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Towards a Model of the Personal Retirement Savings Decision

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Abstract

With the ageing of the Baby Boom generation there has not only been an increase in the number of people who survive to retirement age, but also the number of people who live for much longer. This has dramatically increased the cost of providing pensions leading to doubts about the viability of current approaches. Increasingly, individuals are being called upon to provide for their own retirement income. Unfortunately, current approaches to retirement savings are not conducive to that happening.

Where there is little involvement by individuals in retirement savings, the strength of any connection between individuals and their retirement savings is questionable. 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. This lack of involvement may therefore be hampering the provisioning of retirement savings.

Involvement in the personal retirement savings decision will be moderated by a number of factors. The age and economic circumstances of individuals is likely to have an impact upon their ability and/or willingness to save for retirement as will the type of fund they belong to. In a Defined Benefit Fund there is a tenuous link between individual contributions and account balances, unlike a Defined Contribution (DC) Fund where there is a relatively clear relationship. As a result, in a DC fund there is the potential for individuals to identify with the amounts saved. However this potential may not be realised in an environment where the individual is not involved. Increased involvement in the personal retirement savings decision has the potential to change individual attitudes towards retirement savings.

This paper proposes a model of the personal retirement savings decision based upon the involvement of individuals in the decision to save for their retirement. More particularly individual involvement is looked at in terms of:

Perceived ownership of personal retirement savings
Awareness of the need to save for retirement
Understanding of how to save for retirement.

The elements of involvement in the model are grounded in the concept of the experiential learning cycle, namely that people learn from experience. Experience is lacking where there is little or no involvement. If individuals are not involved in the personal retirement savings decision they are not likely to learn what is required to save for their retirement.

With a reduced workforce and increasing number of people in retirement living for longer, it is essential that individuals are actively engaged in saving for their retirement. This research will provide new insight into how this could be done.

Introduction

1.1 Overview

Pension systems in up to 15 OECD countries are undergoing significant changes as increased numbers are entering retirement (Disney & Johnson 2001 cited in Kelly et al. 2002). Whilst rising costs and predictions of increased demand were consistent factors, individual responses to the challenges varied from country to country. However, certain common threads were evident, in particular the need for greater reliance on self-provisioning and the requirement to reduce the unfunded provisions in retirement schemes. Increasingly, individuals are being called upon to provide for their own retirement income. Unfortunately, current approaches to retirement savings are not conducive to that happening.

In many instances there is little involvement by individuals in retirement savings. As a consequence, the link between individuals and their retirement savings is questionable. Ignorant of the details, individuals may consider that they are adequately covered by the local state system and subsequently not be aware of the need to take a more active approach to preparing for retirement. Lack of involvement may therefore be hampering the provisioning of retirement savings.

This paper considers the involvement of individuals in the personal retirement savings decision and how this affects the provisioning of retirement savings. It does so by setting out the basic dimensions of a model of the personal retirement savings decision that will be used to guide a major research platform into personal retirement savings behaviour.

1.2 The issue in question

The extent to which growing numbers of retirees are able to financially support themselves in the manner to which they are accustomed is fast becoming an issue of significance for governments around the world. The degree to which individuals will turn to the government of the day for support is dependent upon the level of assets individuals take into retirement with them. That in turn may be affected by the type of retirement savings plan they are members of, and how involved they are in that savings plan. Investment in a retirement savings plan is important as dramatic improvements in medical science and a general improvement in living standards have led to a significant increase in life expectancy. The implications of this have 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. This change has increased the ultimate cost of providing a given pension scheme benefit. The consequences of this are becoming apparent in the United States, where there is still a prevalence of Defined Benefit (DB) schemes, despite the massive growth in Defined Contribution (DC) schemes in recent times.

Research by Credit Suisse First Boston (cited in Bartholomeusz 2002) found that 72% of the companies that make up the Standard & Poors 500 Index have DB pension plans. Credit Suisse estimated that in 2000, S & P 500 companies had pension plan assets of approximately US\$1 trillion and US\$922 billion of liabilities. By 2001, this situation had

changed significantly. Assets had fallen to approximately US\$900 billion, whilst liabilities remained constant. Latest estimates suggest that in 2002, plan assets have remained at around that level whilst liabilities have exceeded US\$1 trillion, creating a deficit in excess of US\$200 billion.

