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2 Australia's Retirement Income System

Malcolm Edey and John Simon

2.1 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, it will substantially replace the government age pension, currently relied on 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 toward a funded scheme, and it 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 effect on saving and capital markets.

The current policy has been put in place through a series of initiatives, to be elaborated on in section 2.2, that began in the mid-1980s. The various initiatives did not follow a preannounced plan but nonetheless have progressively established an overall timetable for phased increases in mandatory saving that 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 percent of salary. Subsequent policy decisions have provided for these to be increased to 9 percent of salary when

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1. That is, it is noncontributory and funded from general revenue.

the timetable is fully implemented in the 2002–3 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 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 that receive the compulsory contributions are, in contrast those 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 percent 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 percent of retirees.

To provide an international context for the Australian system, figure 2.1 gives a simple taxonomy of possible 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 noncontributory and does not involve unfunded liabilities in the same way as social security schemes in other countries.² The

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 percent of GDP.

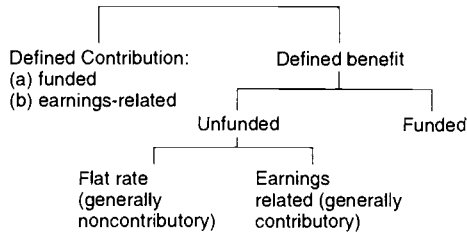


Fig. 2.1 Taxonomy of retirement schemes

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-contribution 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 preexisting 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 to change as a result of recently announced measures to allow greater individual choice.

2.2 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 percent when first introduced to a peak of around 85 percent 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 2.1.

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

Table 2.1 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 number of persons per household	1.11	1.08	1.83	1.89	2.32	1.65
Proportion of households in group that own house outright (%)	71.00	67.30	80.00	79.70	87.70	77.10

Source: Household Expenditure Survey, 1993–94, Australian Bureau of Statistics.

Voluntary superannuation has long been an important source of retirement income for a minority, 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 percent of the accumulated lump sum at retirement. The tax benefit was particularly valuable for taxpayers on high marginal tax rates, but it was not necessarily attractive for low-income earners for whom a significant factor in savings decisions could be the potential effect on entitlement for the government pension. Tax concessions for superannuation were substantially curtailed in 1983 with the introduction of a 30 percent tax on lump sum benefits accrued after that date, and the system was further tightened by changes made in 1988 and subsequent years, including the 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 centralized wage negotiations that took place in 1985 and 1986. The federal government agreed to support a claim by the Australian Council of Trade Unions (ACTU) for a 3 percent 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 percent 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 that in other respects were the same as those already in existence (i.e., 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

Table 2.2 Superannuation Coverage

	Public Sector		Private Sector		All Employers	
	% Covered	% of Labor Costs	% Covered	% of Labor Costs	% Covered	% of Labor 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: Australian Bureau of Statistics.

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 percent in most cases by the 2000-2001 financial year, with tax penalties for noncompliance.⁵ Further measures were announced in 1995 to encourage additional contributions of 3 percent by employees, to be supplemented by a matching contribution from the federal government, thus bringing the total level of contributions eventually to 15 percent. (In the 1997 federal budget, this component of the scheme was replaced by a tax rebate on personal savings.) 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 (e.g., the self-employed and part-time workers) and was taking longer than anticipated to implement because of negotiation delays.⁶ As shown in table 2.2, 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" (Commonwealth Treasury 1991).

5. Vesting and preservation requirements were also standardized. Benefits were now required to be fully vested in the employee immediately and to be preserved in a superannuation fund until at least age fifty-five.

6. Seventy-five percent of employees had superannuation coverage by 1991, five years after the initial decision by the Industrial Relations Commission.

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 aging population structure. However, the aged dependency ratio is still quite low and is not projected to rise as steeply as elsewhere (table 2.3), 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, reflecting 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 that 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 percent of GDP at that time and has since continued to fluctuate mainly in the 3–6 percent range, regarded by the government and many other observers as uncomfortably high. It is also the case that Australia is a relatively low-saving country, at both national and household levels, as discussed further in section 2.5. 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. It is argued that households 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, it is argued that the system has created significant incentives

Table 2.3 **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 Leibfritz et al. 1995).

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

2.3 Tax Treatment

The tax rules for superannuation are extremely complex and can be outlined here only briefly. Important changes to the tax rules were made in 1983, 1988, 1992, and 1996 that generally reduced the tax benefits to superannuation, although the treatment remained concessional. These changes and the current system are described in detail in the appendix. Changes were generally grandfathered at each stage, with the result 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 percent tax on entry to the fund. Following changes announced in the 1996–97 budget, this tax rate rises to 30 percent for high-income earners (for details, see the appendix). Fund earnings are then subject to a 15 percent tax each year as they accrue.⁹ The taxation of final benefits

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).

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

financed by employer contributions and earnings depends on the form in which the benefits are taken. Annuities are subject to normal personal income tax as payments are made, less a 15 percent 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 percent (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 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, and 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 (i.e., contributions and fund earnings) would be tax free, while postretirement 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 postretirement 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 favorably 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.

The tax concessions for superannuation have a significant revenue cost, estimated in 1994–95 to be \$7.3 billion, or around 1.6 percent 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 (1997) and FitzGerald (1996), argue that this is not the appropriate baseline and that the revenue costs are therefore overstated.

