

The Economic Impact of Mandatory Pensions

Final Report

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Executive Summary

Background and Terms of Reference

The National Pension Policy Initiative (NPPI) was established in 1998. It subsequently formulated a strategy and made recommendations for a fully developed national pensions system for Ireland, including the setting of targets related to retirement income and pension coverage. With pension coverage for the 30-65 year age group in Ireland currently well below the NPPI target of 70%, there has been much recent debate about the need for mandatory pension provision as an approach to addressing the situation. The Pensions Board, the statutory body responsible for monitoring and supervising operation of the Pensions Act and advising on pension's policy in general, considered this issue in producing the National Pensions Review in 2005. Following publication of the Review, the Board was asked to further examine the issues relating to adoption of a mandatory (or quasi-mandatory) pension system, with a view to recommending the most appropriate approach for Ireland at a practical level.

As a result, the Board commissioned Fitzpatrick Associates to assess the likely broad economic impacts of introduction of such a system in Ireland, including impact on discretionary savings, impact on fiscal balance/national savings, competitiveness and labour market effects of compulsory savings, and prospective implications of the proposed system on potential economic growth rates. This assessment was done on a desk basis, drawing on existing available literature and information. It was prepared during the three-week period May 22nd-June 9th 2006.

Mandatory Pension Provision

Mandatory pension systems require that employees subscribe to supplementary pension schemes (i.e. beyond the PRSI based Old Age Contributory Pension in the Irish case). However, the nature and structure of such systems in terms of design and delivery can differ very substantially, depending on the way in which a range of key issues are addressed. These key issues include coverage of the scheme, contribution levels, cost distribution, means of scheme introduction, and the establishment of ceilings and floors. The way in which each of these issues is addressed in designing and delivering a mandatory system will also result in potentially different economic impacts.

Mandatory or quasi-mandatory systems are already in place in a number of countries including Australia, Chile, Denmark, Switzerland, Sweden, the Netherlands, Hungary and Iceland. Practice and experience differs markedly between the countries that have adopted this approach. Systems developed include defined contribution and defined benefit models, compulsory contributions to private pension plans, state-run schemes, and initiatives operated by social partners. Some

schemes stipulate fixed contributions and others allow additional payments. This paper draws on published literature about these schemes and their impact.

Irish Economic Context

Ireland has experienced rapid economic growth and a subsequent increase in living standards since the mid 1990s. A key driver of economic success has been the availability of a skilled labour force, with over 2 million people now in employment and labour force participation rates for both males and females having increased significantly. Sustaining the necessary labour force expansion in the medium and long-term is now a key challenge. Falling fertility rates mean that going forward the working age population is likely to remain fairly static in Ireland, even allowing for significant immigration. As a consequence, the number of older people (past the current working age) will constitute a larger proportion of society as a whole. Resources must therefore be in place to support the income needs of older people in retirement, and pension coverage is a critical factor in ensuring that this is the case.

Economic Assessment

Discretionary Savings: In terms of the impact of mandatory pension provision on national savings, the literature reviewed on experience elsewhere suggests that systems can, depending on their design and delivery, increase levels of aggregate savings. The planning of any mandatory pension provision should therefore recognise that the higher the required contribution rate (above current voluntary saving levels), and the lower the opportunities for individuals to offset mandatory savings, the greater the increase that will result in the overall savings rate.

Fiscal Balance: The impact of introducing mandatory pension provision on fiscal balance depends on a number of factors including contribution rates, tax incentives available, revenues generated, the body taking receipt of the contributions, and ultimate use of the contributions. Although international research on this subject is relatively sparse, it would appear that the two main risks in implementation surround Government deployment of contributions for current expenditure purposes and the redistributive effects of tax incentive systems. In the former case, this can negate any impact on increasing household saving. In the latter, unilateral tax incentives can cause regressive redistribution of wealth between high and lower earners. Planning of mandatory pension provision must therefore guard against these occurrences.

Impact on Labour Market: A range of contrasting views as to the impact of mandatory pension schemes on the labour market emerge from international literature. There is some risk of such provision resulting in a decrease in employment levels, with the mandatory contributions acting like a tax, decreasing labour demand (when employer contributions are involved) and reducing labour supply (when levied on employees). The elasticity of labour demand and supply can be influenced somewhat by Government policies (e.g. level of social welfare benefits). Exchequer contributions (e.g. via tax incentives) will have a similar impact, as these will have to be financed through taxation. The level of impact on the labour market will depend on the design and delivery of the mandatory pension model, and would be expected to be most strongly felt in labour-intensive industries and

among employers that had not previously made pension contributions. A phased introduction could prove beneficial, as this avoids shocks and allows the labour market time to react and plan accordingly. Informing employees as to the benefits of contribution, and discouraging them from perceiving it as a tax, may also help to reduce any negative labour market impact.

National Competitiveness: The impact of a mandatory pension system on national competitiveness closely relates to the impact on the labour market discussed above. If labour costs do rise, and labour supply decreases, other things being equal a negative impact in terms of overall competitiveness will result. The introduction of a mandatory scheme may also have some impact on how Ireland is perceived by potential inward investors. National competitiveness both overall and for foreign direct investment is of course a relative thing, i.e. there is less potential loss of competitiveness if Ireland is moving at the same pace as competitors. Developments in key competition countries regarding pension provision would therefore also be a factor. Some consideration of this could therefore be a factor in any phased introduction. In the short-term, with some concerns about Ireland's post "Celtic Tiger" competitiveness generally, there may be a case for particular awareness in this regard.

Economic Growth Prospects: Economic growth impact from mandatory pension provision is intrinsically linked to the issues of both labour demand and supply and national competitiveness discussed above. Some positive impacts in terms of growth can result from implementation of a scheme resulting in increased national savings which are translated into more productive investment and hence an expansion in output. However, the potential negative effects are widely considered to outweigh such potential benefits, and pension systems are primarily a distributive rather than a production enhancing device. This view is confirmed by ESRI forecasts for a range of key economic indicators over the 2007-11 period, assuming adoption of four different mandatory models. In general it would seem that the implementation of a mandatory scheme would generate similar effects to those of any new national tax.

Implications for Proposed Models

It is understood that three basic models of mandatory pension provision are under consideration should the Government decide to proceed along this course. The international research considered in this report has certain implications for each of the models, and the most pertinent issues to consider when weighing up the options are summarised below:

TABLE 1: ISSUES WORTHY OF CONSIDERATION FOR THREE PROPOSED MODELS OF MANDATORY PENSION PROVISION	
Model	Issues Worthy of Consideration
<p>Model A, based on the assumptions used for M1 in the ESRI analysis, with the State Retirement Pension increased to 50% of gross average industrial earnings (GAIE).</p>	<ul style="list-style-type: none"> • Simplest and most cost effective to implement. • Perceived as additional taxation to a greater extent than a supplementary scheme. • Most likely to have greatest negative impact on national savings, compared to other models. • Resultant impact on labour force participation. • Impact on labour demand dependent on scale of increase in employers' PRSI contributions • Less likely to impact on participation in voluntary pension schemes. • Approach may be perceived as overly interventionist by potential inward investors.
<p>Model B, based on the general principles governing M2, M3 and M4 in the ESRI analysis, involving a supplementary system with a contribution rate of 15%, with 5% provided the Exchequer, and the remainder split between employer and employee contributions, with options of immediate introduction or phasing in over a ten year period.</p>	<ul style="list-style-type: none"> • More significant costs of implementation. • Potential to generate increase in total aggregate savings, (although not guaranteed). • May reduce contributions to voluntary pension schemes. • Less of a labour market impact than a PRSI based scheme. • Phased in rather than immediate approach may reduce impact. • Works most efficiently where balance exists between employers and employees contributions.
<p>Model C, a hybrid model combining the above components assuming a State Retirement Pension of 40% of GAIE and a supplementary system with a contribution rate of 15%, a lower contribution threshold of approximately €15,000 and an upper earnings limit of €60,000.</p>	<ul style="list-style-type: none"> • Potentially highest costs of implementation. • Still some potential for negative external perceptions of additional 'taxation' • Labour market impact more significant than purely supplementary scheme. • Guarantees greater minimum income in retirement. • Guards against regressive impacts with lower income threshold. • Stops higher income groups from using scheme as alternative investment option.

