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REFORMING  
TAX  
AND  
WELFARE

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# 1. INTRODUCTION

Questions about the equitable distribution of the fruits of economic growth have come to the fore in recent years, as rapid growth has continued. The title of the most recent partnership agreement – *Programme for Prosperity and Fairness* reflects this trend. Government policy, as expressed in the National Anti-Poverty Strategy, contains commitments to assess proposed policy changes with respect to their impact on poverty (“poverty-proofing”). But there are also concerns about the impact of tax policy changes, in terms of the balance between gains for the low-paid, middle income earners, and high income earners. At the same time, the continuation of rapid growth cannot be taken for granted. One of the factors which has contributed to recent growth is the improvement in financial work incentives associated with changes in tax and welfare policy.

In this study we review current policy issues in the light of recent and longer-term trends and developments. We consider policies and packages for tax and welfare reform that can be delivered within broadly conventional tax-welfare structures. For studies of the effects of a more radical structural shift to a basic income system, see Department of the Taoiseach (2001).

The project can also be seen as building on work done some time ago for the Expert Working Group on the Integration of the Income Tax and Social Welfare Systems. The present report extends the range of policy options to be considered to include the tax treatment of those on low incomes, child income support, and the role and design of in-work benefits; it also aims to deepen the analysis of incentive and distributional effects. It addresses the issue of individualisation of social welfare payments, which would do away with the concept of adult dependancy, as well as moves towards greater independence in the tax treatment of husbands and wives.

Much of the analysis is based on *SWITCH*, the ESRI tax-benefit model. This model simulates the welfare entitlements and income tax liabilities of each individual and family in a nationally representative sample of households. In this way, the first-round impact of changes in tax and welfare policy can be simulated. The results can be aggregated to show the change in government’s costs and revenues, and summarised to show the pattern of gains and losses across the income distribution and across family types. (For more detail on the *SWITCH* model see box.)

### ***SWITCH: the ESRI Tax-Benefit Model***

Tax-benefit models are needed for a comprehensive assessment of the effects of tax and welfare policy changes, taking into account the wide variation in individual and family circumstances relevant to welfare entitlements and tax liabilities. *SWITCH*, the ESRI tax-benefit model, is a well-established tool for analysing the “first-round” effects of tax and welfare policy changes. It is based on the 1994 *Living in Ireland Survey*, a large-scale nationally representative survey of households undertaken by the ESRI. The model database has been adjusted to ensure that it reflects recent changes in incomes, employment, unemployment and population – and draws on projections of such changes as far ahead as 2004 to provide a framework for medium-term analysis of budgetary issues. It is hoped that it will soon be possible to “re-base” the model using data from the year 2000 wave of the Living in Ireland Survey.

The model uses detailed information on individual and family circumstances (including information on wages and hours of work for those in paid employment, and on labour force status and receipt of social welfare benefits for those not in paid employment) to assess the social welfare entitlements and tax liabilities of each family in the database. The model can therefore simulate for each family the disposable income they would receive under actual policy, or under alternative policies of interest.

Using these detailed calculations it is possible to summarise the impact of policy changes in many different ways. Here we focus in particular on how the average gain or loss varies depending on the income of the family. Family units are ranked by income, adjusting for differences in family size and composition using a simple equivalence scale: 1 for the first adult in the family, 0.66 for a second adult and 0.33 for children. Thus, a married couple with a disposable income of £200 per week would have an “equivalised” income of just over £120 (i.e., £200 divided by 1.66). A married couple with one child would have an equivalised income of just over £100 (i.e., £200 divided by 1.99 (=1+0.66+0.33)). Families are then divided into 10 equal sized groups or “deciles”, from poorest to richest.

One underlying technical assumption is that labour market behaviour and wage rates are the same under each policy, but the model can shed light on how such behaviour may change by identifying the impact of policy changes on financial incentives to work. Labour supply responses to tax/transfer policy changes are currently being investigated at the ESRI, in a framework which will allow simulation of the dynamic effects of policy changes in future.

The *SWITCH* model provides a firm basis for the simulation of first-round effects of alternative packages of reforms of the tax and benefit system. This project has involved extending that model, to deal *inter alia* with the particular issues arising from individualisation of tax and of social welfare. Analysis of this type was undertaken for the Working Group Examining the Treatment of Married, Cohabiting and One-parent Families under the Tax and

Social Welfare Codes (Department of Social, Community and Family Affairs, 1999).

Tax and welfare policy in all countries must grapple with “the big trade-off” – equity versus efficiency. Detailed information on the possible consequences of policy changes for income distribution and financial work incentives is essential if policy choices are to be well-founded. Are there areas in which equity can be advanced without disimproving financial work incentives? If not, which of the alternative ways of providing income support to target groups will be least damaging to incentives? Questions of this type are an underlying theme in the report.

The structure of the report is as follows. We first consider (Chapter 2) how gross pay and net earnings have evolved under the influence of recent Partnership agreements covering pay, tax and welfare. We also review the evidence on the changing distribution of earnings, and how that relates to the distribution of household income. In Chapter 3, the focus is on issues relating to the National Anti-Poverty Strategy, including the setting of poverty targets, the recent evolution of poverty and the issues of how welfare payments may be linked to the level and/or changes in general living standards (benchmarking and indexation). Chapter 4 examines issues relating to low pay, and the tax and welfare instruments which can be used to provide assistance to those on low pay. Chapter 5 reviews the broader issues involved in shaping the tax and welfare treatment of individuals and families, situating Ireland’s experience in an international context. Chapter 6 focuses on child income support – where both welfare and tax issues arise. Some critical issues relating to the assessment of the distributional and relative poverty impacts of budgetary policy are examined in Chapter 7, which examines the impact of recent budgets. Chapter 8 brings together some of the ideas from earlier chapters and explores key policy choices in a medium-term context. The main findings and their implications for policy are drawn together in the concluding chapter.

## 2 . EARNINGS AND INCOMES UNDER PARTNERSHIP

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### 2.1 Introduction

Tax and welfare policies have, since 1987, been framed in a context of social partnership negotiations. The initial partnership agreement, Programme for National Recovery (PNR, Ireland, 1987), represented a response to economic difficulties including high unemployment and fiscal deficits. Subsequent agreements – the Programme for Economic and Social Progress (PESP, Ireland, 1991), the Programme for Competitiveness and Work (PCW, Ireland, 1994) and Partnership 2000 for Inclusion, Employment and Competitiveness (P2K, Ireland, 1996) – dealt with the development of policies to sustain and build on the economic recovery, while also tackling issues of social inclusion. The current agreement – the Partnership for Prosperity and Fairness (PPF, Ireland, 2000) – has the twin objectives of maintaining growth in average living standards, and ensuring an equitable distribution of the fruits of economic growth.

The factors involved in Ireland's economic recovery and expansion, including the role of partnership agreements, is dealt with extensively elsewhere (Bradley *et al.*, 1997, Honohan, 1999, Hardiman, 2000). In this chapter our focus is much narrower. We concentrate on a central element of the Partnership agreements, in which low rates of wage growth were agreed, with further growth in net incomes to be delivered by tax cuts. In Section 2.2 we consider the wage increases agreed under the programme, and how they related to actual wage outcomes. Section 2.3 considers some issues arising from the use of tax instruments to boost disposable income. Section 2.4 moves the focus beyond the usual consideration of average wages, to examine developments in the distribution of wages. The picture of wage developments across the distribution provides a necessary backdrop for consideration of many of the issues of tax and welfare policy discussed in later chapters.

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### 2.2 Pay Agreements and Wage Growth

The pay agreements negotiated as part of the partnership process provided for basic increases in pay which were not much greater than expected price inflation. Cuts in income taxes were expected to ensure some (further) growth in real incomes. There were provisions allowing for local negotiations in the event of difficulties in meeting payment. In the 1991 Programme for Economic and

Social Progress, provision was made for employers and unions to engage in local bargaining which could include a pay rise of a further 3 per cent. We follow Sexton *et al.* (1999) in assuming that on average, this raised pay by about 1½ per cent.<sup>1</sup> The Partnership 2000 agreement also had provision for local negotiations over a possible 2 per cent pay rise. Given the strength of the labour market in this period, we assume that almost all employees would have seen pay rates rise by this amount. We do not attempt to take into account the “minimum flat rate” provisions for low paid workers, made by the National Wage Agreement (NWA) elements of the partnership.

Table 2.1 shows the cumulative pay rises provided for under the various agreements, and the actual rise in the hourly wage of the average industrial worker over the period 1987 to 2000, and the sub-periods 1987 to 1994 and 1994 to 2000.

**Table 2.1: Pay Rises Provided for Under Partnership Agreements and Actual Pay Growth, 1987-1994-2000**

Annual average growth rate (in nominal terms)	1987-1994 %	1994-2000 %	1987-2000 %
Increases under Partnership Agreements	2.8	2.9	2.8
Average hourly wage in industry	4.0	4.7	4.3
“NWA Excess”	1.2	1.7	1.4

Sources: Programme for National Recovery (Ireland, 1987); Programme for Economic and Social Progress (Ireland, 1990); Programme for Competitiveness and Work (Ireland, 1993); Programme 2000 (Ireland 1997); Programme for Prosperity and Fairness (Ireland, 2000); and CSO Databank QIBQ for hourly earnings.

In the first sub-period, actual average pay rates in industry rose by 1.2 per cent per annum faster than was provided for under the national wage agreement (NWA) of the Partnership Agreement. In the tighter labour market conditions of the second sub period, this “Excess over NWA” effect (Sexton *et al.*, 1999) rose to 1.7 per cent per annum. While growth in average industrial earnings is not always representative of economy-wide trends (Callan *et al.*, 2000), a cross-check with analysis by Sexton *et al.* (1999), based on Living in Ireland Survey data for 1997 *vis-à-vis* the 1987 ESRI household survey indicates similar growth over the 1987 to 1997 period. More recently, estimates of economy-wide earnings growth in the *Quarterly Economic Commentary* suggest that earnings growth outside of industry is running ahead of the industrial sector figures used here. This would suggest that, if anything, the figures shown in the table somewhat underestimate the increase in “wage drift” in the second sub-period.

<sup>1</sup> A survey carried out by the Department of Enterprise, Trade and Employment in late 1993 indicated that over 75 per cent of enterprises (with some 120,000 employees) had agreed to pay all or some of the 3 per cent increase.

There can be a number of causes of this phenomenon, including shifts in the skill composition of employment. But the higher level of this “excess” effect in the later sub period, when the labour market became considerably tighter, and the variation in the effect across occupations (explored by Sexton *et al.*, 1999) means that it can have significant implications for the relative growth in payment rates across different levels of earnings. We consider the evidence on changes in the distribution of earnings, and their relationship to household income distribution, in Section 2.3 below.

The wage agreements over this period were not constructed in isolation, but in a wider context which included income tax concessions designed to boost take-home pay. The low rates of increase in gross pay were aimed at increasing the demand for labour and boosting employment.<sup>2</sup> Increased employment – and, more recently, reductions in unemployment – were associated with the implementation of this strategy. Our focus here is not on quantifying the impact of this strategy as against other factors (changes in external conditions, exchange rates etc.) examined by others. Instead we point to two features of this wage-tax trade-off which are of particular interest in the context of the present study.

First, tax cuts are sometimes discussed as if they were a perfect substitute for wage increases. But it may be quite difficult to construct a set of tax changes which will exactly compensate for a pay increase forgone. In particular, it may be impossible to do so for those who are outside the tax net. The current partnership agreement (Partnership for Prosperity and Fairness) aims to remove from the tax net those persons earning no more than the National Minimum Wage. This would involve a substantial rise in the number of individuals not paying any tax. As a result, the idea of tax cuts providing a simple, straightforward way of compensating for pay increases forgone may become still more questionable.

Second, packages involving tax cuts in return for pay restraint have become closely associated with the partnership process. There is widespread agreement that this strategy was an appropriate and successful one in moving from high unemployment towards full employment. But it is less clear whether such a bargain remains appropriate close to full employment. In the context of the tight labour market of recent years, there have been suggestions that a move away from centralised bargaining towards a situation variously characterised as a free market, free for all or localised bargaining might be more appropriate. Alternatively, if bargaining at central level is to remain a major feature, bargaining mechanisms may need to be adapted to provide for greater flexibility. For a discussion of various alternatives see McCoy *et al.* (March 2001), de Buitléir and Thornhill (2001) and MacHale (2001). However, there

<sup>2</sup> In a labour market with wages determined in a decentralised fashion, one could also expect that tax cuts on labour income would allow for lower rates of increase in gross wages; the centralisation of wage bargaining and co-ordination of the wage-tax agreements could help to “telescope” the process by which such outcomes come about.

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### 2.3 Earnings Dispersion and the Distribution of Income

has been little questioning of whether income tax cuts would form a necessary part of the package. This may reflect in part an inertia in the process, and the build up of an expectation that such income tax cuts will continue. In a long-run equilibrium, however, it is far from clear that such an expectation would be justified.

The earnings of employees are the single most important income source for households in Ireland as in other industrialised countries. We now look at the way in which the dispersion of earnings among employees has been evolving, and relate this insofar as possible to trends in the overall distribution of income. We rely on the data provided by the 1987 ESRI Survey of Income Distribution, Poverty and Usage of State Services and the 1994 and 1997 Living in Ireland Surveys. (While data are produced regularly by the Central Statistics Office on average earnings in specific sectors such as industry, building and construction and the public sector, the household surveys cover the whole economy and allow the overall distribution of earnings at individual level to be studied.<sup>3</sup>)

The conventional approach to describing the dispersion in earnings is to express the bottom decile, bottom quartile, top quartile and top decile as proportions of the median.<sup>4</sup> While this gives a picture of a number of different points in the distribution, a single summary measure of dispersion may also be useful and the ratio of the top to the bottom decile is often used, though different summary measures may not always lead to the same conclusions in terms of comparisons over time or across countries. We focus first on the hourly earnings of all employees, and Table 2.2 shows the distribution of gross hourly earnings in the 1987, 1994 and 1997 surveys as captured by these measures. The table shows that from 1987 to 1994 there was a marked widening in dispersion at the top of the distribution. The ratio of the top decile to the median rose from 1.96 to 2.24, while the top quartile also moved further away from the median. In the bottom half of the distribution, the bottom quartile fell away from the median but the bottom decile did not. The overall picture is thus of widening dispersion throughout the distribution except at the very bottom, with the ratio of the top to the bottom decile rising sharply from 4.2 to 4.8.

<sup>3</sup> Validation against external sources has shown the employees in these samples to be representative in terms of age, occupational group and industrial sector.

<sup>4</sup> The median of the distribution is the earnings level above and below which half the earners are found. Ranking all employees in terms of earnings from lowest to highest, the bottom decile cut-off is the earnings level below which the lowest 10 per cent of all earners fall, and the top decile the cut-off above which the highest 10 per cent are found. Correspondingly, the bottom and top quartiles are the cut-offs below/above which the bottom/top quarter of the distribution is found.



**Table 2.2: Distribution of Hourly Earnings in 1987, 1994 and 1997, All Employees**

Wage as proportion of median	1987	1994	1997
<b>All employees, hourly earnings :</b>			
Bottom decile	0.47	0.47	0.48
Bottom quartile	0.73	0.68	0.69
Top quartile	1.37	1.50	1.53
Top decile	1.96	2.24	2.33
Top decile/bottom decile	4.16	4.77	4.81

It is particularly interesting to see whether this trend continued from 1994 to 1997, as economic growth accelerated rapidly. We see that the top decile did continue to move away from the median, reaching 2.33 by 1997, with the top quartile also moving slightly further from the median. In the bottom half of the distribution, however, both the bottom decile and the bottom quartile now kept pace with the median, if anything increasing marginally faster. As a result, the ratio of the top to the bottom decile was essentially unchanged.

Over the whole period from 1987 to 1997, then, there was a substantial widening in earnings dispersion in terms of hourly wages among all employees. This was more pronounced in the 1987-94 period than from 1994 on, so rapid economic growth did not lead to acceleration in the trend. It was primarily driven by relatively rapid increases for those towards the top of the distribution, with no indication that the bottom has been falling behind the median. In the light of the relatively rapid increase in the top decile compared with the median it is of interest to look at what was happening towards the very top. The 95<sup>th</sup> percentile (cutting off the top 5 per cent) rose even more rapidly than the 90<sup>th</sup> percentile, going from 2.4 times the median in 1987 to 2.8 in 1994 and 3.0 in 1997. The 99<sup>th</sup> percentile (cutting off the top 1 per cent) went from 3.6 in 1987 to 3.8 in 1994 and 4.3 in 1997. So over the whole period top earnings rose very rapidly, but it is only at the very top that there is any suggestion that this might have accelerated from 1994 to 1997.

## 2.4 Developments in the Distribution of Wages

It is also of interest to look at the distribution of weekly gross earnings among full-time employees, since this is often used in cross-country comparisons. Various definitions and measures of what constitutes "full-time" are used in different countries or with different datasets, depending on custom and practice and the nature of the data available. In some cases survey respondents' own categorisation of their status as full versus part-time is taken, in others different hours cut-offs are applied to reported hours worked. Here we base the distinction on total hours of work reported by respondents, and count as full-time those reporting at least 30 hours usual work per week, the cut-off regarded as most suitable for comparative purposes by the OECD (see Baslelaer, Lemaitre and Marianna, 1997). About 10 per cent of Irish employees worked less than this in 1987, but by 1994 the figure

was up to 15 per cent and by 1997 it was 19 per cent. Table 2.3 shows the distribution of gross hourly and weekly earnings in 1987, 1994 and 1997 among full-time employees distinguished on this basis.

Once again we see that from 1987 to 1994 there was a consistent widening in dispersion at the top of the distribution. The top decile as a proportion of the median rose from 1.82 to 1.97, and the top quartile also moved further from the median. The bottom decile was just below half the median in 1987 and 1994 and just above it in 1997. The top half of the distribution showed little change between 1994 and 1997. Over the decade as a whole, then, the ratio of the top to the bottom decile increased markedly, but this was concentrated in the period from 1987 to 1994.

**Table 2.3: Distribution of Weekly Earnings in 1987, 1994 and 1997, Full-time Employees**

Weekly earnings as proportion of median	1987	1994	1997
Bottom decile	0.49	0.48	0.51
Bottom quartile	0.75	0.72	0.71
Top quartile	1.35	1.43	1.43
Top decile	1.82	1.97	2.02
Top decile/bottom decile	3.68	4.06	3.93

A comparative perspective on the Irish earnings distribution and the way it has been changing since 1987 can be obtained by comparing these results with measures of earnings dispersion for a range of developed countries brought together by the OECD. This shows first that Ireland had a relatively high level of earnings inequality in 1987 compared with other OECD countries, only Canada and the USA having a higher ratio of top to bottom decile. It also reveals that the increase in earnings dispersion in Ireland between 1987 and 1994 was also higher than most of the other countries covered, although over the decade from 1987 the USA saw a more substantial increase in this measure.

The increase in earnings dispersion was particularly marked among men, with the top decile as a proportion of the (male) median rising from 3.5 to 5.0 over the decade. This reflects the bottom decile lagging behind the median, falling from 0.53 to 0.47, but also the sharp increase in the top decile from 1.9 to 2.3 times the median. Although dispersion was greater among women than men employees in 1987 it rose by much less over the decade. With the ratio of the top to the bottom decile increasing for women from 4.4 in 1987 to 4.6 in 1997, dispersion was by then less than for men. The gap between average male and female earnings also narrowed a good deal over the decade (see Callan *et al.*, 2000). For full-time adult men, there has been a particularly pronounced increase in dispersion with the top decile going from 2.9 to 3.6 times the median, whereas among full-time women aged 21 or over, by contrast, there was very little change in dispersion over the period.

As far as low pay is concerned, it is customary to apply thresholds set at either half or two-thirds of median earnings. About 11 per cent of employees were on hourly gross pay below half the median in each of 1987, 1994 and 1997. While 20 per cent of employees were below two-thirds of the median in 1987, this had risen to 23 per cent by 1994 and was 22 per cent in 1997. On this basis Ireland in the mid-1990s had one of the highest levels of low pay of the countries covered by OECD comparative figures, similar to the UK though lower than the USA and Canada. Part-time employees – many of them married women – employees aged under 25, and those in certain sectors such as retailing and personal services were at high risk of being low paid. It is important to be clear, however, that most low paid employees are not in poor households, although employees in poor households are often low paid (see Nolan, 1998; Nolan and Marx, 2000). The introduction of a national hourly minimum wage in Ireland in April 2000 is clearly a major policy innovation in this area. It seems unlikely to have had a significant negative impact on employment so far, given the strength of the economy and the tightness of the market for unskilled labour. The key issue for the future, closely linked to the indexation of social welfare payments as we discuss below, is how the minimum wage changes over time: while increases over the lifetime of the current social partnership agreement have been flagged, at this stage a formal indexation procedure has not been adopted.

The relationship between the distribution of earnings among employees and that of incomes among households is a complex one. The earnings distribution relates to individual employees, takes no account of family size or income from other sources, and focuses generally on gross pay. When looking at households, on the other hand, the income concept most often employed includes income from all sources, after deduction of income tax and social insurance contributions. The measure used often includes an equivalence scale adjustment to take into account the number of people depending on that income. Since a given household may include no, one, two or more earners, the way employees are distributed over households is clearly a critical factor.

We can use the same ESRI surveys to compare the distribution of disposable income among households in 1987, 1994 and 1997, and that is done in Table 2.4. We see that the distribution was generally rather stable over the period, though the middle did gain at the expense of the top. Summary inequality measures such as the Gini coefficient and the Theil index also suggest little change in the overall level of inequality over the period.

It would be unwise to read much in welfare terms into these distributional changes, because household incomes have not been adjusted for differences in household size and composition. When we carry out such an adjustment using a variety of equivalence scales, the share of the bottom decile increases and the top falls from 1987 to 1994, but otherwise there is something of a shift from the rest of the bottom half to the rest of the top half, and both the

Gini and Theil measures show a slight decline in overall inequality. However, the share of total equivalised income going to the bottom two deciles fell between 1994 and 1997, with the top half of the distribution but not the top decile gaining, and the Gini and Theil summary indices show a marginal increase in inequality.

**Table 2.4: Decile Shares in Disposable Income among Households, 1987, 1994 and 1997 ESRI Surveys**

Decile	Share in Total Disposable income (%)		
	1987	1994	1997
Bottom	2.0	2.3	2.2
2	3.4	3.3	3.3
3	4.8	4.6	4.5
4	5.9	6.0	6.0
5	7.3	7.4	7.8
6	8.8	9.1	9.5
7	10.7	11.1	11.1
8	13.2	13.4	13.7
9	16.5	16.5	16.2
Top	27.4	26.4	25.8
All	100.0	100.0	100.0

A wide range of different factors affect how the income distribution evolves over time, and these operate through a variety of channels of influence. The redistributive impact of income tax and social insurance contributions, and of social welfare transfers, is clearly an important part of the story and the main focus of this study. However, in this chapter we have seen that earnings dispersion among employees increased significantly in Ireland between 1987 and 1997, and this raises the question as to why this had not fed through to greater inequality in the distribution of income among Irish households by 1997, in contrast to the UK and the USA where increased earnings dispersion was associated with rising income inequality. This appears to reflect the scale and nature of the increase in labour force participation by married women in the Irish case. Whereas in some other countries increasing labour force participation by married women has had a disequalising effect, in the Irish case the substantial increase in labour force participation by married women between 1987 and 1994 has been shown to have had if anything an equalising effect on the household income distribution (O'Neill and Sweetman, 1998). This was because the married women most likely to have entered the labour force during that period had spouses in the lower rather than upper half of the male earnings distribution. A related finding is that decomposition of household income inequality by income source (using the squared coefficient of variation) shows that earnings became less highly correlated with total income to 1997 – whereas income from self-employment and property became more highly correlated with total income. An in-depth analysis of trends in the household income distribution including such decompositions is given in Nolan, Maitre, O'Neill and Sweetman (2000).

# 3. POVERTY MEASURES, BENCHMARKING AND INDEXATION

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## 3.1 Introduction

The National Anti-Poverty Strategy has important implications for the conduct and evolution of tax and transfer policy. In this chapter, we consider the nature of the targets set in the strategy, and how they relate to broader measures of poverty. Trends in the nature and extent of poverty are described in Section 3.2. Section 3.3 addresses an issue that is now coming to centre stage in that context, namely the linking of annual increases in social welfare rates with other incomes in society.

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## 3.2 The Poverty Context

Poverty is generally conceived as inability to participate in the ordinary life of society due to lack of resources, and this is the definition set out in the National Anti-Poverty Strategy (NAPS). ESRI research has brought out the extent to which households' deprivation levels are influenced not only by current income but also by resources and experiences (particularly in the labour market) over a long period. Income-based poverty lines can be seen as focusing wholly on the "resources" element of the poverty definition, but low income on its own may not always be a reliable measure of exclusion arising from lack of resources. A more reliable measure may be constructed by combining low income with suitable direct indicators of deprivation – items generally regarded as necessities which individuals or families must do without because they cannot afford them.

Factor analysis of Irish data on non-monetary indicators for 1987 and 1994 revealed a number of distinct underlying dimensions of deprivation. "Basic deprivation" included not being able to afford heating; a substantial meal once a day; new rather than second-hand clothes; a meal with meat, chicken or fish every second day; a warm overcoat; two pairs of strong shoes; a "roast" or equivalent once a week; and not falling into arrears or debt paying everyday household expenses. These items were perceived to be social necessities – "things that every household should be able to have and that nobody should have to do without" – they were possessed by most people, reflect rather basic aspects of current material deprivation, and cluster together.

On this basis they were considered to be the most suitable as indicators of underlying generalised deprivation. Those on relatively low incomes and experiencing basic deprivation we then identified as experiencing generalised deprivation or exclusion due to lack of resources. When we looked at the other features that one might expect to be associated with exclusion – such as low levels of savings and high levels of economic strain and psychological distress – this combined measure performed much better than income on its own.

In 1994, about 15 per cent of households were below the 60 per cent relative income poverty line and experiencing basic deprivation, while 9 per cent were below half average income and experiencing such deprivation. When the Strategy was adopted in 1997, it included a global poverty reduction target, based on this poverty measure and using these 1994 results as the baseline. The overall or global target was as follows:

Over the period, 1997-2007, the National Anti-Poverty Strategy will aim at considerably reducing the numbers of those who are “consistently poor” from 9 to 15 per cent to less than 5 to 10 per cent, as measured by the ESRI. (Ireland, 1997.)

New data for 1997 have more recently allowed an updated picture of trends in poverty to be presented, and the NAPS poverty target has been revised in the light of these findings. Callan *et al.* (1999) used the fourth wave to examine trends in poverty and deprivation between 1994 and 1997. There was sizeable attrition between Waves 1 and 4, but detailed validation suggested that it was not associated with characteristics such as income or deprivation levels or social welfare reciprocity, and appeared not to have a significant impact on the structure of the sample. Full descriptions of the 1994 and 1997 surveys and these results are in Callan *et al.* (1996) and Callan *et al.* (1999) respectively.

Looking at trends in relative income poverty between 1994 and 1997, Table 3.1 shows that the percentage of households below relative income lines increased over the period. This is the case consistently moving from a line set at 40 per cent of the mean up to one set at 60 per cent. The table also shows that when one

**Table 3.1: Percentage of Households and Persons Below Relative Income Poverty Lines (Based on Income Averaged Across Households), Living in Ireland Surveys 1994 and 1997**

Poverty line	1994	1997
<b>Percentage of households below line</b>		
40% relative income line	5.0	7.6
50% relative income line	18.8	21.9
60% relative income line	34.6	36.5
<b>Percentage of persons in households below line</b>		
40% relative income line	6.8	10.0
50% relative income line	20.7	21.7
60% relative income line	34.0	35.3

*Notes:* Equivalence scale of 1 for first adult, 0.66 for other adults, and 0.33 for children aged under 14.

focuses on the percentage of persons living in these households, the same trend is seen.

The period from 1994 to 1997 was of course one of remarkable economic growth in Ireland, with GDP increasing by 7-8 per cent per annum. This had a major impact on unemployment, which was still as high as 16 per cent in 1994, but was down to 11 per cent by 1997. It also translated into a 20 per cent increase in average household income in nominal terms between the 1994 and 1997 household surveys, when consumer prices rose by only 6 per cent. Adjusting household incomes for differences in size and composition, the increase in mean incomes was larger, at about 22 per cent. However social welfare support rates, while increasing well ahead of prices, did not keep pace with the exceptionally rapid rise in incomes from the market. Key social welfare pension rates, for example, rose by 12 per cent in nominal terms. This, together with falling unemployment, was crucial to the evolution of poverty measures over the period.

It is also important to know what has been happening to real incomes. For this purpose Callan *et al.* (1999) used income standards set at 40, 50 and 60 per cent of mean equivalised income in 1987 and adjusted upwards only in line with prices from then on. With the 1987 60 per cent line, the poverty rate on this basis would have fallen from about 20 per cent in 1994 to 11 per cent in 1997. Thus, in a period of rapid though uneven income growth, relative income and real income poverty lines provide radically different perspectives on the evolution of poverty.

Deprivation levels, as measured by the range of non-monetary indicators available in the surveys, fell substantially over the 1994-97 period. As a result the percentage of households below the 60 per cent line and experiencing basic deprivation fell from 15 per cent to 10 per cent – the level the NAPS global poverty reduction target sought for 2007. The percentage below the 50 per cent relative income line and experiencing basic deprivation also fell, though less sharply. Thus, combining relative income poverty lines with a deprivation criterion held fixed from 1994 to 1997 gives a very different picture to that shown by relative income lines alone.

The set of indicators included in the basic deprivation measure has remained unchanged since 1987 when this data was first available, so the issue arises as to whether this continues to adequately capture what is regarded as generalised deprivation. Over the whole period from 1987 to 1997, expectations followed the general upward trend in the extent of possession of items. Items such as central heating, a telephone, a car, a colour TV, and presents for friends and family at least once a year came to be perceived as necessities by a substantial majority of households. However, not all socially perceived necessities are suitable for incorporation into the combined income/deprivation measure, but only those tapping the underlying generalised deprivation which one is attempting to capture. Factor analysis shows that these five items continue to load on the secondary deprivation dimension, rather than cluster with the basic items (Layte *et al.*, 2001). This

supports the argument that the basic deprivation index should not, at this point, be expanded to include these additional five items.

The profile of the additional households who would be counted as poor if one broadened the poverty measure to incorporate these five additional items was similar to that of other non-poor households, and strikingly different from those currently identified as poor, in terms of self-assessed economic strain, psychological distress and fatalism (see Layte *et al.*, 2001). The combined income and deprivation measure as originally constituted thus continues to identify a set of households experiencing generalised deprivation resulting from a lack of resources, suffering a degree of economic strain and general psychological difficulties that mark them out from the rest of the population.

When deprivation is falling markedly, many people may not regard an increase in numbers falling below a relative income line as an unambiguous increase in poverty. Over a lengthy period when living standards stabilise, however, societal expectations may indeed catch up and adjust fully to higher average incomes. Higher real incomes and lower deprivation levels, however welcome, would not then mean that everyone was able to participate fully in society: they would not represent a sustained reduction in poverty. In the shorter term, though, the fact that real and relative income levels are diverging so markedly cannot be simply ignored. Poverty targets must capture these realities, but also take into account the long-term consequences of lower incomes, and social welfare rates in particular, lagging behind growth in average incomes.

At a minimum this means the poverty target has to be re-based regularly, and in the light of these results the government in fact decided to take the 1997 level of the combined income and deprivation poverty measure as the new baseline for NAPS purposes. The revised target is now to reduce the numbers in "consistent poverty" to below 5 per cent by 2004.

