

Pension reform:
an analysis of the economic foundations of
private pensions

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Preliminaries

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Acronyms

APRA	Australian Prudential and Regulatory Authority
ASFA	Association of Superannuation Funds of Australia
ATO	Australian Tax Office
CEPR	Centre for Economic Policy Research (Italy)
ENEPRI	European Network Of Economic Policy Research Institutes
FSA	Financial Services Authority (UK)
ICI	Investment Company Institute (US)
ILO	International Labour Office
IMF	International Monetary Fund
NASVF	National Association of Seed and Venture Funds (US)
NBER	National Bureau of Economic Research (US)
NPR	Neoliberal pension reform
OASDI	Old Age, Survivors, and Disability Insurance
OECD	Organisation for Economic Co-operation and Development
OTRC	Office of the Retirement Commissioner (NZ)
PAYGO	Pay-As-You-Go
RBA	Reserve Bank of Australia
RIM	Retirement Income Modelling (RIM) Taskforce (Australia)
UN	United Nations
VC	Venture Capital
WB	The World Bank

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Abstract

The dissertation investigates support by economists for the global policy shift away from unfunded public pension schemes towards funded private pension schemes. Influential economists and institutions, including the World Bank, present a suite of economic arguments that suggest that this shift will have positive effects on national economies, particularly in the context of aging.

The arguments may be categorised according to their relation to the operation of three sets of institutions: capital markets, labour markets and political systems.

In capital markets, the transition is purported to increase private and national saving, increase the quantity and quality of investment, and provide more efficient private administration. In labour markets, it is claimed that the shift will reduce labour market distortions associated with public pensions, which inhibit competitiveness, produce unemployment and encourage early retirement. According to the World Bank, public pensions systems cause these distortions *without* achieving their stated objective of reducing inequality. In the political sphere, the shift is purported to insulate the pension system from political pressures, which otherwise inevitably lead to crisis.

The thesis provides evidence which refutes these claims. The best research, including studies by orthodox economists, indicate that the shift does not increase savings or investment, or improve the quality of financial investment. The main effect of tax concessions associated with private pension systems is to divert to private pension funds savings that would occur in any case via other mechanisms. The tax concessions are also regressive, even in systems with compulsory elements. Private administration of pensions, particularly in a plural consumer market setting, is highly inefficient, with customers at a disadvantage in dealing with providers due to the complexity and opacity of products and pricing.

A negative relationship is found between public pension spending and levels of elderly poverty, suggesting that reducing public pension spending increases levels of elderly inequality. Public pensions are found not to explain differences in economic growth between regions. Elements of system design which distort labour markets,

such as by encouraging early retirement, can easily be adjusted. However, such elements are explicit government policy in several countries.

A review of public and private pensions finds that examples of public system crisis are associated with instances of economic and political collapse, rather than system design. Private funded systems are found to be more vulnerable, not less, to the same external influences. Relatively generous universal public pension systems are found to be financially sustainable despite demographic change, assuming modest levels of economic growth.

Chapter 1 Introduction

This dissertation is a critique of the economic arguments used by influential economists and institutions, including the World Bank, to support neoliberal pension reform.¹

This introductory chapter provides a brief description of neoliberal pension policy, including how it relates to the wider neoliberal economic and social policy agenda.

It provides a summary of the economic arguments used to support neoliberal pension policy and the approach taken in the dissertation in respect of each argument.

1 Neoliberal economic policy

Neoliberals assert an unbreakable link between economic freedom – as embodied in free market capitalism – and political freedom. Intervention by the state in the economy is said to compromise economic and political freedom. Milton Friedman suggests:

Freedom is a rare and delicate plant. Our minds tell us, and history confirms, that the greatest threat to freedom is the concentration of power. Government is necessary to preserve our freedom; it is an instrument through which we can exercise our freedom; yet by concentrating power in political hands, it is also a threat to freedom. Even though the men who wield this power initially be of good will and even though they be not corrupted by the power they exercise the power will both attract and form men of a different stamp. (Friedman, 1982: 2)

As well as threatening freedom, state intervention is also said to be ineffective, typically resulting in unintended and negative consequences. Accordingly, neoliberal economic policy is based on the notion that economic activity should, to the greatest extent possible, be conducted by private enterprise in free competitive markets (Friedman, 1962: 4).

¹ The dissertation is concerned only with aged pensions. In practice, disability and invalid pensions are usually integrated with aged pensions; however the economic analysis of these aspects of pension policy is separate and not dealt with in this analysis. Throughout the dissertation the word ‘pensions’ is used to describe aged pensions.

The term neoliberalism is used to describe a range of theoretical and applied economic concepts. It is closely associated with the polemical works of Friedrich von Hayek (1944) and Milton Friedman (1962/1982). From the 1940s onwards, these economists were the ideological figureheads of a campaign in Western liberal democracies to overturn economic policy legitimised by the prevailing Keynesian orthodoxy. This effort was realised by the early 1980s. Governments across the developed world underwent a shift in policy focus, including raising control of inflation to a higher priority level than maintaining full employment.

This change was combined with a raft of other policy changes which reduced the role of the state in managing and coordinating economic activity, including deregulation, reduced trade and capital controls, privatisation of public productive assets, and a renewed emphasis on private delivery of services such as health, education and welfare. The use of transfers to equalise income has been reduced.

The shift has occurred throughout the developed world, though the changes were and are strongest in the Anglo-American countries – the United States, the United Kingdom, Australia, New Zealand, Ireland, and Canada – and, to a lesser extent, in The Netherlands and Switzerland. The neoliberal counter-revolution² continues today with emphasis on privatisation, competition reform and trade liberalisation. The new orthodoxy's foundations are a committed bureaucracy, a supportive media, and a newly created role for 'financial markets' – deregulated and enlarged early in the process of neoliberal reform – as guardians of 'sound' economic policy.

In pension policy, as in other areas of policy, the neoliberal approach is not necessarily entirely coherent, comprehensive or free from contradiction. Actual reforms may involve a recasting (rather than a reduction) of the state's role in the economy, while couched in rhetoric asserting the strength of smaller government and free markets. Erosion of public health benefit schemes, such as Australian Medicare, while increasing subsidies for private health insurance, is an example of such a

² The neoliberal counter-revolution responds to the Keynesian revolution. Cockett (1995) provides a detailed history of the intellectual and political machinations leading to the counter-revolution with a focus on Europe and the UK.

recasting. Such changes are complex and profound, and are yet to be effectively interpreted.

Developing countries have also been affected by neoliberalism. In development economics, neoliberal economists overturned, where possible, the import substitution development models used in the 1950s and 1960s in Asia and Latin America.

The ideological shift in developing countries more generally was facilitated and expedited by the adoption and promotion of neoliberal economic ideas by the ‘Bretton Woods institutions’ – the World Bank and International Monetary Fund (henceforth, the International Financial Institutions or IFIs) – who implemented a set of economic and political ideas known as the ‘Washington consensus’. By controlling access to development finance, these institutions exerted a powerful influence over economic policy in developing countries, effectively constraining the domestic political agenda. The role of these institutions in shaping economic policy in developing countries, particularly in regards to pensions, is discussed in chapter 6.

One important example is of the transformation in a developing country is Chile. In Chile, the ideological shift occurred comparatively early (1975-76), was implemented by a totalitarian government (a fact generally ignored by orthodox researchers), and represented a particularly abrupt departure from the policies of the preceding democratically-elected socialist government, which included nationalisation of most large scale industry. The Chilean ideological transformation is also pertinent because the free market policies were developed by economists trained at the University of Chicago (home of Milton Friedman and collaborators), and at the Católica Universidad de Chile. The latter institution had a direct relationship with the University of Chicago sponsored by the US Agency for International Development (USAID) (Valdes, 1995: 49). Chile represents the first example of a complete abandonment of public unfunded pooled pensions in favour of a private funded personal account-based system. It was the first of many dominoes to fall in Latin America both with regard to neoliberal economic policy generally, and pensions in particular. Chile received favourable treatment from the IMF following the transition (Valdes, 1995: 2).

The transformation in Chile exposes some basic contradictions in neoliberal thought. While neoliberal ideology is based on the concept of a dichotomy between individual

freedom and state oppression, the ideology was implemented in Chile by a totalitarian regime that systematically abused power, including denying basic human rights. The ‘anti-state’ philosophy provided a basis for policy which created immense fortunes for businesspeople close to the state, particularly via privatisation of state assets (O’Brien and Roddick, 1983: 72). While an extreme example of cronyism, the Chilean case demonstrates how neoliberal policies – purported to improve the welfare of the general community – provide certain benefits for a much smaller set of interests. The following analysis of the implementation of neoliberal pension policy in Australia and other countries suggests less extreme but otherwise similar patterns: the advantage for favoured groups is significant and direct, while the effects on the wider community are more complicated and include examples of clear disadvantage.

2 Neoliberal pension policy

The objective of neoliberal pension reform is to base retirement incomes to the greatest extent possible on privately and plurally administered, funded, personal account-based pension systems. The systems are ‘funded’ in the sense that they hold financial assets in respect of financial obligations associated with future pensions.

The private pension systems are supported via a mixture of mechanisms including tax concessions, employment conditions enforcing contribution, and, in some cases (including Australia), government-enforced mandatory contributions. Public pension systems are seen by promoters of NPR, including the World Bank, as ideally to be set at a level consistent only with poverty alleviation. In the recommended structure, the savings function of pensions are separated from the redistributory function (World Bank, 1994: xiv). This is in contrast with structures in place in much of Europe, South East Asia and New Zealand, in which most citizens receive a majority of retirement income from public pension systems which aim to provide for a level of consumption consistent at least with comfort, rather than subsistence.

Most of these systems are operated on a PAYGO (pay-as-you-go) basis.³ They may have only enough assets to smooth cashflow, and provide pensions directly out of contributions paid by workers. These systems do not have personal accounts, as such;

³ The main exception to this rule is the post-colonial ‘provident funds’, the most well-known of which are in South-East Asia. These are public funded systems with personal accounts.

pensions are typically determined on the basis of the length and quantity of contributions, among other factors.

In *Averting the Old Age Crisis*, the World Bank recommended a ‘three pillar model’ consisting of a minimalist public system to alleviate poverty, a funded private pension system and other voluntary savings (World Bank, 1994). As a leading adviser of national governments reforming and implementing pension systems, the World Bank has dominated the international pension agenda through promotion of this model. According to some Bank researchers, Australia’s retirement income system, which consists of a compulsory private pension system and a means-tested public pension set close to the poverty line, closely matches the preferred model (Khan, 1999).

Although the Bank favours a multi-pillar model with a basic public system, it has assisted in implementation of systems with no public safety net, such as in Kazakhstan. In general, governments throughout the world are under pressure to increase the level of support for private pensions, whether through reduction in public pension benefits, or increases to tax concessions and contribution levels to private systems. Much of this pressure is driven by those involved or potentially involved in private pension administration. In effect, the multi-pillar model is a tool used to promote reform in systems based essentially on public provision. Pressure to improve support for private pensions is constant and ubiquitous. It is a constant factor even in nations with pension settings which closely match the recommended multipillar model, such as Australia.

In developed countries, neoliberal pension reform takes the form of scaling back public pensions and encouraging private pensions. In developing countries, where public pensions are often limited, it often focuses on development only of private pension systems. In the transition countries, it has tended to involve termination or radical reduction of public schemes, and implementation of private schemes. The World Bank favours radical reform over incremental reform because it is perceived as the best method of avoiding potentially protracted negotiations over existing pension rights and the details of new structures.

The majority of the pension reforms are tinkering with an existing pay-as-you-go defined benefit system, rather than reform of the overall system of pension provision. However, while these reforms alleviate some of the fiscal burden, fiscal problems reappear in the long term. The only way to effectively solve the

pension system issue on a permanent basis is to move toward the fully-funded defined contribution reforms currently underway in Latin America, Australia, Poland and Kazakhstan and under consideration in a variety of other countries. (Schwarz and Demirguc-Kunt, 1999: 18)

Pension systems, whether private or public, are structures which require government intervention in the economy (such as legislation allowing tax concessions or requiring employers to deduct employee contributions). This intervention is justified by the World Bank and other contemporary neoliberals on the grounds of paternalism and, to a lesser extent, redistribution; it is seen as necessary to fund retirement income for those who would not, or could not, provide for themselves. This position is at odds with the purely libertarian position put forward by Milton Friedman, who argued that it was unnecessary to require all workers to make compulsory contributions to social security to provide for the tiny minority who would not provide for themselves (1962: 182-190). However, neoliberal policy in respect of pensions, as in many other areas, has developed to accommodate the interests of key social groups, particularly those associated with financial markets.

Martin Feldstein's (1974, 1975, 1976) major contributions to the neoliberal perspective on pensions focussed on economic ills associated only with public systems, particularly on national savings, and introduced the notion of diverting social security contributions to create a fund to be invested on capital markets. While private pension systems do represent state intervention in the economy, following Feldstein, this has been regarded as ideologically acceptable. The form of intervention supports personal thrift, as well as administration and fund management by private enterprise in a competitive market setting. From the neoliberal point of view, it is therefore preferable to public pensions which are run by public bureaucracies, and which often involve progressive income redistribution. Work by Jans Poterba and others during the 1980s and 1990s defended the role of private pension systems in promoting economic growth in several ways, particularly by increasing national saving (eg. Poterba et al, 1996). The work of Feldstein, Poterba and others, focusing on savings, is examined in chapter 2.

In most critical reviews of the emergence of neoliberalism, the transformation of pension policy is not considered of central importance. In some treatments it receives no explicit mention (eg. Haworth, 1994; MacEwan, 1999). A possible explanation of

this oversight is that important aspects of pension reform have a lagged effect, particularly in comparison with the immediate impacts of much neoliberal reform – labelled ‘shock treatment’ by both critics and supporters (O’Brien and Roddick, 1983: 54).

Radical reduction or removal of aged pension benefits, as occurred in Chile, has an immediate and obvious impact on retirement incomes, and this change has been analysed as part of the reduction in welfare state provisions. However, reductions to public pensions via changes to indexation or benefit formulae (more common in developed countries) may only have a noticeable impact over a decade or more. Similarly, the emergence of private pension funds takes time and the impact of this development on the financial system has been considered only recently, though private pension funds (including life insurance) have represented a rapidly growing percentage of finance sector assets since the 1970s. The trends in the impact of these systems on elderly income distribution are discernible (these are discussed in chapter 5) though the full effect will not be observable for another generation.

Although lagged, the impacts of the reform on workers and pensioners are highly significant. The long term nature of pension policy is key to its importance. While monetary policy can easily be reversed, pension systems develop momentum – financial assets and liabilities managed by large institutions with many stakeholders – that make them resistant to change. Pension reform also has a role in the wider advancement of neoliberal policy. It is typically undertaken in developing and transition economies as part of sweeping neoliberal reforms, especially privatisation. Contributions flowing into private pension funds can be used to purchase public assets. Understanding the economic impact of pension reform is therefore of critical importance.

3 Economic arguments supporting neoliberal pension policy

The arguments used to support neoliberal pension reform are based on assertions concerning the nature and effects of market forces at work in three areas of society, each described as subject to market forces by proponents of neoliberal pension reform. They are finance (capital markets), employment (labour markets) and government (political markets). A shift in emphasis towards privately and plurally administered

funded pensions based on personal accounts is said to provide benefits in each of these areas, resulting in a higher trajectory of economic growth.

In respect of capital markets, reform is purported to result in higher national savings, an improved quality and quantity of investment, and more efficient administration. For neoliberal pension reform to generate higher savings, it is necessary that public pension contributions displace more voluntary savings than do private pensions. Theory and evidence associated with this issue are examined in chapter 2.

The impact of neoliberal pension reform on investment is considered in chapter 3. Returns and risks associated with public and private systems are compared. The impacts on returns of demographic change and redistribution within public systems are considered. Pension fund investment is analysed in the context of its role in boosting the capital stock and productivity.

The efficiency of private pension administration organised around a competitive market is discussed in chapter 4. This chapter focuses on the complexity of pension products and pricing, the effect of this complexity on competition in this market, and consequent price and quality outcomes.

In labour markets, replacement of public pensions with private pensions **is said** to remove labour market distortions which reduce demand for, and supply of, labour, thereby increasing employment (e.g. Holzmann, 1999; Nöcker, 2000). This argument is examined in chapter 5 in the context of the role of pensions as mechanisms to reduce poverty among the elderly – a role which intentionally allows older workers to exit labour markets.

Private pensions are also said to be insulated from the machinations of elected leaders driven by political imperatives, which, it is claimed, lead to public pension system mismanagement including the promise of unsustainable benefits (e.g. Palmer and Fox, 1999). A related advantage is that state finances are thought to be insulated from pension finances. These issues are discussed in chapter 6 with reference to the instances of pension system crisis in a variety of countries, including Argentina and the United States.

A theme present in respect of all of these arguments is the impact of demographic change on public PAYGO pension systems. These systems consist of a direct transfer of income from workers to pensioners. The level of contributions from workers

required to fund pensions is a direct function of the ratio of workers to pensioners. Aging results in the ratio of workers to pensioners falling. This is usually described as an increase in the ‘dependency ratio’ – the ratio of pensioners to workers – and requires an increase in the level of contributions from workers necessary to fund a given level of pensions.⁴ Public PAYGO pensions, particularly more generous pensions, are said to eventually require an unsustainable level of contributions due to aging. The sustainability of moderately generous public pensions is considered in chapter 7. Some basic modelling is performed to estimate the level of economic growth necessary to maintain or improve worker after-tax incomes given changes in dependency.

Chapter 8 summarises the conclusions of the dissertation.

4 Methods and data

The analysis relies on a range of types and sources of data. It employs a mixed methodology, utilising the wealth of literature available on pensions in consideration of each of the arguments listed above.

A massive quantity of research is conducted on pensions, reflecting the fact that pension assets (and liabilities) represent a significant and increasing proportion of private and public financial assets. Much of this research is produced or funded by dedicated pension research bodies, or research institutes which treat pensions as a major focus. These include the Pension Research Council, the Employee Benefit Research Institute and the National Bureau of Economic Research in the US, the Pensions Institute in the UK and the Centre for Economic Policy Research in Italy.

⁴ It is more accurate to talk about the impact of aging on ‘people of working age’ and ‘people of pensionable age’ rather than workers and pensioners. The number of workers and pensioners are affected by other factors, including levels of work participation, employment and the average age of retirement. All of these factors have changed dramatically in recent decades, due to falling retirement ages, higher female labour participation at all ages, and higher average levels of unemployment in developed countries. Nonetheless, all things equal, increased dependency caused by aging results in workers being required to contribute at a higher level of income in order to provide the same level of pensions.

Another important source of data and analysis is the World Bank itself, along with other international organisations including the OECD and the UN. National regulatory bodies are another source of data and analysis. Among these, the British regulator, the Financial Services Authority, has a notable research focus.

The general and financial media are also an important source of information and opinion. The media are an important resource because the subject matter is changing so rapidly and also because public opinion is a factor in determining the sustainability of pension policy. The role of the media (and vested interests using the media) in shaping public opinion in relation to pensions is itself an issue worthy of thorough analysis.

The dissertation makes occasional use of quantitative data analysis, including regression. This is used particularly in relation to pension structures and saving, and pension structures and elderly inequality. For each issue, acceptable international data sets were available for most OECD countries. This tool is used to support the argument, rather than as the central focus of the analysis.

Finally, modelling is used to analyse potential future outcomes in relation both to public and private pensions. The use of modelling is provisional – comprehensive analyses are beyond the scope of the work. It is used essentially to illustrate the importance of the interactivity between different variables, and the sensitivity of outcomes to them. In effect, modelling is used not to predict specific outcomes but to emphasise the wide range of likely outcomes, given interrelations, sensitivity and the long timeframe necessary for analysis of pension policy.

Chapter 2 Saving

The duty of ‘saving’ became nine-tenths of virtue and the growth of the cake the object of true religion. There grew round the non-consumption of the cake all those instincts of puritanism which in other ages has withdrawn itself from the world and has neglected the arts of production as well as those of enjoyment. And so the cake increased; but to what end was not clearly contemplated. Individuals would be exhorted not so much to abstain as to defer, and to cultivate the pleasures of security and anticipation. Saving was for old age or for your children; but this was only in theory -- the virtue of the cake was that it was never to be consumed, neither by you nor by your children after you. (Keynes, *The Economic Consequences of the Peace*, 1919: 17-18)

1 Introduction

Neoliberal pension reform (NPR) involves increased reliance on self-provision in retirement via concessionally-taxed saving in private funded pension systems and reduced reliance on public PAYGO (pay-as-you-go) pension schemes. Key arguments raised in support of neoliberal pension reform relate to the operation of capital markets. These arguments are discussed here in three chapters. The current chapter deals with saving, chapter 3 considers investment and rates of return, and chapter 4 discusses financial administration. The subject matter of these chapters are closely inter-related. For example, levels of saving and returns are determined in part by the efficiency of financial administration. Loss to accumulation due to administrative leakage, which is relevant to both savings and investment, is not considered before chapter 4.

The current chapter addresses four goals. Section two explores the assertion by policy-makers and researchers of a *relationship between neoliberal pension reform, saving and economic growth*. This section is relevant to chapters two, three and four, all of which relate to capital markets. The section draws on evidence from the period of rapid neoliberal reform in Australia in the 1980s and 1990s, and on similar reform in other countries. The section provides a brief historical summary of the development of the current Australian retirement income system.

Section three articulates the economic mechanisms by which the first part of this relationship – that neoliberal pension reform increases saving – is purported to operate.

This section includes an explanation of the neoclassical life cycle theory (LCT) of saving, and applications of it to pension systems. The LCT asserts that individuals save above all to smooth consumption, particularly by saving while working to finance retirement. In relation to pension systems, proponents of NPR assert that public pensions displace total saving, whereas private pensions increase total saving.

Section four reviews a number of apparent weaknesses with the LCT and its application to pension systems. These include that individuals may have a variety of objectives for saving besides retirement, that individuals may not have the financial skills to predict retirement income needs, that many individuals cannot afford to save for retirement, that a significant proportion of ‘savings’ are actually inherited, and that the asserted effects of public and private pensions on voluntary saving are contradictory. Empirical evidence that conflicts with the LCT is also reviewed, including that the ‘hump-shaped demographic asset profile’, once thought to show asset run-down during retirement, is actually the result of ‘vintage effects’ due to successive cohorts having higher incomes and therefore greater wealth. National savings rates are shown not to correspond to pension system type, nor to demographic factors, as would be predicted by the LCT.

2 Pension reform and saving: the official policy position

2.1 Australia

2.1.1 Background: Neoliberal pension reform in Australia

Despite being an early adopter of public pensions, Australia is unusual among developed countries in not having a contributory public pension system. By Federation in 1900, public age pensions had already been instituted in New South Wales and Victoria. The Constitution of the newly formed Australia included provision for a national pension system, and this was implemented in 1906, replacing the state systems. These pension systems were paid for out of general revenue, were means-tested, and were explicitly focussed on poverty alleviation (Edey and Simon, 1996: 4). These are all characteristics shared with the public Aged Pension in Australia today.

Serious efforts to create a contributory system like those common in continental Europe and North America occurred at various times. These efforts reached the stage

of enacting legislation being introduced to parliament on three occasions – 1913, 1928, and 1938 – and being passed in the last case. However, these efforts were stymied by a number of factors including lack of bi-partisan support, resistance from friendly societies (cooperative voluntary savings institutions) and the life insurance industry, division in the union movement over the issue, and the intervention of both World War I and World War II (Kewley, 1965: 140, 143). Kewley describes the period from 1913 to 1939 in the field of social services in Australia as being one of 'endeavour rather than achievement' (Kewley, 1965: 165).

As a consequence, and more by historical accident than design, the Australian public pension offered neoliberal reformers of the 1980s very little room to move. At around 25 per cent of average male weekly earnings since the early 1970s, the aged pension leaves recipients close to or under the poverty line.⁵ The level of elderly deprivation in Australia during retirement is largely determined by living arrangements – i.e., whether or not retirees own their homes outright. It is the lowest cost public aged pension in the OECD and closely matches the public element of the World Bank's recommended three pillar model (Khan, 1999; Treasury, 2001). Means-testing has become more stringent since the 1970s; however, due to generous treatment of owner-occupied housing and annuities, more than 60 per cent of those of pensionable age in Australia still receive full or partial benefits.

As a consequence, neoliberal pension reform efforts in Australia focussed not on reducing public benefits but on boosting private provision. The essentially private 'pillar' of the Australian retirement income system is Australian Superannuation ("super"), a system of retirement savings based on personal accounts. Super is concessionally taxed, mostly funded, mostly privately administered⁶, and has minimal

⁵ The relationship between public pension cost and elderly poverty is considered in chapter 5.

⁶ Funded pension systems have assets to match the liabilities associated with the claims of members to future pensions. Unfunded pensions or 'nominally funded' pension systems have lower assets than liabilities, and, in the case of most public pension systems, only have enough assets to cover a potential interruption of cashflow. Pensions are financed by contributions or taxes from new members or by borrowing. In Australia, at June 30, 2000, unfunded superannuation claims (essentially pension claims on public sector employers) represented \$129 billion and funded superannuation claims represented \$511 billion in household assets, out of a total financial assets of \$1,182 billion (ABS, 2000a: 52).

investment restrictions. Fiduciary responsibility for each fund rests with a board of trustees, and the law governing super funds is closely related to laws covering trusts. Since the early 1980s, government policy has moulded super out of a pre-existing system which catered largely to senior executives and professionals into a system that is compulsory for almost all employees and accessible for all workers and dependent spouses.

The system existing before 1985 had three distinct sectors. The *public* sector consisted of employer-sponsored schemes for public sector employees. Private sector executives and professional employees were covered by a private employer-sponsored *corporate* sector. A *retail* sector, operated by the life insurance industry, offered tax effective saving for the self-employed and other independent savers. The first wave of reform in the mid-1980s included super in the Award system of arbitrated worker pay and conditions. Workers in unionised industries (in exchange for a reduced pay rise) were gradually provided with a 3 per cent employer contribution to personal accounts in existing corporate funds or in the newly formed *industry* sector of the super industry (Edey and Simon, 1996: 5). The boards of trustees of the newly created funds included employer and employee (labour union) representatives. Coverage of employees rose to 55 per cent of full-time employees by 1986 (see Figure 2.1 below).

A second wave of reform occurred in the early 1990s, after the Industrial Relations Commission rejected a further 3 per cent employer contribution. In 1992, the Labor Government announced phased introduction of a compulsory 9 per cent 'Superannuation Guarantee'. The Super Guarantee Charge (SGC) created a system of penalties for employers who did not make contributions to super funds on behalf of employees. Super Guarantee employer contributions were set initially at 3 per cent, reaching the full 9 per cent only in July 2002. By 1995, coverage had reached 90 per cent of full-time employees.

In broad terms, tax treatment is currently as follows: mandatory and voluntary contributions (to which a ceiling applies) are concessionally taxed, as are fund earnings, with an additional tax (a 'surcharge') for high income earners. Benefits may be taken tax free up to a generous ceiling, if taken as an annuity, or receive

concessional tax treatment if taken as a lump sum.⁷ Contributions are also concessionally taxed for the self-employed and can be made on behalf of dependent spouses.

The period of super's recent evolution saw only one change of government when the conservative Liberal-National Coalition won power from Labor in 1996, but retirement income policy is largely bi-partisan and has been altered only marginally. The Coalition Government introduced legislation to encourage more choice and competition (Costello, 1997). Choice is also favoured in principle by the Labor Opposition but recent reform attempts have been opposed by Labor, seemingly for other reasons.⁸ The Coalition introduced the Superannuation Surcharge to reduce the tax benefit for higher income earners, but has since announced plans for its withdrawal.

Figure 2.1 Superannuation coverage by type of employee

Year	Full-time	Part-time	All
1986	46.5	7.0	39.4
1989	55.1	17.8	48.1
1992	88.0	54.1	80.3
1995	94.4	71.6	89.4
1999	96.9	76.3	91.0

Source: Insurance and Superannuation Commission, Superannuation Bulletin; Australian Prudential Regulatory Authority, Superannuation Trends. Cited in Treasury, 2001: 84.

⁷ 'Grandfathering' of contributions made under the very generous tax provisions up until 1983 has added substantially to the cost and complexity of tax treatment. Contributions up to that date continue to be treated under the old tax rules in which contributions and earnings were subject to a 5 per cent tax. Superannuation *accounts* established before 1983 (including both early and late contributions) also benefit from unique and more generous tax treatment, regardless of when contributions are made.

⁸ The approach of the major parties to super choice is different in practice because a structure which makes membership of the relevant 'industry fund' compulsory in certain industries provides a direct role for unions in financial management and a possible source of funds for investment activities favoured by unions. This is supported by Labor and opposed by the Coalition for party-political reasons.

2.1.2 Superannuation and macroeconomic goals

In 1992, Ian Robinson of the Commonwealth Treasury wrote:

"the government's retirement incomes policy objective is to ensure retirement income security for all Australians in the face of a marked increase in the aged-dependency ratio; and to achieve this without placing unsustainable burdens on future taxpayers. ... There are, of course, broader macro-economic reasons for encouraging increased domestic saving in Australia, but that is a separate debate" (Robinson, 1992: 8).

However, this claim of separation is at odds with the majority of policy statements and reports issued by politicians and the bureaucracy, and also with the weight of economic media commentary and academic output during the 1980s and 1990s. The development of the Australian superannuation system during this period has *always* been conceived in terms of contributing to the achievement of both retirement income provision *and* macroeconomic goals, especially in the context of an aging population. The new system was expected to increase personal, private and national saving, which in turn was expected to increase investment, productivity and economic growth, as is expressed in a series of government policy statements on retirement income between 1989 and 1997.

The policy framework detailed in this statement recognises the very close links between retirement income policy...and macroeconomic and microeconomic reforms. Increased saving for retirement not only improves retirement income adequacy but also improves investment and future economic growth and hence our capacity to finance retirement income outlays. (Howe, 1989: iv)

This package reflects the importance with which the Government views long term financial security and stability in retirement. Over the long term, our measures will also generate a large pool of investible funds - Australian funds for investing for Australia. It will diminish our need for foreign borrowings and enhance Australia's capacity to develop industry and create employment. (Dawkins, 1992: iii)

That commitment to the national interest in greater self-provision for retirement, and to the individual interest in living better in retirement, will be even more manageable the higher the rate of sustainable economic growth we can achieve. (Dawkins, 1992: 17)

There is a clear need to increase private saving and household saving in particular, if we are to achieve a better balance between domestic saving and investment and allow the economy to grow faster (Costello, 1997: 1).

The need to boost national saving is inherently linked with the need for effective retirement income policy. (Costello, 1997: 9)

The Australian Federal Government bureaucracy has an expert taskforce, the RIM (Retirement Income Modelling) Taskforce, dedicated to econometric research on the implications of our aging population and the government's policy responses. RIM describes the intended economics effects of the retirement income policy as follows:

An important objective of Australia's retirement incomes policy is to increase the level of national savings. Increased national savings will play an important part in maintaining living standards in the face of an aging population. Increased aged dependency will mean that Australia will have a potentially diminishing labour force with which to produce the goods and services necessary to maintain its living standards. Maintaining Australia's living standards will therefore require a combination of

- a substantial change in workforce participation patterns, for instance a movement to later retiring ages or further increases in the workforce participation of women;
- substantial increases in labour productivity; or
- substantial earnings from foreign investments.

Increased national savings through superannuation provides an avenue for financing the investment in Australia and to reduce our reliance on foreign savings to finance such investments. Investment is an important means of raising the productivity of Australian industry, thereby compensating for a diminishing proportion of the population of working age." (Gallagher et al, 1993: 16).

Historical reviews of the development of compulsory superannuation by the Treasury and Malcolm Edey and John Simon of the Reserve Bank accord exactly with this view:

Sustained government support for employee superannuation was motivated not only by a desire to enhance the retirement incomes of the general workforce, but also by macroeconomic pressures. By 1985, the government was battling inflationary pressures, relatively high real interest rates, an increasing current account deficit, foreign debt and a decline in the value of the Australian dollar. Employee superannuation was attractive to the government in this economic climate because it offered scope for deferred wage increases and improvements in national saving (Treasury, 2001: 78).

The move [Award super] was advocated as a means of making superannuation more widely available, and it was also seen as furthering macroeconomic goals by promoting private saving (Edey and Simon, 1996: 5).

A review of the contemporary output of academic economists shows that the government was in step with the consensus view. Fitzgerald and Harper write that 'the government's attempts to promote super both via inducement and compulsion are intended ultimately to increase long-term private saving' (Fitzgerald and Harper, 1992: 40). Fitzgerald recommended a 5 per cent increase in national saving, partly to meet the increased pressure on resources from the prospective aging of the Australian population, and was confident super would contribute to this goal.

"if we do not save more, then the investment necessary to ensure higher growth and more employment will only be funded by even greater recourse to foreign savings and further build up of foreign debt. We also need to save more because of the major demographic transition (rapid aging) we face ahead." (Fitzgerald, 1993: 1)

The RIM Taskforce note Fitzgerald's emphasis on the importance of saving:

The Fitzgerald Report on National Saving stated that the expected increases in savings are 'not simply a "by-product" but is crucial to its effectiveness as retirement incomes policy. (Gallagher et al, 1993: 23)

A recent article by Guest and MacDonald suggests that the orthodox perspective has not developed over the intervening years. They write:

"Higher saving in the near term will add to the consumption potential of Australia in the future through enhancing the accumulation of capital stock and of overseas assets. [...and footnoted...] A larger capital stock will increase labour productivity and thus output, enabling more consumption" (2000: 1).

Guest and McDonald recommend an increase in the rate of compulsory superannuation contributions.

The expectation expressed in these documents is that superannuation will boost private and national saving, and that increased saving is good for the economy because it is a domestic source of funds for investment which will boost the capital stock, productivity and output. The need to stimulate these effects through retirement saving is seen to be particularly urgent due to population aging.

2.2 Overseas

This set of ideas is not unique to Australia. Similar economic expectations have driven pension reform in other countries, and form an important part of the rationale for continuing pressure for reform.

The US pension system has three elements: a contributory public pension system, private concessionally taxed retirement savings vehicles (voluntary and employment based) and other voluntary saving. The series of initiatives to create new and more flexible tax-advantaged savings vehicles were initiated explicitly in response to concern over falling saving rates (Engen et al, 1996). The list of such vehicles now includes occupational pensions, three kinds of Independent Retirement Account (IRA), and employer-based '401k' pension schemes. For those on middle-to-high incomes, the US retirement income system is substantially oriented towards self-provision in private funded pension systems.

The public pension system benefit formula was amended in the late 1970s and early 1980s in response to concern over aging to systematically generate surpluses, creating asset reserves (Weaver, 2003a: 9). Reserves currently total \$US 1 trillion, and are expected to reach \$US 5 trillion by 2020 (Aaron et al, 2001: 8, 15).

Pressure for ongoing reform continues to be based on supposed effects on national saving:

Much of the current debate on pension policies in the US is dominated by two important facts. The first is the decline of household saving rates, as measured in the National Income and Product Accounts as well as in the Flow of Funds figures. Household saving rates went from being close to double figures at the beginning of the 1980s, to being negative last year. The other is the fact that the current Pay-As-You-Go social security system (OASDI) is unsustainable in the medium run, given its current parameters. (Attanasio and Paiella, 2001: 27).

Both the Clinton and Bush Jr Administrations have mooted reforms to the public Social Security system aimed at increasing private and national savings, along with addressing perceived fiscal unsustainability and improving retirement incomes. President Bush Jr's Social Security reform commission argues that increasing national saving is the only sure way to improve retirement security for current workers while also lessening the burden on future generations (Aaron et al, 2001).

Neoliberal academics with preconceived notions of appropriate outcomes for social security are having direct input to the administration's policy formulation process:

Recently we were asked to serve on the President's Commission to Strengthen Social Security (CSSS) along with 14 other members drawn equally from both major political parties. The Commission's charge was to provide recommendations to modernize the Social Security system, restore its fiscal soundness, and *develop a workable system of Personal Retirement Accounts*. (Cogan and Mitchell, 2002: ii [italics added])

The mooted reforms include the investment of public system surpluses in assets other than government bonds (Riley, 7/11/2000: 1), and the creation of fully-funded individual retirement accounts to hold part of the contributions (Aaron et al, 2001: 9). The suggested reforms are referred to as Social Security 'privatisation', and have strong support from certain academic economists due to their supposed impact on national savings. Modigliani et al suggest:

The funded system in contrast to PAYGO results in a large accumulation of assets and thus makes a valuable contribution to national saving, the stock of productive capital and national income. This rise in saving is especially valuable at a time when private saving is unusually low, creating worrisome problems about the level of foreign indebtedness. (Modigliani et al, 2001: 6)

Canada, with the most pronounced aging of the Anglo-American countries, has followed a similar course to the USA. The national contributory public system is creating a reserve fund (Diamond, 2000a: 7) and private savings are encouraged via tax-favoured schemes to which 60 per cent of workers contribute (Banting and Boadway, 1997: 3). Plans to privatise social security are more advanced in Canada than in the US. A framework for investment of public system reserves in private assets (such as corporate bonds and equities) was implemented in 1998 (Iglesias and Palacios, 2000: 4, Palacios and Pallarès-Miralles, 2000: 17).

The UK was committed by the Thatcher Government in 1981 to shift emphasis from public to private provision to increase both public and private savings. Changes to indexing of public benefits have resulted in the value of public pensions as a proportion of wages falling by 37 per cent between 1981 and 1998 (Whitehouse, 1998: 5). Reforms in the early 1990s allowed individuals to 'opt-out' of the public pension system entirely in exchange for assets in private pension funds paid for by the government. Currently more than 25 per cent of all net wealth and 50 per cent of

financial assets in the UK are held in the form of pensions or life insurance (Banks and Rohwedder, 2000: 2).

The countries of continental Western Europe have public pension systems that provide high replacement rate pensions for all but the wealthiest members of society. Neoliberal academics (many from the UK), including Gordon Clark (2001a, 2001b), David Miles (1998, 1999) and Jan Mantel (2001)⁹, are critical of these structures, emphasising the positive effect of private pension provision on accumulation. Curiously, these critics ignore the very high rates of savings and investment in European countries relative to Anglo-American countries.

Influential commentators such as Axel Börsch-Supan, recently appointed head of a European Union pension research group (ENEPRI, 2001), argue that the high replacement rate PAYGO systems of Western Europe have a negative impact on savings (Börsch-Supan and Reil-Held, 1998). A number of other European researchers share this view, including Hans Siebert (1997: 29), Agar Brugiavini et al (2000: 3), and Dirk Fach (2000: 8), who writes:

A fully funded pension scheme does have various advantages over a PAYG system; the biggest - and the one repeatedly emphasized in theory - lies in higher aggregate saving. In contrast to the PAYG model, under the fully-funded scheme a stock of capital is accumulated to provide retirement income from the returns on it and from consumption of the capital itself. This higher capital stock enables higher growth, since higher saving tends to keep the interest rate lower and encourage investment. Consequently, a larger "economic pie" is available for distribution than under the PAYG system.

The increasing prevalence of these ideas in policy circles in Europe, including in EU think tanks, corresponds with the emergence in recent years of policies which, for the first time, offer concessional tax treatment to private retirement savings. These include the pension reform in Italy in 1999 (Diamond, 2000b), Sweden in 1999 (Palmer, 2000) and Germany in 2001 (Bonin, 2001: 15; Nöcker, 2001).

The idea that increased savings due to pension reform will drive investment and economic growth also features in the arguments put forward by international financial

⁹ Besides holding academic posts, Miles and Mantel are also representatives of major merchant banks.

institutions (IFIs), particularly the World Bank and the IMF, in support of funded pension systems. Jan Walliser, of the IMF, summarises the logic:

Raising national saving would help to prepare the economy for future pressures arising from the aging of the population, because higher national saving today would increase the future capital stock and thus the productive capacity of the economy. Higher national savings would also improve the long-run sustainability of fiscal policy and indicate that current generations participate in defraying the cost of their retirement by forgoing consumption. (Walliser, 1999: 3)

In a document which summarises the OECD's major research program into aging and pension reform, *Maintaining Prosperity in an Aging Society*, the OECD suggests that:

Higher national saving, if used productively, will result in higher capital stock and thus more output over the long term.... While [aging requires that] an increasing proportion of national output will need to be transferred to retirees, the higher economic growth is, the easier it will be to ensure that making one group better off does not entail making another group worse off. (OECD, 1998a: 5)

The objective to increase national savings is apparent in the promotion of neoliberal reform in developing and transition countries in which the IFIs have been directly involved in policy development. These statements regarding pension reform in Poland and Brazil provide an indication of the underlying macroeconomic expectations:

We understand social security reform is aimed at improving long-term economic growth prospects in Poland. Our proposed solutions make it possible to accelerate that growth due to increased long term personal and business savings. These savings will fuel investment and economic growth, as well as improve efficiency of the financial markets and lower labor costs through gradually decreasing social security contributions. (OGPSSR, 1997: iii)

Funded private pensions may aid in the development of capital markets. They create a demand for financial assets as well as for financial market regulations that protect investors. They provide a source of long term savings for investors. (Turner, forthcoming)

Rogerio Studart notes that in Brazil, 'as in many other developing countries, the political arguments favoring such reforms' included:

The dominant view that private pension funds would increase aggregate private saving, improve savings mobilization and thus

allow for a rise of aggregate investment and growth. (Studart, 2000: 11)

Increased national saving was also an explicit aim of the Mexican pension reform (Grandolini and Cerda, 1998: 31), the Kazakhstan pension reform (Andrews, 2000: 1), and the Hungarian pension reform (Tóth, 2000: 26). Reformers have claimed throughout Latin America that neoliberal pension systems would boost aggregate savings (Barrientos, 1998). IFI policy intervention in developing and transition economies is discussed in more detail in chapter 6.

Policy-makers in government and international financial institutions, as well as orthodox academic economists, provide strong evidence that neoliberal pension reform was intended to, and is still expected to contribute to macroeconomic goals, particularly national saving, in Australia and overseas.

3 Pension reform and saving: orthodox theory

Neoliberal policy is based largely on selective use of ideas from orthodox (neoclassical) economics. The notion that pension reform can lead to increased national savings is based on an application of orthodox notions of saving. The orthodox approach is called the neoclassical life-cycle theory of saving.

3.1 The neoclassical life-cycle theory of saving

The neoclassical life-cycle theory of saving (LCT) is often attributed to Franco Modigliani and Richard Brumberg (1954), though it followed work by Irving Fisher and others in the 1930s that asserted that individuals would need to vary their saving to smooth consumption because productivity and income varied over the course of life (Lee and Mason, 1998: 2). The LCT is the departure point for a large post-war orthodox literature on saving which ignores J.M. Keynes' emphasis on income inequality between social classes (as opposed to over the life-cycle) as a powerful determinant of saving behaviour.¹⁰

¹⁰ For important statements of, and challenges to, the LCT see Samuelson (1958), Davies (1981), Kotlikoff and Lawrence (1981), and White (1978). For examples of application of the theory to pension reform and saving see Feldstein (1974, 1975, 1976), Whitehouse (1998), Johnson (1999), Bacon (1999), Baillu and Reisen (1998), Disney (1999), Poterba (1998), Guest and McDonald (1999),

In practice, 'consumption smoothing' is generally taken to mean saving during working life for retirement. Retirement is seen to be a period of life in which it may be expected that earned income will be insufficient for consumption needs, and in which the individual will be expected to run down assets, or 'dissave'. To optimise lifetime utility, the individual must calculate retirement consumption needs, calculate lifetime earnings including investment returns, and base saving behaviour on those calculations. This individual is a rational utility maximiser, has perfect knowledge, and has access to perfect labour and capital markets. The assumptions and implications of the theory are summarised in Figure 2.2.

An important empirical basis for the theory, at least initially, was that the asset-age profile of a representative individual was thought to be hump-shaped.¹¹ Data available early in the post-war period appeared to show that the assets of the typical household rose throughout working life, and were then substantially dissipated during retirement. As is detailed in the critique of the LCT in section 4, below, this conclusion was found by Miller (1965) to be based on a fundamental interpretive error. Nonetheless, its role in supporting the neoliberal attack on the welfare state has proven quite unshakable.

Figure 2.2 Assumptions and implications of the life-cycle theory of saving

Assumptions:

- Individual is rational, maximising and optimising.
- Individual has perfect knowledge, including knowledge of lifetime income, lifespan, length of retirement, and lifetime consumption needs.
- Individual has access to perfect labour and capital markets.

Implications:

- The individual is a *target* saver: s/he has a notion of how much income is required during retirement, and aims to accumulate that amount, and only that amount, by retirement.
- Workers save; retirees dissave.
- The individual does not distinguish between different assets and different sources of income; what is necessary is to achieve the required level of income throughout the

Börsch-Supan et al (2000), Booth et al (2000), Kohl and O'Brien (1998), Lusardi (2001), Baldini and Mazzaferro (2000).

¹¹ The theory and empirical evidence is discussed by Bacon (1995) and Banks and Rohwedder (2000).

individual's life. This capacity is known as *substitutability*.

- The individual faces no obstacles to employment (at market wage) or borrowing/investing (at market interest), including for human capital (education).
- The individual has effective knowledge of investment strategy, products and pricing, and has the skills, resources and motivation to calculate personal wealth, including wealth in public and private pension plans.
- The individual does not value or expect inheritance.
- These factors operate irrespective of an individual's level of wealth, and portfolio of assets.

The LCT is used by neoliberal reformers to support three claims: public pension systems reduce saving, private pension systems increase saving, and transition from public to private increases saving.