Such unfunded liabilities are an illustration of the severe doubts that exists as to whether or not employers who have offered employees pension schemes in the past, will be able to afford to provide a similar level of benefits in the future (Everness 2001). As a consequence, individual employees are increasingly called upon to provide for their own retirement income (NATSEM 2002).

1.3 The main elements of the study

Involvement in the Personal Retirement Savings Decision is considered in terms of:

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

These elements of involvement that are grounded in the concept of the experiential learning cycle, namely that people learn from experience (Goby and Lewis 2000). Experiential learning can alter individual involvement in the retirement savings decision and in turn the savings behaviour for self-provisioning for retirement. Experiential learning theory argues that learning is the process whereby knowledge is created through the transformation of experience (Kolb 1984). An act or experience is reflected on, leading to new understanding and from there to revised action (Sutherland 2002).

Consequently, where that experience is lacking, learning is likely to be limited. If individuals are not involved in the personal retirement savings decision they are not likely to learn what is required to save for their retirement. To understand more about experiential learning and involvement in the personal retirement savings decision, consideration is given to:

- a) The degree to which improved knowledge of the three elements changes the level of involvement in the personal retirement savings decision
- b) Whether increased involvement in the personal retirement savings decision alters personal retirement savings behaviour.

In this paper the term involvement in the personal retirement savings decision is used to refer to active decisions made by a person to save for their retirement. Lack of involvement does not necessarily imply that saving is not taking place, merely that decision making by the individual may be passive with decisions being taken on their behalf, possibly without their knowledge. In the context of this paper, retirement savings behaviour refers to behaviour designed to provide funds for retirement.

1.4 Why these elements?

These three elements evolved from experience gained during over 20 years as a practitioner in the financial services arena, working with individuals connected with retirement savings behaviour in various capacities in four countries. This involved almost 10 years as an investment professional and making numerous investment presentations. This was followed by 12 years in both retail and wholesale investment marketing environments, making hundreds of presentations to superannuation fund trustees, financial planners retirement savings plan members and general investors.

During that time, anecdotal evidence was gained from large numbers of individuals regarding the provisioning of retirement savings. In particular, the lack of “ownership” of mandatory savings under the superannuation guarantee legislation in Australia. In particular individuals felt that the deductions in many respects were simply another form of taxation. Added to this was a lack of awareness of the need to prepare for retirement above and beyond the mandatory minimums. This was based upon a mistaken belief that:

- a) The mandatory system would provide them with sufficient funds to enable a continuation of their lifestyle in retirement
- b) The government pension system would make up any shortfall and therefore ensure the continuation of the desired lifestyle

Invariably once there was a degree of awareness of what the state pension system could provide, attitudes changed. However, at this stage a further issue was raised, namely an almost complete lack of understanding of how to save for the long term.

This anecdotal evidence was not restricted to the mandatory system within Australia. Based upon a number of extended study tours of US financial institutions and financial planning firms, certain elements of the anecdotal evidence were reiterated. Even though the US system is voluntary, where the use of default options were common, it appeared to be almost a de-facto opting out approach. Similarities between the experience of people in the US and Australia appeared, especially the lack of awareness of the need to save for retirement and in many instances an understanding of how save for retirement. (Choi et al. 2001)

Further anecdotal evidence was gained in Canada & the UK where different systems operate. In both instances a predominantly DB culture exists with a tenuous link between Contributions made and benefits paid. Whilst there was some movement towards DC types of retirement savings plans, it was apparent that there was a lack of understanding about the operation of such schemes. In the UK as companies were closing down DB plans due to their unfunded liabilities and the strictures of new legislation, media hype was particularly ill informed, about Cash Purchase Plans as DC schemes are called in that country. Consequently, issues surrounding ownership of retirement savings, awareness of the need to save for retirement and an understanding of how to save for retirement are also relevant in such places where the conversion to DC type schemes is slowly gathering pace.