More fundamentally, though, there is a case for broadening the scope of poverty targets, with distinct targets along the following lines:

1. Priority is given to ensuring that those on low incomes see their real incomes rise, and their deprivation levels using a fixed set of indicators decline;
2. Next, relative incomes and deprivation levels using a set of deprivation indicators which changes as far as possible in line with expectations should produce a decline in the combined income/deprivation measure;
3. Finally, the proportion of the population falling below relative income poverty lines should be declining.

Each of these tiers can be regarded as encapsulating a necessary but not sufficient condition for a sustainable reduction in poverty:

1. This target reflects the assumption that if real incomes of the poor are falling and their



deprivation levels rising, then even if their relative positions were improving most people would see poverty as increasing;

2. This target reflects the assumption that the combined effect of changes in relative incomes and deprivation should be to reduce the extent of what is regarded as exclusion at a point in time;
3. This target reflects the assumption that in the long term, people will not be able to participate in what comes to be regarded as ordinary living standards if their incomes fall too far below the average: a sustained reduction in poverty can then be achieved only by bringing them closer to average incomes.

The adoption of a national poverty target highlights the limitations of specific policies which, however valuable in themselves, cannot realistically be expected to have a substantial impact on the overall numbers in poverty. It becomes clear that policies targeting very specific groups or areas do not in themselves constitute a national anti-poverty strategy. It then becomes impossible to ignore what David Piachaud in the UK context has referred to as “the big, expensive issues” – above all what happens to unemployment and the uprating of social welfare benefits. Falling unemployment has been central to the impact of rapid economic growth on poverty, as analysis of the results for 1997 bring out (Callan *et al.*, 1999), though the risk of relative income poverty for the much smaller numbers now unemployed remains high. It is to the setting of welfare payment rates thus, that we now turn our attention.

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### 3.3 Benchmarking and Indexation

Recent debate on the setting and uprating of welfare payments has centred on the ideas of “benchmarking” payments with respect to target income levels, and “indexing” or “uprating” payments to keep them in line with such a benchmark over time. For example, NESG (1999) proposed that “a new benchmark for the income adequacy of social welfare payments, other than old age pensions, be established through the social partnership process. A time frame over which it is to be achieved would have to be agreed as would a mechanism to index levels of payment to improvements in the general living standard once the benchmark has been reached”. Following this, the *Programme for Prosperity and Fairness* (Ireland, 2000) contains both a general commitment to the objective of ensuring that “the real value of social welfare payments is maintained and where possible enhanced to ensure that all share in the fruits of economic growth” and a specific provision for a Working Group to examine the complex issues in developing a benchmark for adequacy of payments, and the implications of adopting a specific approach to the ongoing up-rating or indexation of payments.

The issues involved are indeed complex, and decisions on some of the central issues require social and political judgements regarding the priority to be attached to economic efficiency and distributional objectives. Analysis can inform such judgements, but cannot substitute for them. In the remainder of this chapter we focus on clarifying the conceptual, practical and technical issues involved.

### CONCEPTUAL ISSUES

Why set a benchmark for social welfare payments? And what are the objectives of an indexation procedure? Such fundamental questions are considered in the report of the Social Welfare Benchmarking and Indexation Working Group (2001), set up under the auspices of the Programme for Prosperity and Fairness. A benchmark target would most likely emerge as the product of negotiation and/or political judgement. In that context, its purpose could be regarded as to provide a counterpart, for welfare recipients, to the commitments on pay and tax provided in partnership agreements. More generally, the purpose of benchmark targets and/or indexation procedures could be regarded as ensuring that *ad hoc* decisions taken from year to year do not result in unwanted consequences, in terms of relationships between the incomes of those dependent on welfare and those in employment.

The case against the use of a benchmark was also considered by the Group. One argument was that this would reduce government's freedom of action and that the loss of flexibility could have deleterious consequences. Another was that the introduction of a benchmark was not required to protect and enhance the incomes of welfare claimants.

It is worthwhile to distinguish between two forms of indexation in this context. The first, which we might term *baseline indexation*, involves a commitment to automatic indexation of welfare payments in line with the chosen index *in the opening position for the annual budget*. (See Chapter 7 for further discussion of this idea). This is the form of indexation adopted by the UK with respect to the income tax system. Tax bands and allowances are automatically indexed to prices in the opening position for the annual budget. This can be overridden by the budget in either direction, but the decision must be an explicit one. The second, and stronger form of indexation could be termed policy indexation. Under this form, actual policy is determined precisely by the indexed values.

There is a parallel between the arguments for and against baseline indexation of welfare, and the arguments for and against indexation of tax allowances and bands. If tax allowances were to be frozen in nominal terms, this would require an explicit reduction from the indexed level in the UK. The implicit rise in average tax rates would be more hidden in the Irish case, where there is no commitment in legislation to indexation. In the UK, the legislation was introduced with the intention of making such decisions more

explicit. In effect, therefore, it represented a decision that it was preferable to reduce government's freedom of action and force government to raise revenue explicitly rather than implicitly. Similarly in the context of welfare payments, it could be argued that a baseline indexation procedure would require governments to be explicit about the impact of policy choices on the relative incomes of welfare recipients.

### CROSS-COUNTRY EXPERIENCE WITH UPDATING

Some insights into the issues arising in the choice of indexation or updating regimes can be gained by considering cross-country experience. A review of the different mechanisms used to uprate social assistance benefits in OECD countries was conducted by Eardley *et al.* (1995), and some of the key findings are summarised in Table 3.2.<sup>5</sup>

**Table 3.2: Mechanisms for Updating Social Assistance Benefits in Selected OECD Countries**

Country	Mechanism/methods by which rates are updated
Australia	Indexed by changes in the consumer price index.
Austria	Annual indexation in line with changes in pensions, which are linked with changes in earnings.
Belgium	Automatic link to RPI, and more recently to price index excluding cigarettes, alcohol and petrol; but special increases have seen social assistance rates rise in real terms and narrow the gap between assistance and insurance benefits.
Canada	Annual adjustment, generally linked to CPI, but not guaranteed; benefits frozen on occasion
Denmark	Linked to level of Unemployment Benefit, which is related to average earnings.
Finland	Linked to flat-rate pensions, which are linked to consumption patterns of poorest quintile
France	Can be uprated twice yearly in line with prices, but not automatic.
Germany	Social assistance is uprated in line with price inflation (for expenditure patterns of lowest third of income distribution), but political decisions are often made to uprate by less or more than the full percentage.
Greece	Ministerial or Presidential decision; no statutory basis.
Italy	Uprated in line with cost of living index.
Japan	Indexed to national average consumption.
Netherlands	Linked to net minimum wage in 1980, which is "in theory uprated with increases in national price index". But minimum wage was frozen 1984 to 1990, with corresponding freeze in social assistance, and again in 1993.
Sweden	Standards uprated in line with prices and consumer patterns.
UK	Largely linked to prices since 1980, and since 1982 based on retail price index minus housing costs.
USA	Year to year uprating based mainly on cost of living standards (for Supplemental Security Income) and changes in costs of "thrifty" food plan for food stamps.

Source: Adapted from Eardley *et al.* (1996), *Social Assistance in OECD Countries: Synthesis Report*, London: HMSO.

The most common updating formula is indexation of benefit levels to increases in the consumer price index. Three European countries were found to use a formula other than prices, each linking to another benefit which had a link to wider incomes or

<sup>5</sup> The underlying information was obtained from replies to a questionnaire sent to official and academic informants in each country.

living standards. Denmark linked social assistance to the level of unemployment benefit, which grew in line with average earnings. Finland linked social assistance to the flat rate pension, which was in turn related to the consumption levels of the poorest quintile. In Austria, social assistance was usually increased in line with pensions, which are linked to earnings.

The country experiences outlined by Eardley *et al.*, show clearly that the existence of a mechanism does not predetermine policy choices in an absolute fashion or guarantee any particular result. Consider, for example, the commonest uprating mechanism in use, the link to consumer prices. On average, with positive economic growth, one might expect that this would lead to a constant real value for the benefit, but a fall in its value relative to wage earners and the general living standard. Yet the actual experience of three of the countries using this broad mechanism (Australia, Belgium and the Netherlands) was quite different from this "expected" outcome. In Australia, real wages fell, so that price indexation led to a relative improvement in the incomes of those on social assistance: their real incomes were protected while the real incomes of others fell. In Belgium, there were also real income rises for social assistance beneficiaries, because of special increases in payment rates over and above what was required by indexation. In the Netherlands, social assistance rates were linked indirectly to prices via the minimum wage. But the minimum wage was frozen between 1984 and 1990, and again in 1993. Thus there were reductions in the real purchasing power of the social assistance benefit.

### **IRISH DATA SOURCES**

Turning to the Irish context, what indicators of general living standards are then most appropriate, and how are social welfare rates best linked to those indicators? The 1992 "Minimum Income" Recommendation by the EU Commission, for example, refers to fixing social security rates with reference to appropriate indicators such as statistical data on average disposable income and household consumption, the legal minimum wage if it exists, and the level of prices in the Member State. Member States are also encouraged to establish arrangements for periodic review of these amounts, based on these indicators, "in order that needs continue to be covered". In the Irish case, as pointed out in Callan, Nolan and Whelan (1996), data currently available for this purpose are rather limited. The only official data on earnings and incomes available with sufficient frequency to be of use are the figures produced quarterly by the CSO on average earnings in industry (from the Quarterly Industrial Inquiry) and in certain other sectors, and those in the annual National Accounts on aggregate incomes from different sources and total personal disposable income. Both have limitations in the context of monitoring trends in earnings or incomes generally.

The QII covers only industrial employment, where a minority of employees work, and the published information relates to average gross earnings but not their distribution. Information on individual earnings does not in any case tell us what is happening to household living standards, since the latter depends also on how earners and those in receipt of other income sources are grouped together, with their dependants, in households. The National Accounts income aggregates cover the whole economy and include income from self-employment and property as well as earnings. However, they can serve as the basis for only the crudest estimate of average income per head, with no means of taking into account the way this income is distributed among households of differing compositions. Data on household incomes are produced from the Household Budget Survey but this has only been carried out every seven years in the past, now moving to every five years. The Living in Ireland Survey being carried out by the ESRI for Eurostat does provide *inter alia* annual estimates of household incomes from 1994. Reductions in sample size through attrition prompted action to "refresh" the sample with additional households in 2000, but the shape and nature of an EU-wide statistical instrument for the measurement of income and living standards for later years is as yet uncertain.

Improvements in the range of indicators of trends in earnings, household incomes and general living standard are therefore a priority if the social welfare uprating process is to include an explicit link. One can point, for example, to the data available in the UK on both earnings and household incomes. The New Earnings Survey provides a detailed picture of individual earnings and hours worked for a very large sample of employees. This means that not only measures such as average and median earnings, but also the level of earnings of those at different points in the earnings distribution, are available on an annual basis. The annual Family Expenditure Survey and more recently the specially-designed Family Resources Survey provide in-depth information on household incomes, the latter for a very large sample, so that mean and median household equivalent incomes and the distribution of that income can be derived in a variety of ways. This provides the basis for the annual official British report on Households Below Average Income, setting out the evolution of the position of households towards the bottom of the income distribution relative to both income standards held constant in real terms and ones that move over time in line with the average for all households.

Both individual earnings and household incomes are relevant points of comparison, and it is important that in each case one knows more than simply how the average is changing. Average earnings could for example be increasing because top earnings are rising very rapidly but earnings in the bottom half of the distribution are actually stagnant. This would contrast sharply with an upward shift in the entire distribution giving the same increase in the mean. The work incentive effects of raising social security

rates in line with the average would clearly be different in those two cases.

### WHICH EARNINGS SERIES?

Given the variability in incomes from self-employment and the difficulties in measuring those incomes, it seems likely that incomes from employment will be the main focus of attention. Average earnings in industry have been the headline statistic in this area for many years, as this series is long-established, regularly produced, and reasonably up to date. But given the small share of industry in total employment, it is inevitable that economy-wide trends can sometimes differ from those in industry.

One would ideally like to have information on earnings across the whole economy, but at present the Central Statistics Office's (CSO) quarterly series cover only specific sectors, with no composite index covering all of these sectors. These are manufacturing, building and construction, the public sector and finance and insurance. While those covered are important there are notable omissions, including for example earnings information for many areas of private services. Moreover, the methodological basis underlying the CSO earnings series also differs from household survey-based earnings data in being obtained from enterprises. In some instances (e.g., manufacturing and building) the series involve compilations of hourly earnings, while for others (e.g. the public sector and financial and insurance institutions) the information relates only to weekly earnings. Importantly, employees in small firms are generally not included.

These CSO series do have some notable advantages. They are based on large numbers, they are compiled on a quarterly basis, and they are reasonably up to date.<sup>6</sup> However, the evolution of earnings across these sectors from quarter to quarter or year to year can vary considerably. Sexton *et al.*, 1999, for example, recently compared:

1. A composite index of hourly earnings in building and construction enterprises with 10 or more persons engaged, covering clerical workers and both skilled and unskilled manual operatives.
2. An hourly earnings index for all "industrial workers" (i.e. other than managerial, professional and clerical) in manufacturing industry,<sup>7</sup> again confined to enterprises with more than 10 persons engaged.
3. A weekly earnings index for all public sector workers and,

<sup>6</sup> For example, final figures for March 2000 were published in November 2000, with initial estimates for June planned for release in December.

<sup>7</sup> Unless where otherwise stated, the category "manufacturing industry" includes public utilities, i.e. electricity gas and water.

4. A weekly earnings index for all employees in financial and insurance institutions.

By early 1999 the average earnings of employees in building and construction were some 43 per cent higher in real terms than in Spring 1988. The corresponding rise for public sector workers was just under 25 per cent. For employees in manufacturing this increase was about 17 per cent, while it was 14 per cent for those in financial and insurance establishments. Average earnings in industry cannot thus be simply taken as broadly representative of economy-wide earnings, even over a fairly long period. A true economy-wide measure can at present only be derived from an appropriate broadly-based survey, of enterprises or households.

#### **SOME POTENTIAL INCOME INDICATORS**

NESC (1999) discuss four possible indicators of living standards for consideration in benchmarking and indexing welfare payments:

1. The benchmark set by the Commission on Social Welfare in 1986.
2. The 50 per cent average income threshold or relative income poverty line, calculated on the basis of household disposable income per adult equivalent.
3. Average industrial earnings before tax (gross average industrial earnings, GAIE).
4. Net income after tax and PRSI of a single person on average industrial earnings (NAIE).

We consider each of these in turn, and then examine the evolution of three alternative indicators over time.

The first potential benchmark is the Commission on Social Welfare's (1986) assessment that a minimum adequate basic social welfare payment would have been in the range £50 to £60 in 1986 terms. The logic of several of the approaches used to underpin this estimate suggests that this benchmark would need to be updated in line with higher living standards across the community, rather than simply indexed in line with prices. For example, three of the approaches used by the Commission simply take proportions of the average industrial wage, average personal disposable income from the National Accounts, and average household income for particular family types from a household survey. If the benchmark decided by the Commission were to have continued relevance, therefore, the difficult issues in deciding the precise indicator or combination of indicators to be used, and the relevant proportion(s) of income indicators would still have to be decided in terms of current judgements. It is not possible to "shift the decision" back to the 1986 Commission.

The second indicator listed above is the one most directly related to the poverty targets discussed in the preceding section. The household income measure, adjusted for family size and composition using an equivalence scale, gives a broadly-based indication of the change in living standards over time. It is a critical

element in estimation of relative income poverty rates, and also in the NAPS measure of consistent poverty.

The earnings related statistics (gross average industrial earnings and net average industrial earnings for a single person) have a somewhat different rationale. While they can also be seen as a link between growth in the real earnings capacity of those in the labour market and those dependent on welfare payments, they also have another interpretation. Choice of this benchmark can be seen as relating to financial work incentives. A welfare payment set in relation to GAIE or NAIE can also be interpreted as approximating the (gross or net) replacement rate for a single person at average earnings levels. This highlights the dual nature of a replacement rate measure: on the one hand it is a measure of adequacy of income replacement, when employment income is lost; on the other it can be regarded as a measure of the financial incentive or disincentive to work. The fact that average industrial earnings cannot be taken as necessarily representative of wider earnings trends across the economy was illustrated in the previous section. A further difficulty arises in trying to identify trends in net earnings, in that trends can then depend on the family situation of the individual concerned.

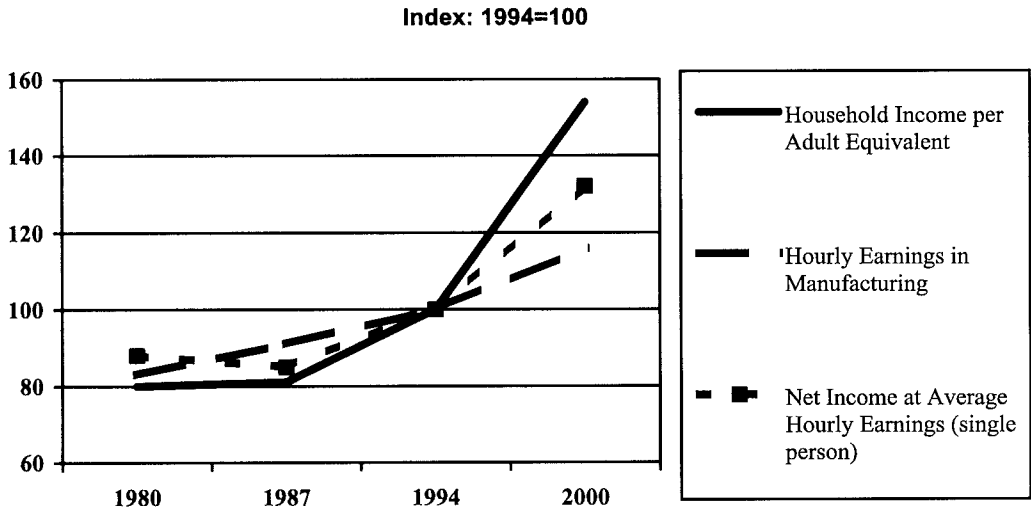
In order to understand the nature of these three alternative income indicators for either benchmarking or indexation purposes, it is helpful to consider broad trends in the evolution of such indicators over a period long enough to cover different stages of the business cycle. Issues concerning the choice of an earnings series are dealt with in the next section. Figure 3.1 shows each of the potential indicators (household income per adult equivalent, hourly earnings in manufacturing, and the net wage at average hourly earnings in manufacturing) for the years 1980, 1987, 1994 and estimates of the position in 2000.

During the 1980 to 1987 period, increases in gross average industrial earnings were offset by tax increases leading to a fall in net earnings. Social welfare incomes were protected against inflation during the period and rose in relative terms, and average household income (per adult equivalent) was roughly constant. From 1987 to 1994, net earnings rose faster than gross earnings, in line with the Partnership agreements on pay and tax. From 1994 to 2000, the gap between the growth of net and gross earnings widened, with larger tax cuts; and average household income is estimated to have risen even faster.

The reasons for the difference in the evolution of gross and net earnings are well understood: it was an explicit goal of policy to trade moderate wage growth for tax cuts which would support faster growth in net earnings. The even sharper increase in the growth of average household income is a more complex phenomenon. It is important to understand the sources of the additional growth in average household income in order to assess the implications for the choice of a benchmark or indexation indicator.



**Figure 3.1: Real Growth in Alternative Income Indicators for Indexation/Benchmarking: 1980, 1987, 1994 and 2000**



*Sources:* Hourly earnings in manufacturing and consumer price index from the CSO Databank and Statistical Release. Growth from 1999 to 2000 projected using forecast from *Quarterly Economic Commentary*, November 2000. Net income at a standard 40 hour work week at hourly earnings calculated for single person on PAYE and full PRSI. Disposable income per adult equivalent from analysis of CSO Household Budget Survey 1980, Survey of Income Distribution, Poverty and Usage of State Services, 1987 and Living in Ireland Survey 1994. Estimate for disposable income per adult equivalent in the year 2000 based on *SWITCH*.

*Notes:* Disposable income per adult equivalent is averaged over households for each of the years 1980, 1987, 1994. For 2000, the growth from 1997 is estimated using projections from the *SWITCH* model which take account of estimated income growth, changes in tax and welfare policy, employment growth, and the age composition of the population.

For any individual household, total disposable income can include not only employment earnings, but also earnings from self-employment, profits, rent, dividends, interest, pensions and social welfare transfers. Thus, growth in household income can be affected not only by growth in average industrial earnings (which, as noted earlier, may not be representative of growth in average employee income across all sectors) but also by growth in self-employment incomes and the other elements mentioned above. Over the 1987 to 2000 period, the wage share in national income has declined as self-employment incomes and profits have risen faster than wages. In addition, household income can be influenced by the balance between the number of individuals within the household who have a job and changes in average household size. Falling unemployment and rising female labour force participation would therefore tend to raise average household income. In addition, average income per adult equivalent would tend to rise as the average number of children per family declined, and could be affected by the way earners group together into households.

There are a number of possible interpretations of such changes in income. One is that the source of the income growth is of little

import, from the point of view of its implications for poverty. Failure to index welfare payments to growth in average household income would lead to a rise in relative income poverty; growth in mean or median income would lead to changes in living standards, with those dependent on welfare failing sooner or later to keep up with ordinary or typical living patterns. At the same time, the source and nature of the growth in average household income could be of major importance for financial work incentives – which in turn could have further implications for employment, unemployment and poverty.

Another view might seek to examine the contribution of different elements to the growth in average household income. Technically, this is a complex task, with no established decomposition methodology. But suppose, for example, that a certain proportion of the rise in average income could be attributed to a fall in unemployment as individuals previously unemployed obtained jobs. Does this mean that welfare rates should be indexed to an indicator which excludes this portion of the growth in income? It would seem more natural, in the context of the broad objectives of the NAPS, to think in terms of a policy blend which took advantage of increased employment rates to pay higher unemployment compensation, while the conditionality of payments might be more closely monitored in the context of a tight labour market.

Similarly, there may be different interpretations of the role of increased female participation in the labour force. The increase in the number of two-earner couples is a contributory factor to the rise in general living standards. But cash incomes are of course an imperfect indicator of household welfare or living standards. Non-cash elements affecting household welfare include the time available for childcare, eldercare, leisure and “home production”, which is reduced by labour market participation.

At a broader level there is an argument for including non-cash income as a contributory element to overall economic welfare. Other non-cash elements affecting household welfare include imputed rent from owner occupation of accommodation; non-cash benefits from employment; and non-cash benefits from the state, whether provided universally (such as free education) or in a more selective manner (such as medical cards giving access to free GP services). One of the difficulties here is that including only a subset of non-cash incomes may prove even more distortionary in terms of characterising the income distribution than restricting the focus to cash income.

### **IMPLICATIONS FOR RELATIVE INCOME POVERTY OF RECENT TRENDS IN WELFARE RATES**

The importance of the way in which future social welfare support rates are related to the growth in other incomes in society can be illustrated by considering recent trends and the implications of their continuation. Table 3.3 shows how real growth in a range of social

welfare rates compares with projected growth in gross and net earnings, and in average income per adult equivalent (projected using *SWITCH*).

**Table 3.3: Social Welfare Rates Compared to Alternative Indicators**

Index (1994=100)	2000
Household Income per Adult Equivalent	154
Hourly Earnings in Manufacturing (Gross)	116
Net Earnings at Hourly Earnings in Manufacturing (single person)	132
Old Age Contributory Pension	119
Widow's Contributory Pension	111
Unemployment or Disability Benefit	112
Invalidity Pension	112
Old Age Non-Contributory Pension	124
Widow's Non-Contributory Pension	112
Short-term Unemployment Assistance	114
Long-term Unemployment Assistance	112
Supplementary Welfare Allowance	114
Lone Parent Allowance (one child, including Child Benefit)	112

Over the period, most welfare rates rose by about 12 per cent more than prices. This was somewhat below the growth in gross earnings (16 per cent) and well below the growth in net earnings (32 per cent). Special increases for pensions led to higher growth than gross earnings but lower than net earnings. Growth in average income per adult equivalent at household level is projected to have been substantially above even the growth in net earnings.

What would be the implications if social welfare rates continue to be increased ahead of consumer prices but lag behind average income from employment? These issues are treated in depth in Chapter 8. But earlier analysis (Callan *et al.*, 1999) showed that the allocation of resources as between tax cuts and welfare increases could have a significant impact on relative income poverty rates. These simulation results, together with those set out in Chapter 7, serve to bring out in a direct way the crucial role, as far as relative income poverty rates are concerned, of the evolution of social welfare rates relative to other incomes in society.

### **IMPLICATIONS OF FORECAST ERRORS IN INDEXING PAYMENTS**

The data available for any linking procedure or mechanism will be provisional, and it will be some time after the event before the final figures become available. In any case, it would be desirable to avoid sharp variation from year to year in social welfare increases, to provide some stability for expectations. It would therefore seem advisable to have an "error correction mechanism" built into any linking procedure. This could mean that social welfare rates were related to a moving average of earnings trends, rather than simply to the latest annual increase. Many of the same considerations, both in terms of data and methods, apply to the question of how the

National Minimum Wage introduced in April 2000 is to be uprated over time. It will clearly be necessary to carefully consider the relationship between the uprating of the minimum wage and social welfare payments, and their interactions, before setting in place any mechanism applying to social welfare.

### 3.4 Conclusions

Rates of welfare payment are a key factor in reaching, and maintaining, the broad objectives of the National Anti-Poverty Strategy. The setting of welfare payment rates involves difficult social choices, in the context of trade-offs between objectives of adequacy of welfare payments, taxation levels and financial incentives to work which can affect employment levels. Experience from other countries where different rate-setting mechanisms, linked to prices or wage growth, have been used, shows that the choice of a mechanism does not predetermine later social choices in a simple fashion. There are advantages, however, in having year-to-year changes made within an explicit framework, which takes account of medium term considerations.

Differences between some of the main forms of income indicator which could be used for the benchmarking and indexation of welfare payments were considered. From a poverty perspective, the role of average household income (adjusted for family size and composition) in influencing living standards and ordinary living patterns is a critical factor. If welfare payments lag behind growth in this indicator, then welfare recipients may find it increasingly difficult to participate fully in ordinary living patterns. If, on the other hand, welfare payment rates rise much more rapidly than growth in net earnings, then the financial incentive to work may be reduced – with potential consequences for employment and unemployment which could make poverty targets harder to reach.

A simple mechanistic approach may be unlikely to resolve the knotty economic, political and social issues which lie at the heart of this debate. There are also technical issues relating to the availability, timeliness and statistical reliability of the various indicators. Some of these are inherent in the nature of the data collection process; others are related to the extent of resources invested in the data collection. But broadly speaking, information on prices is the most up-to-date and readily available, while lags are greater for information on wages.

One possible strategy for dealing with the indexation issue, taking account of the ongoing tension between the objectives of adequacy and financial work incentives, and the flow of data on which decisions can be based is outlined below. The broad aim would be to allow welfare recipients to share in the fruits of growth, but without the ups and downs associated with cyclical changes. The strategy could be seen as having four elements:

- (a) A “real income guarantee” that welfare payments would be indexed in line with expected price

inflation, to insure that their real value was protected even in times of recession.

- (b) Indexation of welfare payments in line with expected growth in net wages (moderated over the cycle to take account of any years in which welfare rates had increased faster than wages).
- (c) Annual correction with respect to forecast errors in the previous year.
- (d) Periodic review, perhaps every 3 to 5 years, in the light of household-based information on the wage and income distributions, relative income poverty thresholds and indicators of deprivation. This review would also be an opportune time to consider issues such as the sustainability of the path over the cycle; and regularly revisit issues relating to benchmarking, rather than assuming that they can be dealt with on a "one-off" basis.

In current economic circumstances, the real income guarantee element of the strategy may seem redundant or overly cautious, but it is well to have a system which can cope with a variety of economic circumstances, including recessions of the type which occurred in the 1980s. The second part of this strategy would ensure that welfare recipients had a share in the fruits of growth, while guarding against adverse effects in terms of financial work incentives. The third part of the strategy would take explicit account of the uncertainties about price and wage changes: if wages or prices grew by more or less than anticipated then this would be explicitly accounted for in determining welfare payment rates in the following year. Finally, and centrally, the evolution of welfare payment rates would be monitored in the context of household-based information on wages and incomes, where the fuller consequences of year-to-year changes could be teased out, and issues relating to the benchmarking of payments could be regularly revisited.

# 4. LOW PAY, TAX AND IN-WORK BENEFITS

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## 4.1 Introduction

The strength of the labour market in recent years has led to very substantial growth in employment and real income gains at all levels of the wage distribution. Rising employment and real wage levels have helped to lift many families out of poverty. However, there are still concerns about the levels of income achieved by some families depending on employment income (the “working poor”) and about the wages and labour market prospects of those at the lower end of the wage distribution (the “low pay” problem). The overlap between low pay and poverty is quite limited. For example, in 1998, only 7 per cent of households falling below the 60 per cent relative income poverty line were headed by an employee (Layte *et al.*, 2001). Even with the highest poverty line and highest low pay threshold, Nolan (1993) found that four out of five low-paid employees did *not* live in poor households. This corresponds with the pattern found in other countries. Most low paid employees are in households in the middle and upper parts of the equivalent income distribution. On the other hand, low-paid employees are more likely to have experienced unemployment, more likely to be younger workers, less likely to be entitled to a pension from their employer on retirement and as such face pervasive labour market disadvantage (Nolan, 1993).

The returns to low wage employment are a vital concern in considering policies to maintain financial incentives for unemployed persons to take up such employment. This concern motivated the introduction of the Family Income Supplement (FIS) scheme in 1984, at a time when the financial incentive to take up employment was at a low ebb. There has also been much discussion of low wage employment in the lead-up to the introduction and implementation of the statutory National Minimum Wage in April 2000. The effectiveness of the minimum wage has depended on the interaction with the tax/benefit system. The significant increase in income, which the minimum wage has represented for many low paid workers, has contributed to the objectives pursued by ongoing tax reductions and in-work benefits.

Combining work and welfare raises important policy issues: are in-work benefits ensuring that working families remain out of poverty? How can the right incentives be provided for unemployed people to take work, and for low-paid people to move up to

better-paid jobs? We begin our search for answers to such questions by considering international experience in this area.

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## 4.2 International Context

This section looks at some international evidence on tax and welfare systems in order to put the Irish system in a comparative context. Comparisons at aggregate or average level are used, as well as others focused more particularly on how the different systems deal with issues of low pay and poverty.

### 4.2.1 IMPLICIT TAX RATE COMPARISON

One method for analysing trends in the structure of taxation is to calculate and compare implicit tax rates (tax revenues divided by the tax base). Using this method for measuring the tax burden on labour employed across Member states, EUROSTAT (2000) find that between 1980 and 1997, the European average implicit tax rate on employed labour increased steadily from 35 per cent to 42 per cent (p. 218).<sup>8</sup> This contrasts with the Irish implicit tax rate on employed labour; from 1970 onwards it had steadily increased to peak at 34 per cent in 1988. It declined between 1988 and 1989 and then remained constant for almost five years. In 1995 it decreased by more than one and a half percentage points and since then has stayed below 30 per cent (EUROSTAT, 2000).

### 4.2.2 TAX WEDGE COMPARISON

Table 4.1 shows the tax wedge between gross income and net income across selected OECD countries, according to family type and the gross income position *vis-à-vis* average gross income prevailing in each country in 1998. Tax rates in Ireland in 1998 were below the average tax rate across each of the eight household types shown. The highest tax rate was faced by single people without children, earning above average wages. One indicator for low pay is the income level of two-thirds the wage of the average production worker (APW).<sup>9</sup> Using this measure, Ireland

<sup>8</sup> The same rate for other factors of production (capital, self-employed labour, energy and natural resources) decreased from 44 per cent to 35 per cent in the 1970 to 1997 period.