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

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

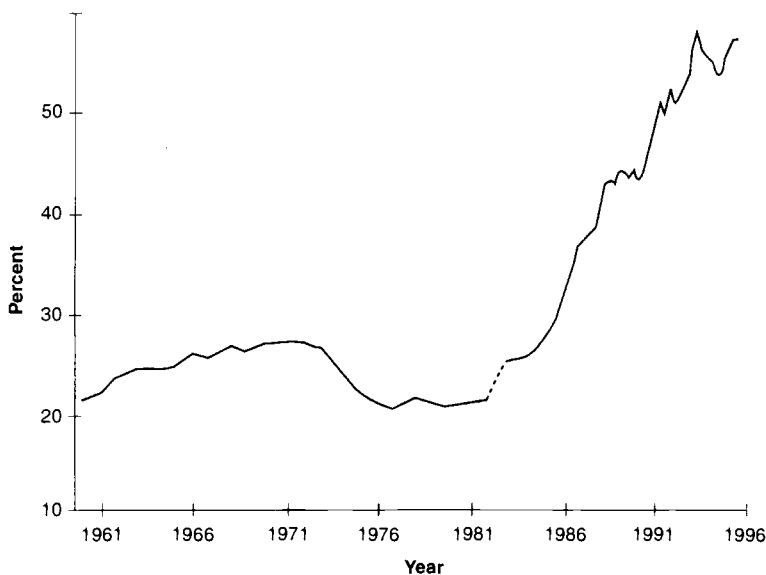


Fig. 2.2 Assets of life offices and superannuation funds (% of GDP)

Source: Australian Bureau of Statistics; Foster (1996).

2.4 Role of Superannuation in the Financial Sector

Assets of superannuation funds and life insurance offices have fluctuated mainly in a range of around 20–25 percent of the Australian financial system in recent decades.¹² They are currently around 26 percent, 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-favored 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 percent 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 summarized in figures 2.2 and 2.3. 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

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 do 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.

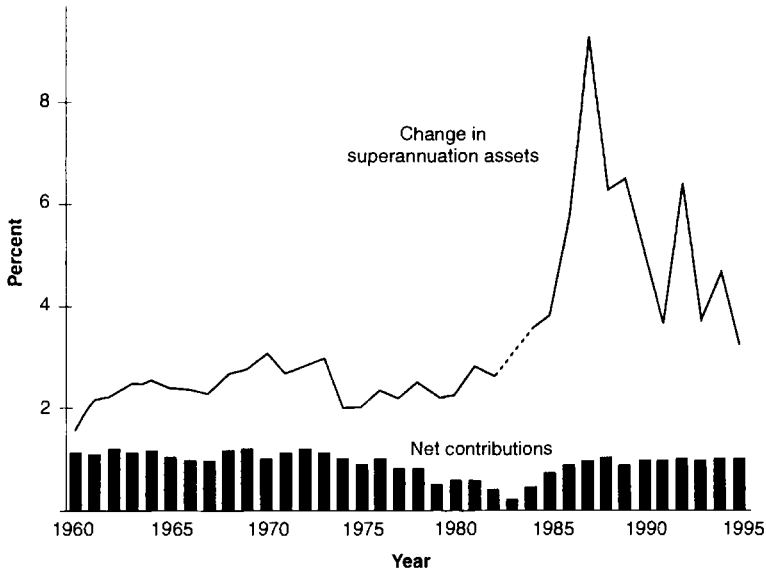


Fig. 2.3 Net contributions and growth in superannuation assets (% of GDP)

Source: Australian Bureau of Statistics.

second phase, which covered most of the 1970s, superannuation assets shrank relative to nominal GDP, largely reflecting poor earnings performance and high inflation. The third phase, from the early 1980s on, 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 last few years. The data presented in figure 2.3 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 can be attributed 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 summarized in table 2.4.

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 cyclic influence on net contributions. They

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.

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

Table 2.4 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: Australian Bureau of Statistics.

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 been a factor in the early 1990s. In addition, many voluntary schemes contain a tranche of employee-contributed funds that 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 preexisting 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 behavior of aggregate contribution rates. However there is no direct way of measuring their quantitative effect 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 2.5, 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,

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 owing to incentives favoring early retirement and the dissipation of accumulated savings (see FitzGerald 1996).

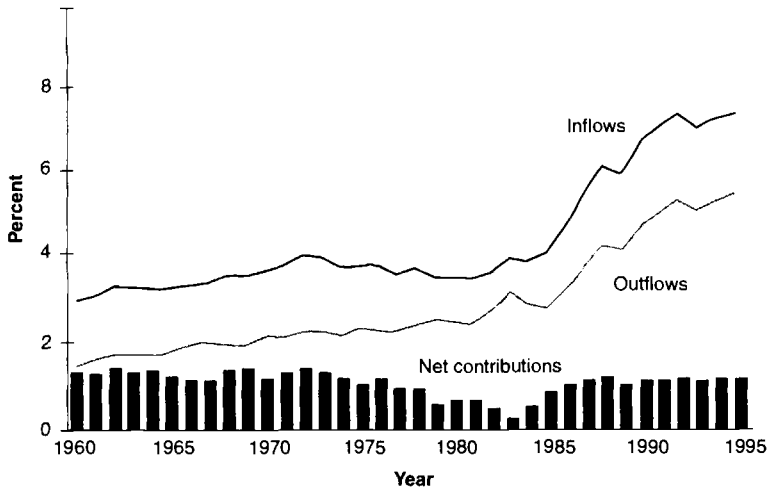


Fig. 2.4 Life offices and superannuation funds, inflows and outflows (% of GDP)