2.0 The Current Retirement Savings Problem

2.1 Australian context

Whilst Australia has made significant progress, primarily due to the mandatory nature of its retirement savings system, it is still faced with a range of issues concerning the care of its growing numbers of elderly citizens. What's more, there is significant potential for the whole aspect of retirement savings and aged care to become politically controversial if corrective action is not taken, or is taken after undue delay. Consequently a plethora of pressures are gradually developing which will impact upon the Australian Federal Government's ability to maintain benefits, for example:

In 2002 the early Australian Baby Boomers reached the age of 55. Past experience has shown that Australian labour force participation drops considerably when people reach 55 as this is usually when they can access their retirement savings for the first time. By 2012 this same group will turn 65. This will result in the population of people aged 65 growing by 4% in that one year (Bishop 1999a). Between 2012 and 2028 the population of over 65s will grow four to five times faster than the total population, as the rest of this cohort reach 65.

More than 80% of Australians over 65 receive age pension or equivalent payments such as service pensions (Bishop 1999b). Pressure is likely to increase on income support programs as a greater proportion of the population reaches retirement age and more retirees live longer. The trend towards early retirement further increases this pressure. The strength of these trends can be seen in the labour force participation data for older men. In the twenty years to 1998 labour force participation for men aged 55–59 dropped about 11 percentage points, the fastest rate of decline in the OECD. Men aged 60–64 dropped about 14 points on a lower base.

In 1994 the Economic Planning Advisory Council calculated that current trends in demography would add A\$23 billion a year (in 2001 dollars) to federal spending by 2031. In 1998 the OECD estimated the effect to be A\$24 billion a year. The most recent estimate comes from Access Economics (Access 2001) who have calculated that the cost of demographic trends and the trends in the pricing of health care, as an extra A\$46 billion a year, in today's money by 2031. To put this in context, in the 2000 – 2001 financial year, Australia's Goods & Services Tax (GST) raised approximately A\$24 billion.

2.2 A global perspective

The confluence of lower fertility rates and increased longevity has generated growing numbers and higher proportions of populations of older people within societies around the world. As education and income levels have risen, increasing numbers of individuals reach old age with markedly different life expectancies and personal expectations than their forebears.

Retirement savings approaches that evolved under one set of demographic circumstances are likely to require substantial restructuring to meet the vastly different circumstances they now face. A traditional pension plan was often a 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 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.

In the ten years to 1988 the number of DC plans in the US more than doubled and covered almost 60 million people. At the same time the number of DB plans fell by a half covering just over 40 million people (Plans 2002). Despite the fact that for historical reasons many of the largest companies still have DB plans, 97% of all companies now also utilise DC plans. 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 (Dawson 2002).

Among the key drivers of change in the UK have been the trends in state and private pension provision. This has seen the post war growth and subsequent decline of occupational DB pension schemes in the UK. The last 15 years has witnessed a growing shift to individual DC personal pension schemes (FSA 2002a). Currently 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). The new accounting standard FRS 17 is causing a number of companies to close their current DB schemes in favour of new DC schemes (Payne 2002) including a number of high profile schemes e.g.:

- Ernst & Young, closing its £381 million DB scheme to new & current members
- Nationwide Building Society closing its £800 million DB scheme to new & current members
- J Sainsbury PLC Pension Scheme closing its £2.7 billion DB scheme to new members
- Marks & Spencer Pension Scheme closing its £3.1 billion DB scheme to new members
- Barclays Bank Retirement Fund closing its £12.9 billion DB scheme to new members

Canada, however, is an example of an English-speaking member of the OECD that 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).

Whereas the US and Australia have seen a dramatic shift from DB to DC schemes, this move is in its early stages in the UK & and even more so in Canada. Lessons from the countries where DC schemes are the predominant form of retirement saving could

provide valuable input into those countries where the change is in its infancy. By way of example:

“There is currently substantial information asymmetry in DC pension provision with those involved not being offered sufficient information, education or guidance as regards the contributions they need to make, investment policies or options they should be considering, or annuities to buy at the end. 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)

3.0 A Model of the Personal Retirement Savings Decision

3.1 Human financial decision making

Behavioural finance applies principles from both psychology and economics to attempt to understand financial decision making (Olsen 1998), combining individual behaviour and market phenomena (Fromlet 2001). It considers susceptibility of individuals to frames and other cognitive errors, varying attitudes towards risk, aversion to regret, imperfect self-control and preferences (Statman 1999).