<sup>9</sup> This provides one perspective on tax rates on lower incomes. Two-thirds of APW represents different points in the wage distribution of different OECD countries – two-thirds of the APW may be close to the legal minimum wage. An alternative would be to take a fixed point on the earnings distribution e.g. the first decile.

demonstrates a very significant difference from other OECD countries for the family type of lone parent. Ireland has the lowest tax burden across all countries shown. The negative figure for this group indicates that cash benefits exceed taxes by 15 per cent. The addition of two children at the same income level means that a lone parent is 31 points better off than a single person with no dependants. This is because of the universal child benefit received and eligibility to benefit from the Family Income Supplement.

**Table 4.1 Comparative Average Tax Rates: Income Tax plus Employee Social Insurance Contributions less Cash Benefits as Percentage of Gross Wage 1998**

Number of Children	Single	Single	Single	Single	Married	Married	Married	Married
	None	None	None	2	2	2	2	None
Wage level (% Gr. W):	67	100	167	67	100	100 + 33	100 + 67	100 + 67
					1 earner	2 earners	2 earners	2 earners
Australia	20.1	25.4	34.0	-6.4	15.5	18.5	20.8	21.7
Canada	22.7	27.3	32.6	3.2	18.2	21.6	24.4	24.2
Denmark	40.0	43.4	50.4	12.9	29.7	35.1	38.1	40.0
France	22.9	27.3	30.7	11.5	14.6	17.0	19.4	23.7
Germany	36.5	42.1	47.5	18.6	22.4	29.7	34.3	36.5
Greece	17.0	18.3	23.3	15.9	18.7	18.1	18.1	18.4
<b>Ireland</b>	<b>16.9</b>	<b>24.9</b>	<b>35.9</b>	<b>-14.5</b>	<b>13.2</b>	<b>15.0</b>	<b>17.7</b>	<b>18.6</b>
Italy	25.0	29.1	33.8	3.8	15.7	21.8	25.6	25.6
Netherlands	30.1	34.4	38.9	8.6	22.4	25.3	28.4	30.7
Portugal	14.2	18.1	24.5	3.4	9.0	10.6	12.6	16.5
Spain	15.0	20.2	24.3	7.1	12.8	15.8	16.6	17.1
Sweden	32.5	34.4	42.0	20.0	26.1	27.5	28.7	33.7
UK	21.3	25.2	27.0	7.1	17.4	15.8	19.0	20.4
US	23.7	25.8	31.7	4.8	17.9	21.4	23.1	24.3
<b>Average</b>	<b>24.1</b>	<b>28.3</b>	<b>34.0</b>	<b>6.9</b>	<b>18.1</b>	<b>20.9</b>	<b>23.3</b>	<b>25.1</b>

Source: OECD, 2000.

A number of developments since 1998 have seen the tax and social insurance contributions, and levies reduced for those below average earnings. By the 2001 tax year, a significant number of taxpayers were removed from the higher tax bracket. All taxpayers and particularly single workers on moderate incomes benefited from the increase in the PAYE allowance to £2,000 in 2001. At the same time, the value of the personal, widowed and lone parent tax allowances increased by 56 per cent in real terms. In the 2001 tax year a single person pays no tax on the first £144 of income per week. The intervening change in the structure of the standard rate band has meant that all PAYE taxpayers up to and at the average industrial wage pay tax only at the standard rate, which fell from 24 per cent in 1998 to 20 per cent in 2001. Given the size and nature of the cuts in taxes in recent years, it seems likely that the situation of average and low paid workers has improved relative to their counterparts in most other developed countries.



### 4.2.3 IN-WORK BENEFIT SYSTEMS

In-work benefits shift the balance between incomes in and out of work and encourage labour force participation. These benefits to “make work pay” are usually in either of two forms. The first is implemented through employment-conditional benefits paid directly to the low wage worker and the second operates as a system of tax credits or through payroll tax rebates given to employers. In recent years many countries have introduced in-work benefits or wage-subsidy schemes as measures to help make work pay for those at the lower margin of the earnings distribution. This section will review programmes that have been introduced in the UK and the US, paying particular attention to the main objectives of the schemes, their effectiveness and their interaction with tax and social welfare policy.

Box 4.1 describes the in-work benefit scheme, which operates as a tax credit in the US. Taxpayers have the option of claiming the Earned Income Tax Credit (EITC) as a lump sum at the end of the tax year. Research has shown that the EITC is making a significant difference in encouraging lone parent income support recipients into work. The impact on couples with children is less positive and Eissa and Hoynes (1998) conclude that the EITC may be subsidising married mothers to stay at home (p. 31) as workforce participation by some second earners in a family was negatively related, in their econometric model, to the level of EITC. Liebman (1998) found that the EITC transferred most dollars to tax-paying households above the poverty line but concluded that the EITC was an effective way to target low-wage workers as EITC recipients received few other transfers and usually benefited individuals who work a large number of hours at low wages.

***Box 4.1: In-work benefit scheme of the United States –  
“The Earned-Income Tax Credit Scheme”  
(EITC)***

In existence since 1975, the EITC was kept at a low level until the 1990s. The eligibility conditions depend on the amount of income earned and the number of children dependent on the taxpayer. In 1999, taxpayers benefited from this scheme if their annual earned income was less than \$30,095 with more than 1 child, \$26,473 with 1 child and \$10,030 with no child dependants. A maximum subsidy applies which also depends on the number of children supported and the income earned by the tax unit. The maximum subsidy for a two-child couple is \$3,756 and requires that income be less than \$12,260. More limited benefits apply to married parents compared with lone parents. The credit is phased in at a rate of 40 per cent on lower incomes and is phased out at a rate of 21 per cent for this particular tax unit type. Married and cohabiting couples are treated differently: if a low-income family lives with other adults who also care for children, these adults are potentially eligible to claim the EITC but only the adult with the highest income in the household

can apply. Married couples receive the credit through their joint income tax return.

In addition to the federal EITC scheme, state level welfare reforms have played an important role since 1996. States have flexibility in designing and implementing their welfare systems since the Personal Responsibility and Work Opportunity Reconciliation (PRWORA) Act of 1996. Some key state-level reforms include three major types of policy: mandating work, making work pay and helping families with childcare. Mandating work has been implemented through providing once-off financial assistance, requiring mandatory job search as a condition of eligibility and/or linking applicants to other services or resources in lieu of cash assistance (known as diversion activities). However, the probability of being sanctioned also varies across states but tends to involve termination of cash assistance and more frequent visits from programme inspectors.

Box 4.2 outlines the in-work benefit system in the UK. The Working Family Tax Credit (WFTC) is targeted at 1.5 million recipients compared with a total workforce of close to 30 million. The WFTC is estimated to cost £50 billion per year. Entitlement to WFTC is concentrated amongst families at the bottom of the earnings distribution: over 35 per cent of families with children in the second and third income deciles are eligible for WFTC.

***Box 4.2: UK In-work Benefit Scheme – Working Families Tax Credit (WFTC)***

WFTC has been in operation since October 1999, replacing the earlier Family Credit scheme which had been in operation for 11 years. Family Credit operated through the benefit system, like FIS, but WFTC now operates as a tax credit through the recipient's pay packet. All low-income families with children are eligible to apply if one adult works more than 16 hours per week. Amounts of credit can depend on the number and ages of children. The rates of payment were set with a minimum income per week in mind, with additional payments for larger families. Up to 70 per cent of childcare costs are taken into account. Additional small premium payments are made if more than 30 hours per week are worked. The credit is reduced by 55 per cent of additional earnings when earnings exceed the weekly income limit. The taper rate applies to net income after tax and social insurance deductions. Housing benefit and council tax relief are also withdrawn as earnings increase giving a theoretical maximum benefit withdrawal rate of over 90 per cent of marginal earnings.

In March 2000, the employment tax credit (ETC) scheme was announced and aims to extend in-work help to those without children, replacing the adult elements of WFTC and disabled person's tax credit (DPTC) and the over-50s employment tax credit of the same name. The intention is to pay adult and child payments separately, on a trial basis, reflecting the distinct aims of each. The benchmark for the level of ETC support is the WFTC adult credit. In 2000/01, this amounts to UK£53 a week.

Amounts of the ETC for parents and non-parents are not the same. The ETC aims to increase work incentives and relieve in-work poverty, through "a single visible instrument, underpinned by the national minimum wage, to make work pay"<sup>10</sup> Couples without children and with someone in full-time work could receive a minimum income guarantee of UK£165 per week.

Both the WFTC and the EITC affect the financial incentive to form a "couple", because they provide the same level of support to families with the same (combined) income whether there are one or two adults present.<sup>11</sup> Figure 4.1 shows that despite the expansions of the EITC, the UK WFTC system is more generous in terms of the average in-work benefit paid, particularly since the WFTC is paid on a net-income basis. There is also a qualitative difference between the US and the UK due to the structure and operation of the EITC and WFTC, respectively. In the absence of the EITC, paid as a US tax credit, low income families have a lower benefit withdrawal rate while still facing a positive financial gain to work. The WFTC with the complete withdrawal of out-of-work benefits under 16 hours a week means that there would be negative financial gain to part-time work without an in-work payment: more than the full-time minimum wage would be needed to see any financial gain to work over welfare.

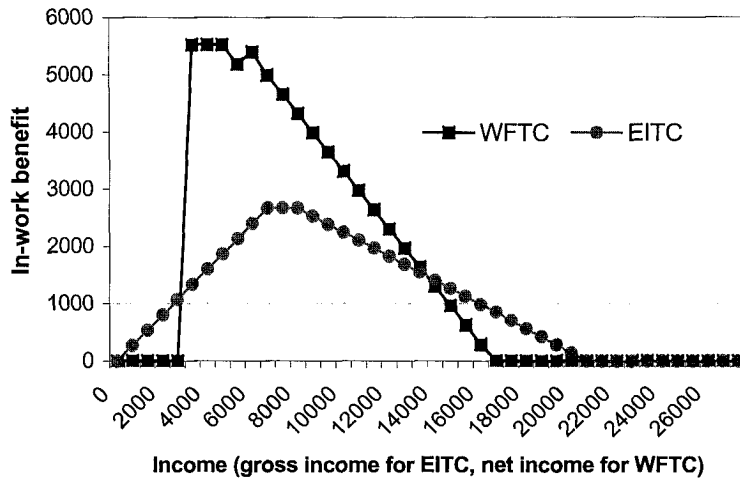
Brewer (2000) found that work incentives in the UK and the US would be worse without their respective in-work benefits.<sup>12</sup> The evidence suggests that WFTC provides good financial incentives to do some minimum wage work, but poor financial incentives to increase earnings beyond that point because of relatively higher marginal withdrawal rates. If benefits are withdrawn soon after an individual takes up employment, the disincentive to taking up work is very significant. A more gradual tapering off of benefit as earnings rise adds less to financial disincentives – but costs more. Individuals may also find themselves facing two or more tapers on different benefits at any one time. Combined, the rate at which benefits are withdrawn and taxes increase as earnings rise is known as the marginal effective tax rate (METR). People facing very high METRs have little or no financial reward for increased work hours and effort and lose very little if they work less (OECD, 1998).

<sup>10</sup> House of Commons *Hansard*, 25 May 2000.

<sup>11</sup> Programmes which provide the same level of support whether there is one or two adults is the extreme case; joint assessment can also be combined with higher support for two adults.

<sup>12</sup> Bingley and Walker (1997) take a sample of lone mothers to look at the effect of changes to in-work benefits (such as the UK's Family Credit scheme) on movement in and out of work. This study found that doubling the maximum amount of family credit eligibility increases participation by 10 percentage points (from a base of 34 per cent working). The maximum amount drawn is dependent on family size but averaged around £75stg (in 1992 prices).

**Figure 4.1: Annual WFTC and EITC Payments, Calculated at Exchange Rate of UK£1=\$1.50**



*Note:* Assumes hourly wage of £3.60. WFTC eligibility occurs after 16 hours per week is worked. The EITC rates apply to a family of 2 or more children, the subsidy rate is 40 per cent and the taper rate is 21.06 per cent. Taper rate of 55 per cent for WFTC.

How strong are the effects of high marginal effective tax rates? This depends in part on the context in which they operate. A high METR may apply over a narrow range, so that very few individuals actually face it – but others may have chosen to avoid it by working fewer hours, or dropping out of the labour market. High METRs may have a significant effect if they affect disadvantaged groups e.g. lone parents. These groups tend to be eligible for a wider range of benefits and are encouraged to stay on long-term benefit for this reason. Further, the incentive for one family member to work can be affected by the benefit entitlement of another. This can be a feature where extensive means testing is employed to determine eligibility for benefits, particularly in family situations where a spouse is considering taking up employment.<sup>13</sup> Marsh and McKay (1993) found that recipients of the Family Credit scheme were often not the unemployed finding low-paid jobs, but spouses in two-earner couples when one partner lost their job.

<sup>13</sup> This result has led Australia to address this problem to some extent by giving each partner in a household whether neither partner has a high level of earnings an individual benefit entitlement and reducing the METR below 100 per cent. Individualising benefits means that income support for family members would be independent of the support received by other family members.

#### 4.2.4 REPLACEMENT RATE COMPARISON – INTERNATIONAL EVIDENCE

The disincentive to move from welfare to work is often measured by the rate of income out of work that can be replaced with income in the form of social welfare entitlements with the complexity associated with multiple entitlements. High marginal effective tax rates (METR) have created strong disincentives to move from welfare to work among those on low incomes (the welfare trap). These disincentives to work can be captured with a replacement rate measure. Replacement rates are defined as the ratio of income net of taxes and benefits when out of work to net income in work (Gregg *et al.*, 1999).

Table 4.2 shows a selection of net replacement rates from the OECD database for three different earnings levels:

- i. the earnings of an average production worker;
- ii. two-thirds of the average production worker (APW) rate and
- iii. the first decile of the earnings distribution.

Table 4.2: Net Replacement Rates at Different Earnings Levels<sup>1</sup> 1996-1997

Rank	Country	Initial Unemployment			Long-term Unemployment <sup>2</sup>		
		Average earnings	2/3 average earnings	1 <sup>st</sup> decile earnings	Average earnings	2/3 average earnings	1 <sup>st</sup> decile earnings
(12)	Australia	74	86	86	74	86	86
(10)	Belgium	60	76	77	63	90	91
(9)	Canada	69	69	80	77	77	77
(15)	Denmark	77	96	96	96	96	96
(16)	Finland	84	94	94	97	97	97
(5)	France	74	86	85	50	60	60
(3)	Germany	74	74	73	52	61	61
(7)	Ireland	62	73	75	62	73	75
(1)	Italy	54	52	52	18	22	23
(8)	Japan	56	64	69	65	95	95
(14)	Netherlands	85	90	90	79	94	94
(6)	Norway	73	74	74	55	73	69
(4)	Spain	74	78	81	43	61	71
(17)	Sweden	84	90	90	100	100	100
(13)	Switzerland	84	84	84	90	93	91
(11)	UK	64	83	87	74	89	89
(2)	US	61	51	51	48	61	61

<sup>1</sup> These figures are given for a hypothetical family where the worker is 40 years old, has a dependent spouse and 2 children and started to work at 18. The figures represent replacement rates for newly and long-term unemployed persons. Housing costs are assumed to be 20 per cent of gross average earnings.

<sup>2</sup> Replacement rates for the long-term unemployed relate to persons in the 60<sup>th</sup> month of their unemployment spell.

Source: OECD database on taxation and benefit entitlements – Table 6 OECD *Economic Studies* No. 30, 2000/1.

These data show that net replacement rates in excess of 80 per cent are quite common in many OECD countries once social assistance and benefits, housing benefits and the effect of the tax system is taken into account. Italy has the lowest replacement rates across all categories while Finland and Sweden have the highest replacement rates across the countries shown. When countries are ranked according to a simple average over the six categories, Ireland has

the 7<sup>th</sup> lowest average replacement rate, similar to those of Spain, France and Norway. Ireland's replacement rates are consistently below the 80 per cent level.

#### **4.2.5 TAKE-UP – PROGRAMME ENTRY EFFECTS**

Low-income families do not always apply for or receive the in-work benefits to which they are entitled. There may be a programme entry effect that determines the take-up rate of the in-work benefit, which is related to problems of intrusiveness and transactions costs. When administrative procedures are time-consuming and the rules themselves discourage reapplication e.g. imposition of a waiting period, the perceived risks of accepting a job may offset any potential gain in income, according to Saunders (1995). Graham (1984) shows that take-up is influenced by the rate of payment received and previous experience in claiming benefit. Employees, who would not otherwise have contact with social welfare services, may now be eligible for in-work benefit. According to the OECD (1998), misperceptions of eventual net incomes both in and out of work may mislead people and result in apparently irrational labour supply decisions. Respondents tend to be more aware of out-of-work benefits than of in-work benefits, leading them to over-estimate their replacement rate, with potentially negative effects on the labour market. A side-effect of this is that if families entitled to small amounts of in-work benefit do not bother claiming, then the degree to which high marginal deduction rates are extended up the income distribution is reduced (Brewer, 2000).

Many countries have had to engage in intensive publicity campaigns (e.g. the Family Credit scheme in the UK) to reach a point where take-up is high percentage of those eligible. An alternative approach followed by the US and to which the new UK WFTC adheres, is to pay the supplement as a refundable tax credit.<sup>14</sup> Using a tax credit system has its own disadvantages: the tax unit has to be similar to the income-sharing unit used for targeting the in-work benefit. In the advent of tax individualisation, targeting support on family income is less straightforward. Second, the period of assessment for the benefit must match the period used for assessing tax returns. Tax liabilities tend to be calculated on an annual basis, while in-work benefits tend to be made on the basis of a short period of earned income. Third, a criticism of any tax credit scheme intending to disproportionately benefit the low-paid is that families with low pay tend not to be in the tax net and may not benefit from a tax credit if they do not pay tax greater than or equal to the value of the credit. On the other hand, experience shows that the aggregate administration cost of applying payroll tax reductions for those with low earnings tends to be lower than that

<sup>14</sup> In the US, EITC participation rates appear to be higher than comparable rates for other programmes serving low-income populations, such as food stamp benefits.

arising from a separate benefit system. There would be some commonality between the costs of applying other payroll deductions and credits including tax credits, employment-conditional benefits and payroll deductions generally.<sup>15</sup>

### 4.3 Irish Experience of Policies for the Low-Paid

#### 4.3.1 EVOLUTION OF FIS

Family Income Supplement (FIS), the Irish in-work benefit scheme administered through the social welfare system, was introduced in 1984 at a time when the out of work compensation payments were high relative to potential earnings (Callan *et al.*, 1995).<sup>16</sup> This was seen as damaging the incentive to take up employment and official statements emphasised the need to combat labour market rigidities by improving the income position of working, low-income families supported by an employee. "The main objective of the scheme is to maintain the incentive to work by providing cash supports to workers with families who are on low incomes and as a result, are only marginally better off than if they were claiming Social Welfare benefits" (Comprehensive Public Expenditure Programmes, 1984).

The structure of FIS is as follows. To qualify for a payment, an individual or couple must be employed in full-time employment for at least 19 hours every week, have at least one qualified dependent child, and have an average weekly income below a limit depending on family size. Employment must be likely to last for at least 3 months.<sup>17</sup> FIS payments were originally calculated as a percentage of the shortfall between the family's gross income (from any source, though some items such as child benefit and investment income are excluded) and fixed income limits according to family size. Until 1991, there was a further provision that payments could not exceed a specified maximum amount for each family size. The percentage rate applied to the shortfall has a dual role. On the one hand, it acts as a multiplier providing income support to the low paid by closing a portion of the gap between income and target income (the income limit). On the other hand, it also acts as a withdrawal rate that serves to gradually withdraw the benefit, as income gets closer to the income limit. The marginal benefit withdrawal rate (MBWR) is in effect a taper that operates

<sup>15</sup> However, the incidence of the administrative cost may be shifted onto employers if the scheme involves additional complexity for them.

<sup>16</sup> An extreme form of this phenomenon is often labelled an "unemployment trap" – a situation in which a person is financially better off unemployed and receiving social welfare benefits rather than working. This would be measured with a high replacement rate where incomes when unemployed form a high proportion of potential net income in employment.

<sup>17</sup> Casual work such as, seasonal work of less than 3 months and Government Schemes do not count as full-time employment. However, Back to Work Allowance (Employees), Job Initiative, Jobstart and Part-time Job Incentive do count as full-time employment. An applicant will not qualify for a FIS payment for any week where an unemployment payment (excluding the Back to Work Allowance (Employees)) is claimed.

like a tax since, for every additional £1 of earned income, a portion of benefit (specifically the increase in income, in this case £1, multiplied by the withdrawal rate) is withdrawn.

FIS has changed quite substantially since its introduction. One of the most substantive changes has been the change from a gross income basis to a net income definition of family income calculated as an individual's assessable earnings (Gross Pay minus income tax, employee PRSI and levies). Spouse/partner's assessable earnings and extra income from employment (such as payments for overtime, bonuses, allowances or commission) are also counted. Items such as income from occupational pensions and payments from a limited number of social welfare schemes also count as family income and will reduce a family's eligibility for FIS.<sup>18</sup> The amount of the FIS payment started originally as 33 per cent of the gap between actual income and the relevant income limit but has been maintained at 60 per cent since 1989. The minimum number of hours fell from 30 in 1986 to 19 at present. Until 1989 a claimant had to work this minimum number of hours himself/herself but since then, it has been possible to combine hours worked by spouses/partners.

The income limits have been raised by 116 per cent between 1986 and 2001, as against wage growth of the order of 90 per cent. This has had the effect of extending the scope of the scheme higher up the wage distribution. This coupled with the relaxation of the minimum hours requirement, has tended to increase the numbers eligible for FIS payments.

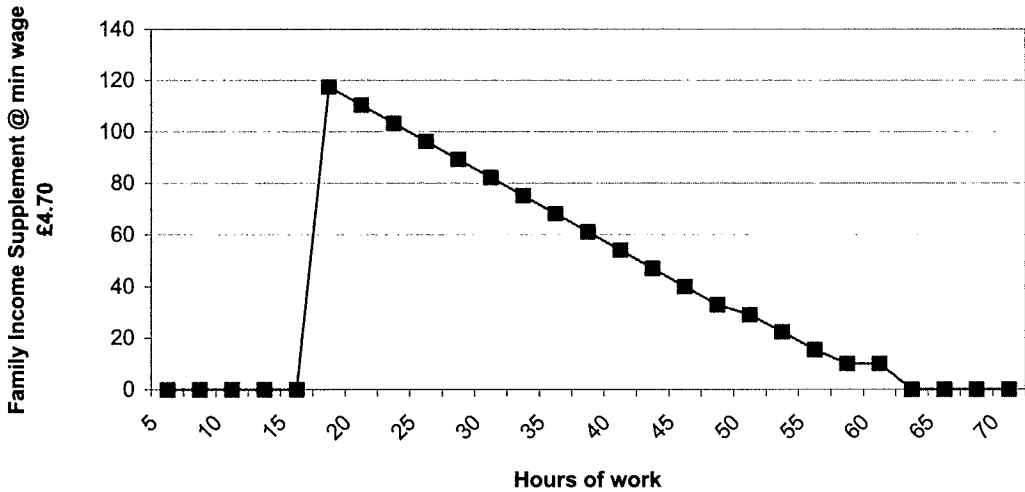
#### **4.3.2 FIS INTERACTION WITH TAX AND PRSI STRUCTURES**

The first step in resolving the issue of how tax-benefit schemes affect financial work incentives is to map how the level of FIS payment varies with gross earnings. This is illustrated in Figure 4.2. In 2001, a one-earner 4-child family with earnings of £250 per week would receive close to £45 per week in Family Income Supplement.

<sup>18</sup> Where an employee is paid weekly or fortnightly, weekly income is based on the weekly average of assessable earnings in the 4-week period before a claim is made. If paid monthly, average weekly income is worked out using average assessable earnings on a per week basis in the 2-month period before the claim is made. If an employee's spouse/partner is self-employed, his/her income over the 12-month period before the claim is made (divided by 52), is used to work out his/her average weekly income.



**Figure 4.2: FIS Entitlement at Varying Hours of Work, Paid at Minimum Wage, 2001. (One-Earner Family with 2 Children)**



There is better co-ordination between FIS and the income tax system than previously. The raising of the tax threshold means that fewer FIS recipients will also be paying tax. This means that the high tax-cum-benefit withdrawal rate arising from the interaction of the FIS withdrawal rate and income taxes, affects only about one-fifth of those entitled to FIS in 2001. The move from a gross to a net income basis for the calculation of FIS entitlement means that even those FIS recipients who are in the tax net will gain at least 20 pence in the pound from an increase in pay.

In order to explore this empirically, we examined marginal effective tax rates (METRs) at 2001.<sup>19</sup> The results show that about four out of five families eligible for FIS are most likely to have an METR of between 60 and 70 per cent. This is not surprising since FIS is withdrawn at a rate of 60 per cent on marginal disposable income.<sup>20</sup> The remainder have tax rates of close to 80 per cent, which arise from the combination of the 60 per cent withdrawal rate and the standard tax rate.

There is a trade-off between policies that reduce replacement rates and the marginal effective tax rate for those in low-wage employment. In-work benefits aimed at making work pay for the low-income employed have to be withdrawn as earnings increase

<sup>19</sup> Marginal effective tax rates measure the amount of an extra pound of income which is deducted in tax or deducted as a reduction in benefits from the welfare system. If a £1 increase in income leads to a 40 pence rise in disposable income, the METR is 60 per cent.

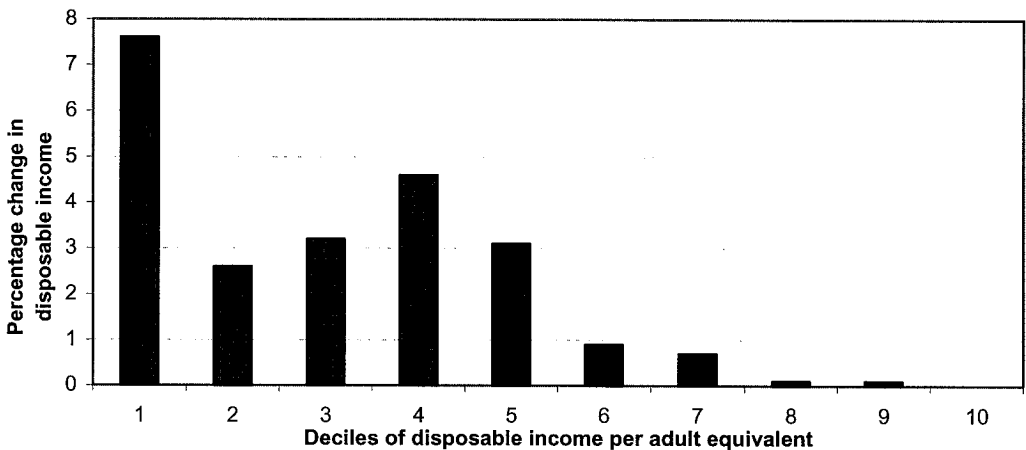
<sup>20</sup> In operation, there are timing factors that "soften" the higher METR associated with FIS i.e. if a recipient gets a pay increase, FIS will not be reduced/withdrawn until the next assessment, which could be up to 12 months later.

to ensure that the costs of the in-work benefit scheme are sustainable. The higher the in-work payment, the greater the boost to financial work incentives, particularly at low income. A high in-work benefit can be withdrawn at a high rate (i.e. 60 per cent for FIS in Ireland) or a lower rate of payment can be withdrawn at a lower rate along the lines of the EITC in the US which is withdrawn at a rate of 29 per cent on every additional dollar earned. As a result marginal effective tax rates are less than 50 per cent, for EITC recipients in the US; but higher METRs are typical for those on in-work benefits in Ireland and the UK.

### 4.3.3 IMPLEMENTATION OF THE MINIMUM WAGE

While labour market aims may be the main motivation for a minimum wage, the existence and level of a minimum wage are also relevant to concerns about the financial incentive to take up employment, and levels of in-work income for low waged workers. The national minimum wage was introduced in April 2001, at £4.40 per hour. Since July 2001, the statutory minimum wage is £4.70 per hour (£188 gross per 40-hour week). *SWITCH* analysis reported in Figure 4.3 shows that the first income decile (controlling for family composition by applying an equivalence scale to disposable income) would be considerably worse off without a minimum wage floor. This minimum wage scenario is contrasted with a scenario in which there is no minimum wage. Families in the first decile, on average, stand to gain by about 7 percentage points in disposable income terms, while the richest half of the population see an increase of less than 1 per cent in their disposable income with the imposition of the 2001 minimum wage.

**Figure 4.3: First-round Impact of National Minimum Wage (£4.70) on Families' Disposable Income, against Benchmark of No Minimum Wage**



### 4.3.4 OTHER POLICIES

Schemes which supplement participants' earned incomes are characterised by Greenwood and Voyer (2000) as a particular kind

of supply-side labour market intervention. The job-search and job-acceptance behaviours of individuals are promoted by raising the financial returns from working. On the other hand, there may be demand side subsidies with the general aim of overcoming employer reluctance to take on less skilled labour.<sup>21</sup> Demand side measures affect the labour market by mobilising labour supply, which lead to improved skills and competencies and has strengthened the job search process. The instruments of labour market activation include training programmes (which can be seen as having both demand and supply side elements) and temporary employment schemes – subsidies to employment in the private sector and direct employment or job creation schemes.

FÁS, the national training and employment authority provide general and specific skills training and have participants in either Specific Skills Training or on the Job Training Scheme. The National Rehabilitation Board administers schemes for people with disabilities. Bridging training programmes were introduced in 1998 to support the progression of long-term unemployed persons onto FÁS mainline training programmes and into work. Other courses in this category are run by CERT, the state tourism training agency. The need for policy to focus on training and up-skilling, rather than continuing to pay “passive” benefits for low pay is stressed by Evans (2001) in his review of UK and international welfare-to-work experience. In the long term, education and training, which will boost the wage that can be commanded, can play a major role in dealing with the low pay problem.

The Department of Enterprise and Employment support schemes to provide employment subsidies to Irish employers, employees and to the self-employed workers in the private sector. Subsidies to employers comprise direct payments to employers<sup>22</sup> and a social insurance exemption scheme. Subsidies to employees are administered by the Department of Social, Community and Family Affairs and are targeted at the long-term unemployed. The largest of these is the Back to Work Allowance (Employment) Scheme which allows employees to retain 75 per cent of their social welfare for the first year, 50 per cent for the second year and 25 per cent of their social welfare entitlement for the third year. On the part-time job incentive scheme, recipients receive a weekly supplement. Subsidised employment is mainly provided for the long-term unemployed (mostly in the form of Community Employment Schemes) (Sexton and O’Connell, 1996).

In tight labour market conditions, such as those obtaining at the time of writing, the role of demand-side labour subsidies will necessarily be somewhat circumscribed. Even in conditions with

<sup>21</sup> These subsidies have been most widely used in Continental European countries (Salverda, 2000).

<sup>22</sup> After 1994 the number of direct payment employment subsidies to employers were reduced leaving the Social Insurance Exemption Scheme as the main form of employer subsidy at present.

more substantial unemployment, there is no guarantee that the jobs go to people from low-income households: much depends on the design of the measures. Measures focusing narrowly on specific target groups (that is the long-term unemployed, the low-skilled or disadvantaged social groups) may have little effect on overall employment, whilst a broad application of subsidies may lead to dead weight losses: the subsidies might be paying for hires into low-paid jobs which would have occurred anyway.