Source: Australian Bureau of Statistics.

created in 1983 as a vehicle for deferring tax liabilities by preserving withdrawn benefits within the tax-favored system.¹⁸ Funds withdrawn as a result of leaving a job can be deposited in a rollover fund (until required to be drawn on) 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 percent 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 2.4. Part of the impetus for this increased turnover in the early 1990s probably came from increased redundancies and early retirements.

Assets of superannuation funds are invested across a wide spectrum of traditional investments, with no important portfolio restrictions other than a limit of 10 percent on the proportion of funds that can be invested with the sponsoring employer. Investments in the broad categories of equities, bonds, and property are shown in figure 2.5. 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

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

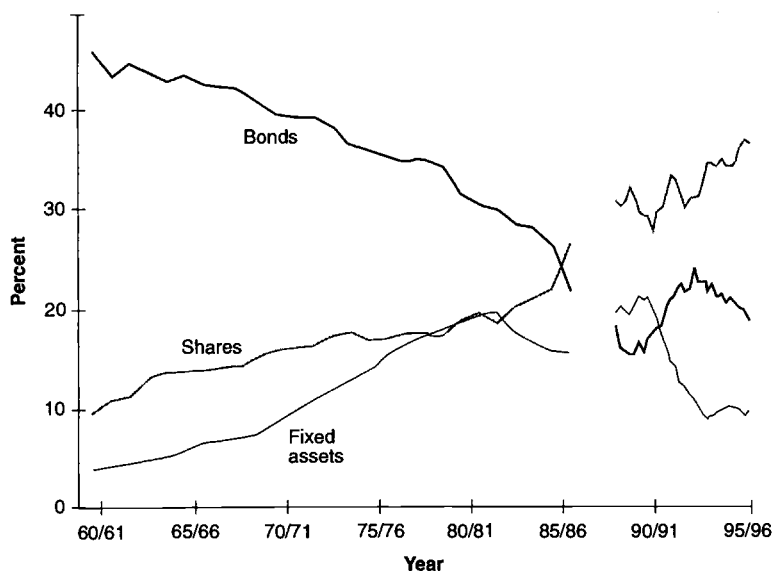


Fig. 2.5 Superannuation funds asset allocation, proportion of asset types in super funds

Sources: Australian Bureau of Statistics; Foster (1996).

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 that reduced the available supply. Holdings of foreign assets are not separately shown in 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 percent. A more detailed snapshot of the asset allocation at the end of 1995 is presented in table 2.5.

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 percent of GDP by the year 2020 (Knox 1995).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 in 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 (see, e.g., Thom 1992). Another issue is the possibility that the superannuation funds will “run out” of domestic assets to purchase as they expand or that their

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

20. The estimates are for the superannuation sector excluding life-office business.

Table 2.5 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: Australian Bureau of Statistics.

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.

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 nonsecuritized lending.²¹ 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 securitization²² and does not particularly seem to reflect competition arising from the growth of superannuation funds. While the trend of increasing securitization 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 specialization in borrower risk assessment, and this is likely to remain important even when loans are increasingly in securitized 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

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

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

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 relation 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-favored 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 2.5, around \$40 billion, or 15 percent of superannuation assets, is 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.

2.5 Effect 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 2.6, can be attributed to reduced saving by the public sector. Gross private saving, as conventionally measured, has also been declining, although 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 that 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.

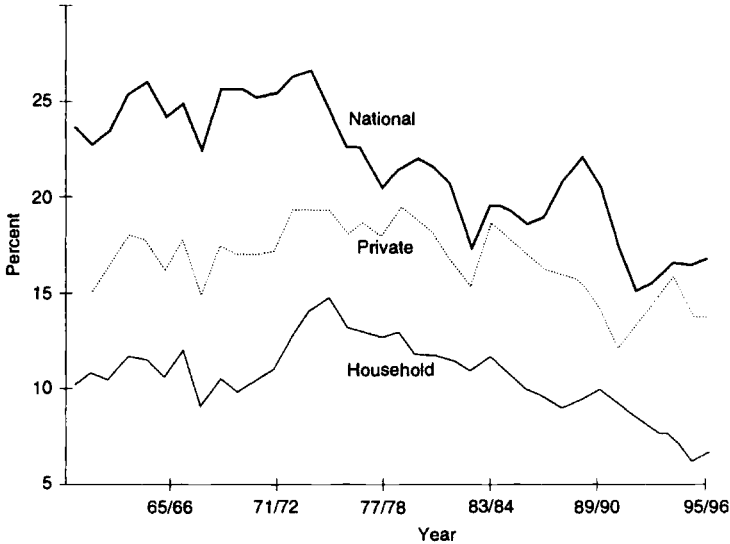


Fig. 2.6 Household, private, and national saving, gross savings measures (% of GDP)

Source: Australian Bureau of Statistics.