Overall Conclusion

While international literature on the specific economic impacts of mandatory pension provision is limited, this study reviewed a range of material that provides good illustrative examples of the

impacts that might result were such a scheme to be introduced. While direct application of such findings to the specific Irish context must be done cautiously, this report nonetheless serves as a means of identifying the economic issues that need consideration when making a decision with regard to mandatory pension policy. It has found that mandatory pension contributions can negatively impact on the labour market with repercussions in terms of national competitiveness and overall economic growth. However we have also found that a scheme could, with appropriate design and delivery, increase overall levels of saving and, if these savings can be productively invested, expansions in national output can be generated. Overall it is clear that the extent to which such impacts are realised is a product of the design and delivery of the system, and very careful consideration must be given to the issues discussed in this report and their relevance to the Irish economic context prior to any decision on any model. The nature of its introduction, and especially the role of a phased approach, also emerge as an important way to avoid any potentially negative economic shocks.

1. Background and Terms of Reference

1.1 Background

The National Pension Policy Initiative (NPPI), established in 1998, formulated a strategy and made recommendations for a fully developed national pensions system. These included a recommendation that a series of targets should be adopted relating to retirement income:

- replacement income of 50% of pre-retirement income before tax;
- minimum income of 34% of gross average industrial earnings (GAIE); and
- supplementary pension coverage for 70% of the working population over the age of 30, in order to achieve the replacement income target.

The Pensions Board, as the statutory body established under the provisions of the Pensions Act, 1990 (as amended) and reporting to the Minister for Social and Family Affairs, is responsible for monitoring and supervising operation of the Pensions Act. It also advises the Minister on pension matters generally. Its activities are framed by a Mission Statement comprising four key areas of responsibility:

- to promote the security and protection of members of occupational pension schemes and contributors to Personal Retirement Savings Accounts, in accordance with the Pensions Act, 1990;
- to promote the development of efficient national pension structures;
- to promote a level of participation in the national pension system which enables all citizens to acquire an adequate retirement income; and
- to provide information and authoritative guidance to relevant parties in support of pension security, structures and participation.

In delivering on its remit, the Pensions Board published the National Pensions Review in 2005. This involved a review of previously agreed pension targets, an assessment of current coverage and adequacy, and discussion of the strategic options available for meeting the agreed targets, including consideration of mandatory pension provision.

Following the publication of the Review, the Minister asked the Pensions Board to further examine the issues relating to adoption of a mandatory or quasi-mandatory system, with a view to recommending the most appropriate system for Ireland at a practical level. This is now being undertaken, without any predetermined view on whether or not such a system should be introduced in the Irish context.

1.2 Present Pension Coverage in Ireland

A key issue facing any ageing society is the distribution of associated costs of the changes that are taking place in the demographic structure of that society. Specifically, it becomes more challenging to ensure that older members of the population have an adequate income in retirement without the costs of such provision adversely impacting upon the economy. In this regard, encouragement of second pillar pension coverage is viewed as a critical mechanism in facilitating adequate income provision for old age and retirement.

The latest CSO figures (for Quarter 1, 2005) show that the pension coverage rate for all persons in employment aged between 20 and 69 in Ireland was 51.5%, representing a slight decrease from the 52.4% reported for the first quarter of the previous year. Analysis is also provided for differing age bands, most notably those for which formal targets were set in the NPPI. This highlights a coverage rate for those aged 20–29 of 34.4%, just below the target set in the NPPI of 35%. For those aged 30–65, there is 58.6% coverage, some way below the NPPI target of 70%.

Some progress has therefore been made since the launch of the NPPI with a range of interventions to encourage voluntary take-up of second pillar pensions. These include financial incentives, educational campaigns and the introduction of obligatory PRSA facilities by employers. However with a considerable gap between existing coverage and the NPPI target for the 30–65 age group of 70%, mandatory pension provision is now being considered as a possible option.

1.3 Terms of Reference

As part of its examination of the issues surrounding the adoption of a mandatory or quasi-mandatory system, were this to occur, the Pensions Board commissioned Fitzpatrick Associates to provide a desk-based assessment of the likely economic impacts of introduction of a mandatory pension system in Ireland. The Board stipulated that this assessment be drawn from research of international literature and should focus on issues including:

- impact on discretionary savings;
- impact on fiscal balance/national savings;
- competitiveness and labour market effects of compulsory savings;
- prospective implications of the proposed system on potential growth rates.

In addressing these issues it is intended that the study outlines the potential economic impact of mandatory pensions in general, rather than focuses on one specific model.

Two parallel pieces of research are also being carried out: Life Strategies is developing potential mandatory pension models and projecting their associated costs, while the Economic and Social Research Institute (ESRI) is carrying out macro-econometric analysis of these mandatory options, using the HERMES model to quantify the economic impact of the proposal for incorporation into the costing model. The economic results from both these exercises are highlighted in this paper where relevant.

1.4 Report Structure

The remainder of the report is structured as follows:

- Chapter 2 outlines the defining characteristics of mandatory pension systems in general, followed by a brief outline of mandatory pension provision in other countries;
- Chapter 3 highlights some relevant Irish socio-economic characteristics, then discusses the economic impacts of mandatory pensions, addressing each of the issues defined by the Board in turn;
- Chapter 4 examines the implications from the findings for the specific models which were analysed by ESRI and Life Strategies;
- Chapter 5 provides our concluding remarks.

2. Mandatory Pension Provision

2.1 Introduction

In order to provide an economic assessment of mandatory pension provision in Ireland, it is important to first identify the differing characteristics of such provision. This facilitates an understanding of how these characteristics generate varying economic impacts. With this established, specific systems of mandatory pension provision are discussed, with brief profiles of the situation in Australia, Chile, Denmark, Hungary, Iceland, Singapore, Switzerland, Sweden, the Netherlands and New Zealand.

2.2 Design and Delivery Issues

Mandatory pension systems require that persons in work subscribe to supplementary pension schemes (beyond the PRSI based Old Age Contributory Pension in the Irish case). However, the structure of such systems can differ substantially, depending on the way in which a range of key issues are addressed. These issues include:

- **Coverage:** those included in the system, (e.g. employees, self employed, those within particular earnings brackets, those in particular sectors, those below a certain age, and so on);
- **Contributions:** the targeted benefit level and thus the subsequent mandated contribution;
- **Cost Distribution:** this critical issue refers to the division of the cost of provision between the three main potential stakeholders – eligible individuals, employers and the Exchequer;
- **Creation:** the means by which the scheme is to be introduced (i.e. Is it to be integrated with current systems? Will it cover all eligible individuals or just new entrants? Will it be phased in or introduced immediately?);
- **Ceilings and floors:** the income from which a contribution will have to be paid (i.e. is income below a certain floor exempt? Is there an upper limit?)

The way in which each of these issues is addressed in designing and delivering individual mandatory pension provision systems will clearly have a resultant economic impact, and this will be discussed in greater depth as an assessment of the impact of such provision is provided later in the report. It is also worth noting that, as part of their work for the National Pensions Review and for the exercises commissioned in tandem with this study, Life Strategies and the ESRI have looked at a number of different specific models of mandatory pensions and their impact for Ireland, considering options for addressing the issues highlighted above. These have included increasing first pillar pension provision contributions (akin to increasing PSRI contributions) and introducing separate second pillar contributions.

2.3 International Models of Mandatory Pension Provision

Approaches to mandatory pension provision differ markedly in countries that have adopted this approach. This can be attributed to a number of factors, including each country's economic characteristics, demographic profile, political system and social policies, and previous pension arrangements. As a consequence, it is difficult to directly compare any two national models of pension provision.

Furthermore, the economic impact resulting from the introduction of a model in one country cannot be assumed to be the same as that resulting from the introduction of a similar model in another country, due to the differing underlying situations. Nevertheless, it is worth briefly profiling some of the mandatory pension provision models that are currently in place.

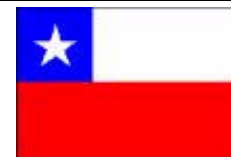
Australia

Australia's pension system consists of two components: a means-tested old age pension plus the superannuation guarantee, a compulsory contribution to a private pension plan. The superannuation guarantee was introduced in 1992, covering all employees (but not those self-employed) aged 18-65 where earnings are greater than \$A450 month (representing 14% of average male earnings). Employers must make a mandatory contribution of 9%, and although not required to contribute for workers earning less than \$A450 monthly, they can choose to do so. A limit exists for the earnings covered by the superannuation scheme - \$A113,460 in 2002 – and employers need not contribute for employees' pay above this threshold.