## 4.4 Future Options

### 4.4.1 INTEGRATING THE TAX AND SOCIAL WELFARE SYSTEMS

Some ideas in the literature involve quite radical alternatives to fully integrate income taxation and social welfare systems. The attractions of such schemes are readily apparent, in terms of simplicity, universality of coverage, and avoidance of the very high marginal tax rates and replacement rates which arise from the combination of benefit withdrawal and payment of income tax. In the Irish context, there have been particularly thorough investigations of schemes of this type, most recently by the Working Group on Basic Income, led by the Department of the Taoiseach.<sup>23</sup>

Some results from that study (Callan *et al.*, 2000) show that few Irish employees faced replacement rates close to 100 per cent. This effect would be eliminated by a basic income system. However, more employees would see their replacement rate rise than fall. The estimated tax rate to finance a basic income system lay between 51 and 53 per cent. Under the conventional system, 57 per cent of taxpayers pay taxes at a rate below 30 per cent, but their marginal tax rates would rise to about 50 per cent under the basic income system. The move to a basic income system would also reduce the tax-cum-benefit withdrawal rate facing the small proportion of cases affected by FIS withdrawal under the conventional system. Callan *et al.*, concluded that the net effect of a move to a basic income system on growth was more likely to be negative than positive.<sup>24</sup>

### 4.4.2 TARGETING TAX CUTS TO LOW PAID

Four options for further targeting tax cuts to the low paid are outlined in this section. First, we look at the aggregate cost and distributional consequences of raising the personal allowance/tax credit to a level sufficient to take all those earning the minimum

<sup>23</sup> In its pure form, a basic income would replace all social security transfers and personal tax allowances with a single basic income payment paid unconditionally to everyone.

<sup>24</sup> While growth, in itself, is not the only criterion for evaluation of such a policy change, a negative impact on growth would imply that the tax rate required to finance the scheme would probably be *higher* than that obtained from static estimates.

wage out of the tax net. Second, the experience of granting relief on health insurance premia and (planned) mortgage interest at source in the form of refundable tax credits is examined, specifically focusing on those in the poorer deciles of the income distribution. We examine the policy option of extending the system of refundable tax credits and look at the distributive effect of such a change. Fourth, following the UK example, a 10 per cent starting tax rate is examined in the Irish context.

*Making Those on the Minimum Wage Exempt from Income Tax*

In order to ensure that all on the minimum wage (£4.70 per hour in 2001), are taken out of the income tax net, the combined personal and PAYE allowances would need to be increased to £9,800 per year equating to a revised tax credit of £1,960 per annum. Using *SWITCH*, we find that the exchequer cost of increasing the personal allowance to £7,800 holding the PAYE allowance at its current level of £2,000) is about £780 million.

**Figure 4.4: The Overall Distributive Effect of Increasing the Personal Allowance to Ensure that those at or Below the 2001 Minimum Wage are not Subject to Income Tax**

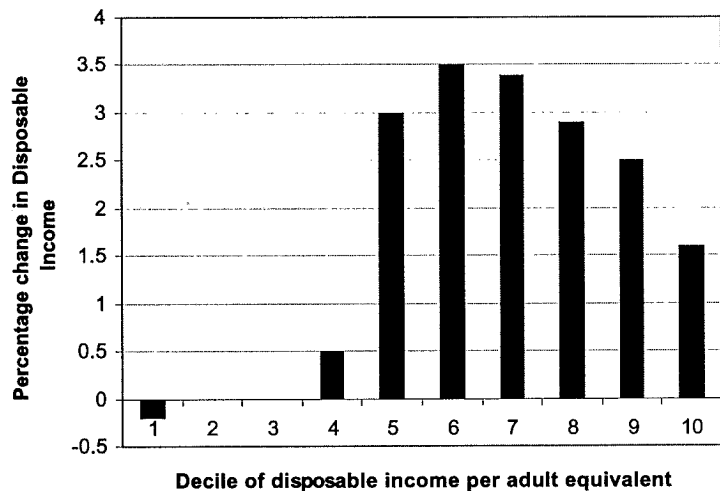


Figure 4.4 shows that there would be little change in the income of those in the bottom 40 per cent of the income distribution from this policy. Gains of 3 to 3½ per cent are found in the middle of the distribution, with somewhat smaller gains towards the top.

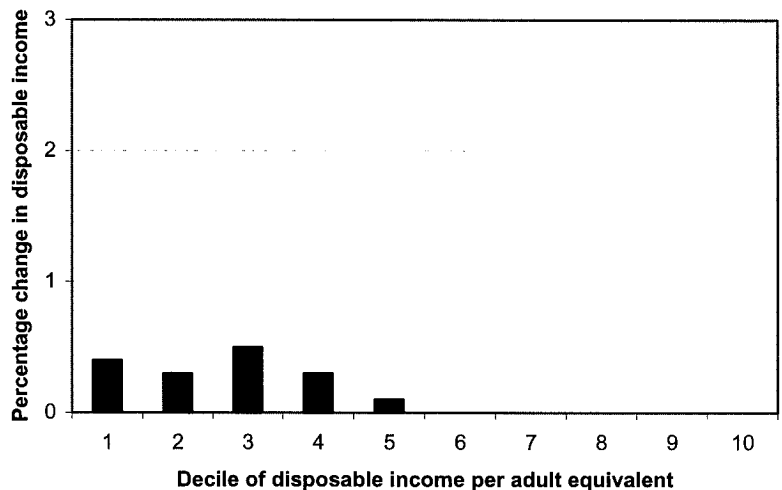
Only about 16 per cent of the total tax forgone benefits those in the bottom half of the distribution, while 84 per cent goes to the top half. Thus, while some of the benefit goes to the target group, much of the benefit “spills over” to higher income earners. Why does this occur? In part the pattern reflects the lack of overlap between low pay and poverty (see Nolan, 1993). Those who are on low pay may be married to a spouse with earnings which bring the tax unit to the middle or upper reaches of the income distribution.

But in large measure, the spillover results from the simple fact that the full value of an increased allowance accrues only to those who remain in the tax net, and not to those who are taken out of the tax net by the increase. The average value to those who remain in the tax net is about £650 per year, almost twice the benefit obtained by tax units who are brought out of the tax net. The tax system does allow for various methods to “claw back” some or all of this benefit, though each has its own drawbacks. But the negative aspects of such policies have also motivated a search for other means to focus relief on low income units.

#### *Refundable Tax Credits – Experience to Date*

A significant development in Budget 2001 also was the introduction of relief at source for health insurance premia. It was also announced that mortgage providers would give mortgage interest relief at source from January 2002. Because the value of this relief is equally available to all those with a mortgage or health insurance regardless of whether or not they are subject to income tax, these credits in effect operate as *refundable* tax credits. This intensifies the benefit of this relief for the lower deciles of disposable income per adult equivalent. *SWITCH* estimates the full-year exchequer cost of these changes to total £25 million. The gains are concentrated on the bottom half of the distribution, with deciles 1 to 4 seeing a rise of between a quarter and a half of one per cent in disposable income. (Figure 4.5)

**Figure 4.5: Income Effects Per Decile of Disposable Income of Refundable Tax Credits (on Health Insurance and Mortgage Interest) Announced in Budget 2001**



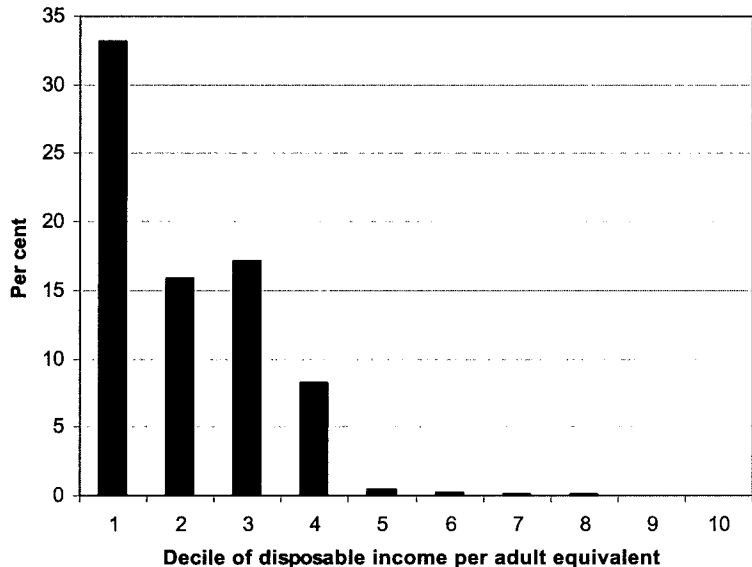
#### *Extending the Range of Refundable Tax Credits*

Budget 2001 saw the completion of a move from a system of tax free allowances, to a system based on tax credits. This followed a transition process where all tax allowances were standard rated.

The idea of refundable tax credits is under discussion in a Partnership Working Group. To make all tax units benefit from tax credits regardless of whether or not they pay tax, a radical move would be to make all tax credits refundable. Making all current tax credits refundable would cost in excess of £850 million, with the first 4 deciles obtaining about 97 per cent of the benefits.<sup>25</sup> The gain for those in the bottom 3 deciles would be from 15 to 33 per cent. Essentially, this would involve the payment of the standard-rated value of tax free allowances to all, irrespective of their income level or income source. Thus, welfare recipients would gain close to £30 per week from a refundable tax credit.

While this is not the same as the “basic income” idea, there are elements in common. Atkinson and Sutherland (1990) consider the effects of “cashing out” the value of tax free allowances, and treating the resultant payment as a partial basic income. If refundable tax credits were operationalised in this way, the £30 per week would be deducted from welfare payment rates, but would be seen by recipients as a payment which did not depend on their welfare status. Thus, job offers could be evaluated on the basis of gross amounts payable, less tax at the standard rate. The true in-work and out-of-work incomes could be calculated somewhat more easily – though assessing the likely amount of FIS payable, if any, would remain quite complex. But of itself, this change would do little to alter the real financial incentives, as distinct from perceptions about them.

**Figure 4.6: Net Effect of Fully Refundable Tax Credits Across Deciles of Disposable Income Per Adult Equivalent**



<sup>25</sup> This estimation is produced by *SWITCH* and excludes the Age Allowance and the Home Carer's Allowance.

### *A Low Starting Rate of Income Tax*

Another option would be to complement the minimum wage with a lower starting rate of income tax, as implemented after the UK July 1997 Budget. A similar scenario for Ireland, with a 10 per cent tax rate on the first £2,000 of taxable income before reverting to the standard rate of 20 per cent on the remaining £18,000 of the current standard rate band would cost almost £260 million according to *SWITCH*.<sup>26</sup>

**Figure 4.7: Initial 10 Per Cent Tax Rate on First £2,000 of Taxable Income Compared with Current 2001 Policy**

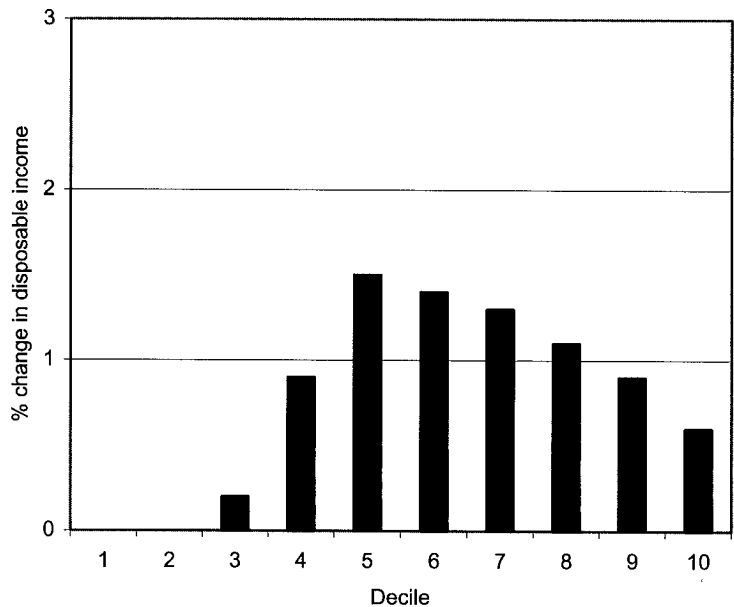


Figure 4.7 shows that there is little benefit for those in the bottom 3 deciles. This evidence concurs with that from the UK, which shows that this measure achieves relatively little for low-income earners on top of the results already achieved by the minimum wage (IFS, 1999). A 10p tax rate does virtually nothing more to reduce household poverty and it is unlikely to improve the work incentives of those who are currently unwaged due to the fact that replacement rates barely changed. The impact on effective marginal tax rates for those on low incomes would be nil, as low wage earners tend not to pay tax anyway. Those on high incomes would gain as much as anyone. There would also be additional administrative complexities if an additional tax rate were imposed. The more bands there are, the more retrospective adjustments have to be carried out. Increasing tax allowances (and credits) produces

<sup>26</sup> This simulation involved keeping standard-rated allowances at the standard rate of 20 per cent.



similar, though slightly more progressive distributional results and avoids any administration problems.

#### 4.4.3 EXPANSION OF FIS

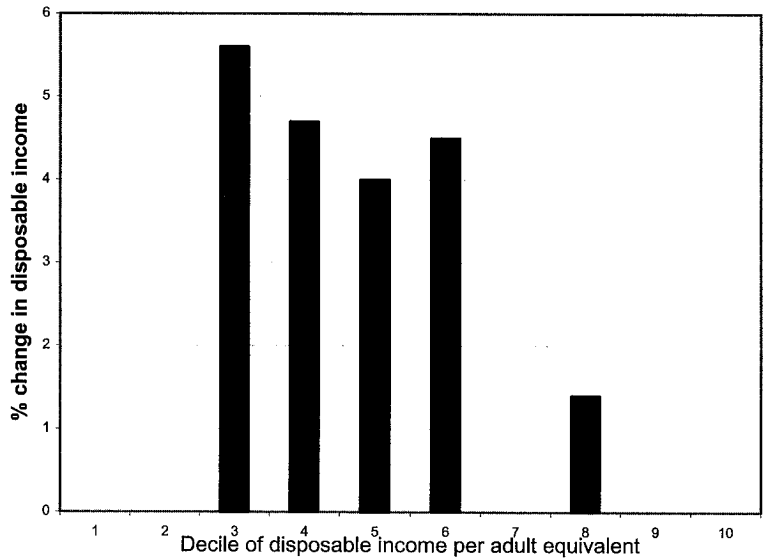
Several options are considered for the expansion of FIS. First, the possibility of extending FIS to become a universal earnings top-up without reference to family status is discussed. Second, the aggregate cost and distributional consequences of increasing the 2001 FIS income limits by 10 per cent are analysed using *SWITCH*. Third, a more comprehensive analysis coupling increased income limits with a reduction in the benefit withdrawal taper is outlined. Finally, the relative impacts of extending FIS parameters or implementing a 10 per cent increase in the current minimum wage is explored.

One option – already being piloted in the UK – is to extend in-work benefits to workers without dependent children. However, the case for this “earnings top-up” seems to be rather weak. Many of those with the lowest earnings levels are young childless people who would already be helped by the minimum wage. The extra expenditure on the earnings top-up has only a limited additional effect on household poverty, although it does further improve the return to part-time work, in particular for currently unwaged men without children. Earnings top-ups also extend in-work benefits to all groups of workers, which may have a depressing effect on wages.

A second option is to increase the FIS income limits by 10 per cent, holding the FIS multiplier/benefit withdrawal rate constant at its current rate of 60 per cent. An increase in the income limit would be consistent with a continuation of the type of changes made to the FIS scheme in recent budgets. This change would cost about £19 million and the distributional impact is shown below in Figure 4.8. The distribution of gains is shown because no family would lose out directly as a result of this FIS policy change. For families in the third decile, a 10 per cent increase in the current income limits for FIS would represent an additional £20 per week in disposable income terms. However, more tax units in the fourth decile stand to benefit than any other decile (15,600) and consequently most resources would flow to those families who have a weekly equivalised disposable income between £114 and £155 in 2001.

Third, these distributional effects would be compounded if the FIS taper rate was reduced in tandem by 10 percentage points to 0.5. The aggregate cost of the combined income limit and taper changes would be about £12 million. A taper cut would have the effect of giving lower payments to existing recipients, while paying money to new recipients who have higher incomes. Cutting the taper rate by 10 per cent also represents a lower rate of benefit withdrawal. This would lower the METR faced by the family but this METR would affect more people.

**Figure 4.8: Distribution of Gains Across Income Deciles of 10 Per Cent Increase in FIS Income Limits**



In-work benefits represent a supply-side support to employed parents, which in conjunction with the tax system can affect labour supply incentives in the process of raising the disposable income accruing to the family. A wage-subsidy type increase in the minimum wage facing the low paid would be an alternative albeit less targeted form of income support. Comparing the alternative of a 10 per cent increase in FIS income limits coupled with a 50 per cent taper rate with a 10 per cent increase in the 2001 minimum wage (an increase of 47 pence per hour), we compare these policy scenarios across three family types in Table 4.3.<sup>27</sup>

By design, all FIS gains are targeted on parents, so the shares of policy gain in the right hand column add to 100 per cent. Employed parents would stand to gain 21 per cent of the total cost of a 10 per cent increase in the minimum wage (£11.5 million). This assumes a FIS take-up rate of 66 per cent. Lone parents and dual-earner parents would have a higher observed and percentage increase in their disposable income under the FIS policy change outlined above. However, more families in total would gain in net income terms from the minimum wage policy change.

<sup>27</sup> Increasing the current minimum wage by 10 per cent would save the exchequer £12.2 million in social welfare with no change in the current tax take.

**Table 4.3: Outcome of Low-Pay Policy Scenarios for Employed Lone Parents, Single Earner Married Parents and Dual Earner Married Parents – Baseline = 2001 Situation**

Family Type	Minimum Wage + 10%	FIS Changes Income Limits +10%, Taper -10%
<b>Earning Lone Parent:</b>		
Average net gain per week	£7.10	£9.95
Percentage increase in disposable income	2.8	3.2
Percentage of this family type gaining min 50p p.w.	33.5	28.9
Percentage of total policy gain accruing to family type	4.0	33.1
<b>Single earner married couple with children:</b>		
Average net gain per week	£14.12	£9.23
Percentage increase in disposable income	4.2	2.8
Percentage of this family type gaining min 50p p.w.	4.8	6.9
Percentage of total policy gain accruing to family type	4.0	55.4
<b>Dual earner married couple with children:</b>		
Average gain per week	£9.27	£9.80
Percentage increase in disposable income	1.7	3.2
Percentage of this family type gaining min 50p p.w.	17.8	1.6
Percentage of total policy gain accruing to family type	13.0	11.5
<b>Aggregate cost</b>	<b>£54.7m</b>	<b>£12.2m</b>

Source: SWITCH

#### 4.4.4 DELIVERY THROUGH THE TAX SYSTEM: FROM FIS TO A REFUNDABLE TAX CREDIT

Experience elsewhere (UK and US) has shown that there may be some advantages to operating an “in-work” benefit through the tax system as a tax credit. Workers would avoid the stigma and the transactions cost associated with the welfare system and they would see an immediate reward in their take-home pay. Shifting administrative responsibilities from the expenditure system to the tax system would make it easier to impose separate taper rates for different family types. Such a system may be administratively cheaper to operate as the FIS application form at present targets families that would not otherwise have any connection with the Department of Social, Community and Family Affairs.<sup>28</sup> However, the difficulties associated with administering a refundable tax credit include the possibility of erroneous payments if family circumstances or income unexpectedly changed during the year and there was no reconciliation process at the end of the year. On the other hand, it is vital that families receive assistance when they are most in need and that they connect the reward with work effort. Further, paying the credit through the recipient’s pay cheque would reinforce the distinction between the rewards of work and remaining on welfare.

On the other hand, paying the benefit through the employer could raise privacy concerns, impose administrative costs on employers and make it more likely that firms rather than workers

<sup>28</sup> However, the total volume of information collected would not reduce.

would capture the subsidy. The UK has addressed the first two concerns by adopting procedures that minimise the involvement of firms in administering the WFTC.<sup>29</sup> It is likely that the institution of a minimum wage would offset the effect of employers capturing the benefit of the subsidy by reducing the wage rate by an equivalent amount. However, firms are likely to be constrained to pay all people who do the same job equally. If the credit recipients are likely to be only a small share of a firm's workforce, the firm will not be able to capture the subsidies.

The PAYE system uses a cumulative withholding system in which tax payments change as income and liabilities change during the year. However, in light of the degree of individualisation between spouses in the Irish tax system, this tracking can only follow an individual's income not the couple's income. Family income is more difficult to track in a timely fashion. It is not surprising that the UK WFTC retains a largely retrospective eligibility determination that existed for the welfare Family Credit scheme.<sup>30</sup>

Paying FIS through the tax system has an additional attraction from an administrative point of view. When paid through the welfare system, FIS counts as an expenditure. When paid through the tax system, it is more likely to be viewed as a tax reduction. This may have implications for how the resources are accounted for in terms of the government's own spending limits, or limits agreed at EU level.

## 4.5 Conclusions

The context for looking at the net income situation of the low-paid in Ireland has changed with the advent of full-employment levels. The strength in the labour market has led to substantial growth in employment with real income gains at all levels of the wage distribution. However, this success has not lessened the pressure on those families still relying on low incomes from employment. Despite the fact that few employed families are defined as poor, the extent to which they benefit from tax, welfare and minimum wage changes affecting the working poor and the low paid remain an important policy issue.

<sup>29</sup> Although firms will include the credit in pay cheques, workers apply for the credit like all other discretionary credits directly to Inland Revenue. Only the amount of the credit is reported to the employer. To minimise moral hazard, there must be an opportunity to verify eligibility before payments are made. To provide the credit in a timely fashion, eligibility determination must be either ongoing or prospective. The EITC advance payment option and the WFTC each meets one of these goals, but neither achieves both.

<sup>30</sup> An end-year reconciliation process could create problems if it meant that overpayments were discovered – particularly if due to changes in incomes and not the “fault” of the claimant. Currently FIS is retained until the next assessment date, even if income increases. This is perceived to be a positive feature of the current system in terms of softening the disincentive to work while eligible for FIS.

This chapter looked at Irish marginal effective tax rates and the tax wedge between gross and net incomes compared with those of other European and OECD countries. These comparisons indicated that the low paid faced relatively low average tax rates in Ireland. Looking at the international context for in-work benefit schemes, Ireland's Family Income Supplement (FIS) and the UK's Family Credit/Working Families Tax Credit schemes tackle the trade-off between payment generosity and the effective tax-cum-benefit withdrawal in a similar fashion. The Earned Income Tax Credit in the US involves rather lower levels of payment, permitting a lower rate of benefit withdrawal.

Increasing the basic personal allowance or tax credit to remove those on the minimum wage from the tax net would cost something approaching £800m. About five-sixths of the benefit would accrue to the top half of the income distribution. Similarly, introduction of a starting rate of tax at 10 per cent would have relatively little benefit for those in the lower half of the income distribution.

The option of paying in-work benefit as a tax credit, rather than a welfare payment along the lines of the UK Working Families Tax Credit or the Earning Income Tax Credit operating in the US, depends on it being a refundable tax credit as most families eligible for FIS do not pay tax at present. A refundable tax credit would benefit all families regardless of whether they are net taxpayers and can effectively target the poorer deciles of equivalised disposable income. It can be envisaged that potential claimants could apply for their in-work tax credit as per other voluntary tax credits, for example age allowance/tax credit. The aim would be that payment should improve take-up of entitlements.

# 5. TAX AND WELFARE

## TREATMENT OF INDIVIDUALS AND FAMILIES

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### 5.1 Introduction

Recent changes in the tax treatment of couples gave rise to a particularly heated controversy. In this chapter we attempt to shed more light on the nature of the change, and identify key factors of importance in the policy debate. We start (Section 5.2) by summarising some possible objectives for the tax and welfare system, and how they relate to one another. Then Section 5.3 examines some international evidence on the structure of other tax/transfer systems. Section 5.4 reviews the Irish experience, up to and including Budget 2001. Section 5.5 turns to the related issues of the welfare treatment of individuals and couples. The main findings are drawn together in Section 5.6.

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### 5.2 Competing Objectives

As we shall see, different countries have made different choices regarding the tax treatment of couples, levels of child benefit or child tax credit and other policy parameters with a critical bearing on the relative economic welfare of different family types in society. Over time, some countries have altered their choices in quite a dramatic fashion. But before we become embroiled in the “on the ground” complexity of these issues, it is useful to step back and ask what would be desirable features of a tax and transfer system.

One feature which most would find acceptable is that taxation should be related to ability to pay. “People with equal ability should pay the same (the concept of horizontal equity), while those with higher abilities should pay more (the concept of vertical equity)” (Musgrave, 1996) While this can be difficult to define precisely, one implication is often taken to be that the average tax rate should rise with income, i.e., that taxes should be progressive.

A second feature that could be regarded as desirable is “marriage neutrality”<sup>31</sup>: the total tax burden for a couple with the same total income should not change upon marriage. Thus, two single persons, whatever their earnings, would find that their total

<sup>31</sup> Systems which favour or penalise marriage are considered later.

tax liability did not change on marriage. This would rule out both "marriage subsidies" and "marriage penalties" – both of which can be found in the US tax code.

### **Box 5.1: Income Tax Treatment of Families**

It is helpful at the outset to clarify some of the terminology used in discussing issues about the tax treatment of the family. O'Donoghue and Sutherland (1999) set out a useful framework. They distinguish between independent, or individual taxation, and three different forms of joint taxation – aggregate taxation, income splitting, and family quotient taxation

Under independent taxation of husband and wife, the incomes of individuals are assessed separately. Thus, in its pure form, each individual's tax liability can be determined independently of the other, and the joint liability is the sum of these individual liabilities. Mathematically we can write

$$\text{Tax} = T(Y_m) + T(Y_f) \quad (\text{independent taxation})$$

The simplest form of joint taxation is aggregate taxation, under which the incomes of husband and wife are combined, and the total is taxed as if the unit were a single individual. Without further adjustment, progressive tax systems mean that this would involve much higher tax bills than independent taxation. But systems using aggregation are usually accompanied by larger tax allowances, bands and credits for couples

$$\text{Tax} = T(Y_m + Y_f) \quad (\text{aggregate taxation})$$

Under the income splitting system, the incomes of husband and wife are aggregated, divided by two. The tax liability is then found by applying the rates and bands for a single person, and doubling that amount (to take account of the halving of income initially). Equivalently, separate bands and personal allowances can be defined for married couples, which are double those of a single person. Aggregate income taxed under this married couple schedule would yield the same answer. A third way of viewing such systems is to think of husband and wife each having their own allowances and tax bands, but having the choice of transferring some or all of the bands/allowances to their partner.

$$\text{Tax} = 2 \times T((Y_m + Y_f)/2) \quad (\text{income splitting})$$

Quotient systems, such as that operating in France, are a generalisation of income splitting. Incomes are aggregated and divided by a family quotient which may count one for adult individuals, and some smaller fraction for dependent children. Tax is calculated as  $Q \times T(Y/Q)$ . Under a progressive income tax system this will be no greater than individual taxation of these systems, and smaller if the incomes earned are unequal across family members – which is almost guaranteed to be true when dependent children are taken into account.

$$\text{Tax} = Q \times T((Y_m + Y_f + \sum Y_c)/Q) \quad (\text{family quotient})$$

A third feature that could be argued for on grounds of "horizontal equity" is that all families with an equal monetary income be treated equally. As with many arguments based on horizontal equity, there are issues here as to whether the situations

of the two comparators are indeed equal. In this instance, one might ask whether families with equal monetary income are “in the same situation”, when one family earns its income through one individual (working a standard workweek) and the other requires two family members to earn that income (each working a standard workweek). But for the moment let us assume that this is a desirable feature of the income tax code.

The difficulty now is that these three objectives are incompatible (as show by Rosen, 1977, among others). A progressive system in which a family's taxes depend on total family income cannot be marriage neutral: depending on more specific features of the system, it may involve either a tax on or a subsidy to marriage. A progressive system which is marriage neutral will not have the feature that families with the same total income pay the same tax.

Since at least one of these three principles must be breached, which is it to be? Progressivity seems to be the most firmly entrenched principle across OECD countries, so we concentrate on the other two. One argument could be that “it is not at all clear that the tax system should treat marriage neutrally” (Eissa and Hoynes, 2000). Married couples benefit from economies of scale in a household context. (This is recognised in the social welfare system by providing a payment rate for couples, including cohabiting couples, which is soon to rise to 1.7 times the rate for a single adult – though old age pensioners, and recipients of contributory benefits can obtain two full adult payments). Similarly, it could be argued that in the tax system marriage should be taxed because it raises ability to pay. If this view were to be taken to its logical conclusion, however, the household or housing circumstances of all taxpayers – adult children living with parents, group-home residents etc. – would need to be reported and used to determine taxes. On the other hand, it could be argued that marriage provides social benefits through positive effects on child well-being. An argument for government intervention would require

- (a) that there is a causal relationship between marriage and child well-being;
- (b) that individual decisions about marriage do not take full account of these social benefits.

If these conditions are met, then a tax subsidy to marriage could be justified.

Many European countries, however, have given precedence to marriage neutrality and progressivity over the “equal tax for equal family income” principle. With an individually based tax, and a progressive rate structure, this means that the tax paid by a couple may depend on the distribution of earnings between them. At one extreme, all the earnings are attributable to one partner, while the other is not engaged in the paid labour market. This family may then be compared with a two-earner family on the same total cash income. One argument here is that while the families have the same cash income, they do not have the same total resources. The one-earner family has the cash earnings, plus the time of the other partner for other valuable activities such as caring for children,



other caring work, or homemaking activities. The two-earner family has the same cash income, but does not have the resource of having one partner available to work in the home. On this basis, the one-earner family could be regarded as having a greater ability to pay, which would imply a higher tax level. Such a system could also be seen as providing labour market neutrality, whereby the incentive to participate in the paid labour market should not be influenced by marriage.

We have seen that the goals of progressivity, marriage neutrality, and equal taxes for equal family income are not compatible. Actual tax systems have resolved this dilemma in different ways, and it is to a consideration of these actual tax systems that we turn in the next section. But it is important to note that, at a theoretical as well as at a practical level, the evaluation of the tax system must depend not only on the effects of the tax system, but also on those of the transfer system that it finances. "After all, what matters is how the budget operation affects the state of distribution; it is unimportant in the end whether the impact comes from the expenditure side or the tax side of the budget. It may thus well be argued that equity should be viewed in terms of net benefit or burden". (Musgrave, 1996, p. 354).

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### 5.3 International Context

As far back as 1977, a review of the tax/transfer treatment of family units (OECD, 1977) concluded that there was a trend towards treating the individual as the tax unit, rather than the married couple or the family. At the same time, there was a trend towards the provision of help for families with children with direct cash payments, or, less frequently through tax credits, rather than allowances against taxable income. During the 1970s six countries (Denmark, Sweden, Austria, the Netherlands, Finland and Belgium) moved from joint/family taxation to individual taxation. As a result, by 1977, individual taxation was the basis on which liabilities were calculated in about half of all OECD countries. The UK also moved in this direction, completing the move in the 1980s.

As the review pointed out, the choice of the basis of taxation left much scope for "ringing the changes" in terms of how gross family income was transformed by the combination of taxes and transfers into disposable income. "In the income tax system alone, by ringing the changes on the choice of tax unit (individual, married couple or family), the type and amount of family allowance for marriage or children (quotient system, separate schedules, tax allowances and tax credits) and also the range and steepness of the rate schedule, similar results in terms of after-tax income can be achieved under systems which, at first sight, appear to be based on different principles" (OECD, 1977, p. 9).

A more recent study found that ten out of fifteen EU countries had income tax systems which were based around independent or individual taxation of husbands and wives (See Table 5.1 for details).