3.2 The LCT and public PAYGO pension systems

Martin Feldstein¹² is a central figure in the application of the LCT to pension systems. In a series of articles, notably 1974, 1975 and 1976, he rapidly advanced the neoliberal intellectual agenda in this area. His 1974 article in the *Journal of Economics* argued that the American social security system (the OASDI or Old Age, Survivors, and Disability Insurance) reduced private saving by 50 per cent. Feldstein identified three causative mechanisms: a 'tax' effect, in that social security contributions reduce disposable income; a 'wealth' effect, in that income streams from public pensions represent wealth that substitutes for saved wealth; and encouragement for earlier retirement, which reduces lifetime labourforce participation and therefore income (1974: 920-22). Feldstein's tax and wealth effects are discussed here. The early retirement argument is that social security creates an incentive to retire at the age when benefits are first available (62 years in the US case). This argument is discussed in chapter 5, which considers the sources of incentive effects from pension systems on age of retirement.

The assertion of a negative public pension 'wealth effect' on saving assumes *substitutability* between sources of wealth and income in retirement. This assumption

¹² In 2001, Martin Feldstein was Professor of Economics at Harvard University and President of the National Bureau of Economic Research (Feldstein and Samwick, 2001).

is plausible under the neoclassical LCT because individuals are target savers seeking a given level of consumption in retirement. According to Feldstein, the existence of public pension income during retirement - equivalent in some respects to a form of wealth - reduces the need for income from other sources, particularly private saving. The concept of 'substitutability' is central to the assertion of a relationship between the LCT and pension systems - both public and private. In both cases, the issue is whether or not pension income is a substitute for private accumulation. The relationship between pension wealth (or saving) and other wealth (or saving) is often described as an 'offset'. An offset of zero implies zero substitutability and zero impact. An offset of 50 per cent suggests that pension wealth of x reduces other saving by 50 per cent of x . An offset of 100 per cent implies total substitutability, in which case there is no increase in total saving.

The existence of a negative public pension 'tax effect' on saving is related to the lower disposable incomes of people after they have made social security contributions. The transfer in public pensions occurs from workers, who are presumed to save, to retirees, who are presumed to consume. The transfer is therefore from savers to dissavers, resulting in a straight loss of savings. An alternative perspective is that retirees continue to save, in some cases at an increasing rate. The impact of public pensions on total saving would therefore be much lower, or even positive. According to Feldstein, however, the tax effect reinforces the wealth effect: workers save less than they otherwise would because future pension benefits mean they do not need to, and contributions mean they cannot afford to.

In (1975), Feldstein suggested moving social security away from its public PAYGO basis by changing benefit formulas within the existing system to create a reserve of assets. This would be achieved by paying less in benefits than is received in contributions. Feldstein recommended that this be done without public announcement to avoid political backlash.

How then should the current social security program be reformed to reduce the harmful effects on capital accumulation? And can this be done without the public hostility and political opposition that might be aroused by a major restructuring of the benefits? Fortunately, it is possible to alleviate the problem without making any changes in the structure of the program that would be noticed by the general public. (Feldstein, 1975 in Seidmann, 1999: 27).

The policy of creating a reserve was adopted by OASDI in the early 1980s, though not without public debate. The reserve is currently held exclusively in the form of US Treasury bonds, although Feldstein and Samwick (eg. 2001), among others, recommend investment of the reserve in other assets, including corporate bonds and equities.

This recommendation rests in large measure on thinking introduced in Feldstein (1976, in Seidmann, 1999: 27) - the 'higher returns from private savings' argument. The article suggests that the transition from a public to a private pension system would be a savings winner because private investments earn higher rates of return than public assets such as government bonds. This 'partial equilibrium' argument, discussed in more detail in section 4 on transitional macroeconomic effects, contravenes orthodox methodology by selectively using different discount rates without allowing for opportunity costs and crowding-out (Holzmann, 1998a and 1998b).

Despite shaky foundations, the argument has political appeal, especially during bull markets when stock market returns are high. This appeal is used cynically by reforming governments, IFIs, and pension-providing institutions. This example is from a World Bank report on the Hungarian reform:

Finally, the promise of higher returns in the private scheme, even after taking into account higher administrative costs, helped offset the benefit reductions in the PAYG scheme and simultaneously diversified the workers' risk in the long-run. This positive aspect of the overall package was instrumental in generating support, especially among younger voters. (Palacios and Rocha, 1997: 32)

One might wonder how these young Hungarians consider their new pension system following the dramatic reversal on international stock markets since March 2000.

Feldstein remains influential, as Cogan and Mitchell (on the President's Commission to Strengthen Social Security) make clear:

If a Social Security reform is to reduce the tax burden imposed on future generations, the system must move toward a prefunded program, a point made forcefully in Martin Feldstein's Presidential address before the Allied Social Sciences meeting. Indeed, he and many other economists have concluded that baby-boomers' retirement would impose no additional burden on future workers, had Social Security been maintained as an investment-based retirement program with assets built up to cover future liabilities. The issue, today, however, is how to

move from what is a mainly pay-as-you-go unfunded transfer program, to an investment-based Social Security program for the future. (Cogan and Mitchell, 2002: 3)

In summary, proponents of NPR claim that public pensions reduce saving by reducing disposable income, providing retirement benefits which reduce the need for personal provision, encouraging early retirement, and by providing lower investment returns (typical of public pension reserve investment).

3.3 The LCT and private funded pension systems

Proponents of NPR also argue that funded pension systems increase savings. Assets in private pension systems have grown explosively in the last three decades wherever they have been encouraged by favourable tax policies and mandates. The assets of dedicated retirement savings vehicles, including pension funds, retirement savings in mutual funds¹³, and life insurance, are estimated to be over \$US 20 trillion. Assets are over 75 per cent of GDP in Switzerland, The Netherlands, the US, the UK, Iceland and Australia, and over 50 per cent of GDP in South Africa, Canada, Chile, Ireland, Japan, and Finland (World Bank, 2000a).

The rapid increase in pension fund assets is easily portrayed as increased saving to the public by policy makers, especially when economists in the media and academia repeatedly make this error. The extent to which a build-up in one asset (e.g. pension funds) can be legitimately described as an increase in saving depends on the extent to which it is offset by reductions in other assets (and increases in liabilities). This includes reductions in other forms of private saving, such as personal equity in housing or bank accounts, increases in borrowing, or decreases in public saving.

Modelling by promoters of private pension systems, including the Australian Treasury's RIM Taskforce, suggests that private and national saving will rapidly increase following implementation of such systems. RIM's modelling has been cited in articles by Australian authors with global distribution (e.g. Edey and Simon, 1996: 21; Bateman and Piggott, 2001: 22) and have been cited in overseas studies (e.g. Fach

¹³ In the UK, USA and Canada, voluntary independent contributions to mutual funds are tax deductible as part of some retirement savings vehicles. The Investment Company Institute (ICI) in the US estimates that 36 per cent of mutual fund assets are sourced from retirement savings vehicles (ICI, 2000: 49).

2000: 23-4; Mitchell and O'Quinn, 1997: 8). Even RIM's predictive charts have been reproduced in articles overseas and, in at least one case, portrayed as historical fact (Mitchell and O'Quinn, 1997: 8). This misrepresentation clearly has disturbing implications for public perceptions of the effect of these policies.

As saving in one form increases, saving in another form may decrease. This is called an offset. The suggestion that an increase in private pension saving causes an increase in total private saving requires an offset of less than 1 or 100 per cent. The RIM Taskforce, for example, initially used a private savings offset of 50 per cent in its modelling. This number was inherited from Fitzgerald and Harper, two respected academic economists (Gallagher et al, 1993). However, Fitzgerald and Harper had not conducted empirical research on the issue. They instead supposed that offsets of 0 and 1 were unlikely results and took the average (Gallagher et al, 1993)! In more recent work RIM has shifted to a more bullish offset factor of 30 per cent (suggesting that 70 per cent of superannuation saving is new and additional), on the grounds that compulsory superannuation encourages saving by many people who would have never saved in the past (Gallagher and Preston, 1997: 4).¹⁴ Again, the conclusion is not based on empirical research. According to RIM predictions, current policies should have translated into an increase in personal saving (from a base case scenario without the policy) of more than 1.6 per cent of GDP by 2001 rising to 3.6 per cent of GDP in 2020 (Gallagher and Preston, 1997:15). Private saving in Australia has instead fallen.¹⁵

Ironically, a pure application of the lifecycle theory of saving predicts that private pensions will have no impact on private savings. This is because individuals will reduce other saving to compensate for the build up of pension wealth (Baillu and

¹⁴ It is important to note that RIM modellers also use an offset to *reduce the negative impact* of super tax concessions on public saving by half. Gallagher and Preston (1997: 3-4) argue that this is appropriate because half of the possible saving (generated by cancelling the concessions) would be lost as part of the budget process. It is unclear whether the same factor is used to reduce future public saving benefits from reduced welfare outlays. This extraordinary approach reduces the opportunity cost of public expenditure (and taxation) by 50 per cent. It essentially means the benefit of cancelling a \$100 million program would only be \$50 million because half of it would be wasted somewhere else.

¹⁵ See page 52 for discussion.

Reisen, 1996: 11). Indeed, the theory predicts an offset of *greater* than 100 per cent – that is, a *reduction* in total private saving. This outcome is predicted because rational savers would calculate the benefit from superior rates of return on private pensions and the additional positive effect of tax advantages on after-tax returns. As a result, they would reduce saving from current income because a smaller amount of contributions would reach the same savings target over the same period. The impact of concessionally-taxed savings programs in this circumstance is reduced government revenue due to tax concessions. This is equivalent to a fall in public saving.

However, researchers in the US have mounted a case that private pension funds do increase private saving based on empirical evidence. Poterba et al (1996) found that private pension systems have low offsets, resulting in substantial increases in total private saving. They compared the savings habits of households that participate in voluntary retirement savings schemes in America, with households that do not. Their conservative estimate for the private pension offset was 50 per cent. This implies that 50 per cent of contributions to concessionally-taxed retirement savings vehicles represent savings additional to saving previously conducted by the household. Important questions related to their research methods raised by Engen et al (1996) are discussed below in section 4. Notwithstanding such issues, Poterba et al have informed the consensus view among American and international policy makers.

3.4 Putting it together: the LCT and neoliberal pension reform

Feldstein's argument that public pensions reduce private saving sits uneasily with the finding of Poterba et al that private pensions increase private saving. In the former case, it is necessary that pensions are highly substitutable for other saving; in the latter case, substitutability must be low. To convincingly assert that neoliberal pension reform increases saving, it has been necessary to relax certain neoclassical assumptions, particularly in relation to rationality. This is achieved through the introduction of concepts known as 'myopia' and 'moral hazard'. Both behaviours help to explain why many people do not save enough during working life for retirement although a rational individual would. Myopia is a failure to correctly estimate the value of future consumption, and moral hazard is manipulation of societal goodwill to take care of people, despite their apparent unwillingness to care for themselves (Banting and Boadway, 1997: 12). The World Bank describes the issue as follows:

Shortsighted behaviour becomes a social problem for two reasons. First, as people age they may change their preferences and wish that they had saved more - but then it is too late. Second, if people don't save enough for their old age, the rest of society may feel obliged to support them. (This obligation may even deter people from saving when young, a problem known as *free riding* and *moral hazard*.) (World Bank, 1994: 36)

These behavioural traits create a rationale for government retirement income policy. In effect, the lower than rational average level of savings reduces the savings offset from government intervention. From the neoliberal perspective, the danger with public pensions is that they increase the risk of moral hazard if people can avoid making contributions by, for example, conducting informal work outside the social security system or avoiding work altogether. Moreover, public pensions do not represent actual savings: they typically operate on a PAYGO basis and do not hold assets. According to proponents, private pension systems are a desirable alternative because they force or encourage genuine private saving, much of which would not otherwise occur.

The 'enhanced' neoclassical LCT and its implications for pension policy may be summarised as follows:

- It is rational for people to save during working life for retirement in order to smooth consumption.
- Many people do not do so due to moral hazard and myopia.
- Government intervention of some kind is necessary to prevent dependence on the community and state.
- Concessionally taxed and/or mandated private funded schemes are preferred because
 - contributions to such schemes represent actual savings and actual accumulation of assets, rather than transfers of consumption as in PAYGO systems,
 - government cannot be trusted with investment functions, as in public funded pension schemes (government influence on investment is discussed in chapter 4, section 2), and
 - personal account systems present no danger of moral hazard.

- Private saving offsets will be limited.

The argument is not presented so clearly by neoliberal authors. The more common approach is to report the findings of authors on public pensions together with the findings of other authors on private pensions without dealing with the intellectual acrobatics required to simultaneously justify both positions.

4 Theoretical and empirical challenges

4.1 Retirement saving

The notion that saving is especially and only for retirement is new to the post-war period. While it was recognised before WWII that people might save for retirement, analysis of saving and accumulation certainly predates analysis of retirement, and indeed, the widespread existence of retirement. The classical economist Adam Smith, for example, discussed saving without mentioning retirement. To Smith, saving was an instinctive behaviour, which existed without limit:

"The principle which prompts to save is the desire of bettering our condition, a desire which, though generally calm and dispassionate, comes with us from the womb, and never leaves us till we go into the grave. In the whole interval which separates those two moments, there is scarce perhaps a single instant in which any man is so perfectly and completely satisfied with his situation as to be without any wish of alteration or improvement of any kind. An augmentation of fortune is the means by which the greater part of men propose and wish to better their condition." (Smith, 1937: 324-5)

Keynes included the smoothing of household consumption as a legitimate motivation for saving, but only among eight "subjective" reasons, in addition to three "objective" determinants (1936: 107). The other seven subjective reasons are preparation for unforeseen events, to enjoy interest and appreciation, to enjoy increasing expenditure, to enjoy independence and economic freedom, to facilitate speculative or strategic investment, to bequeath a fortune, and to satisfy miserliness. The three objective determinants are income, liquidity preference and interest, of which income was the most important:

... a higher absolute level of income will tend, as a rule, to widen the gap between income and consumption. For the satisfaction of the immediate primary needs of a man and his family is usually a stronger motive than the motives towards accumulation, which only acquire effective sway when a margin of comfort has been

attained. These reasons will lead, as a rule, to a greater proportion of income being saved as real income increases. (Keynes, 1936: 97)

The point of this brief excursion is to emphasise that the neoclassical LCT is based on a highly particular notion of motivation for saving. Other, more plausible, concepts of saving would suggest entirely different policy responses. Smith's belief that the instinct to accumulate lasts 'until the grave', implies that people project the objective of betterment of condition onto their descendents, for there would be no other point to continue to save until death. This suggests that part of the objective of saving is to accumulate wealth to pass on, and for this aim, one must imagine that 'the more - the better' would be an appropriate rule. Such a motivation for saving is inconsistent with a target, and therefore with direct substitutability. It also questions the notion that workers save whereas retirees dissave. An individual who wants to pass on wealth may strive to save during retirement, regardless of income.

Keynes' analysis differs from the neoclassical in many important respects; I discuss only two here. First, it is multi-faceted. According to Keynes, people save for a variety of subjective reasons. He makes no attempt to distinguish between them or to apply relative weights to them. People want to save and that is enough. One implication of such an approach is that the notion of any clear target must be disregarded. Using Keynes' approach, it does not follow that an increase in wealth from public pensions would encourage less private saving. The implication for substitutability is similar to that for Smith's notion of ongoing personal betterment. Second, Keynes' emphasis on income as the key objective influence takes the focus away from the notion of motivation altogether, and on to ability. The ability to save differs between people due to income inequality. According to the neoclassical LCT, undersaving is a sign of irrationality. To Keynes, it is a sign of poverty.

4.2 Empirical evidence

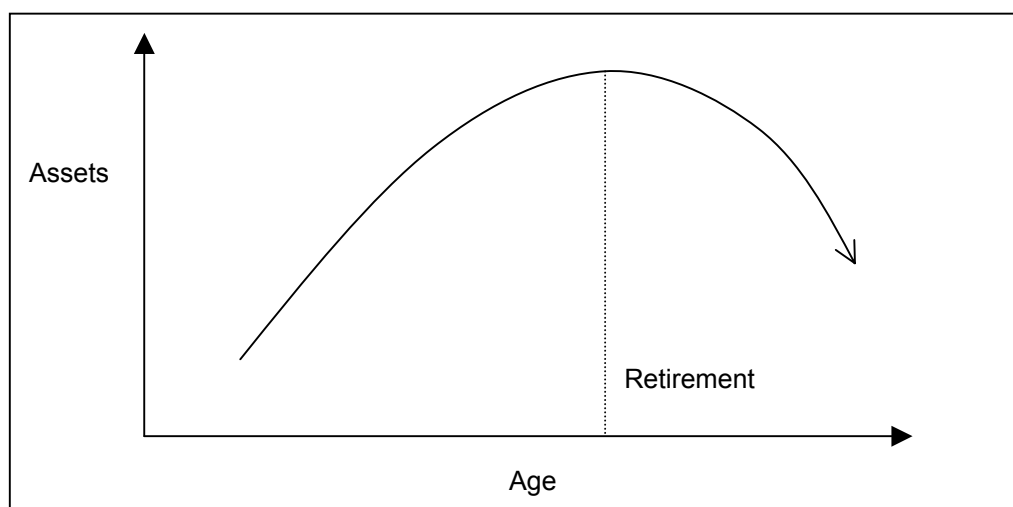
The neoclassical LCT predicts that individuals save during working life and dissave during retirement. This theory has several implications. First, the asset holdings of individuals will follow a predictable path during their lifetimes: steadily upwards to a peak at retirement, and then down towards zero at death. Second, individual age-based savings profiles can be aggregated. This implies that aggregate saving over time can be predicted with demographic data, which tell us, for a reasonable period

into the future, what proportion of the population will be net savers and what proportion will be net dissavers. Third, to the extent that national social security programs and other tax effects distort saving decisions, these distortions should be reflected in national savings rates: generous public systems should be associated with low private saving, and vice versa.

4.2.1 Retirement decumulation and the 'hump-shaped' age-asset profile

An important empirical source of support for the LCT was the discovery of a hump-shaped age-asset profile. When assets are aggregated by age-group (see Figure 2.3), the chart produces a hump-shape: the youngest people, as a group, have the least; the next youngest have greater wealth; those towards the end of working life have the most; and retirees have less than the group immediately younger. This age-asset profile suggests a life-time savings pattern consistent with accumulation before retirement, and decumulation after retirement.

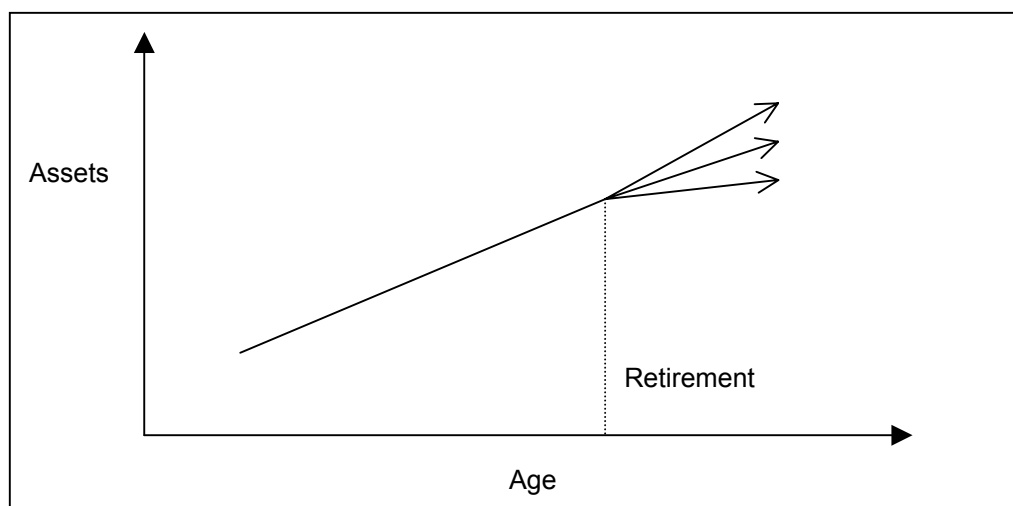
Figure 2.3 The Hump-Shaped Age-Asset Profile



From a relatively early stage, however, it was realised that the explanation for the hump based on asset decumulation during retirement was false. Miller (1965) observed that younger generations earn higher wages due to productivity increase and economic growth. Moreover, the benefits of productivity increase were not distributed evenly among the cohorts. Younger cohorts get most of the wage increases associated with economic growth. The implication is that younger

generations earn substantially more over their lifetimes than older generations. They earn more, save more and accumulate more than the previous generations, eventually becoming the wealthiest cohort. This occurs despite older generations continuing to save during retirement. Shorrocks (1975) and Irvine (1981) have developed this line of research.

Figure 2.4 Age-asset profile of a single cohort



These authors argued that it would only be possible to learn about life-cycle saving using longitudinal studies that observe the behaviour of each cohort over its lifetime. Using the hump-shaped profile to support the LCT confused life-cycle effects with cohort effects. These problems are known as 'vintage problems' in LCT savings theory (Kohl and O'Brien, 1998: 15). In aggregate terms, there is no evidence of dissaving in retirement. Erosion of assets is very rare, occurring only among the very oldest and poorest. Longitudinal studies in many countries have shown that the majority hold assets, and continue to save, right up to death, consistent with Figure 2.4, above.¹⁶

Dogmatic supporters of the LCT, such as Börsch-Supan (Börsch-Supan et al, 2000: 26), recognise the lack of decumulation during retirement but attempt to explain it by other means. These include a possible statistical oversight: the failure of asset data to

¹⁶ See for Japan (Kitamura et al, 2000: 4), Italy (Baldini and Mazzaferro, 2000: 20), New Zealand (Booth et al, 2000: 4), Germany (Börsch-Supan et al, 2000: 26), and Australia (Bacon, 1995: 25)

incorporate much pension wealth, particularly public pension wealth. Other plausible explanations which raise important questions about the LCT include: a reduction in consumption related to the end of work or coinciding with it (e.g. children becoming financially independent); the desire of most people to provide inheritance; and the overrepresentation in aggregate figures of the wealthiest in society, who, in some countries, have been found to save *at an increasing rate* in old age (Kitamura et al, 2000: 4).

Whatever the explanation, the unavoidable reality is that cohorts do not decumulate assets during retirement. One important implication of this is that it is inaccurate to describe saving as deferred consumption. This is because many families provide inheritance, and reciprocally, much wealth is received as inheritance *and held permanently*, rather than 'saved' at all. This assertion is supported by a cursory consideration of the distribution and transfer of wealth in modern capitalist societies. A recent Australian NATSEM study suggests that 5 per cent of Australian families hold 75 per cent of equity in listed companies (Gittins, 17/4/2002).

In the UK, over four-fifths of directly held shares are held by households in the top income decile (Hussain, 2000: 9). Research in the USA recognises the empirically established tendency of wealthy households receiving large inheritances (Engen et al, 2000: 8), while a New Zealand study estimates that a substantial part of wealth - 30 to 60 per cent - comes from inheritance (Booth et al, 2000: 7). In Italy, Barca et al (1994: 361) estimate that 35 to 50 per cent of real estate is received as inheritance or gifts.

Researchers in the US note that bequests are related to the elderly being reluctant to spend accumulated wealth, and find a direct relationship between the growth in defined contribution private pensions and the growth in bequests during the 1990s (Munnell et al, 2002a: 1). According to this research, retirement saving tax concessions are increasing the level and concentration of inherited wealth, not average retirement incomes.

In Australia, recent amendments to the regulations governing contributions to superannuation reflect the reality that retirees continue to save, and, in doing so, reduce the extent to which the policy is a 'retirement' saving scheme. Changes which took effect in July 2002 allow people aged 65 to 75 to continue making concessional-tax contributions. Contributions can also be made on behalf of

children by relatives (including grandparents) (ATO, 2002). These changes make superannuation a more flexible form of tax-effective accumulation for high income families.

American research also shows that neoclassical assumptions relating to perfect knowledge and perfect labour and capital markets are incompatible with actual experience. Research has found that 30 per cent of American families experienced a complete inability to borrow (Booth et al, 2000: 9), and that approximately 20 percent of households, including 45 percent of black households, do not have access to basic bank accounts (Engen et al, 2000: 66). Other American research suggests that only 36 per cent of people conduct long-term financial planning (Lusardi, 2001: 9). Even amongst those who had, most had very little knowledge of key aspects of their own financial situation, particularly wealth held in various types of pension schemes. Reasons cited included the distance to retirement making the calculation too difficult, a lack of time and being afraid of the results. Survey responses suggested that obtaining and evaluating relevant information can be an unpleasant task for consumers with little financial literacy (Lusardi, 2001: 10). The implications of low financial literacy to the competitive dynamics of markets for private pension products are discussed in chapter 4.

The evidence on both inequality and access to financial markets suggests that retirement saving plays a much less significant role in aggregate asset accumulation than the LCT would suggest. An equally important finding is that there is no evidence of asset run-down in retirement consistent with a lifetime savings pattern. These issues directly undermine the case that NPR will increase savings.

4.2.2 LCT aggregate saving predictions over time

Predictions of aggregate savings rates over time based on the LCT have not been realised. It was expected by experts in several countries that private saving would increase as the baby-boomers reached the prime earning and prime saving years just before retirement. For example, Fitzgerald (1993: 8) predicted an increase in savings in Australia during the 1990s due to these demographic changes. Instead, private saving has fallen to record lows. Similar effects were expected in the USA, where private saving has recently become negative for the first time. These recent findings

support American research conducted immediately following Feldstein's 1974-76 articles which found no econometric evidence for the LCT (White, 1978).

The failure of the expected 'demographic savings boost' to materialise points to the absurdity of using simplistic theories to predict complicated economic phenomena. However, recent empirical evidence of theoretical failure has not diminished a global trend towards demographic determinism in political discourse. An important example is the expected economic downturn and fiscal imbalance associated with the retirement of the baby-boomer generation, exemplified by this discussion of modelling conducted by the Group of Ten.

The estimated negative effects of aging on the annual rate of growth of output per capita range from 0.25 to 0.6 percentage points. Thus, given the assumptions, by 2030 the level of output per capita would be 8-20% lower as a result of aging than would otherwise be the case, unless offsetting productivity growth was achieved, other things being equal. It is important to keep in mind, however, that the estimated impacts shown in the chart are averages over a period of slightly more than three decades. During the early part of this period, demographics (through the age-productivity effect) will continue to have positive effects on growth. But as the baby boom generation begins to retire, the net effect of aging will turn negative, in some cases by enough to more than offset trend productivity. (Group of Ten, 1998: 15)

In Australia, Treasury produced a set of 'official' intergenerational accounts stretching 40 years into the future in the Budget for financial year 2002/2003 (Costello, 2002). The accounts are intended to emphasise the need for fiscal restraint in current policy formulation. However, like all long-term modelling, the work is subject to high rates of error, and sensitive to small changes to the levels of variables such as productivity, workplace participation by age and gender, and unemployment. Historically, these variables have fluctuated substantially, and seemingly without a clear trend.

4.2.3 LCT aggregate saving predictions by nation

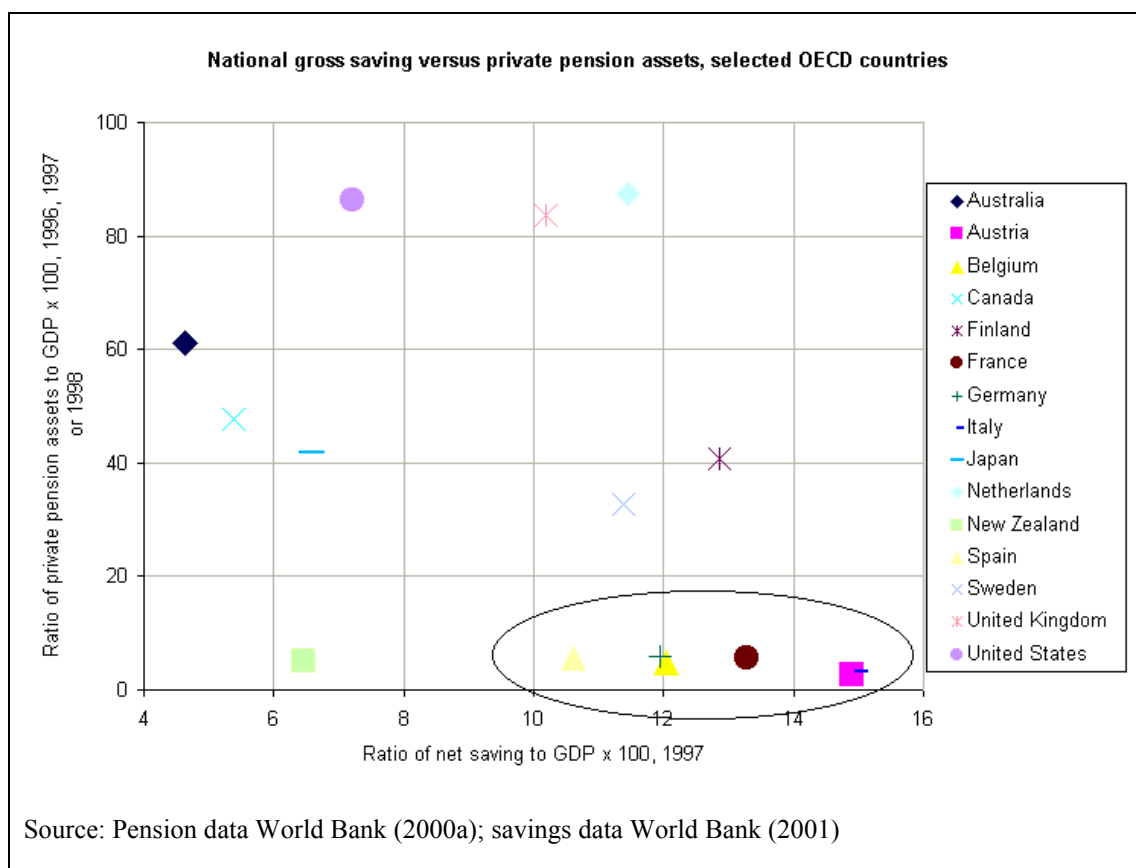
Proponents of NPR claim that a public pension provision reduces saving and private pension provision increases saving. Such a claim would be supported by a finding of high saving in countries with low public provision and high private provision, and low saving in countries with high public provision and low private provision.

Neither relationship is observable in cross-country data. Figure 2.5 shows national savings data against private pension assets for selected OECD countries. The

countries are distributed with no clear pattern, although one group of countries (circled) has both very high savings rates and very low private pension assets, and several countries (including Australia) have relatively high private pension assets but very low levels of saving.

Figure 2.6 shows national savings data against public pension spending for selected OECD countries. Again, there is no strong pattern, although a group of countries (circled) have both very high savings rates and very high rates of public pension spending. The top right corner (high private pension assets and high savings), where we would expect nations to appear if NPR did increase savings, is populated only by The Netherlands.

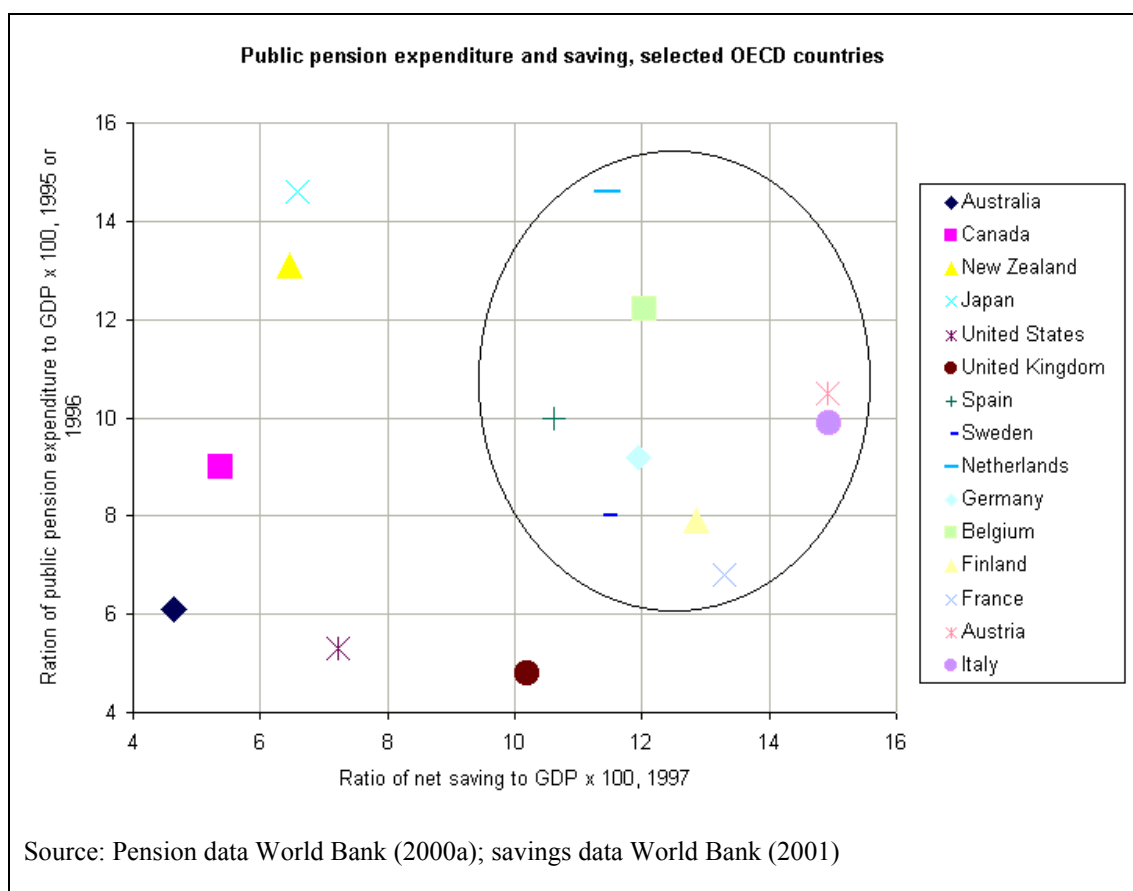
Figure 2.5 National saving versus private pension assets



The measure of national saving used in the above figures incorporates both private and public saving. In the continental European countries with high public pension spending, the public sector is typically in structural deficit. The very high levels of

national saving shown for most of these countries occur notwithstanding significant public dissaving. This indicates that private saving, in particular, is a great deal higher in these countries than in the Anglo-American countries, which have relatively low public pension spending and high levels of private pension assets. These findings are consistent with those of Bovin (1997: 10) 'that there is no cross-country correlation between the importance of funded pension assets and the level of domestic savings rates.'

Figure 2.6 National saving versus public pension spending



Finally, there is no relationship between national savings rates and the level of aging in the population. Many of the 'oldest' OECD countries, such as Japan, Germany and Italy, have the highest savings rates, and many of the 'youngest' countries, such as the US and Australia have very low savings rates, in direct contradiction of the prediction of the LCT that higher dependency rates would cause lower levels of saving.

4.3 Saving offsets

Saving offsets quantify the interdependence of different forms of saving. For example, if an Australian family on the middle quintile of income (this group spends on average around a quarter of disposable income on housing) (ABS, 2000b) borrows to purchase a house, ongoing mortgage payments represent an increase in housing equity, and therefore saving, but will have a substantial impact on other forms of saving. Similarly, compulsory and voluntary contributions to private and public pension schemes presumably have some impact on savings levels, both private and public. NPR may have an impact on savings levels by shifting emphasis to private provision. The questions are 'how?' and 'to what extent?' This section explores these questions in two distinct circumstances: the case where a country did not have a generous public system before the reform (and there is no reform of the public system), and the case where a country did have a generous public system and this system is amended while the private system is created or expanded. The second case is more complex because public saving will be affected by the arrangements for financing existing public pension obligations, and because private saving will be affected by the difference in relative offsets between contributions previously made to the public system which are now transferred to the private system.

4.3.1 One-way transition

As has been discussed above, the shift to a three-pillar retirement income system in Australia has not required a reduction in public benefits. The policy initiative that drove the change was the introduction of mandatory concessional tax retirement savings in authorised vehicles: superannuation funds. The official analysis of how these reforms were going to affect private and national saving has been conducted since the early 1990s by Treasury's Retirement Income Modelling (RIM) Taskforce. RIM has used a model developed by a large local life insurance and superannuation provider, National Mutual (now AXA Australia) (Gallagher and Preston, 1993).

As noted above, RIM in 1997 predicted an increase in the national saving rate of 1.6 per cent of GDP by 2001 by using a private saving offset of 30 per cent (70 per cent new saving) and a public saving offset which reduces the impact of tax revenue foregone by 50 per cent. The 30 per cent private offset was a refinement of the 50 per cent rate provided by Fitzgerald and Harper "chosen because it is half way between 0

and 1 which they saw as the least likely values for the offset" (Gallagher and Preston, 1993: 20). The 30 per cent private offset was seen to reflect overseas research (as summarised in an unpublished Treasury seminar paper) and the belief of the RIM Steering Committee that the SGC included income-constrained workers whose marginal rates of saving would be low (Gallagher and Preston, 1997: 4).

The rate of private offset estimated by Poterba et al (1996) when considering the impact on saving of households who use voluntary retirement saving vehicles in the US was 50 per cent. Their work has been questioned by Engen et al (1996), who argue that this finding is the result of poor methodology. Those households who participate in savings programs have an obvious predilection for saving and cannot be compared to families not participating in the program.

The main problem is simple to explain and typical of the evaluation of program participation. While it is true that IRA or 401(k) participants save more than non-participants, the fact that they participate in a program is likely to be correlated with a high 'taste for saving'. Therefore, the comparison between the two groups is not informative about whether program participants would have saved less in the absence of the program. (Engen et al, 1996: 32)

Engen et al conclude that the offset for private pension funds is 100 per cent, meaning that no new saving results (1996: 132). Gale (1995), similarly, found private offsets of 100 per cent. These researchers have found that private pension schemes effectively provide tax shelters for accumulation that would have occurred regardless. The impact on national saving – that is, private plus public saving – is probably negative in these cases, because of the cost of tax concessions to public revenue.

The perspective of Engen et al and Gale is supported by detailed observations in the US that most saving is done by a small proportion of the population on relatively high incomes with high levels of education, and this group has access to good legal and accounting advice and the flexibility to respond to tax incentives. Orszag and Orszag (2000: 2) cite US Treasury data indicating that two-thirds of tax subsidies for retirement saving accrue to the top 20 percent of income earners, whereas only 12 percent accrue to the bottom 60 percent. Moreover, private pension coverage of around 50 per cent belies a much more limited effective coverage. Data from the Investment Company Institute (ICI) gives an indication of pension fund account balance distribution in the US: 44 percent of participants have account balances of

less than \$10,000, whereas 13 percent of participants have account balances greater than \$100,000 (Holden and VanDerhei, 2001: 16). Similarly, in Canada, the top decile of income earners make 35 per cent of deductible private pension contributions (Wolfson and Murphy, 1997: 76).

Given the US estimates of between 50 and 100 per cent for voluntary schemes, RIM's use of a significantly lower offset - 30 per cent - for Australian superannuation is heavily dependent on much of superannuation saving being by relatively poor workers with relatively low saving propensity. RIM provide statistics on asset inequality to support this assertion:

Considering the wealth of those at retiring age, the poorest 10% of Australians had not accumulated any significant financial assets or housing. At least 50% had accumulated less than \$80,000 and the top 10% held almost 75% of these forms of wealth. (Bacon, 1995: 18)

This is a strong statement of wealth inequality at retirement. However, no research is presented concerning the distribution of superannuation holdings by income group. In fact, there is a variety of statistical and anecdotal evidence to suggest that much saving within the superannuation system matches the US model of voluntary saving – that is, saving that would occur otherwise and is directed to the retirement saving system in order to minimise exposure to taxation.

In Australia, concessional tax treatment applies to both compulsory contributions and voluntary contributions (up to certain ceilings). Compulsory contributions represent less than 40 per cent of superannuation contributions (Bateman and Piggott, 2001: 10). Moreover, the fastest growing area of the super industry are small super funds created as tax effective investment vehicles for wealthy families. At December 2002, this sector represented only 1.8 per cent of accounts but held 20.8 per cent of assets, with an average account balance of \$230,000, assets having more than doubled in size since December 1999 (APRA, 2003: Tables 1b and 2a). APRA's research into the issue of 'replacement' savings concludes that 'the growth in member contributions is clearly associated in large part with the drawing in of assets previously lying outside the superannuation system', though they are unable to quantify this effect (APRA, 1999: 5).

More generally, consumers of retirement saving and income products appear increasingly sensitive to tax-based incentives. ARISA, the industry group

representing providers of income stream products (annuities) reported a jump in sales following the implementation of more favourable tax treatment for certain products, particularly as financial planners became aware of the benefits and began reorganising clients' assets accordingly (ARISA, 1998).

There are rational explanations why a significant proportion of compulsory superannuation contributions would also have a higher offset than the 30 per cent suggested by RIM. First, there is a wide distribution of income within the SGC population, and those on higher incomes are responsible for most of the saving. Compulsory contributions from high income families will represent a disproportionate share of contributions. Second, RIM have not investigated the extent to which families on relatively low incomes save via housing equity, or the impact of compulsory superannuation on this saving. Forced private pension contributions reduce disposable income which may result in lower loan repayments or lower rates of housing ownership - a clear savings offset. This assertion is supported by the strategies of many retirees who receive superannuation lump sums. A common strategy for retirees with mortgages is to take benefits in the form of a lump-sum and use it to pay off outstanding housing debt. In this situation, super, a financial asset, is used to clear a mortgage, a financial liability, suggesting a direct offset. Finally, saving in private pensions can be offset by new borrowing, including consumer vendor credit such as loans on consumer durables. A major New Zealand study suggests that the fall in savings rates in New Zealand and Australia in recent decades is associated with rising consumer debt levels (OTRC, 2000: 13). No effort was made by RIM to investigate the implications of these factors on private saving offsets.

Before proceeding, it is worth considering the course of Australian private saving during the 1990s. In 2000, household saving reached the historic low of 1.5 per cent of GDP (ABS, 2000a: 5).¹⁷ Contrary to expectations that a new domestic source of funds to finance investment would be provided, the household sector has for the first time been a net borrower in most years since the implementation of the SGC in 1992.

¹⁷ The traditional method of calculating savings as a residual of current income and expenditure excludes capital gains on housing and equities from income and therefore saving. I have used the traditional measure as it is consistent with the intention of proponents of NPR when making arguments related to saving – that is, positive net contributions to financial assets from current income.

Australia's reliance on foreign capital is undiminished. Borrowing from overseas averages around 5 per cent of GDP annually (ABS, 2000a: 6). As a consequence, the ratio of national net liabilities to net worth has increased steadily from 11.8 per cent at June 1991 to a peak of 16.6 per cent at 30 June 2000. This represents an increase as a proportion of GDP from 48.4 per cent at 30 June 1991 to 63.9 per cent at 30 June 2000 (ABS, 2000a: 7).

The effect of a build-up of private pension assets on national saving is also offset by associated reductions in public saving. These reductions are related to the cost of the policy in terms of tax revenue foregone. In Australia, government saving has increased rapidly during the 1990s, but this has occurred *notwithstanding* the impact of super. Treasury estimates indicate that the cost of superannuation tax expenditures averaged 1.5 per cent of GDP and 4.5 per cent of the general government budget between 1995 and 1998 (Treasury, 2000; ABS, 2000a). The data is similar for other countries with concessionally-taxed private retirement savings. In the USA, annual revenue loss from retirement saving incentives is estimated at \$85 billion US (Orszag and Greenstein, 2000: 4). In Canada, in 1992, the cost was estimated at \$CA 13.6 billion - 40 per cent of the budget deficit at that time - and the cost increased to \$CA 35 billion by 1995 (Mintz and Wilson, 1997: 210). An interesting feature of neoliberal pension policy is that it is very expensive.

Arguably, however, future government expenditure may be reduced if public pensions are organised appropriately. For example, the Australian public pension is means-tested, and it is anticipated that concessionally-taxed retirement savings will push some people over the means-test limit, thereby reducing pension eligibility and expenditure. However, such an outcome could only arise after the policy had been in effect for at least a generation, when workers who would not otherwise have had super have had an opportunity to accumulate substantial assets. In Australia, a majority of those who have recently retired receive very modest lump sums of less than \$20,000 (ASFA, 2001a). This would have little or no impact on means-tests and therefore public expenditures, nor incidentally on retirement income. In fact, RIM does not expect a positive net effect on public finances until well beyond 2020 (Gallagher and Preston, 1997: 9). This remote prediction of benefit is despite RIM's decision to divide estimates of the cost of public tax expenditures in half based on the assumption that half the potential savings from removing the program would be lost in

the budget process (see Footnote 13). Likewise, in the UK, Curry and O'Connell argue that 'the future cost to the state of current pension policy is not clear. ... The right balance between the cost to the state of paying state pensions and the cost to the state of encouraging private pensions should be debated' (Curry and O'Connell, 2003: 3).

In summary, after combining private and public offsets to saving in private funded pension systems, it appears likely that the net effect on national saving of a one-way transition is negative. There is evidence of substantial private offsets even in the case of mandated savings, as in Australian superannuation. The impact on public saving is substantially negative in the short-term, with possible positive impacts after (at least) a generation.

4.3.2 Two-way transition

In a two-way transition, the public PAYGO scheme is reduced while a new private funded scheme is created. The first of two additional complications is the reaction of individuals to having a portion of their pension contributions diverted from the previously existing public system to the new private system. One plausible reaction is that it has no effect. This assumes identical savings offsets from public and private pension schemes.

