### THE UNIVERSITY OF MELBOURNE

## AUSTRALIAN SUPERANNUATION: THE FACTS, THE FICTION, THE FUTURE

by

David M Knox

**RESEARCH PAPER NUMBER 1** 

**MARCH 1993** 

Centre for Actuarial Studies Department of Economics The University of Melbourne Parkville, Victoria, 3052 Australia.

# AUSTRALIAN SUPERANNUATION: THE FACTS, THE FICTION, THE FUTURE

Inaugural Professorial Lecture The University of Melbourne

#### Professor David M Knox Professor of Actuarial Studies

Wednesday 17 March, 1993

#### Introduction

Let me commence tonight by saying, right at the outset, what a pleasure it is to return to Melbourne, after living in Sydney for 25 years. Not only was I born in Melbourne almost 4 decades ago but I must confess that I have enjoyed the recent Melbourne weather, without the humidity of Sydney! I also believe that my wife, born in northern Scotland, will actually enjoy experiencing a winter, even if it is not quite of the Scottish variety!

It is also a great privilege and honour to have been chosen as the Foundation Professor of Actuarial Studies at The University of Melbourne. There is no doubt that this university has an enviable reputation, both within Australia and overseas, and it is my objective that this reputation will be enhanced in the years ahead as the actuarial programme develops and extends beyond its current operations.

The opportunity to be involved with an academic programme from its commencement rarely occurs and I, together with David Dickson and Des Welch, are planning for the future with a sense of enthusiasm and excitement. I hope that in a few years' time we will be able to look back with pleasure to the time last year when full time actuarial studies commenced at Melbourne and two of us lived out of cardboard boxes for a couple of months!

I might add that this university is not totally foreign to my family as it is my father's alma mater. It is therefore a real delight to be at The University of Melbourne, both in a family sense and with my actuarial responsibility.

\*\*\*\*

For my address tonight, I have chosen the topic:

"Australian superannuation: the facts, the fiction, the future".

I selected this subject area because superannuation is playing an increasingly important role within the Australian economy and within the financial plans of almost every Australian household. That is, it is not only important in the macroeconomic sense but with superannuation coverage much higher than in the past, the Australian community as a whole is now much more 'super-aware' than ever before.

However, with this increased public interest, we have witnessed many statements and comments from the media, from politicians and even from parts of the industry which contain half truths and can therefore be misleading. It is my hope tonight that we will be able to explore some of these statements, sort the wheat from the chaff, and so gain a better understanding of where Australian superannuation may be headed as we move towards the next millennium.

In the early stages of my planning for this lecture I was going to sub-title it: 'A stroll through the superannuation countryside'. I think you will agree that the terms 'stroll' and 'countryside' suggest rest, peace and tranquillity. Yet the issues that are influencing the development of Australian superannuation and the pace of change that we have experienced are the exact opposite of this description. Hence, perhaps a better subtitle is "An expedition through the superannuation minefield!"

Anyway, now is the time to wake up and stay alert as we start the tour of Australian superannuation.

My format will be to make a number of statements, discuss whether they are fact, fiction or a mixture, and then, where appropriate, look to the future.

Let's start with a easy statement.

# "Superannuation is an employer-initiated, employer-controlled, employer-provided benefit for some employees."

This statement is now clearly fiction but it was fact not so many years ago.

In contrast to recent developments, it is interesting to note that the existing Westpac scheme started as the Bank of New South Wales Scheme fidelity guarantee scheme to protect the bank from theft by its tellers. As I understand it, no theft occurred and the first pension was paid out about 15 years after the scheme was set up.

A couple of other examples to highlight the previous employer control.

Earlier this century, one employer threatened to withdraw all employees' superannuation benefits if they went on strike! A rather large stick for those near retirement.

More recently, I was a member of a major scheme where the benefit on resignation (within 10 years of joining) was a return of the member's own contributions without any interest, and with no employer contributions. This benefit design no longer exists and is, in fact, now illegal. Nevertheless, it highlights how far we have come in a relatively few number of years.

But what has caused the significant shift of power from employers to members? Let me suggest five factors:

- As mentioned earlier, superannuation coverage has increased significantly with initially award superannuation and now compulsory superannuation. Super is no longer at the sole discretion of the employer.
- ii. There has been a substantial increase in the level of vesting of employer contributions with employees. That is, an increasing proportion of employer contributions are now, if you like, 'owned' by the employees. This trend commenced in the 1970's and has continued with compulsory superannuation. Of course, with compulsory employer contributions vested with employees, a corollary is that many schemes now have a decreasing proportion of unallocated or discretionary funds. This may affect their long term investment decisions.
- iii. There is now equal representation of employers and employees on the boards of trustees of many superannuation schemes, as required by legislation. The super fund is no longer seen as part of the company. It has a separate entity from the employer which is very different from the common perception and practice of years ago.
- iv. The establishment of industry based plans with the introduction of award superannuation. These plans, some of which now have more than 200,000 members, have clearly moved the superannuation plan away from the employer to a third entity.
- v. Increased information to members. The age of consumerism has caught up with the superannuation industry and members must now be informed on an annual basis. This change has helped bring superannuation into the public arena and funds are now paying more attention to informing their members in an appropriate manner.