Chile

Chile's private pension system was introduced in 1981 and is a fully funded defined contribution scheme, mandatory for all dependent workers who entered the labour force after January 1, 1983 and is optional for those in self-employment. Workers already participating in the labour force prior to 1983 were given the option of staying in the old, government run system or moving to the new system. Workers contribute 10% of their wages to their individual accounts each month; this percentage applies only to the equivalent of the first \$22,300 of earnings. Employers may also make contributions to their employees' accounts. Any worker may also contribute up to an additional 10% of wages.



Denmark

Denmark's pension system has a number of strands; a public basic scheme and two statutory schemes – the ATP and SP. Contributions to these latter schemes represent approximately 1% of gross wages with ATP contributions split between employers (two-thirds) and employees (one-third) and those under SP paid entirely by the employee. Voluntary occupational schemes are also in place, administered by the social partners, and these cover more than 80% of the active population. They are fully funded defined-contribution schemes financed via contributions which range from between 9% and 17% of earnings.



Hungary

The Hungarian pension system is a mixed system that combines an earnings-related public pension with mandatory, funded, defined-contribution schemes. This system was introduced in 1998 and is mandatory for all, except those aged over 42 at the time of the reform. The latter group can choose between this mixed system or a pay-as-you-go public pension. For those covered by the mixed system the contribution rate is 8% of gross pensionable earnings.



Iceland

Iceland's pension system is split into three pillars; a tax financed public pension scheme; mandatory funded occupational pension schemes with a hybrid (albeit mainly defined-benefit) formula and voluntary pension saving with tax incentives. All employees and self-employed persons from 16 to 70 are covered under the mandatory occupational pension. The contribution rate is 10%, of which four-tenths is provided by the employee and six-tenths by the employer.



Singapore

The Central Provident Fund (CPF) operates as a centrally-administered publicly-mandated retirement scheme built around individual accounts. Both employees and employers must contribute a substantial fraction of earnings until the employee attains age 55. The current contribution rate is set at 32%, split between employees and employers. The system has expanded to include schemes such as Home ownership, pre-retirement investments, life, home and health insurance, and others such as a loan scheme for tertiary education and a compulsory medical savings account.

**Switzerland**

The Swiss pension system has three components – public earnings related schemes; mandatory occupational pensions and an income-tested supplementary benefit. The mandatory occupational system was introduced in 1985 and is compulsory for all employees earning over a set minimum income. It is built around “defined credits” to an individual’s pension account ranging from 7% to 18%. Employers are required to pay at least 50% of total contributions but statistics indicate that they actually currently contribute around 60% of the total.

**Sweden**

Sweden has three pillars of pension provision. The first is a state and mandatory scheme with various tiers, the second is supplementary and quasi-mandatory and the third is a voluntary and private system. The quasi mandatory second pillar covers around 90% of employees and involves occupational schemes based on collective agreements. It was introduced in 1999 and applies to people aged 45 or under at the time of reform. Employees contribute 7% of salary and employers contribute 10.21%; 2.5% of the contribution goes into what is known as a premium pension - an individual funded account - while the remainder goes into the public scheme.



The Netherlands

The Netherlands pension system has two main components – a flat rate public scheme and earnings-related occupational plans. The latter is a private quasi-mandatory scheme. Although there is no statutory obligation for employers to offer a pension scheme to their employees, industrial relations agreements mean that 91% of employees are covered. The system consists of 64 industry-wide schemes financed through contributions that are fully funded (of a defined-contribution or a defined benefit type). Under certain conditions, companies are free to opt out of these plans if they offer their own scheme with equivalent benefits. There are around 866 of these single-employer plans. A further 30 000 (mainly smaller) employers offer schemes operated by insurance companies on their behalf¹.

**New Zealand**

New Zealand has a universal flat-rate pension financed through general taxation, and this is supplemented by voluntary, funded direct-contribution pensions. The rates of public pension are linked by law to average earnings with the net couple rate being set between 65% and 72.5% of the net average wage, depending on movements in prices. The rates for single people are set at 65% (living alone) and 60% (sharing) of the couple rate. To qualify, participants must have ten years residency since the age of 20 (including five years after age 50). A new voluntary, work based savings scheme is to start in April 2007 known as the KiwiSaver. All residents under 65 are eligible and personal contributions are 4% or 8% of gross salary. The government makes a kick-start contribution of NZ\$1000 per person. Automatic enrolments for all new employees but with an opt-out period of four weeks. Also tied to the scheme is an opportunity for first time home buyers to withdraw funds to assist with the purchase of a 1st home after a minimum of three years.



¹ Taken from OECD, *Pensions at a Glance: Public Policies across OECD Countries*, 2005.

3. Economic Assessment

3.1 Introduction

In identifying the potential economic impacts of mandatory pension provision, it is important to understand the economic context which would underpin such provision. This chapter provides this context, setting out key issues in relation to economic growth and well being. It then focuses on economic assessment across the specific areas of national savings, fiscal balance, the labour market, competitiveness and potential growth rates. Other considerations outside of these areas are also discussed.

3.2 The Irish Economic Context

Ireland has experienced rapid economic growth and a subsequent increase in living standards since the 1990s. While this has been a highly positive and welcome development, it has also contributed to a series of impacts at both macro and micro level that are of direct relevance to the current study. At a more macro level these have included:

- Heavy reliance on Foreign Direct Investment (FDI);
- High net immigration, and an increasing dependence on this source to meet labour market needs;
- Concerns over costs and competitiveness issues. For example, Irish pay costs have been rising faster than in other EU countries, (up 35.4% in the period 1999 – 2004);

At a more micro or individual level, the following characteristics have been apparent:

- Direct employee payroll taxes have been lowered and remain comparatively low in an international context;
- Personal borrowings have continued to increase. By the end of 2005, the ratio of personal debt to disposable income had increased to 132%, against 115% a year earlier;
- The appetite for investment in property continues to grow, resulting in increasing property prices.

The above factors mean that although significant economic progress has been achieved, with more growth forecast in the short and medium terms, risks (such as our heavy reliance on the construction sector which leaves the economy vulnerable to shocks and also external risks such as the US economy which is currently on an unsustainable growth path) remain that can impede development in the future.

A key driver of economic success has been the availability of a skilled labour force, with over 2 million people in employment and labour force participation rates for both males and females having increased significantly, yet sustaining the necessary labour force expansion in the long-term represents a key challenge.

Falling fertility rates mean that going forward the working age population is likely to remain fairly static in Ireland, even allowing for significant in-migration. As a consequence, the number of older people (past the current working age) will constitute a larger proportion of society as a whole. Resources must therefore be in place to support the income needs of older people in retirement, and pension coverage is a critical factor in ensuring that this is the case.

3.3 National Savings

3.3.1 Impact on Overall Aggregate Savings

A key outcome from the establishment of mandatory pension provision is the raising of saving rates above the levels that are currently being achieved on a voluntary basis. In this way mandatory pension contributions can be thought of as a form of compulsory savings. It can be argued that they counteract the savings behaviour of some individuals who are not currently putting aside funds for their retirement.

However, there exists an alternative life-cycle theory that suggests that any mandatory savings do not have the impact of increasing provision for later life, but merely reduce the extent to which voluntary saving takes place. It assumes that voluntary savings are reduced by the same amount as mandatory contributions because resources are transferred between different portfolios of assets that act as perfect substitutes. It is also based on the principle that individuals are currently acting rationally, saving at the preferred level for their retirement. Such a reduction in other forms of savings due to an increase in mandatory pension contributions would leave aggregate savings intact. A further potential effect is the borrowing against future pension guarantees by individuals, whereby no additional savings arise.

However, there is evidence which suggests that reducing the substitution of savings in the design of a mandatory pension model will result in an aggregate increase in savings. A key mechanism for achieving this would be the setting of the mandatory savings rate at a higher level than the voluntary savings rate that would have occurred without such an intervention. If the mandatory contribution rate is fixed at only a few percent, it has been found that workers can easily offset their contributions

by reducing other forms of savings and increasing debt², making the overall impact on aggregate savings negligible.