Another plausible reaction is that people treat private pension accumulations as a closer substitute for savings other than public pension contributions, leading to a higher relative offset, and therefore reducing total savings. A number of characteristics of private pensions are similar or identical to other savings vehicles: contributions to private pensions are either completely or partly voluntary; assets are held in mutual fund-style personal accounts; assets and rates of return are reported on at regular intervals; and individuals have a choice of investment options. Except for difficulty in accessing savings until retirement, private pensions would appear to be a reasonable substitute for ordinary private financial savings.

By contrast, rights to public pensions are substantially different from private savings. They are not held in personal accounts; precise information on the quantity of rights or the level of 'return' is not easy to access; in unfunded systems pension claims are not 'assets' as such; and benefits are paid according to complicated formula which few people understand. In pure economic terms, risk-return is very difficult to calculate

because the state is ultimately liable, but returns are subject to political intervention. It is plausible that public pension benefits are a very poor substitute for private savings. This approach is supported by empirical research by Gale (1995), who found a 100 per cent offset for private pension funds and only a 12 per cent offset for public pension funds. This research suggests public pension funds had very little impact on other saving, but the transition from an emphasis on public to private pensions may reduce total private saving. Burtless (2001: 5) has similar expectations and is concerned that plans in the US to privatise social security will actually lead to a fall in national saving.

The second complication relates to the funding of existing public pension obligations, and operates at the macroeconomic level. Public PAYGO pension systems fund member benefits out of member contributions. If member contributions are diverted to a new private scheme, the government is left with the problem of how to treat the obligation to pay benefits accrued by retired and soon to retire members who have been contributing to the public scheme for up to 40 years. These obligations are often described in neoliberal research as 'implicit government debt' (e.g. Holzmann et al, 2000) as part of the attempt to describe public pension systems as facing inevitable crisis. According to neoliberal commentators, a true calculation of the financial obligations facing government would include this 'implicit government debt'. Pension liabilities equal or exceed existing government debt in several European countries, and would dramatically affect public perceptions of financial viability. However, there is a strong case for continuing to treat pension liabilities as different from explicit government debt. Diamond (2000c: 4) argues convincingly that pension obligations are not equivalent to formal debt because (despite probable political difficulty in reform) pension obligations are conditional on the government's ability to pay. This debate is discussed in chapter 6.

The way in which these obligations are treated during neoliberal pension reform has implications for public and national saving. Two main options are available to governments: funding the obligations in full (either out of general revenue or by borrowing), or reducing benefits. Increasing the retirement age is sometimes presented as a third option, but this is really a way of reducing implicit returns - by increasing lifetime contributions and reducing lifetime benefits (Diamond, 2000c: 10). The first method *reduces public and national saving* by the value of the pension

obligations. The government must either allocate a greater proportion of ordinary tax revenue to pensions (increase spending) or fund the pensions by borrowing (negative saving). The contributions which were to flow into the public system and are now flowing into the private system create a reserve of assets in the private system, but leave a hole in the public system. Inevitably, much of the contributions to new private systems buy government securities issued to pay for pension obligations. Differences between this and a PAYGO public system may be relatively superficial.

Reducing current or future benefits (for example by changing benefit index rules) presents the only possibility for a gain in public savings from the transition. Clearly, however, this can only occur at the expense of current or future pensioners. There is no painless savings win during transition. That does not stop several proponents of NPR claiming that there is. Authors such as Feldstein and Samwick (2001), Modigliani et al (2001) and, more tentatively, Miles (1998; 1999) and Diamond (1999) continue to suggest that transition will produce welfare benefits, translating into increased national saving. These benefits arise supposedly from the benefits of the higher rates of return for contributors on private assets over the implicit rate of return on public pension benefits.

The absence of such benefits in a general equilibrium setting was explored by Breyer (1989, 2001). The impact of moving pension contributions onto capital markets, and simultaneously issuing debt to cover public pension liabilities generates no net benefit. Rates of return on equities markets would fall, while the cost of government financing would go up. Private benefits would be offset by public costs. The validity of the position is recognised – at least in technical papers – by several orthodox pension economists including Robert Holzmann (1998a and 1998b) and Hans-Werner Sinn (1999). Holzmann, Director of Social Programs at the World Bank, writes:

Deviating from a general equilibrium framework without compensation, results sometimes in estimations which suggest high future benefits bought by only a small transitory burden (see, for example, Feldstein and Samwick, 1996). Yet these results need to be treated with a grain of salt both with regard to their assumptions (such as the assumed very high rate of return from funded provisions) as well as their partial equilibrium nature. (1998a: 24)

He concludes elsewhere that:

Summing up, under a traditional neoclassic setting, the financing of a UF-FF [unfunded to funded] shift becomes technically feasible but difficult to justify in economic terms. *The small long-term welfare gains can occur only at the expense of the transition generation* unless net efficiency gains come from a corresponding shift in the mode of taxation; the likelihood of such gains is small. Thus additional positive economic effects are required to justify such a shift in welfare terms and provide the necessary fiscal financing. (Holzmann, 1998b: 42 [italics added]).

Rigorous economic analysis does not support the notion, despite the wealth of 'pop economic' output to the contrary (World Bank, 1994; OECD, 1998), that a transition from an unfunded to a funded pension system generates additional saving, except 'at the expense of the transition generation'.

5 Summary

There is no effective theoretical or empirical support for the dominant view that neoliberal pension reform (NPR) increases savings. In terms of private saving, the best research indicates an offset approaching 100 per cent in private voluntary schemes, with little reason to justify lower offsets for compulsory schemes. Private pension systems essentially provide a tax effective avenue for saving, the majority of which would occur in the absence of the program.

In terms of public saving, the effect of NPR is negative and pronounced for the short to medium term, with tax concessions costing Anglo-American governments up to 1.5 per cent of GDP annually. Possible benefits from reduced welfare payments occur only after a whole generation. The NPR transition generates no additional public saving without painful reductions in benefits (or double contributions) from at least one generation.

There is no relationship in OECD countries between national savings and type of pension system. Indeed, many of the highest saving countries in the OECD have relatively generous public PAYGO pension systems, minimal private pension assets, massive public debt, and the oldest populations. These findings contradict all the main predictions of the neoclassical LCT, which forms the basis of the notion that NPR will increase savings. The reverse is true in every respect for the Anglo-American OECD countries. Moreover, in the countries with established private pension systems, trend savings rates have fallen since the 1970s as the systems have developed. This is not conclusive proof that pension systems lower saving (as it is

impossible to say what would have happened in the absence of pension reform), but it provides no evidence for the opposite position that NPR will *increase* savings.

An interesting finding from the research underlying this chapter is that the relevant theoretical and empirical work is known to institutions that promote NPR, such as the World Bank. There is a gap between the official line and any reasonable conclusion supportable by available research. Certain techniques for managing this gap have appeared often enough in IFI literature to give the impression of a systematic white-wash. These include:

- asserting current research is at an early stage and more data is necessary;
- citing dubious economic theories with the leader "some economists believe..."; and
- printing a list of possible but improbable effects of reform, including increased saving.

These techniques are, at the very least, misleading. The best available knowledge concerning economic effects are buried in technical papers that even a dedicated journalist or bureaucrat would be unlikely to discover. Meanwhile, the thrust of more accessible documentation and courses offered by the IFIs to coach bureaucrats in 'transition management' continue to assert macroeconomic benefits, particularly related to increased saving.

The level of ignorance in which the policy community, and the wider community, remains, allows promoters of NPR, including those employed by financial institutions which stand to gain direct benefit, to assert macroeconomic benefits unchallenged.

NPR continues to enjoy widespread public support, partly related to the popular opinion that it represents increased private savings and deferred consumption – thereby reducing the burden of retirement income provision on the state, public financing and tax. The reality is that savings would be largely unaffected, and tax rates could be substantially lower *and* more progressive if tax concessions for private pensions were removed.

Chapter 3 Investment and rates of return

The consumption for which we can profitably provide in advance cannot be pushed indefinitely into the future. We cannot, as a community, provide for future consumption by financial expedients but only by current physical output. In so far as our social and business organisation separates financial provision for the future from physical provision for the future so that efforts to secure the former do not necessarily carry the latter with them, financial prudence will be liable to diminish aggregate demand and thus impair well-being, as there are many examples to testify (Keynes, 1936: 104-5).

Of the maxims of orthodox finance none, surely, is more anti-social than the fetish of liquidity, the doctrine that it is a positive virtue on the part of investment institutions to concentrate their resources upon the holding of 'liquid' securities. It forgets that there is no such thing as liquidity of investment for the community as a whole. The social object of skilled investment should be to defeat the dark forces of time and ignorance which envelop our future. The actual, private object of the most skilled investment to-day is 'to beat the gun', as the Americans so well express it, to outwit the crowd, and to pass the bad, or depreciating, half-crown to the other fellow (Keynes, 1936: 155).

1 Introduction

Chapter 2 examined the impact of NPR on saving. This chapter considers investment and rates of return in private pension systems.

Section 2 provides a description of the private pension system that is recommended by NPR proponents. This system bears five important features of those operating in several Anglo-American countries (USA, UK, Canada and Australia). It is: capital funded; concessionally taxed; minimally and non-proscriptively regulated; personal account-based; and market-based, with most providers being private companies operating in a competitive retail/wholesale environment.

Section 3 considers the argument that private systems provide higher rates of return than public systems. The assets of private systems are invested on global financial markets by investment professionals. According to the proponents of NPR, returns in private systems are therefore superior to returns in public systems, which are

generally equal to economic growth, and may also be adversely affected by demographic change and politically-motivated redistributive policies.

Several weaknesses in this argument are considered. These include: apparent selection bias in market return data, which overestimate future returns and underestimate associated risks; a consequent tendency to discount the benefits of risk mitigation associated with public systems; exaggeration of the level of inter-generational transfer; and a failure to recognise mitigating factors associated with aging, particularly that younger generations benefit from higher incomes and wealth.

Section 4 considers the impact of new investment flows from pension funds.

Proponents of NPR argue that these investment flows represent additions to the capital stock that will increase productivity and economic growth. Private systems are said to provide qualitative boosts for capital markets, for example by encouraging financial innovation and filling identified funding gaps (including risk capital). Some authors also claim improvements in corporate governance, resulting from the influence of fund managers on firm management.

The section presents evidence on pension fund investment that contradicts these arguments. Pension fund investment is essentially risk-averse. It is biased towards securities issued by large corporations that are heavily weighted in leading stock market indices. Evidence is presented that a small fraction of capital that moves through capital markets from pension funds finances actual investment, with a relatively trivial quantity made available for venture capital. The concentrated demand for specific securities by pension funds appears to contribute to asset inflation, rather than capital stock expansion.

Notwithstanding this bias, within the group of desirable stocks, pension fund investment is highly diversified. It is consequently impractical for fund managers to add strategic value to management, or even provide an effective role in governance.

Section 5 summarises the chapter and draws out the implications of current research on pension investment for pension system policy.

2 The recommended private pension system

Pension schemes take many forms. Neoliberal reformists, including international financial institutions (IFIs) such as the World Bank, IMF and OECD, recommend

implementation of a multipillar structure which separates the goals of redistribution and saving.

...financial security for the old and economic growth would be better served if governments develop three systems: a publicly managed system with mandatory participation and the limited goal of reducing poverty among the old; a privately managed, mandatory savings system; and voluntary savings. ...

By separating the redistributive function from the savings function, the public pillar ... can be kept relatively small, thus avoiding many of the growth-inhibiting problems associated with a dominant public pillar. (World Bank, 1994: xiv)

According to the World Bank, the 'savings function' - provision for retirement income beyond poverty alleviation - should be achieved in a private system. Private pension schemes also come in a variety of forms. The IFIs, however, favour implementation of a system similar to the private systems of the Anglo-American countries. This preference is articulated in publications such as *Averting* (World Bank, 1994), the World Bank pensions website (www.worldbank.org/pensions), training courses for national government bureaucrats, and in policy implementation with developing and transition countries.

The Anglo-American pension systems are not identical. Australia is the only country in this group to have a compulsory private element, and the UK is the only country in this group to allow complete avoidance of the public system. However, the systems have several important characteristics in common that have been adopted by the IFIs as favoured elements. They are:

- capital funding;
- concessional taxation;
- minimal investment regulation;
- personal account-based - defined contribution (DC); and
- provision organised in a competitive market.

The recommended private system is funded. This is in contrast to the PAYGO financing typical of public pension schemes. This may appear tautological for private systems; however, there are private PAYGO systems in operation in several OECD countries, including Norway and Ireland (Laboul, 1998: 46). All the aspects of

private pension systems discussed in this chapter relate to investment of pension assets on capital markets. This is a feature only of funded schemes.

A second feature of the recommended system is that it is concessionally taxed. The method employed in the UK, Canada and the US is for contributions and earnings to be tax-free up to a ceiling, and benefits to be taxed at the usual marginal rate. The Australian system is unusual, in that it taxes at all three stages, albeit concessionally. The Australian government is under constant pressure from industry bodies, such as ASFA (2001b), to reform the taxation of super to bring it into line with 'standard' overseas practice. Taxing only pension benefits allows the most rapid accumulation, due to a higher initial investment, and a higher after tax rate of compounding returns. The present value of tax taken early in an individual's retirement saving program is much higher than tax taken at the end. The system is based on the notion that retirement saving is deferred consumption. If, however, retirement accumulations are preserved for bequest, this form of taxation allows the accumulation (over generations) of property income with a greatly reduced tax burden.

A third feature is that the private systems operate in a minimalist investment regulation regime. In the Anglo-American countries, investment regulation is largely governed by the Common Law as it applies to trusts. The Common Law emphasises the fiduciary responsibility to 'yield the best return for the beneficiaries, judged in relation to the risks of the investment in question' (Davis, 2001: 19). The legal authority which gave the common name to the minimalist regulatory regime - the *prudent man* concept - is an 1886 case, 'Re Whiteley', in which it was stated that trustees must 'take such care as an ordinary prudent man would take if he were minded to make an investment for the benefit of other people for whom he felt morally obliged to provide' (in Davis, 2001: 19).

This fiduciary responsibility is generally interpreted in strict and restrictive terms. It is, for example, seen as precluding potentially competing investment priorities, including those which actual beneficiaries of the trust may hold dear, such as investment in particular regions or industries. A 'pro-prudent man' literature emphasises the risk of objectives creeping into investment policy which are not supportable on strictly financial grounds (Minns, 2001: 115-6). These include

'economically-targeted-investments' (ETI) and 'socially responsible investing' (SRI).¹⁸ The perceived dangers of ETI are discussed in more detail in chapter 6, section 3, in the context of the perceived threat to investment performance posed by government.

The prudent man concept does not suggest an absence of regulation. However, regulations in a prudent man setting relate to the function of the market - proper governance and open and fair market dealings - as opposed to quantitative restrictions on fund investments restricting investment in equities or foreign assets. This allows the fund manager access to all the tools of modern statistical investment, aimed at maximising risk-adjusted returns, where risk is defined as volatility in returns over a given period. The emphasis of these investment techniques is liquid competitive capital markets which are assumed to provide an objective method of determining fair value.¹⁹

A substantial literature, especially featuring Hans Bloomestein of the OECD (2001a; 2001b),²⁰ details the superior performance of private pension systems operating the prudent man concept over systems operating so-called 'Draconian' quantitative investment regulations. Bloomestein reports that, in the Anglo-American countries with prudent man investment regulation (UK, USA, Canada, Australia and Ireland), equity holdings are more than 3 times as large on average and foreign holdings are twice as high on average as those countries operating quantitative investment restrictions (Japan, Sweden, Germany, Denmark, Portugal, Belgium) (2001a: 11). According to Bloomestein, the result is higher returns: average real annual returns in prudent man countries between 1984 and 1998 were 4.7 per cent higher than average

¹⁸ Representatives of the latter group invented the category to differentiate themselves from the economically targeted investments group, which had been effectively demonised by neoliberals in the USA and UK. They argue that investment in SRI does not conflict with fiduciary responsibility (Yunus, 2002).

¹⁹ Fluctuations in value are divided by modern investment theory into systematic and non-systematic. Systematic risk – fluctuation which affects the whole market – is largely perceived as outside the scope of analysis, though it does, of course, have a profound effect on retirement accumulation. The aim of modern risk minimisation is to achieve returns which match the market. The possibility for the market to provide incorrect valuation over substantial periods contradicts the theory.

²⁰ See also OECD, 1998b: 93; Srinivas & Yermo, 2000: 1; World Bank, 2000; Vittas, 1998a: 22

real annual returns in countries with quantitative restrictions (2001a: 19-20). The validity of this sample is questioned below.

Some pragmatic exceptions to the prudent man rule are evident in the Anglo-American countries. In Australia, for example, investment by a fund in the entity which sponsors the fund (e.g. an employer) is limited to 10 per cent of fund assets. This regulation is not in place in the US, where ICI (Investment Company Institute) research reveals that an extraordinary 39 per cent of 401k assets are held in own-company stock (Holden and VanDerhei, 2001: 12). The related risk, as in the Enron case, is that, in the event of employer bankruptcy, employees lose both employment and retirement benefits.²¹

Enron employees, whose pension scheme - or 401(k) plan, as they are sometimes called - consisted mainly of Enron stock, have lost as much as \$1bn (£700m) in funds.

Under the scheme employees' retirement plans, 62% of the contributions consisted of Enron stock, which traded as high as \$83 a year ago but have since fallen to below 70 cents a share. (David Schepp, 10/1/2002)

A fourth preferred characteristic is that the system is based on the principle of 'defined contribution' (DC) as opposed to 'defined benefit' (DB). Most occupational pensions up until the 1980s, including in the Anglo-American countries, were of the DB type. In DB systems, benefits are calculated using a formula based on length of service and earnings history. These systems often include reward for long service and are notable in that the investment risk is borne by the pension sponsor. DB programs tend to redistribute income by averaging out good and bad periods of investment, as well as transferring income from short-term workers to long-term workers. Criticisms of DB pensions include that the pension value is difficult to calculate during an individual's career and accrued benefits are difficult or impossible to transfer to another pension program.

²¹ Reform in this area is underway, though it appears that a soft reform option supported by President George W. Bush is gaining bipartisan support. Under the proposal, employees would be *allowed* to sell own-company stock three years after they are received within 401k schemes in order to diversify holdings. Direct restrictions on 401k investments would be limited to a phased diversification plan - 20 per cent diversified in year 1, with an additional 20 per cent diversified each year for 4 years (Boehner, 2002).

By contrast, DC or 'accumulation' schemes usually do not have vesting rules and assets are consequently more portable. Investment returns are not smoothed over time and there is no redistribution between groups; in other words, risk-pooling does not apply. An individual receives only what is contributed by themselves or employers on their behalf, plus market returns net of administration. Asset value should be communicable to members in an account-equivalent format, and members may have a choice as to which provider they use and how assets are invested. Almost all new funds in the Anglo-American countries are of the defined contribution type, and the percentage of assets in these funds is now in the majority. In Australia at 30 June 2000, 87 per cent of superannuation members were in DC style funds (Clare and Connor, 2000: 6). In the US, membership of DC funds more than doubled between 1975 and 1997 (Munnell et al, 2002b: 6).

Fifth, the Anglo-American private systems, and most of the systems implemented with the involvement of the IFIs, are organised around a plural consumer market. In this structure, multiple providers compete to sell services directly to individuals, in addition to employers. Alternatives include systems in which fund licenses are strictly limited to prevent inefficient provider proliferation, funds can only market to employers, or administration is handled by the state which purchases funds management services from the finance sector in a centralised tender process.

The rationales for a plural consumer market relate both to expectations concerning the benefits of competition in the market and perceived benefits from additional administrative and investment diversification. It is also seen as the pragmatic solution in countries with an existing market for related financial services, such as life insurance. Robinson describes these factors in the Australian case:

Calls to move to a centralised national superannuation scheme have been rejected, primarily on the basis of the disruption this would cause to existing superannuation arrangements (including the possibly perverse effect of reducing total superannuation cover) but also on what might be called 'risk diversification' grounds. With respect to the latter, there are cogent arguments in favour of a system whereby savings are channelled into a diversified range of independent funds and invested by a large number of independent decision makers on the basis of individual commercial judgments. (Robinson, 1992: 13)

The effectiveness of administrative plurality in achieving diversified investment is discussed below in section 4.1.2. Chapter 4 also deals with the dynamics of the plural

consumer market in detail, demonstrating that it is an unambiguously disastrous element of the private pension policy. Neoliberal researchers have spent two decades recognising problems but resisting solutions which involve direct regulation or public administration (Vittas, 1998a; Whitehouse, 2000a). While the stance of IFI research in defence of consumer markets is appearing to soften (James et al, 2001), there is no consideration in the Anglo-American countries of retreat from market plurality. Indeed, current reform options, supported aggressively by the finance sector, emphasise increased consumer choice (Costello, 1997).

In summary, the preferred private pension system is funded, concessionally taxed, minimally regulated, defined contribution, and market-based. The following sections consider the interaction of private pension funds and capital markets, and whether or not this is desirable for individual fund members and society.

3 Pension rates of return

Proponents of NPR argue that private systems earn higher rates of return for members than public systems. They argue that while private system assets are invested by professional fund managers on international capital markets, public system returns are limited to the domestic rate of economic growth, and may be adversely affected by demographic change and other forms of redistribution. This section considers rates of return and risks associated with public and private pension systems.

3.1 Comparative historical returns

The rate of return on public PAYGO pension schemes is not zero. Even though PAYGO systems may have no assets earning interest, under normal economic conditions, a member with average lifetime earnings and average lifespan will receive more in benefits than they provide in contributions. The economics of PAYGO pensions were described by Paul Samuelson (1958), whose 'overlapping generations' accounting model predicts that the implicit rate of return is equal to the rate of growth of the aggregate wage bill. If the wage share of output is constant, the PAYGO rate of return will equal the rate of real economic growth, which should be the sum of the real rate of growth of labour productivity and the real rate of growth of the labour force.

Samuelson was a strong advocate of the public PAYGO pension system, both in the academic context and in public debate, arguing that it was a permanently welfare-

improving method of retirement income provision. The World Bank appear to attribute personal responsibility to Samuelson for the spread and growth of public PAYGO pensions during the post-war period, quoting him in a 1967 Newsweek editorial:

"... The beauty of social insurance is that it is actuarially unsound. Everyone who reaches retirement age is given benefit privileges that far exceed anything he has paid in. ... A growing nation is the greatest Ponzi scheme ever contrived."²²

The result was the creation of new social insurance schemes or tiers in Switzerland (1949), the Netherlands (1957), Sweden (1960), Norway (1966) and Canada (1966) and the dramatic expansion of schemes in the rest of Europe, Japan, and the United States. (World Bank, 1994: 105)

The public PAYGO implicit rate of return was positive in developed countries during the decades following World War II due to strong economic growth and labour force growth.

Proponents of NPR suggest, however, that the rate of return would have been higher for funded private pensions, even during this favourable period. This argument is based on two assertions: that capital market rates of return are generally superior to economic growth, and that private pension funds can access those returns.

Beginning with the second part of the argument, proponents of NPR argue that pension funds stand to get the best that capital markets have to offer because pension funds have advantages over ordinary private investors. Pension fund investment is run by trained professionals, and benefits from preferential access to information and economies of scale. In investment analysis, pension funds can conduct thorough analysis of a large number of assets, and get access, via closed briefings, to insights to company performance and strategic issues. As large buyers of investment services, pension funds can also get better rates and quality on services such as broking and asset consulting. These costs can also be spread over larger transactions, depending on fund size. Pension funds are pooled investors. This implies that pension funds should be able to maximise the benefits of modern statistical investment analysis related primarily to diversification. By spreading assets carefully over a range of

²² A Ponzi scheme is a financial scam in which payments move from new members to old members in a pyramid structure.

countries, asset types and industry classifications, pension funds should be able to maximise risk-adjusted returns (Bloomestein, 2001a: 19).

Pension funds also have long time horizons. In contrast to ordinary investors, pension funds should not be risk averse. Pension funds should be able to take advantage of pricing errors caused by risk aversion, including the so-called 'equity premium'. This is the name given to the tendency of the risk-adjusted return on equities to be higher than the return for less volatile assets. In addition to being long-term, pooled investors, pension funds are flexible. According to Bloomestein, pension funds are able to exercise rapid portfolio adjustment to take advantage of poor asset pricing (2001b: 7). This is expected to improve the allocative efficiency of investment.

Professionalism, economies of scale, pooling, long time frame and flexibility are important benefits in investment management. However, professional investment management does involve an additional layer of costs. It also introduces a set of risks related to agency, as it is unclear in the private pension marketplace, given serious gaps in accountability, to what extent managers are serving their members or themselves. The impact on private pensions of administrative cost and negligent or fraudulent management are discussed in chapter 4.

Notwithstanding these concerns, most mainstream authors assert that private funded systems receive higher returns than public systems. David Miles (1998), for example, compares GDP growth (equal to public pension returns) to the rate of return on a mixture of government bonds, corporate bonds and equities. He compares these data in a series of ten year periods since WWII for a number of OECD countries. In most periods, for most countries, the average rate of return on the mixture of marketable securities has been higher than economic growth. Miles argues that the finding of higher capital market returns is generally applicable, and explains the relevance for pension reform:

[I]n dynamically efficient economies the average rate of return on assets will exceed GDP growth. Since the tax base for unfunded state pensions is likely to move closely in line with GDP a funded system will tend to generate higher returns so that in the long run funded systems can pay higher pensions for a given level of contributions (or generate the same level of pensions for lower contributions). (1999: 2)

Similarly, Feldstein and Samwick (2001: 8) argue that private pensions (invested 60 per cent in equities and 40 per cent in corporate bonds) will pay 6.9 per cent, based on 1945-95 returns in US capital markets. By contrast, they expect public pension returns to decline to 3 per cent over coming years.

Likewise, Palacios and Pallarès-Miralles, World Bank researchers, provide data on private pension system annual returns between 1984 and 1999 in a selection of countries, mostly in the OECD. Their data suggests that annual average private pension system returns have exceeded annual per capita growth by between 1.5 per cent and 8 per cent, with an average of around 4 per cent (Palacios and Pallarès-Miralles, 2000: 18). This is perceived to be the differential between public and private system returns.

Claims of superior returns on capital markets must be examined closely. Capital market returns are potentially volatile, with numerous examples of market collapse, stagnation, termination and suspension. Indeed, capital market failure partly explains the development of PAYGO pension systems. Early experience in Europe and the US with funded pensions was not positive. Munnell et al write:

Private pension plans in the United States date from 1875, but the early plans were financially vulnerable and most were bankrupted in the 1930s by the Great Depression. Contemporary US pension plans, both private and public, are rooted in the search for greater financial security that became part of the national psychology after the onset of the Depression. (Munnell et al, 2002b: 2)

Similarly, Clark (2001b) relates that part of the rationale for creation of public PAYGO pension systems in France, Italy and Germany, was the annihilation of savings held by households due to inflation, industrial collapse and war. In several developed countries, the public's faith in financial institutions as a mechanism for holding long-term savings was shaken.

The 'search for greater financial security' in the early post war period seems to have given way to complacency, following decades of high capital market performance interrupted only by stagnation from 1973-1983. Complacency is encouraged by authors asserting strong historical performance. However, retrospective investment analysis offers substantial scope for selection bias to affect results. Possible sources of bias include choosing certain countries or periods with superior returns, or not adjusting for firm survival bias.

The three pro-NPR studies referred to above focus on high growth periods: Feldstein and Samwick (2001) use 1945 to 95, Bloomstein (2001a) uses 1984 to 1998, and Palacios and Pallarès-Miralles (2000) use 1984 to 1999.

Dimson et al have analysed the 'de Zoete' study' (regarded as a benchmark) of returns in the UK for the period 1919-1954, which estimates annual real returns at 8.79 per cent. After adjusting for a series of biases, including surviving company and large company biases, and beginning the sample at the beginning of the century instead of after WWI, Dimson et al found real annual returns of only 3.83 per cent (2002: 37).

Use of returns from relatively successful markets, such as the UK or US, may not be representative of general circumstances. Dimson et al show that half of a sample group of 16 OECD countries have had average real annual equity returns of below 5 per cent during the 20th century, even after excluding the years for which certain countries in Europe were affected by hyperinflation (2002: 50). Real bond returns across the sample group averaged 0.9 per cent (Dimson et al, 2002: 53).

Similarly, Larry Willmore (1998a: 5) argues that data drawn from US markets cited in most pro-NPR research is not applicable to other economies. His argument is particularly pertinent to World Bank promotion of private pensions in developing countries with weak trade positions and vulnerable currencies. Financial turmoil has been widespread in developing countries in recent years. In the last decade, transition economies such as Russia and the Ukraine, Latin American economies including Mexico, Brazil and Argentina, and South-East Asian economies including Thailand, Indonesia and Malaysia, have all suffered crises involving currency devaluation and rapid inflation. People in these countries experienced collapses in the value of their savings, whether held in banks, or in pension funds, as in Argentina.

Given the added risks associated with investment on capital markets as opposed to public PAYGO systems, a number of commentators question whether differentials in return compensate for the volatility associated with investment on capital markets (Aaron et al, 2001; Laboul, 1998; Burtless, 2000; Willmore, 1998). Miles suggests statistical parameters under which capital market returns do adequately compensate for volatility.

If average rates of return on funds are as high as 8% then even if volatility in returns is high (17.5% annual standard deviation) and

annuity markets highly imperfect there is no useful role for unfunded pensions. (Miles, 1999: 25)

During the 1980s and 1990s – the period of rapid growth for private pension systems – average market returns in most developed countries were in excess of 8 per cent, indicating that compensation may be adequate. However, this has not always been the case. The distribution of annual returns on US equities between 1900 and 2000 suggests that returns were negative more than 30 per cent of the time, and, with a standard deviation of over 20 per cent, showed a high degree of volatility (Dimson et al, 2002: 55). A histogram of annual returns over the last century approximates a standard bell curve, *except that* there are far more outliers than would be expected in a normal distribution. Even in the US, extreme results occur far more frequently than are predicted by a normal distribution.

These analyses also ignore the tendency for good and bad years to be grouped in bull and bear runs. Miles recognises that this omission may be pertinent:

We have assumed that rates of return are independently (and identically) distributed over time. This means that investment risk can, to a significant extent, be smoothed over time. ... An important area for future work is the modelling of optimal pension arrangements when asset markets are subject to sustained periods of above or below average returns; if there are bull and bear markets funded pensions are likely to be riskier than if returns come from the same distribution each period. (1999: 25)

The impact of bull and bear runs on historical capital market returns is significant.

Gary Burtless has considered the impact on hypothetical private pensions invested on US stock markets over the last 70 years.

Assuming workers deposit 6 percent of their annual pay into a retirement account that is invested in common stocks, historical experience suggests their initial pensions can range from less than 20 percent of their peak career earnings to more than 100 percent of peak earnings. Averaged over their full retirements and taking account of the effects of inflation, workers' real pensions ranged between 15 percent and 70 percent of peak career earnings. (Burtless, 2000: 23).

Historical stock market returns in the US would offer private system members widely varying returns, depending on investment strategy and the timing of retirement.

Retirement at the end of a bull period would result in very high returns, but retirement at the end of a bear period would produce very low returns.

Wide disparity in returns are particularly relevant to current (2002/03) market conditions. Stock markets around the world reached record levels in early 2000. Following very strong growth during the 1980s, the leading Australian index, the All Ordinaries, doubled in value between 1990 and 2000, from around 1600 to around 3200. In the USA, the Dow Jones Industrial Index (top 22 stocks) rose from around 2500 to 11000 (a multiple of 4.4), while the S&P 500 (top 500 stocks) rose from around 350 to around 1500 (a multiple of 4.3). The leading index in the U.K., the FTSE, rose from around 2200 to a peak of 6800 (a multiple of 3.1).

Corporate earnings also rose during this period, but not to the same extent. Price-earnings (PE) ratios have risen to historically high levels in all these countries. A PE ratio of 15 is the historical average in the US and Australia. The Reserve Bank's Australian stock exchange PE series shows a rise from around 10.5 in 1990 to a high of 29 in early 2000, falling slightly to around 25 in April 2002 (RBA, 2002a). In the USA, the PE ratio on the S&P500 rose from a low of 7 in 1980 to a peak of 37 in March 2000 (Walker, 2002). It has fallen substantially since then to around 25 in December 2001, but remains well above historical averages.

It is also likely that published market data underestimate PEs by overestimating aggregate earnings. Firms with negative earnings are excluded, and the earnings of many companies in recent years have been manipulated upwards with a range of fraudulent and misleading accounting practices (Krugman, 29/6/2002). There were more earnings restatements in 2001 on the NY Stock Exchange than in any year previously, and the year 2002 produced more still, indicating that earnings projections were too aggressive and accounting methods were re-evaluated. A range of unethical practices that impact on pension funds are discussed in section 4.4 of chapter 4.

The peak market conditions during 1999-2000 encouraged NPR with the prospect of stellar returns on capital markets. However, leading experts were circumspect about NPR proposals. In considering a Clinton proposal for social security privatisation, Peter Diamond questioned assumptions that the market would provide 7 per cent real returns, the long-term historical average. A key issue for Diamond was the then very high asset prices. Diamond notes that high PE ratios and low dividend ratios signal a probable lower future rate of return on equities (2000d: 42-44). Diamond argues that to achieve historical rates of return, it would be necessary for markets to provide zero capital gains *for the next ten years* (2001a: 1).

Concern over future levels of returns is not restricted to academic commentators. Garth Rossler, a director of analyst/broker Maple-Brown Abbott, is one of many Australian practitioners talking down future returns:

People have got used to double-digit returns, and really that has only been on the back of bull markets of historic proportions ... We think that, going forward, average industry returns will be much lower than they have been. (Todd, 10/1/2)

Later in 2002, little appeared to have changed. Kerr Neilson of Platinum Asset Management said:

"We don't think we're going to make people much money going forward," he laments. "We're in a bear market and what happens in a bear market is that everything falls. The few stocks that hold up through the selling then get nailed because they stand out and don't represent the value that they did before.

"There's no way of escaping widespread market falls and what happens is people then lose the residue of their commitment to long-term investing. They start making losses and skipping out of their investments." (SMH, 20/6/2002)

Vanguard, an international index fund retailer and a leading beneficiary of the stock market boom and stock market enthusiasm, has gone to lengths to warn investors about the likelihood of lower short-to-medium term returns due to the boom which lasted until early 2000 (Vanguard, 2000).

In line with the expectations of Diamond, the bear run beginning in March 2000 removed much of the apparent gains of the previous years. At October 2002, levels on most indices had returned to 1998 levels. Capital losses have flowed through to pension funds. Australian funds provided low or negative quarterly returns between 2000 and 2003 (APRA, 2003). Between September 2000 and September 2002, despite net contributions of \$A 59 billion, total assets increased only \$A 10 billion, implying investment losses after administration of almost \$A 50 billion (APRA, 2003).

Pension funds have been devastated by market performance in the US. US pension funds have fallen an estimated \$US 1 trillion in value (Sanders, 28/2/2003). Defined benefit pensions are doubly affected because, in addition to being impacted by the reversal in equities, the fall in interest rates has reduced the discount rate used to calculate future pension liabilities. The New York Times reports that as a consequences of these dynamics, private DB pension funds in the US have shifted

from being \$US 220 billion over-funded to being \$US 220 billion under-funded in the three years from 1999 to 2002 (Walsh, 13/1/2003).

Hopes that markets will turn around rapidly are not necessarily well founded. Even in economically and politically dominant nations such as the US, recovery from crashes may take a full generation. The Dow Jones Index did not reach its 1929 peak again until 1958 after adjusting for inflation. Japanese markets have been falling since the late 1980s, despite the apparent industrial strength of the country reflected in continued trade surpluses. Between 1993 and 1996, the Japanese social security trust fund lost 6 percent of its value due to falling markets (Turner, 2001: 25). The Japanese market in early 2003 reached lows not seen since the early 1980s. The implicit claim of the pension fund industry that a slow and steady approach to investment – ‘dollar-averaging’ is the current jargon – is hollow in this context. A significant portion of money invested at the peaks of speculative booms is effectively wasted. Asset prices may only recover as much as a generation later, if at all.

The assertion that private pension funds offer superior returns to public PAYGO pension systems is based on selective data that ignores the profound risks associated with capital market investment.

3.2 Intergenerational and intragenerational redistribution

In private funded DC systems, an individual's benefits are equal to his or her contributions, plus market returns. In public PAYGO systems, benefits are paid out of worker contributions and taxes based on formulae which generally reflect the length and quantity of contributions. Critics of public PAYGO systems describe two sources of generational inequity related to financing: windfall benefits for the first retiring generation and decreasing returns for younger generations caused by demographic change. However, several factors mitigate intergenerational inequity: economic growth results in younger generations being wealthier over their lifetimes; increased longevity means younger generations draw pension benefits for longer periods; and inheritance connects the interests of socio-economic groups across generations, and is more lucrative as fertility falls. The ability of the public PAYGO systems to provide immediate pensions allows windfall gains, but whether or not systems provided these gains depended on design. In practice, such gains were generally limited.

Neoliberal critics argue that the combination of aging-related decreases in rates of return and windfalls provided to the first retiring generation lead to systemic generational inequity. As a community ages due to falling fertility and greater longevity, the *aged dependency ratio* (the ratio of elderly people to working people, or the population as a whole) rises. Assuming labour participation by age and gender stays constant, the *pension system dependency ratio* (the ratio of beneficiaries to contributors) will also rise. Assuming the pension system is kept revenue neutral (benefits equal contributions) and benefits are set as a proportion of average wages, contributions must rise as a proportion of wages. Alternatively, benefits may be reduced, reducing implicit rates of return. An increase in the retirement age - sometimes suggested as a third solution - is actually a combination of both the previous solutions, as it represents both an increase in contributions and a decrease in benefits (on a lifetime rather than annual basis).

Figure 3.1 provides some illustrative accounting for a hypothetical pension system experiencing an extreme jump in system dependency. It initially has 1 retiree for every 10 workers, but this ratio rises to 2:10, or only 5 workers per retiree. In the first instance, each worker need only contribute 5 per cent of pay to provide the retiree with a pension equal to 50 per cent of gross wages. In the second instance, each worker must contribute 10 per cent of wages to provide a pension equal to 50 per cent of wages. The increase in taxation (double) is exactly the same as the increase in dependency. Alternately, if taxes are kept constant, the pension would fall from 50 per cent to 25 per cent of gross wages. The later generation of retirees would only receive half the rate of return of the first generation.

Falling present value from public PAYGO pensions is described by neoliberals as a source of intergenerational inequity. Axel Börsch-Supan et al (2001) attempt to build a case that workers in high replacement rate European PAYGO schemes are highly dissatisfied as they are facing high social security contributions with little hope of gaining a pension as valuable as those currently retired. In an aging society, the later a cohort enters the PAYGO pension system, the worse their rate of return will be.

Figure 3.1 System dependency and public PAYGO accounting

Time	0	1
Contributors	10	5
Beneficiaries	1	1
System Dependency	10%	20%
Wages	100	100
Replacement rate (Pension / Wages)	50%	50%
Pension	50	50
Contribution	$= 1 * 50 / 10$	$= 1 * 50 / 5$
(Pensioners * Pension / Contributors)	$= 5$	$= 10$
Contribution rate	$= 5 / 100$	$= 10 / 100$
(Contribution / Wages)	$= 5\%$	$= 10\%$

Hans-Werner Sinn (1999) compares public pension returns to capital market returns in Germany. The approach is similar to that of Miles (1998), mentioned above, but also takes demographic effects into account. Sinn provides data on the growth rate of real wages, the real implicit rate of return on the German public pension system, and the real market rate of interest (Sinn, 1999: 10). The comparison shows real wage growth and the public pension rate of return falling from around 3 per cent p.a. in 1957 to 1.5 per cent in 2000 (projected). The real market rate of interest is consistently between 4 and 4.5 per cent for the whole period. The case is that private pension funds would always have been a superior option, and that the margin of superiority is increasing with demographic change.

Neoliberals argue that windfall benefits provided to the first generation of retirees is another source of intergenerational inequity. A PAYGO system can pay benefits to the first generation of retirees although they may not themselves have contributed to the system at all. The World Bank presents measures of public pension rates of return over time for Switzerland, the United States and Sweden which show very high returns for the first cohort of retirees, reasonable return for the second cohort of retirees, and then progressively worse returns for subsequent cohorts (World Bank, 1994: 136). This type of analysis has led national governments, including Australia's

(Costello, 2002), and supranational organisations such as the EU (European Union, 1999) to create estimated generational accounts to estimate intergenerational transfers.

Returns in public pensions are also affected by redistributory policies. These may operate via progressive benefit formulae, as in the US, and/or as system add-ons, as in Germany, where the government makes contributions on behalf of the unemployed and those on parental leave. The result is that 'returns' within public PAYGO pension systems are generally higher for those with lower and broken incomes than for those on higher constant incomes. The integration of redistributory programs and retirement savings programs is strongly opposed by neoliberal commentators, who claim pricing distortions caused by non-transparent 'implicit' taxes reduce incentives to work and save.

If poverty reduction and income redistribution toward the lifetime poor are the objectives, countries should be wary of earnings-related pay-as-you-go pension systems that produce large intergenerational transfers for later to earlier cohorts but few equalizing intragenerational transfers. They should also be wary of nontransparent systems that make it difficult to figure out who is gaining and losing. (World Bank, 1994: 137)

The World Bank argues that there are redistributory elements to public pension systems which are unintended, and others which are intended but not explicit. The implication is that income is redistributed by social security systems in unexpected and potentially regressive ways. The World Bank notes that social security is available only to those on relatively high incomes, especially in developing countries (1994: 132) and that PAYGO systems have a 'built-in' regressive redistribution due to the correlation between wealth and longevity (World Bank, 1994: 133). Preferential pensions for powerful client groups, including the military, civil service and politicians, were noted in several Latin American countries during the 1970s and 1980s (Barrientos, 1998: 19).

It seems clear, however, that manipulation of pension systems by non-democratic regimes in developing countries is a function of political failure rather than an inherent weakness of PAYGO financing, as the World Bank implies. Claims of regressive redistribution are not accurate in relation to systems in developed countries. As Peter Diamond describes in relation to the US, the central political problem neoliberals have with public PAYGO pensions is progressive redistribution.

The main issue in the US is the within cohort or 'intragenerational' redistribution. Republicans opposed the creation of social security and have opposed it at every step - claiming it would destroy the economy and freedom. (Diamond, 2000e: 15)

American social security does compensate those on lower incomes for shorter longevity. This is not the case for private annuity products. Where those on lower incomes are pooled with those on higher incomes, these private products will have regressive redistribution (Willmore and St John, 2001: 1298).

The World Bank believes public pensions should target those in most need and provide benefits limited only to poverty alleviation. However, the approach of the founders of American social security to combine redistribution and universality appears to be a more practical and lasting solution. Franklin Roosevelt created earmarked payroll taxes to finance pensions to give all Americans a "legal, moral and political right" to a pension. Wilbur Cohen, a bureaucrat involved in designing American social security, remarked that "programs for poor people end up being poor programs" (Seidmann, 1999: 152). Despite the claims of the World Bank that much redistribution in social security is regressive, there is strong evidence that public PAYGO pensions have a strong positive impact on the rate and severity of elderly poverty. This evidence is discussed in chapter 5.

Other neoliberal claims in regards to system redistribution appear to be exaggerated. A Canadian study found no evidence of a windfall by early system retirees, despite assertions by critics of the public system in that country (Wolfson and Murphy, 1997: 72). A recent study in the US, has found only a slight decline in average rates of return on social security over time. Implicit rates of return averaged 2.9 per cent for the cohort retiring in 1941, 2.6 per cent for the 1970 cohort and 2.6 per cent for the 1999 cohort (Anderson et al, 2001: 14). The authors found that the near equivalence of returns was partly explained by increasing life expectancy, which resulted in later younger generations receiving pensions for more of their life (Anderson et al, 2001: 10).

The Canadian study emphasises that the degree to which early retirees gained at the expense of others is dependent on system design. The US study suggests that the interaction between demographic change and pension systems is more complex than is suggested by neoliberals.

Diamond notes that generational accounting does not take into account different wage levels for each generation (2000e: 9). As average wage levels rise with technological progress and economic growth, later younger generations enjoy a higher standard of living. There is no moral basis for not sharing the benefits of increasing wealth with the elderly. Their contribution to society was as much responsible for progress as that of succeeding generations.

Generational accounting also ignores the effect of pension systems on transfers between generations within families. One important effect on younger working families is the easing of financial pressure on them to provide for their retired and invalid parents. Willmore and St John (2001: 1303) note that this frees up family disposable income, particularly important for households with children. The implication is that some of the benefits from public pension programs accrue indirectly to workers and their children. A second effect is that inheritance substantially reverses intergenerational transfers within public PAYGO systems (Booth et al, 2000: 8). To the extent that pensioners do not have to run down assets including housing equity during retirement, their gain is also a benefit for their children who receive increased inheritance. An interesting factor in relation to inheritance is that the level of benefit increases with lower fertility. As families have less children, inheritance is divided fewer ways, resulting in a concentration of inherited wealth. Intergenerational accounts assume that income gained by the older generation is entirely consumed. As we have seen in the previous chapter, however, it is the norm for the retired to continue to save.

Private pension funds are suggested as a solution for retirement income provision for countries with aging populations because they are not transparently sensitive to demographic change. However, the consumption needs of the retired must be provided for out of current production,²³ irrespective of the financial arrangements for provision of income. In private funded schemes - superficially, at least - individuals provide for their own retirement by 'deferring consumption'. However, retirement income in funded schemes is drawn from interest income and asset sales. Asset sales

²³ Only limited direct personal provision for retirement consumption needs can be made ahead of retirement. For example, consumer durables and housing purchased before retirement can be 'consumed' for some period into retirement.

are dependent on a flow of capital (demand for capital assets) from working generations. The flow of capital into markets from working generations is necessary to enable the flow of capital out of markets to retired generations. The quality of living standard achieved by the retired in a funded pension system is highly sensitive to this flow of capital. Strong demand for assets leads to price rises which constitute capital gain. Weak demand for assets would lead to falls in prices causing capital loss.