3.1.1 Decision making and perceived ownership of retirement savings

Some of the key attributes that foster the illusion of control are choice, familiarity, information, and active involvement (Nofsinger 2001). Choice, for example, is based upon the belief that active choice induces control. The more information a person has about a task, the greater the level of participation and more familiar people are with a task, the more likely they are to feel in control. Yet in some retirement savings system, individuals may be given little if any opportunity to exercise any choice. Others offer a bewildering array of options that potentially can overwhelm individuals who feel that they have little knowledge let alone understanding of investments. Consequently, the line of least resistance may be followed with individuals putting the decision in the “too hard” basket as justification. This may involve not actually joining the retirement savings plan, or at the very least using the default option.

Consequently, the individuals concerned have little (real and/or effective) control and potential little connection with their retirement savings and therefore the level of perceived ownership of those savings is likely to be low.

3.1.2 Decision making and awareness of the need to save for retirement

Cognitive Dissonance Theory (Festinger 1957 cited in Goldberg and von Nitzsch 2001) asserts that individuals are distressed by conflicting cognitive elements. People tend to ignore, reject or minimise any information that conflicts with their positive self-image. The avoidance of cognitive dissonance can affect the decision making process in two ways. Firstly, certain issues may be too uncomfortable to contemplate. This is potentially relevant as saving for retirement by definition involves consideration of images that may be unwelcome such as the end of a career and potentially, one’s

mortality. Secondly, the filtering of new information limits a person's ability to evaluate and monitor decisions. If a person ignores the fact that they are not saving for retirement it severely inhibits their ability to determine whether they are doing enough to avoid poverty in the later stages of their life.

3.1.3 Decision making and understanding of how to save for retirement

Cognitive Information regarding the performance investment markets is readily available through a wide range of outlets. As a result many encounter significant amounts of information about investment activity, usually with a very short-term focus. This can lead to the false belief that more information increases knowledge about a subject and thereby improves individual decision making. However, there are limits to how much information can be absorbed (Felser 1997 cited in Goldberg and von Nitzsch 2001). As a result information must be selected and accessed according to its perceived importance. However, the selection process may be based upon irrational criteria as different people evaluate the same information differently. Heuristics, the rules or strategies used to process information to find a quick although not always optimal solution, can play a significant role when investment decisions are being made. Heuristics tend to be used when people are overwhelmed by information or have no time to process information thoroughly. They also tend to be employed when people have little or no prior experience of resolving a particular type of problem. Given that there are a multitude of factors affecting any investment decision, people tend to restrict themselves to what they consider to be the essential elements through such processes as simplification heuristics and mental accounting. As a result, without understanding, incorrect decisions can be made that can have long term consequences with regards to retirement savings particularly as people tend to invest in the familiar (Huberman 2001). For many, the most familiar type of investment is cash based and short term.

3.2 Involvement in the personal retirement savings decision

Degrees of involvement in retirement savings can relate to relatively simple decisions such as merely making contributions in a voluntary system or deciding on the type of fund in a mandatory system. The voluntary nature of the system in the US means that less than 50% of workers in the private sector are enrolled in a retirement savings plan.

In Australia, the mandatory nature of the system means that individuals have had little or no control over the asset allocation of their superannuation fund. Where individuals are actively saving outside of the retirement savings system, it tends to have a short-term focus with cash based accounts the usual choice. 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.