**Table 5.1: Types of Joint Taxation in EU Countries, 1998**

Country	Extent of Joint Tax Assessment of Couples	Children's Income Included
Austria	None	No
Belgium	Property tax income taxed jointly: Family quotient used when one spouse has low income	Yes
Denmark	Capital income taxed jointly	No
Finland	None	No
France	Family quotient	Yes (depends on income level)
Germany	Optional income splitting	No
Greece	None	No
Ireland	Optional income splitting	No
Italy	None	No
Luxembourg	Aggregation	Yes
Netherlands	Property income is assessed with income of higher earner	Investment income only
Portugal	Income splitting	Yes (if less than minimum wage)
Spain	Optional aggregate taxation	Yes
Sweden	None (joint taxation of wealth only)	No
UK	None	No

Source: O'Donoghue and Sutherland (1999)

Focusing on the tax system (and neglecting benefits) they attempt a loose categorisation based on whether tax is independent or joint; the number of family tax instruments, if taxation is joint, whether this is mandatory or compulsory. They find four countries at one end of this spectrum, with independent taxation and few family tax instruments: Denmark, Finland, Sweden and the UK. Four more have joint taxation, but have many family tax instruments (Austria, Greece, Italy and the Netherlands). On the joint taxation side there are three countries where joint taxation is mandatory (France, Luxembourg and Portugal) and four where joint taxation optional (Belgium, Germany, Spain and Ireland). As the authors recognise, the classification is a loose one and subject to debate. In our view, the fact that the Irish system offered alternatives to joint taxation, including independent taxation ("single assessment") was of little practical import. Given the parameters of the system, it was almost inevitable that taxpayers would opt for joint assessment (the default option) if they wished to minimise their liabilities. The "option" of single assessment had almost no financial value. As a result, we would see little difference between Ireland and countries with mandatory joint taxation.

O'Donoghue and Sutherland (1999) emphasise that there are many other aspects of tax and welfare systems which influence their relative generosity to single persons and couples, with and without children. "The impact of income tax systems [on families] should be judged in combination with the other parts of the tax-benefit system, as well as in isolation. Indeed, highly redistributive systems can include "large" income tax systems with few family concessions financing an extensive system of family benefits and services" (O'Donoghue and Sutherland, 1999, p. 593).

### ***Box 5.2: The US Tax System: Penalising and Subsidising Marriage***

Alm and Whittington (1999) outline how the net effect of US income taxes has varied over time from being neutral, to favouring marriage, and penalising marriage. The individual was the unit of taxation in the original (1913) federal income tax. As a result, taxes did not change much on marriage and the system was largely "marriage-neutral". Income splitting for couples was introduced in 1948, giving rise to a "marriage subsidy". A new income tax schedule was adopted in the Tax Reform Act of 1969, which was more favourable to single persons and created a "marriage tax" for many (though not all) couples, especially those with similar earnings. "Changes in the income tax laws since 1969 have altered the magnitude of the marriage tax, and have also maintained the marriage subsidy for some couples. In short, the tax consequences of marriage have been and continue to be substantial and varied." (Alm and Whittington, 1999, p. 298) They find evidence of significant, though generally small, effects of taxes on marriage decisions.

Eissa and Hoynes (2000) studied changes in the marriage tax over the 1984 to 1997 period. They found that overall, marriage is subsidised in the US, but that the marriage tax cost was rising over this period. This rise in the cost of the marriage tax was mainly due to changes in tax law, but was also influenced by the rise in married women's earnings.

## **5.4 Individualisation and the Tax System**

The Irish tax system initially treated couples as a unit for income tax purposes, with the wife's income being aggregated along with that of her husband. While there was a "married man's allowance" tax was assessed on the basis of the same band width as for single persons. Compared to two cohabiting single persons, a married couple received a marriage subsidy if the wife was not earning an independent income, or earned a very low one. But if the wife's earnings were greater, she, and the couple, faced a substantial tax penalty. A similar system operated in the UK, also built around the "male breadwinner" model. Until the 1970s, the systems were broadly similar in structure. But the UK introduced the option of separate taxation for wives on earned income, removing a major source of unfairness from the system, and a step towards a system of independent treatment of husbands and wives.

In Ireland, the Supreme Court ruled in 1979 that the "marriage penalty" implicit in the tax code was unconstitutional. Since then, fiscal policies implying a less favourable treatment for a married couple than for an unmarried couple would be regarded as contrary to the constitution. The response to the decision in the

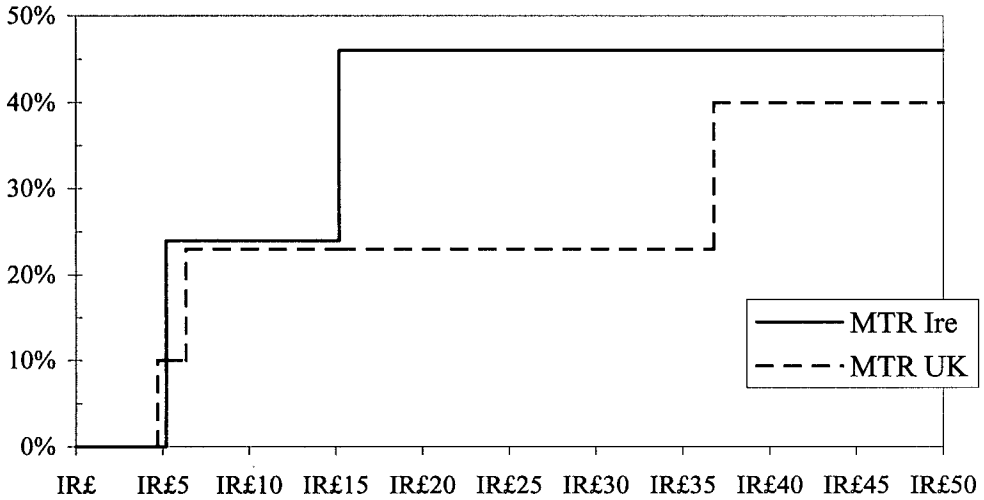
Murphy case<sup>32</sup> was to move to what is known as an “income-splitting” system. This involved aggregating family income, and splitting it equally between the partners for income tax purposes. Alternatively, this can be characterised as involving “doubled bands and personal allowances”, or full transferability not only of income tax allowances, but of rate bands as well. (See Box 5.1) Married couples are permitted to minimise their tax liabilities by assigning allowances and rate bands freely to either partner. In the UK, reform of the tax treatment of couples involved a move towards independent treatment of each partner’s income. The last vestige of the old system is the “married couples allowance”, which is now seen as an ill-targeted subsidy, and was restricted in value (by permitting it only at the lowest rate of tax, 10 per cent) in UK Budget 2000.

The net effect of these different policy responses is that Ireland has ended up at one extreme with respect to the tax treatment of couples, while the UK is close to the other extreme. Other countries can be found with intermediate positions. One implication of income-splitting is that widening of the standard rate band has been much more expensive in revenue terms in Ireland than in the UK. Until recently, in order to widen the band by £1,000 for single persons, the band had to be raised by £2,000 for married couples, including the large number of one-earner married couples. In the UK, the band can be widened by £1,000 for each earner, without extending the benefit to £2,000 for one-earner married couples. This has restricted the ability of Irish policy makers to attain the desired end of reducing substantially the number and proportion of taxpayers paying the top rate of tax. The results of this are illustrated in Figures 5.1 and 5.2.

Despite cuts in tax rates and the application of significant resources to tax-cutting packages in recent years, the threshold income at which single persons pay the top rate of tax remains relatively low in Ireland. This has been a persistent feature of the income tax system over many years. A comparison with the situation in the UK, in Figure 5.1, shows stark differences in the marginal tax rates facing single persons at incomes between about IR£15,000 and IR£35,000. The difference is much less marked for one-earner couples, as shown in Figure 5.2. One-earner couples in Ireland face similar (and sometimes lower) marginal income tax rates to those in the UK on incomes up to about IR£28,000 per year. It is only on incomes between this level and about IR£38,000 that a substantial gap in marginal tax rates emerges.

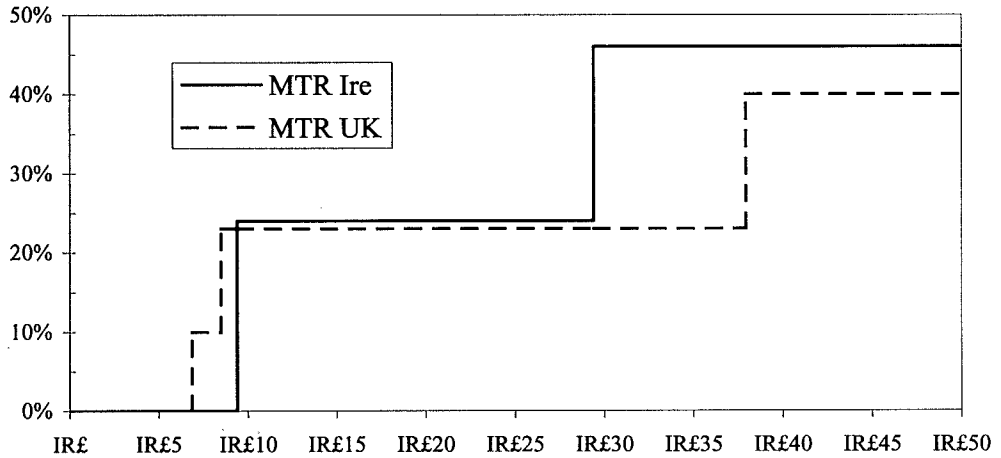
<sup>32</sup> It has been argued that this was not a necessary response, and that other structures – including those with greater independence of taxation between spouses – could equally have addressed the issues arising from the judgement.

**Figure 5.1: Marginal Income Tax Rates for Single Persons, Ireland and UK, 1999**



Note: UK figures converted to Irish pounds using purchasing power parity exchange rate derived from European Economy, December 1998: this exchange rate was IR£1=UK£0.92.

**Figure 5.2: Marginal Income Tax Rates for One-Earner Married Couples, Ireland and UK, 1999**



Note: UK figures converted to Irish pounds using purchasing power parity exchange rate derived from European Economy, December 1998: this exchange rate was IR£1=UK£0.92.

Greater independence in the tax treatment of husbands and wives means restricting the transferability of bands and/or allowances. Some options along these lines were considered in the

report of the Working Group Examining the Treatment of Married, Cohabiting and One-Parent Families Under the Tax and Social Welfare Codes (1999), which drew on an initial analysis of cost and distributive effects using *SWITCH*. One option considered by the Group was restriction in the transferability of rate bands, coupled with an increase in child benefit. While the Working Group could not reach agreement on this option, there were broadly positive comments indicating the need to explore it further.

The major structural innovation in the Budget announced in December 1999 for implementation in 2000 was indeed a move towards individualisation of the standard rate tax band. This involves restricting the extent to which tax bands are transferable between spouses. In 2000, the standard tax band for a single person was increased from £14,000 to £17,000 per annum. The standard rate band for a married couple with one income remained at £28,000 per annum, whereas the corresponding band for a married couple with two incomes rose to £34,000. The stated objective was to arrive at a position after three years where each individual, whether single or married, has his/her own standard rate tax band which can be set off against his/her own income but cannot be transferred between spouses.

As argued in Callan, Nolan, Walsh and Nestor (1999), this broad policy direction in itself has many positive features. In terms of equity, it recognises that a one-earner couple has a greater "ability to pay" than a two-earner couple at the same level of total family income. The existing system treats the couples almost identically, as if they had the same total resources because their cash incomes are equal. But this ignores the fact that the one-earner couple benefits from having one partner available to manage the home and care for children. From a labour supply point of view, the package proposed aims to increase the financial reward for taking up paid employment, while protecting the income position of those who choose not to take up employment.

However, the broader context in which this policy is implemented is crucial, both to its reception and its success. We argued in Callan, Nolan, Walsh and Nestor (1999) that independent taxation and increased child benefit *in combination* could provide a framework in which to address the twin issues of the recognition of the childcare work done by "women in the home" and the need to assist with childcare costs in an even-handed and neutral way. We return in Chapter 6 below to the issue of child income support and how it can best be structured. The point to be emphasised here is that resources can best be targeted directly on children – whether in one-earner or double-earner families, or those with no one in employment – through universal Child Benefit. Linking greater individualisation in the tax code with very substantial increases in Child Benefit then represents a balanced strategy giving parents greater freedom to make decisions about how best to care for their children.

As a result of the reactions to the budget, the Minister subsequently announced in addition the introduction of a special

allowance of £3,000 at the standard tax rate for couples where one partner stays at home to care for children, the elderly or someone with a disability. While the overall distributional impact of the budget is analysed in Chapter 7 below, it is worth bringing out here the impact of the budget including this special allowance, compared with an alternative where the standard tax band for all couples simply reverted to being double the band for a single person. We see in Table 5.2 that the latter would in fact benefit the top quintile of the income distribution more than the budget including the special allowance. Conversely, the second and third quintiles from the bottom benefit more from the budget including the special allowance than they would if the band had been doubled for all couples.

**Table 5.2: Average Percentage Change in Disposable Income by Quintile from Budget 2000 Including New Special Allowance, Compared With Doubled Tax Bands for All (Benchmark Budget indexed to earnings)**

Income group	Budget 2000 with special allowance	Budget 2000 with doubled tax band for all couples
Poorest 20% of families	0.8	0.7
2 <sup>nd</sup>	2.4	1.9
3 <sup>rd</sup>	2.8	2.2
4 <sup>th</sup>	3.3	3.3
Richest 20% of families	4.0	4.5

Developments during 2000 have moved policy closer to the package of increased child benefit and greater independence in the taxation of husband and wife. At the beginning of the year, Partnership for Prosperity and Fairness, the latest partnership agreement, included the statement that

The social partners support the policy of establishing a single standard rate income tax band for all individual taxpayers. They also agree that the standard rate income tax band should be kept under review in the light of increases in income levels and the objective of ensuring that, over time, at least 80 per cent of taxpayers are not subject to the higher rate of income tax.

At the end of the year, Budget 2001 widened the single person standard rate band by £3,000, yielding an increase of £6,000 for two-earner couple; but the band for a single-earner couple was increased by £1,000. The major feature of Budget 2001, so far as policy towards children was concerned, was an increase in the main rate of child benefit of £25 per month, or almost 60 per cent; and an announcement that the target was to almost triple child benefit from its initial level of £42 per month to £117.50 over a three year period.

## 5.5 Individualisation and the Social Welfare System

The report of the Working Group Examining the Treatment of Married, Cohabiting and One-Parent Families under the Tax and Social Welfare Codes (1999) points out that

For many years one assumption underlying both social welfare provision and the taxation code was that of a "breadwinner father" with dependent spouse and children in a lifelong marriage. This is, however, no longer necessarily the norm in Irish society. Key social changes relevant to the deliberations of the Group include the rise in the labour force participation of women, the fact that women are staying in employment after marriage and childbirth, the increase in the number of women in part-time work, the decline in the fertility of marriage, the increase in the level of marital breakdown, the increasing numbers of those parenting alone, and the fact that cohabitation is emerging as either an alternative or a precursor to marriage for a small, if growing, number of people. (p. 1-2).

In this context, structural changes which could increase the flexibility of the income support mechanism were considered. One area of interest is the idea of "individualisation" of the social welfare system.<sup>33</sup> Before we consider what is meant by individualisation, and the motivation behind such changes, it should be noted that "individualisation within fiscal systems should not be seen as the same thing as the cultural phenomenon of individualism. Indeed many of those arguing for greater individualisation do so because they believe this enhances social solidarity, and/or encourages the formation and maintenance of important social bonds – those between spouses, or those involved in other long-term intimate adult relationships, and between parents and children" (McLaughlin, 1997).

The current welfare system includes a mixture of an individual basis of assessment (e.g., individual entitlements to personal rates of payment of social insurance benefits) and payments based on family circumstances (e.g., many social assistance payments, but also payments of "qualified adult allowance" and child dependant additions under social insurance schemes).<sup>34</sup> This can create a situation in which there are particularly severe financial disincentives to employment or increased hours of work for the partner of a social welfare recipient. Tapering arrangements applied

<sup>33</sup> A commitment to investigate this issue was given in the National Anti-Poverty Strategy, 1997: the Working Group's report represented the initial investigation of the issues.

<sup>34</sup> There are exceptions to this in the current social welfare system: if each partner is entitled to a contributory benefit they each get the full rate. In the case of the Old Age (non-contributory) Pension, if both spouses are over 66 they can claim the personal rate of pension in their own right.



to qualified adult payments have reduced the severity of this problem insofar as it applies to partners of benefit recipients, but not eliminated it. Means tests which include spouse's earned income, such as the Unemployment Assistance means tests, also involve such disincentives (with some easing provided by a disregard for spouse's earned income). An individualised system may seem an attractive way of dealing with these problems, with each person's benefits depending on income earned in his or her own right.

Similar issues may also arise in terms of the incentives for household formation and co-parenting, as emphasised by the Commission on the Family. If each individual's welfare entitlement depended on his or her own circumstances, they would be free to marry or cohabit without any loss of welfare support. Under the current system, there are however two potential sources of loss of welfare support. First, there is the "limitation rule" which limits the joint assistance payments of a married or cohabiting couple to a rate which is designed to take into account the economies of scale of living as a couple. If this scale (currently 1.6 times the single rate, though set to rise to 1.7 times that rate) reflects true economies of scale it could be argued that the net resources of a welfare-recipient couple would be similar whether living apart or living together. In this context it is possible that individualised welfare payments could tend to tilt the balance towards couples living together. Second, for couples living apart, total payments might include not only Unemployment Assistance, but also a One Parent Family payment. Here, the more favourable treatment of earnings in the One Parent Family means test is designed to assist lone parents with their particular difficulties in taking up employment, but may distort decisions regarding cohabitation and marriage.

How might individualisation of welfare payments deal with these issues? First, we must distinguish between different concepts of individualisation, ranging from quite limited administrative changes to far-reaching structural changes.

- "Administrative individualisation": In effect, this would not alter the total amount paid to any family, nor the basis on which the amount was calculated, but it would ensure that half of the total payment was paid to each spouse. This facility "is only currently available in difficult family situations on request" but could be extended subject to certain administrative and technical difficulties.
- "Payment rate individualisation": This would simply bring the rate of payment for a qualified adult up to the level of the personal rate of payment for each scheme. At present, the qualified adult rate is about 60 per cent of the personal rate for most schemes, while Budget 2000 has announced the intention of bringing this rate up to 70 per cent. The cost of this option was estimated by the Working Group at about £185m per annum.

- “Full individualisation”: This is not a single option, but a range of options, each with the key feature that the concept of a “qualified adult” is abolished, with entitlement to a personal welfare payment being established on the basis of individual circumstances. These options could vary in terms of how income support would be provided to individuals who previously had the indirect benefit of a Qualified Adult Allowance (QAA). This could involve channelling resources through some combination of improvements in Child Benefit and Carers’ Allowances, and/or new benefit or assistance payments designed to deal with parenting responsibilities.

The first of these options is a very limited one. The only additional costs would be administrative, with no net change in the total resources of any family, and the impact would be limited to those families in which the division of the payment influenced control over resources. “Payment rate individualisation” would represent a more substantial change. But it would not alter the structure of financial work incentives associated with family-based means tests; indeed, the increase in payment levels for qualified adult allowances would be more likely to cause a disimprovement in the financial incentive to work for the spouse of a welfare recipient. There would be a shift in the balance of financial advantage towards cohabitation and marriage, because in effect a couple’s payment rate would rise to the same as twice the individual rate. But the extent of the response to such a change is difficult to gauge.

An assessment of the impact of full individualisation depends quite sensitively on how it would be implemented. One option described by the Working Group is as follows:

Each individual would be able to claim a payment in his/her own right based on their own insurance record or income (a spouse’s income would not be included in the means test). Persons working in the home who are available for and genuinely seeking employment would be entitled to claim Unemployment Assistance. Some allowance would have to be made for those caring in the home, perhaps in the form of an increased Child Benefit, Homemakers’ Allowance, Home Responsibility Allowance or Parental Benefit as recommended by the Commission on the Family.

The implications for financial work incentives depend critically on the latter element of this package. A “Homemaker Allowance”, lost on taking up employment, would involve the same sort of disincentive to paid employment as the loss of the qualified adult allowance in the current system.

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## 5.6 Conclusions

As with many areas of public policy, social preferences have a vital role to play in determining the design of a tax/transfer structure which can best serve social goals. It would be unrealistic,

on this account, to expect analysis to give rise to an answer that can command universal support: in this area, as in so many others, there is no "right answer". The contribution that can be made by economic analysis is twofold. First, it can help to clarify the outcomes that will be associated with particular policies. Second, it can help to distinguish between more and less efficient policies in achieving certain goals.

Since 1980, the Irish tax system has not been "marriage neutral". It has instead had provisions which favour marriage – moving from a situation where many individuals faced a "marriage penalty" to one in which none faced a penalty, and many benefited from a subsidy. Consider two couples, each with one earner, but one couple being married and the other cohabiting. The tax bill of the married couple is below that of the unmarried couple. This is what would be recognised in the economics literature as a "marriage subsidy". The recent moves towards an individualised standard rate band have reduced this subsidy, in the case of top rate taxpayers, but increased it (through the Home Carer's Allowance) for others.

As noted earlier (Eissa and Hoynes, 2000) a case for a marriage subsidy can be constructed, depending on two elements. First, that marriage has an "external benefit" from society's point of view, perhaps through positive effects on child well-being. An argument for government intervention would require (a) that there is a *causal* relationship between marriage and child well-being and (b) that individual decisions about marriage do not take full account of these social benefits. More commonly, the rationale of the "marriage subsidy" has been seen as a support for those caring full time for children or relatives who are elderly or disabled. But here, economic analysis tells us that there are more efficient ways of providing such support.

For example, let us consider the target group as families with children.<sup>35</sup> If this is so, then a tax subsidy based on marriage is ill-targeted. As Fahey (1998) points out, many of the target group would receive no benefit, and many who receive benefit are not in the target group. Even if the tax subsidy were restricted to families with children its targeting would be problematic. If, as was the case for many years, the tax concession for such families consisted of an allowance, or a combination of a standardised allowance and extra band width, this would be of greatest value to top rate taxpayers. A more equitable mechanism for the support of children is readily available, in the form of child benefit. Labelling made for easy connections between "individualisation" and individualism, or a system which is good for individuals and not for families. But in fact individualised taxes can, together with specific benefits like child benefit and carer's benefit, offer a more efficient and effective way of achieving social goals. As ever, much depends on the detail of the rates of taxes and benefits. In this connection, it is worth

<sup>35</sup> Similar comments would apply with respect to other target groups such as elderly or disabled persons needing care.

noting that the main child benefit rate increased by something under 25 per cent in 2000 (the year individualisation was introduced); but the total increase will be 240 per cent by 2003, on current policy plans.

# 6. REFORMING CHILD INCOME SUPPORT

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## 6.1 Introduction

In previous chapters we examined a range of issues relating to reform of the social welfare and tax systems, but left to one side the whole question of provision of support to families with children. Since such support can be provided through the tax system, the social welfare system or both, it is more appropriate to deal with it *en bloc* and that is the focus of this chapter. We first set out (Section 6.2) some evidence on recent trends in child poverty in Ireland, an important part of the context in which child income support issues are to be addressed. In Section 6.3 we discuss some general strategies for provision of support to families with children, and the advantages and disadvantages of each. In Section 6.4 we assess the distributional impact of some alternative uses of extra resources for children, including the announced government policy of concentrating substantial extra resources on Child Benefit.

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## 6.2 The Context: Trends in Child Poverty

Compared with the 1970s, the relative position of households with children had deteriorated sharply in Ireland by the late 1980s. Nolan and Farrell's (1990) study for the Combat Poverty Agency showed that in the late 1980s children faced a much higher risk than adults of being in a poor household. The relative position of children versus adults also worsened in a number of other industrialised countries around that time, but the extent of child income poverty in Ireland was exceptionally high. The dramatic increase in unemployment during the 1980s was the critical factor driving this wedge between income poverty rates for children versus adults, though tax and social welfare policies also played a role.

Using the 1994 Living in Ireland Survey, Callan *et al.* (1996) showed that the gap between relative income poverty rates for children and adults was fairly stable between 1987 and 1994, as the rates for each group rose. Child poverty at that point, measured in terms of relative income poverty lines, was again very high compared with other European Union member states. Eurostat, the Statistical Office of the European Community, has recently produced figures for 1994 from the European Community Household Panel Survey for most of the EU member states, which allow such a comparison to be made. These relate to the percentage below half the average income in the country in

question, and are shown in Table 6.1. (The income measure used in these comparisons relates to calendar year 1994, as reported in Wave 2 of the ECHP carried out in 1995.) We see that at 30 per cent Ireland in fact has the highest rate of child poverty, measured in this way, of any of the member states included in the survey. Only Portugal and the UK have a child poverty rate nearly as high, and in many of the countries the rate is half Ireland's or below.

From other sources one can see that other industrialised countries such as Australia, Canada and particularly the USA also had high child poverty rates, measured *vis-à-vis* relative income lines, in the early-mid-1990s. Applying a common income poverty line across EU or industrialised countries, rather than country-specific relative lines, would also give a rather different picture, but Ireland in the mid-1990s would still have a relatively high poverty rate on that basis.

**Table 6.1: Percentage of Children Below 50 Per Cent Relative Income Poverty Line in European Union Countries, 1994**

	Children (under 16) below Poverty Line
	%
Belgium	15
Denmark	5
Germany	18
Greece	14
Spain	22
France	15
Ireland	30
Italy	20
Luxembourg	19
Netherlands	10
Austria	18
Portugal	27
UK	28
Average	19

More recent information is now available for Ireland, from the 1998 round of the Living in Ireland Survey (LII). Table 6.2 shows relative income poverty rates for adults and children in 1998 compared with the 1994 LII. (The income measure employed is now income at the time of the survey, not annual income in the previous year.) To put these recent trends in context the table also includes the corresponding results from the 1987 ESRI Household Survey and the Household Budget Surveys of 1980 and 1973. We see that from 1994 to 1998 these poverty rates for children declined at the 50 per cent and 60 per cent relative income poverty lines while those for adults also fell but not by the same magnitude. Child poverty rates at the 50 and 60 per cent lines are now considerably below those experienced in 1994. With the 40 per cent line, however, the poverty rate for children increased. This increase in child poverty at the lowest relative poverty line measured less than one per cent but it was the only poverty rate to increase as all poverty rates decreased between 1997 and 1998 for

adults, producing a significant narrowing in the gap between children and adults. Just as rising unemployment produced increasing relative income poverty for Irish children in the 1980s, the fall in unemployment between 1994 and 1998 was central to the decline in the proportion of children living in households below half or 60 per cent of average income. In 1994, one child in five lived in a household where the head was unemployed, but by 1997, this had fallen to 14 per cent. The relative income poverty risk associated with unemployment rose since 1994, however, as social welfare support levels lagged behind rapidly increasing average incomes. This contributed to the divergent pattern with the lowest relative income line. Prior to 1997, families relying on social welfare support would have been below the 40 per cent relative poverty line. By 1997, the 40 per cent line had caught up on the support for families provided by some social welfare programmes.

**Table 6.2: Risks of Relative Income Poverty for Children and Adults, Ireland 1973-1998**

	1973 HBS	1980 HBS	1987 ESRI	1994 LII	1997 LII	1998 LII
<b>Per Cent Children Below Relative Income Line*</b>						
40% line	8.1	10.1	7.6	8.0	13.2	13.9
50% line	16.2	18.5	25.5	29.5	26.0	21.8
60% line	27.5	29.5	37.8	40.2	37.2	31.3
<b>Per Cent Adults Below Relative Income Line*</b>						
40% line	7.4	7.7	6.5	6.6	9.1	8.6
50% line	15.1	15.2	16.1	18.2	20.5	20.2
60% line	24.4	25.4	26.5	31.8	34.4	29.7

Note: \* Equivalence scale 1/0.66/0.33. Child defined as an individual aged under 14 years.

As well as purely relative income lines, it is important to see how children have fared in terms of the combined income and basic deprivation measure adopted in the NAPS global poverty reduction target. Like relative income poverty lines, measures combining those lines with experience of basic deprivation showed children at a substantial disadvantage *vis-à-vis* adults in 1987 and 1994. Table 6.3 shows that these combined income and deprivation measures showed substantial falls for both children and adults between 1994 and 1998, with the gap between child and adult rates of consistent poverty closing. By 1998 about 12 per cent of children were in households below 60 per cent of mean equivalised income and experiencing basic deprivation, compared with 8 per cent of adults. This is roughly a halving of the consistent poverty rate over 4 years. Compared with children below the relative income lines alone, a smaller proportion of the children meeting the combined income and deprivation poverty criteria were in households headed by a self-employed person or farmer and more are in households where the head is unemployed.

Very rapid economic growth has been sustained since 1997, bringing with it further pronounced falls in unemployment and in long-term unemployment. This represents very much a continuation of the underlying trends seen over the 1994-1997 period, and is

likely to have had a broadly similar impact on child poverty. The gap between relative income poverty rates for children versus adults may thus have continued to narrow, and deprivation levels are likely to have continued to fall. It is more difficult to assess how much impact this is likely to have had on the ranking of Ireland versus other European Union countries in terms of relative income poverty rates for children: further waves of the European Community Household Panel will allow that picture to be updated.

**Table 6.3: Percentage of Children and Adults in Households Below Relative Income Thresholds and Experiencing Basic Deprivation, 1987, 1994, 1997 and 1998**

Relative Income Line	Per Cent in Households below Line and Experiencing Enforced Basic Deprivation*			
	1987	1994	1997	1998
<b>Per Cent of Children</b>				
40% line	4.6	4.1	8.6	5.9
50% line	18.5	17.9	14.9	9.8
60% line	24.8	23.5	16.9	12.4
<b>Per Cent of Adults</b>				
40% line	3.4	3.2	3.6	2.9
50% line	9.5	9.0	6.8	5.3
60% line	14.6	14.8	9.4	7.7

Note: \* Equivalence scale 1/0.66/0.33.

### 6.3 Strategies for Child Income Support

The State has a variety of objectives in assisting families with the costs of child rearing. These include avoiding or alleviating child poverty, helping redistribute resources across the lifecycle, sharing the costs of children across the community, and promoting efficiency in the labour market. A number of different tax or transfer instruments aimed at supporting those with children can be employed. These include extra payments for those depending on social welfare, income tax relief, cash transfers to those in work with children, and universal payments for all children. In the Irish case, there has been no general tax relief of this sort since child tax allowances were abolished in 1986. There are, however, child additions to the tax exemption limits which can affect the level at which one enters the tax net. Additional payments for each child dependant of those receiving support from the various regular weekly transfer schemes form an important element in the social welfare system. Family Income Supplement also provides cash transfers to those in work on low incomes and with dependent children, with the amount varying with the level of (after-tax) earnings and the number of children. Finally, Child Benefit provides an untaxed monthly amount for each dependent child, with a higher amount paid for third and subsequent children.

These instruments have different distributional and incentive effects, as has been brought out in previous work using the *SWITCH* tax-benefit model (see for example, Callan, O'Donoghue and O'Neill 1995). However, the best mix of instruments and the balance between them depends on the balance between what may be to some extent competing objectives – promoting horizontal



equity, reducing child poverty, reducing disincentives, and ensuring that resources go to improving the lot of the children themselves. All per-child payments help the degree of lifetime redistribution by enhancing family incomes during a period of additional need (Lundberg *et al.*, 1997). As we have discussed in previous studies, channelling resources through income tax relief is regressive (though less so now that a tax credit system is in operation), failing to benefit those with incomes too low to be in the tax net. Child dependant additions to regular weekly social welfare payments do reach many of those on low incomes, but can contribute to serious unemployment traps. Trying to offset these effects through targeted payments to those in work on low pay runs the risk of pushing these disincentive effects a little further up the income distribution, exacerbating poverty traps. The work disincentive effects associated with high marginal effective tax rates are exaggerated by any child payment that is withdrawn as parental earnings increase (Lundberg *et al.*, 1997). However, a benefit that is not means tested does not prioritise the short-term income maintenance goal and in this regard loses efficiency at targeting poverty alleviation. At the same time, there are inequities associated with the stigma of means testing (which can lead to less than full take-up by those eligible for the support). Child tax exemptions assist only those on the margins of the tax net, and can seriously worsen poverty traps.

Universal Child Benefit assists all those with children in meeting the costs involved, assists those on low incomes more relative to their incomes, and does not distort parental choices about labour force participation. It also directly helps mothers of dependent children, whether working outside the home or not, since the payment is generally made to the mother. It is not particularly well targeted in terms of concentrating resources on the poor. However, Brown (1988) noted that universal child benefits have many functions besides reducing the rate of child poverty. It performs a similar role to child tax allowances by contributing to horizontal equity on the net taxation of families of different types.