Net private saving, however, has still shown a trend decline, reflecting an upward trend in the ratio of depreciation to income.²³

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 effect 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 behavior under the compulsory scheme, as the authors themselves acknowledge. The move to compulsory contributions and the 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 nonsuperannuation saving in the future. Other studies have cited lower offset coefficients. FitzGerald (1993) uses a coefficient of 0.5, while

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

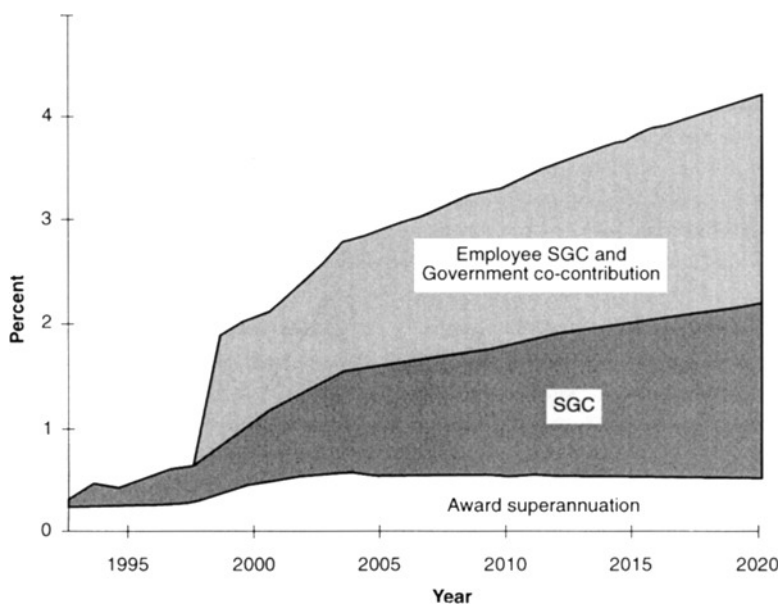


Fig. 2.7 RIM projections, addition to national savings (% of GDP)

Source: RIM Task Force.

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 (RIM) Task Force, using an assumed offset coefficient of one-third.²⁴ A summary of these projections is presented in figure 2.7, which shows the estimated additions to saving relative to a baseline scenario.²⁵ 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 percent 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 sometime 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 1 percent of GDP when the system matures. However, a point of caution is that the funding for the govern-

24. The task force is jointly sponsored by the Treasury, the Department of Finance, and the Department of Social Security. Nonofficial estimates of the effect of employer contributions give broadly similar results (see Bateman and Piggot 1992; AMP Society 1995; Corcoran and Richardson 1995; and Covick and Higgs 1995).

25. The projections are discussed in Willis (1995).

ment 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.

An important dimension of the overall effect of compulsory superannuation concerns its likely effect on the behavior of those around retirement age. In Australia, there was a substantial increase in the rate of early (i.e., pre-sixty-five) retirement in the 1970s and 1980s, as illustrated by the declining male labor force participation rates for older age groups, shown in figure 2.8. 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 sixty-five. 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 labor participation.

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

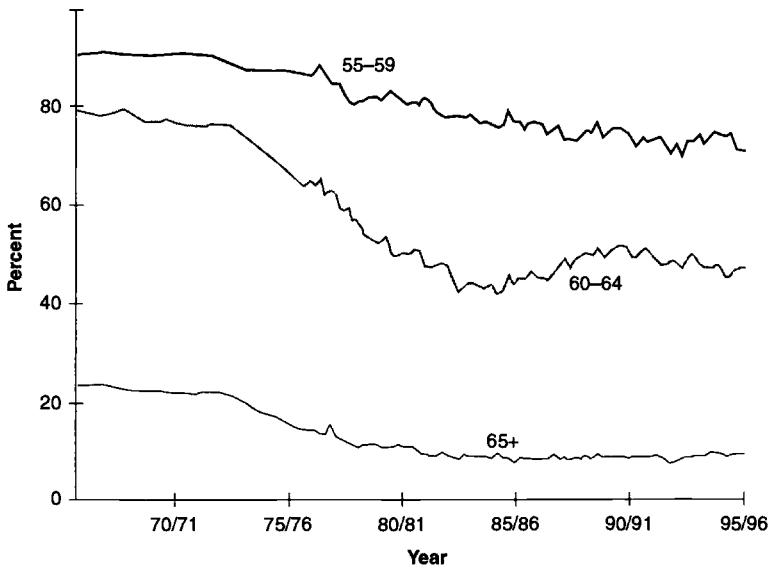


Fig. 2.8 Participation rate—males

Source: Australian Bureau of Statistics.

compulsory scheme than other actions to offset higher superannuation saving taken by individuals at earlier stages in their working lives. The size of the effect on saving and labor 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 labor force participation rates in the fifty-five to sixty-five age group, even though the strict "double-dipping" stereotype does not seem to be particularly common.²⁶

Given the policy objective of maintaining a reasonable safety net through a government pension, two broad strategies are available to reduce the adverse 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 effect 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.²⁷ 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.