Such lack of preparation is not isolated to Australia. In the UK the Financial Services Authority (FSA) found that individuals often do not prepare for their retirement believing

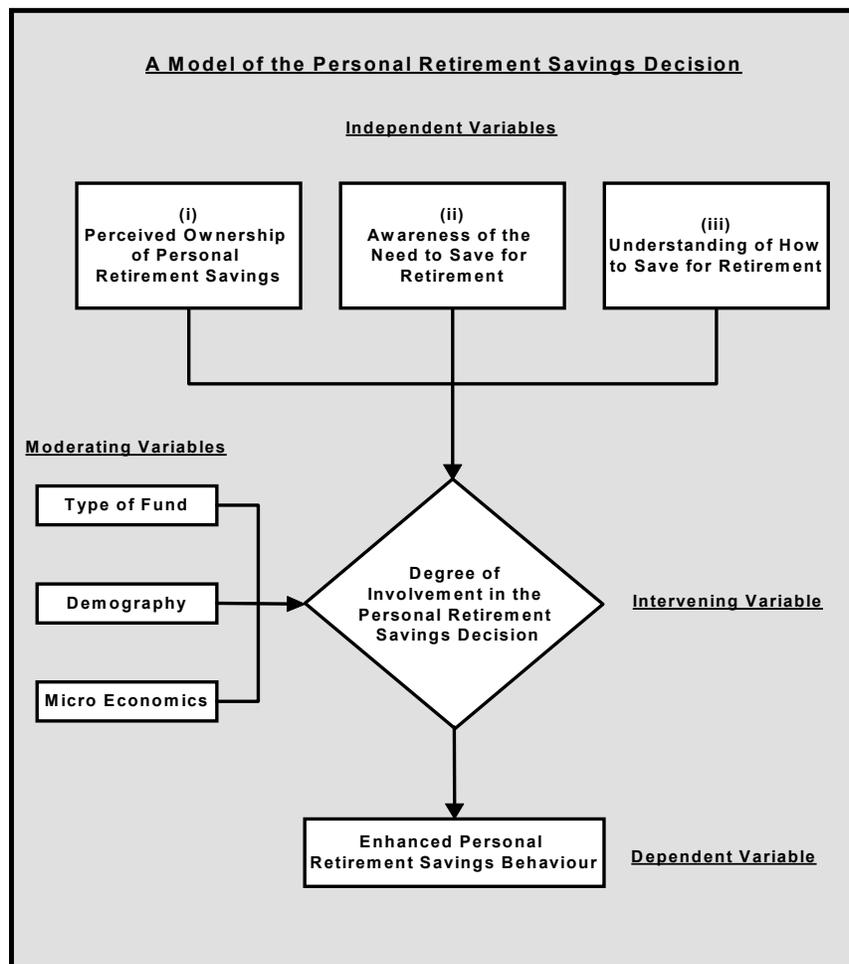
that current provisions will be sufficient or think that retirement is far enough into the future not to worry about. For example:

“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 therefore potentially a means of engaging the individual in the process of provisioning for retirement.

3.3 The model

The model sets out the relationship it is postulated exists between the three factors, viz., (1) perceived ownership of retirement savings, (2) awareness of the need to save for retirement, and (3) understanding of how to save for retirement and involvement by the individual in the personal retirement savings decision. The model also includes the expected influence of three moderating variables, viz., the type of retirement fund the person belongs to (e.g. DB or DC), their demographic profile (e.g. age and marital status) and micro economic factors (e.g. amount of discretionary income). These moderating variables are expected to affect individual saving behaviour.



Experiential learning theory tells us that experience (involvement) leads to improved learning. By extension, (i), (ii), & (iii) heighten the degree of involvement, which in turn enhances retirement savings behavior. The consequent retirement savings behaviour exhibited will be improved over what would otherwise be expected, determined by using an accepted set of measures. The test will be to determine if higher scores in (i), (ii) and/or (iii) will lead to higher scores for the dependent variable

3.3.1 Independent variables

3.3.1.1 Perceived ownership of personal retirement savings

In a mandatory retirement saving scheme such as operates in Australia, there is no involvement in the decision to contribute. Consequently the individual has no control or involvement in decisions regarding how much is contributed, when it is invested and in many cases, where it is invested. Overall, individuals have very little information about the operation of their fund as currently members of Australian Superannuation funds receive an annual report but have access to little information between reporting dates and are unable to form opinions about the management and performance of their fund (Drew and Stanford 2002). Consequently, as they have no choice of fund they are unable to transfer between funds, even in response to poor performances. In such situations it is not unreasonable to expect that there are potentially low levels of perceived ownership of the assets held on behalf of the fund member.