We look at the income distribution effects of child benefit in Table 6.4. Column (1) shows what share of total child benefit expenditure accrues to each income decile, from poorest to richest. Columns (2) and (3) show what proportion of income is made up by child benefit for each income group, for families with children and for all families respectively.

The distribution of child benefit expenditure reflects the location of children across the income distribution.<sup>36</sup> Thus, the low share of child benefit going to the bottom decile reflects the low number of children in that decile. Column (2) makes clear, however, that child

<sup>36</sup> Larger families are somewhat more likely to be found in the lower reaches of the distribution. Higher child benefit payments for 3<sup>rd</sup> and higher order children, therefore, mean that average child benefit payments per child will be somewhat higher at lower income levels.

benefit payments form a much higher proportion of income for those in the bottom half of the distribution than for those in the top half. This reflects the flat rate nature of the benefit. Families with children in the second decile are shown to derive almost one-fifth of their disposable income from their monthly child benefit payment. For families in the top decile, child benefit contributes just one-fiftieth to the disposable income of families with children.

**Table 6.4: Current distribution of Child Benefit by decile of equivalised disposable income**

	Child benefit as a share of income		
	(1) Share of current CB accruing to each decile	(2) Families with children	(3) All families
Bottom	2.0	15.9	2.2
2 <sup>nd</sup>	12.3	18.3	10.7
3 <sup>rd</sup>	7.0	16.6	4.6
4 <sup>th</sup>	12.9	12.4	5.0
5 <sup>th</sup>	12.5	9.2	4.0
6 <sup>th</sup>	13.0	7.4	3.4
7 <sup>th</sup>	10.9	5.9	2.5
8 <sup>th</sup>	11.0	4.5	2.1
9 <sup>th</sup>	9.6	3.7	1.5
Top	8.8	2.3	0.8
All	100.0	6.2	2.5

A rise in child benefit would give rise to a distributive impact which would have a similar pattern.<sup>37</sup> Looking at families with children, the greatest proportionate gains would be at the lower end of the income scale, with a decline to much smaller proportionate gains at the top. Looking at all family units, the results for each income decile would depend also on what proportion of families had children.

For the reason that a substantial increase in universal child benefits is very costly, we have argued for a strategy which substantially increases Child Benefit, but covers some of the cost by making it subject to income tax. In recent budgets Child Benefit has been the primary route through which extra resources for child support have been channelled, but there has been no change in the tax status of the payment.

One difficulty that has arisen in discussion of the idea of an increased, taxable child benefit is that there are some uncertainties regarding the legal and constitutional position. For example, at the time such matters were under consideration by the Tax and Welfare Group (TWG), a High Court decision had ruled that a widow, in receipt of child dependant additions to her Widow's Contributory Pension, should not pay tax on the child dependant additions. But more recently, the Supreme Court, overturning earlier decisions by

<sup>37</sup> A doubling of Child Benefit would give rise to the same proportionate changes as outlined in the table. A smaller rise would see the same distributive pattern, but the impact would be "scaled back".

the Appeal Commissioner and the High Court, held that the full Widow's Social Welfare Contributory Pension, including the increase in respect of "qualifying children" was the beneficial entitlement of the widow and correctly assessable on her. At present, there remains some uncertainty regarding how the taxation of child benefit would be viewed by the courts, depending not only on new legislation, but also on existing legislation concerning child benefit and constitutional provisions. For prior removal of uncertainties regarding constitutionality, it would be necessary to allow for money bills to be referred by the President to the Supreme Court, which is not currently permitted by the Constitution.

More fundamentally, however, it seems unlikely that a taxable child benefit could be introduced without very substantial increases in child benefit payment rates. The fact that substantial increases were initiated last year, and that further increases were announced for the next two years, makes the introduction of a taxable payment in the future much less likely. One specific calculation may help to illustrate the point. At the current top rate of tax, an increase in child benefit of about 70 per cent would be required to compensate top rate taxpayers for incipient losses. This is approximately the rate of increase envisaged over the next two budgets, following an increase of 58 per cent last year. Future increases will now be from a much higher base.

The other major element of child income support is through Child Dependant Additions (CDA) to the payments received by social welfare beneficiaries. Table 6.5 shows that about three-quarters of this expenditure goes to the 30 per cent of families with the lowest incomes. CDAs amount to 7 per cent of income in the second decile, and 4 per cent in the first. For all deciles above the third, CDAs amount to less than 1 per cent of income.

**Table 6.5: Current distribution of Child Dependant Additions by decile of equivalised disposable income**

	Share of total CDA expenditure	CDAs as share of income
Bottom	23.6	4.2
2 <sup>nd</sup>	42.0	6.9
3 <sup>rd</sup>	11.3	1.4
4 <sup>th</sup>	8.2	0.6
5 <sup>th</sup>	4.2	0.3
6 <sup>th</sup>	4.8	0.3
7 <sup>th</sup>	3.5	0.2
8 <sup>th</sup>	1.6	0.1
9 <sup>th</sup>	0.7	0
Top	0.1	0
All	100.0	0.5

## 6.4 Distributional Impacts of Alternative Policy Instruments

Budget 2001 pre-announced the government's intention to raise Child Benefit rates to £117.50 per month and £146 per month over the three-year period 2001-2003. Given this plan, we examine the impact of this (and other options) in the context of a projected 2003 scenario. This involves uprating wages, salaries and other self-employment incomes by expected growth in the years 2002 and 2003; and a benchmark policy that indexes the 2001 policy to expected wage growth over the period.<sup>38</sup> We then consider the impact of an increase in Child Benefit to the target level of £117.50 per month for first and second children, and £146 per month for higher order children.

Table 6.6 shows how the policy of substantially increasing Child Benefit, with a continued freeze on the nominal amount of child dependent additions, compares with a simple wage indexation rule on current policy. The net cost of the policy change is of the order of £500m per annum. About 20 per cent of this goes to the poorest 30 per cent of family units; but this is enough to raise their incomes by 1½ to 3½ per cent. By contrast, the top 30 per cent of family units receive almost 30 per cent of the total expenditure, but their incomes rise by less than 1 per cent.

Another scenario would be to move to a Child Benefit system similar to that of the Netherlands where payment rates are universal to all children but are graduated on the basis of the child's age (and by extension, material needs) rather than the number of children per claimant. However, Immervoll *et al.* (2000) conclude that a child benefit system which depends on the number of children as well as the age of the child, is more effective at reducing poverty than a system which depends on age alone. In a scenario run on the EUROMOD model, they found that even when controlling for the amount spent on benefit, a system that pays more to larger families appears to be the most efficient in reducing poverty rates. A similar conclusion was reached in the Irish context by the report of a special group on Child Benefit prior to the 1995 Budget.

**Table 6.6: Distributional Impact of Announced Increases in Child Benefit, 2003**

Decile of Income per Adult equivalent	% gain in average decile income	Aggregate gain £m
Bottom	2.2	27
2 <sup>nd</sup>	3.5	45
3 <sup>rd</sup>	1.5	28
4 <sup>th</sup>	2.3	59
5 <sup>th</sup>	2.0	67
6 <sup>th</sup>	1.6	65
7 <sup>th</sup>	1.1	51
8 <sup>th</sup>	0.9	51
9 <sup>th</sup>	0.7	45
10 <sup>th</sup>	0.4	40
All	1.1	478

<sup>38</sup> The reasons for this latter choice are examined in depth in the next chapter.

### CHILD INCOME SUPPORT THROUGH THE TAX SYSTEM

The current policy approach is that child income support should, so far as is possible, be delivered through a universal child benefit. However, suggestions have been made from time to time concerning the introduction of child income supports through the income tax system. In Table 6.7 we consider three such approaches.

The first, is to (re-)introduce a tax-free allowance in respect of dependent children allowable in full at the taxpayer's marginal rate, in respect of children. An allowance of £1,000 per child would be worth £3.84 per week to a standard rate taxpayer and over £8 per week to a top rate taxpayer in 2001. The aggregate cost would be £390m. The second is to introduce a standard-rated allowance (or tax credit) with the same aggregate cost. This would allow a standard-rated allowance of £1,600, worth £6.14 per week per child to almost all taxpayers.<sup>39</sup> The third is to make the tax credit "refundable", i.e., those who did not have (enough) tax liabilities to make use of the tax credit would see their tax liability become negative, and receive a payment from the authorities. In principle, this could achieve precisely the same results as a universal child benefit payment, and this is how its distributional effects are modelled here. (Possible differences between the "refundable child tax credit" and child benefit are discussed later.)

Under the child tax free allowance there would be little or no gain in the bottom 3 deciles, and gains of about 1½ per cent for most middle and upper middle deciles. The top decile, and the fourth would see gains of just under 1 per cent. The standardised allowance would see slight reductions in the percentage gains for the top 4 deciles, and gains in middle deciles would be up by about 0.3 percentage points; those at the bottom would be unaffected. The distributional impact of a refundable child tax credit/child benefit are quite different. Gains of between 1½ and 4 per cent are found in the bottom four deciles; 1½ per cent in the middle two deciles; and 1 per cent or less in the top four deciles.

Thus far we have treated refundable child tax credits (RCTC) and child benefit (CB) as identical. Now we examine possible differences between them, before considering why it is that one might be preferred over the other. Payment of child benefit depends on completion of some relatively simple forms. Would this remain the case for RCTC, or would payment of RCTC depend on being fully up-to-date with tax returns? If so, then a shift from child benefit to RCTC could affect two classes of "non-compliant" taxpayer. First, those who are not paying the tax due. Second, those who have paid the tax due (or in some cases, more than the tax due) but who have not, as required by law, kept their tax

<sup>39</sup> Taxpayers who did not have enough tax to fully utilise this credit would have a smaller gain: their tax liability could only be reduced to zero.

returns up to date. Alternatively RCTC could take a form very similar to child benefit, and this would be allowed on taxpayer's tax liability without having to prove that other tax affairs were up-to-date.

**Table 6.7: Distributional Impact of Alternative Tax-Based Child Income Supports 2001**

Decile of Income per Adult equivalent	% Gain in Average Income of Decile		
	Tax-free allowance (CTFA)	Standardised tax-free allowance (Child tax credit=CTC))	Refundable child tax credit (RCTC=CB)
Bottom	0.0	0.0	2.5
2 <sup>nd</sup>	0.0	0.0	3.9
3 <sup>rd</sup>	0.1	0.1	1.6
4 <sup>th</sup>	0.8	0.9	2.3
5 <sup>th</sup>	1.4	1.8	1.6
6 <sup>th</sup>	1.9	2.2	1.5
7 <sup>th</sup>	1.5	1.6	1.0
8 <sup>th</sup>	1.5	1.4	0.9
9 <sup>th</sup>	1.3	1.1	0.6
10 <sup>th</sup>	0.7	0.6	0.3
All	1.1	1.1	1.1

*Note:* By construction, the aggregate costs of all three options are identical at £390m. This would permit a tax free allowance in respect of children of £1,000, a child tax credit of £320 (equivalent to an allowance of £1,600 at the standard rate), or a refundable child tax credit, modelled here as identical to a child benefit, with a value of £30.40 per month (£38.70 for 3<sup>rd</sup> and higher order children).

Under the child benefit system, payments continue (by voucher at the post office, or direct to a bank account) irrespective of the labour force status of the claimant. An RCTC may have particular advantages for those in steady employment, and may be very similar to child benefit for those out of employment, but dealing with those who move into and out of employment would pose challenges. Could administrative mechanisms be put in place to ensure timely payment is kept up (and avoiding dual payment). US evidence suggests that employment participation may be encouraged by paying advances on refundable tax credits (Vleminckx and Smeeding, 2001).

A feature of the child benefit scheme is that, in most cases, it is paid direct to the mother. Under the RCTC, by contrast, the value of the payment would be included in someone's pay cheque or pay packet. Thus, the payees under CB and RCTC could be different in a number of cases. While the real implications for the use of resources may be limited in many cases, there are some where the altered balance of resources will affect outcomes and the welfare of children.

From an administrative point of view, the fact that child benefit counts as an expenditure, while RCTC is a "tax reduction" may be of particular importance. If administrators are faced with "cash limits" on expenditure (e.g., a ceiling on expenditure growth from year to year) this would rule out certain policy options – even if

they are desirable on other grounds. Such rules may come from national government or from EU level. If the rules are amenable to change (e.g., because national government can be persuaded to remove an expenditure cap) then this may be the "first best" way to deal with an unwanted distortion. But if the rules are externally imposed and cannot be changed, then alterations in the balance of policy instruments of this type can provide a "second best" solution.

The use of an RCTC could result in some altered perceptions. At present, child benefit may be seen as a welfare payment and little to do with the person who sees himself or herself as a taxpayer. Likewise, welfare recipients may see tax credits as little to do with them. But a refundable child tax credit (RCTC) could be seen as something which would be of benefit to all children and their parents, irrespective of their labour market status. It could be argued, on the other hand, that one of the virtues of Child Benefit is the widespread recognition and support which it enjoys.

#### **INCREASED, TAXABLE CHILD BENEFIT**

The trend of recent policy has been to focus extra resources for child income support on child benefit. The fact that equal amounts of extra income form a greater percentage of a low income than of a high income means that this element of policy tends to give greater proportionate gains to those on low incomes. But, as noted already (Table 6.4), the aggregate amounts of (extra) child benefit going to high and top income earners are substantial. For example, more than £85m of the announced increase in child benefit up to 2003 will go to the top one-fifth of income earners. One method of restricting these gains, and focusing resources first at those in poverty, then at middle income earner is to allow child benefit to be treated as assessable income for tax purposes. The rationale for this approach has been discussed on many occasions: here we update the budgetary arithmetic which is involved.

Columns 1 and 2 show the distributive effects of simply increasing child benefit, and of increasing it by a greater amount, financed by making all of child benefit taxable. Column 3 shows the first-round impact of an "integrated child benefit", replacing child dependant additions. This would fully compensate for the eliminated CDAs. By construction, the total cost, and the average gain across the population (1.1 per cent) is the same across all options. The increased, taxable child benefit shows gains of between 2½ and 6½ per cent for the bottom four deciles with gains for the top four deciles being under 1 per cent; the middle income group has gains of about 1½ per cent. Thus, it involves greater gains at the bottom of the distribution than the increased child benefit.

**Table 6.8: Distributional Impact of Alternative Child Income Support 2001**

Decile of Income per adult equivalent	% gain in average income of decile		
	Increase in child benefit (1)	Increased, taxable child benefit (2)	Integrated child benefit (3)
Bottom	2.5	4.3	1.6
2 <sup>nd</sup>	3.9	6.5	2.1
3 <sup>rd</sup>	1.6	2.4	1.9
4 <sup>th</sup>	2.3	2.6	3.1
5 <sup>th</sup>	1.6	1.4	1.9
6 <sup>th</sup>	1.5	1.3	1.7
7 <sup>th</sup>	1.0	0.8	1.1
8 <sup>th</sup>	0.9	0.6	1.0
9 <sup>th</sup>	0.6	0.3	0.5
10 <sup>th</sup>	0.3	0.1	0.3
All	1.1	1.1	1.1

*Note:* By construction, the aggregate costs of all options are identical at £390m. This would permit a child benefit increase, with a value of £30.40 per month (£38.70 for 3<sup>rd</sup> and higher order children) or an increased, taxable child benefit with a total value of £121.50 (£154.80) i.e., an increase of £54 (£69). If CDAs were to be withdrawn as CBs increased, this would allow an increase to reach levels of £140 (£177 for higher order children), an increase of £72.50 (£91).

What if child benefit were increased still further, but child dependant additions were withdrawn? Would this reduce, or completely reverse the gains at the bottom of the income distribution. It would reduce them, but gains in the bottom three deciles would still be above those in the top 3 deciles. The highest proportionate gains would be towards the lower middle part of the distribution.

## 6.5 Conclusions

This chapter reviewed the evidence on the evolution of child poverty in Ireland. It is clear that child poverty is less severe at present than in recent years. Unprecedented economic growth, which led to rising employment, has ensured that the prevalence of unemployed heads of household has fallen substantially. This fall in unemployment is closely related to the decline in the proportion of children living in households below half or 60 per cent of average income. Average income levels for households engaged in farming or with a head of household who is self-employed have also grown. This phenomenon has also contributed to a substantial reduction in the number of households with children experiencing combined income poverty and basic deprivation.

How can further falls in child poverty be achieved? Given that unemployment rates are at rates which are historically very low, both from a national and international perspective, there may be limits on the extent to which further growth in employment rates and unemployment reductions could be expected. Other routes to the reduction of child poverty include the use of child-related



transfers, through existing policy instruments (Child Benefit, Family Income Supplement, Child Dependant Additions) or new instruments (taxable child benefit, refundable child tax credits, in-work benefits paid through the tax system).

The trend of recent policy has been to focus extra resources for child income support on child benefit. This policy results in greater proportionate gains for those on low incomes. But the aggregate amounts of extra child benefit going to high and top income earners are substantial. For example, more than £85m of the announced increase in child benefit up to 2003 will go to the top one-fifth of income earners. One method of restricting these gains, and focusing resources first at those in poverty, then at middle income earners, is to allow child benefit to be treated as assessable income for tax purposes.

# 7. ASSESSING BUDGETARY IMPACT: DISTRIBUTIONAL EFFECTS AND “POVERTY PROOFING”

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## 7.1 Introduction

There has been considerable debate over the years about the “fairness” of Budget day changes in income tax and social welfare policy. During the 1990s much of the debate focused on the structuring of tax cuts – the contrasting implications of delivering tax cuts through rate and band adjustments as against increases in allowances or personal tax credits. In more recent years, the adoption of a National Anti-Poverty Strategy (NAPS), requiring an assessment of the impact of budgets on poverty, has raised broader questions about the combined impact of tax and welfare policies. The National Anti-Poverty Strategy requires that policy proposals should be “poverty proofed” i.e., “it is now a requirement in the updated Cabinet Handbook...that memoranda for government ‘indicate clearly the impact of the proposal on groups in poverty or at risk of falling into poverty in the case of significant policy proposals’” (National Anti-Poverty Strategy Unit, 1999).

In this chapter we first discuss how best to assess the distributional impact of a budget, pointing out some serious flaws with the framework most commonly employed. The rationale for an alternative approach (first implemented in an Irish context by Callan *et al.*, 1998) is elaborated. We use this approach to look at the distributional impact of budgetary policy over three sub-periods since 1987, and at the separate impact of the three most recent budgets. We find that “poverty proofing” budgetary packages in advance, as required by NAPS, and “poverty auditing” of the impact of an actual budget retrospectively, raise similar issues regarding the appropriate framework for the analysis, with important substantive implications.

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## 7.2 Approaches to Assessing Budgetary Impact

One problematic aspect of much of the commentary on budget tax and welfare changes is that it looks at effects on a small number of supposedly "typical" families. While this approach has a place in helping to understand the nature of a policy change, it can also be highly misleading. The most commonly analysed "typical" family at budget time is a one-earner couple, with 2 children, taxed under PAYE. Less than 1 family in 20 actually falls into this category, and those who do differ widely in terms of income, housing tenure and other characteristics relevant to their social welfare entitlements and income tax liabilities. Concentration on the effects of a policy change on a small number of hypothetical households cannot provide an overall picture of the gains and losses associated with reform packages. Further, by concentrating on a small number of supposedly "typical" families it may lead to the neglect of effects which are important for significant groups. Microsimulation models such as *SWITCH*, based on large-scale surveys of actual households, have been developed and used to overcome these shortcomings. Being based on a large-scale representative sample of the population, they automatically take account of the wide diversity of circumstances in the population, and can show the overall pattern of gains and losses (in terms of first-round effects, before any behavioural responses).

In assessing the impact on the income distribution of the tax and welfare measures introduced in a particular budget, one needs a benchmark against which to assess the policies the Minister actually announces. What is the best way to construct this benchmark? Here we outline three different approaches, before going on to compare their usefulness in assessing the impact of budgetary changes on measures of income poverty and the distribution of income.

### CONVENTIONAL OPENING BUDGET

The usual approach adopted – for example, in documents accompanying the budget – is to analyse the impact as if the alternative to budget day changes was to leave tax and social welfare policy essentially unchanged in nominal terms. This simple approach has obvious attractions, but has serious, though less obvious, disadvantages. The approach grows out of the longstanding conventions governing the construction of the opening budget. For many years, estimates of expenditure during the budgetary year have been prepared on the basis of constant rates of tax and constant social welfare payment rates.

A somewhat different convention is used in preparing the multi-annual projections which have accompanied the budget documentation since 1998. While there is no automatic mechanism in the projections for changes in tax and welfare parameters, "prudent provision" (Department of Finance, 1998) is made for additional expenditure and tax reductions. Thus the "no policy

change" scenario in this case *could* allow for indexation of welfare parameters in line with expected price inflation. No policy change *could* then mean constant real levels of expenditure on social welfare, as well as on other areas of government spending.

The procedures now involved in arriving at the annual expenditure estimates and the three year macroeconomic projection are described in Department of Finance (2000a). Initially, departments are asked to submit expenditure projections for the next three years based on a no policy change (NPC) scenario. This quantifies the cost "of the existing levels of programmes and services, adjusted where Government decisions exist authorising specific improvements or curtailments". Later, following Government decisions on broad budgetary targets, departments submit draft expenditure plans which are the basis for detailed discussions with the Department of Finance. Government decisions then approve detailed spending allocations for the next financial year, and financial envelopes for the following two years.

We have described this process in some detail in order to tease out the differences between the treatment of welfare policies compared to the vast bulk of public expenditure. The baseline for most public expenditure is a "no policy change" situation, defined with respect to "existing levels of programmes and services". Thus, for example, the estimates for health and education expenditure are adjusted to take into account agreed pay increases for relevant staff, or other costs of providing the same level of service.<sup>40</sup> By contrast, for social welfare expenditures, payment rates are frozen in nominal terms under the opening budget convention. This cannot be regarded as a continuation of the "existing level of services" for social welfare clients. A constant real value for social welfare payments would imply price indexation, while a constant value of social welfare payments relative to other incomes would involve indexation to a broader earnings or income measure.

Similarly, on the income tax side, estimates of receipts which underpin the budget day calculations are made on the basis of no change in rates, allowances or bands. Under a progressive income tax system, this would involve a rise in the tax take as a proportion of income or "fiscal drag". The amount of fiscal drag would depend on the level of inflation and the growth in real incomes.

### **PRICE INDEXATION**

The experience of substantial fiscal drag during certain periods of high inflation was one of the factors motivating the idea of "price indexation" for key tax parameters. In the UK the Rooker-Wise amendment to the 1977 Finance Bill provided for price indexation of the main income tax personal allowances. These allowances are

<sup>40</sup> Where pay increases are yet to be negotiated, no increase is assumed but a contingency provision may be included elsewhere.

increased automatically each year in line with the inflation rate as measured by the retail price index, unless Parliament decides otherwise.<sup>41</sup> This indexation provision was refined and extended in 1980, and some key welfare payments have also been price indexed since 1981/2. The US income tax system has also used price indexation since the mid-1980s.

One advantage of a price-indexed benchmark for policy is that changes in the level of inflation do not affect the assessment of policy impact. For example, if actual budgets were simply to price index all relevant parameters, assessment against a conventional opening budget benchmark would suggest that the size of policy impacts varied directly with the level of inflation; but assessment relative to a price-indexed benchmark would show policy providing constant real levels of service in each year, with no change from year to year. Budgetary impacts calculated relative to conventional opening budget (in macro terms) would, on the other hand, simply "track inflation".

### INDEXATION TO WAGE GROWTH

When examining the impact of budgetary policy on income distribution and relative income poverty, it is useful to have a benchmark which can be regarded as "distributionally neutral". This can be thought of in a number of ways: under a "distributionally neutral" benchmark, major population groups would share equally in the benefits of economic growth. Growth in disposable income would be the same for all major population groups, and shares of income for different groups in the population would remain the same after the budget as in the year before. While some would argue that the government should undertake more redistribution, and others that it should do less, the "distributionally neutral" benchmark at least provides a yardstick against which changes can reasonably be measured.<sup>42</sup>

A number of choices arise in implementing such a benchmark. The approach implemented here involves indexing tax and social welfare to the growth in gross wage income, the predominant element in national income.<sup>43</sup> In effect, then, the benchmark represents a budget which is neutral in terms of the share of wages

<sup>41</sup> "Indexation applies to the main income tax personal allowances, the threshold for the higher rate of tax, the capital gains tax exempt amounts for individuals and trusts, and to the threshold for inheritance tax. It is given effect by "indexation orders" – pieces of secondary legislation – but it can be overridden to increase allowances and thresholds by more (or indeed less) than indexation by the Finance Bill." (HM Treasury, 2001).

<sup>42</sup> A similar benchmark is among those used by Redmond, Sutherland and Wilson (1998).

<sup>43</sup> Incomes from self-employment are more variable from year to year than wages, so indexing taxes and social welfare to wage growth provides a more stable benchmark.

going in tax, and in terms of the relationship between wages and the incomes of social welfare recipients. For wage earners, this is achieved by increasing tax-free allowances and tax bands in line with the growth in gross wages. For those depending on social welfare payments for their income, an increase in welfare rates equal to the rate of increase in pre-tax wages would, in general, ensure that they shared equally in the growth in income.<sup>44</sup> It is worth noting that this "wage indexation benchmark" can also be viewed as a "neutral" option in macroeconomic perspective: indexing policy to wage growth would keep government revenue and expenditure roughly constant as a proportion of national income.

Another perspective on this benchmark is that even if tax allowances, credits and bands are adjusted in line with price inflation, real income growth would still push taxpayers into higher tax brackets. As a result, there will be a tendency for the tax take to rise as a proportion of income. Some countries have had annual discretionary adjustments of income taxes to counteract this tendency;<sup>45</sup> others offset it in a more systematic fashion by an automatic adjustment of brackets and thresholds in line with nominal income growth (e.g., Denmark from 1974 to 1983).<sup>46</sup> The indexation to wages procedure considered here is one systematic way of adjusting tax parameters to hold the share of income taken in tax at a constant level over time.

### **WHICH BENCHMARK?**

What are the implications of using one of these benchmarks rather than another? In the real world, identifying budgetary impacts can be hampered by concurrent changes in economic and social structures and by difficulties in identifying behavioural responses to tax and welfare policy changes. Here we construct a much simpler illustrative scenario in which the direct impact of budgetary changes on the income distribution and on relative income poverty can be measured. This scenario helps to identify the differences between the alternative benchmarks in assessing budgetary impacts.

Under the scenario, the economy can be regarded as in a "steady state", with prices and wages growing at fixed rates, and economic and social structures perfectly stable e.g., employment and unemployment rates, the age distribution of the population and so on. All earnings (by employees and by the self employed) are assumed to grow at the same rate: there are no shifts in the

<sup>44</sup> If tax cuts over and above indexation were implemented, then welfare payments would have to rise faster to keep pace with growth in net wage incomes.

<sup>45</sup> Immervoll (2000) cites the experience of Japan.

<sup>46</sup> The term "super indexation" is sometimes used to describe such procedures (Immervoll, 2000).

earnings distribution towards greater or lesser inequality, or shifts in relativities. Occupational pensions are also set to rise by the same proportion. Essentially, the only changes are to incomes and prices, and not to employment, unemployment or household composition. The baseline year used is 1999, but this illustrative scenario is not meant to be a representation of the year 2000, but a counterfactual construct which helps to clarify differences in the nature of the alternative benchmarks.

#### An Illustrative Scenario

Prices rise by	5%
Real wages rise by	5%
Nominal wages rise by	10.25%

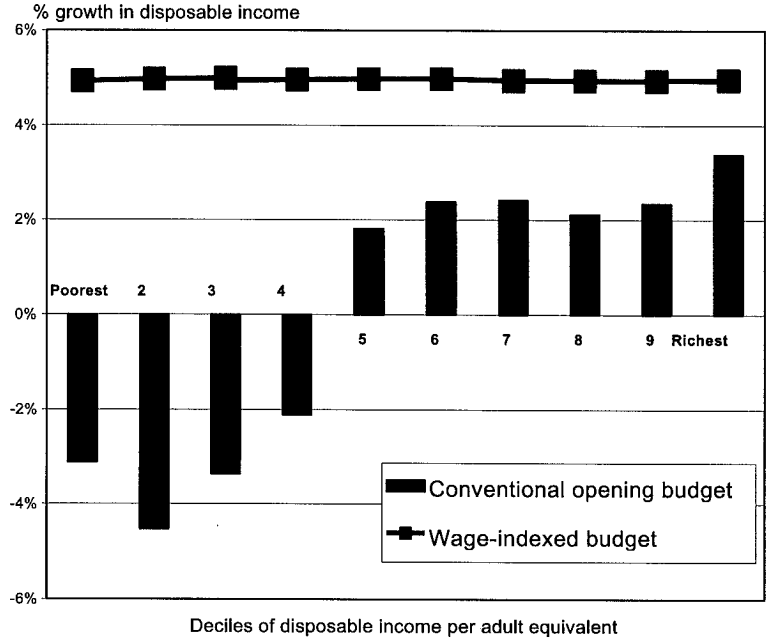
We first examine how real disposable income growth varies across the income distribution under the conventional benchmark policy (simply freezing policy in nominal terms) and under the wage indexation alternative. Family units are ranked from poorest to richest, based on income per adult equivalent (where the first adult counts as 1, other adults as 0.66, and children as 0.33). Families are then divided into ten equal sized groups or "deciles", and the growth in income for each decile is shown.<sup>47</sup>

Figure 7.1 shows that under the wage indexation benchmark real disposable income growth is the same for all ten income groups. Furthermore that rate of growth is equal to the growth in real earnings before tax.

If, on the other hand, the conventional opening budget were actually implemented, this would be far from neutral in its effects across the income distribution. With tax and welfare parameters frozen in nominal terms, there would be real income losses for those dependent on welfare. Higher up the income distribution, the average tax rate would rise because of the progressivity of the income tax system i.e., there would be "fiscal drag" due to both inflation and real growth in incomes. As a result, growth in real disposable incomes would be somewhat below real earnings growth in the upper income groups.

<sup>47</sup> Third-level students, aged over 18, are treated as separate tax and benefit units by the tax and social welfare systems. In earlier analysis (e.g., Callan *et al.*, 1998 and Callan and Nolan, 1999) distributive analysis has treated these students as separate "tax units". In this chapter, where third level students are living with their parents, and the students have no independent income, they are grouped with their parents in what is termed an "income-sharing unit" for the purposes of the distributive analysis.

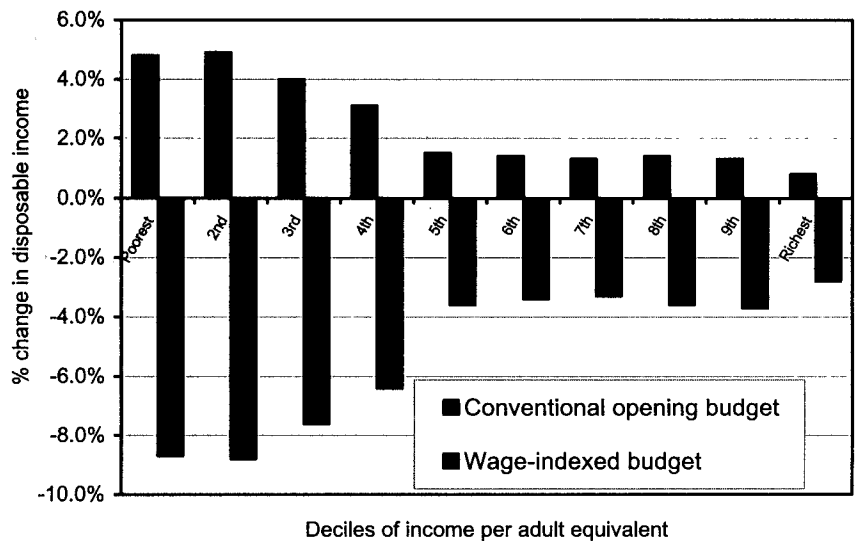
**Figure 7.1: Real Income Growth under Alternative Budgetary Benchmarks, Illustrative Scenario**



Suppose that the actual budget simply indexed tax and welfare parameters in line with prices. What would be the distributive impact of this policy? The answer depends critically on the benchmark used for assessing the impact, as shown in Figure 7.2. Measured against the conventional opening budget, the price-indexed budget is shown as producing gains for all income groups, with the greatest gains for the poorest income group, and the size of the gain declining as income rises. Measured against the wage-indexed budget, the picture of the distributive impact is reversed. All income groups lose, with the greatest losses for those at the bottom of the distribution, and losses declining as income rises. These differences in the measurement of policy impact go back to the very different impacts of the benchmarks themselves: the conventional opening budget would see real disposable incomes rise for the top half of the income distribution, while falling for those in the bottom half. A wage-indexed budget would see equal proportionate gains for both top and bottom.



