



## DISCUSSION PAPER PI-0210

# The Shift from Defined Benefit to Defined Contribution Retirement Plans and the Provisioning of Retirement Savings

Donald Ross and Lester Wills

*July 2002*

ISSN 1367-580X

The Pensions Institute  
Cass Business School  
City University  
106 Bunhill Row London  
EC1Y 8TZ  
UNITED KINGDOM

<http://www.pensions-institute.org/>

# **The Shift from Defined Benefit to Defined Contribution Retirement Plans and the Provisioning of Retirement Savings**

Donald Ross

Lester Wills<sup>1</sup>

University of Western Sydney  
Australia

**Version of a paper presented at:  
Centre for Pensions and Superannuation  
Tenth Annual Colloquium of Superannuation Researchers  
Sydney Australia**

**July 8-9 2002**

## **Abstract**

This paper examines the trend in retirement saving away from Defined Benefit (DB) to Defined Contribution (DC) plans. It looks at reasons why this shift has occurred in several countries, considers the potential offered by the change and then briefly examines the operation of DC plans in the US and Australia. Problems with both the voluntary and mandatory approach to retirement savings using DC plans are outlined. The potential consequences of the shift are then reviewed in the context of responsibility for the retirement savings decision and personal involvement in retirement planning process. The paper concludes that the level of involvement in the personal retirement savings decision may be a critical factor in determining the propensity of an individual to save for their retirement. As a result research is proposed to more fully consider the involvement of the individual in the personal retirement savings decision.

---

<sup>1</sup> College of Law & Business - School of Accounting. University of Western Sydney. Building U2, Blacktown Campus. Locked Bag 1797 South Penrith Distribution Centre NSW 1797 Australia

# **The Shift from Defined Benefit to Defined Contribution Retirement Plans and the Provisioning of Retirement Savings**

By Donald Ross & Lester Wills

## CONTENTS

Abstract	1
Introduction	3
Section One	4
1.1    The trend towards Defined Contribution Pension Plans	4
1.2    The rationale for the change in pension plan structure	5
1.3    The potential offered by the shift to Defined Contribution Plans	8
Section Two	8
2.1    The operation of Defined Contribution Plans in the US	8
2.2    The operation of Defined Contribution Plans in Australia	10
2.3    The effects of the shift from DB plans to DC plans	14
2.4    The consequences of the Shift to Defined Contribution Plans	15
2.4    Responsibility for the retirement savings decision	16
Section Three	18
3.1    Involvement in the Retirement Planning Process	18
3.2    Measures of Involvement	19
3.4    New areas for research on involvement in the personal retirement savings decision	24
3.5    Next Steps	28
Conclusion	28
References	30

## **Introduction**

Dramatic improvements in medical science and a general improvement in living standards has led to a significant reduction in the mortality rate in many countries. As a result the average age at which people are likely to die increased significantly in the 20<sup>th</sup> century. The implications of this has been not only to increase the number of people who survive to retirement age, but it has also seen larger numbers of people live for much longer periods in retirement. The effect of this change has been to increase the ultimate cost of providing a given pension scheme benefit. Consequently, there are severe doubts about whether or not employers who have offered their employees pension schemes in the past will be able to afford to provide a similar level of benefits in the future (Everness, 2001).

This paper aims to consider the effects of the shift from DB to DC plans from both the perspectives of the plan provider and the plan member. Examination of this trend is undertaken to determine whether there are lessons to be learnt from the countries where this shift is most advanced which could be utilised by countries where the shift is less pronounced. Consequently the paper is split into three sections. In Section one the reasons behind the trend from DB to DC plans in two countries where it is well advanced (US and Australia) are considered along with trends in two countries where DC plans are not dominant (UK and Canada). In Section two the operation of DC plans in the US and Australia are reviewed along with the broader consequences of the shift away from DB plans. Section three examines the responsibility for the retirement savings decision and focuses on the degree of involvement by the individual in the retirement planning process. The concept of involvement is then reviewed and measures of involvement are examined with a view to considering its application to financial services and in particular the retirement savings decision. Finally, new areas of research are proposed around three factors, namely, the perceived ownership of retirement savings, the awareness of the need to save for retirement and an understanding of how to save for retirement. The research aims to investigate whether

levels of involvement in these elements are significant in determining the overall level of involvement in the individual retirement savings decision.

## **Section One**

### **1.1 The trend towards Defined Contribution Pension Plans**

A traditional pension plan was often a Defined Benefit (DB) structure relating the end payment to final salary and/or years of service. However, there has been a strong shift away from DB Plans and towards Defined Contribution (DC) Plans in a number of countries whereby the end payment is related to the level of contributions made and the investment returns of the fund during the accumulation phase.

This trend has been very strong over the last 2 decades in the US with 97% of companies now using DC plans (Altmann, June 2001). The Employee Benefit Research Institute (EBRI, 2002) estimates that the number of workers covered by DC plans in the US has increased 600% between 1987 & 2002 from 7 million to 42 million (Dawson, 2002). In Australia, less than 5% of superannuation fund assets remain in pure DB funds (APRA, 2001). Among the key drivers of change in the UK have been the trends in state and private pension provision, in particular, the post war growth and subsequent decline of occupational DB pension schemes and the shift to individual DC personal pension schemes that has occurred in the last 15 years (FSA, 2002a). Currently approximately a third of pension schemes in the UK are DC but the trend away from DB funds is expected to accelerate in coming years (Altmann, June 2001). Canada on the other hand has not yet witnessed the dramatic decline of DB funds seen in the other countries mentioned. Whilst almost 54% of pension plans in Canada are DC in structure, membership of such plans currently covers less than 13% of total pension plan members (Statistics Canada cited in (Brown, 2001).