2.6 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 channeled. This has meant that the financial system has adapted relatively smoothly to the new arrangements. However, the system has been criticized 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

26. Survey-based evidence on this issue is provided in 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.

27. The preservation age is to be raised to sixty 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.

made, with successive layers of changes often embodying special provisions to protect previously accrued rights.

The new system is projected to have a substantial effect on aggregate saving, increasing it by as much as 4 percent of GDP over the next three decades. However, it is still in an early part of the transitional stage, and there has not yet 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 cyclic phenomenon and may also reflect underlying incentives that 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 labor participation in the fifty-five to sixty-five age group.

Appendix

Further Details

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

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 percent of average weekly earnings (AWE) over the past forty years and is currently around 25 percent. 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 percent 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 sixty-five and women over sixty (although the eligibility age for women is being raised to sixty-five by 2014).

The benefit is asset and income tested. Over time, the stringency of the means testing has varied. Currently, the assets test reduces the value of the pension by \$3.00 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 nonowner 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 fifty cents for every dollar earned above a fairly low threshold (\$94.00 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 percent of GDP. This proportion has been relatively stable over time, varying between 2 and 3 percent 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 toward 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 percent 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 percent 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

percent 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 percent. If the recipient was over fifty-five, the first \$55,000 was taxed at the concessional rate of 15 percent. 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 percent 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 a 15 percent tax. Pension payouts were subject to the normal income tax, with a 15 percent rebate, while lump sum payouts were subject to 20 percent taxation or, for recipients over fifty-five, were \$60,000 tax free and 15 percent 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 percent) is applied; this limit doubles if more than half the payout is taken as an annuity. The limit is considered to be sufficiently high that it will affect only high-income earners, at least until the new SGC scheme matures in around forty years' time.

Further changes announced in the 1996–97 budget increase the tax on employer contributions to 30 percent 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.

Rules for the New System

The new system really begins with the introduction of the 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 percent employer-funded superannuation benefit, in lieu of a simi-

lar general wage rise. This was implemented by inserting a requirement into employment awards that employers pay 3 percent of wages into a nominated industry superannuation fund. Many different union-organized 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, owing 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 percent (or 3 percent for employers with a payroll of less than \$500,000) and were scheduled to rise until they reached 9 percent in the 2000–2001 financial year. The government also flagged the possibility of raising contributions to 12 percent 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 that, 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 2A.1.

Are Some Industries Subject to Different Rules?

Those industries that 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.

Table 2A.1 Mandated Employer Contributions

	Percent of Income
1993–94	5
1994–95	5
1995–96	6
1996–97	6
1997–98	6
1998–99	7
1999–2000	7
2000–01	8
2001–02	8
2002–03	9

Voluntary Contributions

Individuals may make additional voluntary contributions. These are typically in the range 2–10 percent of salary. However, the taxation treatment of additional contributions is different for employer-provided superannuation as those contributions must be paid out of posttax 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” that 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 percent of funds (at cost) can be invested in the business of the sponsoring employer. There are moves to reduce this to 5 percent (of market value). In the 1960s and 1970s, rules existed that required superannuation funds to invest a minimum of 30 percent 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 fifty-five, subject to exemption in cases of hardship and some volun-

tary contributions that can be withdrawn on change of employment. Legislation is proposed to raise this to sixty 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 his or her 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 that they can obtain cheaper life insurance without the necessity of everyone having a medical (i.e., 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 on 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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Comment John Piggott

Malcolm Edey and John Simon have written an excellent overview of Australian retirement income arrangements—clear and uncluttered with unnecessary detail, it emphasizes the main contours of the policies in place as well as those still maturing. Given the title of the conference, they have concentrated on the superannuation guarantee, as the mandatory element of Australian retirement provision is called. I have little to quarrel with in what they write. They focus on four key issues: (1) Australia's employment related retirement income policy, embodied in the superannuation guarantee, is government mandated but privately run. (2) The transition in Australia is different from that which might be contemplated in the United States or in other countries that have a pay-as-you-go type of employment-related social security system. (3) Taxation arrangements are very important, both in implementing the superannuation guarantee and in its operation; these are very complex. (4) The superannuation guarantee is projected to increase national saving substantially, but this outcome is threatened by leakages, particularly those associated with early retirement and the option, which still exists, to take retirement benefits as a lump sum.

I elaborate on each of these points and then add a list of policy issues that I think will need to be addressed as the superannuation guarantee develops further. In doing this, however, I do not want to suggest that this novel Australian policy is not working or that it faces insurmountable problems. In many ways, it is one of the most economically laudable retirement provision policies around. It is, however, a structure that is only half complete. The accumulation phase is well developed, if still a little fragile and prone to political risk; the benefits phase needs much more attention. Peter Diamond's remark, in the context of the paper on Chile, that it is important to examine the benefit design of these policies at the time they are first developed is germane here.

The Private Mandated Structure

Only three countries in the world, to my knowledge, have legislated retirement provision policies that are mandated by the government but privately operated and that are now well established—Australia, Chile, and Switzerland.