Several prominent pension researchers, including Schieber and Shoven (1994), Poterba (1998), Group of Ten (1998), Bloomstein (2001a) and Jan Mantel (2001) argue that changing demand for capital assets due to demographic change will result in low asset prices in the medium to long term, undermining the capacity of private funded systems to provide adequate retirement income. Li and Davis summarise the concern:

Whilst there are benefits from funded pension schemes, ... the forecasts highlight market risks associated with a move towards funding, notably through defined contribution funds. Our analysis suggests that ageing could put downward pressure on expected returns. In effect, adverse movements in stock prices and bond yields as pension funds become net sellers while the high saving cohort is small would have repercussions for retirement wealth, leaving retirees with smaller than expected net assets. *Funding finds it difficult to allow for the risk of extreme market volatility when expectations and investors' asset allocations change.*
(Davis and Li, 2002: 33 [Italics added])

This concern is based on the lifecycle theory of saving (refuted in chapter 2, section 3), in which the retired are assumed to decumulate assets. This theory predicts a long term bear market as the baby-boomers move into retirement and begin to liquidate their non-liquid capital market assets. As chapter 2 described, predictions of savings levels over time and across nations based on demography and the LCT have not been accurate. As such, these predictions can only be treated as speculative.

However, the concern is notable for two reasons. First, it is important to recognise that the retirement income policy proposed by neoliberals *as a solution for aging* also requires income flow from working to retired generations. The primary difference is that it does so via asset markets instead of direct transfer. The transfer is therefore dependent on asset prices which, as we have seen, are subject to substantial and rapid fluctuation. Samuelson saw unfunded pension systems as benign pyramid schemes. Minns notes that funded pension systems are also grand pyramid schemes (Minns,

2001: 120-4). The market mechanism through which the scheme operates obscures the underlying transfers and adds both complexity and instability.

Second, the concern of some pension researchers with demographic change and asset prices emphasises the lack of rigour employed by most orthodox economists who support NPR based on demographic determinism and the life cycle theory of saving but fail to recognise profound risks predicted by these approaches. Supporters of NPR have their cake and eat it, by using the LCT and demography to insist that self-provision via private personal accounts is a necessary solution, while ignoring the long-term asset depreciation that would result if the LCT did actually predict savings behaviour.

3.3 Summary

Claims that returns from private funded pensions are superior to those of public PAYGO systems often overestimate market returns by ignoring data from failed markets and from periods of low returns. Annual volatility in returns is significant and is amplified by bull and bear runs rather than smoothed over the medium term. These characteristics of market performance will lead to significant disparity in returns to private pension members. The failure of financial markets between the World Wars was one factor that encouraged the development of public PAYGO pension systems in the USA and several European countries. Although private funded systems are suggested as a solution for aging populations, they are also dependent on a flow of capital from working to retired generations - via the exchange of assets on capital markets. If demand for capital assets falls caused by a fall in net saving (as predicted by the LCT), asset prices will fall also, resulting in a drop in the standard of living for retirees reliant on funded pensions.

Critics of public PAYGO systems argue that windfall gains to the first retiring generation and falling rates of return related to aging cause intergenerational inequity. However, there is empirical evidence that rates of return on public PAYGO systems have decreased only marginally since formation. A number of factors mitigate against the impact of demographic change on intergenerational transfers, including higher income levels for younger generations, increased longevity, and the implications of public pensions on transfers within families, including inheritance. Immigration will also generally slow the impact of aging. Public systems in developed countries are

demonstrably progressive. I concur with Diamond, who suggests it is the progressive redistribution of public pensions which explains why they are the target of neoliberal reformers.

4 Pension fund investment

In chapter 2, I argued that NPR does not cause an increase in private or national saving. The build up of assets in private pension funds results not from an increase in net saving, but from a redirection of household savings from other savings mechanisms to take advantage of tax benefits. These mechanisms include bank accounts and home equity.²⁴ Proponents of NPR argue that increased pension fund investment is positive for the financial system and the economy – even without any net increase in saving or investment – due to qualitative improvement in investment. For example, Catalan et al of the World Bank suggest that:

The introduction of a funded pension system in the economy will increase the demand for risky assets and will develop the stock market even when total savings are unchanged (Catalan et al, 2000: 6).

The development [of the private pension system] is usually accompanied by improvements in financial innovation and regulations (including minority shareholders' protection), corporate governance, and overall improvement in financial market efficiency (including reduction in transaction costs), transparency, and competition. All these effects add depth and liquidity to the market and they are extensively discussed in the literature. Ultimately, these effects will result in high rates of long-term growth. (Catalan et al, 2000: 7)

The fact that the portfolio weight of long-term bonds is high for contractual savings institutions means that the corporate sector

²⁴ The US is unique in this regard due to the level of development of the stock market. While bank accounts and home equity are also the main assets in the US, a relatively high proportion of household assets were held in direct shares *before* the surge in private pension funds that began in the 1970s. These holdings are relatively concentrated. In the US, direct share holding has decreased since the mid-1980s, replaced by indirect holdings in mutual funds and pension funds (BGFRS, 2002). In the other Anglo-American countries, the growth of indirect holdings via mutual and pension funds has grown in parallel with the increased popularity and profile of the stock market, which in the UK and Australia, is closely related to privatisation of government assets. In these countries, the proportion of directly held shares has not fallen, despite the massive increase in the flow of capital to pension funds.

will have additional long-term funds to finance their long-term production plans. As a consequence, the profit opportunities in the corporate sector will induce the entry of new firms that will issue both equity and debt, increasing the market capitalization of the economy, and thus, the market will become more liquid and the value traded in stocks will increase (Catalan et al, 2000: 18).

Schwarz and Demirguc-Kunt (1999), also of the World Bank, place a similar stress on financial system development:

Fully-funded, defined contribution pension systems can lead to capital market development by providing a supply of long term investible funds. Institutional investors have contributed heavily to the deepening and strengthening of capital markets in developed countries. Evidence of this deepening has been noted in countries which have undertaken these reforms. (Schwarz and Demirguc-Kunt, 1999: 17)

This section considers the role of pension fund investment in terms of its contribution to improvement in the capital stock, boosting economic growth and its impact on corporate governance. Relevant issues include: duplication by pension funds of the role of other financial institutions such as banks in debt markets; the level of risk aversion and herding in equity markets; the limited extent to which stock markets function as a conduit for finance to fund capital investment; and the limited impact on governance due to highly diversified holdings.

4.1 Pension fund investment and economic development

4.1.1 Financial duplication

Pension funds are active participants in debt markets, having a significant proportion of assets in deposits and negotiable debt securities, such as bonds. In Australia and the US, around 40 per cent of pension fund assets are held in interest bearing securities; in the UK slightly less and in Canada slightly more. However, having pension funds as large players in bond markets does not materially affect the operation of these markets. The role of these entities in these markets is essentially identical to that of banks and other financial institutions. The effect on society of funds being channelled to these markets via pension funds instead of via banks is effectively neutral. However, pension funds add extra costs in the form of tax revenue foregone (see chapter 2) and administration (see chapter 4). In Australia, each is slightly over 1 per cent of GDP.

The displacement of bank assets by pension fund assets is obvious in the market for mortgage-backed securities. The securitisation market reached \$110 billion in Australia in June 2002, 70 per cent of which are mortgage-based issues (RBA, 2002b). In Australia, before widespread securitisation, the primary method of saving for most families was via equity in the family home and in bank accounts. Surplus households saved at banks which lent to mortgagees. Now a substantial proportion of saving is via superannuation funds, which invest in (among other securities) mortgage-backed securities, which provide finance for bank or non-bank lenders, enabling them to provide mortgages. The flow of capital from saving households to deficit households is no different, but involves an additional level of intermediation.

This displacement effect can also be observed in developing countries with private pension funds. In Chile, for example, pension funds hold 95 per cent of mortgage backed securities (Vittas, 1998b: 10).

4.1.2 Herding

A major area of differentiation between pension funds and other major financial institutions such as banks is the relatively high holdings of corporate equities by pension funds. In June 2000, the ABA *Financial Accounts* record that Australian banks held only \$A 44 billion out of total assets of \$731 billion, or 6 per cent, in equities. By contrast, superannuation funds and life offices held \$245 billion out of total assets of \$482 billion, or 51 per cent in equities (ABS, 2001a). A shift in household saving from banks to pension funds will result in more household savings moving through the stock market, rather than debt markets. This change raises a series of important questions: How do pension funds invest in equity markets? Does the flow of funds from pension funds into equity markets represent addition to the capital stock? Does this flow of funds correct a market failure, increase the national 'growth trajectory' or provide some benefit that justifies the cost of administration, tax concessions and compulsion?

Listed equity markets hold shares issued by enterprises varying greatly in size and stage of development. In the Anglo-American countries, private pension assets are held in a plethora of funds, and invested either directly or via a number of organisations which specialise in fund management. Claims have been made that the plurality of pension fund management leads to greater investment diversification

(Robinson, 1992). However, the reality is that fund managers respond to similar incentives, operate in similar organisational cultures, are evaluated using similar techniques, and have similar investment imperatives. As a result, pension funds generally invest in the same manner. This process is known as 'herding', and is recognised by proponents of NPR (Clark, 1998: 24; Vitas, 1998a: 22).

A Swedish fund manager interviewed by Kent Weaver describes the issues:

There are drawbacks and positives to this [competition]. The positives are that you are much more on your toes to perform better. The risk is that we don't differentiate ourselves enough, that we tend to look at one another and copy each other. Of course that's part of competition: you look at each other and copy the best ideas from competitors... But when it comes to pension fund management maybe it's a good idea if we tried to seek different solutions. The idea of having four separate funds was not only to have competition but to have separate solutions, and if you look at us, the separateness might be small. (Weaver, 2003b: 24)

Pension fund investment is focused on the big end of town. In a survey of US fund managers in April 2000, more than half reported having more than 50 per cent of assets in large-cap stocks, while more than 95 percent reported having less than one quarter of their shares in mid-cap and small-cap stocks (IIM, 2000).

Gompers and Metrick (1999) note that, in the USA between 1980 and 1996, the group of fund managers with at least \$100 million under management nearly doubled their share of the common stock market from 1980 to 1996. By December 1996, these institutions held control over more than half of the US equity market. The largest 100 alone held 37.1 per cent of the market (Gompers and Metrick, 1999: 4). Gompers and Metrick found that these institutions consistently favoured liquid shares issued by larger corporations.

Maarten Nederlof, Managing Director of Pension Strategies Group, Deutsche Bank, estimates that globally, a typical pension fund equity allocation is 70 per cent, and 80 per cent of that is in large cap stocks. The implication is that 56 per cent of assets held by pension funds is in a 'difficult-to-add value' category (Nederlof, 2000: 9). This is another way of saying that investment in these companies does not represent addition to the capital stock.

Gordon Clark (1998: 22) estimates that pension funds and other institutional investors control the majority of stock of the world's 1000 largest corporations. Richard Minns (2001: 170-1) notes that, in the UK, pension funds hold 70 per cent of equity assets in the 100 largest companies, which account for two-thirds of total market capitalisation. Minns also discusses geographical concentration and industry concentration in pension fund holdings in the UK. Minns notes that the extent to which pension funds are invested in banks and other fund managers, raising serious questions in relation to governance and accountability in these industries (2001: 172).

Two important investment imperatives which drive the preference for shares issued by large firms are liquidity and diversification. Pension funds generally aim to have relatively low exposure to any stock or sector. This imperative would tend to spread pension fund investment around widely. However, it is also desirable that pension funds not be in an investment position which is difficult to readily liquidate. This restricts investment to popular shares which are traded heavily, and to issues by very large firms, in which the relatively large investments made by pension funds do not represent significant share holdings. Pension funds are restricted to investment in large firms to *avoid the situation* where a pension fund must liquidate a significant holding, say, 20 or 30 per cent of a stock; a move which would adversely affect market price and the value of the investment.

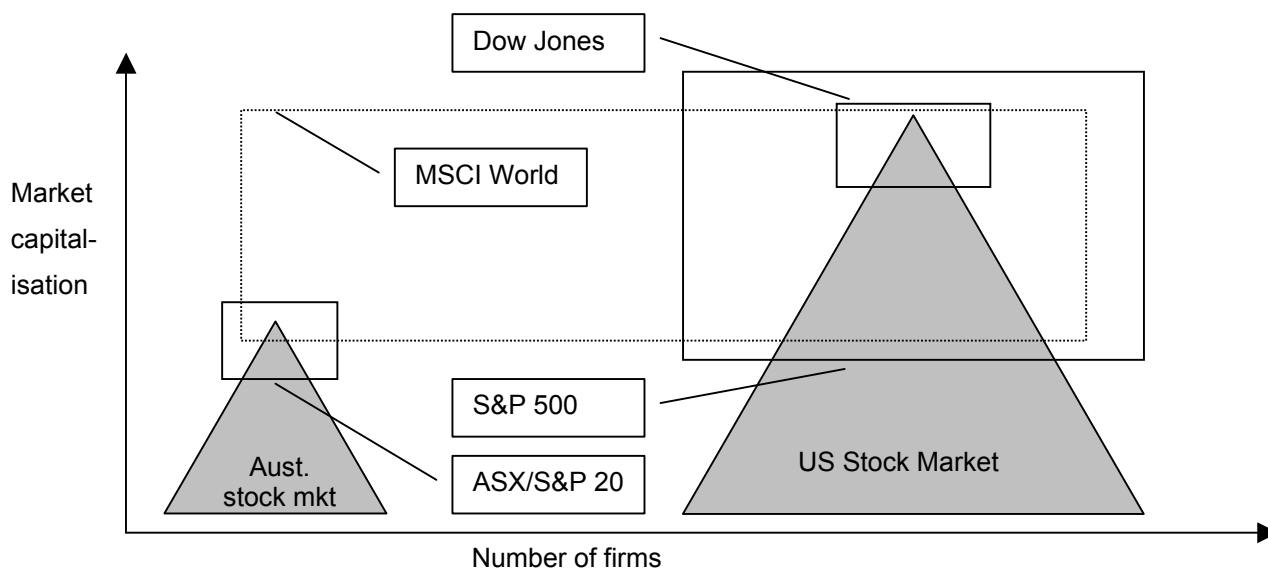
A major trend in pension fund equity investment which encourages herding is index fund or passive (as opposed to active) investment. The passive investment manager attempts to match holdings to the weightings in a major market index in order that performance will closely match the index. Advantages for consumers include diversification, low transaction costs and lower cost fund management, as passive investment does not require analysis-intensive 'stock-picking'. Most leading market indices are weighted according to market capitalisation, so very large entities such as, in Australia, News Corporation or the National Australian Bank, will have a heavy weighting and will feature heavily in the holdings of passive investors. There is, therefore, an automatic bias in passive investing towards very large companies. In the UK, around 25 per cent of funds under management are passively invested (Phillips and Drew, 1999: 1). In the USA, passive investing is at around 15 per cent of pension fund assets and growing (Institutional Investor, 2000). In Australia, the level of

passive investing is similar to that in the USA and also rising, with some major fund managers holding around 50 per cent in passive investment (Hely, 1999: 33).

Much index fund investment has a bias towards shares issued by the largest corporations, as most indices start at the top of the market (in terms of market capitalisation) and work down. For example, in the Australian stock market, the leading indices are the ASX/S&P20, ASX/S&P50, ASX/S&P200 and ASX/S&P300, holding, respectively, the top 20, 50, 200 and 300 firms listed in Australia. Capital invested against all of these indices focuses on the largest firms due to weighting. The combined effect is a still stronger bias, however, as the top two indices exclude mid-cap firms altogether. The effect is yet stronger when international passive investing is taken into account. There are a number of high profile international indices which direct investment towards globally dominant firms wherever they are based. Figure 3.2 (below) illustrates the combined impact of domestic and international indices on the direction of passive investment. It is important to note that there are also medium and small-cap indices in major markets, although the major indices focusing on larger firms attract more capital, particularly of institutional investors.

The effect of passive investment on investment flows is demonstrable in the relative pricing of shares moving in and out of leading indices. American research shows Price-Earnings ratios are directly effected by inclusion, exclusion or weighting revision within major indices (Goetzmann and Massa, 1999: 2).

Figure 3.2 Passive investment and herding



The line between passive and active investment is also blurring due to developments in both active and passive management. All investment managers, whether active or passive, are judged against the performance of leading market indices. An 'active' investment strategy will therefore begin with a weighting matching the index, and then identify areas of improvement, say, sectors or stocks that are over-valued or undervalued in the main index. Much 'active' institutional investment could more appropriately be termed 'enhanced passive'.

The other trend is the development of market indices as commercial products for the passive fund investment market. The main global indices companies – Standard & Poor's and Morgan Stanley Capital International – market the indices to passive fund managers. The rules under which firms are weighted in the indices are claimed to be increasingly sophisticated, filtered for appropriate size, liquidity, foreign ownership constraints, and even strategic and growth potential.

MSCI (Morgan Stanley Capital International), producer of the globally recognised 'MSCI World', recently completed a review of its methodology (MSCI, 2000). The changes to its MSCI weightings formulae, phased in between November 2001 and May 2002, had direct implications for the pricing of major firms, and even whole national markets. A Sydney-based broking firm estimated that half of the world's index funds changed to the new MSCI weightings, implying \$1.4 billion of buying and \$600 million in selling in Australia alone (SMH, 22/5/2002).

The notion that pension fund investment in equities could in any respect be correcting a market failure in those markets does seem absurd, given that much pension fund investment is herded to match the weighting of major indices, thereby replicating and amplifying existing patterns of investment.

4.1.3 As a source of capital investment

Most OECD countries have a relatively high replacement rate public pension system. However, proponents of neoliberal pension reform (NPR), including the World Bank, argue that a multipillar system emphasising concessionally taxed private provision is more appropriate. An important argument raised in support of private pension systems is that they facilitate increased investment. It is argued that increased investment adds to the capital stock, generating higher rates of return for members

and higher productivity and economic growth for society. This chapter explores these arguments.

There were high expectations in Australia during the 1980s and 1990s that pension funds would provide support for the country's lagging venture capital industry, based on the observations that pension funds have long-term liabilities and are pooled investors, and are therefore 'uniquely suited to high risk investment' (Jones, 1992: 85). In the late-1990s, the dot.com stock boom lent credence to academic and media commentators claiming pension funds were a source of venture finance. Both Clark (2001a) and Bloomestein (2001a) tie pension fund investment to the dot.com boom and the stock market.

Whereas the new economy could be seen as a technological phenomenon, it is also a financial phenomenon being driven by venture capital, stock-options, and IPOs. Behind the new economy are financial intermediaries, institutional investors and pension funds (Clark, 2001a: 7).

As a consequence of the increased demand for long-term assets by institutional asset managers and households, the increased institutionalisation of savings has, in turn, led to an increased supply of long-term funds, including risk capital. This increase in the supply of risk capital has stimulated new businesses and job growth. Increasingly pension funds have been investing in blue-chips and small caps. In addition, a part of their huge portfolios has been allocated to so-called "alternative" investment projects such as venture capital operations, including dot.com projects. (Bloomestein, 2001a: 13)

Evidence of pension fund support for venture capital is largely anecdotal. Empirical studies suggest a trivial level of support. Even in the US, the original home of venture capital, institutional investors (including but not limited to pension funds) are only the eighth largest source of finance for formal venture capital (Heard and Sibert, 2000: 15).²⁵ Sources of funding for formal venture capital that rank ahead of institutional investors include foundations, allocated state funds, dedicated state revenues, investment tax credits, credit enhanced notes (state mediated debt instruments), individual investors, and banks (Heard and Sibert, 2000: 15). The list is evidence of

²⁵ The formal VC sector excludes 'business angel'-type VC investment by wealthy individuals, which is equal to or greater than the formal sector.

substantial government support for what is portrayed as a triumph of entrepreneurship and private risk capital.

SME equity finance, being high risk, long-term and illiquid, is at odds with the pension fund investment philosophy. Investments can usually only be realised after several years, and most individual investments fail. The management of investments in this area, particularly in early-stage and technology-based companies, is highly labour intensive. The fact that the requirements of VC investing and the capabilities of pension funds were incompatible was known to industry practitioners by the early 1990s. Thom observed that pension funds simply do not have the credit skills held by banks needed to provide risk capital to small businesses (Thom, 1992: 60). In 1997, the banking sector was still the main provider of finance (in the form of debt) to small business (RBA, 1997a).

Pension funds in Australia (Jones, 1992: 92) and in the UK (Wheelan, 2000) made small commitments to venture capital in the 1980s, but were generally disappointed with results relative to other assets, such as the stock market, which provided spectacular returns during that period. The conservatism of pension funds and life insurance was well recognised in other countries. Susan St John explains that part of the reason for private pension funds not receiving concessional tax treatment in New Zealand was related to the strong public perception of conservatism in investment (St. John, 2001).

Frustration with the tendency of pension funds to be more willing to invest in global equities than in local industry is expressed even by the Swedish Prime Minister Göran Persson who argues that a pensioner depends not only on “the yield in state pension funds, but also that Sweden has a functioning industry that pays taxes in Sweden. That is the crucial security for me as a pensioner.” (Svenson, 2001, cited in Weaver, 2003b)

Current commitment to venture capital in Australia is very low. At the end of financial year 2001, the VC industry had raised less than \$A 1.5 billion (AVCAL, 2001). This figure represents around one quarter of one per cent of total pension assets. The level of commitment to genuine high-risk VC would be substantially lower than this, as VC funds have other sources of finance, and the AVCAL data includes much medium-risk investment such as leveraged management buy-outs.

Notwithstanding the low level of actual commitment to venture capital, the pension fund industry has long recognised the public relations value of risk finance. In the 1980s, the Life Insurance Federation of Australia (LIFA) estimated total investment by life insurance offices and superannuation funds in venture capital of \$A 850 million (Jones, 1992: 85), at a time when investment in the entire venture capital industry was estimated to be as low as \$A 150 million.

On listed equity markets, as noted above, herding is observed in pension fund investment that directs capital flows towards issues by large firms. Large companies are a major source of innovation and economic expansion. If these large firms issued new stock to finance commercial expansion, pension fund capital would be used to increase the value of the capital stock. However, as I argue below, large companies may not need new equity to finance innovation and expansion programs. In the US, a relatively mature equity market, net equity issues on stock markets are negative. In countries with growing equities markets, including Australia, the UK and the developing world, issues are positive, but include large transactions that are disguised corporate restructures, including privatisations and demutualisations.

Large, innovative, market leading firms may not require equity finance to fund expansion. If well managed, they may be able to fund these programs out of operational cashflow. Large companies also have better access to debt markets, including junk bond markets. Pension fund capital does also acquire these securities. However, in so doing, as discussed above, they are competing directly against banks and other financial institutions which are established sources of demand in these markets. Finally, large firms systematically buy back shares, partly as a tax-effective method of returning capital to investors, and partly in order to manipulate share prices upwards to boost executive stock option remuneration. Buy-backs create an additional source of demand for the stock, and are recognised by markets as a vote of confidence by executives in the stock (Innis, 19/6/2002).

Johnson & Johnson (J&J), the large US pharmaceutical company, illustrates each point. The company is highly innovative, with an R&D budget representing 10 per cent of sales and 60 per cent of net earnings (J&J, 2001: 6). Sales revenue is dominated by new products. However, the sources of funding for this innovation program are essentially internal. Due to monopoly patent rights on medical products, the company books gross margins of around 70 per cent (some external estimates are

closer to 90 per cent). In effect, a major part of the free cashflow from its current generation of products on sale is used to fund research (and acquisition) to create future generations of products. This is a constant process of reinvestment – a controlled, successful form of venture capital manageable in large part due to J&J's established international distribution network.

Between 1984 and 1993, a period in which the J&J share price increased five-fold, the company returned \$US 2.5 billion to markets in buy-backs, above and beyond regular dividend payments (J&J, 2001: 20). Between 1996 and 2000 (inclusive), historical cashflow accounts show it returned another \$US 3.8 billion in share buy-backs, along with \$US 6.6 billion in dividends (J&J, 2001: 7). The company also made use of short-term and long-term debt markets, with total transactions in debt markets of between \$US 1 and \$5 billion. However, these debt transactions largely netted out, with the result that J&J's net impact on capital markets was to supply cash and demand (principally equity) securities. J&J is mostly owned by institutional investors, including pension funds, but the flow of capital from these funds into J&J shares does not represent a flow of capital to J&J, and does not finance addition to the capital stock. J&J could function effectively without any additional external financing.

Far from issuing new stock, companies like J&J are de-issuing stock. As a result, while the demand for these securities from pension funds and other investors is increasing, the supply, far from increasing as Bloomstein (2001a) optimistically suggests, is actually decreasing. For this reason, US *Flow of Funds* accounts produced by the Federal Reserve show that net issues (issues minus buy-backs) have not been positive for any of the last twenty years, including during the dot.com boom from 1995 to 2000 (BGFRS, 1980-2002: Table F101-1). New, smaller growth companies do make new stock issues, including IPOs (initial public offers). However, these transactions are dwarfed by the massive buy-backs of established market leaders like J&J. Additionally, the effect of these smaller issues on pension fund acquisition is marginal, as pension fund asset allocation to small-cap shares is very low.

In the UK and Australia, equity markets have grown more rapidly during the 1980s and 1990s than in the US, as they were less developed before this period (World Bank, 2001). In the UK and Australia, net issues have been consistently positive. However, Minns (2001: 111) notes another reason why stock issues have a much lower impact on capital markets than they would appear to: many issues are related to corporate

restructure, not finance for investment. During the 1990s in the UK and Australia, aggregate new issues on both major and emerging markets have been dominated by a few large transactions unrelated to external financing. These are corporate restructures, including demutualisations and privatisations, and issues to fund corporate mergers and acquisitions. Minns notes that during demutualisation (notable in insurance in Australia and the UK), far from the entity drawing in additional finance, members receive cash from the entity. Privatisations involve new issues on stock markets. However, the new stock issues are offset by retired government debt or reduced future government borrowing on bond markets. Depending on the valuation of the debt and equity, the net effect of the corresponding transactions may be low or negative. In Australia, the Reserve Bank observes that governments made \$A 60 billion from privatisation during the 1990s, and that

the equity market has been a major beneficiary of privatisation, which has boosted both market capitalisation and liquidity. Former PTEs [private trading enterprises] now listed on the stock exchange currently account for about 10 per cent of the capitalisation of the Australian share market (1997b: 12).

Neoliberal experts have argued that the lack of supply of quality assets, particularly but not only in developing countries, can be addressed via a program of privatisation. Bloomstein of the OECD argues that such a strategy can "kill two birds with one stone", meaning that radical neoliberal reformers can simultaneously achieve two key goals: an end to both public pensions and public ownership of productive assets (Bloomstein, 1998). This statement underlines the powerful ideological role of private pension systems, and their promotion by the IFIs. This role is investigated more fully in chapter 6.

The 'two birds' strategy has been widely adopted in Latin America. In Chile, pension fund equity holdings are 90 per cent privatised companies (Minns, 2001: 112). While the Chilean reform is held up as a model for emulation, Palmer and Fox report that 40% of returns during the early 1990s were from two previously state-owned energy companies (Fox and Palmer, 2001 :10). Studart describes similarly close links between privatisation and the growth of pension funds in Brazil (Studart, 2000: 36). A similar policy was adopted in Kazakhstan, in which the only assets available for the new private pension system to acquire were either government securities or issues in

previously government-owned corporations. The pension reform plan involved privatisation of public mining and financial companies (Andrews, 2000: 39).

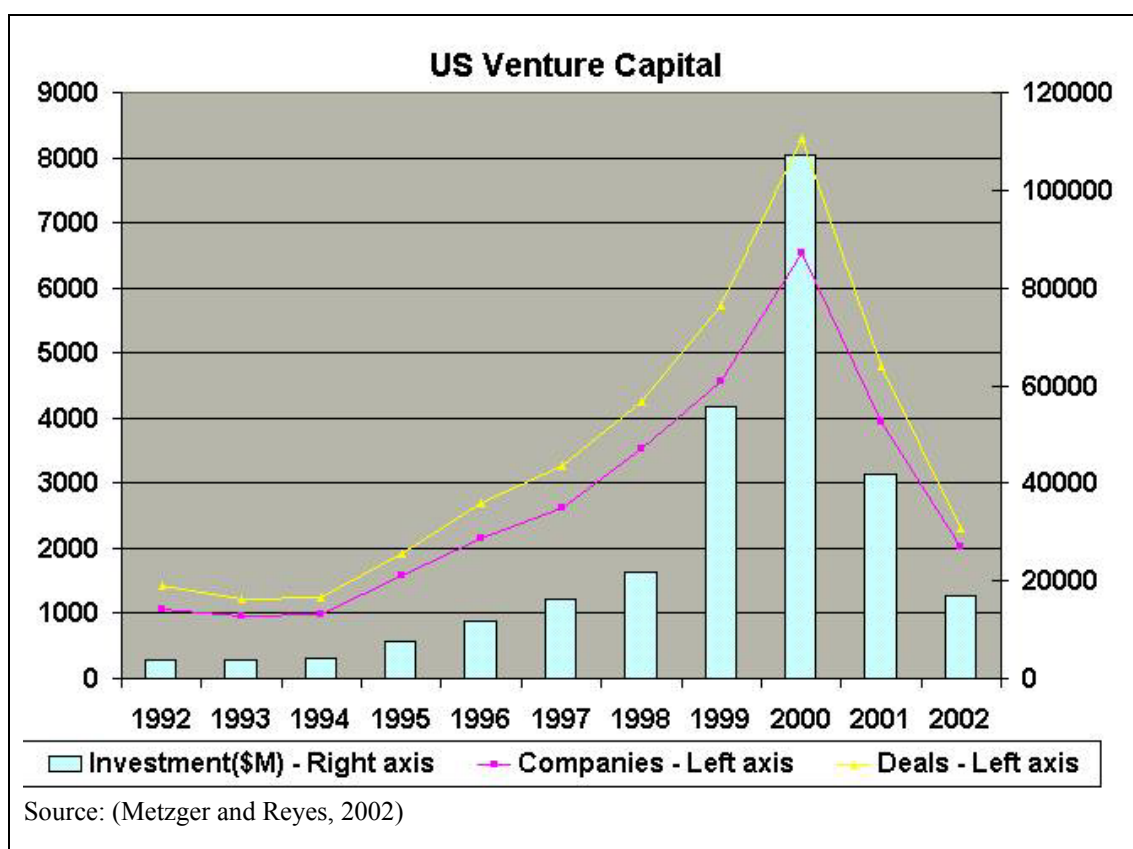
That fact that privatisation is suggested by neoliberals as a method of contriving a supply of securities to match pension fund demand is an admission of policy failure. The reorganisation of the pension system has no positive impact on investment in the underlying economy, but instead justifies other neoliberal policies.

The need for such a strategy recognises that increased demand for securities on capital markets caused by increased institutional savings will not cause a corresponding increase in the supply of new securities issues, nor stimulate underlying economic development. The rise in prices on stock markets to 2000 represented inflation of the capital stock rather than its expansion. Rather than addressing market failures in listed equity markets, the focused demand of pension funds on large-cap equities has contributed to this process.

4.1.4 As an indirect source of capital investment

The focused demand of pension funds generates premium prices for liquid securities issued by large firms. As discussed above, this flow of capital largely does not represent addition to the capital stock, because it does not fund firm creation or expansion. It is possible that the premium on the shares of leading companies caused by institutional investment patterns does create a strong incentive to create successful new start-ups which might eventually be floated. In support of such an effect, there is evidence of a relationship between sentiment on the stock market and the level of venture capital activity. The venture capital industry gained from the dot.com share market boom of the late 1990s, growing more than five fold between 1998 and 2001, from \$266 million to \$1.4 billion (AVCAL, 2001). In the US, VC funding mirrored the dot.com boom upwards and down again. VC funding increased from \$21 billion in 1998, to \$55 billion in 1999 to \$107 billion in 2000, before dropping rapidly in 2001 and 2002 to pre-1998 levels.

Figure 3.3 Venture capital and the dot.com stock boom



Three comments can be made about this indirect mechanism to encourage the provision of risk capital. First, it is indirect and inefficient. The financial might of the pension funds is first misdirected in order to create incentives which may lead eventually to the intended outcome. If a farmer had a source of water and wished to irrigate, it would make sense to pipe water to the fields directly, rather than build a brewery, use the water to brew beer, have a party with the beer and let the guests urinate on the fields. It is a capital flow 'trickle down' effect to which J.K. Galbraith's comment applies: "if the horse is fed enough oats, some will eventually pass through to the road for the sparrows" (Globe & Mail, 22/7/2002).

Second, to the extent that this method of trickle down finance for productive investment actually operates, the distribution of benefits works in favour of entrepreneurs, early stage investors and agents (brokers and underwriters), rather than pension fund savers, who, in buying in after the early growth phase, miss the most rapid gain, but realise the investment of the earlier groups.

Third, indirect provision of venture capital is highly volatile. As figure 3.3 shows, venture capital funding has collapsed following the stock market collapse in March

2000. This is an undesirable fluctuation in investment in innovation, which is a major driver of economic growth and employment.

4.2 Governance

Much has been made of how rapidly increasing pension fund holdings could potentially affect corporate performance via direct shareholding. The UK peak body for socially responsible investment presents the highly optimistic position that pension funds will take an holistic view of investment:

For long-term investors such as pension funds, there is clearly a case for encouraging companies to pursue a model of development which strengthens, rather than undermines the social and environmental fabric in which they must operate (JustPensions, 2001: 4).

A more conservative, though still positive expectation, is that pension fund investment will have strategic and procedural benefits for firms. Impersonal professional directors may be expected to require best practice in financial stability, management structure, long-term strategic focus, employment practices and training, and accounting standards (Devesa-Carpio and Vidal-Meliá, 2002: 25). Negative expectations relate to the lack of industry-specific managerial experience, the short-termism of financial management overcoming longer-term strategic considerations. Concerns have been expressed over the concentration of economic power in the hands of financial technocrats who are not themselves shareholders, and who appear to have no concern for the 'social and environmental fabric' in which they operate (Nitsch and Schwarzer, 1996)

There is little evidence that pension funds as shareholders exert pro-active influence over firm management. This is largely because, in keeping with the investment philosophy of liquidity and diversification, fund managers attempt to keep shareholdings at relatively small levels. Diversification requires that holdings are kept at low levels as a proportion of total fund assets, which implies that an individual fund's equity holdings will be spread over many firms. Liquidity requires that holdings are kept at a low level as a proportion of total shares issued by the firm. A large shareholding in a company is relatively illiquid because attempting to sell a part or all of the shareholding will tend to effect total trades in the share, leading to a price

fall which would discount its value. Relatively small shareholdings will reduce the incentive and ability of an individual fund to have direct input to firm management. These issues are discussed in research into pension funds in the UK by Faccio and Lazfer (2001). As pension fund shareholdings are split to avoid large holdings, the effort required to actively monitor the management of each firm is prohibitively costly. They also found that funds avoid public intervention, such as criticism at board meetings, because it draws attention to a company, which lowers its share price. Faccio and Lazfer conclude that having a large degree of pension fund ownership on the shareholder register does not positively affect firm performance, though the authors do not report a negative effect either (Faccio and Lazfer, 2001: 22).

A major Swedish fund adopted a set of guidelines for investment following a 'negative screening' socially-responsible investment approach. Companies were ranked according to various social criteria, including use of child labour and environmental impacts, and investment in poor performers was discouraged for five years. However the fund maintained investment in gambling, alcohol and weapon producers in which the Swedish government had an interest, the General Manager arguing that a consistent approach would also require divestment of Swedish government bonds (Weaver, 2003b: 22). In any case, for such an approach to be adopted at the national level would contravene the dominant 'prudent man' philosophy. Furthermore, recent research suggests negative screening has no discernible impact on firm behaviour (Gifford, 2003).

Arguably, pension funds are forced to take a long-term strategic view of firm value once they reach a large size relative to the market. This is because they must eventually hold fairly large shareholdings within companies that are heavily weighted in major indices, and these holdings cannot easily be sold without moving the market. However, the weight of evidence points to continuing short-termism among pension funds. Evidence includes moving from value stocks into growth stocks during the technology boom and back again subsequently (IIM, 2000), moving into and out of 'cyclical stocks' at the end of the 1990s boom and at the end of the 2001 recession (SMH, 14/5/2002), Australian funds moving into and out of foreign (particularly US) markets (Garnaut, 11/11/2002) and pension funds abandoning equities in 'emerging market' economies following the East Asian currency crisis in 1996 (Studart, 2002: 52).

More is revealed about this culture in specific instances. The Boots pension fund in the UK took the extraordinary step of selling *all* of its equity holdings during 2000-2001 to take advantage of the high price of equities and expected lower returns. It also promoted its strategy widely in both the mass financial media and pension economics research media (Ralfe, 2001).²⁶ The intention of taking such a radical strategy (most funds in the UK hold between 60 and 75 per cent of assets in equities) and making it public seems to be to encourage a generalised movement, which would sell down the price of stocks. The effect on capital markets in the UK (and globally) of a generalised movement by pension funds out of equities would be catastrophic. Such a strategy “forgets”, as Keynes suggested, “that there is no such thing as liquidity of investment for the community as a whole” (1936: 155). Nonetheless, following from Boots’ success, pension funds around the world – especially small and medium funds – will try to repeat the move by swinging in and out of equities to take advantage of speculative booms. One possible implication of this trend is stronger commitment among pension funds to investments in derivatives based on the future values of securities.

There is anecdotal evidence that growing pension fund shareholding does have an effect on the culture of management. The mechanism of control is the collective power that a group of institutional investors has on management due to a similar perspective of what constitutes appropriate corporate strategy. Pressure is exerted not in an interactive and instructive manner, but via the threat or promise of decisions to buy, sell or hold stock. Management keep institutional investors informed of developments in private briefing sessions.

The type of influence exerted by institutional shareholders on management is evident in media reports concerning News Corporation during June 2002. Lachlan Murdoch, son and heir of NewsCorp Chairman, Rupert Murdoch, has been under pressure from institutional investors over the acquisition by NewsCorp of the Italian pay-TV operator Telepiu (Mychasuk, 17/6/2002). NewsCorp shares fell more than 2 per cent in a week, reportedly due to institutional investor disappointment that an earlier

²⁶ John Ralfe has since launched an independent investment consulting firm based on the self-promotional opportunities associated with this single act of market-timing investment. See <http://www.JohnRalfe.com/>.

commitment to emphasise cost reduction and earnings improvement had apparently been ignored. There is little evidence here that professional fund managers would provide the financial support necessary to create a NewsCorp from scratch, inevitably involving a much higher level of commercial and technical risks than acquisition of an established business.

These types of intervention are consistent with the analysis of Mike Dempsey (1998), who has explored the implications of modern investment theories on corporate strategy. Dempsey interviewed senior management in leading industrial and technology companies. He notes the risk averse behaviours encouraged by use of statistical investment analysis such as discounted cashflow (DCF) models, which are favoured by pension fund analysts. The emphasis of institutional shareholders is on incremental process improvements, rather than substantial innovation which involves risk-taking. Dempsey notes that senior executives in Japanese companies are aware that the post-war industrial miracle in that country would not have occurred had DCF-style investment evaluation been widely used during the 1960s. Major long-term strategic moves such as Honda entering the markets for motorcycles and trucks could not have been supported using DCF analysis, but have led to the establishment of globally-competitive industry sectors.

The strongest indictment of the quality of governance exercised by institutional investors has surely come from the failure of these shareholders to control the self-serving remuneration strategies of senior management during the late 1990s, and acting to prevent the series of major corporate collapses in the US and Australia during 2001 and 2002. Retirement savers should be able to expect that professional fund managers are capable of assessing the underlying value of acquired assets, and assuring senior management is not systematically undermining shareholder value. Pension funds have proven incapable of adding even this minimal level of value.

Pension funds in the US were caught up with the collapses of WorldCom and Enron, along with retail investors. According to the Wall Street Journal:

Pension fund officials say there was no way they could have known that WorldCom, the nation's second-largest long-distance telephone company, was hiding nearly \$4 billion in expenses from the investing public.

"We're scrutinizing things closer than we might have," said Gary Bruebaker, chief investment officer of the Washington State

Investment Board. "The trouble is, all we can use is publicly available information." (WSJ, 29/6/2002)

This statement sums up much of the weakness of 'pension fund capitalism'. Pension funds now represent the largest household financial assets and hold between 30 and 50 per cent of issued corporate securities, but apparently can exercise no more direct control over management than small individual investors. Indeed, to the extent that pension funds emphasise corporate strategy oriented to boosting stock price, as Faccio and Lazfer (2000) have found, pressure on management from pension funds would encourage, not discourage, accounting practices such as the use of reserves to smooth earnings, and encourage malpractice, such as capitalisation of expenses and the design of corporate structures to conceal liabilities.

4.3 Summary

The assets of pension funds are held almost exclusively in cash and marketable securities. This analysis has focused on investment in equities and venture capital, as investment by pension funds in cash and marketable debt securities duplicates the activities of other major financial institutions, including banks.

- Investment is governed by a philosophy emphasising liquidity, risk-minimisation and diversification.
- Pension funds provide very little support for venture capital, as it is high risk, low liquidity, requires specialist skills, and provided poor returns during the 1980s compared with listed equities. Support for venture capital in Australia is at less than half of one per cent of assets. In the US, institutional investors are only the 8th largest source of finance for venture capital.
- Pension funds exhibit herding, the replication of similar investment strategy throughout the funds management industry. This results from generally similar investment parameters (diversification and liquidity), similar performance evaluation criteria (against leading indices), and the increasing prevalence of passive investment.

5 Conclusions

Proponents of NPR argue that investment by private pension funds provides benefits for individuals and for society. Pension fund investment is purported to provide

higher returns than public systems, boost the capital stock and economic growth and improve corporate governance.

Claims of higher returns in private systems have been found to be based on selective data which ignore periods and countries with low returns, and particularly those markets which have experienced collapse. This data also consequently underestimates the potentially extreme risks associated with market volatility. Public pension systems insure against these risks. A number of factors mitigate intergenerational inequity due to aging, including higher incomes for younger generations and more concentrated inheritance.

Pension fund investment is risk averse and concentrated on the issues of large firms which feature on national and international indices. The extent to which pension fund investment boosts the capital stock appears limited based on analysis of these firms, whose aggregate requirement for external finance is negative in the US, and in the UK and Australia, largely related to corporate restructure. Investment by pension funds in venture capital is at a trivial level.

In the area of governance, available evidence points to a short term investment culture. The emphasis in pension fund investment on liquidity and diversification acts to prevent significant shareholdings that would justify direct long-term interaction with management. There is evidence of fund investment responding to trends and cyclical factors. The short-term stock price focus discourages high-risk long-term strategic investment. Pension fund shareholding does not protect against, and may even encourage, unethical accounting and managerial practices.

Arguments related to returns and to the impact of investment have been treated separately in this chapter. In macro terms, however, the two are directly related. In order to provide returns for members, it is necessary that pension fund investment add to the capital stock. Gains for members achieved during the 1980s and 1990s with limited addition to the capital stock have been based essentially on speculative asset price rises. These gains are liable to evaporate, as the period since early 2000 has demonstrated.

Chapter 4 Administration

The price of financial services is of great consequence for consumers. Mistakes due to misunderstandings or the expense of collecting information can be costly, especially with long-term contracts, such as pensions. Furthermore, private pensions will for most people be their most valuable asset or second most valuable after their home.

However, measuring the price of financial services is more difficult than other goods and services. Fees can take many different forms. Different kinds of charges interact and accumulate in complex ways, particularly with long-term products, such as pensions and life insurance. This often means that the price of financial services is not transparent. (Whitehouse, 2000a: 5).

1 Introduction

The previous chapter described the preferred neoliberal private pension scheme and considered investment and rates of return in such schemes in comparison to public schemes. This chapter considers how pensions being delivered by private operators in a market setting affects cost and quality. Proponents argue that a private plural structure encourages innovation and price competition. Detractors point to a number of systemic weaknesses. These include: market failures related to consumers' access to and understanding of information; added costs associated with 'competition', such as marketing and selling costs; reduced economies of scale; additional administration costs borne by individuals and the state; account proliferation; and the reliance of the system on the integrity of the financial community.

The chapter begins with a discussion of orthodox perceptions of competitive dynamics in consumer markets. It reviews the impacts on these dynamics of high information cost due to complex products and pricing. Determinants of the cost of pension administration are described. Evidence of systemic fraud in the financial community is reviewed, and the potential impacts on private pensions drawn out. Finally, non plural administration systems implemented in Bolivia and Sweden are briefly reviewed. These systems facilitate private fund management, but competition is organised by the state in an institutionalised auction rather than a consumer market.

2 Information cost

Private pension provision in the Anglo-American countries is organised in a low regulation, plural, competitive market. A similar structure is in operation in most developing and transition countries whose pension policies have had input from the World Bank. The assumption underlying this delivery structure is that the market will discipline suppliers into providing optimal services at an efficient price. This requires that markets are competitive, as predicted by orthodox theory, with consumers actively comparing providers, products and pricing.

The emergence and growth of private pension systems occurred during the 1980s and 1990s when the perception that financial markets were over-regulated held sway. Deregulation was perceived to have a variety of benefits. The 'Wallis Report', a government inquiry into the financial system in 1996/97, had this to say about historical and prospective deregulation.