## 1.2 The rationale for the change in pension plan structure

There are a number of reasons cited for the shift from DB plans to DC and in some instances, proponents have suggested that it is simply a matter of time. Bharmal, Holmes & McCaw (cited in (Ostaszewski, 2001) outlined several of the reasons for the change which Ostaszewski paraphrased as:

- a) The Risk Averse Employer Theory
- b) The Excessive Regulation Theory
- c) The New Economy Theory

### a) The Risk Averse Employer Theory

With increase in volatility in financial markets the cost of funding retirement benefits has become less predictable than in the past. This lack of predictability presents inherent problems for employers attempting to provide adequate funding for a DB plan. The problems associated with the funding issues are likely to have made employer's cognisant with the risk distribution issues between DB and DC plans. In most countries employers generally have control of the type of retirement plan that will be offered to their employees. Consequently, having become aware of the risks associated with offering DB plans, a shift towards DC plans would be expected, especially as employees are likely to less be aware of the risk distribution between the different types of plans. In Australia this move has really taken hold with the introduction of the mandatory retirement savings scheme. The Superannuation Guarantee has forced many employers to establish superannuation funds and make regular contributions on behalf of their employees. The new plans were invariably DC and where a DB plan was in operation; new employees were usually prevented from joining. Employees who were members of the old DB plan were allowed to continue in the old DB plan but were encouraged to move across to the new DC plan. There was no compulsion but suitable inducements were offered. This was particularly so with public sector workers who often had very generous DB schemes. The situation in the UK however is somewhat different. Large

number of UK companies are closing their DB plans to new and, in a number of high profile cases, existing members as well. Such companies are establishing DC plans to replace their old schemes. The reason most cited is the new UK accounting standard FRS 17. It is claimed the new accounting standard has made it too expensive and risky for companies to continue to provide DB plans. FRS 17 is similar to but stricter than the US FAS 87 and requires companies to value annually their pension plans in the profit and loss statement. No smoothing of pension assets and liabilities are allowed and liabilities are discounted against AA corporate bonds. Consultants say that FRS 17 is being used as a scapegoat as plan sponsors wake up to the true costs of providing DB plans (Payne, 2002). FRS 17 has accelerated many planned changes in UK pension plans, as companies have been concerned about the risks of running pensions for some time (Keogh, T. cited in (Payne, 2002).

b) The Excessive Regulation Theory

Governments have passed laws in order to try and ensure that contributions made to pension plans are protected and usually that they are preserved until retirement. This has involved the imposition of strict legal, funding and solvency laws as well as regulations about what types of assets can be included in a pension plan. The laws are made additionally complicated by tax laws concerning deductibility of contributions, as well as regulations concerning who can make contributions and on behalf of whom those contributions are made. In Australia, the superannuation system that exists in 2002 has been pieced together by governments from both sides of politics during the last ten years. Each successive government has modified the system in some way with the result that retirement savings legislation is unduly complex and difficult to keep up with even for practitioners<sup>2</sup>. This degree of complexity has recently been increased by the intrusion of family law in the pension system with the introduction of

---

<sup>1</sup> By way of example, in the 12 months of calendar year 1999 there were 786 changes in legislation and regulations affecting superannuation

legislation concerning the breakup of marriages or de facto relationships and the division of superannuation fund assets.

c) The New Economy Theory

Workers today are more mobile and consequently unlikely to retire from the same firm in which they began their careers. For some workers, DC schemes may be an advantage. Compared to DB schemes, which typically re-distribute from leavers to stayers, DC schemes may benefit people who stay with a firm for a relatively short period of time and be better suited to more flexible working practices (FSA, 2002a). DB schemes offer an assured income replacement ratio in retirement provided they remain with the same employer for their whole career. This applies to fewer than 5% of workers in the UK as the average worker changes jobs up to six times. In such circumstances that worker could lose 25-30% of their full service pension compared to someone who stays with the same employer for their whole career. Even someone changing jobs once in mid career could lose up to 16% of the full service pension (Blake, 2000a). At the same time, employers are unlikely to view their workers as lifetime employees. The result is that for a retirement saving structure to be effective, employees need direct ownership of their retirement funds and full portability. One can also argue that changes in culture, technology and education have provided the impetus for employees to be more self-directed and independent. Such an approach is more readily suited to DC plans than DB plans, making DC plans more desirable. This trend can be illustrated by the increasing number of self-employed people and the weakening of the link between employers and employees. Both groups demonstrate a greater focus on their economic self-interest. Unlike DB plans, DC plans offer distinct and ongoing measures of wealth accumulation as well as much more flexibility in terms of asset allocation. DC plans are also more portable than their DB equivalent.



### **1.3 The potential offered by the shift to Defined Contribution Plans**

This shift to a more transparent retirement plan structure for plan members offers significant potential for member involvement. The comparative simplicity of DC plans and the ability to effectively track account balances mean that members have a greater potential for active involvement in their retirement savings than members in DB plans. Given these opportunities, is there evidence that DC plan members take advantage of the potential for more involvement with their retirement savings? Canada is yet to undergo any major change away from DB plans, the UK is still in the early stages of such a shift but both countries may benefit from any lessons learnt about the behaviour of DC plan members. Two countries that are well advanced with regard to shifting from DB to DC pension plans are the US and Australia. Having stated that, it must be recognized that there are significant differences between the US and Australian systems particularly as one is voluntary and the other mandatory. A detailed breakdown of the two schemes is not the topic of this paper and hence only a brief examination of each system is provided.