Where a pension system is voluntary, there is potentially a stronger link between the monies contributed to the pension scheme and the person contributing those monies. However, in situations where automatic enrolment is prevalent, default options become extremely important as the line of least resistance is often the path chosen. The investor may not actually be taking an active decision to join the retirement savings plan, but rather is failing to remove themselves from the enrolment. The default option therefore becomes critically important (Choi et al. 2001). In such circumstances, behaviour similar to that in a mandatory system seems to manifest with relatively weak links between the member of the retirement savings plan and the actual savings.

3.3.1.2 Awareness of the Need to Save for Retirement

Research on financial knowledge has not proven causality between macroeconomic knowledge and wealth but has suggested that these two variables are both systematically related to some unobserved third factor such as the respondent's innate interest (Bernheim cited in Mitchell and Schieber 1998). A number of reasons have been cited as to why people did not save for their retirement, amongst them was a failure to recognise the need and consequently a lack of motivation (Dawson 2002).

Andrew Mohl of AMP was recently quoted as saying:

“Unfortunately, one thing that the baby boomers have not done well is to voluntary save for their retirement. They know that they will live in retirement for considerably longer than previous generations and they have plenty of plans of what they will do during that time. In fact, many cannot wait for retirement and

are choosing to enter their retirement phase early. Others are entering retirement earlier than they wanted through retrenchment. Overlooking the financial aspects of retirement may be the big mistake for baby boomers. They know what they want to do and they have the time to do it, but will they have the money?" (Kelly et al. 2002)

Many today are getting a late start on saving for their retirement. They stay in school, postpone marriage, and start families later than earlier generations. This, compounded by the fact that many are retiring earlier, leaves less time to save for retirement. Baby boomers also have much of their personal wealth tied up in their homes. This creates a dilemma in terms of funding for the prolonged time to be spent in retirement. When the baby boomers retire, it is questionable that the following generations, which will be purchasing these properties, will actually pay sufficiently high prices in order for the boomers to recoup the money that they have invested in their homes. This is a critical issue as many are relying on such funds to fund their retirement (ANOP 2001)

Where there are low levels of connectivity between the individual and their personal retirement saving, there is the possibility that the individual may not be aware of the need to take action. This can be compounded if there is a belief that a State run scheme will provide adequate provision for retirees.

In a mandatory system this is particularly prevalent but it can also manifest itself in a voluntary system. In automatic enrolment members can be temporarily locked into a low savings rate and in a conservative investment vehicle (Choi et al. 2001). This suggests that in such circumstances, individuals may simply fail to opt out of the retirement savings plan, as opposed to taking an active decision to opt in. This lack of action is potentially a result of a limited awareness of the need to save for retirement

3.3.1.3. Understanding of How to Save for Retirement

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 same report illustrated that saving for a holiday was the most popular reason for saving with almost one third of respondents giving holidays as their main motivation for saving. 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.

By definition, saving for retirement is usually a long-term process (unless retirement is relatively close). Where the focus is on short term saving, the individual is unlikely to consider saving for retirement a priority and therefore is unlikely to be familiar with the

process of long term saving. This is confirmed by the Financial Planning Association of Australia (FPA) who have reported that fewer and fewer Australians appear to be able to save sufficient funds to finance a reasonable living standard during retirement. The FPA goes on to highlight that a number of people are not only entering retirement with no savings but are in fact entering retirement with debt (NATSEM 2002)

A lack of understanding is not exclusive to either mandatory or voluntary systems. It has been found that when presented with a menu of investment choices, participants lacking in financial literacy are likely to use naive diversification strategies, i.e. given five choices, they are quite likely to split their investment five ways (Choi et al. 2002).