#### "Superannuation coverage has grown rapidly during the last twenty years"

This statement is factual but there have really been three stages in the recent growth.

In 1974, only 32% of all employees were covered by superannuation. By 1979 this rate had increased to about 37% of all employees and then continued to increase to about 40% in 1983. Coverage of the workforce was therefore increasing at about 1% per year during the ten years to 1983. This represents stage 1.

The second stage was from 1983 to 1987 when the coverage rate remained steady at 40% of all employees. During this period superannuation was continuing to grow as the labour force grew but the percentage of employees with superannuation remained static.

We then witnessed the introduction of award superannuation where a 3% superannuation contribution from the employer formed part of many industrial awards. As a result, coverage increased to 42% of all employees in 1988, 48% in 1989, 53% in 1990, and 72% in 1991. Although the new contribution rate was small in most cases, the increase in coverage was nothing short of outstanding.

Yet many employees remained uncovered. Furthermore, the Government wanted to increase the employer's contribution rate beyond the initial 3%. So we saw the introduction of compulsory superannuation (otherwise known as the Superannuation Guarantee Charge) from July 1992. Superannuation coverage increased to 80% of all employees and 88% of full time employees, as at August 1992.

There is no doubt that over the last 5 years there has been a superannuation revolution in terms of coverage. Initially through industrial awards and now by legislation, virtually every employee earning above \$450 per month receives superannuation support from their employer.

This has changed the face of Australian superannuation forever. It is a condition of employment and must have a long term impact on how Australians perceive superannuation.

However, there is perhaps an even more fundamental and structural change that has occurred during the last decade. Let me give you another description of superannuation.

Hence superannuation is no longer an employer's gift to a faithful employee at the end of 40 years' service. It is part of the normal package of remuneration for almost all employees. We have witnessed a shift from superannuation as an employer controlled benefit received by some employees to one that is now an employee's right. Employers are no longer in the driving seat.

With this loss of control by employers, employers will need to find other ways to reward some staff members and to manage their labour force. This is not to imply that employers can't, in a voluntary capacity, top up the level of compulsory superannuation. Many do and will continue to do so. But, one of the purposes of superannuation, as seen from the employer's perspective, has changed forever.

Let me now suggest a related consequence.

## "Superannuation is increasingly expressed and considered to be an individual benefit."

Individualism has increased everywhere in the last ten years. I believe that there has been a philosophical shift from the 'us generation' to the 'me generation'. Clearly such a statement is a generalisation but the trends are there. Greater responsibility is being given to the individual as governments and employers are becoming less paternalistic. Self-sufficiency and personal responsibility are the trends.

#### Some examples include:

- an attempt to decrease Government welfare in many parts of the Western world
- employment contracts at the individual and workplace level
- a transfer of risks in many financial contracts from the provider to the consumer (for example, market-linked life insurance and personal superannuation products)
- · an increased emphasis on user pays practice
- a reduction in the extent of cross subsidies in many areas, including banking and so on

Individuals are increasingly on their own. The community is beginning to accept that. For example, recent surveys show younger workers do not expect to receive the age pension. In respect of superannuation, this also means that fund members are more concerned with their existing personal benefit entitlements.

The advent of compulsory superannuation and increased awareness at the individual level has also been associated with a clear shift towards defined contribution (or accumulation) schemes. These schemes are fundamentally similar to bank accounts where investment earnings are credited to members' accounts each year. The problem with these schemes is that the end benefit received by the members is not defined and may vary considerably in its value, depending on economic circumstances.

In contrast, defined benefit schemes provide a retirement benefit defined in terms of the member's final salary. As interest rates drop and economic uncertainty remains, some members may prefer these types of schemes, where the risk is borne by the employer. Yet, much of the development in the 80's and the thinking of the early 90's has been in terms of defined contribution schemes. As I will discuss later, this trend towards individual based benefits in accumulation plans may not be in the best long term interests of all members.

This increased responsibility at the individual level also means that individuals will want to have a greater say as to where their superannuation money is invested. This trend towards individual investment control may represent the most fundamental shift in superannuation during the next 10 years. A proportion of investment decisions will be made at the individual level. In some funds this is already happening and I believe that the direction is already set. Such a change will have important macroeconomic effects as the sum of investment decisions made at the individual level is likely to be very different from the investment decisions made by a group of trustees for a fund as a whole.