## **Section Two**

### **2.1 The operation of Defined Contribution Plans in the US**

The US Safe Harbor regulations require a DC plan to offer the following:

- (i) At least three investment alternatives each of which must be diversified with different risk/return characteristics
- (ii) Members must be able to control the assets and change investment choices
- (iii) Members must receive good information
- (iv) Investment choices must allow the creation of an appropriate portfolio
- (v) The combination of choices should allow portfolio risk minimization through diversification

However, there is some evidence that the shift to employee directed investment in pension plans has created a major problem as individuals invest their assets much more conservatively

than institutions do (Bryant, 1996). In response to these concerns it is common practice for mutual fund companies to provide significant training in investments for prospective plan members, often in the workplace. Evidence suggests that such education does lead to higher quality investment decisions and a better understanding of the benefits of long term investment in risky assets (Bayer, Bernheim, & Scholz, 1996), (Altmann, June 2001). Since 1991 the Retirement Confidence Survey (RCS, 2002) has tracked Americans' financial preparations for retirement and their attitudes regarding retirement ([www.ebri.org/rcs](http://www.ebri.org/rcs))<sup>2</sup>. The 2002 RCS found that two thirds of employed respondents indicated that their current employer offers a retirement savings plan that allows before tax contributions to be made, such as 401(k), 403(b) or 457 plans. The participation rate in such circumstances was 75%. 40% of workers reported that an employer or work related plan provider has given them educational material or seminars during the previous 12 months. 27% of those receiving these educational materials reported that they had made changes in their retirement planning as a result of the material received. Such changes included increased saving and changed asset allocations.

However, for an individual to participate in a sponsored pension plan in the US, it requires the person's employer to offer a suitable scheme. Whether or not an employer sponsored a pension plan was found to be a function of a number of variables (DOL, 1999). The level of unionisation, the level of pay of the workers, their education level and the type of industry were all relevant factors. Reasons given for low participation rates in pension plans by workers were such things as eligibility requirements and the increasing use of 401(k) plans that dictate voluntary employee contributions as a condition of participation. In such circumstances, there were low coverage rates for part time, temporary and low wage

---

<sup>2</sup> The RCS is a random, nationally representative survey of 1,000 Americans over the age of 25.

employees. Where an employer did sponsor a pension plan, the majority of the workers participated in the plan.

Overall more workers in the US are reporting pension coverage with 44% of private employees reporting participation in a “pension or retirement plan”, up from 41% in 1995. (DOL, 1999). Two key reasons underlie the relatively low participation levels in pension plans. Money management problems (the lack of) prevent many from saving appropriately and large numbers of workers do not recognise the need and consequently are not motivated to save for the future (Dawson, 2002). Consequently, the voluntary nature of retirement saving in the US is potentially inhibiting retirement saving behaviour. Such a premise is born out by the fact that in excess of 50% of the workforce is not participating in a pension or retirement plan. Australia on the other hand has a mandatory retirement saving regime utilising DC plans.

## **2.2 The operation of Defined Contribution Plans in Australia**

Until the late 1980’s, Australia had a voluntary system of retirement savings. The system became an incentive by which employers could attract and retain selected employees as they could make contributions on behalf of those selected. The system was open to abuse and became one that provided a method of developing short term savings as employees who changed jobs were able to cash in their superannuation and spend the virtually tax free benefit.

In 1983 legislation took effect to change the tax status of superannuation savings. This was an attempt to ensure that at least some of the funds would be preserved until retirement. 1986 saw the introduction of compulsory superannuation. In 1992 the Superannuation Guarantee legislation was introduced. This required employers to make compulsory contributions on behalf of employees and extended coverage to virtually the entire workforce. The level has

been gradually increased and will reach the 9% limit of salary in mid 2002. According to the Australian Bureau of Statistics (ABS, 2001b), superannuation coverage of the workforce has increased dramatically from 42% in 1987 to 91% in 1996.

Despite initial media programs to explain the nature of superannuation when it became compulsory in 1992, knowledge of the system and even individuals' own account balances is not encouraging. Five areas of concern are briefly examined:

- a) Lost & unclaimed accounts
- b) Account balances
- c) Coverage of superannuation
- d) Adequacy of superannuation contributions
- e) Short term focus of investors

- a) Lost and unclaimed accounts

The unforeseen consequence of attempts to preserve superannuation savings until retirement, have been that significant sums of money have become "lost or unclaimed". To prevent early access individuals who change their employer are required to place their superannuation into a holding account. Unfortunately in a number of cases, people either have not done so, or they have ended up with a plethora of holding accounts, each containing relative small sums of money. The propensity for people to lose track of such funds appears to be high with the Australian Taxation Office (ATO, ) estimating the amount of lost superannuation to be almost A\$6 billion (<http://www.findmysuper.com.au>). The ATO reports that is growing by almost A\$1billion p.a.

b) Account Balances

The various types of superannuation fund in Australia in some respects reflect the occupation of the individuals concerned. The main exception to this are what's known as Do It Yourself Funds (DIY Funds), which tend to be the preserve of the more financially sophisticated. DIY Funds represent less than 2% of the number of superannuation funds in Australia but they contain almost 18% of the country's superannuation assets. The average DIY fund account balance is more than 4 times larger than the average worker in business, 5 times the size of the average public sector worker and 35 times larger than the average account balance from an industry fund, which were originally based around union membership.

c) Coverage of superannuation

Being a mandatory system, employers have to make contributions on behalf of their employees. However there are exemptions (ABS, 2001a) and as a result there are significant numbers who have little or no superannuation. The ABS (ABS, 2001b) found that 25% of the pre-retired population has no superannuation at all. Not only do a higher proportion of males have superannuation than females, their account balances are almost twice as large. Less than half the unemployed population had some form of superannuation compared to 87% of those in employment. Over 90% of full time employees had superannuation whilst less than three quarters of part time employees have any superannuation.

d) Adequacy of superannuation contributions

The contribution rate stipulated in the Superannuation Guarantee legislation has been rising slowly since its introduction and will reach its peak of 9% this year. Unfortunately it will take approximately 30 years for the policy to be fully operational because the dollar level of coverage per person (as distinct from the percentage of workers with some coverage) is very low for most of the new entrants. Even when the scheme reaches maturity the level of compulsory contributions will not provide an adequate level of retirement income (Scheiwe,