3.3.2 Moderating variables

Literature on decision making in retirement savings has often focussed on education. Studies have found that it can play an important part in determining the attitude towards investment and that appropriate forms of education may improve the quality of personal financial decision-making (Bayer et al. 1996). A person's general education may have an affect on the type of assets they elect to use if they decided to save (Poterba 1996). Financial education was also found to have an impact on a person's willingness to invest (Bernheim and Garret 1996) with evidence suggesting that financial education, even if obtained in the workplace, may affect household financial behaviour (Bernheim et al. 1997). However, a growing body of evidence suggests that whilst financial education may impact the intention to invest, retirement savings is an area in which individuals excel at delay (Madrain & Shea 2001 etc. cited in(Choi et al. 2002). Measure of an intention to save may not match actual behaviour and as a result such measures may overstate the effects of financial education.

3.3.2.1 Type of Fund

Whether the individual is in a Defined Benefit or Defined Contribution Fund, whether it is a voluntary or mandatory scheme can all affect the relevance of any information from and/or about the fund. A low level of information is not conducive to a high level of involvement. In the same way information that is not understood or that is not seen to be relevant to the individual is potentially not going to have much impact either. Consequently, the type of fund may affect the flow of information available to the individual. This in turn is likely to have a causal effect upon the perceived ownership of those funds, the level of awareness of the need to actively save for retirement and potentially the motivation to understand how to save for retirement.

3.3.2.2 Demography

The life cycle theory of saving predicts that consumption and saving behaviour of an individual changes greatly with income, wealth, age, marital status and other socioeconomic conditions during various stages of the individual's life (Tin 2000). Further, according to the life cycle model, individuals work and save when they are young and run down their savings during retirement (Thornton 2001). Therefore the age structure of the population is suggested to have a major impact on private savings behaviour (Sarantis and Stewart 2001). Consequently, this approach suggests that the personal saving rate will be a decreasing function of population ageing.

The life cycle theory of saving, whilst attempting to explain savings patterns through a person's life, does not appear offer suggestions as to how the pattern could be changed and saving for retirement increased throughout a person's working life. However, the aspects of the theory that outline the influence of extraneous factors are incorporated into the proposed model of the personal retirement savings decision as moderating variables.

3.3.2.3 Micro Economic factors

There is a great deal of research concerning savings. Keynes argued that the marginal propensity to save and hold financial assets is influenced by a set of subjective and objective factors (Tin 2000). Keynes listed eight motives for saving:

- (i) To build up reserves against unforeseen circumstances
- (ii) To provide for an anticipated future relationship between the income and needs of the individual
- (iii) To enjoy interest and appreciation
- (iv) To enjoy a gradually increasing expenditure
- (v) To enjoy a sense of independence and power to do things
- (vi) To secure a masse de manoeuvre to carry out speculative or business projects
- (vii) To bequeath a fortune
- (viii) To satisfy pure miserliness

To this list another has been added, namely to accumulate deposits to buy durable goods (Browning 1996).

Levels of personal debt and/or savings and patterns of income etc are all therefore influences on the levels of discretionary income available for saving.

3.3.3 Intervening Variable - Involvement in the Personal Retirement Savings Decision

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 Aldaigan and Buttle 2001). Research on attitude change suggested that an audience's response to a message was dictated by prior attitude to and their involvement in a topic. Consequently, it is postulated that the level of involvement of the individual in the decision to save for retirement is likely to be affected by the independent variables and in turn is likely to influence the retirement savings behaviour of that individual.

3.3.4 Dependent Variable - Personal Retirement Savings Behaviour

Saving for retirement requires a degree of self-control in order to balance current spending against future financial security. When surveyed about low savings rates, many households reported that they would like to save more but lacked the willpower. Another issue closely related to this is procrastination, the tendency to postpone unpleasant tasks (Thaler and Bernartzi 2001).

Consequently, the personal retirement savings behaviour referred to in this study relates to conscious decisions about saving for retirement, i.e. individuals making conscious

decisions that will affect the level of income they will receive in their retirement years. This therefore means not just the decision to save but also the quality of savings.