**Figure 7.2: Change in Disposable Income under a Price-Indexed Budget, Measured Against Alternative Budgetary Benchmarks, Illustrative Scenario**



Similar considerations apply to the measurement of budgetary impact on poverty. We illustrate this in terms of one of the most commonly used indicators of poverty, the proportion of households below half average income. We use the same illustrative scenario, involving steady growth. Table 7.1 shows that just under 20 per cent of households fell below half of mean disposable income per adult equivalent in the base year (year zero). Under the conventional benchmark, this proportion would rise by 2.3 percentage points. There would be a smaller rise (0.7 percentage points) under a price-indexed budget. Under a wage-indexed budget the relative income poverty rates remain constant.

**Table 7.1: Relative Income Poverty Rate at Half Average Income Under Alternative Policy Scenarios**

Policy Choice	Year Zero	Year One	Change in Percentage Points
Conventional benchmark	19.8%	22.1%	+2.3
Price indexation	19.8%	20.5%	+0.7
Wage indexation	19.8%	19.8%	+0.0

Source: Calculations using SWITCH.

Thus, if actual policy followed the route of price indexation, this would be seen as a budget with a favourable impact on the poverty rate under the conventional benchmark (a fall of 1.6 percentage points), but would be seen as increasing poverty under the wage-indexed benchmark. If actual policy simply froze tax and welfare parameters in nominal terms, this would be seen as a “neutral”

budget in terms of its impact on poverty, relative to the conventional opening budget. But relative income poverty would rise between the base year and year 1, despite the fact that there was no economic shock or downturn reducing employment or increasing unemployment, which would cause an incipient rise in the relative income poverty rate.

It seems to us more accurate to characterise such a rise in the relative income poverty rate as due to the tax welfare policy package chosen. This is what happens when a "distributionally neutral" budgetary policy is used as the starting point. The application of price indexation to welfare payments could be interpreted as delivering a constant real standard of living to welfare recipients; this could be seen as parallel to the assumption underlying the "no policy change" estimates of most public expenditure of a constant real level of public services. Wage indexation of tax and welfare policies can be seen as providing a distinctive, distributionally neutral benchmark, which under steady state conditions would imply no change in the proportion of persons falling below relative income poverty lines. In what follows, we compare actual budgetary outturns with the benchmark constructed by indexing tax and welfare policies to growth in wages.

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### 7.3 Distributional Impact of Budgets from 1987 to 2001

In this section we obtain a broad overview of the distributive impact of tax and welfare policy over the past 15 years. We divide this into three sub-periods: the 1987 to 1994 period (analysed in detail by Callan and Nolan, 1999), 1994 to 1998, and 1999 to 2001. In the next section we examine the three most recent budgets – which have involved the largest ever tax and welfare packages – in more detail.

In order to get an idea of the size of the budgetary packages in each of these periods/years, Table 7.2 sets out the cost of price indexation, and the additional cost of wage indexation and the actual budgetary package.<sup>48</sup>

Over the 1987 to 1994 period, budgets had an annual full year cost of just over £50m, over and above the cost of wage indexation. Over 80 per cent of the total cost of the budgets would have been required simply to index policies in line with wage growth. During

<sup>48</sup> The decomposition, and the estimate of the total cost of the budgetary package are derived from *SWITCH*-based analyses. *SWITCH* and official estimates of the total cost of the last three budgets are quite similar – a detailed comparison of *SWITCH* and official costings for 2001 is given in Appendix 7.1.

**Table 7.2: Breakdown of Cost of Budgetary Changes in Tax and Welfare, 1987-2001**

Year/ Period	Cost of price indexation	Additional cost of wage indexation	Additional cost of actual budget changes	Annualised cost of actual budget over wage indexation	Total cost	Per cent change in average net income relative to wage indexation Per Cent
	£m	£m	£m	£m	£m	
1987-1994	1,060	927	379	54	2,365	2.4
1994-1998	585	658	917	229	2,160	3.9
1998-1999	138	314	377	377	829	1.5
1999-2000	506	197	837	837	1,540	2.9
2000-2001	418	668	933	933	2,019	2.9

the four years to 1998, much greater resources were available: over £200m per annum in budgetary costs over and above the cost of wage indexation. This is dwarfed by the size of the budgetary packages in the past three years, with an average cost of over £700m per annum, again over and above what would be required by wage indexation. This was sufficient to raise average disposable income by over 7 per cent over the level implied by wage indexation, as against a rise of about 4 per cent in the four years to 1998 and something over 2 per cent over the seven years to 1994.

Figure 7.3 examines the gains, relative to the "distributionally neutral" benchmark, for each decile of income per adult equivalent during each sub-period. The 1987 to 1994 sub-period was one in which income tax rates were cut, and social welfare payment rates were streamlined. There were special increases, as recommended by the Commission on Social Welfare, for those on the lowest rates. This is the main factor behind the high percentage increase in income in the lowest income decile. Low to middle income groups fared less well than under a wage-indexed policy: indexation of tax allowances would have been of greater value to this group than the tax rate cuts actually implemented. The size and structure of the tax cutting packages gave gains to upper middle and high income groups, with the proportionate gain rising with income.

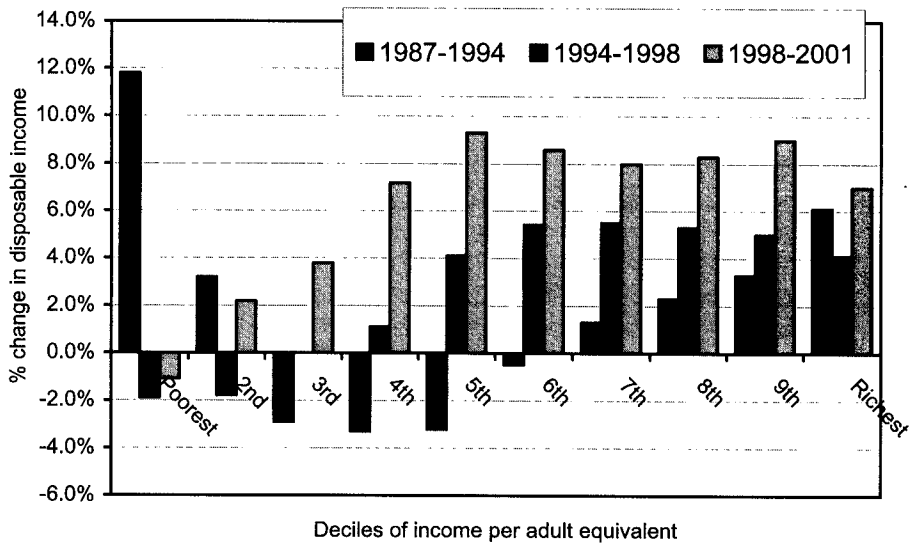
Over the 1994 to 1998 period, welfare rates rose by a little more than prices, but not as fast as other incomes. There were, however, some special increases for pensioners towards the end of the period. The standard and top tax rates were cut, along with widening of the standard rate band and increases in personal allowances. There was also a restructuring of the PRSI system, with an allowance structure being put in place. Low income families fared less well under actual budgets than under a "distributionally neutral" wage indexed benchmark, while those in the upper half of the income distribution gained 4 to 5 per cent more. The richest 10 per cent of families gained about 4 per cent from Budget day changes, over and above what they would have gained from the simple indexation rule. But the poorest fifth of the population

gained 2 per cent less from Budget day changes actually introduced than from indexation.

The 1998 to 2001 period saw the greatest average gains, but again the distribution of the gains was uneven. Those in the bottom decile would have fared better under simple wage indexation, the distributionally neutral benchmark policy. Others in the bottom 30 per cent of the income distribution saw gains of 2 to 4 per cent, but much higher gains of 7 to 9 per cent were recorded by the lower middle, middle and upper reaches of the income distribution.

The analysis set out in Figure 7.3 does not take account of any distributional impact arising from the introduction of the National Minimum Wage from April 2000. It would be misleading to view this as a tool of redistributive policy, in the same way as income tax or social welfare policy. A key difference between the minimum wage and tax/welfare policy is that the immediate costs of the former are borne by employers, with the immediate benefits flowing to households, whereas the immediate costs and benefits of tax and welfare policy can be attributed to government and to households.

**Figure 7.3: Distributive Impact of Budgetary Changes, 1987-2001**



Of course, the ultimate incidence of taxes may be quite different from the initial "impact" effects. Similarly, in the context of the national minimum wage a key concern is the size and nature of the effects on employment associated with the introduction of the wage or a change in its level. But there is likely to remain a substantial contrast between the immediate impacts of these different policy instruments.

In attempting to examine the distributional impact of gains from the national minimum wage, we hold tax and welfare policy

constant at the actual 2000 levels, and contrast a situation in which the National Minimum Wage of £4.40 is introduced, with a scenario in which no minimum wage is specified. Table 7.3 shows the distribution of "cash gains" on impact, before any adjustments in employment levels.

**Table 7.3: Projected Distributional Impact of National Minimum Wage, 2000**

Decile of income per adult equivalent	Per cent gain in disposable income	£m gain in disposable income
Bottom	3.7	43
2 <sup>nd</sup>	3.3	23
3 <sup>rd</sup>	2.6	31
4 <sup>th</sup>	4.4	77
5 <sup>th</sup>	3.3	75
6 <sup>th</sup>	0.9	27
7 <sup>th</sup>	0.6	21
8 <sup>th</sup>	0.1	4
9 <sup>th</sup>	0.1	4
10 <sup>th</sup>	0.1	4
All	1.0	£309m

Deciles in the lower half of the income distribution gained by 3 to 4 per cent, typically. The proportionate and absolute gains for those who do benefit from the minimum wage are, of course, much more sizeable. There were some gains in the top half of the income distribution as well, but the average gain falls to about 0.1 per cent for the top three deciles. In money terms, the aggregate gain is concentrated on deciles 4 and 5, which together share about half the total gain. A further one-third of the gain goes to the bottom three deciles. These findings are in line with earlier *SWITCH*-based estimates produced for the Interdepartmental Group on the Implementation of a National Minimum Wage (1999).

There are a number of features underlying these figures, which caution against too precise an interpretation of the results. First, the uprating of wage and salary incomes applies the same estimate of average wage growth to earnings at all levels of the income distribution. As a result the *distribution* of earnings is tied very closely to the underlying 1994 wage distribution. In particular, the increase in relative earnings for those towards the bottom of the earnings distribution, which appears to have occurred over this period, is not caught by this projection. This means that the picture shown here will tend to overstate the impact of the national minimum wage. Second, even with perfectly accurate data for 1999 and 2000, there would still be uncertainty over the extent to which the rise in wages for the low paid reflected the strength of demand for low-skilled labour, as against the introduction of the minimum wage. Under the approach adopted here, the rise is attributed wholly to the introduction of the minimum wage. Finally, even with perfectly accurate data and analysis, there is the further issue of how gains arising from (a change in) the minimum wage should be interpreted in analysing the distributive effects of government

policy. For this reason, we concentrate, when not analysing (changes in) the minimum wage in its own right, on analysis of the distributional impacts of tax and welfare policy, taking the minimum wage for each year as a given.

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#### **7.4 Recent Budgets, 1999 to 2001: Distributional Impact**

We now turn to a closer analysis of the last three budgets, beginning with Budget 1999 (i.e., the budget announced in December 1998 and implemented in 1999). Once again the benchmark employed is indexation of tax allowances and bands, and of social welfare rates, in line with earnings growth. Budget 1999 aimed at concentrating tax relief on low and middle income earners, and restricting gains to those at the top of the income distribution. This was to be achieved by restricting the value of personal allowances to the standard rate of tax, and focusing tax relief on increasing this standardised personal allowance.

Figure 7.4 shows that Budget 1999 gave the greatest gains in proportionate terms to those in the middle of the income distribution, with substantial gains for low earners and lesser gains for high earners. It also shows that the bottom 20 to 30 per cent of the income distribution did not share to the same extent in the gains, relative to the wage indexation benchmark. Indeed, the bottom 20 per cent of the population fared less well than under simple wage indexation of tax and welfare parameters, while the next decile fared only marginally better. Gains of about 2 to 3 per cent were typical for the middle of the income distribution, while the upper three deciles saw gains tapering off towards 1 per cent at the very top. This was the year in which tax policy moved towards tax credits, via a standard-rated personal allowance, and more importantly, in which resources were concentrated on increasing the standard-rated personal allowance. It is this latter feature which helped to focus gains on the middle of the distribution rather than its upper reaches.

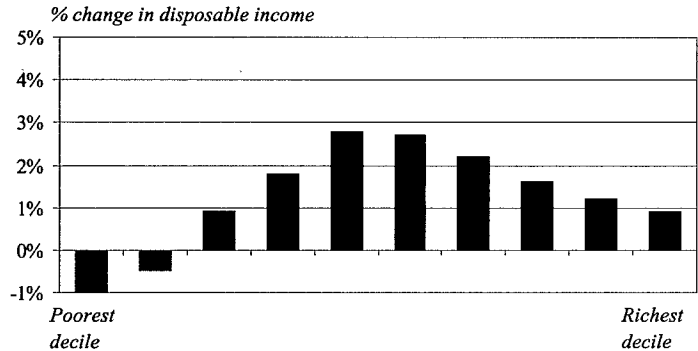
A similar analysis for Budget 2000 (including post-Budget day adjustments such as the Home Carer's Allowance and the changes to PRSI exemption limits) is shown in Figure 7.5.<sup>49</sup> The average gain in disposable income across all families was just under 3 per cent, measured against the wage indexation benchmark. The poorest one-fifth of family units did not share in this gain, with losses for the poorest one-tenth. Middle and upper income family units gained about this average, or slightly above. The relatively low gains for the poorest income groups reflect the balance that

<sup>49</sup> The major structural innovation in Budget 2000, and the element which received most attention in the immediate aftermath, was the proposal to move towards individualisation of the standard rate tax band by restricting transferability of allowances across spouses. This has already been discussed in some detail in Chapter 5, whereas here we are interested in the distributional impact of the Budget as a whole.

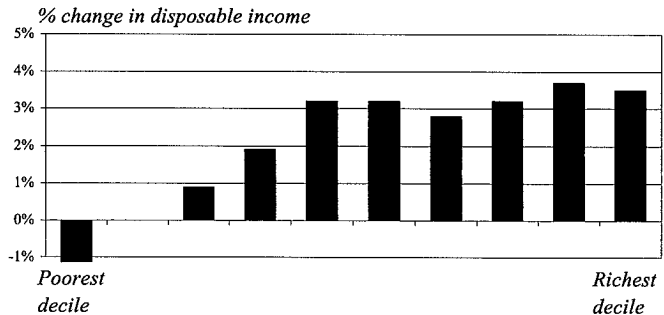
was struck between increased welfare expenditure and tax cuts. The upper reaches of the income distribution gained more from tax rate cuts and the widening of bands (which, together with individualisation of bands, was a major feature of Budget 2000). On the other hand, post-budget adjustments such as the PRSI exemption limits and the Home Carer's Allowance were of greatest proportionate benefit to the lower and middle reaches of the earnings distribution.

Budget 2001 gave rise to an average gain of close to 3 per cent above the indexation benchmark. Low income groups fared 1 or 2 per cent better than wage indexation on average, but middle and higher income groups saw still greater gains.. Most other income groups saw a gain of close to 3 per cent, with gains close to 4 per cent in the fifth and ninth deciles. These estimates take account of the main changes in income tax rates, tax credits and the standard rate band (including the further individualisation of the band). They also include the main changes in social welfare payment rates. Among the items not included is the distributive impact of the Special Savings Incentive Scheme, whereby individuals can set up special savings accounts, and the Government supplements every £4 of savings with an additional £1.

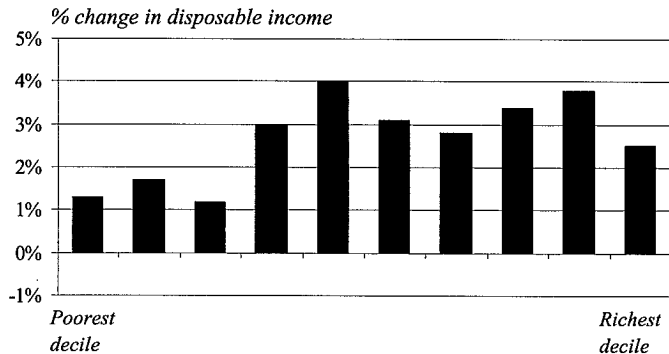
**Figure 7.4: Distributive Impact of 1999 Budget Against 1998 Policy Indexed to Earnings**



**Figure 7.5: Distributive Impact of 2000 Budget Against 1999 Policy Indexed to Earnings**



**Figure 7.6: Distributive Impact of 2001 Budget Against 2000 Policy Indexed to Earnings**



## 7.5 Poverty Proofing and Poverty Auditing

Guidelines for the implementation of poverty proofing procedures were drawn up by the NAPS unit, and partial assessments of the 2001 Budget were undertaken by the Department of Social, Community and Family Affairs (2001) and by the Department of Finance (2001).

There are a number of limitations to these poverty proofing exercises, as pointed out by Combat Poverty Agency (2001). Neither provides a full assessment of the impact of tax and welfare changes on poverty. The Budget documentation (Department of Finance, 2001: Annex C, pp. C47-C50) provides an analysis of the combined impact of income tax changes and child benefit, while the Department of Social, Community and Family Affairs (2001) analysis looks at the impact of changes in social welfare (including child benefit). The two analyses cannot be combined to provide an overview.

The Department of Finance assessment states that the budgetary income tax package will help to prevent people falling into poverty, by raising disposable incomes and underpinning economic development and employment growth. Furthermore, by reducing tax at lower incomes and taking more of the lower paid out of the



tax net, it is stated that the Budget addresses inequalities that might lead to poverty. The documentation for Budget 2001 goes on to state that

...it is not intended that poverty proofing would require that all policies be fundamentally transformed so that they are explicitly targeted at the disadvantaged. It should also be pointed out that the impact on poverty is one criterion for assessing the Budget. There are many other legitimate goals and targets such as increasing economic efficiency, rewarding effort and enterprise and risk taking, removing market distortions, controlling inflation and encouraging capital accumulation, all of which improve economic welfare generally. (Department of Finance, 2001).

The Department of Social, Community and Family Affairs (2001) considers the anti-poverty impact of changes in rates of payment, changes in child benefit, and changes in FIS, against the standard set of questions set out in the guidelines for poverty proofing. The Department notes that higher payment rates will help to ameliorate poverty by providing increased incomes to at-risk groups, and will help to address inequalities that might lead to poverty. Similarly, Child Benefit increases will, it is stated, act to reduce the level of poverty, particularly as the highest increases go to larger families, facing the greatest risk of poverty. Lastly, FIS increases will also improve income support to an at risk group, and make it less likely that they will fall into unemployment.

A key feature of both departments' analysis is that the implicit assumption is that policy impact can be measured against the conventional benchmark of no change in the nominal values of tax bands and welfare payments. We have seen in Section 7.2 that this benchmark is a very uneven one: if implemented it would involve income losses for welfare recipients, and income gains for those in employment. A wage indexed benchmark was found more suitable for distributional and poverty issues, as it involved equitable growth across all income levels.

We now set out the impact of Budget 2001 on one of the key poverty measures, the proportion of persons falling below half average income. This is of interest in itself, as a broad measure of poverty over time; and is an essential stepping stone in assessing the impact of the Budget on the more immediate NAPS poverty target of reducing consistent poverty. (On the relationship between these measures of poverty, and their links to possible poverty targets, including the NAPS targets, see Layte *et al.*, 2001.)<sup>50</sup>

<sup>50</sup> In order to move to an assessment of the impact on consistent poverty, one must estimate or judge on the basis of available evidence, the likely impact of the budget on the proportion of those below the income poverty line who are also experiencing basic deprivation – which in principle involves not just a fixed set of items regarded as necessities, but a socially-defined set of items which may change over time.

The *SWITCH*-based estimate of poverty for 2000 is a little under 20 per cent.<sup>51</sup> Under a conventional opening budget this figure would rise to just over 21 per cent. The actual policy implemented for 2001 is estimated as giving rise to a poverty rate of just over 20 per cent. Thus, against the conventional benchmark, Budget 2001 would be assessed as reducing poverty by about one percentage point. But a wage-indexed budget would see poverty remain at its 2000 level of just under 20 per cent. Measured against this distributionally neutral standard, Budget 2001 is found to have increased relative income poverty by about half a percentage point. In our view, analysis of this type is needed to assess poverty impacts in a systematic way.

We noted earlier (Chapter 3) that when consideration is being given to strategies for the indexation of welfare payments, the lags in relevant information must be explicitly taken into account. Similar considerations apply to the analysis of the distributive and poverty impacts of Budgets. We illustrate this point using Budget 2000. At the time of the introduction of the Budget (December 1999), the ESRI's *Quarterly Economic Commentary* forecast price inflation of 3 per cent, and wage growth of approximately 6 per cent during 2000. A year later, price inflation was estimated to have been 5.6 per cent, and wage growth was estimated at almost 8 per cent. Thus, if budgetary policy had aimed at price indexation, an adjustment of a further 2½ per cent to welfare payment rates would have been needed; if the aim had been wage indexation, an adjustment of something under 2 per cent would have been required. If such adjustments were not to be made,<sup>52</sup> the *ex ante* forecasts of the distributional and poverty impact of the budget could be quite different from an *ex post* analysis of actual outturns. This, in turn, suggests the need for systematic "poverty auditing" of outcomes, which would become an input to the design of policy.

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## 7.6 Conclusions

We have examined alternative benchmarks for the assessment of the distributive and poverty impact of budgetary policy. While the opening budget convention, as developed over the years, may have particular attractions as a baseline for the *construction* of a budget, it is not sufficient in itself as a benchmark for the *assessment or evaluation* of budgets. Implementation of the conventional opening budget would see relative income poverty

<sup>51</sup> *SWITCH*-based estimates use the 1994 database projected forward, and use simulated tax liabilities and welfare entitlements in order to be able to compare the results of alternative policies. Thus the levels of poverty simulated by *SWITCH* may not coincide with those produced from current data, but the impact of policy changes may nonetheless be quite closely modelled.

<sup>52</sup> Tax Strategy Group (2001b) does state that compensating "for higher-than-expected inflation in 2000" was one of the primary objectives of the increase in payment rates in Budget 2001.

rise; as welfare recipients real incomes were reduced by inflation, while those with earnings would usually see their real incomes rise. Nevertheless, such a policy would be measured as having no impact on poverty or income distribution. Provisions for price-indexation of tax bands and allowances are sometimes seen as protection against fiscal drag which may tend to distort decisions on taxation and expenditure. But if policy followed this path, average tax rates would still rise, and the incomes of welfare recipients would fall behind in relative terms, as a result of real income growth. If a price-indexed benchmark were used, the measured impact on poverty would be zero – but relative income poverty would rise from one year to the next.

These findings point towards the need for the measurement of budgetary policy against a distributionally-neutral wage-indexed benchmark. Using this benchmark we find that low income families gained most during the 1987 to 1994 period, while middle income families would have fared better under indexation. Higher income families also gained, with the greatest gains at the top. During the 1994 to 2001 period, low income families fared less well than others, with losses at the very bottom compared to the wage indexation standard. The middle and upper reaches of the income distribution saw gains of 14 to 15 per cent, with a rise of about 10 per cent for the top decile.

The National Anti-Poverty Strategy requires that significant policy proposals, including the budget's income tax and welfare package, must be "poverty-proofed". Assessments of the anti-poverty impact of these policies by relevant departments have not, as yet, taken full advantage of the possibilities now offered by *SWITCH*. The direct assessment of first-round impacts on relative income poverty and the income distribution can provide results of direct interest, and provide a framework for the discussion of broader issues. The key issues concerning the choice of benchmark policy (frozen in nominal terms or indexed with respect to expected wage growth) also need to be addressed. Both departmental assessments continue to use only the conventional benchmark of "freezing" current year tax and welfare policy in money terms, which is found to be highly unsatisfactory when analysing issues of poverty and income distribution.

## APPENDIX 7.1: COMPARISON OF OFFICIAL AND SWITCH-BASED ESTIMATES OF COST OF BUDGET 2001 INCOME TAX AND SOCIAL WELFARE CHANGES

Official estimates from the Budget 2001 documentation are compared below with *SWITCH*-based estimates prepared on a similar basis. The *SWITCH* estimate of the overall cost is within 2 per cent of the official estimate. The *SWITCH* estimate of the cost of the tax and PRSI package is within 6 per cent of the official estimate. The breakdown as between the major elements of the package is also captured well. For example, the cost of changes to allowances and credits forms 44 per cent of the total income tax package for both the official and the *SWITCH* based estimates.

There are somewhat greater divergences in the estimated costs of social welfare increases, with the *SWITCH* estimate 13 per cent below the official estimate. A part of this is due to increases in expenditure which are not modelled – such as respite care, and the duration of the fuel allowance. While more recent data will help to improve the quality of the estimates, a specially designed large scale survey (like the Family Resources Survey in the UK) may be needed to obtain a high degree of precision on low income groups.

**Table A.7.1: Estimated Full Year Costs of Income Tax and Social Welfare Changes in Budget 2001**

<b>Exchequer Cost in Full Year</b>	<b>Official Estimate</b>	<b>SWITCH Estimate</b>
<b>Personal Income Tax Package</b>		
Allowances/tax credits	540	576
2 per cent cut in standard rate of tax	208	211
2 per cent cut in top rate of tax	163	177
Widening standard rate band	278	329
Age exemption limit	2	6
<b>Other Income Tax</b>		
Rent relief under 55s	7	n.m.
Rent a room	2	n.m.
Permanent health benefits	3	n.m.
Trade union subscriptions	10	n.m.
Medical insurance relief	7	7
Other reliefs		n.m.
<b>Sub-total Income Tax</b>	<b>1,220</b>	<b>1,306</b>
<b>PRSI and Levies</b>		
Employee PRSI rate (cut by ½ per cent)	63	51
PRSI self-employed (rate cut 2 per cent, ceiling abolished)	-21	-25
<b>Sub-total PRSI</b>	<b>42</b>	<b>26</b>
<b>Social Welfare</b>		
Social Welfare rates	439	383
Child Benefit	329	316
Family Income Supplement	13	8
Carer's Allowance – respite care and disregards	21	1*
Disability Allowance special arrangements	5	
Fuel Allowance	6	
<b>Sub-total Social Welfare</b>	<b>813</b>	<b>708</b>
<b>Total</b>	<b>2,075</b>	<b>2,040</b>

Notes: n.m.=not modelled by SWITCH.

\*Respite care not modelled.

The table excludes the cost of increasing non-cash social welfare benefits, which are not modelled in SWITCH.

Sources: Dept of Finance (2001) and authors' calculations using SWITCH.

# 8. KEY POLICY CHOICES

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## 8.1 Introduction

In earlier chapters we have considered possible changes to particular elements of the tax and transfer system. Chapter 7, however, considered the overall impact of budgetary packages in the recent past, and over a longer time span. In this chapter we look at alternative budgetary packages in the future.

Section 8.2 considers recent policy trends, and stated government or partnership targets, in an attempt to construct realistic projections of 2003 policy structures. As well as a “central” case, we consider a rebalancing of fiscal priorities in favour of social welfare increases rather than tax cuts; and conversely, a scenario in which priority is given to tax cuts, with welfare increases attenuated. In Section 8.3 the policy scenarios thus constructed are compared with the wage-indexed benchmark, which, as outlined in the previous chapter, represents a distributionally and fiscally neutral benchmark. This allows the impact on the income distribution, and the first-round impact on relative income poverty, to be identified. Section 8.3 also looks at a possible variation from the continuation of past policy trends, focusing tax cutting effort on personal tax allowances/credits. Section 8.4 goes on to examine the impact of the alternative packages on marginal tax rates (a measure of incentives facing those in work) and replacement rates (a measure particularly relevant to those out of work, though also potentially relevant to some employees). Section 8.5 brings together the main findings.

### **Box 8.1: Welfare Economics and Policy Evaluation**

Welfare economics has wrestled long and hard with the basic question of how to determine whether or not a policy change is desirable. The initial approach (“social welfare function”) treats social well-being (social welfare) as depending on the welfare of individuals or families. Choosing the weights on the individual utilities is clearly problematic, but the Robbins critique (Robbins, 1938) posed even more fundamental difficulties, questioning whether there is any scientific basis for making interpersonal comparisons of utility.

One approach seeking to circumvent these difficulties is the use of "compensation criteria". (Kaldor, 1939) A policy change is said to be welfare enhancing if, by some costless lump sum transfer, it is possible to move under the changed policy to a situation in which every individual is at least as well off, and some individual is better off i.e., with the lump-sum transfers society can move to a Pareto superior situation. But there is no guarantee that such transfers are possible, or will take place. Coate (2000), elaborates an alternative approach suggested by Little (1958) and argues for an exploration of policy options, based on a given redistribution of income. Given the desired redistribution, what is the most efficient way to achieve it? Essentially this is to say, given that the desired distributional consequences can be specified, the job of (welfare) economics is to find the most efficient solution.

Real world policy making faces even more fundamental difficulties. Policy makers and their advisers need information on the *consequences* of alternative policy options – cash impact on distribution, changes in incentives, likely behavioural responses, macroeconomic responses. The inability of welfare economics to make interpersonal comparisons of welfare does not mean that redistributive decisions are not taken on an ongoing basis. Static and dynamic microsimulation modelling have much to contribute in informing such decisions.

## 8.2 Projecting Policy Trends

While an exact prediction of future policy cannot be expected, it is possible to specify and analyse a scenario in which recent and current policy trends are continued. We can expect that this scenario will capture the main features of a continuation of present policy trends.

First, it is necessary to specify the resource envelope within which tax/transfer policy must operate. The size of overall tax welfare package depends *inter alia* on broader economic trends, and on priorities as between other spending (e.g., health, education, roads) and welfare spending. While these factors are subject to change, some indication of the overall size of the tax/welfare package can be obtained from the projections relating to the stability programme, attached to the budget. Notes to tables projecting the situation in 2002 and 2003, supplied in Department of Finance (2001), state that they include "technical provisions under the expenditure and tax headings for possible future budgets, with full year costs of £1.3 billion in 2002 and £1.2 billion in 2003". The costs of changes announced in Budget 2001 for implementation in Budget 2002 and 2003 are included within these technical provisions. In recent years these technical provisions have tended to underpredict the size of the actual budget package, but slower growth in recent months, and the possibility of a more sustained downturn, make it prudent to use these figures as the basis for determining a "resource envelope" for medium-term analysis. Not all of the budgetary package goes to personal tax or

social welfare spending; some goes also to other areas of expenditure and costs of other tax reductions: we use a figure of four-fifths the total provision, or £2,000m, as the total size of the tax/welfare package envisaged by 2003. A counterbalancing factor is that wage growth appears, according to the latest *Quarterly Economic Commentary*, to be proceeding at a faster pace than was assumed in the Department of Finance forecasts underlying budgetary projections.<sup>53</sup> Allowing for this, the nominal amount available for tax cuts and/or welfare increases is of the order of £2,500m.