1999). ASFA (ASFA, 1999) has calculated that an average worker, saving through superannuation for 30 years, at the full 9% contribution rate, is likely to gain approximately \$19,000 per year for their retirement. This figure includes a part pension. ANOP Research Services (ANOP, 2001) conducted a survey of 750 people in Australia aged between 30 & 69 in the second half of 2001. The sample was asked what the minimum amount would be to ensure an adequate lifestyle in retirement. Less than 4% of workers stated that they could live on less than A\$20,000 pa. 70% of the sample stated that they would need at least A\$30,000 pa, three times the level of the current aged pension. ASFA (ASFA, 2001c) concluded that:

“The chilling finding was that many people – 33% - were in fact deluded in believing that their current saving habits are adequate. An additional 38% will be disappointed at not having what they want in retirement”.

e) Short Term Focus

Most Australians show low levels of commitment to retirement savings and often forgo opportunities to make long-term savings due to a disinclination to sacrifice current spending for future savings (UNSWRCAR, 2001). The Household Savings Report from the Melbourne Institute of Applied Economics & Social Research (MIAESR, 2001) found an unwillingness to contribute more to their retirement savings with in excess of 90% reluctant to invest more than the minimum into superannuation. The attitude towards saving appears to have deteriorated in recent times with evidence of a major shift in attitudes suggesting that it has become unfashionable (Mackay, 2001). The act of saving is no longer something that appears to have inherent virtue. The emphasis instead appears to be on using money to create the kind of lifestyle people want to live, here and now. Further, Mackay suggests that borrowings are being used to fund that lifestyle.

### **2.3 The effects of the shift from DB plans to DC plans**

Although superannuation contributions have grown rapidly over the last twenty years in Australia, the aggregate nominal level of household saving is no higher now than it was in 1983-84. This implies that the increase in superannuation contributions has occurred, in large part, at the expense of more traditional savings instruments, and has been accompanied by rising household debt (Commission, 2001).

Areas of concern are also starting to appear with DC schemes in the UK. Research conducted by the Association of British Insurers (cited in (FSA, 2002a) suggests that people may be under-saving for retirement. Their analysis shows that, on the basis of current rates of saving, future generations will retire with relatively lower incomes (relative to pre-retirement incomes) than previous generations. Pensions are generally trusted but there is relatively low understanding of how they are invested. Such lack of knowledge can also lead to unscrupulous exploitation, as was the case in the pension miss-selling fiasco. Even today current charging structures of a number of UK personal pension scheme providers are high, complex, disguised and front-loaded (Blake, 2000a). Pension fund members are not being offered sufficient information, education or guidance as regards the contributions they need to make, investment policies or options they should be considering. Survey evidence suggests that people think they will be able to achieve a reasonable level of income in retirement from their DC pension plan, but they have not been shown how to plan the pension and retirement process properly in order to meet these expectations (Altmann, June 2001).

In the US the employee potentially has a far greater degree of choice, albeit limited in a number of instances by the type of scheme provided by their employer. Even this is changing with the advent of member directed investment choices, which potentially offer a huge range of investment options. The pension field in the US has undergone a fundamental change (Rafter, 1996).

“401(k) plans have replaced traditional employer plans at an ever increasing rate; employer-funded plans have become employee-funded plans; institutionally managed employer-directed investments have become employee-directed investments; and institutional money has become individual money.”

## **2.4 The consequences of the Shift to Defined Contribution Plans**

The result of the trend away from DB plans has meant that plan providers are no longer responsible for the investment risk of retirement savings. The risk associated with defined contribution plans in theory rests with the individual owners of the assets. Such an approach can be beneficial if the individuals concerned have a close connection with their retirement savings plan. Where this connection is strong the individual is able to make a conscious decision to accept the responsibility and take appropriate action, or at the very least, seek expert guidance. Where the connection is weak, the individual is unable to make such decisions, yet they are still responsible for the investment risk. In such a situation the individuals concerned may find themselves disappointed with the accumulated sum when facing retirement. Consequently, there is a need to ensure that there is a strong link between the retirement savings plan, and the individual owner of the retirement savings assets contained within that plan in order to actively engage them in the decision making process.

A number of conclusions can be drawn from the evidence presented above:

- (i) A voluntary scheme offers the potential for pension fund members to be actively involved in their retirement savings.
- (ii) Where a voluntary scheme operates, there is the potential for a low participation rate.
- (iii) A mandatory scheme has the potential to increase the participation rate.



- (iv) Where a mandatory scheme operates there is the potential for a low level of connectivity between the fund member and the fund assets.

The corollary of the above is that, in both mandatory and voluntary systems, even under a DC structure, insufficient provision is being made for retirement. Following this to its logical conclusion, there is likely to be disappointment with any accumulated benefit. This disappointment may lead to increased dependency on the state system during retirement, thereby increasing funding pressure. Therefore, far from transferring the risk from the plan provider to the plan member, the risk ultimately resides with the state. Such a situation can become critical as some governments are counting on the current DC schemes to help alleviate future funding problems. The Australian Government released an Intergenerational Report with the 2002 Federal Budget (Government, 2002a). The report revealed that the budget was projected to move from a surplus of 1% of GDP at its best, to a deficit of 5% of GDP by 2042, primarily due to the increased cost of providing for its ageing population. However, this was based on a number of optimistic assumptions. In particular, it assumed that an increased proportion of retired people would be drawing income from their superannuation savings. Consequently, unless adequate savings are made into the DC superannuation system, the projected budget deficit could be much higher.