Let me now turn to the investment of Australian superannuation funds. Here are a couple of statements that are often heard in respect of these investments.

# "The trustees of superannuation funds invest in a conservative manner, concentrate on the top 20 stocks, and do not help the Australian community or economy."

#### "There is too much investment overseas."

There will always be much discussion on the investment policy of superannuation funds. It is right and proper that this occurs. But let us make sure that we are talking the facts and not the fiction.

The following table shows a breakdown of the assets held by Australian superannuation and approved deposit funds as at March 1989 and September 1992.

Item	<b>%</b>	%
	March 89	Sept 92
Equities & shares	24.1	26.2
Bonds & securities	20.6	24.1
Overseas	11.1	14.5
Short term assets and cash	13.8	11.5
Land and building	16.4	10.0
Loans	5.8	6.2
Units in trusts plus other	7.4	6.2
Other assets	0.7	1.2
Total	\$90.7b	\$152.0b

This table clarifies a number of myths that arise from time to time in the community.

#### We note that:

- The major investment area is in Australian companies, through either equities or loans and securities;
- Superannuation funds are also important holders of Government stock which represent over 14% of their assets;
- The relative small holding in property may surprise many observers. It is now only 10% and has fallen significantly over the last three years;
- The proportion of overseas investment has remained in the order of 10-15% for some time. Overseas assets represent an important investment for many funds as it helps them to reduce their risk by spreading their investments into other markets, beyond Australia. Further, it opens up an opportunity to invest in some industries which are simply not available in the Australian market. We must remember that the Australian equity market represents less than 2% of the world's total equity market. I do not believe that overseas investment of this order is a cause for concern. In fact, I suggest that it brings benefits to the fund members which they would not otherwise receive.

Before leaving the investments of Australian superannuation funds, I wish to present some recent research results on the actual investment of these funds in listed Australian companies.

According to the Australian Bureau of Statistics, Australian superannuation funds held almost \$40 billion of share investments as at December 1991. On a confidential basis, I have received details of the actual holdings in Australian equities as at December 1991 from a number of major fund mangers and self administered funds. The total equity holdings of these funds are \$20.8 billion or more than half the total industry. I think you will agree that this represents a fairly good sample.

The results enable us to answer the following questions:

- Where do superannuation funds invest their equity funds?
- Is it only in the top 20 companies?
- Do they ignore the smaller companies?

Graph 1 and Table 1 answers these questions.

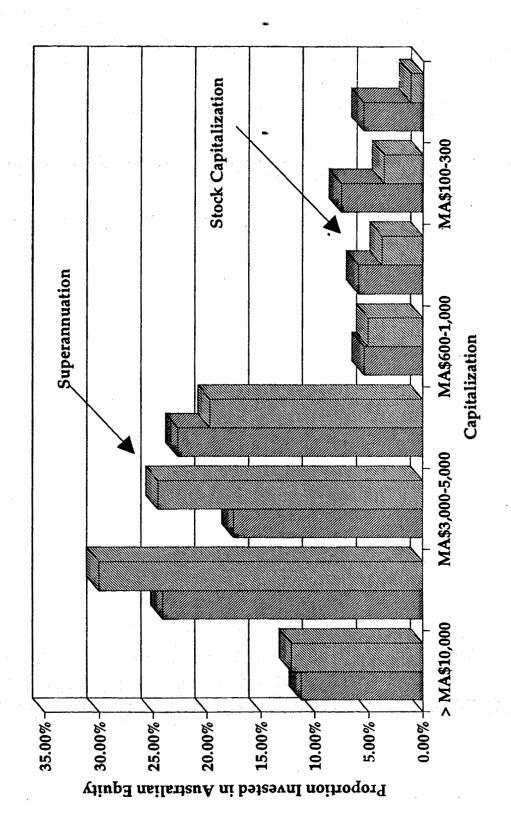
Table 1: The equity investment of Australian superannuation funds by capitalization

Size of company	No of coys	% of market	% of super funds
>\$10 bill	1	11.3	12.2
\$5-10 bill	7	24.1	30.0
\$3-5 bill	9	17.5	24.6
\$1-3 bill	26	22.7	19.7
\$600-1000 mill	13	5.4	5.0
\$300-600 mill	26	5.9	3.8
\$100-300 mill	81	7.5	3.6
<\$100 mill	677	5.5	1.1

#### We can note the following:

- a. Most listed companies are relatively small with total capitalization of less than \$100 million. In fact, these companies, which represent more than 80% of the companies listed, represent only 5.5% of the total market's value. They are clearly under-represented in the investment portfolios of major superannuation funds. However, this result is not really surprising given the low market value of these stocks and their limited marketability.
- b. At the other end of the table, we see some concentration in the top 20 stocks. For instance, whereas the top 17 stocks represent 52.8% of the total market, they represent 66.8% (or two thirds) of the share value held by these managers. Hence, these figures confirm the impression that these major institutions and funds concentrate in the top end of the market.