Each of these countries arrived at this policy posture from a different starting point, so the transition problems have been different, and the current state of the policy varies as well. Many pairwise comparisons can be made between Australia and each of the others that exemplify this. But comparing Australia with both the others as a combination, the three most important differences are the following: (1) Australia has no regulations concerning asset allocations or minimum rates of return, relying instead on the trustees in charge of each superannuation fund to act in the interests of their members. Australian law holds trustees personally liable for the competent discharge of this task. Chile and Switzerland both have maximum asset allocations for various types of asset and minimum rates of return. (2) The Australian government offers no minimum return guarantee on the mandated contributions, whereas both Chile and Switzerland offer such a guarantee. (3) In Australia, retirees can take their benefits as a lump sum—there is no annuity requirement. Both Chile and Switzerland, and, for that matter, almost all other developed countries, require compulsory retirement benefits to be taken as an income stream, usually for life (Chile is an outlier here). Lump sums from superannuation are prevalent in Australia; the life annuity market hardly exists. In 1992–93, Aus\$4.7 billion was paid out in final benefits to private-sector retirees; only Aus\$213 million was in the form of an annuity or pension (Bateman and Piggott 1997).

Transition Differences

Traditionally, most Australians have relied on the public age pension, along with the house they have bought and paid for throughout their working lives, to provide for their retirement. No employment-related pay-as-you-go national retirement scheme exists or ever existed, although at various stages such schemes have been proposed and, on one occasion, draft legislation was prepared, only to be postponed by the onset of World War II. The superannuation guarantee can thus be seen as Australia's version of retirement social security. It is an add on, and therefore no issue of compensation, recognition bonds, or anything else arises. This does not mean, however, that there is no transition problem in Australia.

The superannuation guarantee began with productivity award superannuation (PAS) in the mid-1980s. As the paper points out, this was a nationally negotiated arrangement, relying on Australia's (then) highly centralized wage determination system, and involved a 3 percent of wage payment into a designated superannuation fund in lieu of 3 percentage points of pay increase. The unions were therefore heavily involved in the early stages of the evolution of the superannuation guarantee. This had a number of implications: selling the idea to the Australian worker was made easy because the unions wanted it and supported it; coverage is restricted to employees; and many of the funds designated were "industry funds," coinciding in coverage with particular unions, and in which the 50 percent required employee trustee membership

was effectively 50 percent union membership. This last consequence has meant that, even though the PAS has now become the superannuation guarantee, independent of wage negotiations, it is still hard to choose other funds because the 3 percent PAS must still be paid into the designated fund and to go elsewhere with superannuation guarantee contributions would simply double administration costs.

Second, as the authors correctly and pertinently observe, the superannuation guarantee used the administrative, legal, and financial structures under which the preexisting voluntary occupational superannuation worked. This meant that the design faults with occupational superannuation, which were not particularly serious because of the low voluntary private-sector (funded) coverage, applied also to the superannuation guarantee. In particular, lump sum withdrawals are permitted from the age of fifty-five, even though the means-tested public age pension is not available until at least sixty and until sixty-five for most men. This lack of coordination and integration between the publicly provided flat-rate pension and the private superannuation guarantee means that a gap exists where much leakage of retirement saving can occur. It probably encourages early retirement (Australia is in the top half of OECD countries in this regard) and also leads to early asset disposal so as to meet the means-test provisions for the age pension. This is the major structural problem in the development of the superannuation guarantee as an effective retirement income policy—I will return to it below when I get to my list of policy reforms.

Taxation Issues

The authors emphasize the complexity of the taxation of superannuation in Australia. But, in my view, they overemphasize grandfathering as its cause and play down the entirely avoidable complexity introduced by taxing contributions, earnings, and benefits. All are taxed concessionally, so it is less the burden of tax than its complexity that is the difficulty here. However, the flat-rate structure does introduce inequities, and the tax on earnings distorts net-of-tax returns, adversely affecting asset choice. In addition, earnings taxes probably further encourage early retirement since it is when retirement is a viable option that the earnings tax bites most severely, reducing the lifetime reward for working another year.

A further point about the separation of superannuation tax rates from the personal tax rate schedule is that political risk is increased—if, as in the United States, only benefits were taxed at the retiree's marginal rate, it would be much more difficult for any government to change superannuation taxation unless the personal schedule were also changed. (This observation was made before the 20 August 1996 budget statement, which increased the contributions tax on high-income earners from 15 to 30 percent.)

I also comment briefly on the allusion in the paper to tax expenditures. The authors quote the Aus\$7.3 billion tax expenditure figure, the most recent an-

nual estimate prepared by the Australian Treasury for the tax-expenditure statement. The most important of several objections that can be raised against the use of tax-expenditure estimates in the present context is that they are calculated using a single year. If a time dimension is introduced into the calculation, it is easy to show that, for many employees, the present value of the cost of the superannuation tax concession is negative, once reduced future age pension payouts are factored in. In fact, the Treasury has itself published a paper demonstrating exactly this proposition (Brown 1993). Tax expenditure estimates are important politically because they are used as a kind of weapon to fend off anyone who advocates tax-preferred status for saving—especially silly in a nation that publicly acknowledges its poor saving performance and that has a broad tax design tilted more toward capital taxes than in most comparable countries. Australia relies heavily on income taxation, including an indexed but full marginal rate-type capital gains tax, and there is neither a social security tax, nor state-based retail sales taxes, nor a general goods and services tax.