In general, international research supports the view that – if properly designed and delivered accordingly – mandatory savings will increase aggregate savings. A World Bank (2004)³ paper concluded that overall national saving levels increased by more than 50% of the increase in mandatory pension saving when such a scheme was introduced, drawn from research using an unbalanced⁴ panel of 43 countries. Such an experience was confirmed in Chile, where the savings rate increased sharply after the introduction of a mandatory pension contribution rate, although it is difficult to determine the extent to which this can be fully attributed to the introduction of the scheme.⁵

A Reserve Bank of Australia paper (2004)⁶ found that in that country only part of compulsory superannuation contributions have been offset by reductions in other savings, suggesting that – other things being equal – compulsory superannuation has indeed resulted in higher levels of household saving. The authors estimated that 38 cents of each dollar in superannuation contributions were offset, or in other words, 62 cents in each dollar had been saved additionally. However this additional savings rate varied across different income groups, with those earning higher incomes more able to reduce other savings or borrow more, while those reliant on lower income were unable to increase borrowing because of credit constraints.

The authors used these estimates to construct a counterfactual saving rate, which suggested that superannuation may have increased the household saving rate by up to 2% in recent years. Their results therefore suggest that government policies encouraging superannuation have added to both household savings and wealth. These findings were reinforced by a further study projecting that the impact of the mandatory scheme would be to increase national savings by approximately 3.6% of GDP by 2020.⁷

As with each of the economic impacts discussed, the design and delivery of the mandatory pension scheme will determine the magnitude of the impact on national savings (see below). This is highlighted in the work undertaken by Life Strategies/ESRI as part of the NPR. In this work, the authors found that four out of the five models considered were likely to raise household savings. In contrast, under varying assumptions for their work taken in parallel with this study, the four models

² Turner, John A., *Economic Analysis of Mandatory Defined Contribution Pension Systems*, ILO October 1997.

³ Lopez Murphy, Pablo and Musalem, Alberto R., *Pension Funds and National Saving*, Policy Research Working Paper Series 3410, The World Bank, August 2004.

⁴ Unbalanced since the number of time series observations differ considerably across countries.

⁵ World Bank, *Averting the Old Age Crisis: Policies to Protect the old and Promote Growth*, Oxford University Press: Oxford, 1994.

⁶ Connolly, Ellis and Kohler, Marion, *The Impact of Superannuation on Household Saving*, Reserve Bank of Australia, March 2004

⁷ Bateman, Hazel and Piggott, John, *Australia's Mandatory Retirement Saving Policy: A View from the New Millennium*, The Social Protection Advisory Service, The World Bank, March 2001.

of mandatory pension provisions proved to have a negative impact under on the personal savings rate.

3.3.2 Design and Delivery Issues

While most international literature shows that mandatory pension provision can have overall positive impact on aggregate savings levels, a number of issues have been identified regarding the design and delivery of such schemes that determine the extent to which national savings increase or decrease.

An OECD (1997)⁸ paper highlighted a number of critical success factors in achieving an overall increase in national savings following the introduction of a mandatory pension system. These included:

- stimulation of a positive savings impact from the lower savers group;
- limitation of the negative income effect on savings that may be derived from higher implicit rates of return on tax-exempt funded pensions;
- control of tax exemptions on pension returns to ensure that they are limited to low savers or that pension returns are taxable like the returns on other savings;
- discouragement of individuals from borrowing against accumulated and mandatory pension assets.

The authors also suggested that mandatory pension schemes that cover the low-savers group effectively not only stimulate current savings but also serve as an important policy vehicle to help make retirement income levels and wealth distribution more equal between high and low savers.

Within the Chilean defined contribution system, three features were identified by Turner (1997)⁹ that potentially generated a negative impact on savings. These should be borne in mind in the development of any mandatory pension provision model and can be summarised as follows:

- Inclusion of both a means tested benefit and a minimum benefit reduces the incentive for low income workers to save for retirement. Low income workers are induced not to save because the marginal increase in future income above the means tested benefit or minimum benefit may be small;
- Government expenditure to finance the transition to the new defined contribution system reduced Government savings;

⁸ Bailliu, Jeanine and Reisen, Helmut, *Do Funded Pensions contribute to Higher Aggregate Savings? A Cross-Country Analysis*, Working Paper No. 130, OECD Development Centre, December 1997

⁹ Turner, John A., *Economic Analysis of Mandatory Defined Contribution Pension Systems*, ILO October 1997.

- Defined contribution plans may have the effect of reducing savings, measured in terms of the accrual of assets, if they have a low rate of return. This can result from Government regulations that increase their costs and limit their investment portfolios to low risk assets.

Finally, a World Bank (2004)¹⁰ paper put forward a number of points for consideration in the adoption of a proposed mechanism for mandatory pension saving:

- first, the development of a pension savings scheme, or contractual saving in general, can generate a better functioning of capital markets that in turn can contribute to higher levels of saving;
- second, a funded system with explicit, direct links between contributions and benefits can increase savings by generating awareness of the importance of saving;
- third, individuals might consider mandatory pension savings as an imperfect substitute of ordinary saving due to liquidity considerations;
- fourth, individuals might consider mandatory pension saving and ordinary savings as perfect substitutes, but could then be forced to accumulate more assets than would otherwise be the case, and therefore have trouble offsetting pension accumulation (e.g. borrowing constraints);
- finally, levels of voluntary savings by individuals might remain unaffected by forced savings via a mandatory scheme, thereby increasing aggregate savings.

A further consideration is that the purpose for which an individual saves will also have a bearing on the degree of substitutability between voluntary and mandatory savings. For example, if savings are for inheritance, or for a rainy day, they will not serve as a substitute for mandatory pension provision.

The limited international literature reviewed on experience elsewhere suggests that mandatory pension systems can, depending on their design and delivery, increase national savings. However, the discussion in the previous section also highlighted that there are a number of factors which could induce negative impacts on savings. This is confirmed by the various work by Life Strategies/ESRI in this area, with various models (and corresponding assumptions) resulting in different outcomes.

In summary, the international research suggests that the planning of any mandatory pension provision should recognise that the higher the required contribution rate (above current voluntary saving levels), and the lower the opportunities for individuals to offset mandatory savings, the

¹⁰ Lopez Murphy, Pablo and Musalem, Alberto R., *Pension Funds and National Saving*, Policy Research Working Paper Series 3410, The World Bank, August 2004

greater the possible increase that will result in the overall savings rate.

3.4 Fiscal Balance

3.4.1 Net Exchequer Cost of Provision Components

As is the case in relation to national savings, the impact of the introduction of a mandatory pension system on fiscal balance (i.e. the difference between general government receipts from taxation and expenditure), will be dependent on design and delivery of the pension model that is introduced. Different models of mandatory pension provision will impact to varying degrees on a series of components that together comprise the net Exchequer cost of provision. In the Irish context these components include:

- Cost of Pillar 1 pensions;
- Cost of public service pensions;
- PRSI receipts;
- Net transfers to/from the National Pension Reserve Fund;
- Net cost of voluntary Pillar 2 provision (i.e. the cost of tax relief on voluntary contributions and tax forgone on investment income/gains, less tax collected from voluntary pension provision);
- Cost of tax relief on mandatory pensions (where relevant);
- Tax collected from pensions in payment arising from mandatory provision.

An estimate of the cost implications that might arise under each of these components has been provided by Life Strategies for various potential mandatory pension models, based on a range of scenarios. This exercise, which has run in tandem with our study, remains a separate and distinct piece of work, but the nature of the different costs involved remains pertinent to this assessment of economic considerations.

It is also important to acknowledge that the cost implications of introduction of mandatory pension systems are significant regardless of the model selected for this purpose, and the cost of implementation must always be a central consideration in any decision to progress with this approach. Costs will not only be incurred at the outset, but substantial expense will be involved in operating any new mandatory pension scheme. Therefore in the long-term Exchequer costs of sustaining a mandatory pension scheme would generate a significant tax burden. The economic impact of the policy-trade in this regard will be a particular concern, as if public expenditure is

prioritised on mandatory pensions over competing demands the opportunity cost of this prioritisation must be taken into account.

3.4.2 Government Expenditure

If mandatory pension systems are financed on a pay as you go basis, Government finances benefit in the short-term. Over time, however, the benefits decline and ultimately reverse as additional mandatory pension payments exceed the mandatory contributions. The National Pensions Review noted that if compulsory savings are paid to Government and not to private financial institutions, the contributions would then be accessible to finance current Government expenditure. This could then result in increases in the level of household savings being offset by corresponding decreases in the level of Government saving. Although in practice it would seem unlikely that the Government would adopt such an approach to managing expenditure, there does nonetheless exist the possibility that contributions could be used in this way. Therefore it may be worthwhile considering the introduction of a ring-fencing mechanism to ensure that funds paid to the Government under a compulsory scheme are used for future pension payments.

