in the 1970s and 1980s, as illustrated by the declining male labour-force participation rates for older age-groups, shown in Figure 7. Anecdotally this trend is often argued to have been encouraged by the phenomenon of 'double dipping'. This is where individuals who have accumulated moderate amounts of superannuation savings retire early, consume the bulk of those savings and then qualify for the government pension at age 65. Such a strategy is thought to be attractive where individuals have accumulated enough savings to reduce entitlement to the government pension, but not enough to generate a private income in retirement that would substantially exceed the pension. More generally, the interaction of the personal income tax system with the means testing of the government pension is argued to create very high effective marginal tax rates on saved income for some groups, and therefore to encourage low rates of labour participation.

Figure 7: Participation Rate – Males

Source: ABS Cat Nos 6204.0 and 6203.0.

It is possible that this disincentive effect, acting in the years just prior to retirement, is a more important potential source of leakage of saving from the compulsory scheme than other actions to offset higher superannuation saving taken by individuals at earlier stages in their working life. The size of the impact on saving and labour participation is not accurately known. However, the general observation that only a small minority of people currently receive their main retirement income from sources other than the government pension does seem to suggest important disincentives to save for retirement among low and middle income groups. This may well be a factor contributing to low labour-force participation rates in the 55-65 age group, even though the strict 'double-dipping' stereotype does not seem to be particularly common.²⁷

Given the policy objective of maintaining a reasonable safety net through a government pension, two broad strategies are available to reduce the adverse

²⁷ Survey-based evidence on this issue is provided by the Department of Social Security (1992). On the basis of this evidence Kalisch and Patterson (1994) argue that stereotypical double-dipping, in the form of holidays or other consumption expenditure financed by a lump sum, is rare. However, Bateman, Kingston and Piggott (1994) argue that there is still a more broadly defined incentive problem associated with the age pension.

effects on incentives to save for retirement. One is to make the government pension universal, as is the case in a number of countries including New Zealand. This removes the adverse impact of the means test on effective marginal tax rates, but raises problems of equity as well as increasing the cost to the government, possibly reducing the overall level of support that can be afforded. The other approach is to tighten the enforcement of compulsory self-provision for retirement. This is broadly what is happening in Australia through various measures to increase the attractiveness of annuity benefits relative to lump sums, along with a gradual increase in the compulsory preservation age for superannuation benefits.²⁸ These changes should reduce the potential for savings to leak from the system in the years immediately prior to retirement. But changes in these incentives are hard to bring about quickly because of a strong presumption that existing accumulated entitlements should be protected from significant rule changes.

6. Conclusions

The most important distinguishing features of the Australian system are that it is government-mandated but privately run, and that it has been able to make use of a well-developed financial infrastructure for superannuation saving, through which the new compulsory contributions could be channelled. This has meant that the financial system has adapted relatively smoothly to the new arrangements. However, the system has been criticised for being highly complex in its administrative rules and tax provisions. This complexity is a consequence of separate tax treatment of contributions from different sources, along with the cumulative effect of the various incremental changes that have been made, with successive layers of changes often embodying special provisions to protect previously accrued rights.

The new system is projected to have a substantial impact on aggregate saving, increasing it by as much as 4 per cent of GDP over the next three decades. However, it is still in an early part of the transitional stage and there has not yet

²⁸ The preservation age is to be raised to 60 by the year 2025. Concerning tax incentives to encourage annuities, Bateman, Kingston and Piggott (1992) argue that recently introduced incentives in this direction are not very strong.

been a sustained increase in net contributions to superannuation funds, even though there has been a big expansion of membership. In part, this probably reflects significant withdrawals of funds from the superannuation system in recent years through increased redundancies and early retirements. These leakages might not be entirely a cyclical phenomenon and may also reflect underlying incentives which affect the attractiveness of early retirement. The longer-term success of the system in meeting its objectives will depend critically on whether these leakages can be contained, by discouraging the use of lump-sum benefits to finance early retirement and by encouraging labour participation in the 55-65 age group.

Appendix A: Further Details

This Appendix gives additional details on some specific points relating to the operation of the previous and the new system in Australia.

A.1 The Previous System

Australia's previous system of official retirement income support consisted of two separate elements: the age pension which provided a basic level of benefits for most people, and tax-advantaged voluntary savings for retirement.

The Age Pension

Benefits

Australia has an age pension that provides a flat-rate income for retirees. The level of the pension has varied between 20 and 25 per cent of Average Weekly Earnings (AWE) over the past 40 years, and is currently around 25 per cent. The pension is indexed to the CPI and the government has committed to making irregular *ad hoc* adjustments to maintain the level at around 25 per cent of AWE. There are also various supplementary benefits available to age pensioners such as cheap public transport, telephone services and pharmaceutical benefits.