Deregulation [following publication of the 'Campbell Report' – (Australian Financial System Inquiry, 1981)] stimulated change in the financial landscape in two respects. First, it focused innovation on the delivery of financial services rather than on the unproductive activity of circumventing outdated regulations. Secondly, it created a more competitive environment in financial markets. Nonetheless, the financial system remains subject to a wide array of regulations and entry restrictions and there is scope to encourage greater competition and efficiency through further regulatory reform. (Financial System Inquiry, 1997: 5)

The perceived connection between deregulation, competition and efficiency is clear. However, it has long been recognised that consumer markets are not necessarily competitive or efficient. Scitovsky (1944) found differences in prices in consumer markets that could not be explained by differences in quality. This result has been confirmed in many studies since (Kerton, 1998: 12). The notion of the market tending to an equilibrium price where marginal cost equals average cost is dependent on an auction-type bidding process with many buyers and sellers such that none can individually influence price. Other necessary assumptions including low fixed costs, decreasing returns to scale and free and instantly available information. There are few real-life examples of such a market. In most consumer markets, buyers and sellers are dispersed geographically and products may or may not be directly comparable. Consumers must spend time and effort to find, understand and compare alternatives.

The decision whether to 'search' or not – to incur information cost (Stigler, 1961), – becomes an economic decision distinct from the decision to purchase.

The decision to search is complicated by uncertainty. A shopper may buy a known product at a known price here and now, or spend time and effort looking for a better product/price. The level of benefit from the search is unknown and must be estimated. The consumer is aware the benefit may be low or even zero, resulting in wasted effort. A market will include buyers prepared to research purchases to varying degrees. As a result of uncertainty over potential benefits, many worthwhile searches are not conducted. Marketing strategies which target 'inefficient' shoppers will hence provide super returns.

Inefficient pricing has generally not proven a persuasive argument in favour of regulation of consumer markets. The diligent consumer can, at least in theory, overcome information cost. And despite its flaws, the consumer market is seen as a least worst solution; that is, preferable to regulation. As I argue below, however, pension administration has several structural characteristics which make a consumer market an inappropriate organising mechanism. These features were finally recognised by World Bank researchers in a recent technical paper which found that an 'institutional market' such as that implemented by the Swedish was substantially more efficient than a consumer market (James et al, 2001). The defining features of the Swedish institutional market are discussed in section 7 of this chapter.

Information cost is extremely high in the private pension market. Factors which contribute to the cost include: the proliferation of suppliers, the heterogeneity of suppliers, the complexity of products and pricing, the lack of product transparency and the complexity of relevant regulations and tax law. There is ample evidence that many customers do not actively 'purchase' pensions, taking default options instead. Those that do 'actively purchase' often misunderstand products and invest poorly as a consequence. These are more important issues than inefficiencies in other consumer markets because apparently small differences in price compound over time with potentially dramatic effects on retirement accumulation. The state has a responsibility to ensure fair and efficient outcomes because it creates, shapes and promotes private pension systems. Finally, the industry delivers products that are too important for individuals and society to be allowed to be organised so inefficiently.

The analysis in this chapter is based primarily on the Australian market, supplemented by data from other private pension systems.

3 Products

Private pension products are complex. This is partly due to the inherent challenges of financial investment, and partly related to specific features of pensions, such as unique industry structure, tax treatment and product add-ons, including insurance.

Private pension assets are held in pooled, diversified investment vehicles broadly equivalent to mutual or managed funds. As a form of indirect investment, the burden of many tasks associated with direct investment, such as selecting individual securities and executing transactions, is removed. However, the ease of indirect investment is deceptive. The consumer must choose the type of fund (determining the mixture of assets) and the provider. Indirect investment, especially in equities or overseas assets, holds most of the risks of direct investment, with dramatic gains and losses possible in relatively short periods.

3.1 Constrained provider choice

The Australian market for retirement savings products is complex. While 'Choice of Fund' is government policy (Costello, 1997), the industry has developed iteratively, resulting in a market partially segmented by regulation and incumbency. Not all providers face direct competition for all business. Public sector funds, corporate funds and industry funds each have areas of business with little or no overlap with other providers. Many customers, particularly while employed by a given employer, must accept the fund chosen by their employer. Portability is improving, but obstacles remain to shifting and combining funds, particularly when an employee changes profession or industry.

This structure does not remove choice from the market; it merely constrains when and how the choice can be made. It is typical for an employee to be forced to hold an account with a given provider while with one employer, but not be able to continue to contribute to that account when they cease employment with that employer. Ideally, when changing jobs, the individual would roll-over balances from one employer nominated fund to the next. However, due to fund rules, the individual may not be allowed to rollover sums either from the old employer nominated fund, or to the new

employer nominated fund. Fund rules often treat balances from alternate sources²⁷ differently, allowing some funds to be rolled-over and others not. The transfer is also complicated where an individual becomes unemployed, or has multiple employers. With generally shorter average employment periods and growing casual and part-time employment, it is necessary for individuals to recurrently make pension investment choices, though often with only a fraction of their retirement savings. Exit fees, frequently up to 5 per cent on some retail accounts, also add to the transaction cost of account consolidation.

In combination with a widespread apathy in relation to retirement saving, complex rules associated with pensions and compelled fund changes at inconvenient times result in account proliferation, discussed in section 5.

3.2 Product choice

Making a choice about the appropriate pension fund is a complex, and arguably impossible, task. It requires a range of specialist skills and knowledge. It certainly requires an understanding of the individual's personal financial situation, including current asset holdings, disposable income and planned retirement age. Issues which bear on the choice of investment fund type include weightings of asset classes, a preference for passive or active investment and an understanding of investment strategies such as 'buy and hold' or market timing. Poor decisions regarding type of fund can have a rapid, negative and irreversible effect on retirement accumulation.

A basic understanding of the pension industry value-chain is necessary to analyse providers. The two main value-add components - fund management and account administration - are separate functions. Both may be internal or outsourced to consultants. Evaluation of performance and cost in each area should be considered separately, though this is often difficult to establish given published information, and may change over time. Indeed, the question of how to evaluate fund managers is as yet unresolved in investment theory. Important issues include whether or not passive investment is superior to active investment, whether past performance is a guide to

²⁷ Types of contributions include employee compulsory contributions, employee voluntary contributions, employer contributions and Award-based productivity components.

future performance, and, if so, how to separate 'the signal' (good investment) from 'the noise' (lucky investment).

Research in the UK, for example, suggests that, on a fund by fund basis, historical performance is not a useful guide to future performance (Rhodes, 2000: 5). In Australia, a preliminary paper by Hazel Bateman and Olivia Mitchell found evidence of a *negative relationship* between price and net returns among superannuation funds (Bateman and Mitchell, 2002: 11). These findings make it unclear how even a very well informed consumer should evaluate fund options.

Products are further complicated by tax treatment. In the Australian market, superannuation, retirement savings accounts, and life insurance are all taxed at different stages and rates.²⁸ There is a longer list of products with varying tax treatment in the American market. In any case, the private pension customer must be aware of varying tax treatment of competing products in order to make an informed and efficient decision. Finally, when purchasing pension products, customers must also make a decision about difficult to value add-on features such as death and disability insurance.

Decisions over fund type and product type are non-trivial. They have a direct impact on the price and form of the product, which can have a significant affect on retirement accumulation. The relationship between fund type and price is discussed in section 4.4.

4 Pricing

4.1 Complexity

Pricing structures represent an additional layer of complexity. Pension funds can have fees levied at four stages: account establishment, contribution, periodic (asset-based) and exit. Charges at each of the four stages can be either flat (dollar-based), variable (percentages) or a combination of both. Some providers separate the charges for account administration and fund management; others do not. Many funds, especially retail funds, also have additional stepped penalty rates for small accounts and/or

²⁸ Tax rates also depend on whether benefits are taken as lump sums or annuities.

stepped discount rates for large accounts.²⁹ The various stages and methods of levying fund charges create a large number of possible fee structures. Each product has a virtually unique pricing mechanism.

Understanding the *pricing structure* only gets the customer half-way to understanding the *cost*. The actual cost of the product will depend on a range of variables *in the future* which *must be estimated at the outset*, including career contributions (dependent on household earnings and contribution rates), length of working life, length of retirement, and rates of return on assets (Whitehouse, 2000a: 11). To compare products effectively would require a financial model for each product with base assumptions for the relevant variables, and sensitivity analysis to cater for alternate circumstances.

Figure 4.1 Negative impact on final accumulation of different annual asset-based fees with different annual gross returns

Annual asset-based fees	Annual Gross Real Returns					
	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%
0.0%	0%	0%	0%	0%	0%	0%
0.5%	11%	11%	11%	12%	12%	12%
1.0%	20%	21%	21%	22%	22%	23%
1.5%	28%	29%	30%	31%	32%	32%
2.0%	35%	36%	38%	39%	39%	40%
2.5%	41%	43%	44%	45%	46%	47%
3.0%	47%	49%	50%	51%	52%	53%

Source: Author's calculations.³⁰

²⁹ Examples from the Australian market are discussed in section 4.4.3, below.

³⁰ The table displays the reduction in final accumulation resulting due to the annual asset-based fees in the left-hand column being deducted from the gross annual real returns in the top row. The table displays output using these variables as input to a formula for future value: $FV = PMT * (GR - A) ^ P$, where FV is future value, PMT is annual contribution, GR is gross returns, A is Administration Fees and P is period. The period used is 40 years. PMT is set at 9% (the current contribution rate of

Finally, administration and fund management costs are not necessarily made explicit. In Australia, the UK and the US, some costs are kept hidden from the consumer. For example, payments to brokers by consultant fund managers may be bundled with payments for research (Davis, 2001: 27). Alternately, these costs may be subtracted from income 'above the line' of gross returns, making it unclear to the consumer where the line is between returns and administration cost. A range of transaction costs, including stamp duty and legals, are treated in this fashion by Australian industry funds with external fund managers. Steven Wynn argues that in the UK and the US, hidden costs include research and other services purchased from brokers that are not paid for explicitly (Wynn, 2002). The outcome of the opacity of cost structures is that consumers are not aware of how much they are paying for fund management.

The lack of transparency in fund pricing structures makes price differences difficult to detect, but it does not make them trivial. Small differences in percentage charges have a substantial effect on retirement accumulation. The output of calculations in Figure 4.1 suggest that each *half per cent rise* in annual asset based charges will result in a *6-9 per cent drop* in final accumulation.

4.2 Consumer skills and motivation

As discussed, effective comparison of private pension products and pricing clearly requires considerable financial skill. There is evidence that most consumers lack the necessary skills.

Under current Australian legislation, super funds must provide the consumer with a "Key Features Statement" which contains all relevant consumer information. Ross Clare reports that formal comprehension testing commissioned by ASFA (Australian Superannuation Funds Association) found that neither the current lay-out, nor an experimental new lay-out, produced adequate comprehension levels, or allow

Australian superannuation) of a constant representing real income. The intermediary output therefore is in the form of a multiple of median income. The output displayed shows the percentage lost due to administration cost against the hypothetical case in which there are no fees.

This approach is a slight abstraction in that real income increases over time. However, the alternate approach of calculating a median income which grows over time produces very nearly identical results.

informed comparison between products. Even use of the heading "Key Features Statement" was not well-understood (Clare, 2001: 38).

ASFA's findings in relation to financial skills are grim. The survey found that most Australians have difficulty understanding fees expressed as percentages (Clare, 2001: 40), although this is the most meaningful way for certain fees to be expressed. This suggests that these consumers would be incapable of comparing products with complicated pricing involving both fixed and percentage components, especially considering that fees based on contributions and fees based on assets are not directly comparable. This type of finding has led to fees commonly being published for comparison in dollar terms based on a hypothetical account balance and contribution levels. But these examples may be misleading, as they would only reflect the circumstances of some consumers.

A recent report into financial literacy by Roy Morgan commissioned by ANZ Bank made a number of findings which confirm that a majority of Australians have *no effective* understanding of pension products and pricing.

The survey highlighted limited awareness of fees, charges and taxes in relation to superannuation:

- fifty-five per cent (55%) of fund members claimed to know little or nothing about the fees and charges that apply to superannuation; and
- only 54% of those with superannuation were aware that it is taxed at a lower rate than other investments. (RMR, 2003: 7:)

Studies of financial skills in other countries support the notion that consumers are ill-equipped to evaluate private pension products. Kevin James of the UK Financial Services Authority writes:

Surveys of investor knowledge in both the UK and the US consistently find that retail investors do not understand how disclosed charges affect performance, let alone the pound and pence cost of that performance impact.

Consequently, retail investors now lack the information and knowledge they need to evaluate the investment funds they must choose between. Choosing funds on the basis of imperfect information and imperfect knowledge potentially imposes significant costs upon retail investors. (James, 2000: 6-7)

A study by the US Securities and Exchange Commission found that 50 per cent of American adults did not know the difference between a stock and bond (cited in

Diamond 2000f: 8). As these are basic financial instruments with fundamentally different historical rates of return, risk-profiles and tax treatment, it follows that these individuals would struggle to make informed choices about fund type. Markets include far more complicated securities than these basic kinds. An associate of mine who works as an information officer at a finance company finds the naiveté of customers extreme, recalling the following conversation with a potential client requesting information about an Australian property trust prospectus:

- Potential investee: "Is this prospectus intended to finance one property development?"
- Information officer: "Yes, that's correct."
- Potential investee: "How much are the units each?"
- Information officer: "The units are \$1 each."
- Potential investee: "Only \$1 per unit?! How many are there?"
- Information officer: "There are 11 million units in this issue."
- Potential investee: "11 million units?! How do they get that many units in one building?"

Research by Anna-Maria Lusardi suggests that the process of obtaining and evaluating relevant information can be an unpleasant task for consumers with little financial literacy (2001: 10). Lusardi also found that financial skills are correlated with educational attainment (2001: 9). Busseri et al (1998, cited in Kerton, 1998: 11) found that some consumers are bewildered and disempowered by the market, feeling that the outcome of transactions are "beyond their control."

Findings like these have prompted studies into the effectiveness of financial education. Experience with worker education in 401k plans (voluntary pension schemes) in the US shows that substantial and expensive worker education is needed to have a noticeable effect on workers' investment choices (Diamond, 2000f: 11).

A lack of motivation to conduct search and analysis of competing products also has a bearing on consumer efficiency. The rationale for government policy to encourage retirement saving is that many people would not otherwise save adequately. This is partly related to a lack of skills, and partly related to a lack of interest in the long-term. NPR treats the symptoms rather than the cause of the problem: the government encourages and/or forces the population into the private pension market without

addressing either the lack of skills or motivation which create the imperative for government intervention.

This has some interesting implications for competitive dynamics in the marketplace, particularly by changing the default, 'hands-off' outcome. Without NPR, few disinterested individuals would purchase pension products. With NPR, the default result is purchase of a product that the consumer may know little or nothing about. Despite being thrust into the market, financial preparation for retirement remains 'out-of-sight and out-of-mind' for most people. These consumers significantly reduce competitive pressure on incumbent funds which are selected by employers to be the workers' default option. In American occupational 401k schemes with 'automatic enrolment' (similar to automatic employer contribution to superannuation in Australia), default levels of saving and investment options are initially taken by 80 per cent of employees. Three years later, 50 per cent of employees still have these options (Choi et al, 2002: 2).

This 'no look' consumer behaviour is self-reinforcing. Despite purchasing certain products, these consumers do not go through an active purchase process involving product selection. The customer, despite owning the product, may not become familiar with its details (or of competing products) and does not gain the market knowledge which normally comes with market participation. Their lack of skill and interest is unchanged by the experience and remains a factor for future activity in the market.

In many employment-base funds in Australia and the US, the employee's choice is effectively delegated to the employer. In this circumstance it is necessary for the employer to evaluate the merits of competing funds on behalf of the employee. However, in the Australian system currently, there is no incentive for the employer to conduct the search for an efficient solution because all costs are passed on to employees. As John Piggott points out, a system where employer contributions are determined *net of administration costs* would have a completely different effect. If employers were required to contribute 9 per cent of remuneration *plus administration costs*, they would have an incentive to keep administration costs as low as possible (Piggott, 2002). Additionally, the combined administration costs payable on the pension holdings of a large number of employees would provide the economies of scale necessary to justify an effective search, encouraging market efficiency.

Another factor which affects the consumers' relationship with the supplier is that retirement savings can generally be accessed only late in life. A consumer who 'selects' the default option without analysis may be unaware of the costs for many years. The consumer experiences no short-term negative cashflow or utility effect as they would if they purchased an expensive or ineffective consumption good. The benefits of cheaper pricing or better performance may never be discovered, or discovered only decades after the initial commitment is made and the potential benefits of a superior decision are lost.

Finally, in the case of compulsory membership, there is no possibility of withdrawing from the market, or choosing a substitute product. These are options open to consumers in most markets, and are options essential to validate the liberal maxim that all commercial transactions are entered into freely and are mutually beneficial. This is not merely a theoretical issue. In terms of competitive dynamics, compulsion lowers the bar on supplier performance. As a default choice, suppliers do not have to provide a product attractive enough to shake off consumer inertia to enable purchase. Rather, they need only provide a product that is not so *relatively* unattractive as to encourage a switch of fund; a process which entails a complex, time-consuming and, for some consumers, intimidating search and analysis process.

4.3 Marketing and selling - bias and cost

As discussed, many consumers in the pension product market have neither the skills nor the motivation to conduct the search necessary to be efficient consumers. Providers of pension products who compete for these customers in the retail market (where funds are not selected by employers) must bridge the information and motivation gap. This is achieved by commission-based selling including via 'financial advisers', and marketing material including mass media advertising.

There are two negative consequences of this effort for consumers. First, easily available information is biased in favour of the provider who is paying for it. The intention of the effort is to sell rather than inform, and often to do so by appearing to inform. This can result in consumers being misled and purchasing inappropriate products.

An important source of supposed 'advice' comes from financial planners, who are nominally employed by the consumer, but who are in effect sales agents remunerated

by the product suppliers. A recent survey into the quality of financial planning by the Australian Securities and Investment Commission (ASIC) found that an extraordinary 70% of financial planners surveyed had an ownership link to offered products (ASIC, 2003: 6). More than half of the advice prepared in the survey was borderline, poor or very poor. Planners aligned with major banks had the lowest rating as a group (ASIC, 2003: 5). ASIC noted a number of general weaknesses, including a tendency to recommend higher cost investments, and recommend selling existing investments, without appropriate explanation. These biases are explained by the remuneration of the agents, explained below.

A typical tactic of agents in Australia, particularly during the recent bull market in equities, was to explain that higher fees associated with investment options such as overseas equities would not be noticed given the returns of 15-20 per cent achieved in these assets. This was the advice I received in late 1999 on rolling-over my own super, without any discussion of the inevitably temporary nature of the investment conditions, or even the additional currency risks associated with overseas investment. Overseas equities have since fallen 30 – 40 per cent in Australian dollars. Recent retirees have gone to court over similar misrepresentation made to them during the 1980s, so far without gaining redress (SMH, 13/6/2002).

The Financial Services Authority in the UK has researched consumers' choices of mutual fund. To do so, it has developed its own measure of fund cost, MP1. High MP1 funds are high cost funds. Kevin James writes:

Since retail investors do on average choose high MP1 funds, these funds must look attractive to them. This attraction arises from a combination of how investors select funds and how funds compete for investors. Surveys of investor behaviour find that, while investors generally desire low MP1 funds, they lack the information and knowledge needed to distinguish between high and low MP1 funds. (James, 2000: 8)

That high cost funds attract customers seeking low cost funds is not accidental. Without the skills necessary to conduct their own analysis, consumers are heavily dependent on fund literature, and studies "show that high MP1 funds can behave in a way that makes them look superior to low MP1 funds to such investors." (James, 2000: 6) Unfortunately, research of this kind has not been carried out in Australia.

In Latin America, aggressive selling techniques have led to the account switching phenomenon. In Chile and Argentina, 30 to 50 per cent of workers switch pension providers each year. Agents achieve this through a combination of misleading information, fraud (including counterfeiting signatures), and offers of kickbacks on the agents' hefty up-front commissions (Vittas, 1998a: 18; Diamond, 2000f: 18).

A second negative implication of the marketing and selling functions is that they are a significant cost of running a competitive private pension fund. All things equal, the providers best represented by agents and most visible in the media will be more expensive than those that are not. All things equal, the funds most likely to attract consumer attention, are the most expensive, and the least deserving of it. In Latin America, marketing and selling costs are often over 50 per cent of total costs in plural private pension markets (Vittas, 1998a: 19). Edward Whitehouse discusses an Argentinean study of the interaction between increased advertising and marketing on cost and membership flows. The study concluded that increased spending on advertising and marketing made sense (to the supplier) because the increase in members attracted by the selling effort was approximately double the loss of members from increased costs (Whitehouse, 2000a: 29).

In Australia, financial planners and other sales agents receive up-front commissions from the initial contribution charges and annual 'trailing fees'. Up-front contribution fees are generally 5 per cent in retail funds, of which the financial planners would receive between 1.5 and 2.5 per cent.³¹ Trailing fees frequently amount to 0.6 per cent of assets. The trend in commissions is up, as funds can improve subscription to new, more expensive products if they offer preferential remuneration for planners (Bruining, 26/6/2002).

As Choice of Fund became policy, established industry funds became able to achieve public offer status in competition with the private retail funds. As Hely observes, although the Government hoped that this would put price pressure on the private retail funds, it instead put cost pressure on the industry funds (Hely, 1999: 20). To gain

³¹ ASIC (Australian Securities and Investments Commission) suggests that 1.5 to 2.5 per cent of assets invested is what an investor can expect to pay a financial planner for investment in general (ASIC, 2002: 3).

market share, the industry funds had to change product offerings, invest in new IT, and develop and maintain a marketing exposure, all of which represented additional costs (Mace, 1999: 46). In summary, as competition was introduced to this sector of the Australian market, the price of administration rose, in direct contradiction of orthodoxy.

4.4 Determinants of price

The market for private pensions in Australia exhibits a wide range of prices. Fees vary by fund type, fund size, account balance and type of investments.

4.4.1 Fund type

In the Australian market, fund type is a major determinant of cost. Industry, corporate, master trust and retail funds all have quite different cost bands. Similarly, costs in the markets in the UK differ between 'stakeholder' funds and other funds, and in the US, between no-load funds and load funds.

A study by Bateman and Prieto (cited in Whitehouse, 2000a: 32) emphasises the difference in charges between master trust (retail funds) and industry funds in Australia. Master trusts are private pension funds which market to employers, while industry funds are non-profit funds which were set up to receive contributions from employees in an industry after Award-based super was set-up in the 1980s.³² The industry funds had an average flat rate of \$45 p.a., 0 per cent on contributions and 0.45 per cent on assets, while the master trust had an average flat rate of \$70 p.a., 4.5 per cent on contributions and 1.3 per cent on assets for administration and 0.6 per cent on assets for funds management. On reasonable assumptions of contribution rate and rates of return, that resulted in a reduction in yield of 0.51 per cent for the industry funds and 1.9 per cent for the master trust. Consistent with my analysis above, Bateman and Prieto estimate that the difference in impact on final accumulation could be as much as 23 per cent. Private funds in the retail market are more expensive again, costing at least another 1 per cent on yield, equivalent to around 15 per cent of accumulation (Sampson, 26/6/2002).

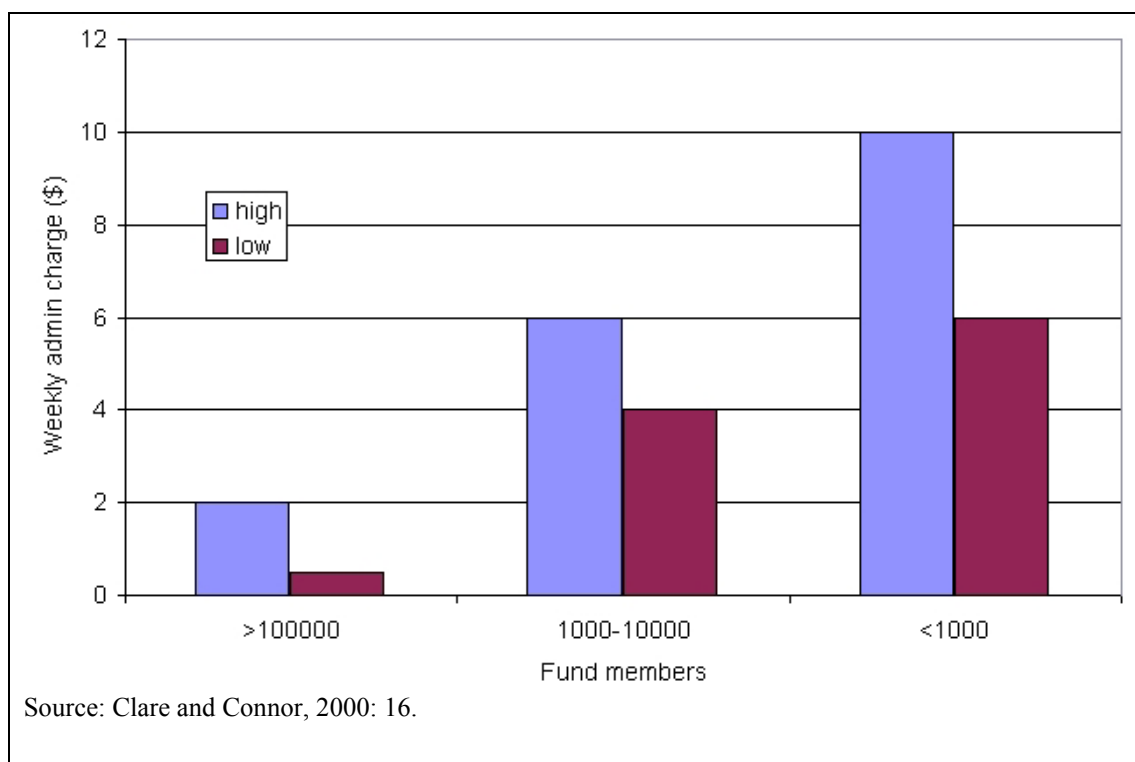
³² Many major industry funds now have public-offer status so they effectively compete directly with the private funds operating Master Trusts and in the retail market.

Differences in price are only partially related to value-add activities, such as administration and fund management, as these are generally outsourced to external consultants by funds of all kinds (discussed below). The difference in price is related to differences in marketing and selling costs (discussed in the previous section), and differences in corporate structure. Industry, public sector and corporate funds are run for members on a non-profit basis, and administration may be subsidised by sponsoring employers. Charges are intended to cover costs, which do not include distributions to shareholders. Private funds are, by definition, commercial businesses owned by private shareholders. These businesses operate to maximise returns for shareholders. In perfectly competitive markets, providers are price takers and can only make return on capital by matching best practice. As we have seen, the market is not perfectly competitive.

Private funds still have an incentive to be efficient, to increase margins. But there is no compulsion to pass efficiency gains onto consumers in the form of price reductions. Price dynamics and structural change are discussed in section 4.5.

4.4.2 Fund size

Economies of scale are important determinants of efficiency in financial services. Figure 4.2, below, displays administration fees falling significantly with each order of magnitude of fund size (in member numbers). Funds with more than 100,000 members had administration fees per member of \$2 per week, while those with less than 1000 members had fees per member of at least \$6 per week. Data on US mutual funds from the ICI (Investment Company Institute) demonstrates similar effects in that market. In 1997, the average operating expense ratio for funds with less than \$250 million in assets was 1.25 percent. In contrast, the average for those funds with assets greater than \$5 billion was 0.64 percent (Rea and Reid, 1998: 12).

Figure 4.2 Range of administration charges per member by size of fund

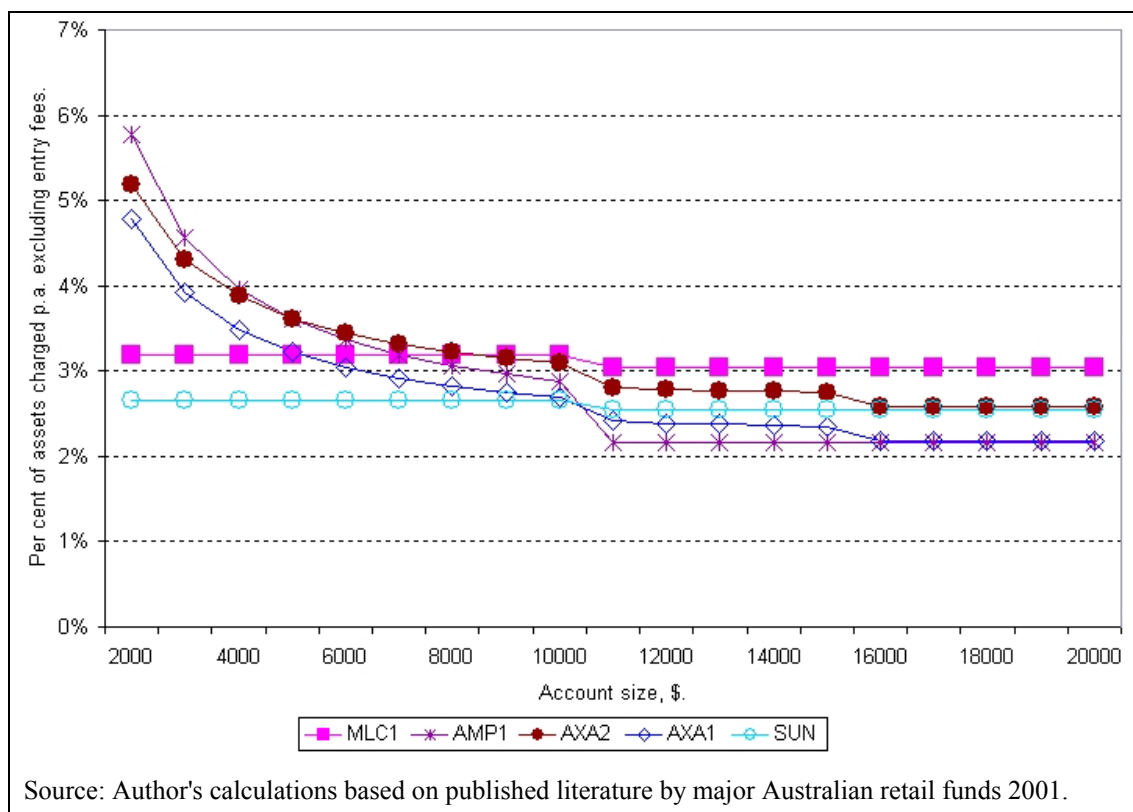
Economies of scale have important implications for competitive dynamics in the industry. They are one of several barriers to entry that leads to a stable market structure, and the main factor driving the biggest structural changes in the industry: market concentration and outsourcing.

4.4.3 Account size

The second dimension of differences in charges is between members within the same fund, based on both size of account and choice of investment option. Account administration carries largely fixed information and handling cost components. While some charges are based on a percentage of assets, it is also common for charges to be fixed at a flat dollar rate. This is typical of the industry funds, possibly responding to a need for simplicity on the part of members. Retail funds operate charges that combine fixed and variable elements, including some rates that carry surcharges for smaller accounts and discounts for larger accounts. The implication is that, in general, account administration charges will impact to a greater extent on smaller account balances. Figure 4.3 displays charges by size of account from a group of leading Australian retail funds. These are rates charged on assets per year, and **exclude entry**

fees, which typically amount to 5 per cent of new contributions. Annual asset based fees vary from over 5 per cent to 3 per cent for account balances of \$2,000 to \$5,000, down to around 2 per cent for account balances of \$5,000 and over. Some funds have discounts for accounts larger than \$50,000, bring annual costs just below 2 per cent.

Figure 4.3 Asset-based charges, by size of account (medium expense investment options)



This tendency has important equity implications for compulsory systems. Lower income earners, who make lower contributions, will receive lower net returns. All things equal, the rate of return of the wealthy will be superior to that of the poor. Arguably, the price structures reflect the fixed cost of administering an account. However, under NPR, the private pension system replaces or augments an existing public system with an existing administration structure funded progressively via the tax system. Moreover, in voluntary private pension systems, there are only middle and high income members, and these members bear all administration costs. In a compulsory system, to the extent that fees on lower income members contribute to overheads, fixed fund costs can be spread over more people, resulting in cheaper account administration and fund management for middle and high income participants than would otherwise be the case.

In Australia, there is legislation to protect low balances from being eaten-away by fees. However, the legislation only protects sub-\$1000 balances, and it relieves the fund of the obligation to credit interest earned to small accounts. The effect is nominal balance maintenance but declining purchasing power, and no compensation for the time value of money.

4.4.4 Investment choice

The cost of the fund management component of administration depends on the type of investment option chosen. For example, an investment option including overseas assets will generally be more expensive than one without. These differences are significant. Among the retail funds considered in Figure 4.3 for an account balance of \$50,000, fees averaged 1.9 per cent of assets for low cost investment options and 3.0 per cent of assets for high cost options. The more expensive investment options are 58 per cent more expensive again than the cheaper investment options on average.

In theory, consumers are accessing asset types which suit their preferences via more expensive investment options. Arguments for expensive choices can be based on accessing higher returns, or on achieving portfolio diversification. However, as noted above, more expensive funds in Australia have been found to provide lower returns. There appears to be no price-performance relationship that would be expected in an efficient market.

4.5 Structural change and the cost of administration over time

The Australian finance industry has undergone significant structural change in the period since deregulation in the early 1980s. Factors besides deregulation have included the increasing exposure to and integration with international financial markets, the introduction of new technologies, a reduction in the banking branch network and a reduction in front- and back-office labour. Major trends have included an increase in the size of financial entities due to mergers and consolidation, and the emergence of financial conglomerates due to mergers across the previously existing boundaries between insurance and banking (Kent and Debelle, 1999: 15-16) These trends have contributed to a rapid increase in profitability, particularly in banking.

The two main internal structural changes in the superannuation industry are increasing outsourcing and increasing concentration, both taking advantage of economies of

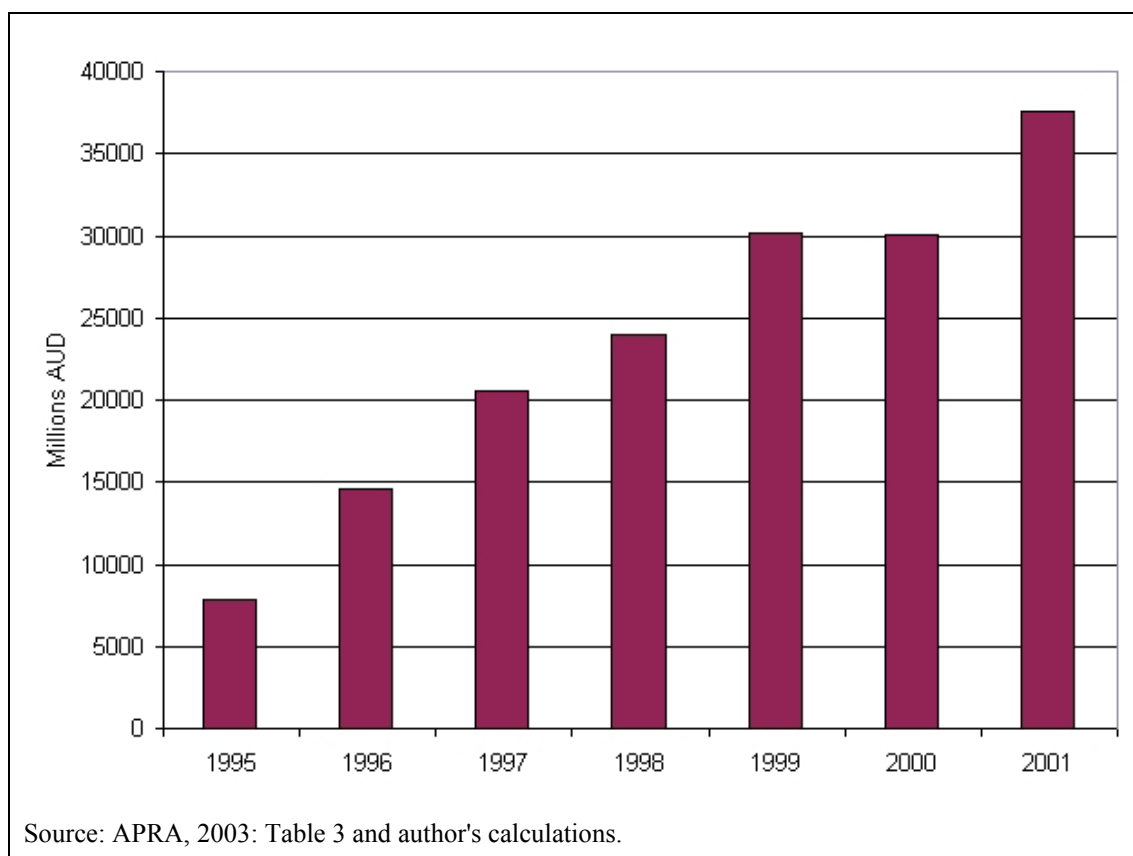
scale. The industry has also been shaped by government policy, which has driven an increasing proportion of income through the pension system.

Many of the activities of funds are outsourced to specialised service providers who also service other institutional investors including mutual funds. Activities often outsourced include funds management, administration, asset consultants, broking, actuarial and legals. Use of consultants for these tasks is standard practice, such that a superannuation fund is often a shell with responsible trustees but very few employees. Around 71 per cent of funds are invested via an external fund manager being either a life insurance company (32 per cent) or an independent fund manager (39 per cent). And 60 per cent of all large funds use external consultants for administration (Clare and Connor, 2000: 8, 15).

Market concentration in these superannuation service industries is high compared to the numbers of actual funds. In fund management, the top ten operators hold around 63 per cent of the market. In asset consulting the major five hold around 75 per cent of the market. In administration, two major players - AAS (an AMP subsidiary) and Jacques Martin Industry - dominate the industry fund sector with a combined market share of 83 per cent. In the corporate fund market, there are six majors, including subsidiaries related to the two major players mentioned above (Clare and Connor, 2000: 18-19).

The number of independent funds is also shrinking. APRA figures show that between June 1995 and June 2002, the number of 'non-small' funds decreased from 5,001 to 3,742, a reduction of 25 per cent (APRA, 2003: Table 9).

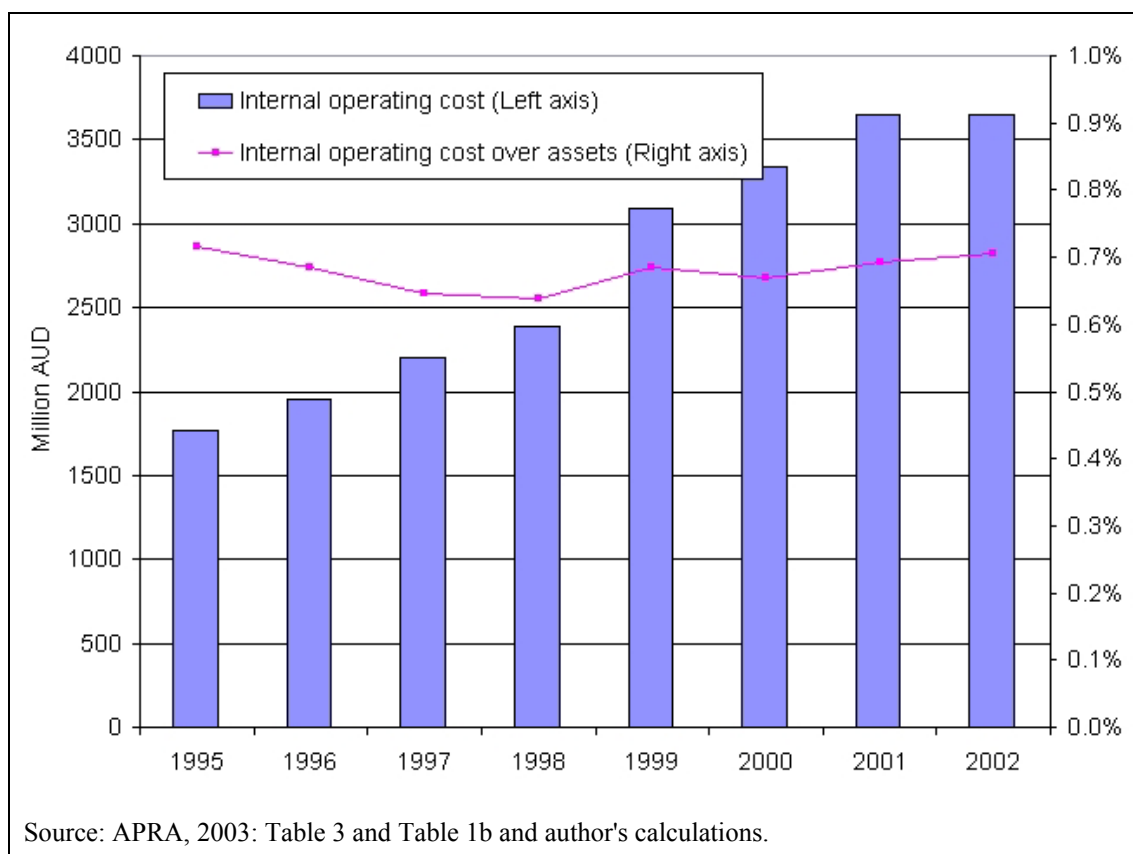
Government policy has also continued to drive growth in the super industry, and this can be expected to continue. Initiatives to increase growth include measures to block loop-holes allowing early removal of funds (particularly at change of employment), and steadily increasing contribution levels. Contribution levels reached the final planned stage at 1 July 2002 at 9 per cent of income. Net transfers (contributions minus benefits) have continued to rise, as is shown in Figure 4.4.

Figure 4.4 Net annual contributions to Australian superannuation

In competitive markets, cost efficiencies should be passed on to customers in the form of reduced price. The outcome is different in an uncompetitive market. Cost savings driven by concentration, growth and outsourcing contribute to higher margins.

Figure 4.5 shows a data series produced by APRA of super fund internal operating costs. The data excludes a range of important external costs, including external fund management. Nonetheless, it is a constant series that provides an indication of trends in total super costs. The chart shows annual administration, and the ratio of administration to assets. In absolute terms the costs rise steeply, increasing by 122 per cent. Internal costs as a proportion of assets fell slightly between 1995 and 1998, before rising to its highest level in 2001 and 2002. The first two quarters of 2003 suggest a record figure for that year also.

The data suggests that the efficiencies gained from market concentration, outsourcing and growth have not been passed on to consumers. Costs have risen as a proportion of assets, despite rapid and unsustainable asset growth. Efficiencies gained through increasing economies of scale and outsourcing are not being passed on to members.

Figure 4.5 Aggregate internal operating costs for Australian superannuation

4.6 Summary

When production is organised by profit-driven operators in a market setting, as private pensions are in the Anglo-American countries, efficiency is dependent on competition. A necessary condition for competition is that consumers understand the products, and the prices associated with those products, and exercise choice on the basis of that understanding. All available evidence points to a lack of necessary understanding. Consumers are consequently making inappropriate choices, driven in no small part by the 'advice' of paid agents of profit-driven suppliers. Pension administration cost when organised in a plural market is far more significant than it need be. Efficiencies resulting from structural change are not being passed onto consumers.

5 Account proliferation

In Australia, compulsion to join pension funds, inflexible rules governing membership based on employment, and an absence of centralised account management combine to cause account proliferation. This partly explains how a country of less than 20

million people can support over 3,500 pension funds (APRA, 2003). In Australia in November 1995, there were 6.6 million superannuation fund members and 15.5 million accounts at an average of 2.3 accounts per person. The number of accounts increased by another 25 per cent to 20.55 million by December 1999 (Clare and Connor, 2000: 2). In 2000, accounts per person reached 2.6 accounts (Clare 2001: 32). Unofficial estimates from the Australian Tax Office suggest the number might now be as high as 3 accounts per person.

This results in lower net returns for members with more than one account, due to the prevalence of administration fees with a fixed component. The impact on savers is amplified because the retail sector - with more expensive fees - accounts for a disproportionate share (56 per cent) of accounts (Clare, 2001: 32). The implications of multiple accounts are significant for administration cost and therefore rates of return and final accumulation. Additionally, having smaller account balances results in higher *rates* of fees due to low balance penalty rates and high balance discount rates.

The analysis of cost by fund type provided above (section 4.4.1) suggests that retail funds are up to 2 – 4 times more expensive than non-profit public offer funds. While the cheapest option is to have all one's super in a single non-profit fund, the *average* option is three accounts, two of which are retail accounts. Assuming fixed costs represent 50 per cent of fees, on assets of \$10,000, the average option will cost 3 – 6 times the cheapest option (author's calculations). Presumably, some members have 5 or more accounts, with administration costs proportionately higher. Small accounts would be protected by (nominal) balance protection legislation, resulting in real balance erosion.

Another negative symptom of the plural market structure and account proliferation is the growth of lost accounts. After only 10 years of compulsory pensions in Australia, the Australian Tax Office now holds more than \$7 billion in 4.5 million lost super accounts (Wade, 9/9/2002). This compares with the \$220 million held by the Australian Securities and Investment Commission (ASIC) for all bank accounts, life insurance and lost shares since the 1950s. Many consumers are clearly disinterested in compulsory pensions. An industry in account search services has emerged to help unite individuals with their lost super accounts.

The same dynamics have created similar situations in the UK and US. The quantity of lost pension savings is unknown in the US, but is presumed to be significant, based on UK estimates in 1998 of between £10 and £77 billion (Turner and Bruce, 2002: 2).

6 Negligence and fraud

A plural private pension system sees the direction of vast flows on income through a relatively new and unregulated administrative sector consisting of (mostly) private entities. As we have seen, the level of scrutiny from consumers is so low that more than one per cent of assets in the Australian system are considered lost. The potential for fraud within the industry is significant. The system is also dependent on integrity within the wider financial community, both in relation to the cost and quality of consulting services, and more generally in ensuring assets are correctly valued and well managed.