#### **2.4 Responsibility for the retirement savings decision**

If individuals are to take responsibility for the funding of their retirement, a primary requirement is that they are at the very least aware of that responsibility. As has been illustrated the degree of awareness of that responsibility is open to question in DC schemes. Even where employers' offer pension schemes in the US, significant proportions of the workforce do not participate. At least where there is participation, individual members appear to have a connection with their retirement savings as the level of contribution is voluntary and by definition involves a conscious decision. Within Australia, it is questionable whether there

is a connection between the individual member of a superannuation fund and the money accumulated within that fund on their behalf. Unless they are making additional voluntary contributions, individuals have no involvement in how much is removed from their earnings to be paid into their superannuation fund. They also have little or no involvement in how the funds are used and under normal circumstances are unable to access the funds, at least until some point in the future. The situation is not dissimilar to taxation as there is also no involvement in how much is removed from earnings, or how it is used. Consequently, it is conjecture as to whether Australians view superannuation contributions as a form of saving or taxation.

It is also questionable whether individuals are aware of the need to save for retirement. In the UK a recent survey conducted on behalf of the Financial Services Authority (FSA, 2002b) found that:

“at present there is a big gap between today’s young workers’ expectations of how well off they will be at retirement and the numbers and the amounts actually being saved.”

The research found that 52% of people aged 18 or over did not have any occupational or personal pension provision at all. For most people in the UK, planning for retirement is not an active ongoing process. The low participation rates in the US where 56% of the population do not appear to be covered by any form of pension plan imply a similar situation.

It is arguable whether the compulsory nature of superannuation in Australia can also lead to a false sense of security. Politicians and supporters of the system discuss the growth of superannuation assets in glowing terms. Like many other countries, Australia has a safety net for older citizens, namely, an aged pension scheme. As a result, many may be placing their trust in the government to take care of them. Consequently, ignorant of the details, individuals may consider that they are adequately covered by the system and subsequently not

be aware of the need to take a more active approach to preparing for retirement. The lack of involvement of individuals in the retirement saving process may therefore be reducing their connection with the issue of retirement provisioning.

### **Section Three**

#### **3.1 Involvement in the Retirement Planning Process**

Those plan members who are actively participating in their retirement plan are able to make decisions on the asset allocation of their plan. The increase in education has had some effect on the typical asset allocation in a number of cases. Available information suggests that this is still a minority and data is not available as to the reasons why the remainder did not alter their behaviour. In Australia, the compulsory nature of the system means that individuals have little or no control over the asset allocation of their superannuation fund. As has been illustrated, the focus of any saving is often short term in nature. Where individuals are saving, cash based accounts are the usual choice which supports with the proposition that people prefer to invest in the familiar (Huberman, 2001). The instances where Australians can exert some control over their superannuation funds tend to be during periods of relatively high stress. This is usually when they leave a particular job (possibly not through choice), the death of a partner or when they actually retire. Lack of prior involvement means that there has been little or no preparation for what can turn out to be significant future lifestyle decisions.

The situations outlined above all indicate levels of uncertainty for the individual in terms of preparing for their retirement. Uncertainty can be reduced by improving predictability through shortening time horizons, e.g. preferring short term to long term goals (Cyert & March 1963 cited in (Lipshitz, 1997), behaviour demonstrated in Australia by the short term focus of saving (MIAESR, 2001). Individuals can also ignore undesirable information, namely illustrations of potential poverty in old age. Such behaviour has been called the

Pollyanna effect, the acquisition of an (often false) sense of security through the belief that “this unfortunate outcome cannot happen to me” (Montgomery, 1988 cited in (Lipshitz, 1997). Arguably behaviour demonstrated by individuals who do not prepare for their retirement believing that current provisions will be sufficient or think that retirement is far enough into the future not to worry about. For example:

“Some people assume that their pensions will be sufficient, some people hope that they are saving enough, others think that it is too difficult to know whether they are saving enough or not. When people do receive pension predictions, these are either not understood or thought not to be relevant because retirement is still a long way off.” (FSA, 2002a)

Increasing the level of involvement in the personal retirement savings decision is potentially a means of reducing this uncertainty and engaging the individual in the process of provisioning for retirement.

### **3.2 Measures of Involvement**

The concept of involvement was initially researched in the field of Social Psychology by Sherif and Cantril in 1947 with further work conducted by Sherif et al in 1965 (cited in (Aldlaigan & Buttle, 2001). Attitude change was considered a suitable area to utilise the concept and was used in social judgment theory, which suggested that an audience’s response to a message was dictated by prior attitude to that topic and their involvement. Houston & Rothschild 1978 (cited in (Aldlaigan et al., 2001) proposed that there are different types of involvement and placed emphasis on involvement as it relates to cognitive response to a persuasive message. Rothschild (1984 cited in (Aldlaigan 2001) proposed that involvement is an unobservable state of motivation, arousal or interest. Zaichkowsky (1985 cited in (Zaichkowsky, 1994) defined involvement as “a person’s perceived relevance of the object

based on inherent needs, values and interests". Zaichkowsky (1986) and Bloch & Richins (1983 cited in (Zaichkowsky, 1994), viewed involvement as having three antecedent factors

- a) The characteristics of the person
- b) The characteristic of the stimulus
- c) The characteristic of the situation

It is suggested that one or more of these factors is likely to affect the level of involvement with the stimulus in the context of involvement with products or with purchase situations. Retirement savings plans can be considered a product and the decision to take an active involvement i.e. make contributions to the pension plan can be considered a purchase decision. With the three factors in mind, Zaichkowsky (1985 cited in (Zaichkowsky, 1994) developed a context free 20 item scale called the Personal Involvement Inventory (PII) which measures the motivational state of involvement. Items in the PII are related to three assumed areas that affect a person's involvement level:

- (i) Personal: inherent interests, values or needs that motivate the person toward the object
- (ii) Physical: characteristics of an object that cause differentiation and increase interest
- (iii) Situational: something that temporarily increases the relevance of, or interest toward an object.