Saving

The superannuation guarantee must in the first instance be assessed as a mechanism for providing adequate retirement income. But, with looming demographic transition, the feasibility of such arrangements inevitably depends on their fundedness. An important by-product of the superannuation guarantee, which is by and large funded, is that the effect on private saving is likely to be positive. This has proved to be a major selling point for the policy: both government and industry regularly produce estimates of its positive effects on saving.

It is no doubt true that the superannuation guarantee will increase private and national saving. The quantum would be much larger if the integration and coordination of preservation age with the age pension were fixed up. The estimates quoted in the paper are based on the assumption that an indexed life annuity is bought by retirees to the value of 75 percent of their retirement benefit. While 25 percent lump sum dissipation is probably a reasonable assumption, very few retirees buy indexed annuities, and it is therefore probable that these estimates overstate the saving implied by controlled asset disposal *through* retirement. This affects both private saving (directly) and public saving: the consequent reduction in means-tested age pension outlays is probably overstated as well. Currently, the proportion of retirement cohorts drawing the age pension increases with age; in the absence of appropriately indexed annuity purchase, this pattern is likely to continue, even when the superannuation guarantee is fully mature.

A largely ignored effect of the superannuation guarantee is its effect on the composition of saving. Here, the benefits might be expected to be substantial. Housing is heavily tax preferred in Australia. Owner-occupier housing is omitted from the income tax base; it is exempt from the capital gains tax; and it has

a negligible effect on access to the age pension. Residential real estate investment is particularly suitable for tax-minimizing negative-gearing arrangements because the debt service is more likely to be met evenly by rental returns than by returns on equity investment and real estate is an attractive form of collateral for lenders. Unlike most other OECD countries, there is no tax-preferred channel for financial saving that is not employment linked, such as an IRA. Non-workers who inherit have the choice of paying a lot of tax, spending the inheritance, upgrading their owner-occupied home, or negatively gearing. It is not surprising that about 60 percent of private net wealth in Australia is in the form of residential real estate, owned or rented.

Under current policy, almost all superannuation guarantee saving is directed toward investments other than housing. This is likely to move the composition of saving in Australia in the right direction; although no quantitative research has been undertaken, I think it possible that the welfare gain from the reduction in this distortion is at least as important as the effect on aggregate saving rates.

A Partial Policy Agenda

It may be useful to lay out a list of outstanding policy deficiencies that will need to be addressed over the next period if Australia's mandatory retirement saving plan is to be a long-term success.

Retirement Income Streams

At the top of the list is the introduction of retirement income streams. Most analysts believe that this will eventually be achieved through compulsion in some form, although the design (a lump sum for the first \$ x , then compulsory annuity purchase, or compulsory annuity purchase to \$ y per year, then a lump sum option, to give two possibilities) remains unclear.

In the meantime, the market is drawing out some interesting products. One, which has emerged in the last few months, combines what in Australia are called *allocated pensions*, and in Chile are termed *phased withdrawals*, with a deferred life annuity that begins at age eighty, the expected exhaustion age of the allocated pension. The deferred life annuity, sold at age sixty-five, does not cost much, and the retiree retains considerable control over his or her capital through the fifteen-year deferral period. A second design, first suggested in the Australian context by Formica and Kingston (1991) and now being actively considered by annuity sellers, is an inflation-indexed annuity with a deductible. Indexation does not cut in until annuity purchasing power has been reduced through a cumulative price level increase of, say, 15 percent. In the version being considered commercially, the annuity payment then increases to 115 percent of its initial value and stays there until the price level has risen by a further 15 percentage points, at which time a compensating increase in the annuity payment is made once again. This design allows the initial annuity payment to

be considerably larger than can be offered with a fully indexed instrument while at the same time providing inflation insurance against large and unexpected price-level movements.

A problem not so far addressed by either policy makers or researchers in Australia is that of annuity rate risk. If annuity purchase is to be mandatory, then variations in the price of the annuity close to the time of retirement can make a large difference to the rest of life income. One possibility is gradual deferred annuity purchase, along the lines proposed by Brugiavini (1993) (although his analysis is motivated by adverse selection considerations rather than annuity rate risk).

It is entirely possible that policy will converge with the market—eventually compelling an income product with longevity and inflation insurance properties that nevertheless does not cut into immediate consumption too deeply and that leaves the retiree with some capital discretion to cope with contingencies such as health expenses. Sooner rather than later, however, some policy initiative will be required on income streams.

Taxation

As I indicated earlier, the complexity of superannuation taxation in Australia stems from the multiple bases on which the tax is levied. To my knowledge, Australia is the only country to tax all three of these possible bases, and their consolidation would do everyone some good. The best option would be to abolish the taxes on contributions and earnings and to tax benefits at the retiree's marginal rate, as is done in the United States. The implications for the current budget balance probably render this infeasible. An alternative might be to tax contributions at a flat rate and tax benefits at the retiree's marginal rate less the flat-rate contributions tax. The earnings tax seems to have no virtue whatsoever and should be abolished without delay.

Coverage and Replacement

As the authors of the paper point out, superannuation guarantee coverage is confined to employees. It is likely to provide adequate retirement income only for those whose work histories have been more or less continuous. For those with broken work histories, the accumulations can be much less. In addition, coverage at any level remains voluntary for the self-employed, and, except for a recently introduced dependent-spouse provision, those not in the labor force enjoy no tax-preferred financial saving opportunities whatsoever.