In Australia, regulation of the pension industry is exercised via an approved trustee structure. Under this structure, trustees for public offer funds must be registered with the regulator APRA (Australia Prudential Regulatory Authority). In extreme circumstances, APRA has limited powers to replace or remove trustees.

As discussed above, the integrity of the pension system generally is compromised by the selling practices of sales agents and financial planners. However, in respect of administration, the system of regulation in Australia has worked reasonably effectively – at least to the extent that APRA's powers have been exercised only occasionally. A medium sized superannuation company, Commercial Nominees, had new trustees appointed after losing 80 per cent of member assets in non-performing asset acquisitions (Seeder, 2/7/2001). The trustees of several smaller superannuation funds have also been replaced (APRA, 2001a; 2001b). Some relatively minor frauds have been discovered relating to avoidance of superannuation and false business registry services (APRA, 2001c).

A greater concern is the lack of accountability in respect of the purchase of services by pension fund administrators on behalf of members, and fund managers on behalf of pension funds. Given the absence of direct pressure on parties to these contracts, and the consequent capacity for deals involving kick-backs, there appears to be very little scrutiny of these relations by regulators. There is certainly cause for concern over a failure to maintain arms-length dealings between funds and related service providers.

Indeed, Wynn argues that 'soft commission' transactions between funds and brokers represent an institutionalised form of kick-backs, protected by non-transparent cost reporting (Wynn, 2002).

The assertion that this risk is material would seem paranoid if not for the daily reports of wrong-doing on the part of one aspect or another of the financial community. The recent (2002/2003) round of convictions of senior executives in Australia and the US is profoundly disturbing in the context of the commitment of governments to private pension systems. The evidence across a number of major cases exposes a spectrum from small, isolated, opportunistic crimes to groups of executives across multiple entities conspiring over many years to embezzle billions of dollars from millions of people.

At the small end of the scale is the case of famous Australian stock-broker, Rene Rivkin, recently convicted for insider trading after receiving a hot tip concerning an airline take-over. On a medium but intolerable scale are major corporations such as insurer HIH and life insurance office AMP losing billions through negligence and mismanagement, and providing preferential information to an inner circle of shareholders to allow timely sale of shares. On the most disturbing level is the systematic abuse by financial services conglomerates (notably Anderson, Citibank and Merrill Lynch) of research and auditing services in order to secure other business from clients, including IPOs, underwriting, broking and consulting. These practices facilitated the accounting fraud that enabled corporations including WorldCom, Enron and HIH to continue to trade and raise capital while insolvent. It is clear also that the investment banks released specific and general public misinformation to fuel the equity price bubble of the late-1990s. In February 2003, merchant banks had agreed to a \$US 1.48 billion settlement (Collins, 20/2/2003).

The political pressure in the US has led to much talk of reform, and ten of the largest US investment banks have agreed to pay \$US 1.46 billion in fines in respect of unethical and illegal practices during the 'boom-time' (Maiden, 12/5/2003). However, regulators are reluctant to break up the financial conglomerates. As reported in The Sydney Morning Herald:

New York State Attorney-General Eliot Spitzer's idea of breaking up the stock research and investment banking businesses at Wall

Street firms "is a very drastic remedy", Securities and Exchange Commission chairman Harvey Pitt said.

Mr Pitt said the federal agency would consider this step "only as a last resort". (SMH, 13/5/2002)

The background to this white-collar crime wave is apparent general acceptance in the management and shareholding community of white-collar 'near crime' in the form of spiralling executive remuneration made up of exorbitant salaries and stock option plans. It seems, in short, that every opportunity is taken to serve oneself.

The pension industry consists of a massive quantity of capital moving through pension systems on behalf of unaware, anonymous and often unwilling consumers, watched over by disinterested regulators. In this context, the absolute cynicism with which the financial community has bent and broken rules for their own advantage is cause for the utmost concern. There can be little doubt, at minimum, that contracts between financial service providers on behalf of pension consumers would involve generous pricing, and relatively low pressure to perform.

7 Alternative systems

7.1 Bolivia and Sweden - funded systems without consumer markets

Bolivia and Sweden were among many countries that underwent significant pension reform during the 1990s. Both reforms included creation of new fully funded pension systems. In Bolivia, the private system represents the bulk of retirement income arrangements. In Sweden, the private system is an important element of a comprehensive system which also includes a transformed contributory unfunded public system. The unfunded system is a 'notional defined contribution' (NDC) system run on principles intended to reflect the actuarial realities of an aging population.

The design of the private funded elements of the Bolivian and Swedish reforms represented an important break with the then orthodoxy of delivery via Anglo-American style consumer markets. In the Bolivian funded system, as with other Latin American countries and the Anglo-American countries, private (foreign) corporations administer accounts and manage funds. However, only two providers were licensed, and the licensees were appointed by the government after a lengthy bidding process which provided a centralised price determination process. The two providers were

appointed customers on a geographical and alphabetical basis with no overlap, and no account switching allowed for the first years of operation. In the Swedish funded system, there is no private involvement in account administration. This function is handled by the public agency which runs the NDC system. The funded system assets are managed by private fund managers appointed by the state in a bidding process. Products offered by these fund managers are offered to fund members, though there is no direct contact between customers and fund managers.

The Bolivian system has several important advantages over an unregulated consumer market. Having only two providers allows considerable economies of scale, lowering average administration costs. Having only two providers with separate client bases prevents competition. However, the monopsonistic bidding structure reduces the scope for super profits to be made on administration. Hermann von Gersdorff comments that the structure "allowed a competition for the market instead of a competition in the market resulting in competitive fees" (Gersdorff, 1997: 18). Moreover, as we have seen, much of the marketing and selling activity involved in pension market competition adds cost without giving the consumer efficacy. The Bolivian government was keen to avoid the high selling costs and account switching that developed in Argentina and Chile. The entire administration cost is captured in a single contribution-based percentage fee of 4 per cent (Gersdorff, 1997: 6). This compares to an average fee of 16 per cent of contributions in Chile (Whitehouse, 2000a: 29). Finally, having no overlap in the client bases of members prevents wasteful account proliferation.

The Swedish system moves further from the Anglo-American model by having no private account administration. Among other advantages, this system maximises economies of scale in administration by having a single provider. Economies of scope are achieved by having a single administration system which deals with both public and private pensions, and which potentially coordinates with other social programs (Diamond, 2001f: 9). This structure means that certain aspects of the administration task, including collections and disbursements, would have a marginal cost of close to zero (Palmer, 2000: 33). A centralised administrator would be the best method of avoiding the problem of account proliferation.

The Swedish system shares advantages with the Bolivian system, gained by not having consumers directly exposed to fund marketing and selling. By having a range

of fund managers, the Swedish system has lower economies of scale in funds management than the Bolivian system. The intention was to allow choice but prevent the costs associated with choice in other systems. The state acts as a clearing house for information and funds. Individuals have access to relevant information, such as returns, risk and cost, in a format that allows direct comparison (Palmer, 2000: 33). Fund management charges are determined via a centralised process involving a formula based on size of fund. For a large fund, a consumer would expect to pay 0.75 per cent of assets annually, half normal fees in the voluntary mutual fund market in Sweden. This amount includes the cost of establishment of a new public personal account system, which is being amortised over a fifteen year period (Whitehouse, 2000a: 34).

Some issues remain in any system involving investment choice. As has been discussed above, even with full disclosure and transparency, it is unclear how consumers should evaluate financial investment options, as past performance does not predict future performance, and there is no correlation between price and risk return.

The Bolivian and Swedish pension reforms demonstrate that a funded pension system does not need either private administration or a consumer market to operate effectively. A system without private administration and a consumer market has certain advantages: administrative efficiencies related to scale and scope, reduced waste related to selling and marketing, an efficient market (at least in regard to price) via bidding 'for the market', transparent product information, and reduced account proliferation. The decisions of the Bolivian and Swedish governments to avoid consumer markets for private pensions have effectively been endorsed by the World Bank, whose researchers have found a measurable and significant difference in average administration cost between institutional markets and traditional consumer markets (James et al, 2001). The Bank has stopped short of explicitly criticising the many plural consumer markets that it had previously endorsed or assisted to implement.

7.2 A reformed consumer market for the Anglo-American countries

The competitive market for funded pension administration is firmly established in the Anglo-American countries. It is unreasonable to expect that administration could be

brought under monopoly public management, or even that monopoly licenses could be auctioned by the state in the short term.

There is significant scope, however, for relatively simple reforms that would immediately improve operation of the current system, leaving room for a transition to a more rational structure in the longer term.

The reform would have as aims:

- a radical reduction in the number of providers, to increase economies of scale;
- immediate implementation of a 10 per cent investment limit in own-company stock by pension funds (equivalent to Australian law);
- a simplified fee structure – limited to one or two types of fees and including all administration costs, to improve transparency;
- a public, centralised information service on funds, to improve transparency and efficiency;
- a compulsory public centralised account registration process linked to tax or social security identification numbers, to control account proliferation;
- enforced account rationalisation when entering funds, to control account proliferation; and
- compulsory employer contributions excluding administration cost, to encourage efficient fund selection by employers.

8 Conclusions

Neoliberal pension reform was presented to the public as a method of providing for old age income that offered substantial macroeconomic benefits. As argued in chapters 3 and 4, benefits in terms of increased national savings and improved investment performance are impossible to substantiate. However, the benefits of NPR for the financial community are obvious.

A consumer market for complicated products buoyed by tax incentives and compulsion provides no effective discipline on suppliers. There is a great deal of evidence to suggest that many consumers have no effective understanding of the products or pricing. Manipulation of consumers' ignorance by commission-based

agents including financial planners is standard practice. Ironically, expenses associated with competition, including agents' fees, make the system less efficient. Communities with consumer markets for private pensions are paying to be misled. Structural change to cut costs continues, but benefits are not flowing on to consumers. The lack of interest from consumers is demonstrated most powerfully by the extent of account proliferation, with the average Australian consumer now having three accounts (and rising), and more than one per cent of assets separated from their owners. In this context, a largely deregulated industry seems an inappropriate method of delivery, especially given apparently pervasive corporate negligence and fraud. Replacing the consumer market with an institutional market consisting of a small number of licensed fund managers and administrators, appointed periodically via auction, provides a demonstrable efficiency gain. Reforming the consumer market by simplifying products and fees, centralising account registration and forcing employers to pay for administration costs, would have a less pronounced but immediate positive effect.

Chapter 5 Labour markets and inequality

1 Introduction

Robert Holzmann and Estelle James of the World Bank, and Axel Börsch-Supan of the European Union, among others, propose that high-replacement rate public PAYGO pensions³³ create damaging labour market distortions. They argue that income transfers and other aspects of public pension systems impede the efficiency of markets by altering the price and mobility of labour, reducing both labour demand and labour supply. Purportedly, outcomes include increased unemployment, harmed national competitiveness and lowered labour market participation, particularly in the form of early retirement.

Public pensions are intended to directly affect labour markets by enabling retirement (permanent withdrawal of labour supply) for people who have insufficient personal resources to support themselves. This is achieved via a transfer of income from workers. This effect is directly related to the prime political and economic need addressed by public pensions: the prevention of elderly poverty or, in high replacement systems, elderly disadvantage. The impact of pensions on labour markets and poverty are inextricably linked and considered here together.

The World Bank also claims that public pension systems create labour market distortions *without* necessarily reducing elderly poverty. In support of this position, the Bank points to pension systems that are regressive and exclusive, and also to those so poorly managed they collapse. The impact of pension systems on elderly poverty and inequality is considered in section 2 primarily with reference to OECD countries. Public pension expenditure varies widely in these countries, but the systems are relatively well-managed and the underlying political and economic systems are relatively stable. Trends in elderly poverty and elderly inequality in recent decades are considered in view of the spread of NPR. Pension system crisis is examined in chapter 6.

³³ Unless stated otherwise, 'public pensions' is used in place of 'public PAYGO pensions' for the remainder of the chapter.

Section 3 examines labour market distortions associated with public pension systems, including purported effects on competitiveness and unemployment, and encouragement of early retirement. Section 4 concludes the chapter.

2 Pensions and inequality

The first goal of public pensions is to ensure an adequate standard of living for the elderly, or, at least, to prevent elderly poverty. However, the World Bank (1994: 11) asserts that it is a myth (Myth 2 of 6) that "public social security programs are progressive, redistributing income to the old who are poor." The Bank argues that windfall gains at pension system inception are "invariably" made by middle- and upper-income groups. It argues that: people with higher incomes live longer on average, therefore receiving higher average benefits; payroll tax ceilings put a limit on the contributions of the wealthiest reducing their contribution rate; and earnings-related benefit formulas are regressive and subject to manipulation, which typically benefit powerful client groups. Moreover, according to the Bank, mismanagement and poor indexation systems frequently result in collapsed systems or benefits which fail to keep up with wages and prices. The Bank's survey of evidence on pensions and redistribution concludes:

Not a single study for any country has presented strong evidence that the public pension scheme has substantially redistributed income from the lifetime rich to the lifetime poor once mortality differences are taken into account. In fact, in some countries the redistribution goes from the poor to the rich (World Bank, 1994: 135).

Fox and Palmer's description of Latin American public pensions is a representative characterisation of the World Bank view:

As in Europe, Latin American systems expanded in the 1950s and 1960s. For the most part, however, they remained fairly elite systems, reflecting the small formal sector labor force and high income inequality. (Fox and Palmer, 2001: 7)

The approach taken here is to consider the impact of pensions on elderly poverty and elderly inequality. Data on elderly poverty in the OECD is regressed against data on public pension expenditure and private pension assets. Studies looking at the transition in elderly poverty rates within countries over time due to pension system change are also reviewed. This exercise does not directly explore the level of redistribution within pension schemes. However, it does point to the extent to which

different types of pension systems achieve the goal of reducing elderly poverty. The impact of neoliberal pension reform on elderly inequality is also discussed. Some parameters for modelling the future impact of funded pension schemes on poverty are considered.

2.1 Defining poverty

The word poverty is used to describe the circumstance of the poor: *people experiencing inadequate levels of consumption*. There are a number of definitional issues associated with the concept. How to define 'inadequate' is a central and potentially contentious issue. The two main methods – based on absolute and relative definitions – are discussed below.

Other issues relate to measurement of consumption. Income is often used as the basis for analysis in place of consumption because the two are closely connected (especially for those on lower incomes) and data for personal income are far more readily available than for personal consumption.³⁴ Measurement of income is also not without problems. According to Edward Whitehouse, issues which impact on the measurement of income include: what is included/excluded in income (treatment of tax, transfers and assets such as pension assets and housing assets); what time period is used (shorter-time periods produce higher levels of poverty as income levels even out over time); what unit is the basis for analysis (i.e. families or households); and what method is used to calculate 'equivalence' for families/households with varying numbers of income earners and dependants (Whitehouse, 2000b: 14-5).

The surveys referred to in the sections below address these issues in slightly different ways, with some impact on comparative results. Relevant issues are mentioned with the results.

There are two widely recognised approaches to defining the line between adequate and inadequate levels of consumption/income: the absolute method and the relative method (Rainwater, 1999). The absolute approach seeks to describe a level of

³⁴ Peter Saunders found that basing analysis on consumption figures rather than income reduced poverty rates substantially, primarily because many people with sub-poverty line incomes consume more than they earn (Saunders, 1998: 9). Saunders suggests that this is partly explained by people supplementing income by borrowing and asset round-down, which was only possible in the short-term.

subsistence consumption, below which people are considered to be in poverty. This was, for example, the notion of poverty guiding Sir William Beveridge, whose report on social insurance provided the basis for rationalisation and redesign of the British social security system during World War II (Macnicol, 1994: 84). According to Beveridge "The rates of benefit or pension provided by social insurance should be such as to secure for all normal cases an income adequate for subsistence..." (Beveridge, 1942: 76). Studies were conducted to establish what level of income was required to provide adequate shelter, clothing and meet human nutritional needs. Levels of absolute poverty are negatively correlated with the wealth of a country, in terms of income per capita.

The relative approach is derived from the sociological study of poverty, and defines the level of adequacy relative to general consumption levels of the community to which an individual or family belongs. The underlying concept is that social participation and identification are essential human needs, and in modern society these are largely defined by consumption activities. It follows that a level of income substantially lower than general levels results not only in a lower material quality of life, but also social exclusion. This social exclusion is both practical and psychological, as people in relative poverty will be identified by others and by themselves as different, as they are unable to participate in consumption activities which define social membership (Rainwater, 1999: 33). Levels of relative poverty are not necessarily correlated with levels of income per capita. A rich country can have higher levels of relative poverty than a poor country.

Although associated with 20th century sociology, the idea that poverty is determined culturally has early origins. In the 18th century, Adam Smith noted different standards of poverty for different countries, times and between genders. He also recognised the importance of social judgments made by individuals about themselves and others:

By necessities I understand not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without. A linen shirt, for example, is, strictly speaking, not a necessary of life. The Greeks and Romans lived, I suppose, very comfortably though they had no linen. But in the present times, through the greater part of Europe, a creditable day-labourer would be ashamed to appear in public without a linen shirt, the want of which would be supposed to denote that disgraceful degree of poverty which, it is presumed,

nobody can well fall into without extreme bad conduct. Custom, in the same manner, has rendered leather shoes a necessary of life in England. The poorest creditable person of either sex would be ashamed to appear in public without them. In Scotland, custom has rendered them a necessary of life to the lowest order of men; but not to the same order of women, who may, without any discredit, walk about barefooted. In France they are necessities neither to men nor to women, the lowest rank of both sexes appearing there publicly, without any discredit, sometimes in wooden shoes, and sometimes barefooted. Under necessities, therefore, I comprehend not only those things which nature, but those things which the established rules of decency have rendered necessary to the lowest rank of people (Smith, 1937: 821-2).

The relative approach to poverty has a significant practical advantage for comparative study. Relative poverty levels can be used in multiple jurisdictions without time-consuming, expensive, and ultimately subjective analyses of the comparability of prices and incomes. This is because the relative measure takes the general level of personal income in a jurisdiction as a fair basis for analysis. By contrast, absolute measures of poverty produce absurd results when comparing rates over space and time (Rainwater, 1999: 35). Standards of housing, clothing, food, healthcare, transport and education have changed over the last hundred years, with the effect that people living in conditions that were standard 100 years ago would today be considered to be living in poverty.

The relative poverty line is usually defined as a proportion of median income, because the median gives a better indication than the mean of the central tendency (due to the small proportion of people with extremely high relative incomes). While societies feature gradations of poverty and social exclusion, a consensus has emerged among sociologists that people with less than half the median income are certainly poor (Rainwater, 1999: 36), though the claim can still be made that any level chosen is arbitrary (eg. Whitehouse, 2000b: 20).

Another relative poverty method is to define the lowest income group, for example the lowest quintile, as in poverty. This is a useful mechanism for exploring the question: 'Who is in poverty in country X?' However it is not useful for comparing levels of poverty in different jurisdictions, as each will be, by definition, 20 per cent (Whitehouse, 2000b: 13).

Absolute and relative poverty measures have different policy implications, and can be used to support different pension policies. For example, indexing public pensions

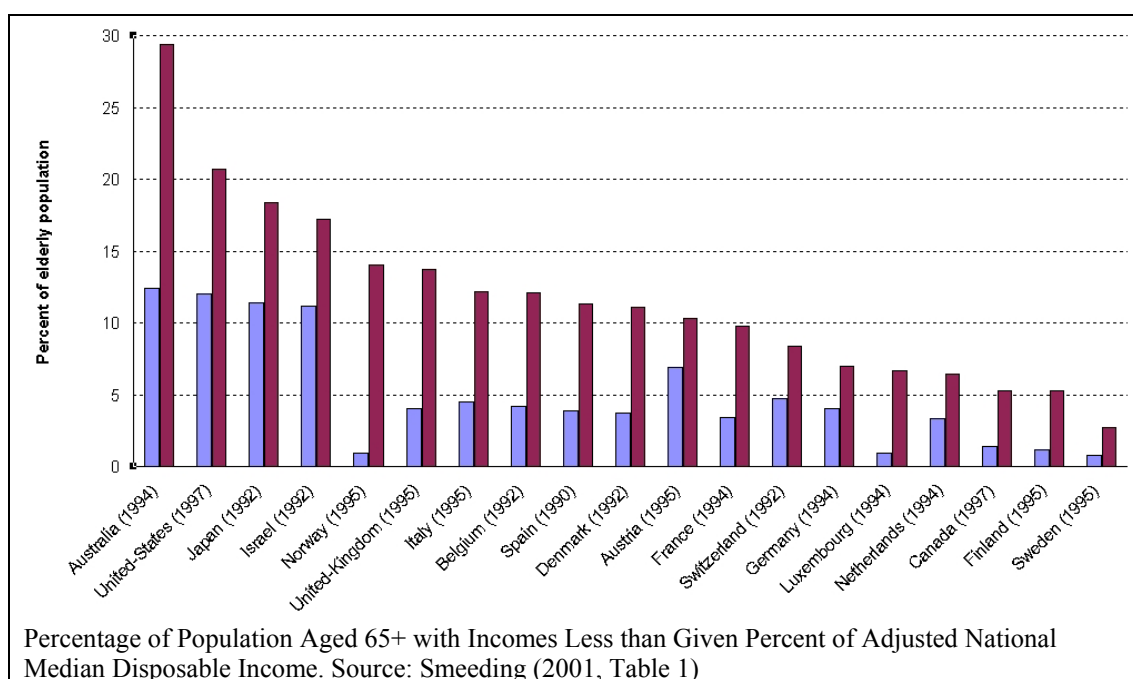
according to prices will help to prevent increases in absolute poverty, as future pensions will have the same buying power as current pensions. However, as wages rise faster than prices, pensions linked to prices will fall behind wages, resulting in increases in relative poverty levels. If pensions are indexed according to prices, the living standard of the elderly will remain constant in absolute terms, but will fall behind the rest of society.

The relative measure of poverty is used here for comparative research, which is restricted to the OECD. It is not the case that the relative definitions of poverty used for international comparison are more generous than other definitions. A well known Australian definition of poverty - the 'Henderson Poverty Line' - is substantially more generous than the 50 per cent of median income line. In 1995-96, the Henderson Poverty Line was \$A 496 per week for a family with two children, whereas 50 per cent of median equivalent income was only \$A 353 per week (ABS, 2000c).

It is important to note also that potential for use of a relative measure is limited in countries where there is only a very small group with very high incomes and a large majority with extremely low incomes. The relative measure in such countries may produce a quite low level of poverty, though the majority may have no access to employment or education, or even clean drinking water and food.

2.2 Elderly poverty in OECD countries

Timothy Smeeding (2001) used data from the *Luxembourg Income Study (LIS)* database, which contains information on household incomes for 28 nations, to compare the income of the population of people aged 65 and over in OECD countries. He provides detailed comparisons of eight of those countries, including Australia. The data are from the mid-1990s in each of the countries, and incorporate a wide definition of income including 'near cash', such as food stamps and housing allowances. Income levels are adjusted for family structure, including marital status and numbers of dependants. Tables are provided for two levels of elderly poverty, 40 and 50 per cent of median disposable income. Data are displayed graphically in Figure 5.1.

Figure 5.1 Elderly People in Relative Poverty in Selected OECD Countries

A general review of the figures shows a significant gap between elderly poverty levels in Australia, the United States, Japan and Israel and the other countries. The levels in these countries were well above the average levels of 4.8 and 11.6 per cent for the respective categories. These four countries were the only countries in the sample to have more than 10 per cent of elderly people in poverty at the 40 per cent poverty line. Australia topped both tables with 12.4 per cent at the 40 per cent poverty line and an extraordinary 29.4 per cent at the 50 per cent line. Second at both levels was the USA with 12.0 and 20.7 per cent respectively. A number of countries show large gaps between the two poverty lines. These countries have a concentration of pensions at a level between the 40 and 50 per cent median line.

Smeeding provides some breakdown by age, gender and household structure. In Australia, at the more extreme poverty level of 40 per cent, elderly women as a group are not worse off than men, with a 12.2 per cent rate of poverty (Figure 5.2). However, at the 50 per cent level, women are noticeably worse off than men, with a figure of 33.9 per cent. This implies that almost half of women over 65 living alone in Australia have adjusted incomes at the very low level of between 40 and 50 per cent of median income. Conditions are slightly worse still for the sub-group of women over 75, with more than two-thirds of women who are over 75 who live alone having adjusted income below 50 per cent of the median.

Figure 5.2 Gender Breakdown of Elderly Population in Australia in Relative Poverty

	40% (rank)	50% (rank)
All persons (65+)	12.4 (1)	29.4 (1)
Women (65+)	12.2 (2)	33.9 (1)
Women living alone (65+)	15.2 (2)	62.3 (1)
Women living alone (75+)	19.7 (2)	68.7 (1)

Incomes Less than Given Percent of Adjusted National Median Disposable Income and rank in OECD.

Source: Smeeding (2001)

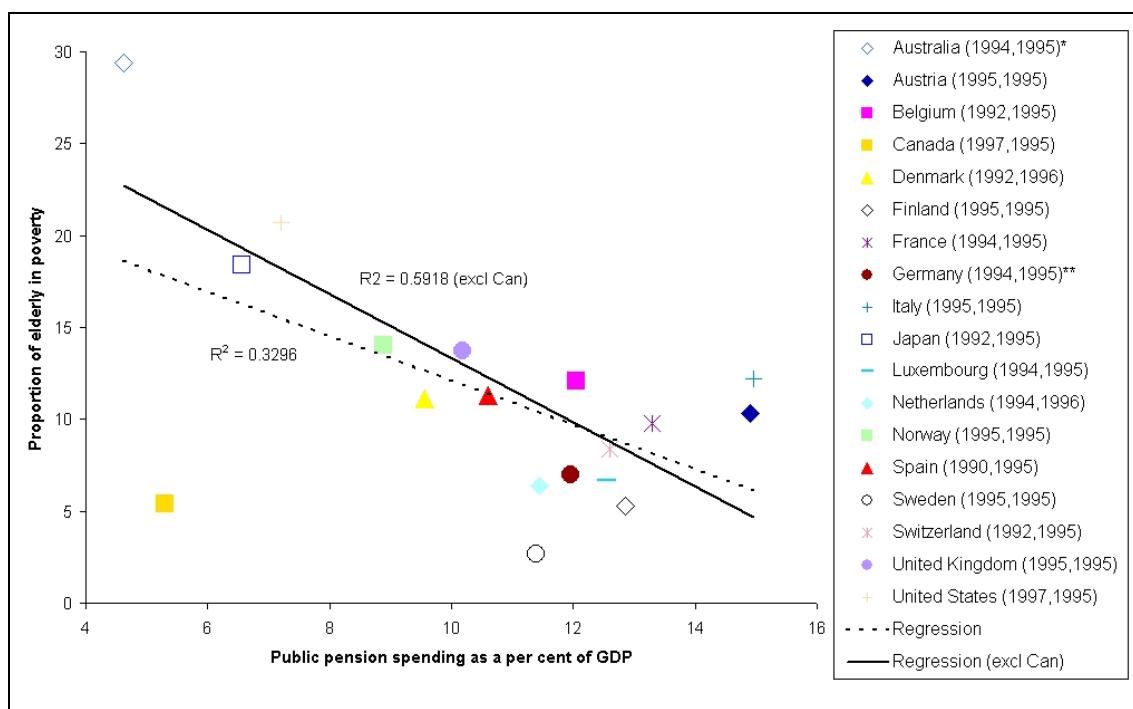
2.3 Elderly poverty and pension systems

The main transitions undergone in neoliberal pension reform are a decreased reliance on public pensions and an increased reliance on private funded pensions. In this section, public pension expenditure data and private pension asset data are regressed against the Smeeding OECD elderly poverty data. Studies on elderly poverty which shed light on the impact of neoliberal pension reform on inequality are also discussed. The impact of pension system change on poverty – particularly the impact of funded systems – takes time to be felt. Parameters necessary to model this impact are discussed, as is my provisional work in this area.

2.3.1 Regression of pension and poverty data

Regressing Smeeding's data on elderly poverty against World Bank data on public pension spending suggests that public pension spending is an important determinant of elderly poverty. Although the data are imperfect and one would hesitate to make more specific assertions, the regression suggests that levels of elderly poverty are negatively correlated with public pension spending (see Figure 5.3 below). As public spending rises, levels of elderly poverty fall. The fit (R^2) is 0.3296, and is much higher (0.5918) if Canada, an obvious outlier, is excluded. It is likely that the Canadian public expenditure figure is an underestimate, as Canada has both a public pension financed out of general revenue *and* a public contributory (PAYGO) system (Banting and Boadway, 1997: 3-4).

Figure 5.3 Public pension spending versus elderly poverty (50% of median income) - Selected OECD Countries



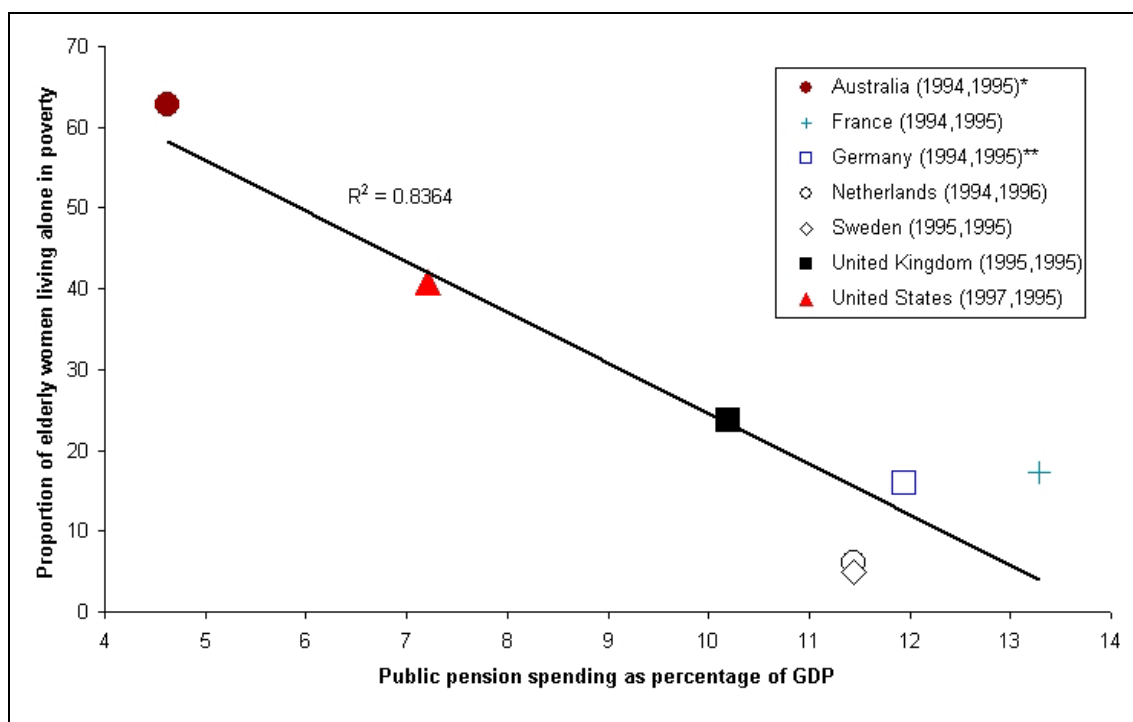
* (Date of poverty data, Date of pensions data) ** Former West Germany.

Sources. For pensions data World Bank, 2000a; for poverty data: Smeeding, 2001: Table 1

The relationship is strongest at the higher end of the poverty distribution. Excluding Canada, the three lowest spenders each have the highest level of elderly poverty. In qualifying this conclusion, it is important to recognise that there is a range of elderly poverty outcomes possible for a given level of spending. Those countries above the regression line in Figure 5.3 appear to get poor value for money, and those below the line are getting better value. The difference, for example, between Italy and Sweden is quite large, as Sweden has a very low elderly poverty level with public pension expenditure of 11.5 per cent of GDP, while Italy has a medium-poor elderly poverty level (13 per cent) with the highest public pension expenditure at 15 per cent of GDP.

Figure 5.4 shows the proportion of elderly women living alone in poverty plotted against public pension expenditure as a proportion of GDP. The sample is small but the fit on the regression is high ($R^2 = 0.84$), suggesting that public pension expenditure is particularly important in reducing female elderly poverty.

Figure 5.4 Public pension spending versus elderly women living alone in poverty (50% of median adjusted income) - Selected OECD Countries

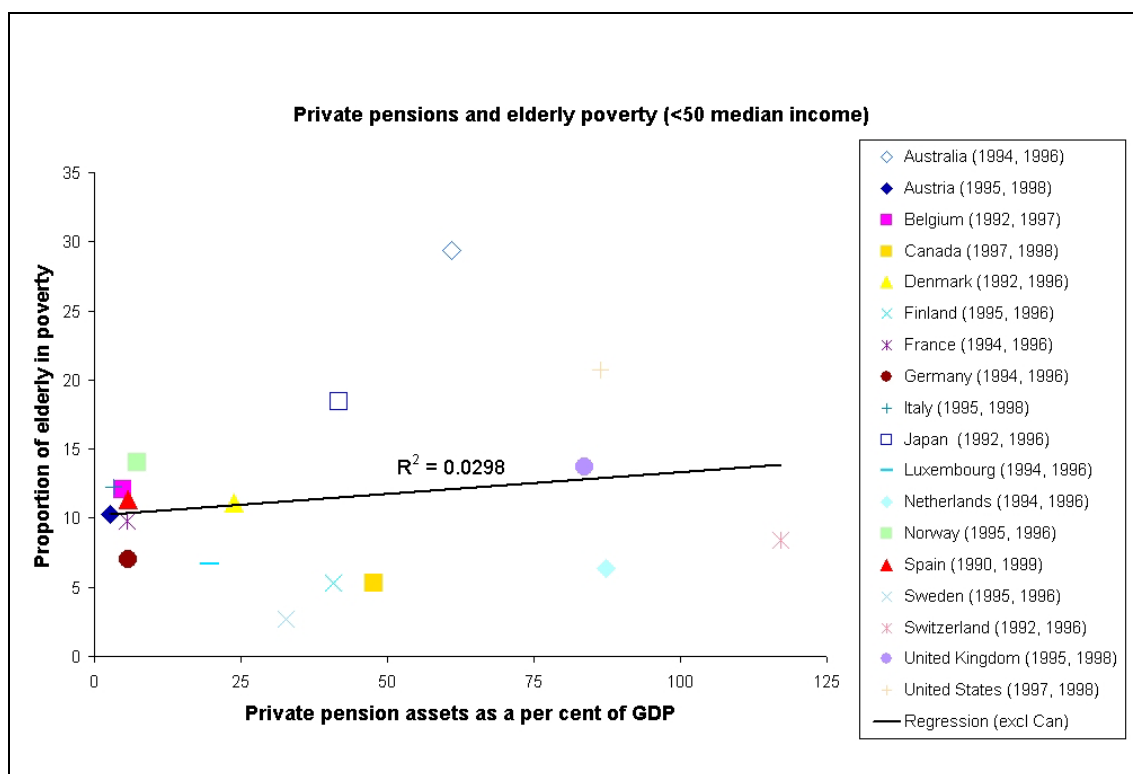


* (Date of poverty data, Date of pensions data) ** Former West Germany.

Sources. For pensions data World Bank, 2000a; for poverty data: Smeeding, 2001: Table 2

Figure 5.5 shows the proportion of elderly in poverty at the 50 per cent of adjusted median income line plotted against private assets as a percentage of GDP for selected OECD countries. The regression suggests no clear relationship between private pension assets and levels of elderly poverty. The countries with private pension assets above 25 of GDP show a wide variation in rates of poverty. Switzerland, Sweden, Canada, The Netherlands, and Finland have relatively low rates of elderly poverty while the United Kingdom, Japan, the United States and Australia have relatively high rates. Countries with low levels of pension assets generally have medium to low levels of elderly poverty, however this would be explained by the level of spending on public pensions rather than the level of commitment to private pensions.

Figure 5.5 Private pension assets versus elderly poverty (50% of median income) - Selected OECD Countries



* (Date of poverty data, Date of pensions data) ** Former West Germany.

Sources. For pensions data World Bank, 2000a; for poverty data: Smeeding, 2001: Table 1

2.3.2 The impact of NPR on elderly poverty and inequality

As discussed in chapter 2, in Australia the level of the public pension conformed closely to the neoliberal ideal by historical chance. Neoliberal pension reform in Australia therefore consisted of a reversal of the trend during the 1970s towards making public pensions universal, and an extension of the superannuation system. These changes have been followed by a notable increase in the level of elderly poverty, and increased levels of elderly income and wealth inequality.

During a brief period (1976-78) the pension became practically universal as there was no assets test and a means test only for those between 65 and 70 years of age.

However, the assets test was reintroduced for people over 70 in 1978, and for all people in 1985 – the year superannuation was extended to Award workers via Accord Mark II.

Smeeding's time series data show that between 1981 and 1994 the level of elderly poverty in Australia increased at both the 40 and 50 per cent levels. The data suggested an increase of 5.4 per cent at the 50 per cent level and 3.9 per cent at the 40 per cent level (Smeeding, 2001: 37). On this evidence, the impact of the new retirement income system on elderly poverty is negative. Whitehouse suggests that data for Australia underestimate elderly income because super is often paid as a lump sum, and may not be captured by income data (Whitehouse, 2000b: 26). However, ASFA data on super payouts show that the majority of payouts until recently have been less than \$20,000 (ASFA, 2001a). Amounts would typically be significantly lower than \$20,000 for those under or near the poverty line. Such transfers would have little effect on consumption in retirement (over a 10 or 20 year period) whether taken as a lump sum or an annuity.

Superannuation offers the opportunity to pay reduced tax on earned income and property income. Compulsory contributions and optional contributions made by employers are taxed at the concessional rate of 15 per cent. An additional 'surcharge' of up to 15 per cent is levied on high income earners, though current plans are for its reduction. Even with the surcharge, a detailed study by the RIM Taskforce demonstrates that for both standard employer contributions and one-off investments (typically only made by high income earners) the proportional tax benefit is far higher for those on the highest marginal tax rate, with the level of benefit increasing over working life. Over a whole working life, the benefit approaches 100 per cent of contribution value for those on the highest marginal tax rate (primarily due to the compounding effects of concessional tax on earnings), but is only around 30 per cent for those on the next highest marginal tax rate (Rothman, 2000: 7).

Superannuation has appeared to have a significant effect on average levels of elderly wealth and income, though this is predominantly due to an apparently very large impact on those who already had significant wealth. A recent Australian study suggests that average levels of elderly wealth nearly doubled in real terms between 1986 and 1997, due significantly to superannuation. Harding et al report that while

superannuation made up only an estimated 2 per cent of their [the elderly's] total wealth in 1986, by 1997 this had risen to about 18 per cent. Equities also became more significant, rising from about 7 to 14 per cent of total wealth over the same period. (Harding et al, 2002: 9)

The rise in the proportion of superannuation and equities occurred during a period of rapid increase in housing wealth, particularly in the major capital cities. As a result, the share of wealth held by the wealthiest elderly 25 per cent rose from about 67 to 71 per cent (Harding et al, 2002: 16).

The impact on inequality of the shift in retirement income provision in favour of private schemes has an important gender dimension. The change will inevitably disadvantage women, due to women having, on average, longer periods out of the workforce, higher levels of casual work and lower levels of pay. Bateman and Piggott (2001: 20) note the disadvantage that women and other 'non-standard' workers experience in the private system, but do not attempt to quantify it.

The experience in the UK reinforces the picture of funded pension systems providing tax benefits for high income earners, which in turn leads to increased inequality. In the UK, the Thatcher government introduced several neoliberal pension reforms between 1981 and 1985 (Whitehouse, 1998). Key elements included:

- reducing future public pension benefits by changing indexation to CPI instead of average wages (1981);
- increased support for private occupational pensions; and
- allowing people to 'opt-out' of the public system altogether by allowing a swap of public pension rights for private pension assets provided by government.

While average income for the elderly in the UK has increased, the disparity in incomes has widened. Curry and O'Connell report that while average income for single people of pension age is £UK 9,500 a year, the richest fifth earn an average of £UK 19,000 a year, and the poorest fifth only £UK 4,600 a year (or 21 per cent of average earnings).

Whitehouse also cites studies showing a pronounced broadening of the elderly income distribution in the 1980s and 1990s (Whitehouse, 2000b: 51-3). In the 1970s, the income distribution for the elderly in the UK was very even, with only a 10 per cent difference between the highest and lowest paid pensioners. By the beginning of the 1990s, the wealthiest decile of elderly were earning 5 1/2 times the earnings of the lowest decile. These changes are attributed to the rapid growth of private pension and investment income.

While the richer majority enjoyed the fruits of this growth, a poorer minority of pensioners is dependent on state benefits whose value has increased little in real terms since 1980 (Whitehouse, 2000b: 52-3).

Indeed, due to the change of indexation policy, the value of public pensions (and unemployment benefits and other social assistance) decreased in value by 38 per cent relative to average wages between 1981 and 1998 (Whitehouse, 1998: 5). A quarter of pensioners are in relative poverty, with older pensioners, women, ethnic minorities and the previously self-employed over-represented in this group (Curry and O'Connell, 2003: 3). The importance of gender in pension policy is emphasised by Curry and O'Connell who note that there are only 3.9 million male pensioners, but 6.9 million female pensioners (2003: 5).

The conclusion in relation to UK pension policy reached by Sue Ward is that the two objectives of the current UK government: to further shift from public to private provision, and to end elderly poverty, are completely incompatible (Ward, 2002: 1).

The US has a strongly neoliberal pension policy setting with a three-decade old commitment to voluntary and occupationally concessional tax private pension savings, and a contributory earnings-based public pension system which provides a replacement rate of around 50 per cent of wages. Although American social security provision is somewhat progressive, the high and increasing levels of income inequality in the workforce are reproduced in the essentially earnings-based pension system. Between 1973 and 2000, the 90-10 'Gini coefficient'³⁵ jumped 38 per cent for men and 33 per cent for women among full-time employed (Bosworth et al, 2001: 1). The level of income inequality among the elderly is high compared to other OECD countries. The elderly 90-10 Gini coefficient in the US in 1998 was 5.5 (Whitehouse, 2000b: 43); that is, the average income of the top decile is 5.5 times that of the average income of the bottom decile. As is indicated in Figure 5.3, the US has the second lowest level of public spending on pensions as a proportion of GDP and the second highest level of elderly poverty among a sample of 19 OECD countries.

Munnell et al suggest that pension income for poorer workers in the US is so low that it has led to a complete breakdown in the standard retirement age.

³⁵ The ratio of the 10th percentile income to the 90th percentile income.

Thus, it would appear that low-income workers ... do not receive enough from Social Security to avoid a decline in economic well-being upon retirement and, therefore, they need supplementary pension income. In the current environment, their only option is to continue working. That is a possibility for some, but for others unemployment and ill health make continued work very difficult. (Munnell et al, 2002: 9)

As was discussed in chapter 2, concessionally-taxed retirement saving mechanisms in the US are criticised for their regressivity. Nonetheless, neoliberal reformers are currently attempting to increase the level of tax deductibility for pensions and privatise social security by investing system assets in private securities.

The World Bank has been involved in implementing neoliberal economic reforms, including pension reform, in many developing and transition countries.

Beginning with Chile in 1981, NPR has been implemented in ten Latin American countries. Barrientos writes that the period from 1980 to 1989 saw poverty incidence in Latin America as a whole increase from 26.5 per cent to 31 per cent (Barrientos, 1998: 23). Pension reform in Latin America involved dissolving existing public pensions or excluding more of the population from them.

A World Bank researcher notes the direct relationship between neoliberal reform, fiscal sustainability and social exclusion in the Argentinean case.

The evolution of the financial situation of the RPP [public pension system] will improve in future decades for the same reason that the coverage problem will emerge. The projections show that the public scheme's finances should improve significantly due to stagnation and even a decrease of the number of beneficiaries and to a reduction in the amounts paid as benefits begin to be replaced by those of the funded scheme. Obviously, if that happens, the system will be in better financial shape because of the exclusion of an important part of society from the system. (Rofman, 2000: 21)

40 per cent of the population over 65 in Argentina no longer have any social security (Vibes, 2002: 2).

Gender gaps in pension coverage also appear to have worsened in Latin America (Bertranou, 2000). The ILO note that women are among the main losers of the reforms in Latin America (Nitsch and Schwarzer, 1996). A pro-reform article published on the World Bank website notes that the accumulations of women in private pension systems are always less than those of men and usually less than 50 per

cent of men's' (Edwards, 2000: 31). Nonetheless, the author remains committed to the reform:

If one thinks of labor market behavior as immutable and women's place as in the home, some method of subsidizing women in old age may be necessary. But, if one views the role of women as changing and responding to incentives, the new structure is a more appropriate way to provide a social safety net while encouraging work and discouraging dependency. (Edwards, 2000: 2)

This approach ignores the reality of gender differences in pay and gender-based child-caring responsibilities which social security has sought to redress. This reality is borne out in the observed emergence in Latin America of a 'family income gap'. This is the disparity in incomes between women who have children and those who do not (Bertranou, 2000: 20). For individual women and families, avoiding having children is one solution to falling incomes and security. However, if social reform is intended to address the problem of aging, it should facilitate child-rearing, rather than punish those who choose to reduce paid work to raise children with lower retirement income. Retirement income, whether in public PAYGO or private funded pension systems, is a transfer of income from the working generation, brought up by parents, whose access to private pensions (all things equal) is reduced. Child care is justly recognised as an essential contribution to society in European social security systems.