The PII came to be regarded as a reliable and effective measure of involvement. However, criticism of the PII developed including the fact that some researchers considered it was too long for repeated testing. Zaichkowsky (1987 cited in (Foxall, 1988) conducted further research and developed the Revised Personal Involvement Inventory (RPII) which appeared to answer the criticisms leveled at it. The RPII has been used in a large number of additional studies whose authors were satisfied with the reliability and predictive validity of the new scale (e.g. Goldsmith et al 1991, McQuarrie & Munson 1987, Foxall & Bhate 1993, cited in (Foxall, 1988).

The initial testing of the PII was conducted in relation to its application to advertising. Foxall & Pallister (1998) used Zaichkowsky's work to assess involvement in financial services. They argued that consumer's financial decision making was a mass of confusion, lack of confidence and shortage of trust. They used the Revised Personal Involvement Inventory (RPII) and Mittal's Purchase-decision Involvement Scale (PIS) to compare internal reliability, dimensionality, convergent validity, discriminant validity and criterion validity. The results produced by Foxall & Pallister indicated that for purchase decision involvement in respect of pensions, life assurance, mortgages and savings and investments, both Zaichkowsky's RPII and Mittal's PIS inventories exhibited high and acceptable levels of reliability. They found that on both scales significant differences were recorded between buyers and non-buyers for savings and investment. However, both scales showed no significant differences between buyers and non-buyers of pensions. Unfortunately information is not available on what type of pension was used in this research. If it was a product designed to produce an income stream (as opposed to an accumulation phase pension plan) the purchasers could have been facing a simple choice. They could have been choosing between an income stream from interest earned on bank deposits or an income stream produced from an annuity type product. In such circumstances it can be argued that the involvement is likely to be low as the decision is purely based around the purchase point, where one type of income is substituted for another. Consequently the decision would not so much be about the income stream product, but more about the provider.

Based upon their analysis Foxall & Pallister concluded that both Zaichkowsky's RPII and Mittal's PIS appear equally capable of capturing the construct of purchase decision involvement and that both scales were found to perform well in a financial services context.

Aldlaigan & Buttle (Aldlaigan et al., 2001) investigated consumer involvement in financial services and utilised Zaichkowsky's PII and Laurent and Kapferer's Consumer Involvement Profile (CIP). Laurent and Kapferer developed the CIP to measure five dimensions of involvement:

- (i) Interest: the personal interest a person has in a product (its personal meaning or importance)
- (ii) Pleasure: hedonic and rewarding value of the product class. The hedonic value of the product, its emotional appeal, its ability to provide pleasure and effect.
- (iii) Sign value: the degree to which the product expresses the person's self.
- (iv) Importance risk: perceived importance of the negative consequences of a mispurchase
- (v) Risk probability: the perceived subjective probability of making such mispurchase

The research by Aldlaigan & Buttle was considering consumer involvement in eight particular financial services, a cheque book, an overdraft facility, Switch services, a cash machine, savings accounts, investment services, mortgage services and a personal loan. They concluded that:

- 1) Not all services are equal in involvement
- 2) The two scales measure different latent dimensions of involvement
- 3) There is a need to develop a customised instrument to measure involvement in the context of financial services.

### **3.3 Involvement in the personal retirement savings decision**

The application of the measures of involvement in financial services is one that therefore needs further consideration, particularly in relation to the personal retirement savings decision. Significant time and effort is being expended in various countries to encourage people to save for their retirement but with limited success. At this stage there appears to be little or no research to determine why this is so. In Australia this is not the focus of attention due to the forced nature of retirement savings. However, as has been shown, undue reliance

is being placed on a system that is unlikely to deliver the expected benefit upon retirement. In a voluntary system such as operates in the US, by definition, a conscious decision has to be taken to save for retirement, implying a degree of involvement. The drawback to such an approach is its potential for limited coverage. This issue is addressed in a mandatory system but with the caveat that the level of involvement by the individual in the personal retirement savings decision is open to question. If individuals have little or no control over the decision making process, the level of involvement is likely to be limited. Further, if the level of involvement is limited, it is possible that the level of connection between the individual and those funds could be low especially if there is intermittent communication between the custodians of the savings and the individual. This link is likely to be further weakened if there is limited ability for an individual to take this money with them when they change occupations. At the same time a dichotomy can develop whereby there is a tenuous link between an individual and individual savings for retirement but identification with an amorphous scheme designed to provide benefits in retirement. This can be reinforced by a lack of understanding of what the scheme really is and the active promotion of the benefits of the scheme, both of which are occur in Australia. As a result, a sense of security can develop without active involvement by the individual in the scheme. In such circumstances, even where individuals actually make conscious decisions to save, previous experience is likely to have been directed towards short-term goals. It is not unconceivable that they may be a limited understanding of how to save for a time horizon that may extend decades into the future and consequently, limited activity may be directed to that end. Issues such as perceived ownership of the forced savings, awareness of the need to save and even an understanding of how to save for the long term are all areas that require involvement on behalf of the individual. Consequently, the degree of individual involvement in the personal retirement savings decision may have a fundamental bearing on the propensity of the individual to actively save for their retirement.