Graph 1: The equity investment of Australian superannuation funds by company capitalization



c. However, it must be stressed that the middle ranking companies are not overlooked. Indeed, if one considers the companies with capitalization between \$300 million and \$3 billion, the percentage of the funds' portfolios is 28.5% whereas the market value is 34%. I therefore suggest that these figures show that superannuation funds are willing to invest in these companies, providing they offer a good investment opportunity.

This study also enables us to test the theory that all superannuation funds invest in the same manner. That is, does a herd mentality exist? The following table shows the range that was present between the 19 fund managers and funds that formed the sample.

Table 2: The range of equity proportions in the managers' share portfolios

Size of company	Minimum %	Maximum %	Average %
>\$10 bill	7.3	24.5	12.2
\$5-10 bill	23.0	42.4	30.0
\$3-5 bill	12.4	37.2	24.6
\$1-3 bill	8.5	32.0	19.7
\$600-1000 mill	0.0	9.1	5.0
\$300-600 mill	0.0	9.0	3.8
\$100-300 mill	0.0	10.3	3.6
<\$100 mill	0.0	5.9	1.1

Although I have not shown the breakdown for each fund manger, the range within each grouping suggests that there exists considerable variation between funds Clearly, not all managers adopt the same investment strategy when the proportion of BHP in their Australian share portfolio can range from 7.3% to 24.5%!

Before leaving these results, I will briefly consider the share investments of the superannuation funds classified by industry, as shown by Graph 2 and Table 3.

In broad terms, the superannuation industry does not have a favourite industry. There is a slight overweighting in banks and finance, building materials and transport when compared to the total market. However these differences are not significant.

And so, what of the future?

Investment in Australian equities will continue to play an important role in the investment portfolios of Australian superannuation funds. However, there are some important influences at work. These include:

- the increased level of vesting of employer contributions,
- the increased importance of defined contribution funds,
- the decrease in the size of unallocated contributions in defined benefit funds,
- greater awareness and investment decision making by individuals, and
- the presence of member trustees.

I therefore suggest that there may be an increase in the conservatism in the investment decisions of the trustees due a decreased willingness to accept the volatility in the returns that come from the share market.

This could lead to a decrease in the proportion of funds invested in Australian equities and/or an increase in the concentration in the top 20 or 30 stocks, which tend to have a greater level of marketability and offer investors associated synthetic securities. Of course, it should be added that this conservatism may not mean less dollars for the share market, if the total growth of superannuation funds exceeds the growth of the total economy, which is probable.

Let me now move from one controversial area to another, namely tax.