2.4 Modelling private pensions and poverty

The indications from studies of the early stages of neoliberal pension reform are that tax concessions on private pensions and reduced public pensions increase the level of inequality among the elderly, including increasing the level of elderly poverty. Particularly in *voluntary* private pension systems, high income earners benefit disproportionately from concessionally taxed pensions. Later generations of retirees in countries with voluntary concessionally taxed private pensions will show increasing levels of inequality as high income earners gain the benefits of concessionally taxed savings over a greater period, while those with lower incomes and broken work patterns continue to rely on stagnant or reduced public benefits, or, as in much of Latin America, face complete destitution.

In *compulsory* private pension systems, such as those in Australia and Switzerland, high income earners also benefit from tax concessions disproportionately. However,

it is possible that these systems may increase the wealth at retirement of the relatively poor by forcing them to save during working life. It was certainly the intention in Australia that compulsory superannuation would enable increased self-sufficiency in retirement, with a fiscal benefit arising from reduced eligibility for public pensions due to means-testing. While there is little evidence of this trend to date – accumulations are generally small (as discussed in chapter 2) – the long term impact will be felt only a generation after the reforms of the 1980s and 1990s.

An attempt can be made to model the capacity of low income earners to avoid poverty in retirement via participation in compulsory private pensions. Important issues for modelling include:

- the level, timing and consistency of income earned;
- the manner in which private pension accumulations interact with the tax system and public benefits including public pensions;
- the severity of financial hardship experienced during working life (the opportunity cost of saving); and
- the relative benefit of other forms of saving, including owner-occupied housing.

The exercise is complicated by a number of factors. The first is the wide variety of income and consumption conditions experienced during working life, particularly for low income earners. It is not enough to categorise households by income level, as the idea of a 'standard worker' is largely irrelevant for low-income worker families, especially in single-parent families. Workers in these families may experience periods of unemployment, periods of casual or part-time employment, and periods of unpaid caring work and periods of full-time employment on low or medium incomes. Changing family structures also have a profound bearing on household income and consumption. The mix, timing and duration of different circumstances determine the level of participation in the private pension system, the amount of accumulation, and the degree of financial stress before and during retirement. The length of working life and retirement are also key variables which would require a probabilistic approach.

Estimating returns from private pensions and alternative forms of investment represents another set of complications. Alternative forms of investment include owner-occupied housing and human capital. The analysis would have to estimate (regressive) administration cost, the wide disparity in capital gains evident on

different types of housing, and the financial implications of home ownership and renting during working life and retirement. The effects of different kinds of income and assets on welfare entitlements, including the aged pension, would also have to be considered. Calculation of the annuity paid in retirement based on the accumulation is also dependent on investment returns, inflation and life expectancy. The accuracy of the model would also depend on numerous aspects of government policy.

A modelling exercise at the necessary level of detail is beyond the scope of this dissertation. However, I have conducted some provisional work in this area. The model inputs and outputs are summarised in Figure 5.6, with a more detailed summary at Appendix A. The model estimates the pension achieved in a compulsory pension system by two households – one with median income and one with two-thirds of median income – under various assumptions. The pension achieved is expressed as a percentage of median income. Median income grows over time with assumed productivity gain. Variables included are:

- length of working life;
- length of retirement;
- inflation;
- investment return in the accumulation and annuity phases; and
- the tax structure.

No changes in life circumstances are considered. It is assumed implicitly that 100 per cent of median income for the whole of working life, or two-thirds of median income for the whole of working life, is a reasonable approximation for a variety of life circumstances for an ordinary or low income working household. These levels correspond with the ABS central quintile and second lowest quintile of earnings – essentially middle and low income working families. According to the ABS, 30 per cent of all families in the bottom two quintiles (the ABS' definition of 'low income families') of the income distribution *do not* have welfare transfers as the main source of income. This group – the working poor – represents 12 per cent of all Australian families (ABS, 2000d). It is this group's prospects for a self-funded retirement that the modelling exercise intends to capture.

This group of poor working families shows evidence of financial stress. The ABS reports that 29 per cent of families in the second lowest income quintile gave answers consistent with high levels of financial stress to a series of survey questions on consumption tasks such as paying bills, buying first or second hand clothes, eating out once a fortnight, or going away once a year (ABS, 2002). While an estimate of the opportunity cost of pension saving is inevitably subjective, it appears that for families in this situation, the opportunity cost in terms of housing investment or disposable income may well be too high to justify, given the very small impact it may have during retirement.

Many families are certainly in a more grave financial position than those considered here, with inconstant employment and lower access to the funded pension system. In considering patterns of unemployment, the ABS found that 75 per cent of the unemployed are unemployed for a period of less than one year. Amongst these, many can only find short-term employment and have subsequent periods of unemployment (ABS, 1998: 5). The type of employment found by the unemployed directly affects their access to the funded pension system. 55 per cent of the unemployed have no superannuation coverage (ABS, 2001b: 4). Those who are not in the paid workforce, including unpaid carers (mostly women), experience even lower coverage. 70 per cent of those aged between 15 and 64 who are 'not retired' and not looking for work have no coverage (ABS, 2001b: 4). Research on these groups appears less beneficial as it is self-evident that funded pensions provide no benefit for those without access to the system.

The provisional modelling suggests two points. The first is that pensions for families on ordinary or low incomes from compulsory funded pensions are not likely to be of a level that will enable self-sufficiency. A family on median income in the base case (working life 40 years, retirement 15 years, Australian tax structure, inflation 2 per cent, interest rate 6 per cent during accumulation phase and 4 per cent during annuity phase) will receive a pension equal to 30 per cent of median income averaged over retirement. If this family in addition receives 25 per cent of wages in aged pension, they will only just be over the poverty line.

Figure 5.6 Summary of provisional modelling of the potential for ordinary and low-income earners to avoid poverty in retirement in funded pension systems

Case	Scenario 1			Scenario 2		
	Base	Optimistic	Pessimistic	Base	Optimistic	Pessimistic
INPUT						
proportion of median	100%	100%	100%	67%	67%	67%
inflation	2%	1%	2%	2%	1%	2%
working life	40	45	40	40	45	40
retirement	15	10	25	15	10	25
lifespan	75	75	85	75	75	85
tax						
contributions	15%	0%	15%	15%	0%	15%
earnings	15%	0%	15%	15%	0%	15%
benefits	15%	25%	15%	15%	25%	15%
contribution rate	9%	9%	7%	9%	9%	7%
interest rate (nom)	6%	6%	5%	6%	6%	5%
annuities rate (nom)	4%	4%	3%	4%	4%	3%
OUTPUT						
Start ratio	36%	70%	21%	24%	47%	14%
End ratio	24%	59%	10%	16%	39%	7%
Average ratio	30%	64%	15%	20%	43%	10%
Better/worse than base		118%	-50%		118%	-50%

Note: Shaded cells have inputs differing from the base case.

Source: Author's calculations (see Appendix A for explanation of methodology and more detailed table).

A family that earns two-thirds of median income receives a proportionately smaller pension: 20 per cent of median income averaged over retirement.³⁶ Even with a full public pension this family would expect to spend retirement in poverty.

The second important finding of the modelling is the wide range of possible outcomes for savers in funded pension systems.³⁷ The model produces a very wide range of potential difference between optimistic and pessimistic scenarios, despite having a

³⁶ No allowance is made in the model for regressive administration cost. Regressive fees could cost low income earners an additional 1 or 2 per cent annually in returns.

³⁷ This is an inevitable feature of modelling future pension liabilities. Recent court cases in the US over pensions have seen actuaries on opposing sides give vastly different testimony as to pension liabilities (in some cases a difference of 100 per cent) (Barakat, 28/2/2003).

very short list of variables and making only slight adjustments to each. The optimistic case provides more than double the base case pension, while the pessimistic case provides around half the base case pension. For high income earners, this can mean the difference between a comfortable and very comfortable retirement. For low income earners this means the difference between comfort and poverty. A funded pension system implies a high degree of financial risk, both for individuals and society.

2.5 Summary

This section considered pensions and elderly inequality, particularly poverty. Data on public pension expenditure and elderly poverty in the OECD suggests higher public pension expenditure is necessary to reduce elderly poverty, particularly among women living alone. The review of studies of elderly inequality in developed and developing countries suggests that neoliberal pension reform does increase inequality. The analysis of the Australian compulsory funded pension system demonstrates that more than half of the unemployed and more than two-thirds of carers have no superannuation coverage. Provisional modelling suggested that working families on median incomes may expect a pension of only 30 per cent of median income from superannuation, and families on low incomes (two-thirds of median income) may expect a pension of only 20 per cent of median income. These families will continue to require public support to avoid poverty. Small adjustments to base case variables produced widely divergent results, emphasising the high degree of financial risk associated with funded pension systems. The alternative to high replacement rate public pensions is poverty and uncertainty.

3 Pensions and labour markets

3.1 The neoliberal view: labour market distortion

Neoliberal academic economists associate a variety of economic ills with high replacement rate public pension systems. The labour market is one of the mechanisms by which these ills are supposed to be generated.

Robert Holzmann of the World Bank argues that high replacement rate public pension systems cause labour market distortions with 'dead-weight losses' of resources and output (Holzmann, 1999: 4). Börsch-Supan claims that "the overall tax burden on

labour [in European high replacement rate systems] has reached highly distorting levels, creating disincentives to work and reducing labour demand” (Börsch-Supan, 1999: 2). Ralf Nöcker writes that in Germany, “as in many other European countries, high social security charges have been identified as one of the causes of sustained high unemployment” (Nöcker, 2000: 2). Siebert (1997: 2) makes identical conclusions in relation to Germany. These authors essentially follow the line developed by the World Bank that pension contributions are a tax wedge rather than a savings mechanism (representing deferred income and consumption).

[T]he defined benefit formula and pay-as-you-go method of finance break [the] link between benefits and contributions – benefits to some are not as great as their contributions, whereas others can get the benefits even if they do not contribute. So, workers who bear the tax may try to evade it by reducing their labour supply or escaping to the informal sector, whereas employers who bear it may reduce the quantity of labour they demand.

...

In the few situations in which wages cannot fall any further because a legal or social minimum has been reached, employers pay the tax and may cut back on employment and output as a result. This is inefficient. This line of thought suggests that the rise in payroll tax rates in OECD countries over the last two decades may be one possible explanation for the rise in unemployment and the more general slowdown in the growth of real wages. (World Bank, 1994: 121)

Much of this literature asserts the superiority of an 'Anglo-American' socio-economic model characterised by a small state, low income transfers, and flexible labour protection laws. It is contrasted with a continental European socio-economic model with the opposite characteristics. Lower unemployment rates and higher growth rates in the former case have been key to these assertions during the 1990s. In this context, pensions are a part of a broader debate, though an important part, as pensions constitute the largest single component of the welfare state.

In summary, the neoliberal position is that public pensions increase labour costs and therefore reduce competitiveness, reduce demand for labour which causes unemployment, and reduce labour supply particularly by encouraging early retirement. As discussed in the previous section, this analysis discounts the profound effect that public pensions have in reducing elderly poverty; an effect that cannot be matched by private pensions. The position has other weaknesses. It is ahistorical, ignoring higher

growth rates and lower unemployment rates in areas with non-Anglo-American socio-economic models, including Europe and Japan. At the aggregate level it misrepresents the relative levels of competitiveness between the Anglo-American and European models. It also ignores the wide regional differences in employment and growth within the regions, which suggest more complex determinants of these measures than social security arrangements.

In relation to early retirement, the neoliberal position exaggerates the connection between social security and retirement, ignores more modest reform methods, which remove incentives to retire early without reducing redistribution, and does not provide a realistic policy alternative for governments that explicitly promote early retirement to maintain employment turnover and reduce unemployment.

3.2 Pensions and competitiveness

A notion underlying much criticism of generous social security in Europe is that an Anglo-American free market socio-economic model produces superior economic growth. The flipside of this is that it is assumed that European economies are in urgent need of radical neoliberal economic reform. This notion ignores the tendency for economic growth to exhibit long-term cycles at the regional level. Western Europe grew rapidly during the 1950s and 1960s, as did Japan into the 1970s and 1980s. An apparently higher growth trajectory in the USA and UK during the 1990s appears to have stalled. Predictions could not currently be made about economic growth with any certainty, even in the short term.

The critique of pensions based on their impact on labour markets ignores the profound geographic differences in employment and growth within the large regions. There are heavily depressed areas in much of both Europe and North America, and also areas with very high growth and low unemployment in both regions. These differences suggest that macro policy settings, including social security, do not determine levels of employment. Reducing public pensions and social security is not the key to a dynamic and successful economy.

The International Labour Office (ILO) offers an alternative interpretation of the European socio-economic model to the neoliberal analysis. According to Michel Cichon of the ILO, high labour remuneration including pension contributions

encourages a longer-term perspective to employment, including ongoing investment in education and training, and higher levels of investment in capital and technology:

What is claimed here is that there are good reasons to believe that high levels of social spending in Europe are not only financially sustainable but might even be economically efficient since they help in sustaining high levels of productivity and thus reduce the number of hours that European populations have to work.
(Cichon, 1997: 2)

The European Union has higher average productivity than the US. High income countries in the EU, such as Germany, Northern Italy, Luxembourg, The Netherlands and Austria, have significantly higher productivity than the US. The US does have higher income per capita. However, this is the result of higher employment, longer working days, longer working weeks and fewer holidays, which more than compensate for lower levels of productivity. Work in the US is less efficient, particularly in terms of labour hours used, due to lower average skills and lower capital intensity. As a result, average earned income (wages and salaries) is lower, despite having higher income per capita (and workers working for more of their lives). Pension systems and other aspects of the welfare state contribute to making the economy more productive. Such a tendency is self-reinforcing, as higher productivity will drive increased growth and higher incomes.

3.3 Pensions and early retirement

The period between 1950 and 1990 have seen the average age of retirement fall markedly in OECD countries. The average retirement age for males decreased by more than 6 years from 68.5 in 1950 to 62.2 in 1990. Japan was the only country in which the retirement age increased (Latulippe, 1996). The trend was most pronounced on average in the 1970s, and slower during the 1980s. The fall in total labour participation has been offset by growing female labour participation generally, including among older cohorts.

Feldstein (1974) argued that one mechanism by which public pension systems reduce savings is to encourage reduction of labour supply, particularly among those approaching retirement. An empirical effect of this kind was found by Gruber and Wise (1996, initially 1981). They found retirement 'spikes' at ages that correspond to eligibility for entitlements, particularly the age of earliest available benefits, and the age of maximum available benefits. In the US, 62 is the earliest age at which

participants can claim social security for old age. Gruber and Wise present evidence in relation to the US, France and Germany, that such spikes have appeared when certain design elements that encourage early retirement have been introduced, and disappeared when they have been removed (1996: 18-19).

There is evidence that benefit formulae and eligibility criteria combine to provide low or negative financial incentive for workers approaching retirement age to keep working. This happens when people are excluded from pension benefits if they continue to work, including via means tests, and/or if they get no extra benefits from continuing to work even though they continue to make contributions to the pension system. The marginal benefit from staying in the workforce and in the fund can reduce very quickly and even become negative. These effects are described by neoliberals as an 'implicit tax on labour' (Holzmann et al, 2000, Blöndal and Scarpetta, 1998). These arguments are used in support of radical neoliberal pension reform.

There are a number of reasons why such a radical response might not be appropriate. The first is that early retirement may well be an intended outcome of public pension policy. Strong encouragement for elderly workers to retire was an explicit aim of both unions and employers in calling for public pensions in the UK during the early years of the 20th century. They sought to 'speed the exit' of older workers from the labour market (Macnicol, 1994:76). This goal was again emphasised in the late-1970s and early-1980s in some European countries, such as France. These countries reduced minimum retirement ages during periods of high unemployment in an attempt to reduce labour supply (Clark, 2001b: 1). Encouragement of early retirement is a policy response to a real and difficult economic context. With continuing high unemployment in most developed countries, there is no indication that such effects are on the decline, so this social pressure cannot be expected to disappear.

Second, elements of public PAYGO system design that do encourage early retirement can be easily reformed without affecting the overall replacement rate. Benefits can be moved to an actuarially fair basis in which people are rewarded fairly for continuing to work and make contributions. American Social Security benefit formulae were altered to an actuarially-fair basis in the early 1980s without altering redistribution or overall replacement rates, and a schedule of retirement age increases were slated to begin in the year 2000 (SSA, 2000: 12-13).

Reforms with similar aims were implemented in Australia by the Howard Government in the 1997-1998 Budget. The Deferred Pension Bonus Plan offers individuals reaching pension age a positive incentive to defer retirement. Under the plan, a person who defers pension take-up (and works more than 25 hours per week) receives a tax-exempt bonus payment of 9.4 per cent of the basic pension for each year deferred up to five years (Treasury, 2001: 71). There is no reason why such reforms cannot be implemented in more generous public pension systems. For example, in Sweden, normal retirement age is 61, however, under measures introduced in 1994, people can continue to work longer for higher pension benefits (Diamond, 2000g: 9; Palmer, 2000: 1).

Elements of system design that encourage early retirement are not a rationale for system destruction. System redesign to prevent early retirement would exclude some basic neoliberal reforms, including the means-testing of public benefits. Means-testing prevents workers from engaging in potentially valuable part-time work because it may exclude the worker from benefits. Means-testing also adds significant administrative costs.

Finally, the effect of the retirement income system on the retirement decision can be exaggerated. The trend towards early retirement has occurred in several countries that have had no change in their pension systems, such as New Zealand. Surveys suggest that the retirement decision for some may be involuntary. Burtless and Quinn reviewed US social security surveys which suggest that retirement is most commonly associated with health concerns and redundancy, as it always has been (Burtless and Quinn, 2000 in Grimmond, 2001). Undoubtedly, prejudice among employers has reduced demand for older labour. Researchers have found no rational grounds for 'younger worker preferences', which are obvious among employers. Social mores have a role here: from the employers' perspective, offering early redundancy is the most socially-acceptable method of shedding labour. The fact that labour demand falls with age suggests that reform of pension systems to 'prevent early retirement' may simply punish the victims of prejudice who have increasingly poor access to the labour market.

Average retirement ages also conceal differences among socio-economic groupings. Early retirement is more common among those with lower education levels. Common explanations for this effect include higher pay during later employment for those with

higher education levels, more job satisfaction, and lower physical deterioration from less physical work (Grimmond, 2001: 14). As cohorts with higher education levels, such as the baby-boomers, head towards retirement, it is plausible that these cohorts will have higher retirement ages, and the trend will be reversed.

4 Conclusions

Neoliberals claim that public pensions distort labour markets and do not redistribute wealth. The findings in this chapter contradict this claim. There is a strong inverse relationship between public pension expenditure as a proportion of GDP and the level of elderly poverty, particularly among women. Countries that have lower reliance on public pensions show higher levels of elderly poverty and countries that have encouraged private pensions show increasing levels of elderly inequality.

There is no evidence that reducing levels of public pensions will facilitate greater economic growth due to the removal of distortions in labour markets. High replacement rate public pensions are entirely consistent with high levels of productivity, based on higher investment in training and capital.

Incentives to retire early in the pension system are explicit policy in some countries. If and when policy priorities change, encouragement of early retirement can easily be removed by means of reforms to award benefits on an actuarially fair basis, and by removing work restrictions and means-testing, without reducing the replacement rate of the pension system or removing progressive redistribution.

Chapter 6 Political economy

Averting's diagnosis, in a nutshell, was that pillar 1 systems, funded or unfunded, were fatally flawed from a political economy point of view. The temptation to shift costs to future generations could easily be irresistible, especially in less developed political systems which are typical in Bank client countries. Low savings, systemic deficits and crises were therefore postulated to be an inevitable outcome of this model. In addition, even if politicians were well-behaved, and adequate funding for demographic shocks was created, public sector management of these reserves had a poor record compared with private sector management, and anyway, private sector management improved financial sector development, increasingly recognized as an important element in overall economic growth. Finally, the poor design and credibility problems of 'solidarity' systems distorted labor market choices, reducing formal sector demand for labor, and thus creating unemployment and inefficient informal markets. (Palmer and Fox, 1999: 3-4)

1 Introduction

This recent World Bank paper summarises and reaffirms the position on public pension administration promoted in *Averting the Old Age Crisis* (World Bank, 1994). The Bank raises two issues relating specifically to the interaction between the state and public pension systems. First, political pressure on leaders encourages them to make offers of generous pensions which may only be feasible in the short term. Winners and losers from pension system transfers are constituents who may be appealed to in democratic elections. Fox and Palmer describe politicians succumbing to this 'irresistible temptation' as 'shifting costs to future generations...leading inevitably to low savings, systemic deficits and crises'.

Second, the public pension system cannot, ultimately, be quarantined from other state finances. According to the Bank, pension reserves can and will be ransacked.

One of the main conclusions of *Averting* was that while advance funding is highly desirable, there is considerable political risk involved in public administration of pension funds. ... The risks involve everything from restricting investments and investment returns to fund confiscation to meet political ends. To mitigate these risks, individual account systems, privately managed, were recommended. (Fox and Palmer, 1999: 23)

There is no point disputing the existence of these risks. Any financial system carries the risk of appropriation and mismanagement. And the long-term interests of any nation – democratic and otherwise – can be undermined by short-term populist policy. However, in this chapter I argue that public pension crisis due to political interference is not inevitable, or necessarily likely. A brief global survey of public pension systems shows both that pension crises in most cases have other causes, notably large-scale political and economic collapse, and that there are many examples of sustainable and anticipatory public management.

I also contest the assertion that neoliberal reform is an effective solution to these risks. A review of private pension systems demonstrates that they suffer identical or greater risks: private pension systems have winners and losers who influence policy; and private pension assets are also subject to misappropriation and cannot be quarantined from fiscal, economic and political crisis.

2 Public pension system crisis

Promoters of neoliberal reform have conducted a long-term campaign to characterise public pension systems as *inherently* and *inevitably* susceptible to crisis. According to the World Bank and others, political leaders either promise too much (especially important in the context of demographic change), direct public pension reserves into non-performing investments, or undermine system finances by diverting pension funding for other purposes. Populations prefer lower contributions and seek to avoid making contributions by under-declaring income, using tax havens and joining informal labour markets. Elements of this characterisation – particularly in relation to the negative impact of demographic change – have been taken up by the media in developed countries. Many voters no longer have faith in public pensions; expecting zero or reduced benefits at retirement (Lam et al, 1997: 108; Boeri et al, 2001: 4). This voter perception is an important aspect of support for private pensions.

An international review of public pension systems suggests alternative conclusions. System failure in most cases is related to political and economic crisis, in some cases brought about by radical neoliberal economic policy. Demography adds fiscal pressure to systems in developed countries, but is not a factor in system crisis in developing countries. Many public systems demonstrate a capacity to manage pension liabilities and assets in the long-term, including periodic alterations to policy.

2.1 Chile and Latin America

As discussed in chapter 1, above, the experience of Chile is notable for a number of reasons. Chile was the first country to embark on a compulsory private funded pension scheme, and the reform was implemented under the Pinochet dictatorship, with policy input from the IMF. The Chilean reform began a domino effect in Latin America, where Peru (1992), Colombia (1993), Argentina (1993), Uruguay (1995), Mexico (1995-1996), Bolivia (1997) and El Salvador (1998) have implemented private pension systems and Nicaragua and Venezuela are both likely to implement such a system (Turner, 2001: 18). Reform is also underway in Brazil, the largest regional economy (Stuart, 2000). Elements of the Chilean reform were reproduced in the transition economies of Eastern Europe and Central Asia, also with guidance and encouragement from international financial institutions.

In Chile, the replacement of the public system with a compulsory private system took place in 1980. Pension reform was part of a suite of neoliberal reform which included trade liberalisation, capital market liberalisation, privatisation, labour market liberalisation and reduced government spending (Acuna and Iglesias, 2001: 21).

The traditional neoliberal narrative holds that pension systems in Latin America failed due to insolvency caused by 'political resistance to change to systems'. Brooks and James lament:

It has become apparent that many policies that we recommend at the [World] Bank for technical economic reasons have not been implemented for political reasons. (Brooks and James, 1999)

The standard narrative blames crisis on insufficient contributions caused by demographic issues, overly generous benefits and low retirement ages, and narrow coverage. In this vein, Aiyer suggests that:

While not every country has the same degree of problems with regard to contributions, benefits and coverage, the preponderance of these concerns suggests that these problems are inherent in pay-as-you-go, defined benefit plans (1997: 3).

Barrientos' study (1998) of Latin American pension reform provides a more detailed analysis. He notes some traditional neoliberal concerns, including a structural weakness in Latin American public pension systems that allowed full benefits to be earned with very few years of contributions. However, his research suggests these issues were not the main cause of crisis. In Chile between 1960 and 1980, there was a

sharp deterioration in the system support ratio³⁸ - the ratio of active to passive members - from 10.8 to 2.2 - requiring a five-fold increase in worker contributions. This change was not due to demographic influences but instead due to a set of policies intended to undermine and bankrupt welfare provision. These included economic policies which encouraged the growth of informal labour markets, and industrial relations policy which gave employers freedom from administrative and legal constraints.

Important elements of the Junta's economic policy undermined formal labour markets. Privatisation, reduced government spending and trade liberalisation all reduced the scope of formal labour markets, and therefore the numbers of contributors to the public system. Government business enterprises, the bureaucracy and the manufacturing industry were all formal labour markets, featuring high union membership and pension participation (Barrientos, 1998: 20, 22). The decrease in employment in each area was a double blow to the pension system, which lost high paid contributors but gained more beneficiaries in the form of the unemployed, early retirees and an increased number of disability pension claimants. New areas of economic activity encouraged by trade liberalisation, particularly mining and agriculture, were informal labour markets outside the existing and new pension arrangements (Barrientos, 1998: 23).

In the industrial relations area, although labour protection laws were not removed until 1979, employers had an effective *carte blanche*. The regime had leaders of the political and union opposition imprisoned, tortured and assassinated, with the effect that the existing labour laws were rendered meaningless (Barrientos, 1998: 22-23). Among other deteriorating conditions, employers were able to avoid making social security contributions on behalf of employees.

By 1980, the situation was untenable and opportune for reformist elements within Chile which, under direction from the Junta, had been working since 1974 on the design of a new private pension system based on personal accounts (Acuna and Iglesias, 2001: 19).

³⁸ The reciprocal of the system dependency ratio.

Similar effects were wrought on the public pension systems of other Latin American countries during the economic crisis and debt spirals of the 1980s and 1990s.

According to Barrientos, across Latin America economic conditions had a stronger impact than demographic factors, demonstrated by the fact that crisis occurred in countries without any demographic pressure (Argentina has a relatively old population) (1998: 24).

Neoliberals suggest high contributions associated with public pensions encourage labour to 'escape to informal labour markets' (World Bank, 1994: 122), but the Chilean case suggests another causality: reactionary governments intentionally encouraged the development of informal labour markets, undermining social welfare including pensions.

2.2 The Transition Economies

World Bank reports on Eastern European and Central Asian transition economies describe the hopeless situation of public pension systems in those countries by the mid-1990s. In Hungary, for example, the health and pension budgets were both financed by payroll taxes, which were up to 7-8 per cent of GDP, and 40 per cent of labour costs (i.e. 80 per cent of wages) by the early 1990s (Palacios and Rocha, 1997: 1). This fiscal pressure precipitated action by the Bank to encourage³⁹ a series of countries, including Poland, Hungary and Kazakhstan, to adopt private funded systems.

The Bank does not discuss the contribution made to fiscal pressure by the abrupt transfer of ownership and restructure of public enterprises combined with trade liberalisation. Transition reforms from 1990 onwards in Hungary caused a massive increase in unemployment. As unemployment benefits did not exist (they were not required in the former communist countries due to the full employment policy), many of the newly unemployed entered involuntary early retirement and began claiming disability pensions. The Bank describes this trend as an 'abuse' of the pension system (Palacios and Rocha, 1997: 5).

³⁹ Methods employed by the Bank and other IFIs in developing and transition companies on behalf of the neoliberal political agenda and foreign business interests are discussed in Section 4.

Events followed a similar pattern in Poland:

Difficulties appeared in assuring the financial sustainability of the Social Insurance Fund (FUS). As a result, the social insurance contribution rate grew quickly from 25% in 1981 to 38% during 1987-1989 up to the present level of 45%. The crisis was caused by the simultaneous occurrence of a sudden increase in the number of new pensioners, especially in 1991, with effects in later years including a decrease in the number of contributors as a result of a decline in employment, and a distinct growth in the real value of pensions compared to real compensation. As a result, the consolidated state budget became more burdened with disability pensions and other benefit costs. (OGSPPR, 1997: 4)

The importance of precedents in other countries, such as Chile, is obvious in documents describing the Kazakhstan reform:

Although the analysis of future benefits was far from thorough, the general optimism about future economic growth and high rates of return, in light of the Chilean experience, led Kazakhstan policymakers to discontinue the PAYGO system while maintaining rights accrued before January 1, 1998. (Andrews, 2000: i)

The summary of conditions in Kazakhstan before the reform suggest institutional and general economic weakness, rather than demographic or political failure.

Kazakhstan, a country with favorable demographics for a pay-as-you-go pension scheme, had a high system dependency burden and correspondingly high payroll taxes due to ineffective collection procedures and early retirement ages. Essentially, the growth of the informal sector and the development of wage arrears led to a relatively small tax base relative to the actual labor share of income in the economy. (Andrews, 2000: 4)

A group of reformers with backgrounds in finance implemented the radical reform that included closing the public pension system, privatisation of state assets, implementation of compulsory private pensions and attempts to rapidly boost capital market capitalisation.

In summary, pension system crisis in Latin America and the transition economies resulted from economic turmoil related to structural change, the impact of which was worsened by neoliberal economic policy. These examples do not suggest that public pensions are inherently and inevitably flawed.

2.3 Africa

The World Bank uses examples of pension systems in Africa to illustrate its critique of public pension systems. *Averting* describes how the Zambian public provident fund lost 23 per cent of assets invested in public securities in one year, and half of the value of contributions were wasted on administration during the 1980s (World Bank, 1994: 2). Many of the former British colonies in Africa and Asia had provident funds, the most successful and longest-lasting of which are the Singaporean and Malay systems. The provident fund is a form of public pension system which is funded and holds personal accounts unlike European and American PAYGO social insurance. Several of these systems in Africa were converted to PAYGO systems due to very low or negative returns, including those in The Seychelles (late-1970s), Ghana (1991), Nigeria (1994) and Tanzania and Gabon (1997), with proposals under consideration in Kenya and Uganda (Turner, 2001: 9-10). Assets in these systems appear to have been eroded by inflation, poor investment or misappropriation.

It is unclear exactly what crisis in these (mostly sub-Saharan) African pension systems proves. Many of the countries with systems in crisis have underdeveloped physical and social infrastructure, which are essential prerequisites for effective centralised collection, payment and administration. A pension system is not possible without modern transport and communication systems. Coverage is less than 10 per cent in most African countries, with no systems at all until very recently in Botswana, Lesotho, Malawi, Namibia, Swaziland and Zimbabwe (Turner, 2001: 10). Internal and external conflict has wrecked havoc in the economies of Eritrea, Ethiopia, Democratic Republic of the Congo, Lesotho, Sierra Leone, Somalia and Liberia, and HIV/AIDS has reduced life expectancy by more than a decade throughout sub-Saharan Africa, particularly decimating working age populations (Turner, 2001: 10).

Economic growth has been anaemic in much of the region during its recent history. The background of economic and political conflict hardly provides a controlled test of the effectiveness of public pension systems. Social insurance, like other forms of insurance, offers only limited protection against systemic collapse.

Elsewhere on the African continent, public pension systems have proven effective in providing near universal coverage and reducing elderly poverty. ILO researcher Mohamed Chaabane found that in Tunisia, the social security system covers more

than 80 per cent of the employed population, with successes in the last ten years including inclusion of more than 50 per cent of the self-employed (Chaabane, 2002: 11).

Mauritius, while arguably having unique characteristics as an island state, is another African nation with a successful, universal, non-contributory (i.e. funded out of general revenue) public pension system. The pension in Mauritius has been universal since means tests were removed in 1958. As Larry Willmore concludes:

Mauritius demonstrates clearly that basic pensions for all are not only theoretically desirable; they are also affordable and politically feasible in a developing country (Willmore, 2003: 19).

2.4 South-East Asia

The provident funds of South East Asia have been relatively successful. There are provident funds in Singapore, Malaysia, Indonesia, The Philippines and Thailand. The level of success appears to be a function of political stability, population structure (higher density is better) and effective physical and social infrastructure. Coverage in 1996 was 90 per cent of resident workers in Singapore, more than 50 per cent of resident workers in Malaysia, and around 70 per cent of the labour force in the Philippines. In Indonesia, at best 20 per cent of the workforce is covered (Asher, Undated).

Contributions are very high in Singapore, at 40 per cent of income (reduced to 30 per cent during the Asian currency crisis of 1997). The provident funds are not necessarily just retirement income systems. Though originally intended for this purpose, members are allowed to access most of their funds before this date to fund housing purchase, pay for medical and educational expenses, and in periods of financial hardship such as unemployment. It is typical, despite the high contributions, for members to reach retirement with little available capital (Asher, 1999: 26). However, most people own their own homes (often subsidised housing) at retirement, which is a significant achievement for an Asian country with an extreme land shortage. This, in itself, has a significant impact on elderly poverty.

Some researchers have been critical of the Singaporean provident fund for a lack of transparency and excessive regulation of fund investment. In 1998, fund investment was partially liberalised, though it is too early to evaluate these policies. It has been suggested that due to a lack of data on fund earnings, it is possible that the

government may be appropriating fund profits (Asher, 1999: 19). It is certainly reasonable to suggest that a more transparent administrative structure would assist in evaluation of the provident fund.

2.5 OECD countries

A detailed survey of the public pension systems of OECD countries is not possible here; however only a brief summary is necessary to illustrate the weakness of the assertion that public pensions inevitably tend toward crisis. In particular, it is evident in the responses of governments in developed countries that:

- governments *can* reform in anticipation of changing financial needs;
- a range of reform options are available to governments; and
- there is strong political support for pension systems, including in countries with very high contribution levels.

In an effort to impress the need for the reform of generous public pension systems upon the policy and general community, neoliberals describe pension liabilities as 'implicit government debt'. Governments with generous public PAYGO systems carry financial obligations associated with those systems which may be several times explicit government debt (Holzmann et al, 2000). However, as discussed in chapter 2, Diamond (2000c) argues persuasively that explicit and implicit debt are not comparable. Public PAYGO pension system benefits are not fixed liabilities but negotiable and conditional upon governments', and the community's, ability to pay.

Governments can and do reduce benefits when necessitated by demographic or economic circumstances. Turner (2001: 25-6) lists ten methods by which OECD governments have reduced benefits in the last 15 years:

- introducing an actuarially adjusted calculation of early retirement benefits (eg. US, Australia);
- raising the retirement age of women (lower in many countries) to match that of men (eg. Germany, Australia);
- raising the early or normal retirement age of both men and women (Germany);

- increasing the number of years used to calculate benefits, which tends to include years from earlier in working life at lower levels of pay, and increases the chance of inclusion of some period of unemployment, (Italy – the period was increased from the last 5 years to lifetime earnings);
- changing indexing to prices rather than wages (eg. UK);
- changing accrual benefit formulae (Japan);
- lowering survivor's benefits calculations (The Netherlands);
- basing accruals on net wages rather than gross wages (Germany);
- basing indexing on net wages rather than gross wages (Germany - indexing will be lower due to anticipated rises in social security contributions); and
- introduction of means tests and other mechanisms to reduce eligibility (eg. Australia).

Governments clearly have and exercise the capacity to reduce benefits if this is necessary. Incremental reform is possible and desirable, given the demonstrated value of public pensions in reducing elderly poverty.

Neoliberals assert powerful and growing voter discontent in relation to social security, and have conducted extensive polling on the issue. The level of resentment is seen as a driver of evasion and political resistance to contributions, which undermines welfare systems.

Boeri, Börsch-Supan and Tabellini (2001) conducted a major study in Europe to document increasing opposition to high social contributions associated with the cradle-to-grave welfare state. To the authors' surprise, however, the high replacement rate welfare states of Europe enjoy majority political support in all countries (2001: 10). Voters are aware of the benefits of high replacement rate pension systems as well as the costs. Critical views concerning welfare state provisions, and support for radical reform, is highest in Italy. Arguably, Italy is a special case by Western European standards. Its welfare system lacks traditional elements such as unemployment benefits, there are widely-held perceptions of a corrupt and inefficient bureaucracy, and socio-economic differences between the North and South fuel resentment over social transfers. Even in Italy, however, the group of dissatisfied voters is in the minority.

Despite widespread promotion of the idea of social security crisis in the US, Marmor and Mashaw report similar findings in that country: American opinion polling shows strong support for social insurance (Marmor and Mashaw, 1998: 5). Concerns that government might undermine social security in the US are real, but these are not related to the irresistible temptation faced by populist politicians to woo voters with unsustainable pension policies. Economists such as Paul Krugman regard current US tax policy as self-evidently designed to sabotage government revenue balance in order to cause a ‘fiscal train-wreck’ that will necessitate the dismantling of social security and other key social programs (Krugman, 27/5/2003).

The financial sustainability of public pensions is considered in more detail in the next chapter.

2.6 Summary

The neoliberal suggestion that public pensions inevitably lead to crisis appears unfounded. Examples of system crisis appear to have causes other than policy paralysis caused by political economy. In the case of several African countries, particularly in the sub-Saharan, causes for crisis include ineffective institutional apparatus, economic and political collapse and war. In Chile, as in much of Latin America, and potentially in the US, economic policy contributed directly to a collapse in social security system revenue, making the systems unsustainable.

Examples of effective, universal or near universal pension coverage of a variety of kinds – such as the non-contributory Mauritian system, the Provident funds of South East Asia and the contributory system of Tunisia – indicate that public pensions do not inevitably fall into crisis. In the developed world, in which demographic change will soon have an impact on system finances, governments have been able to incrementally reform systems, without the need for radical neoliberal reform.

3 Insulation of private pensions from government

Government decision-makers are perceived by neoliberals as having a detrimental impact on pension fund investment. Mitchell and Piggott describe the risks of...

...the practice known in Australia as “directed” and in the US as “economically targeted” investment (ETI). The concern behind the ETI issue is that public pension managers may be investing assets using political criteria rather than risk and return, a

problematic outcome if such investments perform poorly.
(Mitchell and Piggott, 2000: 8)

The neoliberal solution is to implement private funded systems.

Private management of the funds allows the funds to be separated from the political process so that the funds are managed for the retiree's best interest rather than being forced to fulfil other political objectives (Schwarz and Demirguc-Kunt, 1999: 6).

The neoliberal position is that private funded pension systems are not headed by politicians, and management does not report to politicians. Fund investment and administration is in the hands of finance professionals, who, with appropriate incentive structures and a suitable regulatory environment, will make investments in the fiduciary interest of the beneficiaries. It is hoped that the pension system is outside the influence of politicians, and should not be affected by state fiscal crisis (and also that the state cannot be compromised by pension system failure). Funds invested according to risk management principles should provide members with appropriate risk-return.

However, the notion that the pension system can be quarantined from political influence or systemic crisis is unrealistic. Any state-sanctioned pension system has been created by government, and policies can be withdrawn or amended at any time. Moreover, a private pension system is not independent of the domestic or global economy. Economic and political turmoil will undermine the capacity of a private pension fund to provide retirement income, as severely or more so than a public pension fund. In cases of extreme fiscal pressure, private pension assets are a relatively accessible form of financial value for use by a government.

Neoliberal faith in private sector managers is misplaced. Private pension funds periodically fail, creating a moral and practical dilemma. Either members must be left out of pocket or the state must assume financial responsibility. In either case, the objective of providing retirement income without government support is not met. State-sanctioned pension systems, particularly compulsory systems, have a political obligation to provide compensation. In voluntary systems, such as in the US, compensation is not paid.

3.1 Private pension system reform

Private funded pension systems are implemented by governments through concessional taxation and/or mandated contributions. More generally, pension systems exist in a regulatory framework provided and enforced by the state. As was discussed in chapter 3, there are a number of approaches to provision of a regulatory framework. Pension funds may have restrictions on investment, such as limits on exposure to certain assets, or foreign holdings.

Neoliberals favour a laissez-faire or 'prudent man' philosophy, which has a reduced emphasis on explicit regulations related to investment and returns. However, even the 'prudent man' approach requires regulations that deal with licensing, governance, communications, administration, conflict resolution, and, in the UK (for 'stakeholder' pensions) the fee basis.

Political machinations aside, it is implausible and undesirable that a regulatory environment should be designed once and then never be altered. It is necessary that pension system design be flexible, and may be altered in response to either technical, organisational or external developments (such as changing economic conditions or state development). An example of a driver of system redesign is European unification, which may lead to the standardisation of private pension regulations throughout the EU (Tillotson, 2000).

The political objectives of different governments may also be expected to have an impact on system design. The Australian superannuation system has had many major regulatory changes since 1985.⁴⁰ Several of these changes have involved system fundamentals, such as coverage, tax treatment and contribution levels. It is with regard to this history that Bateman and Piggott observe that the independence of private pension systems from the political system is an impossibility:

... while Superannuation Guarantee accumulations rest in the private sector, and are therefore not part of the government budgetary process, they are not completely insulated from political risk. It is open to any government to increase tax rates on accumulations and/or benefits – as was the case with the introduction of the superannuation surcharge – or to make

⁴⁰ For a history see Treasury, 2001 or Rothman, 2000.

detrimental changes to the regulatory environment. (Bateman and Piggott, 2001: 19)

In the US, reforms planned by Bush are intended to enable private pension funds to restructure defined benefit pensions. This will reduce employers' exposure to investment risk and reduce member benefits (Walsh, 13/1/2002). The plans have been represented as being a necessary and pragmatic response to current financial conditions to avoid potentially widespread corporate failures. This reform represents a unilateral recasting of liabilities impossible in other areas of the financial system. Pension assets, whether public or private, are not equivalent to other financial assets. Far from being insulated from political decisions, private pensions are, like other areas of policy, subject to review and alteration by government.

3.2 Economic and political crisis

The lack of insulation of private pension systems from government is most visible in extreme economic and political conditions. This has been demonstrated by the Argentinean economic crisis of 2001.

The Argentinean crisis represents a failure in economic policy. In 1990, the Argentinean peso was pegged to the US dollar to stem hyper-inflation. The policy required the acquisition of foreign currency reserves to maintain the peg which necessitated borrowing and diverted government spending from other areas. The policy did not anticipate the rapid appreciation of the US dollar against other Latin American currencies, which made Argentinean exports (a major focus of other neoliberal economic reforms such as trade liberalisation) relatively uncompetitive. The policy suppressed economic growth, achieving low inflation at the expense of high unemployment. Maintaining the peg also required interest rates of up to 20 per cent, which inflated public borrowing to 9 per cent of GDP (Stiglitz, 10/1/2002).

Tax revenue fell due to further economic stagnation, and the government became dependent on emergency loans from the IMF. In December 2001 the IMF refused to extend further credit, and the government was left unable to pay bills, including salaries (Rohter, 26/2/2002). Soon after, the government took control of \$US 3.5 billion in private pension funds (Catan and Lapper, 7/12/2001). This appropriation followed a year of near compulsory diversion of pension fund and bank capital flows to finance government debt. The *Financial Times* reported that an IMF spokesman

said that actions taken by the Argentinean government were "'regrettable", but that few alternatives were available'.

The Argentinean collapse demonstrates that a state under pressure to meet urgent financial needs can and will appropriate funds accumulated by private pension systems. Quarantine of private pension funds from the state is ineffective.

More general conclusions can be drawn about the usefulness of private funded pension systems in developing countries. In many very poor countries, social security coverage is a profound problem, with coverage levels below 50 per cent in many developing countries and below 10 per cent in many extremely poor African countries (Turner, 2001). However, lack of coverage caused by small formal labour markets and inadequate communications and transport infrastructure cannot be addressed via implementation of private funded pensions. As the ILO recognise,

both funded and PAYG pension systems are faced with largely the same problem with regard to the extension of coverage, i.e. the fact that in many countries a large, and often growing, part of the labour force works in the informal economy (Ginneken, 2003: 38).

The major difference between the two types of system is not the level of vulnerability to economic or political crisis, nor in overcoming institutional obstacles; it is simply that in private systems the state avoids making a direct moral obligation to provide income for all elderly people.

3.3 Implied public responsibility for private pensions

Private pension systems are based on a principle of self-provision, and therefore enable the government to avoid general obligations of retirement income support. However, private pension systems are supported and/or enforced by government policy, so that financial obligations created in these systems (earned by those who save in these systems) remain morally tied to government.

The link is particularly clear in systems with mandatory contributions, and in 'opt-out'-style reforms such as in the UK, where individuals can replace their public pension rights with private pension rights. By participating in design, implementation and regulation of the system, the system is connected with government from a practical perspective, and in the perceptions of voters.

Chile is held up as an example of successful social security privatisation; however, returns in the Chilean system were propped up by the very high price paid by the government for loans from the pension funds, and by subsidies to save it from financial crisis during the period 1983-84 (Fox and Palmer, 2001: 10).

Most OECD countries have public compensation systems in case of private occupational pension system failure. Australia is an exception, though plans are under review to implement such a system (O'Loughlin, 9/9/2002). The design of such systems is oriented towards provision of compensation necessitated by a specific plan failure, caused by negligence or fraud in investment or administration. Large scale private pension failures, however, are potentially disastrous for government in both political and fiscal terms.

The largest such failure in an OECD country to date is the UK 'mis-selling' scandal, which involved individuals being convinced to opt-out of the public system against their interests. By 1998, 645,000 cases of potential mis-selling had been identified, of which 255,000 have been settled. Compensation, paid for by Government, totalled £UK 1.2 billion by 1998 (Whitehouse, 1998: 27).

In the US, a system with 'voluntary'⁴¹ employment-based private pensions, there appears to be no public compensation available for private pension system failures. As was discussed in chapter 3, pensions are currently a serious issue in a number of bankruptcy proceedings involving major corporations in the US. Millions of American workers consequently face simultaneous loss of employment and retirement benefits.