The need to consider such a prudent approach to the operation of a system where contributions are made directly to the Government is reinforced by the findings of a World Bank study in 1994. It found evidence that in some cases governments have borrowed from provident funds at below market interest rates, cutting future pension benefits and current public borrowing costs. It was noted that these low rates could increase public deficits if they induce the Government to spend more on other goods and services.¹¹ The inherent danger in this regard is that spending, financed by mandatory pension contributions that effectively become a tax on workers, becomes counter-productive. Decentralised pension schemes that charge market rates avoid this danger. However if the Government guarantees their benefits, this constitutes another state obligation that could become increasingly significant if strategic manipulation and moral hazard are not controlled (e.g. by setting up a NPRF-type system for extra contributions).

3.4.3 Tax Incentives

Tax incentives are not essential for mandatory schemes, but they improve compliance and are therefore common in countries where this approach has been adopted. In considering introduction of an incentive scheme in support of mandatory provision, it will be important to take account of the knock-on effect of reduced tax contributions, as these may then result in reduction in Government spending or increases in other taxes.

Contributions to most mandatory saving schemes are deductible for income tax, as is the current investment income from the funds. For example, workers in Chile were allowed to contribute

additional amounts on a voluntary tax-exempt basis. In most schemes, withdrawals are subject to tax, like any other income. The benefits of tax deferral are greater for higher-income workers, because their initial tax savings are higher and they are likely to be in a lower tax bracket after retirement. To avoid this regressive redistribution impact, limits may be placed on tax benefits or a tax credit may be offered in place of making contributions tax-deductible, as has been proposed for some occupational plans.

In the past Malaysia and Singapore exempted both the contributions and the withdrawals from taxation. The total tax benefits of Singapore's national provident fund (and the government tax revenue forgone) were estimated to amount to slightly more than 1% of GDP (1987). The Singapore fund thus provided a valuable tax shelter for contributors, especially high income workers who would be subject to higher marginal tax rates on other investment income. World Bank research pinpointed increased tax benefits as a key factor in national policy decisions that set high contribution rates and low interest rates.¹²

The impact of introducing mandatory pension provision on fiscal balance depends on a number of factors including contribution rates, tax incentives available, revenues generated, the body taking receipt of the contributions, and ultimate use of the contributions. Although international research on this subject is relatively sparse, it would appear that the two main risks in implementation surround Government deployment of contributions for current expenditure purposes and the redistributive effects of tax incentive systems. In the former case, this can negate any impact on increasing household saving. In the latter, unilateral tax incentives can cause regressive redistribution of wealth between high and lower earners. Planning of mandatory pension provision must therefore guard against these occurrences.

3.5 The Labour Market

Implementation of a mandatory pension scheme raises a number of issues with regard to the labour market. An increase in both employer and employee contributions as a result of the introduction of such provision will subsequently affect labour costs, and this can subsequently generate a range of economic impacts.

Firstly, additional employer contributions under a mandatory scheme (assuming real wages are held constant) will increase employment costs. In the short term this will result in higher gross wages,

¹¹ World Bank, *Averting the Old Age Crisis: Policies to Protect the old and Promote Growth*, Oxford University Press: Oxford, 1994.

¹² World Bank, *Averting the Old Age Crisis: Policies to Protect the old and Promote Growth*, Oxford University Press: Oxford, 1994.

and could then have repercussions in terms of higher prices being passed on to consumers, an impact that was forecast in research conducted by ESRI for the National Pensions Review. This would be of considerable concern in sectors which are labour intensive, such as tourism, although this impact may not be as significant in key industries such as internationally traded services or high-technology manufacturing. Companies operating within particularly tight profit margins will also experience additional difficulties. Those employers that are not currently making contributions may find it difficult to provide for this added requirement, and a reduction in labour demand could result. In the medium to long term this pattern could be repeated across all employers required to make mandatory contributions, with labour demand decreasing as a consequence of the rise in costs. In a competitive labour market this would then lead to a lower wages. In this way, employees are absorbing some of the cost of the additional contributions (even though the contributions are levied solely on the employer). This impact may be expected to be less prevalent in Ireland than for other economies due to its vibrant labour market and position at close to full employment in the short/medium term. Again, this may differ on a sector-by-sector basis.

The reverse is true in the case of the mandatory contribution levied on the employee. In this respect there is a danger that labour participation rates may fall as fewer individuals choose to enter the labour market with what is perceived to be a higher level of 'taxation' now in place. This would be especially true among groups at lower income levels, as this increased 'tax' may, depending on how it is levied, constitute a large percentage of their salary. Although contributions are deducted from the employee's wages, the overall burden is therefore partly borne by the employer through higher wages resulting from a contraction in labour supply. Those currently on the margins of the labour market, e.g. women working in the home, may also be deterred from entering the labour force given the perceived additional employment costs.

Regardless of the scale of the impacts noted above, it is clear that the financial burden of the introduction of a mandatory scheme is shared between employers and employees, with the precise share being determined by the relative elasticities of labour supply and labour demand in relation to increased taxes. The elasticity of labour demand and supply can be controlled somewhat by Government policies (e.g. level of social welfare benefits), and Exchequer contributions will have a similar impact (e.g. via tax incentives), but it should be noted that these would have to be financed via other taxation.

International research highlights some likely labour market impacts of mandatory pension contributions, and confirms the hypotheses outlined above. Turner (1997) states that with high mandatory contribution rates in a defined contribution scheme, workers may be motivated to evade contributions. This can occur through simple non-payment, or it may take the form of a distortion in labour supply, with workers being forced into the informal sector to avoid the high mandatory pension contributions.

In relation to mandatory personal saving plans¹³, a World Bank research paper (1994)¹⁴ debated the issue of labour market impact and found that unlike public or occupational plans, these personal plans have relatively little impact on the labour market. This is because workers eventually recoup their contributions with interest, and as a consequence they may be less likely to see these as taxes. Also there is no penalty for mobility, which otherwise might effect the labour market. However some distortions were acknowledged, consistent with the hypotheses outlined above. When contribution rates are set above the household's desired savings rate (the main reason for a mandatory system), incentives to evade contributions by understating covered wages or leaving the labour market do arise. If workers cannot evade they may be induced, by their higher accumulated savings and compulsory savings rate, to retire early (if this facility is allowed). Thus mandatory saving plans may reduce the supply of labour, especially experienced labour, in the formal sector.

This may be especially true as a consequence of changing employment patterns within Ireland. In general, workers are now much more mobile, typically having multiple employers over their lifetime. Turnover of employers has a knock-on impact of the administration costs of a mandatory pension scheme, and may also increase the danger of losing track of an employee, hence raising the potential for evasion as noted above. Work-life balance is also a growing labour market issue, and more and more individuals are taking time out from work to pursue educational goals, spend time with family, travel and attend to other matters, and this will make them much more flexible in attitude towards participation in the labour market. Such changing attitudes may therefore increase the labour market impact of mandatory pension provision in the future, as the associated costs of participation become more outweighed by the value placed by an individual on non-work time. Lifelong learning will be a further critical emerging issue with regard to work patterns in the future, and it is essential that mandatory provision does not discourage participation in learning activity on an ongoing basis as a result of the incremental cost it levies on individuals.

A further consideration is that wage rigidities may prevent employers from shifting their share of payroll tax to workers, with a negative employment impact occurring. Singapore seems to have experienced this effect in 1984, when it raised the contribution rate to 50% of wages, shared equally between employers and employees. The employers' rate was cut in half the following year because of the belief that this had affected employment adversely. Both of these factors imply a tax element that distorts the labour market and limits the implementation of an efficient contribution rate.

In Australia the Superannuation Guarantee is not generally thought to have had major labour market consequences. The Government adopted a phased approach, which allowed the labour market to

¹³ Where contributions are deposited in personal accounts and benefits available in old age depend on these contributions and the investment income they earn.