Eligibility

The age pension is available to men over 65 and women over 60 (although the eligibility age for women is being raised to 65 by 2014). The benefit is asset tested and income tested. Over time the stringency of the means testing has varied. Currently the assets test reduces the value of the pension by \$3 for every \$1,000 of assets above a threshold level (\$118,000 for single people and \$167,500 for married couples). The family home is excluded from the assets test although higher asset limits apply to non-owner occupiers (owner occupiers with homes worth more than \$70,000 are better off under the test; the average house price is around \$150,000). Income testing reduces the value of the pension by 50 cents for every dollar earned above a fairly low threshold (\$94 per fortnight for singles and \$164 per fortnight for couples). When this interacts with the income tax system it can lead to quite high effective rates of marginal taxation.

Funding

The age pension is funded out of government consolidated revenue; there is no explicit tax for the provision of the pension. In 1994/95 the cost of the pension was \$12.7 billion or 2.8 per cent of GDP. This proportion has been relatively stable over time, varying between 2 and 3 per cent of GDP.

Voluntary Superannuation

The other form of officially sanctioned retirement provision was voluntary superannuation: that is, savings for retirement that are concessionally taxed and inaccessible until retirement. These schemes could be either accumulation funds, with the final payment related to contributions plus earnings, or defined benefit schemes, where the final payment is related to final income. These funds invested in assets in much the same way as unit trusts and other professionally managed funds. Many of the funds were employer-sponsored and structured as an employment incentive. Defined benefit schemes tended to be weighted towards longer term service with the one employer, thus encouraging loyalty. The private sector schemes were all fully funded.

Public sector schemes, in contrast to private sector schemes, were predominantly unfunded. Voluntary employee contributions were paid into a fund and invested to earn income following a normal accumulation scheme. The government, however, did not pay anything into the schemes and met liabilities out of consolidated revenue as they arose. Current estimates of the net present value of these liabilities are around \$100 billion for State and Federal schemes, or around 20 per cent of GDP.

Taxation Changes

Within this institutional framework the taxation arrangements were the main area that changed prior to the introduction of the SGC legislation. New taxation arrangements introduced mainly in 1983 and 1988 continue to apply under the SGC. In the early 1980s employer contributions to superannuation funds, employee contributions (up to a limit of \$1,200, equivalent to around 9 per cent of AWE), and income on superannuation assets were tax free. Pension payouts were

taxed as normal income, while lump-sum payouts had the first 5 per cent added to income for taxation in the year of payout with the remainder tax free.

In 1983 the status of employee contributions was changed to be no longer tax-deductible, and they thus had to be paid out of after-tax income. Other changes at that time primarily involved the taxation of lump-sum payments related to employer contributions and fund earnings. These were now taxed at 30 per cent. If the recipient was over 55 the first \$55,000 were taxed at the concessional rate of 15 per cent. While tougher, these changes still involved a concessional treatment as earnings remained tax free. There were also grandfathering provisions that exempted pre-1983 contributions.

In 1988 the arrangements changed again. Employer contributions were now taxed at 15 per cent on entry to super funds (although they remained fully tax deductible to the employer). Employee contributions were still paid out of after-tax income. Fund earnings were subject to 15 per cent tax. Pension payouts were subject to normal income tax with a 15 per cent rebate, while lump sum payouts were subject to 20 per cent taxation or, for recipients over 55, \$60,000 tax free and 15 per cent on the remainder. The lump sum component attributable to employee contributions was tax free. These provisions remain broadly in place subject to adjustment of the tax-free threshold.

Another change introduced in 1988 (and fully effective from 1994 after some transitional arrangements) was to revamp the Reasonable Benefit Limits (RBLs). This was aimed at encouraging people to take benefits in the form of annuities and thereby provide for their retirement rather than relying on the government pension. The RBL rules stipulate a maximum amount of superannuation that can benefit from concessional taxation (initially \$400,000, to be indexed by AWE). Beyond this limit normal taxation (currently 48.5 per cent) is applied; this limit doubles if more than half of the payout is taken as an annuity. The limit is considered to be sufficiently high that it will only affect high income earners, at least until the new SGC scheme matures in around 40 years time.

Further changes announced in the 1996/97 Budget increase the tax on employer contributions to 30 per cent for employees earning more than \$85,000. This higher tax rate is phased in for incomes between \$70,000 and \$85,000 and applies only to new contributions made after the announcement date.

A.2 Rules for the New System

The new system really begins with introduction of SGC legislation in 1991. However, the introduction of award superannuation in 1986 was an important precursor to this.

Award Superannuation

In 1985 the union movement argued for, and received, a commitment to establish a 3 per cent employer-funded superannuation benefit, in lieu of a similar general wage rise. This was implemented by inserting a requirement into employment awards that employers pay 3 per cent of wages into a nominated industry superannuation fund. Many different union-organised industry superannuation funds were created to receive the contributions, which are beginning to attain a significant size. As awards were renegotiated, the coverage of superannuation was increased to many more members of the workforce than had previously been the case. Nonetheless, the coverage of this scheme was not universal and, due to negotiation delays in some areas, not all union members received the benefits immediately.