Graph 2: The equity investment of Australian superannuation funds by industry

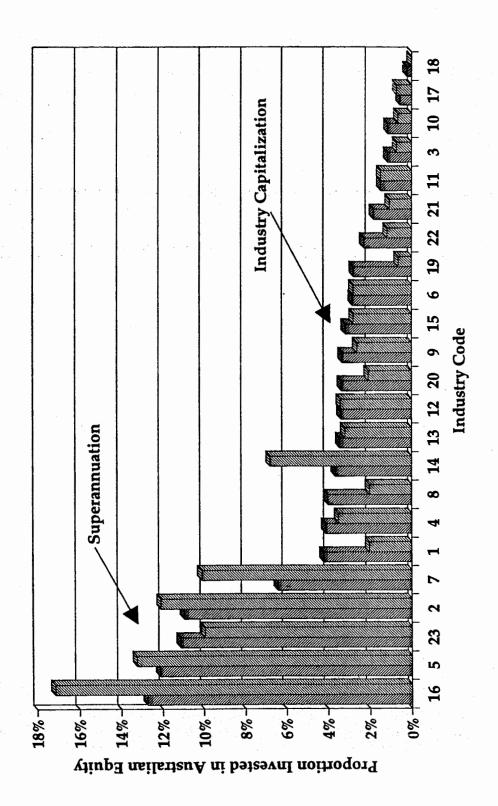


Table 3: The equity investment of Australian superannuation funds by industry

#IND	CAPITALIZATION	%	SUPERANNUATION	%
16	24,363	13%	3,569	17%
5	23,193	12%	2,753	13%
23	21,244	11%	2,068	10%
2	20,941	11%	2,513	12%
7	12,231	6%	2,100	10%
1	8,016	4%	418	2%
4	7,854	4%	<b>725</b>	3%
8	7,599	4%	417	2%
14	6,950	4%	1,410	7%
13	6,547	3%	659	3%
12	6,430	` 3%	704	. 3%
20	6,357	3%	427	2%
9	6,311	3%	539	3%
15	6,002	3%	577	3%
6	5,381	3%	578	3%
19	5,291	3%	131	1%
22	4,335	2%	242	1%
21	3,469	2%	220	1%
11	2,800	1%	305	1%
3	2,194	1%	149	1%
10	2,155	1%	136	1%
17	1,065	1%	147	1%
18	428	0%	4	0%
TOTAL:	191,155	100%	20,792	100%

#### INDUSTRY - ASX CLASSIFICATION

GOLD #01	. 1	RETAIL #13	13
OTHER METAL #02	2	TRANSPORT #14	14
SOLID FUELS #03	3	MEDIA #15	15
OIL AND GAS #04	4	BANKS & FINANCE #16	16
DIVERSIFIED RESOURCES #05	5	INSURANCE #17	17
DEVEL & CONTRACTORS #06	6	ENTREPRE'L INVESTORS #18	18
BUILDING MATERIALS #07	7	INVEST & FIN'L SERVICES #19	19
ALCOHOL & TOBACCO #08	8	PROPERTY TRUST #20	20
FOOD & HOUSEHOLD #09	9	MISC. SERVICES #21	21
CHEMICALS #10	10	MISC. INDUSTRIALS #22	<b>2</b> 2
ENGINEERING #11	11	DIVERS'D INDUSTRIALS #23	23
PAPER & PACKAGING #12	12		

## "Superannuation receives considerable taxation support and it costs the Government \$4.97 billion in revenue in 1991-92"

#### Federal Treasury.

This statement has two parts:

The first is true: that is, superannuation is a tax supported or tax encouraged activity. However, I hope to show you that the second part (ie. the cost figures) is not only fiction but actually misleading.

But first - a brief review of income tax as it applies to superannuation.

Superannuation can be taxed in two basic ways:

- Similar to a bank account or other forms of saving. That is, income is taxed as it is earned and before it is saved, any investment or interest income is then taxed but the benefit when withdrawn, is tax free. This is sometimes known as the TTE method tax on contributions, tax on investment, but tax exempt benefits.
- As deferred income. That is, no tax is payable when the income is earned and invested, no tax is paid on the investment income but the benefit when received is fully taxable. It is argued that as receipt of the benefit is deferred until retirement, then so is the tax. This method is known as the EET method tax exempt contributions, tax exempt investment income but taxed benefits. This is the most common method for taxing superannuation and pensions in the developed world.

Now, turning to Australia. Under the current rules we have:

- a 15% tax on employer contributions and most employees contribute from income that has been taxed at marginal rates
- a 15% tax on investment income
- taxes on lump sum and pension benefits

In effect, we have a tax, tax, tax environment or a TTT method! Notwithstanding these three levels of taxation, it is reasonable to state that superannuation is taxed in a concessional manner for most income earners due to the small rates of tax that apply, even though it is rather complex! This tax support is required to offset the conditions that are part of superannuation when compared to other forms of savings. These conditions include lack of access to the funds by the member and preservation until age 55 (now) or age 60 (in the future).

But does this support cost the Government \$5 billion per annum?

Each year the Federal Treasury produces a Tax Expenditures statement which endeavours to cost, in terms of revenue, the effect of any special tax treatment that applies to a defined activity or to a certain classes of taxpayers. For instance, what is the effect on revenue of exempting the income from certain Commonwealth educational scholarships? The answer is a reduction in tax revenue of \$11 million per year. Let me state that I have no objection to the exercise of tax expenditures as I believe it is

appropriate that we, as the community, should have some indication of the cost to revenue of the range of special tax arrangements.

However, the fundamental problem is that superannuation is not a one year exercise. Therefore the results are misleading and confusing, especially when the Government is endeavouring to increase both the level of superannuation coverage and employer contributions.

So where does the \$5 billion figure come from?

Here is the table for 1991-92.

Costs	
	\$m
Undertaxation of employer contributions	2223
Undertaxation of fund earnings	1802
Undertaxation of unfunded lump sums	690
Deduction for self employed	410
Rebate	62
Sub total	5187
Offsets	
Tax on funded lump sums	222
Tax expenditure	4965

In brief, the Treasury argues that the first two items, namely employer contributions and investment earnings are not taxed at the individual's marginal tax rate when paid into the superannuation fund. Therefore a concession exists in this year and the loss of revenue is valued at this amount. Well, that part of the argument holds. The contributions are taxed at lower than the marginal tax rate but they will be taxed again when the benefits are received - won't they? Yes, but that's in the future so we won't count it for this year!