It would appear desirable to extend superannuation guarantee coverage to these individuals. In part, their exclusion results from the union-based origins of the policy; in part, the accounting and compound interest properties of defined-contribution schemes tell against workers with broken work histories. The first of these is more easily overcome than the second. For those with broken work histories, the age pension acts as a form of social insurance, and the maintenance of its current support level then becomes a policy priority.

Member Choice

The present government has indicated that it will encourage greater choice for superannuation, both between funds and between portfolios within funds. While economic rhetoric clearly supports the idea that contributors should be able to change their fund if they wish, costs of administration, about which not nearly enough is known, may make this less desirable than it seems at first sight. Certainly, in some cases, the administrative costs of transfer between funds in Australia seem high, although this situation is being addressed through the agreement of a "transfer protocol." Additionally, choice of fund is seen by the industry as being associated with what in Australia is called *short termism* and what U.S. analysts succinctly term *myopic loss aversion*. This allegedly leads fund managers to invest more conservatively than might be appropriate for many of their members. The truth of this claim remains untested.

Of more interest is a move toward greater portfolio choice within a fund. A few years ago, I was involved in an informal survey of the hundred or so industry funds that receive a large proportion of the superannuation guarantee contributions. Only two offered members a choice of portfolios. Yet these funds have as members people of very different ages, for whom standard age-phasing arguments would seem to indicate very different optimal portfolios. Member investment choice is beginning to become more widely available and should, in my view, be actively encouraged by policy. One retarding factor thus far has been the nervousness of trustees, who have been unsure of their potential liability on advice to members as to which portfolio to choose. Appropriate guidance by the Insurance and Superannuation Commission, the Australian regulator, would appear to be all that is necessary to cope with this.

My comments have sought to elaborate on a paper that has met its objectives very well. In doing so, I have spent much time criticizing various aspects of current Australian arrangements. I would therefore like to conclude by reiterating that I think the Australian superannuation guarantee is a very good policy, one that in many respects other countries now seek to emulate. Because few countries have done anything similar, there are no really appropriate models from which Australia can work, and a number of difficulties, conceptual, ethical, and practical, still need to be addressed. It remains to be seen whether there is sufficient commitment to complete this task successfully.

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Discussion Summary Jeffrey Liebman and Andrew Samwick

The discussion began by noting some comparisons with the Chilean system. The employer mandate in the Australian system allowed for the selling costs to be priced on a group basis. Therefore, compared to Chile's system of individual selling, the administrative costs were hypothesized to be about two-thirds less. The authors quoted a figure of 1 percent of balances for administrative costs but acknowledged that the churning of accounts was expensive. The Chilean system is actually better designed to keep the number of accounts low, thereby contributing to administrative savings when jobs turn over. The authors responded that, in fact, much of the system in Australia is being organized on a group basis. For example, the current government has allowed for easier consolidation of accounts as long as they are held in banks.

The particular way that Australia means tests its retirement benefits required clarification. Benefits are reduced by 50 percent of income above a threshold and 3 percent of assets above a different threshold. The value of the family home is exempted from the means test. Married couples get approximately double the replacement rate of single persons, so it is unlikely that the means test is responsible for many "fiscal divorces." An example of the moral hazard that is permitted by the means test was to take early retirement at age fifty-five, receive a lump sum distribution, spend down assets, and then begin collecting the means-tested benefit in old age. It was noted that the replacement rate offered by the means-tested benefit is quite generous for workers below the top quintile of the income distribution. The authors suggested that reasonable benefit limits are likely within the next ten years to limit the amount of tax-preferred, nonannuity withdrawals.

Participants also inquired about the political economy of the transition. Low-income workers are thought to have lost out in the transition because they received roughly the same benefits as before but now make contributions. Union involvement was cited as being very important in the setup phase to gather support for a universal retirement scheme. Trade unions are also very involved in the details of the current system. Some of the idiosyncracies of the government's plan were inherited from existing industrial relations agreements, and all revisions to the plan must still be ratified through the industrial relations system. The authors noted that the expectations of the unions were that the gains from privatization would come at the expense of wage increases. Several questions were asked regarding the response of employers

to the transition. The authors admitted that there has been no solid evidence yet that retirement dates changed as a result of the transition, probably because such an effect would be difficult to identify against a backdrop of a secular trend toward earlier retirement, business-cycle effects, and a tendency for layoffs in Australia to be concentrated among workers over age fifty-five.

Some participants wondered why the annuity option was not taken more frequently, given the apparent tax subsidy. Suggested reasons for the annuity option's unpopularity were the perceived low rates of return on annuities, possibly owing to adverse selection, and the feeling that investors lose control over their own money once it is annuitized. Still another possibility was the permissiveness of the lump sum option. In Chile, for example, the lump sum option is allowed only if it still leaves enough in the account to fund a benefit that is a 70 percent replacement rate and equals 120 percent or more of the guaranteed minimum pension. Only 24 percent of the eligible retirees in Chile have taken the lump sum option. Finally, under Australian tax rules, the principal of the annuity is taxed as income, so it was acknowledged that, in some instances, it might be better to take the lump sum distribution and pay the 15 percent tax rather than buying the annuity.