### **3.4 New areas for research on involvement in the personal retirement savings decision**

It is proposed that three factors are investigated to determine their effect on the level of involvement in the personal retirement decision, namely:

- a) Perceived ownership of retirement savings.
- b) Awareness of the need to save for retirement
- c) Understanding of how to save for retirement

- a) Perceived ownership of accumulated retirement savings

Where a pension system is voluntary, there is likely to be a strong link between the monies contributed to the pension scheme and the person contributing those monies. This link should be strong as by definition there is active involvement in the decision making process, i.e. the decision to contribute. In the US system, this decision making extends to the amount that is contributed, the risk/return profile of the fund and ongoing decisions regarding future asset mixes. In a mandatory scheme such as operates in Australia, there is no involvement in the decision to contribute to a pension/superannuation fund. This lack of involvement is compounded by the superannuation fund member having no involvement in the decision making process with regards the type fund, the asset mix or who manages the fund assets. Further, access to the assets is severely restricted, even when the member leaves the superannuation fund. Where the level of involvement is low, it is questionable whether individuals perceive forced savings as savings at all, or simply another form of taxation. If those being forced to save do not consider that the forced deduction from their earnings are savings, the degree of ownership of that money may also be low. The growth in lost and unclaimed superannuation monies supports this supposition. Where involvement is low in such circumstances, there is potentially low levels of perceived ownership of the assets held in the superannuation fund on behalf of the member.

b) Awareness of the need to save

Where there is a lack of involvement between the individual and retirement saving, there is the possibility that the individual may not be aware of the need to take action. If there is no active participation in any of the decision making process, it would not be unreasonable to expect awareness of those decisions to be low. The individual is more likely to be aware of issues that they are involved with rather than those they are not involved with. Planning for events that will take place some time in the future will involve a degree of uncertainty, which is compounded by the uncertainty of return when investing. As has been discussed, in areas of uncertainty, there is the potential to focus on the short term, and/or develop the Pollyanna effect. In both instances, the potential uncertainty is avoided.

In a voluntary scheme such as the US, participation in a retirement plan suggests involvement and a certain degree of awareness of the need to save for retirement. However, the results of the RCS (RCS, 2002) suggest that even this effect may be muted, as there is often little connection between current saving behaviour and the desired end result. When questioned as to whether they had tried to calculate how much they will need to have saved by the time they retire, so that they can live comfortably, less than a third of respondents indicated that they had made the calculation. Yet 70% reported that they were confident they would have enough money to live comfortably in retirement. Consequently, the plan members were involved in the decision to contribute and therefore may have relatively high levels of perceived ownership of the fund assets. The decision had been made to save for their retirement but there was little awareness of the detail once this decision had been made. Consequently, they illustrated low levels of awareness of why they were savings, i.e. how much was needed. Similar behaviour was found in the UK by the FSA who concluded that:

“Today’s young adults are storing up a nasty shock for when they approach retirement. Most people not only save too little but also rarely check whether they have enough saved until just ten years before they are due to retire” (FSA, 2002b)

In Australia it was found that there appeared to be a low level of awareness of the need to save for retirement. In a nation wide survey a significant proportion of respondents reported that they had factored at least a partial dependence on the aged pension as part of their retirement plans. However, awareness of the level of the Aged Pension was minimal and once they became aware of it’s rudimentary nature (being approximately one third of average weekly earnings) many expressed surprise (Wills, 2001). After the release of the report entitled “Looking forward to retirement. Is this as good as it gets?” ASFA concluded that:

“If retirement savings are inadequate, or savings plans are disrupted, then retirement can become a period of virtual imprisonment” (ASFA, 2000)

Consequently, lack of involvement in the retirement saving process has the potential to limit the awareness of the individual of the need to save for retirement. Even where there is some involvement, the lack of education regarding the need means that the accumulated benefit is unlikely to meet expectations.

c) Understanding of how to save for retirement

In the US a number of mutual fund companies offer educational seminars in the workplace with evidence suggesting that such training can lead to a better understanding of the benefits of long term investment in assets of a slightly higher risk profile (Altmann, June 2001). In the UK the FSA found that many appear to be basing their expectations for retirement on the view that all debts will have been paid off and that they will have saved enough to provide a better standard of living in retirement (FSA, 2002b). In Australia the Melbourne Institute has found that the focus of voluntary saving is short term (MIAESR, 2001). In a number of

countries there are government funded educational programs to try and encourage people to save for their retirement. In the US the Retirement Savings Education Campaign produces a range of material focused on explaining how to save for retirement. In the UK the FSA produces a range of booklets designed to provide a step by step guide to retirement savings. In Australia the Federal Government announced a multi million-dollar education campaign on saving for retirement in the May 2002 Federal Budget. The stated intention is to undertake an extensive community education campaign to inform employees and employers of their rights and obligations in relation to choice of superannuation; and inform superannuation funds and their members about portability of existing superannuation balances.(Government, 2002b). This is a radical measure as the only previous time the Federal Government sponsored a major education campaign on retirement savings was on the introduction of the Superannuation Guarantee legislation.

Unless there is a specific purpose for long term saving, the individual is unlikely to have any involvement in the practice. Where there is a lack of active involvement in saving for retirement, the individual is unlikely to consider it a priority and therefore unlikely to be familiar with the process. Involvement in the process of saving for retirement, by necessity, dictates saving for a longer time horizon that is normally associated with everyday money management. Even where some degree of involvement is evident in ownership of retirement plan assets, and there is some degree of awareness of the need to save for retirement, unless there is an understanding and consequent involvement in how to save for the longer term, it is likely that the focus will be short term in nature as is the most familiar. As a consequence there is increased potential that the investment return of the assets will not meet the goal of the saver. Unfortunately, realization of such an occurrence is likely to come when it is too late to redeem the situation, i.e. upon retirement.

### **3.5 Next Steps**

A research project is being developed to examine involvement in the retirement savings process based on the three factors outlined above. The research will seek to develop a model of the personal retirement savings decision, which potentially will provide valuable input into the ongoing development of DC schemes and raise the level of involvement of individuals in the accumulation of their retirement savings.

### **Conclusion**

In Section One this paper provided evidence of the shift in retirement savings plans away from Defined Benefit structures and towards Defined Contribution types of plans. Both the US and Australia were cited as examples of where this shift is well advanced, whilst the UK and Canada were provided as examples of where this shift is far less pronounced. Section Two showed that despite the potential offered by this shift for empowerment of the individual in terms of the provisioning of retirement savings, there is little evidence that this is happening. On the contrary, evidence was presented illustrating that in both voluntary and mandatory regimes, a significant number of individuals are not saving enough for their retirement. The consequences of this shift in plan structure has meant that the risk associated with the operation of pension plans has shifted away from the plan provider towards the individual and government. Section Three discussed the concept of involvement in decision making and raised the suggestion that individuals are not making adequate provisions for their retirement due to their lack of involvement in the retirement savings process. Several measures of involvement were briefly reviewed but the conclusion of earlier research was that whilst offering relatively high levels of reliability, a customised instrument is required to measure involvement in the context of financial services.