¹⁴ World Bank, *Averting the Old Age Crisis: Policies to Protect the old and Promote Growth*, Oxford University Press: Oxford, 1994.

react. The accumulation effects and mandatory nature of the policy, while altering the time profile of labour payments, are not seen as having major impact on overall levels of compensation. A proactive education policy, informing employees of the benefits of contribution and discouraging perceptions of it as a tax, was also considered to have made an important contribution in this regard. This may be something of an oversimplification however. It is thought that once the scheme matures, old age pension entitlements will be affected by the Superannuation Guarantee accumulations. Further short-term wage rigidities may lead to increased labour costs resulting from the mandatory employer contribution. However, it is widely considered that in the long term the impacts will be minor.¹⁵

A final consideration, particularly pertinent to Ireland, is the potential impact on the additional supply of migrant workers (30,000 are needed each year up to 2010¹⁶) needed to sustain high levels of economic growth. It may be argued that an additional cost to be borne by employees may be viewed as a disincentive to come to the country to work. That said, in the international context, Ireland currently has comparatively low direct employee payroll taxes which may offset the negative impact in this regard.

¹⁵ Bateman, Hazel and Piggott, John, *Private Pensions in OECD Countries – Australia*, Labour Market and Social Policy Occasional Papers – No 23, OECD, 1997.

¹⁶ See FÁS publication “Building on our Vision FÁS Statement of Strategy 2006-2009”

A range of contrasting views as to the impact of mandatory pension schemes on the labour market emerge from international literature. There is a real risk of such provision resulting in a decrease in employment levels, with the mandatory contributions acting like a tax, decreasing labour demand (when employer contributions are involved) and reducing labour supply (when levied on employees).

The level of impact on the labour market will depend on the design and delivery of the mandatory pension model, and would be expected to be most strongly felt in labour-intensive industries and among employers that had not previously made pension contributions. It could also act as a greater deterrent to labour market participation for those on a lower income levels, and those outside the labour market who may be considering taking employment, e.g. women working in the home.

The elasticity of labour demand and supply can be influenced somewhat by Government policies (e.g. level of social welfare benefits). Exchequer contributions (e.g. via tax incentives) will have a similar impact, as these will have to be financed through taxation.

Also, the available international literature on this issue shows that a number of approaches may be adopted to lessen the negative labour market impact of mandatory pension provision. A phased introduction could prove beneficial, as this avoids shocks and allows the labour market time to react and plan accordingly. Informing employees as to the benefits of contribution, and discouraging them from perceiving it as a tax, may also help to reduce any negative labour market impact.

3.6 Competitiveness

In simplest terms, competitiveness relates to the ability of a nation or firm to sell competitive goods or services in international trade. One particular aspect of this which is particularly impacted by mandatory pension provision (and that is much discussed in Ireland at present), is price competitiveness. Price competitiveness is determined by productivity, profit margins, the exchange rate, and most importantly for this analysis, input prices, which includes real wages (together with material prices and the cost of capital).

As detailed extensively in the previous section, mandatory pensions may impose additional costs on employers, especially those who are not currently making pension contributions. This could increase pressures on competitiveness, as employment costs increase. The risk of reduction in the labour supply as a result of perceived higher 'taxes' would also potentially have a negative impact on national competitiveness. If such difficulties result, with the extent to which they might occur determined by a wide range of variables, it would be expected that labour-intensive industries would suffer most in terms of competitiveness, and particularly international competitiveness. A further knock-on impact may be the hindering of attraction of skilled migrants to meet the ongoing labour market needs of the economy.

A final consideration with regard to competitiveness is that the introduction of a mandatory pension scheme which adds to employment costs may act as a disincentive for Foreign Direct Investment (FDI), as against the current situation. This depends somewhat on the pension policies in the countries with which we compete for FDI. However it must be acknowledged that any potential multi-national inward investor will make its investment decision based on a wide range of factors, with the tax regime present in each of the potential investment locations typically one of these factors. The attraction of FDI has been central to Irish growth performance, with a far greater reliance on FDI inflows than larger more closed EU economies. Ensuring that any scheme is implemented in a manner that minimises the risk of it being perceived as an overly interventionist approach will therefore be a prime consideration.

Considering the implementation of a quasi-mandatory scheme in this respect may be one option. Such a scheme, where although not obligatory for all, is taken up by the vast majority of the population as a result of union ties, flexibility of access or generally acknowledged benefit, has been successfully adopted in countries such as Denmark, where it is operated by the social partners and covers 80% of the active population. A quasi-mandatory scheme would however be more difficult to implement in Ireland as a result of lower levels of unionisation, an increasing trend. A quasi-mandatory scheme would certainly, however, reduce perceptions of pension provision being viewed as an additional tax, particularly if contributions were not made to Government but to another agency.

The impact of a mandatory pension system on national competitiveness closely relates to the impact on the labour market discussed above. If labour costs do rise, and labour supply decreases, other things being equal a negative impact in terms of overall competitiveness will result. The introduction of a mandatory scheme may also have some impact on how Ireland is perceived by potential inward investors.

3.7 Potential Growth Rates

Economic growth, which is usually measured as the increase in output in terms of Gross Domestic Product (GDP) and Gross National Product (GNP), has a number of determinants. These include inputs such as labour, capital and natural resources, and/or greater productivity. The relationship between mandatory pension provision and economic growth is therefore linked to the previous discussions regarding impact on the labour market and hence competitiveness.

The goal of mandatory pension provision is to increase savings now, in order to pay for increasing costs in the future. However as has been shown above, in the worst case scenario, this could result

in the following economic impacts, over and above the actual revenues gathered by a mandatory contribution scheme:

- decreasing labour demand and labour supply;
- contraction in wages and personal disposable income, and in resultant demand for goods and services;
- the deadweight loss of the introduction of the scheme in relation to output as a consequence of the above, which is a loss of economic welfare beyond the tax revenues collected.

However, pension reform may also, under certain circumstances, generate some positive impacts with regard to economic growth. If mandatory pensions result in increased national savings, and these higher savings are translated into more productive investment, this investment could result in increased output. Davis and Hu (2004) point to a number of studies which indicate that reform in Chile may have led to an improvement in economic growth, via raised saving and private investment rates. However, these are tentative studies, and improvements in economic growth were attributable to pension and other economic reforms in general, and not mandatory pension provision alone.¹⁷ It is also important to note that Chile’s economy is not as open as Ireland’s and therefore Irish savings are less likely to stay in Ireland.

Within Ireland, Life Strategies/ESRI completed work for the National Pensions Review, supplemented by the additional exercises being undertaken in parallel with this study, which focused on establishment of the net impact of introduction of various mandatory pension models on economic growth. This forecasts largely negative impacts across a range of key economic indicators from 2007 to 2011, including real GDP, real GNP, employment, unemployment and real personal disposable income, regardless of the mandatory pension model adopted. Table 3.1 highlights these findings across each of the four models tested over the period, assuming that they are introduced in 2007. The figures represent the predicted percentage change in the indicators compared to the ‘do nothing’ scenario. The design and implementation of each model differs, and as such has different impact on growth rates. Also the figures fluctuate depending on what year you examine.

TABLE 3.1: IMPACT OF MANDATORY PENSION SCHEMES ON ECONOMIC VARIABLES, COMPARED TO THE BASE SITUATION (YEAR 2007/2011)				
	Model 1	Model 2	Model 3	Model 4
Real GDP	-3.3	-0.68	-0.70	-1.35
Real GNP	-0.9	-0.31	-0.32	-0.30
Employment	-3.1	-0.68	-0.70	-1.18
Unemployment Rate	0.7	0.38	0.39	0.25
Real Personal Disposable Income	-13.7	-2.83	-2.90	-5.62
SOURCE: RESULTS FROM THE ESRI HERMES MODEL				

¹⁷ Davis, E Philip and Hu, Yu-Wei, *Saving, Funding and Economic Growth*, Public Policy Discussion Papers from Economics and Finance Section, Brunel University, October 2004

The fact that in all cases ESRI projections show that the mandatory models under consideration have a negative impact on growth rates is consistent with the previous discussions in this report, which highlighted potential negative impacts on the labour market, competitiveness and indeed economic growth in general. It suggests that in general, the introduction of a mandatory pension scheme has a similar impact to the introduction of a new tax, and that the benefits of such provision in the short-term are outweighed by the costs in terms of the primary economic indicators.¹⁸

Economic growth impact from mandatory pension provision is intrinsically linked to the issues of both labour demand and supply and national competitiveness discussed above. Some positive impacts in terms of growth can result from implementation of a scheme, with increased levels of aggregate national savings experienced in some cases which might then be translated into more productive investment and hence an expansion in output. However, the potential negative economic effects in terms of GDP growth and contraction of employment counter any such potential benefits, and pension systems are primarily a distributive rather than a production enhancing device. This view is confirmed by ESRI forecasts for a range of key economic indicators over the 2007-11 period, assuming adoption of four different mandatory models. In general it would seem that the implementation of a mandatory scheme would generate similar effects to those of any new national tax. The extent of the negative impact on growth rates will be determined by the design and delivery issues outlined above.