SGC Legislation

In 1991 the government extended the coverage of superannuation to all employees by introducing the SGC legislation. The legislation mandated minimum levels of superannuation contributions by all employers on behalf of their employees. The levels were to start at 5 per cent (or 3 per cent for employers with a payroll of less than \$500,000) and were scheduled to rise until they reached 9 per cent in the 2000/01 financial year. The government also flagged the possibility of raising contributions to 12 per cent through employee contributions at some later date. The structure of the legislation was that employers were not technically mandated to contribute to employee superannuation, but if they did not the government would impose a Superannuation Guarantee Charge of an equal amount through the tax system and then redistribute this to the employee. The SGC payments would not be tax deductible and would have an additional administration charge included. Thus, it would be cheaper for employers to make the superannuation contributions themselves.

Participation

Participation is mandatory in that employers are required to make contributions for all their employees, subject to some exemptions for part-time and casual workers who do not generate sufficient balances. These exemptions are made in order to reduce administrative problems associated with contributions of very small amounts. In all cases where people do not accumulate sufficient balances to fund their retirement, the age pension will continue to act as a safety net.

Contribution Rates

The required contributions are detailed in the table below.

| Table A.1: Mandated Superannuation Contributions | | | | |
|---|---|-----------------------------------|-------------------------------------|--------------|
| | Employer SGC contributions | Employee contributions | Government contributions | Total |
| 1993/94 | 5 | — | — | 5 |
| 1994/95 | 5 | — | — | 5 |
| 1995/96 | 6 | — | — | 6 |
| 1996/97 | 6 | — | — | 6 |
| 1997/98 | 6 | 1 | — | 7 |
| 1998/99 | 7 | 2 | 1 | 10 |
| 1999/00 | 7 | 3 | 2 | 12 |
| 2000/01 | 8 | 3 | 3 | 14 |
| 2001/02 | 8 | 3 | 3 | 14 |
| 2002/03 | 9 | 3 | 3 | 15 |

Are Some Industries Subject to Different Rules?

Those industries which were subject to award superannuation continue to be bound by those rules. However, the levels of contributions required under the award are less than under the SGC legislation and, to that extent, subsumed. Nonetheless, the award provisions continue to govern the fund into which contributions have to be paid.

Voluntary Contributions

Individuals may make additional voluntary contributions. These are typically in the range 2 per cent to 10 per cent of salary. However, the taxation treatment of additional contributions is different to employer-provided superannuation as they have to be paid out of post-tax income. Contributions by the self-employed are essentially voluntary. Up to a threshold amount they can benefit from employer-treatment of their contributions for tax purposes. They can also qualify for the government co-contribution on any contributions as employees in line with the schedule.

Funds Management

The funds are generally managed by professional managers who are chosen by a board of trustees for each superannuation fund. The superannuation funds themselves are chosen by the employer, or negotiated with the employer as part of the award process. This led to the establishment of union-created 'industry funds' which cover many workplaces. It is also possible to appoint external trustees for a more 'off the shelf' type of superannuation fund.

Investment Restrictions

There are practically no restrictions on where the funds can be invested. The only significant one is that no more than 10 per cent of funds (at cost) can be invested in the business of the sponsoring employer. There are moves to reduce this to 5 per cent (of market value). In the 1960s and 1970s rules existed which required superannuation funds to invest a minimum of 30 per cent of their assets in government securities, but these rules are no longer in place.

Payouts

Benefits must be 'preserved', that is, made unavailable to the beneficiary, until age 55, subject to exemption in cases of hardship and some voluntary contributions which can be withdrawn on change of employment. Legislation is proposed to raise this to 60 years by 2025. Traditionally the most common form of benefit has been a lump sum. The more recent RBL provisions are aimed at encouraging people to take an annuity. The type of annuity purchased can be

either a traditional annuity (which provides a given income for the rest of the person's life) or an allocated pension. An allocated pension pays an annual income based on investment earnings. The allocated pension is not guaranteed to last for the retiree's lifetime. The difference between these two products is that with an annuity the life assurance company bears the investment and mortality risk while with the allocated pension the retiree does. Thus, if a person with an allocated pension dies relatively early there may be a lump sum to be distributed to their estate. If a superannuation fund member dies before payout the accumulated contributions are paid to the estate and are tax free, regardless of the age of the beneficiary.

Life Insurance

Mandated life insurance or disability provisions do not exist. However, many funds offer these facilities, taking advantage of the fact they can obtain cheaper life insurance without the necessity of everyone having a medical (ie pooled life insurance cover). Disability insurance is also offered by some on a similar basis. This usually involves the employer paying an extra contribution to cover the cost of the insurance. These policies can pay benefits as either lump sums or annuities and the choice made will depend upon individual circumstances. Some schemes also provide annuities on retirement that will revert to surviving spouses if the retiree dies relatively early, but this is not a mandated requirement.

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