The logic is as follows. I give you \$100 this year on the condition that you will give me \$200 next year. Is it a good investment for me? The tax expenditure figures would say no because it costs me \$100 this year. The \$200 return to me is next year and we will therefore ignore it!

With the substantial growth that is occurring in superannuation coverage and contribution rates, it is to be expected that the undertaxation of contributions and investment income will continue to increase for many years to come. Of course, the offset is that there will be increased tax revenue in future years when the benefits are received and there will be some reduction in Social Security costs. These future offsets are totally ignored by the Treasury figures.

Why am I making the point? Two reasons.

The first is that this tax expenditure figure is used by the media, politicians and others as the cost of supporting superannuation each year. It does not represent the full picture. As a result, it is misleading and dangerous!

The second is that the figure can lead to a change of policy as politicians respond to these numbers and endeavour to reduce them for political reasons. The largest two numbers are in respect of employer contributions and investment earnings. This has been the case for many years. What happened in 1988? The Government introduced a tax on employer contributions and investment income and reduced the tax on lump sum benefits. The reduction in benefits tax had no effect on the tax expenditure numbers because it was in the future but the tax on contributions and investment income immediately decreased these annual figures!

My point is that the annual publication of these figures can affect the public perception of the cost of the support provided by Government to encourage superannuation. This is potentially dangerous if we only consider it on a year-by-year basis. Superannuation is a long term investment vehicle and it is too important to be affected by these annual figures which create a fictitious picture.

Let me now turn to a topic that is somewhat less technical and is relevant to all of us.

## "A 12% contribution rate is sufficient to provide an adequate retirement benefit."

As mentioned earlier, the Labor Government has introduced the Superannuation Guarantee Charge which brought in compulsory employer sponsored superannuation for the vast majority of employees. It plans to gradually increase the minimum level of compulsory superannuation from the 3%/4% rates introduced last year to 9% early next century. It also claims that, with an additional 3% employee contribution, a total contribution rate of 12% would be sufficient for most employees to receive a reasonable retirement benefit. In turn, this will enable the future costs to the Government of the means tested age pension to be reduced. But is 12% sufficient? Will this plan work?

To test this hypothesis, a model has been constructed which accumulates an individual's contributions over his/her working career. The model allows for varying inflation levels and an investment return that averages 5% per annum in excess of inflation but with a standard deviation of 8% to realistically reflect the volatility of investment returns. That is, the model does not assume a fixed rate of return for 40 years or so. Instead, it allows for a variable investment return around a mean or expected rate of return. Hundreds of simulations were then carried out for each set of circumstances.

Let us now look at the results assuming a 12% contribution rate. The accumulated contributions are assumed to be taken as an indexed annuity or pension for life and are therefore expressed as a percentage of the individual's final salary prior to retirement.

		Λ	<b>Aales</b>	Females	
Entry	Exit	Expected	Standard	Expected	Standard
Age	Age	Benefit as	Deviation	Benefit as	Deviation
		a % of salary		a % of salary	
20	65	58.0	17.4	46.2	13.5
25	65	49.5	14.0	39.6	11.4
20	60	40.3	11.4	32.9	9.4
25	60	32.9	8.9	26.8	7.4
20	55	27.6	7.3	23.3	7.3

The first conclusion to note is that a 12% contribution rate payable for 40 or 45 years with a retirement age of 65 provides a reasonable retirement pension ranging from 40% to 57% of final salary for males and 33% to 47% for females. Hence, the Government is correct when it states that a 12% contribution is sufficient to provide a reasonable retirement benefit. But let us now look at some of the other figures.

Early retirement has a devastating effect on the final result. First, there are fewer years over which the benefit can be accumulated and secondly, the pension has to be paid for a longer period. Hence, reducing the retirement age from 65 to 60 cuts the final pension by 13-17% of the person's final salary. Early retirement at age 55 reduces the benefit even further. Yet, earlier retirement is a trend that is already present within the workforce and is likely to continue.

The whole concept of early retirement presents the community with a very interesting dilemma. In many instances, individuals are happy to retire early because they are in good health and can afford to do so, partly because of superannuation. Further, many employers are pleased to co-operate as it provides them with a fairly painless method of reducing their staff numbers. Yet, in terms of the whole economy, early retirement may not be a good trend, especially if it means that a greater proportion of retirees will receive the age pension because their retirement periods are longer. We are also removing skilled personnel from the labour force. As a community, how can we overcome the dilemma that early retirement is seen as advantageous by the two parties involved, namely the employer and the employee, but may have a negative long term impact on the economy?