4.0 The Path Forward – Testing the Model

4.1 Key research questions

The research objectives are concerned with the investigation of the relationships set out in the model. To investigate these relationships, the following research questions are proposed:

- 1) Does perceived ownership of retirement savings have an affect on personal retirement savings behaviour?
- 2) Does awareness of the need to save for retirement affect personal retirement savings behaviour?
- 3) Does understanding of how to save for retirement affect personal retirement savings behaviour?
- 4) Does the type of fund, demography and microeconomics moderate the effect of ownership, awareness and understanding on personal retirement savings behaviour?

4.2 Development Issues

4.2.1 Measure of perceived ownership

A series of questions will need to be developed to attempt to gauge the level of perceived ownership of retirement savings. The questions would need to target issues such as who the individual considers is responsible for ensuring retirees have sufficient retirement savings, whether the individual has knowledge of current and previous retirement savings accounts etc.

4.2.2 Measure of awareness

Questions to assess the awareness of the individual to provide for their retirement will need to be developed. Issues such as their approach to planning their long term financial future, the relative importance of short term versus long term use of funds, their attitude towards saving, their planned retirement age and expected income etc. would need to be considered.

4.2.3 Measure of understanding

A series of questions will need to be designed to gauge individual understanding of long term saving. The time horizon used when saving along with issues such understanding of risk and return, types of investment utilised and expected growth rates etc. will need to be considered.

4.2.4 Gauging moderating variable influences

In order for the analysis to consider the type of fund individuals are members of, their life stage and economic circumstances etc. information will need to be collected on a range of issues relating to the moderating variables.

4.2.5 Measuring changes in personal retirement savings behavior

The level and type of saving for retirement will need to be determined for correlation with the level of involvement in the personal retirement savings decision

4.3 Key methodological problems

A range of issues will need to be addressed such as the nature and size of the sample along with the development of an appropriate questionnaire. Ideally the model should be tested in both voluntary and mandatory environments' which means that the questions need to tackle the issues without specific reference to a particular retirement savings system.

Fortunately some preliminary work was conducted by ING in this area (Wills 2001) with questions tested in a telephone survey with approximately 1200 respondents within Australia. The information from that survey can be utilised as a basis for development of a more refined approach that will:

- a) not be restricted by country specific questions, and
- b) will yield results for statistical analysis.

4.4 Relevance of the model to other countries

The main goal of retirement income systems is to ensure that the elderly have the resources to support an adequate standard of living (Whitehouse 2002). However, the type of scheme that is in operation can have a fundamental influence on how efficient the saving patterns are:

If you are concerned about your pension, then the type of pension scheme you have matters considerably. Because of demographic imbalances, unfunded state pension schemes are unlikely to be sustainable, unless the real growth rate in pensions is severely constrained or the effective working life increased substantially. (Blake 2000)

The transition from DB to DC retirement plans is adding weight to the argument. In the UK this appears of particular concern as it seems to be instigating a fundamental change in the provisioning of retirement savings:

The UK's pension system has always rested on the notion that responsibility for retirement provision should be shared by the state, employers and individuals. The present problems are a result of a retreat from pension provision by the state and employers. (TUC 2002)

This transition from DB to DC schemes is gathering pace in a number of countries with the potential for many to be faced with *fait accompli*. In order individuals to have the opportunity of attaining the goal of having sufficient resources to support an adequate standard of living, it is important that lessons learnt in countries with experience in the operation of DC schemes be understood. Countries where DB schemes are still

predominant have an opportunity to gain from the experience of those further along the transition:

There is still a chance to structure the system better while it is in its early stages. It is hoped that this process can be accelerated and enable DC to provide better pensions in years to come than would be the case if left to creeping gradualism, without a clear focus on these issues. (Altmann June 2001)

Consequently, problems associated with the personal retirement savings decision are not restricted to a particular approach to retirement savings as a number of the issues raised are common to both mandatory and voluntary DC systems. With the growth in DC systems as more and more countries move away from predominantly DB plans it is critical that the approaches adopted are effective in stimulating retirement savings by individuals. Current literature is predominantly based at the macro economic level with relatively little research considering decision making at the individual level. This research aims to address this deficiency.

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