3.4 Summary

Neoliberals suggest that private pensions, unlike public pensions, are not vulnerable to political intervention or fiscal or economic crisis. However, private pension systems are subject to government policy, and there are examples of fundamental reform to private pensions with profound effects on fund members. Private pension systems cannot be quarantined from economic or state fiscal crisis, as the recent Argentinean

⁴¹ Contribution to company pension plans is a condition of employment in many large firms.

case demonstrates. Periodic failure of private pensions leaves members without benefits, or dependent on the state for compensation.

4 Private pensions - private interests

The neoliberal pension reform literature suggests that public pension systems are hopelessly embroiled in political subterfuge whereas private pension systems are free from vested interests. The reality is that the implementation and operation of private funded pension systems advances the interests of certain groups.

The previous chapters have illustrated that the economic and social benefits for the community as a whole are doubtful. However, the economic benefits for select groups are material. One to two percent of system assets are spent on administration every year. In the Australian system, this represents around \$A 7 billion annually. This is the prime source of revenue for a range of lucrative, price-insensitive businesses. A larger amount (currently around \$A 9-10 billion annually in Australia) is foregone in tax as a result of private pension tax concessions. This provides a benefit for income earners, though the benefit is not distributed evenly. The advantaged groups include:

- The funds management industry and interests associated with it, including:
 - fund managers, brokers, lawyers, actuaries, asset consultants, merchant banks and IT consultants;
 - consultants who advise governments on pension reform and related reforms including privatisation;
 - the investment fund sales industry including marketers and advertisers, insurance and pension sales people, and financial planners;
 - trustees and administrators, including former and current union representatives; and
 - banks (also fund managers) and non-bank financial institutions which benefit from an additional source of funds and the increase in financial assets as a proportion of total assets (housing equity is reduced and housing debt is increased with the growth of private pensions).
- Higher income earners and wealth holders:

- who can contribute less or nothing to redistributive public schemes when they are reduced.
- who benefit disproportionately from regressive tax breaks on earned and property income; and
- have seen the value of the stock market driven up during the 20 year bull run.

4.1 Direct lobbying

Merchant banks, life insurance companies and brokers are keenly aware of the benefits for their industries associated with private pension schemes and of the sensitive politics involved.

In the US, the financial community has provided dedicated funding for research and lobbying on social security privatisation in organisations such as the Cato Institute and the Heritage Foundation, which has been instrumental in the plans to privatise social security (Dreyfuss, 21/1/1999) discussed first by the Clinton Administration, and now the Bush Administration.

In Australia, there is a long history of merchant banks and life insurance companies' involvement in research and lobbying. The development of national contributory social security was prevented by, among other obstacles, the sustained opposition of the life insurance industry and friendly societies from the 1920s on (Kewley, 1965: 140).

More recently, in relation to the current funded system, the initial modelling in the 1980s on the impact of superannuation on saving in the Australian economy was performed by National Mutual, and then transferred to the Treasury's RIM Taskforce (Gallagher and Preston, 1993: 10). Currently, a major suite of research activity into future budgetary pressures related to the aging process is being directly funded by AMP (AMP-NATSEM, 2002). The researcher's press release received front page coverage in *The Sydney Morning Herald*, without mention of the direct financial interests of the backers of the research (SMH, 21/5/2002a).

The ABA (Australian Banking Association) and the CPA (Certified Practicing Accountants) have both financed major submissions to government during financial year 2002. The submissions focus not on the needs of industry providers, but on the needs of retirement savers. Both groups find retirement saving at current levels is

inadequate (SMH, 21/5/2002b, CPA, 2002). Recommendations include new employee contributions and government contributions to match employer contributions, and further reduction of taxes, particularly the super surcharge, which reduces tax incentives for high income earners. The superannuation providers' industry association, ASFA, similarly recommends that the government provide direct contributions to personal accounts and that tax be reduced on superannuation.

The role of financial communities in the promotion of neoliberal pension reform is globalised. Many large financial and business service providers, fund managers and banks are global operators. These institutions fund research promoting NPR, including that of Jan Mantel (2000; 2001) and David Miles (1998; 1999), both of whom work for Merrill Lynch. As discussed in chapter 4, Merrill Lynch recently settled a suit in New York involving fraud during the late 1990s.

American merchant banks were involved in promotion of neoliberal reform in Europe during the late 1990s for strategic reasons, when the US pension market was perceived as relatively saturated. These operators were closely involved in negotiations over the first private pension tax concessions offered in the German reform of 2001. A major conference featured 'wild guessing as to the value of the market' to be created by the reforms which channelled a portion of pension contributions to private funds (Nöcker, 2001: 3).

In Sweden, the government and insurance industry shared the view that funded pensions were required. However, as Edward Palmer writes:

There was less of a consensus from the outset on the organization of insurance provision. Needless to say, the insurance market promoted the idea of competitive insurance providers, while politicians across party lines favored the idea of a single (state) monopoly provider. (Palmer, 2000: 32)

In both Sweden and Finland, life insurance companies entered fierce negotiations with government (including legal action) over pricing regimes for funded pensions (IPE, 1998).

Direct support for the neoliberal pension policy, and ongoing lobbying to encourage expansion and advantageous restructure is a current feature to be expected by institutions who gain direct benefit from its implementation.

4.2 IFI policy encouragement

Radical neoliberal pension policy was first implemented by the Pinochet dictatorship in Chile during the 1970s and early 1980s with input from American economists under the auspices of the IMF. Since that time, neoliberal pension reform has been implemented in many developing and transition countries with support and guidance from the IFIs. The IFIs in some cases offer direct assistance by seconding advisers to client governments. The IFIs also produce much literature on pension reform, dealing with technical issues and tactical advice on ‘political economy’; that is, methods of selling the reform to the public. The IFIs also offer short courses and workshops for politicians and bureaucrats.

The IFIs are also capable of exerting pressure on the governments of these countries. Countries in dire economic circumstances need external funding, and therefore the support of international financial markets. World Bank and IMF finance, while often not in itself sufficient to fund nation rebuilding, represents a stamp of creditworthiness which is a necessary condition to access private sector funding from the developed world. The IFIs hold effective monopoly rights over overseas capital, offering powerful leverage over economic policy.

The structure of the relationship between the IMF and client states is outlined in the overview of the role of the IMF:

In both its regular and concessional lending operations, financing is provided primarily under “arrangements” with the IMF, which are similar to lines of credit. For the large majority of IMF lending, use of these lines of credit is conditional upon the achievement of economic stabilization and structural reform objectives agreed between the borrowing member and the IMF. The IMF can also create international reserve assets by allocating SDRs to members, which can be used to obtain foreign exchange from other members. Use of SDRs is unconditional, although a market based interest rate is charged. (IMF, 2002: 8)

Robert Holzmann, Director of Social Programs at the Bank, describes the relationship between the Bank's funding roles and its interest in economic policy in more pointed terms:

In general, the Bank's involvement comes in two contexts: (i) structural adjustment lending, where the large influence of pensions on a country's fiscal, financial and economic life cannot be ignored, and (ii) investment lending directed to helping

countries modernize government operations in revenue collection, payment services and regulatory supervision. *Understandably, the Bank prefers to do its lending to governments pursuing economic and social policies that are not self-defeating.* (Holzmann, 1999: 3 [Italics added])

The notion that non-approved economic policies are 'self-defeating' is interesting given how ineffective IFI advice has been in the past. IMF economic policy was a major cause of the 2001/2002 Argentinean economic crisis and amplified the 1997 Asian currency crisis which IMF policy amplified (Stiglitz, 10/1/2002). IFI economic advice has also turned 180 degrees in the last decade on some major issues, such as whether it is most appropriate to float, peg or abandon a national currency.

Application of orthodox economic policy by economists at the IMF and World Bank have had devastating consequences for ordinary people in developing countries, as in Mexico following the implementation of the NAFTA agreement (Blecker, 1996).

Nonetheless, for developing countries, lending from the IMF is contingent upon adoption of a program of trade liberalisation, privatisation and, in many cases, implementation of a neoliberal pension system. Specific social and economic policies are conditions of the loan agreements entered into by the developing nation. The process of negotiation over loan agreement wording in relation to the 1997 pension reform in Hungary is discussed in a SAPRI (Structural Adjustment Participatory Review Initiative) document (SAPRI, 1999: 8). SAPRI is a joint effort of the World Bank and national NGOs "to improve the understanding of the impact of adjustment policies and to seek ways of incorporating the participation of civil society in future policy formulation" (SAPRI, 1999: 1).

The notion that policies other than those approved by the World Bank are 'self-defeating' was not shared by all involved in the design of the new pension system in Hungary. Critics regarded the Bank "as an advocate of radical market-based reforms without 'social sensitivity'" (SAPRI, 1999: 8).

The Hungarian reform, in which the public PAYGO system is maintained in reduced form in parallel with a new mandatory private contributory system, was far less radical than some in other former communist states. In Kazakhstan, the public pension system was entirely replaced with a private funded system, as the local free-market authors of the reform believed an incremental approach would be stymied by opponents of reform.

To generate public support and quell political opposition, the reformers won \$US 1.7 million in funding from USAID to conduct market research and create promotional material, which included 600,000 leaflets and a number of custom-designed episodes of the nation's favourite sitcom *Perekrestok* (Crossroads) (Andrews, 2000: 3). It is inconceivable that organisations that oppose neoliberal reforms would have matching resources to effectively present a competing perspective to the Kazakhstan population. Neoliberal pension reform was implemented first by a totalitarian regime as a solution to a failed public pension system that it had previously undermined. IMF economists worked with this regime to implement the pension reform, along with an extensive program of privatisation and trade liberalisation. The IFIs have subsequently worked with many countries in more democratic settings to implement funded pension systems. It is questionable whether the commitment of these governments to neoliberal reform is a democratic expression of political will. The IFIs have effective monopoly control over foreign finance, and use conditional loan agreements to ensure that the governments adhere to programs of neoliberal economic policy, including implementation of private pension systems. Some methods used to win public support for these changes have been highly insidious.

5 Conclusions

An important branch of arguments raised by the World Bank in support of neoliberal pension reform relate to political economy. It is claimed that public involvement in pension administration leads inevitably to crisis because politicians cannot resist the temptation to implement unsustainable policy in exchange for short-term political gain. Private administration supposedly ensures pensions are managed exclusively in members' interests by quarantining benefits from the political process. Private pensions are purportedly also protected from state financial crisis, and, reciprocally, should not compromise state finances due to demographic change or other shocks. The impact on the political process of potential gains to groups advantaged by private pensions are not discussed by the World Bank.

A brief international review of public pensions suggests that instances of crisis are caused primarily by political and economic collapse. There is no evidence that the political economy of pensions inherently and inevitably causes crisis. Public systems

in both developed and developing countries can be well managed and sustainable, and exhibit the capacity for incremental reform.

The notion that private pension systems may be quarantined either from government policy or fiscal crisis is absurd. Pension systems – public and private – are brought into being by government and may be rapidly, radically and retrospectively changed with potentially dramatic effects for system members. Private pensions are within reach of government if emergency funding is required, as the Argentinean crisis demonstrates.

The implementation and administration of private pension systems directly advantage certain groups, particularly those associated with financial markets, who lobby aggressively to have systems structured in their favour. The IFIs are directly involved in pension policy formulation in many developing countries, often using their control over foreign finance as leverage to ensure that their advice is heeded.

Chapter 7 Demography and fiscal sustainability

To some degree the clash between individualistic and collective visions of fairness frames the debate about universalism in the right terms. We believe that the social, political and economic arguments for universalism are persuasive. And, opinion polling concerning support for social insurance suggests that most Americans agree.

The attack on social insurance has therefore often taken a different form. It has not confronted issues of fairness, uninsurable risks and market failures directly. It has instead asserted the unaffordability or ungovernability of the social insurance programs that we currently have. Without confronting the issue of desirability directly, we have been urged to believe that collective provision for economic security cannot be organized successfully. (Marmor and Mashaw, 1998: 5)

1 Introduction

In addition to suggesting that neoliberal pension reform provides benefits for capital markets, labour markets, and for the political system, the World Bank and others have based a critique of public pensions on demography and fiscal sustainability. It is argued that generous public pensions are unsustainable due to aging, which is increasing dependency ratios in developed countries, leading purportedly to intolerable levels of taxation and/or public borrowing. This concept has motivated the development of ‘generational accounting’ (discussed in chapter 3), which emphasises the degree of social transfer between generations due to demographic change.

This chapter models the impact of demographic change on the fiscal sustainability of a simple, generous, universal, general revenue-funded pension system similar to New Zealand Superannuation (NZS). The approach follows modelling by the World Bank (1994: 297) and Willmore and St John (2001).

The analysis demonstrates that the incremental impact of demographic change on fiscal sustainability and the standard of living of workers and pensioners is marginal, and would be substantially outweighed by the positive effect of economic growth.

New Zealand Superannuation is discussed in section 2. The approach to modelling the impact of demography on financial sustainability is discussed in section 3. Model

output is discussed in section 4. Conclusions and implications of the analysis are summarised in section 5.

2 New Zealand Superannuation (NZS)

In New Zealand, as in Australia and Denmark, the prime public pension system is a non-contributory PAYGO system. It is publicly administered and benefits are financed from general revenue, including personal and business income tax and a value-added consumption tax. The system is called New Zealand Superannuation (NZS).

NZS provides a relatively high replacement rate compared to other non-contributory public systems - often described as 'safety net' systems. The level of benefits has been subject to change in recent years, but was set in April 2000 at 67.4 per cent of net average male wages for couples. Single people receive two-thirds of that amount, or 45 per cent of average net wages (Willmore and St John, 2001: 1294). This is above the 50 per cent of median income poverty line. It is a level of income in between the level of public benefits provided in Australia and the US (particularly for low income people) and that of the generally more generous social security of the European Community countries.

NZS is universal and non-means-tested. The only eligibility criteria are age and residency: 65/62 for men/women and five consecutive years residency during the ten years before retirement. This has important implications for both retirement decisions and administration. The level of benefits enables those who wish to retire at the age of eligibility to do so. However, there is no compulsion to do so. People can continue to work without foregoing public benefits. NZS payments are added to taxable income from other sources. Administration is also simplified in parallel with the simplicity of the benefit structure. The lack of a means-test may be critical to the political popularity of the scheme. High income earners do receive a lower net pension as the pension is fully taxable at marginal rates.

Another strength of the system is that it does not discriminate against those with broken work patterns, particularly parents. NZS implicitly recognises the contribution

of those who have engaged in unpaid work as equal to those who have had paid work.⁴²

3 Modelling sustainability

The first step, following work by the World Bank and Willmore and St John, is to derive a formula for the tax rate necessary to fund public pension commitments in a PAYGO system with a balanced budget. The formula expresses the pension-specific tax rate ' t ' as a function of aged dependency levels, ' d ', and the pension replacement rate, ' r '. All formula are on a 'per capita' basis rather than an aggregate basis.

We begin with the pension, ' p ', which is average income, ' y ', times the replacement rate ' r '.

$$p = ry \tag{1}$$

If average income was \$40,000 and the replacement rate was 50%, the pension would be \$20,000.

The tax rate, ' t ', necessary to pay for this pension is determined by the relative numbers of workers and pensioners – the dependency rate, ' d '. If there were the same number of workers and pensioners (dependency of 100%) the tax rate would be the same as the pension. From the above example (replacement rate 50%), each worker would have to contribute 50% of their wages to cover pensions. If there were four times as many workers as pensioners (dependency of 25%), the tax rate would be 25% of the pension: 12.5% in the above example. Algebraically,

$$t = dr \tag{2}$$

Assuming that a policy aim is to keep pensions at the same replacement rate, ' r ' becomes a constant.

This formula describes the direct relationship between dependency and tax levels. It is a function which expresses the reality that in a PAYGO pension system, an increase

⁴² As in other countries, pension reform has been a serious political issue in New Zealand during recent years. In 2001, the Government began creating a fund to partially pre-fund future pensions, intending to 'smooth' the burden of future pension obligations (Treasury NZ, 2001). This system has been added to the existing public unfunded system.

in dependency results in an increase in taxation and a fall in net (after-tax) incomes. It is this concept which underlies neoliberal notions of fiscal pension system crisis, as workers are predicted to resist government attempts to increase taxes in order to fund growing pension commitments.

However, framing the problem like this does not provide a measure of the incremental impact of demographic change on pension financing, and ignores the greater impact of economic growth on income.

The second step in the approach is to establish a rule for policy success; a measure of the political and fiscal sustainability of the pension policy which takes into account economic growth. I assume a minimal rule for policy success is that average real net (after-tax) incomes increase in an average year. The intention is that the rule expresses expectations of material improvement in standard of living over the medium to long term, which may be achieved with relatively small annual changes. The rule is expressed in terms of economic growth; that is, the objective of the exercise is a formula which specifies the minimum amount of economic growth necessary for net average income to rise, after accounting for tax increases required by increased dependency.

Net income, 'x', is equal to income, 'y', times 1 minus the tax rate 't'.

$$x = y (1 - t) \quad (3)$$

Net income can also be expressed in terms of the dependency and replacement rates, by substituting for t from (2):

$$x = y (1 - dr) \quad (4)$$

Our condition for policy success is that post tax incomes increase over time. Where time is represented by subscript t , this can be written as:

$$x_t > x_{t-1} \quad (5)$$

By substitution, from (5)

$$y_t (1 - d_t r_t) > y_{t-1} (1 - d_{t-1} r_{t-1}) \quad (6)$$

As the replacement rate, r , is being kept constant, this can be written

$$y_t (1 - d_t r) > y_{t-1} (1 - d_{t-1} r) \quad (7)$$

and reorganised

$$y_t / y_{t-1} > (1 - d_{t-1}r) / (1 - d_t r) \quad (8)$$

Next, by subtracting 1 from each side of the inequality we can put $(y_t - y_{t-1}) / y_{t-1}$ on the left hand side.

$$(y_t - y_{t-1}) / y_{t-1} > (1 - d_{t-1}r) / (1 - d_t r) - 1 \quad (9)$$

$(y_t - y_{t-1}) / y_{t-1}$ is the percentage growth rate, 'g', in a given period:

$$g = (y_t - y_{t-1}) / y_{t-1} \quad (10)$$

So, by substitution, the condition for policy success, becomes

$$g > [(1 - d_{t-1}r) / (1 - d_t r)] - 1 \quad (11)$$

This formula provides a method of calculating the amount of annual per capita economic growth required to ensure that average net incomes rise, given an increase in dependency from d_{t-1} to d_t , for a given replacement rate.

4 Applying the model

4.1 Australian demographic conditions

The Australian aged dependency ratio (proportion of the adult population over 60) was around 18 per cent in 2000, and is predicted to rise to 28 per cent by 2030. An illustrative income level is put in for the year 2000: \$40,000. Figure 7.1 shows the model applied to Australian demographic conditions.

The table shows that as dependency rises from 18 to 28 per cent, the pension-specific tax rate necessary to balance the budget rises from 8.1 to 12.6 per cent. In order that net income rises, growth in income of 18.27 per cent is required over the thirty year period. As growth is compounding, this is equivalent to 0.56 per cent real annual per capita growth.

Predicting growth levels is intrinsically difficult. The past is not necessarily any guide to the future; however, historical rates of change may be used as a starting point. In Australia, rates of real annual economic growth per capita averaged 2.1 per cent between 1961 and 1998 (World Bank, 2001). Rates in 22 of the 38 years were between 2 per cent and 5 per cent. I use 2 per cent as a base case, with one per cent as a pessimistic forecast and 3 per cent as an optimistic forecast.

Figure 7.1 A model of sustainability applied to Australian demographic predictions

	2000	2030			
r	45%	45%			
d	18%	28%			
t	8.1%	12.6%			
		Required (greater than)	Low	Predicted Average	High
g (total)		18.27%	35%	81%	143%
g (annual)		0.56%	1%	2%	3%
y	40000	47307	53914	72454	97090
x	34960	34960	39842	53544	71750

Source: ABS (2000e) and author's calculations.

In all cases, the level of growth exceeds that required to maintain after tax incomes, despite increased tax due to increasing dependency. The model predicts that after tax incomes, initially \$34,960, increase to between \$39,842 and \$71,750 in constant currency, a real increase of 14% to 105%.

4.2 Other OECD countries

Figure 7.2 shows tax implications and growth requirements for OECD countries. The countries are ordered according to dependency in year 2030. Annual growth is in bold type if over 0.75 per cent p.a.. These countries are worthy of note as this level is approaching the 1 per cent p.a. growth level. If actual per capita economic growth is at (or lower) than the specified level then workers will receive zero (or negative) benefit from productivity improvement and economic growth.

The level of growth necessary to ensure improving net incomes is significantly lower than historical averages.

Figure 7.2 The NZS-style model applied to other OECD countries

	Dependency		Tax		Required real per capita growth	
	2000	2030	2000	2030	Total	Annual
Germany	0.40	0.80	0.18	0.36	28.32%	0.83%
Italy	0.42	0.77	0.19	0.34	24.03%	0.72%
Switzerland	0.34	0.77	0.15	0.34	28.90%	0.85%
Austria	0.36	0.75	0.16	0.34	26.79%	0.79%
Japan	0.41	0.75	0.18	0.34	23.06%	0.69%
Belgium	0.39	0.70	0.18	0.31	20.14%	0.61%
Netherlands	0.32	0.70	0.14	0.31	24.81%	0.74%
Sweden	0.41	0.68	0.19	0.31	17.56%	0.54%
Canada	0.29	0.67	0.13	0.30	24.62%	0.74%
Finland	0.35	0.67	0.16	0.30	20.51%	0.62%
Greece	0.43	0.67	0.20	0.30	15.57%	0.48%
Spain	0.37	0.67	0.17	0.30	19.15%	0.59%
United Kingdom	0.39	0.63	0.17	0.28	15.54%	0.48%
France	0.37	0.62	0.17	0.28	15.68%	0.49%
Norway	0.36	0.62	0.16	0.28	16.46%	0.51%
Denmark	0.34	0.61	0.15	0.28	16.63%	0.51%
Luxembourg	0.34	0.61	0.15	0.28	17.03%	0.53%
Portugal	0.38	0.60	0.17	0.27	13.41%	0.42%
Australia	0.29	0.58	0.13	0.26	17.61%	0.54%
United States	0.30	0.58	0.13	0.26	17.45%	0.54%
New Zealand	0.28	0.52	0.13	0.23	14.09%	0.44%
Iceland	0.28	0.50	0.13	0.23	12.91%	0.41%
Ireland	0.29	0.42	0.13	0.19	7.40%	0.24%

Source: For dependency data World Bank (2001) and author's calculations.

5 Conclusions

Considering demographic change in the context of economic growth emphasises the extent to which economic variables are interconnected. Demography cannot be

considered in isolation from other factors which determine economic dependency, particularly levels of employment. Demographic determinism distracts from the fundamental concerns of economic policy, including low unemployment.

The model suggests that the incremental impact of demographic change on the financing requirements for generous universal public pensions is relatively low. Real per capita economic growth of around 0.5% would ensure that after tax incomes remained at a constant level in most OECD countries. Economic growth above this level would provide increasing after tax incomes.

Chapter 8 Conclusions

Neoliberal pension reform (NPR) consists of changes to a nation's retirement income system that increase reliance on private, funded, concessionally-taxed pension systems, and/or reduce reliance on public pensions. The dissertation has examined a number of economic arguments used by the World Bank and others to support NPR. Namely:

- NPR increases savings;
- NPR improves the quality of investment and provides higher returns for members;
- NPR results in efficient and innovative pension administration;
- NPR reduces the labour market distortions associated with the (purportedly regressive) redistribution of public pensions;
- NPR insulates pensions from the state and vice versa; and
- NPR is necessary because generous universal public pensions are unsustainable due to demographic change.

This chapter summarises the findings and draws general conclusions.

1 Summary of findings

1.1 Saving

The argument that NPR increases saving is based on applications of the neoclassical lifecycle theory of saving (LCT) to pension systems (notably Feldstein, 1974). The LCT, which emerged between 1930 and 1960, supposes that individuals save in order to smooth consumption – effectively saving during working life and dissaving during retirement. As well as being consistent with neoclassical notions of utility maximisation, the LCT gained credence from the then current interpretation of the hump-shaped asset-age profile, which shows that assets by age peak at around 60. The asset-age profile has since been shown to demonstrate that younger cohorts enjoy greater wealth than older cohorts, due to generally increasing incomes (Miller, 1965; Shorrocks, 1975; Irvine, 1981). Longitudinal analyses of specific cohorts in several

countries have shown that saving continues during retirement, even increasing in some cases.

That people continue to save in retirement is consistent with the perspective of J.M. Keynes that the motivation to save is multifaceted, and with Adam Smith's belief that saving is instinctive. The main determinant of saving is ability, not motivation – saving is essentially a function of income. Some people will have earned enough and saved (or inherited) more than enough assets at retirement to fund consumption in old age; many others will have been unable to save enough to avoid poverty.

Enough fundamental questions regarding the LCT have been raised to highlight that the search for an effect of NPR on saving has been treated as an empirical question. Some researchers (eg. Poterba et al, 1996) claim to have found evidence that private pension tax incentives do increase saving. However, as Engen et al (1996) have shown, these findings are based on a selection bias common to all program evaluation: participants exhibit a predilection for the tested behaviour. In essence, while those participating in voluntary concessionally-taxed pension programs in the US save more than the average individual, it is unclear whether the program has increased their saving, or whether they are participating in the program because they save. The best research indicates that voluntary saving incentives have no effect on levels of private saving; that, in effect, private pension programs result in a *redirection* rather than an increase in savings to take advantage of tax concessions (Gale, 1995).

There is also evidence that saving in systems with a compulsory element, such as the Australian system, follow similar patterns. Around two thirds of contributions to the Australian superannuation system is voluntary. The area of most rapid growth in the super system is in very small funds designed as tax effective vehicles for the assets of wealthy families. Even within the compulsory element (the 'superannuation guarantee'), savings are disproportionately made by those on higher incomes and those approaching retirement, as would be the case without a system of incentives. Those on lower incomes – the working poor – who spend upwards of 50 per cent of income on housing (whether renting or paying mortgages) might well be reducing those payments, due to reduced disposable income caused by super contributions. This represents another form of redirection of savings. Modelling by government officials that suggests the Australian pension system will increase saving is based on offset assumptions that demonstrate a selective view of the international literature,

and on optimistic assumptions regarding the degree of additional savings likely to be generated by the superannuation guarantee population.

While the quantity of private saving appears to be largely unaffected by incentives, public saving is reduced by the amount of tax concessions on pension contributions, earnings and distributions. In the Anglo-American countries with established private pension programs, the cost in tax revenue foregone is one of the largest elements of social spending, at well over 1 per cent of GDP and growing. The combined impact on private and public savings of additional support for private pensions through beneficial tax treatment appears to be a reduction in the level of national saving.

The outcome is similar when NPR involves a direct shift from public to private pensions such as when some fraction of contributions to social security are diverted into private accounts and invested on capital markets. While this action creates a pool of funds for investment, pensions for those who had contributed to the PAYGO system must then be funded from another source, typically involving public borrowing. The only circumstance in which this transition increases the saving level is if public pensions are reduced. World Bank technical papers recognise that the transition will only generate savings at the expense of the 'transition generation'. This has not altered the official stance of the World Bank, which continues to educate client governments on the macroeconomic benefits of NPR.

The picture emerging from consideration of microeconomic factors is confirmed at the macro level. A review of national pension assets and savings data, and national public pension spending and savings data, shows that there is no clear relationship between the structure of pension policies and saving. Several countries with generous public PAYGO pensions are among the highest savers. Conversely, most of the countries with high levels of private pension assets have low levels of saving. There is also no clear relationship between the age of a country's population and its level of saving. Many 'older' countries have relatively high rates of saving, and vice versa.

1.2 Investment

There is no evidence that NPR increases savings. However, NPR does cause a rapid build-up of assets in private pension funds. This begs the following questions: How are private pension funds invested? Do members receive better returns in private schemes than in public schemes?

As Award-based and then compulsory private pensions were introduced in Australia during the 1980s and 1990s, there was much hope that these newly formed or enlarged financial institutions – being repositories for pooled long-term investment – would address funding gaps such as risk finance or venture capital. These hopes have not been realised. Over 95 per cent of pension funds in Australia, as in other countries, are invested in deposits and marketable securities, such as equities and bonds. Investment in venture capital is at a trivial level of less than one per cent of assets.

In terms of corporate debt holdings, these institutions operate in a manner largely undifferentiated from other financial institutions. Pension fund investment in deposits, bonds, and other debt adds no value to the previously existing financial system, and therefore brings into question the additional costs of the system in terms of administration and tax revenue foregone.

In contrast to other financial institutions, pension funds in Anglo-American countries (with ‘prudent man’ non-prescriptive regulations) invest up to 60 per cent of assets in equities. This investment is differentiated from that of previously existing financial institutions, but it also poses a number of problems for the economy.

It was hoped that having a plural administrative structure with many fund managers would encourage diversity and innovation. However, fund managers tend to herd, with investment focussed on the shares of very large corporations. This investment focus is necessary to avoid acquiring large holdings in companies which cannot be liquidated without adversely affecting the value of holdings. ‘Herding’ is perceived as a driver of inflated share values during the recent share market boom, particularly of large firms which are heavily weighted in share market indices, which much pension fund capital passively tracks. While it was hoped by proponents of NPR, such as Hans Bloomstein (2001a; 2001b), that professional fund management would lead to more accurate pricing of capital market assets, pension funds have demonstrably *followed* investment cycles and fads, into and out of tech stocks, and into and out of overseas holdings. By following investment trends, pension fund investment amplifies rather than smooths market pricing fluctuation.

According to the government officials who designed and implemented Australia’s compulsory superannuation, for private pension funds to finance improved retirement

income they must fund investment that adds to the capital stock. In theory, addition to the capital stock will contribute to improved productivity, which is necessary to maintain standards of living as the population ages and the dependency ratio increases. If no addition to the capital stock is made, the resources available to pay retirement incomes are unchanged. In fact, it is plausible that only a small portion of pension fund investment in equities actually funds new investment. The majority of shares acquired are existing securities rather than new issues. Moreover, a significant proportion of issues of new equity in Australia and the UK fund corporate and financial restructures such as privatisation, demutualisation and mergers and acquisitions. These transactions do not fund new physical investment. In the case of demutualisations, capital is returned to 'members'. In the case of privatisation, capital is returned to the government, enabling retirement of debt.

The US has the most mature capital market with the most large corporations listed. It is a destination for most overseas investment by pension funds in other countries. In the US, net issues have been *negative* for the last twenty years, even including issues related to financial restructure. This is because IPOs and other new issues of equity are dwarfed by the return of capital in the form of share buy-back programs operated by most large corporations. These large corporations, on aggregate, fund investment from internal sources. The flow of capital is from corporations back to shareholders, emphasising the limited extent to which pension fund investment in securities issued by the largest corporations actually funds new investment in the 'capital stock'.

Hopes that institutional investment would improve corporate governance have also been disappointed. Highly diversified holdings make strategic guidance impractical, and, according to pension fund trustees in the US, have even failed to provide oversight of accounting and management practices. Pension funds were unable to prevent, or even to evaluate and avoid, fraudulent behaviour by executives during the late 1990s. The management tools of the institutional investor are to buy or sell (or the threat to do so), and attempts to influence management are focussed on cost control. Pension funds have institutionalised rather than ameliorated short-termism among capital market investors.

Proponents of NPR argue that returns for members are higher in private funded pensions than in public PAYGO pensions because the former receive capital market returns, and the latter receive returns that are at best equal to the rate of real economic

growth, and may also be adversely affected by demographic change and redistribution. In an argument linked closely to neoliberal perceptions of the political economy of pensions, proponents of NPR assert that public PAYGO pensions enable an irresistible windfall gain for the first generation of retirees who can live in retirement on the contributions of other workers, though they themselves may have contributed little to the system.

The reality is altogether different. Detailed actuarial analysis of public PAYGO pensions, such as Canadian and US social security, finds near constant internal rates of return and no evidence of windfall gains. Returns in public pensions are positive, and benefits are secure – in comparison with private funded pensions. The value of security appears to be undervalued by proponents of NPR, who ignore the early lessons of funded pensions. Corporate funded pensions date back to the late 19th century in the US, but many were wiped out during the Depression.

Instead, many economists who support NPR assert that capital markets have provided ‘historical’ returns of around 7 per cent, and that these can be expected in perpetuity. As critics point out, these analyses include a number of biases, most clumsily through selection of convenient markets and periods. Real returns have been estimated at as low as 1.5 per cent, when all markets, including those affected by financial collapse, are included. Even ignoring instances of market collapse, the tendency of years with high and low returns to be grouped together in bull and bear runs has profound consequences for retirement income from private pensions invested in corporate securities. Based on the performance of the benchmark US index, the S&P500, a difference of only three years in the timing of conversion of retirement savings into an annuity could reduce retirement income by up to 40 per cent.

Less diversified funds can produce more extreme transitions. Employees of bankrupt US corporations with 401k pensions invested predominantly in own company stock (such as Enron) have paid the heaviest price for misguided pension policy, losing both employment and their private pensions. Proponents of NPR in the US would gladly also have diverted public pensions into the stock market, undermining the remaining safety net.

1.3 Administration

Private pensions in the Anglo-American countries (and most developing and transition countries assisted by the World Bank) are delivered by private entities operating in a consumer market setting. This structure is completely inappropriate for several reasons. In a consumer market, discipline on price and quality can come only from efficient competition, but there is no evidence of this pressure on suppliers. Products and pricing are highly complex and non-transparent and are consequently not understood by most consumers. Consumers are often misled by advertising and commission-based agents ('financial planners').

A consumer market also involves higher costs than is necessary, due to lower economies of scale and additional selling and marketing costs. Close to two per cent of the total value of assets are spent annually on administration cost, with fees higher than average in retail funds and slightly lower in industry funds. Administration cost in a consumer market is also regressively distributed, due to a range of fixed charges which cause fee ratios to be higher for smaller account balances. A plural administration structure – especially combined with rules related to employment governing membership – contributes to account proliferation. Members in Australia hold an average of around three accounts. Assets spread across several accounts attract higher total fees. Millions of accounts are now considered lost, with lost balances estimated to represent around \$A 7 billion (over one per cent of total asset value).

More efficient administrative structures are possible within private funded pension systems. Small numbers of fixed-period fund administration licences can be issued with exclusive client bases and auctioned as in Bolivia, which has only two private pension providers. Alternately, administration can be kept public, and fund management services purchased by the government on a wholesale basis on behalf of individual members as is the case in Sweden. Such a structure maximises administrative economies of scale, puts price pressure on fund managers, prevents wasteful consumer advertising and sales, and prevents account proliferation.

Even within the context of a plural consumer market, simple reforms would have a dramatic effect on administration cost and accumulation. Obvious reforms include: transparent, simplified fee structures, centralised account registration, and making

employers (who ‘purchase’ most employment based funds) pay for administration costs over and above contributions made on behalf of employees.

1.4 Labour market distortion and inequality

While NPR places the responsibility for retirement income provision on the individual, the capacity to save for retirement varies greatly. Many people, including those with broken work patterns (disproportionately women) reach retirement with little or no financial assets. It follows that public pensions offering a level of income above the poverty line are necessary to prevent elderly poverty, particularly among women. Data analysed in chapter 5 suggest that the relationship between public pension spending and elderly poverty in the OECD is strong and negative. The countries with the lowest spending – Australia and the US – have very high levels of elderly poverty, particularly among women. Countries with low levels of poverty among the elderly have at least medium and generally high levels of public pension expenditure. This appears to contradict the World Bank’s assertion that redistribution within public pension programs is invariably regressive, favouring privileged workers and not providing income for the poorer among the elderly. In contrast to private pensions, real benefits are shared with those who cannot provide for their own retirement. It is notable that NPR, presented as a solution for aging, adds to financial disincentives to have children by basing retirement income only on paid work, and therefore not recognising the essential contribution parents make to society.

That public pensions should be universal rather than means-tested is advisable for a number of practical reasons: universal programs are invariably well-supported politically; non-means-tested programs do not create incentives to leave the labour force; and they are also the most efficient to run.

Critics of public PAYGO pensions argue that they introduce labour market distortions, which lowers demand for and supply of labour, reducing competitiveness and employment. Opinions of this kind include crude references to apparent growth differentials between Anglo-American and Western European countries. However, these arguments do not stand up to examination. They ignore periods of rapid growth in countries with socio-economic models very different to the Anglo-American nominally ‘free market’ model, such as in East and South East Asia, and also in Europe. They also ignore profound regional differences in growth rates within both

groups of countries, such as between Northern California and the mid-West. As Michael Cichon of the ILO argues, high labour costs (including generous social security contributions) are entirely compatible with capital intensive and productive enterprise. To the extent that the Anglo-American and Western European countries do represent different socio-economic models, they are both consistent with capitalist development, although in the latter case with generally lower levels of poverty.

Labour market distorting aspects of public pension systems may be reduced without resorting to radical neoliberal reform. Early retirement can be allowed on an actuarially fair basis, reducing the so called 'implicit tax on labour'. One obvious way to do this is to remove means tests on pensions, so that individuals can continue to work and pay taxes on earned income while receiving pension entitlements.

The World Bank points to other problematic responses to high social security contributions, including the under-reporting of income and the development of informal labour markets. These are essentially administrative enforcement matters, though dependent on political will. Examples of successful public PAYGO pension systems operating in both developed and developing countries emphasise that these are not inevitably terminal problems, as is asserted by the World Bank.

1.5 Political economy

An important branch of arguments raised by the World Bank in support of neoliberal pension reform relates to political economy. It is claimed that public involvement in pension administration leads inevitably to crisis because politicians cannot resist the temptation to implement retirement policy which is not sustainable in the long term for short-term political gain. Private administration purportedly ensures that pensions are managed exclusively in members' interests by quarantining benefits from the political process. Private pensions are purportedly also protected from state financial crisis, and, reciprocally, should not compromise state finances due to demographic change or other shocks.

A brief international review of public pension systems provides no evidence that the political economy of pensions inherently and inevitably causes crisis. Public systems in both developed and developing countries are generally very popular and demonstrate the capacity for sustainable incremental reform. Several instances of crisis used by the World Bank to illustrate that this outcome is inevitable were in

countries that experienced profound economic collapse (and in some cases were crippled by war and disease). Under these circumstances private funded pensions would certainly also have failed. The notion that private pension systems may be quarantined either from government policy or fiscal crisis is absurd. Pension systems – public and private – are brought into being by government and may be rapidly, radically and retrospectively changed with potentially dramatic effects for system members. Private pensions are within reach of government if emergency funding is required, as the Argentinean crisis demonstrates. They are subject to financial crisis just like other private financial institutions.

The World Bank's 'political economy' argument is highly ideological, stemming ultimately from mistrust of government intervention in the economy, particularly universal programs which redistribute income and invest capital. World Bank researchers such as Brooks and James (1999) assert that, while scientific assessment shows the necessary path of reform, local vested interests can obstruct progress. The notion of objective research confronted with vested interests is curious. Public pensions are funded by workers, who are also the main beneficiaries, and most programs of this kind enjoy majority support. By contrast, private pensions benefit contributors in proportion to income, and more importantly, elements of the financial community involved in provision. The latter group is the source of much supposedly objective research into pensions asserting the need for higher tax concessions and higher levels of compulsory provision. Substantial resources are made available by international financial institutions to developing and transition governments to win public support for NPR. In Kazakhstan, for example, the public relations efforts funded by USAID and the entry of American investment banks to the private pension market appear to be closely coordinated.

1.6 Sustainability

Critics of public PAYGO pensions question the financial sustainability of such systems due to aging. An increasing dependency ratio does require that contributions (as a proportion of wages) increase if pensions (as a proportion of wages) are to remain constant. However, this does not necessarily mean that workers will lose out, as economic growth brings higher productivity and higher incomes.

Modelling in chapter 7 suggests that the annual impact of demographic change on the financing requirements for relatively generous universal public pensions is quite low. Real per capita economic growth of around 0.5% would ensure that after tax incomes remained at a constant level in most OECD countries. Economic growth above this level would provide increasing after tax incomes.

2 Some implications of the findings

The dissertation has presented evidence that refutes the economic arguments used by the World Bank and others to support NPR. The sources used in the analysis are all publicly available, and include work by World Bank researchers. How is it, then, that these arguments remain so prominent and influential? It appears that, along with much thorough research on pensions, including by researchers working for and published by the World Bank, there is also a considerable weight of ‘soft research’ and deliberate misinformation produced by the IFIs and interested parties.

In particular, the public debate in many countries is strongly influenced by finance industry associations whose primary objective is to increase the flow of capital to their members. The economic arguments criticised in this thesis give these organisations a set of tools to shape opinion amongst the public and policy-makers.

The IFIs also recognise that pension policy has subtle but powerful ideological effects. Pension privatisation necessitates and facilitates a range of other neoliberal policies, especially privatisation of state assets, and financial market deregulation. The change also contributes to a significant increase in the role and profile of equity markets, and directly links the interests of workers (especially well-paid workers) with those of capital. The difference in identification implied by a private funded system is significant, compared to a public unfunded ‘solidarity’ system in which retirement income is drawn directly from the current contributions of other workers.

The thesis provides much information which would be useful for informing sound pension policy. The most important finding is that, to avoid a substantial portion of the elderly (especially women) living in poverty, it is necessary to have generous public pensions with universal coverage. The World Bank’s contention that pensions (at least in developing countries) generally cover only privileged workers is salient, but it does not provide a rationale for NPR. The issues in these countries are coverage

and redistribution, neither of which is addressed by a shift from public to private pensions, such as that experienced in the Latin American and transition economies.

Tunisia or Mauritius offer a better path of reform for developing countries to follow, both having achieved close to universal pension coverage in contributory and non-contributory schemes respectively.

Private pensions are regressive and wasteful. They offer a tax effective method of saving for people who would do so in any case, constrain the disposable income of the working poor, and offer no coverage for the unemployed or unpaid carers. The level of waste could be reduced using the mechanisms summarised above; however concessionally-taxed employment-based schemes will inevitably be complex and rule-bound.

There is as yet no answer to the larger question of how to usefully direct the river of capital which flows through pension funds. Fund managers avoid investment in illiquid private equity, preferring liquid capital markets in which non-systematic risk (fluctuations in security or sectoral performance) can be dealt with through diversification. Reliance on this form of investment provides no protection against crashes in value affecting the whole market, but this outcome is of less concern to fund managers, who are judged against the market. More importantly, perhaps, much of this form of financial investment does not fund physical investment, and therefore does not add to the capital stock. A continuation of such a policy will presumably lead to falling yields, after the speculative returns caused by frantic acquisition of scarce blue-chip securities subside, if this has not already happened.

Appendix A. Detailed representation of Figure 5.6

The underlying spreadsheet includes a model of individual private pension accumulation based on the inputs in the top half of the table, and provides output as the value of an annuity purchased at retirement for estimated life expectancy relative to median income. The value of the annuity relative to median income falls during retirement due to income growth. Please contact the author on sachavidler@optusnet.com.au or sachavidler@hotmail.com for a copy of the model.

Figure A.1 A model of self-provision for retirement in private pension funds for middle and low income people

Case	Left Group										Right Group										
	Base	Lower contributions	Longer retirement	Shorter retirementq	Lower working life,	American tax structure	Lower nominal interest	Lower inflation	Optimistic	Pessimistic	Base	Lower contributions	Longer retirement	Shorter retirementq	Lower working life,	American tax structure	Lower nominal interest	Lower inflation	Optimistic	Pessimistic	
INPUT																					
proportion of median	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	
inflation	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	2%
working life	40	40	40	40	35	40	40	40	40	45	40	40	40	40	40	35	40	40	40	45	40
retirement	15	15	20	25	20	15	15	15	15	10	25	15	15	20	25	20	15	15	15	10	25
lifespan	75	75	80	85	75	75	75	75	75	75	85	75	75	80	85	75	75	75	75	75	85
tax																					
contributions	15%	15%	15%	15%	15%	15%	0%	15%	0%	15%	15%	15%	15%	15%	15%	15%	0%	15%	0%	15%	
earnings	15%	15%	15%	15%	15%	15%	0%	15%	0%	15%	15%	15%	15%	15%	15%	15%	0%	15%	0%	15%	
benefits	15%	15%	15%	15%	15%	15%	25%	15%	25%	15%	15%	15%	15%	15%	15%	15%	25%	15%	25%	15%	
contribution rate	9%	7%	9%	9%	9%	9%	9%	9%	9%	7%	9%	7%	9%	9%	9%	9%	9%	9%	9%	7%	
interest rate (nom)	6%	6%	6%	6%	6%	5%	6%	6%	6%	5%	6%	6%	6%	6%	6%	5%	6%	6%	6%	5%	
annuities rate (nom)	4%	4%	4%	4%	4%	3%	4%	4%	4%	3%	4%	4%	4%	4%	4%	3%	4%	4%	4%	3%	
OUTPUT																					
Start ratio	36%	28%	36%	36%	30%	27%	43%	44%	70%	21%	24%	19%	24%	24%	20%	18%	29%	30%	47%	14%	
End ratio	24%	18%	20%	18%	17%	18%	28%	34%	59%	10%	16%	12%	14%	12%	11%	12%	19%	23%	39%	7%	
Average ratio	30%	23%	28%	26%	23%	22%	35%	39%	64%	15%	20%	15%	18%	17%	15%	15%	24%	26%	43%	10%	
Better/worse than base		-22%	-7%	-13%	-24%	-26%	19%	31%	118%	-50%		-22%	-7%	-13%	-24%	-26%	19%	31%	118%	-50%	

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