Having briefly commented on the exit age, the entry age also represents an important variable. Clearly, later entry means smaller superannuation benefits assuming the same retirement age. With increased retention rates in the secondary and tertiary education systems, we are witnessing a generation that is entering the workforce later and may be expecting to leave it earlier! Under these circumstances, a 12% contribution rate is not sufficient to fund a reasonable retirement pension.

Let me now briefly comment on the columns which show the standard deviation around the expected benefits. Because investment returns are volatile and vary from year to year, every retiree is going to receive a different benefit for the same contribution rate. In fact, the variation can be quite extreme depending upon the years through which the person worked. For example, the pension received by the male member who has contributed for 45 years has a 15% probability of being below 40% of their final salary. This will probably come as a surprise to them!

One method of reducing this variability or risk is for the member to place their superannuation in a more conservative investment environment during the later years of their working career. Let us therefore consider the results for a 12% contribution rate with three investment strategies for a male with an entry age of 20 and an exit age of 65:

Strategy A: real rate of +5% (managed fund with shares, property etc)

standard deviation of 8% pa

Strategy B: real rate of +3% (capital stable fund with mainly fixed interest)

standard deviation of 5% pa

Strategy C: real rate of +1% (cash and short term securities)

standard deviation of 2% pa

The table below shows the results under six different investment strategies.

Investment strategy	Mean benefit	Std Dev
A for 45 years	58.0	17.4
A for 40 years, then B	53.6	15.1
A for 35 years, then B	49.7	12.9
A for 40 years, then C	47.6	13.1
B for 45 years	38.9	8.0
C for 45 years	27.2	4.0

The important result, and not an unexpected one, is that as the individual chooses a lower level of risk for their investment (or a more secure investment portfolio), their likely benefit is also reduced. This trend is critical because if individuals are to be given greater responsibility and the choice as to where they would like their superannuation money to be invested, many of them may adopt investment approaches to reduce their risk but to the detriment of the economy as a whole.

#### Two further points to ponder:

- 1. I have not discussed the interaction of the means tested age pension on these individual decisions. In fact, for many individuals, the above differences in the total pension benefits they would receive will be reduced due to the impact of the means tested age pension. That is, a higher age pension will be payable to those who suffer a poor investment return. Naturally, the converse also applies to those who receive good investment returns. Hence, some individuals may adopt the risk averse position and say "I'm not taking any investment risk because the age pension is there and I don't want to risk losing it by adopting a risky investment strategy. What's the point?"
- 2. We have an aging population and as the baby boom generation approaches retirement they will also tend to act more conservatively. If, as individuals, they choose the conservative investment options to reduce the variability of their investment returns, the fund managers will have no choice but to follow their instructions. This may be yet another influence to cause the total asset allocation of superannuation funds to take a conservative shift.

You will note that the above examples have concentrated on males who work in a full time job for their whole career. The situation is worse for females for two fairly obvious reasons:

First, most women have broken working careers with periods out of the work force and/or significant periods of part time employment. Under such circumstances, a contribution rate of 12% is not sufficient to provide a reasonable pension.

Secondly, women, on average, retire earlier and live longer than men. Hence to provide the same benefit, even with the same working career, a higher contribution rate is required.

And so, let us return to question: Is 12% enough?

I believe that the answer for many individuals is that, by itself, it will be insufficient to provide a reasonable retirement income. Many will continue to rely on the age pension to supplement their retirement income. Factors that will make this necessary include:

- · later entry into the workforce;
- · earlier retirement from the workforce;
- · periods of unemployment or family responsibilities;
- · increasing part time work for both men and women;
- increasing longevity;
- volatile investment returns which will provide a reduced benefit for some individuals;
- individuals choosing conservative investment options.

Finally, the above discussion has concentrated on defined contribution or accumulation plans, which operate as an individual account. I suggest that the uncertain returns that these schemes produce for members due to the variations in the investment markets, mean that defined benefit funds will not disappear and may even experience a resurgence. Where an employer is willing to promise a benefit in terms of final salary, and bear the associated investment risks, some employees may be very attracted to the proposition, particularly if a low inflation environment is maintained so that the very high rates of return achieved in the 1980's do not return.

Let me now come to a related statement.

# "Superannuation will cause a significant reduction in the future cost to the Government of the age pension"

An important argument that the Government has used to encourage superannuation is that it will, in time, reduce the strain on the Federal Budget as retirement income is increasingly provided from the private sector in the form of superannuation. Hence, Governments have supported superannuation through the provision of taxation support, albeit at a reduced level in recent years.

Yet, the real question is: will it work?

My conclusion is that under the current conditions, there is a fair bit of fiction and/or hope in this statement.