3.8 Other Considerations

A number of other considerations in terms of economic impact were identified from the review of international literature. These are each discussed in turn below.

3.8.1 *Impact on Existing Occupational Pension Schemes*

There has been much debate in international literature as to the effect of the introduction of a mandatory pension scheme on those currently participating in existing voluntary occupational schemes. It has been argued that, where minimum contribution levels are set, those employers making contributions above this minimum percentage will regress to this level for existing employees, and/or only offer this contribution to new employees. However this assumes that approaches are highly flexible and contributions can be changed in a timely and straightforward manner. In practice any attempt to reduce employer contributions in major firms would be expected to have labour relations repercussions, and it is unlikely that employees would accept the reduction

¹⁸ A number of international econometric studies have found negative effect of increase in taxation on GDP growth, although the impact would differ depending on the nature of the tax, economic characteristics of a country etc. An overview of the relevant studies is provided in Leach, Graeme, *The negative impact of taxation on economic growth – New edition*, Reform, September 2003

without any corresponding increase in wages to offset the decrease in pension contributions. The employer would also be constrained by the tightness of the Irish labour market, a situation that would limit the extent to which employees could be replaced, and it is unlikely that any such developments could progress without significant negotiations.

Nevertheless if a mandatory pension scheme is introduced with contribution levels below that offered in voluntary schemes, there may be a tendency for this prescribed minimum rate to be adopted as standard practice for voluntary provision. Such a scenario is based on the following assumptions:

- contributors and their employers may understand the mandatory contribution as being what is necessary as an adequate retirement income rather than recognising it as a minimum;
- employers may see no competitive advantage in providing benefits above those mandated, particularly if employees are unaware of the value of pension benefits. In any case employees may prefer extra pay to pension. However as employers currently provide voluntary contributions to pension schemes, it is unlikely that their rationale for doing so would change post the introduction of mandatory pension provision, given that pension contribution are seen as the overall remuneration package;
- the integration of the mandatory systems with existing arrangements may be complex and may eventually have the effect of discouraging voluntary occupational schemes. The greatest problems are likely to arise in relation to DB schemes, as integrating them with mandatory DC schemes represents a highly complex matter, and the costs of complying with regulations may be overly prohibitive.

3.8.2 Regressivity Considerations

It was noted earlier in this report that the introduction of unilateral tax incentives alongside mandatory schemes could result in an unintended regressive redistribution of wealth. There is however some concern that mandatory schemes themselves may generate regressive impacts under certain conditions. Regressivity arises where payments relative to earnings are greater for those individuals within lower income bands than for their counterparts in higher bands. Turner (1997) noted that it is only when the rate of return net of expenses is constant across income class that such impacts are avoided. However this research goes on to highlight that for this constant rate of return to be realised, administrative costs would have to be allocated equally across all money invested, all income bands would have to invest in the same portfolio, and benefits would have to recognise differences in life expectancy across different bands. Clearly this is not usually feasible in practice and as a consequence schemes can tend to be regressive in nature. Thus in order to avoid, as far as possible, regressive impacts from the introduction of mandatory pension provision, the design of any system should take account of the payments and likely term of draw down for different social classes.

3.8.3 Contribution Evasion

As noted within the discussion on labour market impacts, the introduction of a mandatory scheme could be expected to increase the risk of contribution evasion by non-declaration of income or by leaving the formal labour market entirely. International literature has focused further on the problem of contribution evasion, and particularly interesting research exists in relation to the Chilean experience. Evasion occurs for several reasons, most of which apply equally for defined benefit and defined contribution systems (Bailey and Turner 1998). Turner (1997) identified high rates of evasion in Chile, where providing low income workers with a guaranteed minimum benefit reduced their incentive to contribute and there was a general perception that there was little relationship between level of contributions and level of future benefits. Evasion was most prevalent, as would be expected, among those employees and employers experiencing the greatest financial hardship. Indeed evasion by employers was found to be a significant problem, with 150,000 cases pending against employers in Chile in 1996 who had failed to remit worker contributions to the pension fund management companies (Economic Intelligence Unit 1996). This is the worst form of contribution evasion since it amounts to employers defrauding employees of their own contributions. In order to avoid such difficulties, the design of any defined contribution mandatory scheme should seek, as far as possible, to guard against offering lower rates of return on contributions than would be the case for other investments, as this acts as a major source of motivation for evasion.

3.8.4 Retirement Decision

Mandatory defined contribution plans may impact upon retirement age in several ways. By retiring at the earliest possible age with non-annuitized benefits, it was noted that low income workers in Chile may be able to qualify later for government subsidised minimum benefits after they have run down their pension contributions. Research has also identified the likelihood of a similar strategy being used by low income workers in Australia in order to qualify for government provided benefits. There may also be random distortions on retirement decisions in defined contribution plans due to the effect of changes in the interest rate on the level of monthly benefits provided by an annuity. Workers may postpone or advance their retirement date depending on when they expect annuity markets to be relatively favourable.

4. Implications for Potential Irish Models

4.1 Introduction

The analysis of international experience in the previous chapters has provided a broad understanding of the issues to be considered in evaluating the introduction of a mandatory or quasi-mandatory pension scheme in Ireland. It is worthwhile concluding this research by examining the implications from the findings for the specific models currently being considered, on which the ESRI and Life Strategies have been conducting analysis in tandem with this exercise.

4.2 Proposed Models

It was highlighted earlier in this report how ESRI had forecast the potential economic impact of four models (M1, M2, M3 and M4) of mandatory pension provision should they be introduced in Ireland. Two of the three primary models currently under consideration draw on this analysis, and each of the three can be summarised as follows:

- Model A, based on the assumptions used for M1 in the ESRI analysis, with the State Retirement Pension increased to 50% of gross average industrial earnings (GAIE).
- Model B, based on the general principles governing M2, M3 and M4 in the ESRI analysis, involving a supplementary system with a contribution rate of 15%, with 5% provided by the Exchequer, and the remainder split between employer and employee contributions, with options of immediate introduction or phasing in over a ten year period.
- Model C, a hybrid model combining the above components assuming a State Retirement Pension of 40% of GAIE and a supplementary system with a contribution rate of 15%, a lower contribution threshold of approximately €15,000 and an upper earnings limit of €60,000.

4.3 Implications for Each Model

4.3.1 Model A

Raising the Old Age Contributory Pension Component of PRSI contributions in order to provide for a retirement income of 50% of GAIE undoubtedly represents the most straightforward option from a logistical perspective. If the PRSI contributions are increased to fully provide for future pension payments under this scheme, it could represent the most cost-effective option in terms of fiscal balance.

However the dangers of mandatory pensions schemes being viewed as a tax by both employers and employees have been highlighted throughout this document and this impact would be greatest if contributions are sourced in this manner. It could be expected, therefore, that introduction of this scheme would have a more negative effect on the labour market than supplementary systems. The costs associated with entering the labour force for those recipients of social welfare payments would act as a greater deterrent to participation, while potential foreign migrant workers may be discouraged from relocating to Ireland by what is seen as too great a tax burden on their earnings. The scale of this impact in comparison with supplementary systems would be dependent on what extent perceptions of additional contributions change if they can be more directly attributed to future pension payments (as in a supplementary system). For the employer, the impact will be dependent on increases in their PRSI contributions as a result of Government adopting this approach. If the costs of labour are perceived to have risen significantly in this regard, it may result in a reduction in labour demand.

Any notable increases in PRSI contributions for employers or employees may also have a knock-on impact on external perceptions of the tax regime within Ireland. As noted previously, potential inward investors base their investment decisions on a range of factors, of which the national approach to taxation is one. The introduction of an entirely state-run, PRSI based scheme may have a negative impact on competitiveness in this regard, as there is a risk of it being perceived as overly interventionist.

There can also be expected to be some reduction in voluntary pension contributions as a result of the introduction of a scheme that guarantees 50% of GAIE on retirement, although this may not be as exaggerated as under a supplementary scheme, as contributions are going into a central 'pot' and the benefits generated from them will not be related to the initial payments.