The paper suggests that the level of involvement in the personal retirement savings decision may be a critical factor in determining the propensity of an individual to save for their

retirement. As a result research is proposed to consider the importance of three elements in the involvement of the individual in the personal retirement savings decision: the perceived ownership of retirement savings, the awareness of the need to save for retirement and the understanding of how to save for retirement.

## References

- ABS. 2001a. Employment Arrangements & Superannuation: 1-63. Sydney: Australian Bureau of Statistics.
- ABS. 2001b. Superannuation Coverage & Financial Characteristics: 1-60: Australian Bureau of Statistics.
- Aldlaigan, A., & Buttle, F. 2001. Consumer involvement in financial services: An empirical test of two measures. *International Journal of Bank Marketing*, 19(6): 232-245.
- Altmann. June 2001. Lets get DC right before it's too late. *Journal of Pensions Management*, 7(1): 38-45.
- ANOP. 2001. It's time for a retirement reality check: 1-20: ANOP Research Services Pty Ltd Association of Superannuation Funds of Australia.
- APRA. 2001. Superannuation trends June quarter 2001: 1-28. Sydney: Australian Prudential Regulation Authority.
- ASFA. 1999. Achieving an adequate income in retirement. How much is enough?: 1-24: Association of Superannuation Funds of Australia.
- ASFA. 2000. Looking forward to retirement. Is this as good as it gets?: 1-47: Association of Superannuation Funds of Australia.
- ASFA. 2001c. Retirement reality check - many are deluded: 1: Association of Superannuation Funds of Australia.
- ATO. Find My Super [www.findmysuper.com.au](http://www.findmysuper.com.au), Vol. 2002: Australian Taxation Office.
- Bayer, P., Bernheim, B., & Scholz, J. 1996. The Effects of Financial Education in the Workplace. Evidence from a Survey of Employers: 1-29: National Bureau of Economic Research.
- Blake, D. 2000a. Two decades of pension reform in the UK. *Employee Relations*, 22(3): 223-245.
- Brown, R. J., L. 2001. The Shift to Defined Contribution Pension Plans: Why did it not happen in Canada. *North American Actuarial Journal*, 5(3): 65-77.
- Bryant, J. S., J. 1996. The 401(k) plan and the retirement planning revolution. *Compensation & Benefits Review*, 28(1): 58-68.
- Commission, P. 2001. Review of the Superannuation Industry (Supervision) Act 1993 & Certain Other Superannuation Legislation: 1-230. Canberra: Australian Federal Government Productivity Commission.
- Dawson, A. 2002. Financial Planning in the workplace shouldn't focus on just retirement, *Employee Benefit Plan Review*, Vol. 56: 14-16.
- DOL. 1999. Coverage Status of Workers under Employer Provided pension Plans, Vol. 2002: Department of Labour - US Government.
- EBRI. 2002. Retirement Confidence survey 2002: 1: Employment Benefit Research Institute.
- Everness, G. 2001. The effect on pensions of increasing life expectancy. *Journal of Pensions Management*, 7(2): 178-184.
- Foxall, G. P., J. 1988. Measuring purchase decision involvement for financial services: Comparison of the Zaichkowsky and Mittal scales. *International Journal of Bank Marketing*, 16(5): 180-194.
- FSA. 2002a. The impact of ageing population on the FSA: 1-37. London: Financial Services Authority.
- FSA. 2002b. Young are storing up last minute pension panic: 1-4. London: Financial Services Authority.
- Government, C. 2002a. Intergenerational Report 2002-03: 1-94. Canberra: Federal Government of Australia.
- Government, C. 2002b. Budget papers No. 2: 1-200. Canberra: Federal Government of Australia.
- Huberman, G. 2001. Familiarity breeds investment. *The Review of Financial Studies*, 14(3): 659-680.

- Lipshitz, R. S., O. 1997. Coping with uncertainty: A naturalistic decision making analysis. *Organisational Behaviour and Human Decision Process*, 69(2): 149-163.
- Mackay, H. 2001. The Mackay Report. Exploring the mind & mood of Australia: 1-33: Mackay Research Pty Ltd.
- MIAESR. 2001. Household Savings Report: 1-14. Sydney: Melbourne Institute of Applied Economics & Social Research.
- Ostaszewski, K. 2001. Macroeconomic Aspects of Private Retirement Programs. *North American Actuarial Journal*, 5(3): 52-65.
- Payne, B. 2002. UK companies abandoning defined benefit plans, along with cult of equity, *Pension & Investments*, Vol. March 2002: 14-16.
- Rafter. 1996. The DOL 401(k) guidelines: How employers can separate "information" from "advice". *Compensation & Benefits Review*, 28(1): 66-74.
- RCS. 2002. The 2002 Retirement Confidence Survey: 1-14: Employment Benefit Research Institute & the American Savings Education Council.
- Scheiwe, D. 1999. Why Australia's pension system is not a good international model: 1-14. London: Pensions Institute University of London.
- UNSWRCAR. 2001. *Ms...ing Out? Women & Retirement Savings*. Paper presented at the Economic Policy Summit.
- Wills, L. 2001. Financial Retirement Readiness Rating: 20. Sydney: ING.
- Zaichkowsky, J. L. 1994. The Personal Involvement Inventory: Reduction, Revisions, and Application to Advertising. *Journal of Advertising*, XXIII(No.4): 59-70.