My fundamental reason for this answer is that there exists no direct integration between benefits received from superannuation and eligibility for the age pension. Further, the actual reduction in age pension costs will be limited because of several factors, including:

- the prevalence of lump sum benefits within the Australian context. Although it
  must be acknowledged that many retirees spend and invest their lump sum in a
  conservative manner, the option to use it for non-retirement income considerably
  reduces the efficacy of the superannuation system;
- the trend towards earlier retirement. As superannuation becomes more widespread, individuals will choose to retire early because they are financially able to do so. The proposed increase in the preservation age from 55 to 60 will, in theory, help to alleviate this problem but its deferral until 2025 reduces its impact considerably;
- the level of the Superannuation Guarantee Charge is currently only 3% or 5% depending on the size of business. Even if one allows for the proposed increases to 9%, its effect will be a long term one. In terms of potential saving for the Budget, a superannuation benefit based on SGC only contributions will not be sufficiently large to affect age pension entitlement for anyone within 20 or 25 years of retirement, and that represents most of the post war baby boomers! This problem is further exacerbated if part of the benefit is taken in lump sum form.

Superannuation benefits should affect an individual's age pension entitlement, assuming we persist with a means tested age pension. However, because of the long lead time and the lack of any direct integration, any actual saving within the next 20 years will be more by good luck than good design!

We need an integrated retirement income system which incorporates both superannuation and the age pension whilst maintaining an incentive for individuals to increase their personal saving, both within and beyond the superannuation industry. The existing means tests and associated rules do not meet that objective.

#### **Conclusion**

Now we are approaching the end of this expedition through the superannuation minefield.

Let me conclude by summarising where we have been and raising some issues for the years ahead.

- Superannuation will continue to grow in importance, both in terms of the economy and for individuals. Its importance also means that Governments will not stay out of it! Nevertheless, increased bipartisanship and a slowing in the rate of change would provide confidence to members, employers, investors and retirees and therefore be of benefit to all.
- Australia now has a national superannuation scheme for employees in the form of the Superannuation Guarantee Charge. The contribution rate will continue to increase in the years ahead and will therefore form an integral part of remuneration and financial planning for all Australians. However, unlike most overseas schemes, it is administered in the private sector and does not provide any integration with the publicly provided pension. A better link between superannuation and the age pension is necessary. We cannot afford to have two retirement income systems running in parallel.
- The continued growth of superannuation through the SGC and the associated increase in the size of superannuation assets will ensure that the investment of these funds remains an important economic and political issue. In the recent election campaign, we witnessed bipartisan support for the limited use of superannuation funds for the purchase of housing for members. This development introduces a new dimension into the superannuation debate. What are legitimate uses for superannuation money? Can funds be used for health care? What about the national interest? These are important questions. My brief response is that we must make sure that superannuation provides economic security in retirement before we permit it to be used for other reasons. The provision of retirement income must remain its fundamental purpose.
- As far as their investments are concerned, superannuation funds are invested in a wide range of areas, including overseas and Australian equities. While there is some concentration in the top 20 companies, there is also considerable diversity in the investment strategies followed. However, there are a number of influences that may increase the conservatism of the investment policies followed. These include increased vesting levels, a higher level of individual involvement, the aging of the population, and a relative decline in the importance of defined benefit plans which have higher levels of non-allocated funds.
- In terms of taxation, superannuation does receive concessional tax treatment but its
  value is not \$5 billion per annum. This figure should not be used for policy
  development as it can lead to wrong long term decisions. I also believe that some
  form of concessional tax treatment will continue. In fact, in keeping with the
  Government's objective to introduce an additional 3% contribution by employees

over the longer term, I suggest that we may see the broadening of the current rebate system for employee contributions. This is currently income tested and restricted to contributions of \$1000 per annum. Nevertheless, it is interesting to note that the \$1000 limit is very close to 3% of the average wage! Is that coincidental? I believe that if we want members to increase their savings through superannuation, we must increase the incentive to them at the point of saving. The extension of the current restricted rebate system, to accommodate the Government's long term goal of 3% employee's contributions by all members, represents one way forward.

The introduction of greater vesting, compulsory superannuation, more information to
members and some choice at the member level will result in greater responsibility at
the individual level. The link between employers and the provision of superannuation
will remain but the employer's position of control has been reduced considerably and
the individual is now being given much more responsibility to become self sufficient.

And so, in conclusion, we have seen that superannuation is important for individuals, employers, the capital markets, the economy and the Government. However as we go forward, it is important to distinguish the facts from the fiction. Although many of the issues are difficult, it is my hope tonight that I have clarified some of the facts, highlighted elements of fiction and provided you with a better understanding of some of the future directions for Australian superannuation.