4.3.2 Model B

A range of issues have been highlighted throughout this report with regard to Model B, and some of the implications of its introduction will be dependent on factors such as how and when it is implemented and the employer/employee contribution split. In general, we have found that the introduction of such a scheme could potentially generate an overall positive impact in terms of savings. Although some individuals currently contributing to voluntary schemes may reduce their overall contribution levels to those prescribed by the mandatory scheme, such an effect could be more than countered by those making pension contributions for the first time. An overall positive impact on savings was confirmed by World Bank research into the introduction of mandatory pension provision in 43 countries, and further confirmation has been provided by the Australian experience. As part of the work for the NPR, the Life Strategies/ESRI models with characteristics similar to this scheme resulted in an increase in household savings. However, under different assumptions for their work taken in parallel to this study, models M2 – M4 showed a slight negative

net impact on personal savings (although significantly less than the reduction under Model A, or M1 in their analysis).

In terms of the labour market, the introduction of a mandatory supplementary scheme will have some impact on the costs of participation in the labour force and may then reduce labour supply. The requirement for employer contributions could also result in lower levels of employment, while employers already making voluntary contributions may reduce these down to mandatory levels. However, this system will demonstrate direct links between contributions and future pension income, and as such it may be viewed as less of a tax and more of an investment. This was the experience in Australia, where the negative impact in terms of the labour market is considered to have been minor.

The most effective systems internationally would demonstrate a fairly even balance in terms of employer and employee contribution rates and it is likely that this approach would minimise the negative impact on the labour market, with neither group perceiving that they are being asked to shoulder an overly harsh burden.

The decision on whether to implement any supplementary pension scheme immediately or gradually over a period of time (10 years is proposed within the model) could also be expected to have implications in terms of overall impact. International research suggested that if the latter phasing approach is adopted the impact on the labour market will be reduced as it will allow employers and indeed employees time to consider the changes and react and plan accordingly.

Finally, it has been noted that the setting of high contribution rates under supplementary schemes increases the risk of evasion. The proposed rate of 15%, comprising Exchequer, employer and employee contributions should avoid such difficulties however, as where problems have arisen the overall contribution rate has been significantly higher.

4.3.3 Model C

Model C, a hybrid model combining the above two different systems would generate similar implications to those described above. The costs involved in establishing such a scheme could be the most significant of the three models under consideration, as it involves both the setting up of a supplementary scheme and changes to the Old Age Contributory Pension component of PRSI.

It would protect low income groups by guaranteeing a greater minimum retirement income via increased PRSI payments, but would also require individuals to make their own provisions for retirement in addition to state assistance. It would appear to offer the greatest potential for maximising future pension income per household, while not placing the entire onus on individuals to generate a sufficient income in retirement from their current contributions.

The impact on the labour market would again relate to what extent changes are perceived as an increase in taxation, and there is always the danger that this is strongly the case in any increase in PRSI contributions. The negative impact on the labour market would therefore be expected to be more than that of a purely supplementary scheme, but less than a purely PRSI-based scheme. Concerns over competitiveness may also arise in this regard as noted above due to concerns from potential inward investors that the system represents an additional tax burden for employers.

This report has noted that mandatory pension schemes can risk regressive impacts, and this proposed model does include provisions that would help to address such factors. Schemes are regressive where payments relative to earnings are greater for those individuals within lower income bands than their counterparts in higher bands. Clearly the PRSI element of the model is not regressive and is related to the minimum income of 40% of GAIE. However the supplementary scheme can act in this way as it may require full contributions from low income groups which result in very little return above this 40% level. Lower income groups also have less capacity to forsake an additional 5 to 10% of their earning. The introduction of a threshold of around €15,000, where income up to this point would not require a contribution, should ease the burden for those that are less well-off. The introduction of an upper earnings limit of €60,000 will also protect the scheme from being used by higher income groups as an investment opportunity in preference to other investment options, due to the Exchequer and employer contribution components.

4.4 Summary of Issues and Synergy with ESRI Findings

The issues discussed under each proposed model are summarised in Table 4.1 in order to summarise the key points worthy of consideration in appraising the introduction of mandatory pension provision, based on international research. For the most part, the ESRI findings with regard to economic impact would confirm the impacts that are suggested in this report, although the hybrid Model C was not formally tested in this manner. The ESRI analysis, highlighted in Table 3.1 earlier in this report, confirms that the impact on overall competitiveness is greatest under Model A (or M1), a purely PRSI-based approach. This reflects the risk of pension provision being perceived as additional taxation by employers, employees and potential inward investors. The labour market impact of Model A, as emphasised in our own analysis, would also be significant with a reduction in employment and an expansion in unemployment forecast by ESRI over the 2007-2011 period.

For Model B (M2, M3, M4), the ESRI analysis confirms some negative impact in relation to competitiveness, employment and unemployment, although on a much less significant scale than is predicted to be the case for Model A. The differences between M2, M3 and M4 in the analysis also confirm a number of the issues discussed in this report. The even balance of employer and employee contributions in M2 is shown to be marginally preferable in GDP growth and labour

market terms to a model (M3) assuming that the employee would take all of the non-Exchequer burden. Meanwhile when applying two scenarios to this equal contribution model of gradual phased introduction over 10 years (M2) or immediate introduction (M4) the latter situation is forecast to generate substantially more negative impacts on growth and employment. This illustrates our point that phased introduction of mandatory pension provision is preferable in order to allow employers and employees to react and plan accordingly.

TABLE 4.1: ISSUES WORTHY OF CONSIDERATION FOR THREE PROPOSED MODELS OF MANDATORY PENSION PROVISION	
Model	Issues Worthy of Consideration
<p>Model A, based on the assumptions used for M1 in the ESRI analysis, with the State Retirement Pension increased to 50% of gross average industrial earnings (GAIE).</p>	<ul style="list-style-type: none"> • Simplest and most cost effective to implement. • Perceived as additional taxation to a greater extent than a supplementary scheme. • Most likely to have greatest negative impact on national savings, compared to other models. • Resultant impact on labour force participation. • Impact on labour demand dependent on scale of increase in employers' PRSI contributions • Less likely to impact on participation in voluntary pension schemes. • Approach may be perceived as overly interventionist by potential inward investors.
<p>Model B, based on the general principles governing M2, M3 and M4 in the ESRI analysis, involving a supplementary system with a contribution rate of 15%, with 5% provided the Exchequer, and the remainder split between employer and employee contributions, with options of immediate introduction or phasing in over a ten year period.</p>	<ul style="list-style-type: none"> • More significant costs of implementation. • Potential to generate increase in total aggregate savings, (although not guaranteed). • May reduce contributions to voluntary pension schemes. • Less of a labour market impact than a PRSI based scheme. • Phased in rather than immediate approach may reduce impact. • Works most efficiently where balance exists between employers and employees contributions.
<p>Model C, a hybrid model combining the above components assuming a State Retirement Pension of 40% of GAIE and a supplementary system with a contribution rate of 15%, a lower contribution threshold of approximately €15,000 and an upper earnings limit of €60,000.</p>	<ul style="list-style-type: none"> • Potentially highest costs of implementation. • Still some potential for negative external perceptions of additional 'taxation' • Labour market impact more significant than purely supplementary scheme. • Guarantees greater minimum income in retirement. • Guards against regressive impacts with lower income threshold. • Stops higher income groups from using scheme as alternative investment option.

5. Overall Conclusion

While international literature on the specific economic impacts of mandatory pension provision is limited, this study reviewed a range of material that provides good illustrative examples of the impacts that might result were such a scheme to be introduced. While direct application of such findings to the specific Irish context must be done cautiously, this report nonetheless serves as a means of identifying the economic issues that need consideration when making a decision with regard to mandatory pension policy. It has found that mandatory pension contributions can negatively impact on the labour market with repercussions in terms of national competitiveness and overall economic growth. However we have also found that a scheme could, with appropriate design and delivery, increase overall levels of saving and, if these savings can be productively invested, expansions in national output can be generated.

Overall it is clear that the extent to which such impacts are realised is a product of the design and delivery of the system, and very careful consideration must be given to the issues discussed in this report, and their relation to the Irish economic context, prior to any decision on any model. The nature of its introduction, and especially the role of a phased approach, also emerge as an important way to avoid any potentially negative economic shocks.

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