Second, we consider the allocation of these resources as between cuts in income tax and PRSI contributions and welfare increases. Table 8.1 analyses how resources have been allocated over the seven year periods ending in 1994 and 2001, and also for the last three individual budgets. For the various periods of interest, the basic procedure is the same. The cost of the base period policy, indexed in line with nominal wage growth, is calculated. The total cost of policy changes since the base period can then be decomposed into the cost needed to index the tax and welfare system in line with gross wages, and the resources over and above that cost actually allocated to the tax and/or welfare systems. (While the discussion of indexation in Chapter 3 refers to the alternative possibilities of indexing welfare to growth in gross wages or net wages, in the present context it is indexation of both the tax and the welfare systems which is used to provide a neutral benchmark for the decomposition.)

**Table 8.1: Costs of Indexation to Wages, and Total Costs of Tax and Welfare Budgetary Packages**

Year/Period	Cost of indexing to wages		Total cost		Net cost above indexation	
	Welfare £m	Tax £m	Welfare £m	Tax £m	Welfare £m	Tax £m
1987-1994	1,088	898	951	1,414	-137	516
1994-2001	1,535	1,859	1,871	5,332	336	3,473
1998-1999	231	222	239	592	8	370
1999-2000	330	366	347	1,193	17	827
2000-2001	492	618	705	1,363	213	745

Source: Estimated using SWITCH.

Over the 1987 to 1994 sub-period, welfare expenditure increased by less than would have been required for indexation to gross wages: by contrast, the tax system was allocated more than

<sup>53</sup>The report of the Tax Forecasting Methodology Group (Department of Finance, 1999) stresses that "...under forecast of growth in the economy has been the principal cause of the under forecast of tax revenue during the 1990s".



was required by indexation. During the 1994 to 2001 sub-period, both the tax and welfare systems were allocated more resources than were required for wage indexation; but the welfare system received under 10 per cent of the total resources over and above indexation, while the tax system was allocated about 90 per cent. During 1998 and 1999, this broad trend was still in place, with social welfare expenditure being increased by about the same rate as wage indexation, and the tax system being allocated resources over and above what wage indexation required. But the size of the child benefit increase in Budget 2001 was such that the welfare system received about 22 per cent of the total resources over and above indexation, with the share of the tax system falling just below 80 per cent. It should be noted that the fact that sufficient resources were allocated to the welfare system to allow for indexation in line with nominal wage growth is no guarantee that all payment rates will have risen in line with wages: the concentration of resources on particular aims, such as the increase in child benefit, may mean that other rates were increased by less than wage growth. Also, as seen earlier, when a large share of resources, over and above indexation, is devoted to tax reductions, then the rate of growth in welfare payment will fall below growth in net earnings.

Turning back to the division of resources as between the tax and welfare systems, past experience indicates that the welfare system could not expect much more than 20 per cent of the total resources (over and above wage indexation) available to the tax transfer system. Indeed, the proportion could be a good deal less, and an average proportion over the period would lie between zero and 10 per cent. However, before constructing a scenario based on such an assumption regarding the resource allocation, it is useful to examine the specific commitments on welfare policy included in the *Partnership for Prosperity and Fairness* (Ireland, 2000).

A paper on social welfare strategy for the Tax Strategy Group (2000b) sets out the main social welfare commitments in the Programme for Prosperity and Fairness. Those outstanding after Budget 2001 include the following:

- All rates of social welfare will be increased in real terms in the period up to 2003.
- The Government's £100 target for all old age pensions will be achieved by 2002.
- Over the period up to 2002, all old age pensions will increase in line with average industrial earnings.
- Substantial progress will be made over the period up to 2003 towards a target rate of £100 per week for the lowest social welfare rates.

In addition, Budget 2001 announced not only increases in Child Benefit for 2001, but also the rates that would be reached by 2003:

- £117.50 per month for the first and second child and
- £146 per month for third and higher order children.

These commitments can be used to specify a likely future welfare policy scenario, which can be costed to determine the implied split of resources between the welfare and tax systems.

The commitments regarding payment rates for pensions and for non-elderly social welfare recipients can be approximated by wage indexation over the years 2002 and 2003. This would see personal rates of Old Age Contributory Pension exceed £120, while the non-contributory rate would reach £110 in 2003. Most rates would be at least £98 with the lowest rates within £3.50 of the £100 target. Wage indexation of social welfare rates to 2003, along with indexation of tax parameters, would leave about £950m from the total resource envelope. The net cost of the substantial increases in child benefit (allowing for savings from “freezing” the rates of payment for child dependant additions) is about £470m. Even with no further welfare increases, this leaves the share of welfare in the resources over and above indexation at about 50 per cent. If the share were to be below this, it would imply a failure to attain some of the specific targets laid out above e.g., failure to raise child benefit rates to the levels announced, or rates for the elderly not being raised in line with wage growth, or other rates not being raised close to £100 by 2003.

Similarly, we may look at outstanding tax commitments in the government's *Action Programme for the Millennium* (APM), and in the *Partnership for Prosperity and Fairness* (PPF) for indications of likely future action:

- The standard rate tax band will be broadened “to ensure that 80 per cent of taxpayers do not pay the higher rate on any part of their income” (APM) and “The social partners support the policy of establishing a single standard rate tax band for all individual taxpayers. They also agree that the standard rate income tax band should be kept under review in the light of increases in income levels and the objective of ensuring that, over time, at least 80 per cent of taxpayers are not subject to the higher rate of income tax” (PPF).
- “If economic circumstances permit, the objective will be to reduce the higher rate to 40 per cent during the lifetime of the Government” (APM).
- “The Government and the social partners regard increases in tax credits and the development of the tax credit system as priority areas for resources” (PPF).
- “It is an agreed policy objective of the government and the social partners that, over time, all those earning the minimum wage will be removed from the tax net” (PPF).

The quantitative implications of these objectives are not quite so clear-cut. For example, what judgement will be made as to whether “economic circumstances permit” reduction in the top rate of tax to 40 per cent? And as regards increases in tax credits, the time scale envisaged for the removal of those on minimum incomes from the tax net will determine the rate at which personal tax credits will rise. Budget 2001 states that as a result of the band widening “the

proportion of income earners on the higher rate will fall to 23 per cent". The implication seems to be that reaching the declared target (no more than 20 per cent on the higher rate) would require fairly modest increases in the width of the standard rate band, over and above indexation in line with earnings.

We construct three distinct scenarios, taking into account the information (and the uncertainties) set out above: each operates within the resource envelope described. The central scenario is one in which the specific welfare commitments are met, and remaining resources are applied to tax reductions. An alternative scenario gives higher priority to tax cuts, which, with a fixed resource envelope, implies that welfare increases are curtailed. Third, we examine a scenario in which welfare payments receive higher priority, and tax changes are limited to those offsetting the effects of wage growth.

Key tax and welfare parameters associated with each of the scenarios are set out in Table 8.2.

**Table 8.2: Specification of Policy Scenarios**

	Priority to Tax	Central Scenario	Priority to Welfare
<i>Income Tax</i>			
Personal tax free allowance	£7,900	£7,200	£6,308
Standard rate band (single)	£25,000	£24,000	£22,940
Standard rate band (2-earner couple)	£50,000	£48,000	£45,880
Standard rate band (1-earner couple)	£31,000	£30,000	£30,000
Standard tax rate	19%	20%	20%
Top tax rate	40%	40%	42%
<i>Social Welfare</i>			
Old Age (Contributory) Pension	£112.10	£121.60	£133.60
Old Age (Non-contributory) Pension	£101.00	£109.50	£120.30
Unemployment Benefit	£90.40	£98.10	£107.70
Child Benefit (1 <sup>st</sup> /2 <sup>nd</sup> child)	£108.30	£117.50	£117.50
Child Benefit (3 <sup>rd</sup> child up)	£134.60	£146	£146
<i>Costs in excess of indexation</i>			
Social welfare	0	£468m	£955m
Tax	£962	£479m	0

*Memo item:* Costs of indexation are £928m for tax, £750m for social welfare.

*Note:* FIS income limits adjusted to maintain cash gap between income in-work (with FIS) and income out of work (with UB).

In the central scenario, all the major welfare targets are met: the lowest pension rates reach £100 in 2002 and rise in line with wages in 2003, and other personal rates are close to the £100 level in 2003. Child benefit reaches the levels announced in Budget 2001. The remaining resources are sufficient to permit wage indexation of other elements of the tax and welfare systems, and to allow for a package of tax cuts including 2 percentage points off the top rate, substantial increases in personal allowances and widening of the standard rate band. Under the scenario entitled "priority to tax" all welfare rates (including child benefit) are scaled back – implying that welfare targets are not met – so that resources over and above indexation go purely to income tax cuts. This allows further

increases in basic personal allowances and some further widening of the standard rate band, as well as a one percentage point cut in the standard rate of tax. Conversely, a budgetary package with all resources above indexation devoted to welfare expenditure could see rates of payment rise by about £10 to £11 per week above the central scenario.

In the next sections we explore some of the implications of these and other packages for the distribution of income, relative income poverty, marginal tax rates and replacement rates.

### 8.3 Implications for Income Distribution and Poverty

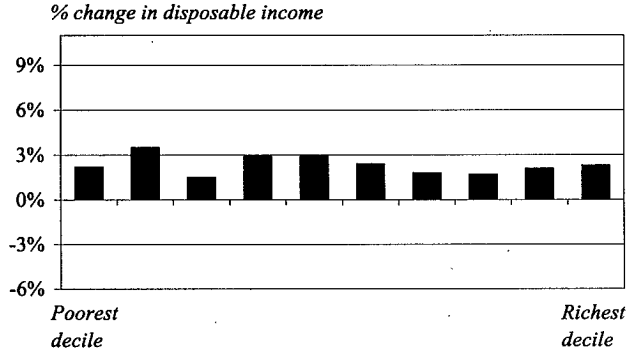
The first-round distributional impact of the alternative policy packages are illustrated in Figures 8.1 to 8.3. (The same scale is used on the vertical axis for all three figures, in order to facilitate comparisons.) The central option, with half of the resources above indexation going to tax and half to welfare, yields a fairly even spread of gains across the income distribution. The largest gains are in the second decile (about 3½ per cent) and the smallest (1½ to 2 per cent) are in deciles 3, 7 and 8; all the rest have gains between 2 and 3 per cent. Compared to the spread of gains shown by many actual budgets, this is quite narrow.

Figure 8.2 shows quite a different picture for the outcome when all resources over and above those needed for indexation to wages are allocated to tax reductions. There are substantial losses – from 3½ to over 5 per cent – at the bottom of the income distribution, relative to a wage indexation benchmark. This contrasts with gains of about 3 per cent for deciles in the upper half of the income distribution.

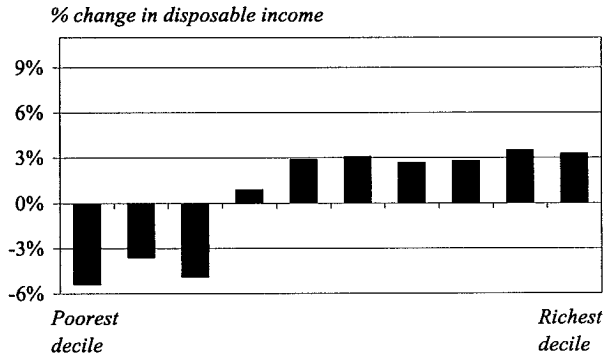
An alternative use of resources is to reverse the trend of recent years and aim at welfare increases which exceed the wage indexation benchmark. Under this scenario, the income tax system would simply be indexed in line with wages, and all other budgetary resources would be applied to increases in personal and qualified adult rates (with increased child income support coming wholly through the specified increases in child benefit). Gains are highest in the bottom two deciles, and decline steadily to very low levels of gain for the top income deciles. For the bottom 30 per cent of family units, average gains are of the order of 10 per cent. In the remainder of the bottom half there are gains of 3 to 5 per cent. In the upper half of the distribution gains fall from 2 per cent to less than half of 1 per cent.

What about the implications of the alternative policy packages for relative income poverty? Table 8.3 sets out the impact of the packages on some of the key indicators of relative income poverty. Mean disposable income is, of course, nearly identical across the three options. But differences in the distribution of income brought about by the relative scales of the tax cuts and welfare spending have significant implications for the incidence of relative income poverty.

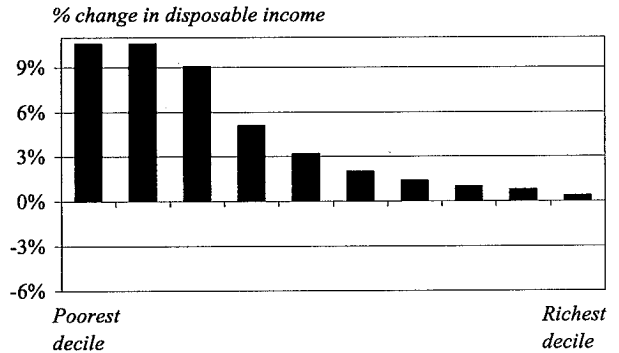
**Figure 8.1: Distributive Impact of Central Policy Scenario 2003, against 2001 Policy Indexed to Earnings Growth**



**Figure 8.2: Distributive Impact of "Priority to Tax" Policy Scenario 2003, against 2001 Policy Indexed to Earnings Growth**



**Figure 8.3: Distributive Impact of "Priority to Welfare" Policy Scenario 2003, against 2001 Policy Indexed to Earnings Growth**



**Table 8.3: Impact of Alternative Policy Options on Relative Income Poverty**

Poverty measure	Priority to Tax	Central Scenario	Priority to Welfare
Mean disposable income per household	£304.18	£304.29	£304.18
% of persons below			
40% of mean income	12.6%	9.5%	7.7%
50% of mean income	21.9%	21.0%	18.4%
60% of mean income	27.8%	27.0%	26.2%
Poverty gap measure (takes account of depth of poverty)			
40% of mean income	0.0197	0.0129	0.0087
50% of mean income	0.0522	0.0418	0.0320
60% of mean income	0.0846	0.0748	0.0647
Weighted poverty gap (takes account of depth and distribution of poverty)			
40% of mean income	0.0047	0.0029	0.0020
50% of mean income	0.0160	0.0115	0.0083
60% of mean income	0.0322	0.0260	0.0206

*Memo item:* Relative income poverty rate at 50 per cent of mean income is 21.1 per cent under wage indexed policy.

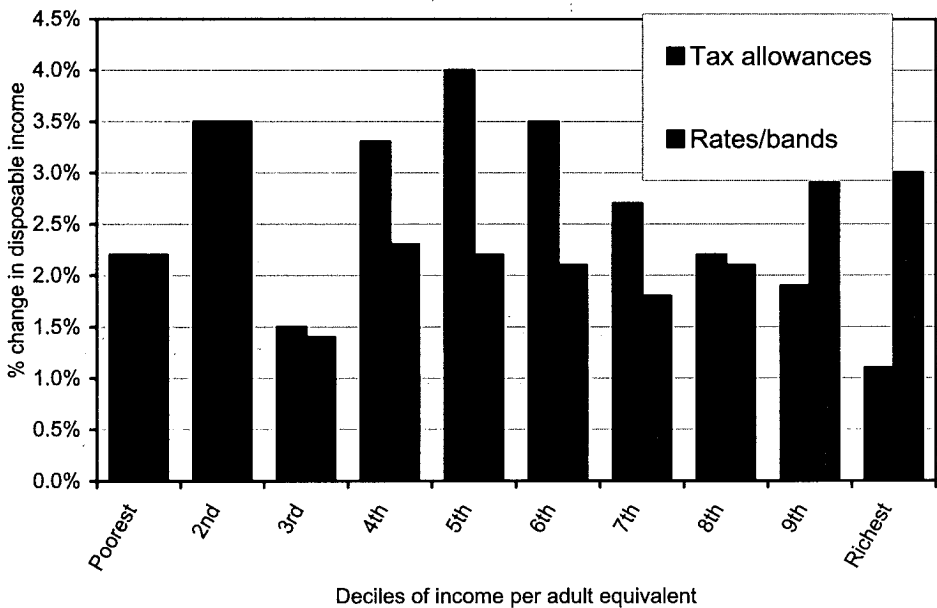
About 21 per cent of households fall below half average income under the central option. This is very close to the number falling below half average income under the simple wage indexation benchmark. Reallocating resources towards tax cuts raises the proportions below 50 and 60 per cent of average income by about one percentage point. Reallocation towards welfare expenditure, on the other hand, reduces the proportion below half average income by about 2½ percentage points, and the proportion below 60 per cent of average income by something under one percentage point. Analysis using more comprehensive measures of poverty (taking into account the depth, or the depth and distribution of poverty) confirms that the results stated are not simply dependent on the location of the poverty line or on the properties of the head count measure. But these more sophisticated measures also show a greater “symmetry” about the central option e.g., the poverty gap at half average income rises and falls by about the same amount under the priority to tax and priority to welfare options respectively. The fact that moving from “priority to tax” to the central option lowers the head count at half average income reflects the fact that many individuals are pushed from just below to just above the poverty line.

Finally, we consider the impact of changing the structure of tax cuts, within a given size of tax-cutting package. We start from the central option, and consider what might happen if all the resources available to the tax system (over and above the costs of wage indexation) were applied to increasing the basic personal allowance or tax credit; versus a situation in which tax credits were simply indexed and all additional resources were applied to reducing rates and band widening. Table 8.4 sets out the main results in terms of head count measures of relative income poverty.

**Table 8.4: Impact of Alternative Tax Cuts on Relative Income Poverty**

Poverty measure	All on Personal Allowances	Mixed	Rates and Bands Only
% of persons below			
40% of mean income	9.5%	9.5%	9.5%
50% of mean income	20.9%	21.0%	21.1%
60% of mean income	26.8%	27.0%	27.1%

The incidence of persons falling below 40 per cent of average income is unaffected by the structure of the tax cuts: few if any taxpayers are included in this group. Even at half average income, the variation in the structure of the tax cut makes a difference of only one-tenth of 1 per cent to the head count of those in poverty. At the higher, 60 per cent relative poverty line, the difference is marginally greater.

**Figure 8.4: Distributive Impact of Alternative Forms of Tax Cuts**

Do more significant differences appear further up the income distribution? Figure 8.4 shows that there are more significant differences in the middle and upper reaches of the income distribution. Thus, from an overall distributional perspective both the size and the structure of tax cuts matters; but from a relative poverty perspective, the key factor is the allocation of resources as between tax cuts and welfare increases.

## 8.4 Implications for Financial Incentives to Work

We consider two major aspects of the financial incentive to work. For those who are in employment, we consider the effective marginal tax rate. This is made up of the marginal rates of income tax and employee social insurance contributions/levies, together with the benefit withdrawal rate arising for recipients of Family Income Supplement. This concept is of most relevance to decisions about an extra hour or an extra day's work. For those who are unemployed or classify themselves as engaged in home duties, a more relevant measure of the financial incentive to work is provided by the replacement rate – the ratio of the family's disposable income out-of-work to disposable income in work.

Table 8.5 shows how marginal tax rates for employees are affected by variations from the central policy scenario (wage indexation of tax and welfare, plus extra resources to meet the child benefit target, with remaining resources applied to tax cuts).

**Table 8.5: Impact of Alternative Policies on Marginal Tax Rates**

Marginal tax rate relative to central policy option (percentage points)	Priority to Tax	Priority to Welfare
More than 20% lower	2.8	0.0
2% lower	65.0	0.0
No change	32.2	62.8
2% higher	0.0	34.0
More than 20% higher	0.0	3.2
	100	100

*Memo item:* Number of individuals: 1.15m.

Under the "priority to tax" option, there is a fall in the standard rate of tax from 20 per cent to 19 per cent, affecting about two-thirds of employees. Most of the remainder see no change, but just under 3 per cent are affected by either additional widening of the standard rate band (bringing some individuals from the top rate to the standard rate of tax) or increased allowances (removing others from the tax net). Under the "priority to welfare" scenario, marginal tax rates are unaffected for close to two-thirds of employees. About one third – those on the top rate of tax – would have a tax rate two percentage points higher than in the central policy option. This is because the "priority to welfare" option foregoes the two percentage point cut in the top rate of tax, in order to concentrate resources on welfare increases. A further 3 per cent would have tax rates at least twenty percentage points higher than in the base case. About half of this is due to differences in the width of the standard rate band and the personal allowance; the other half is due to higher income limits for FIS, which make more persons eligible. While net incomes are boosted, the withdrawal rate for FIS also boosts the marginal tax-cum-benefit withdrawal rate.



**Table 8.6: Impact of Alternative Policies on Replacement Rates for the Unemployed (on UA or UB)**

Replacement rate category	Per Cent of Unemployed		
	Priority to tax	Central option	Priority to welfare
Less than 20%	16.8	13.3	8.5
20 to 40%	41.7	36.2	34.2
40 to 60%	23.6	29.1	32.3
60 to 70%	6.8	8.2	8.9
70 to 80%	6.6	6.2	8.2
Over 80%	4.5	7.0	7.7
Total	100	100	100

Tables 8.6 and 8.7 show the distribution of replacement rates – the ratio of out-of-work family income to in-work family income – under the alternative policy scenarios. Table 8.6 shows that 13 per cent of unemployed persons would have a replacement rate above 70 per cent (a commonly used cut-off) under the central policy scenario. This proportion would rise to almost 16 per cent under the priority to welfare scenario, but would fall to 11 per cent under the priority to tax option.

**Table 8.7: Impact of Alternative Policies on Replacement Rates for those Engaged in Home Duties (Self-reported)**

Replacement rate category	Per Cent of Unemployed		
	Priority to tax	Central option	Priority to welfare
Less than 20%	1.4	1.2	0.6
20 to 40%	13.1	11.0	9.2
40 to 60%	32.0	32.3	33.1
60 to 70%	21.5	21.4	21.6
70 to 80%	18.7	19.5	20.0
Over 80%	13.2	14.5	15.7
Total	100	100	100

Table 8.7 examines replacement rates facing those who classify themselves as engaged in home duties. Under the central policy option, about one-third would face replacement rates above 70 per cent. This would rise by about two percentage points under the priority to welfare option, or fall by about two percentage points under the priority to tax option.

Similar analysis for employees shows that the policy alternatives above have very little impact on the incidence of high replacement rates among employees: it remains low under each option (at about 11 to 12 per cent).

## 8.5 Conclusions

The trade-offs between levels of income support and the tax rates required to finance them are faced in the construction of the annual budget. The current positioning of the tax/transfer system along that trade-off reflects the accumulation of past choices in the allocation of resources. Over the past 14 years, we found that on average, the welfare system obtained no more than 10 per cent of the incremental resources available to the tax/transfer system (over

and above what would be required by wage indexation). Looking to the future however, specific commitments on welfare, and the indicative level of resources for tax and transfer changes, would imply something more like a 50-50 split of additional resources as between the tax and welfare systems. If the more usual relationship (10:90) is to hold, and the specific welfare commitments are to be met, then the size of the resource envelope would have to increase.

Working within the resource envelope indicated by Budget 2001, we constructed a central policy scenario around specific tax and welfare commitments (mainly in Budget 2001 and the Partnership for Prosperity and Fairness). Variations from this scenario, giving priority to tax or to welfare, in the allocation of resources, were also considered. These showed that key poverty indicators, such as the proportion of individuals below half average income, could be significantly influenced by the allocation of resources as between welfare and tax. The structure of tax cuts had little impact on poverty rates, but did affect the distribution of resources among the top 70 per cent of the population: a focus on basic personal allowances favoured low and middle income earners, while rate cuts and band widening favoured those towards the top.

Turning to financial work incentives, we can identify the other aspect of the trade-off between levels of income support and tax rates. We found that 13 per cent of unemployed persons would have a replacement rate above 70 per cent (a commonly used cut-off) under the central policy scenario. This proportion would rise to almost 16 per cent under the priority to welfare scenario, but would fall to 11 per cent under the priority to tax option. For those in employment, a majority would face a marginal tax rate no more than two percentage points different as between the priority to tax and priority to welfare scenarios. But about 6 per cent would see tax rates differ by around twenty percentage points, mostly as a result of differences in levels of personal allowances or the width of the standard rate band.

# 9. CONCLUSIONS

Government's concern about the impact of policy on poverty has led to procedures for "poverty proofing" which are now required for all major policy initiatives – including the annual budget. The latest social partnership agreement – as might be expected from its title, the Programme for Prosperity and Fairness – also shows particular concern about distributional issues. The taxation section includes mention of increasing take-home pay "especially for those below average earnings" and developing "the structure of the tax system to deliver benefits and focus resources in an equitable manner". Much of the work reported here is highly relevant to these concerns. In this chapter we summarise the main findings and conclusions, organised around four main themes: poverty-proofing, the balance between welfare increases and tax cuts, the tax and welfare treatment of individuals and families, and child income support.

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## 9.1 Poverty- Proofing under NAPS

The benchmark usually used at budget time is that the impact of the budget can be measured by projecting the current system, with tax rates and welfare rates unchanged in nominal terms, into the future. Estimates of the impact of the budget on poverty are based on this "conventional opening budget". But over a ten year period, this official estimate could show that the impact of each year's budget has been to reduce poverty, while the actual poverty rate was unchanged throughout the period. The key to this apparent paradox is that the "conventional opening budget" is not neutral: if implemented, it would lead to a fall in the real incomes of welfare recipients, and rises in real income further up the distribution.

A neutral benchmark is needed, under which the incomes of all families grow at the same rate, and tax revenue remains a steady proportion of income. One such benchmark is provided by indexation of tax and welfare parameters with respect to nominal wage growth. If this policy were implemented, the income distribution would be unchanged, and relative income poverty rates would be constant. Measured against this benchmark, we find that low income families gained most during the 1987 to 1994 period, while middle income families would have fared better under indexation. Higher income families also gained, with the greatest gains at the top. During the 1994 to 2001 period, low income families fared less well than others, with losses at the very bottom compared to the wage indexation standard. The middle and upper

reaches of the income distribution saw gains of 14 to 15 per cent, with a rise of about 10 per cent for the top decile.

The National Anti-Poverty Strategy requires that significant policy proposals, including the budget's income tax and welfare package, must be "poverty-proofed". Assessments of the anti-poverty impact of these policies by relevant departments have not, as yet, taken full advantage of the possibilities now offered by *SWITCH*. The direct assessment of first-round impacts on relative income poverty and the income distribution can provide results of direct interest, and provide a framework for the discussion of broader issues. The key issues concerning the choice of benchmark policy (frozen in nominal terms or indexed with respect to expected wage growth) also need to be addressed. Both departmental assessments continue to use only the conventional benchmark of "freezing" current year tax and welfare policy in money terms, which is found to be highly unsatisfactory when analysing issues of poverty and income distribution. In the year 2000, for example, measurement against the conventional benchmark suggests that the budget led to a slight fall in relative income poverty, whereas measurement against the neutral, wage indexation benchmark suggests that the impact of the budget was a rise of half a percentage point (at the 50 per cent relative income poverty line). Official statements, at the same time, point to a fall in poverty. It may be that part of this difference relates to a difference of focus – on the relative income poverty line, as against the measure of consistent poverty in the NAPS target. But even if the central focus is on consistent poverty, poverty-proofing guidelines indicate that attention should be given to the impact on inequalities that give rise to poverty.

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## 9.2 Tax Cuts and Welfare Increases

**B**road options for tax and welfare policy between now and the end of 2003 – the end of the current Partnership agreement – were examined. Commitments under the PPF and the Government's Action Programme for the Millennium, as well as the future changes to Child Benefit announced in Budget 2001, were used to build up a central case scenario. This involved an approximately equal split of resources over and above those required by wage indexation as between the tax and welfare systems. Over the past 14 years, however, welfare's share has been no more than 10 per cent on average. Two variations from the central case were examined: one in which priority was given to welfare (implying a 100 per cent share in available resources above indexation, with none for tax reductions) and the other giving priority to income tax reductions (implying no extra resources for welfare, as all would go to tax reductions).

Key poverty indicators, such as the proportion of the population below half average income, could be significantly affected by the allocation of resources as between welfare and tax. For example, the proportion of persons below half average income is some 3½

percentage points higher under the “priority to tax cuts” scenario as against the “priority to welfare” scenario.

This is, of course, a static estimate which does not take account of behavioural responses in the labour market. But the implications of the alternative policy choices for financial work incentives were also identified. The proportion of unemployed persons with a replacement rate (ratio of out-of-work to in-work income) above 70 per cent varied from 11 per cent, for the option giving priority to tax cuts, to 16 per cent, for the option giving priority to welfare increases. In the central case, about 13 per cent of unemployed individuals had high replacement rates.

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### 9.3 Tax and Welfare Treatment of Individuals and Couples

Tax systems varied quite substantially across countries, but the 1970s and early 1980s saw seven European countries move from systems based on joint taxation towards independent or individual taxation of husband and wife. In Ireland, Budget 2000 took an initial step in this direction, continued in Budget 2001.

As with many areas of public policy, social preferences have a vital role to play in determining the design of a tax/transfer structure which can best serve social goals. It would be unrealistic, on this account, to expect analysis to give rise to an answer that can command universal support: in this area, as in so many others, there is no “right answer”. The contribution that can be made by economic analysis is twofold. First, it can help to clarify the outcomes that will be associated with particular policies. Second, it can help to distinguish between more and less efficient policies in achieving certain goals.

Neither the pre- nor post-1980 Irish income tax system was “marriage neutral”. Instead, the system moved from one in which many individuals faced a “marriage penalty” to one in which none faced a penalty, and many benefited from a subsidy. Consider two couples, each with one earner, but one couple being married and the other cohabiting. The tax bill of the married couple is below that of the unmarried couple. This is what would be recognised in the economics literature as a “marriage subsidy”. The recent moves towards an individualised standard rate band have reduced this subsidy, in the case of top rate taxpayers, but increased it (through the Home Carer’s Allowance) for others.

The economic case for a marriage subsidy depends on two elements. First, that marriage has an “external benefit” from society’s point of view, perhaps through positive effects on child well-being. An argument for government intervention would require (a) that there is a *causal* relationship between marriage and child well-being and (b) that individual decisions about marriage do not take full account of these social benefits. The rationale of the “marriage subsidy” has been seen as a support for those caring full time for children or relatives who are elderly or disabled. But here, economic analysis tells us that there are more efficient ways of providing such support.

For example, let us consider the target group as families with children.<sup>54</sup> If this is so, then a tax subsidy based on marriage is ill-targeted. Many of the target group would receive no benefit, and many who receive benefit are not in the target group. (Fahey, 1998.) Even if the tax subsidy were restricted to families with children its targeting would be problematic. If, as was the case for many years, the tax concession for such families consisted of an allowance, or a combination of a standardised allowance and extra band width, this would be of greatest value to top rate taxpayers. A more equitable mechanism for the support of children is readily available, in the form of child benefit. Individualised taxes can, together with specific benefits like child benefit and carer's benefit, offer a more efficient and effective way of achieving social goals. As ever, much depends on the detail of the rates of taxes and benefits. In this connection, it is worth noting that the main child benefit rate increased by something under 25 per cent in 2000 (the year individualisation was introduced); but the total increase will be 240 per cent by 2003, on current policy plans.

<sup>54</sup> Similar comments would apply with respect to other target groups such as elderly or disabled persons needing care.

## BIBLIOGRAPHY

- ALM, J. and L. WHITTINGTON, 1999. "For Love or Money? The Impact of Income Taxes on Marriage", *Economica*, Vol. 66, pp. 297-316.
- APPS, P., 1997. *A Tax-Mix Change: Effects on Income Distribution, Labour Supply and Savings Behaviour*, Discussion Paper No. 371, Canberra: Centre for Economic Policy Research, Australian National University.
- ATKINSON, A.B. and H. SUTHERLAND, 1990. "Scaling the 'Poverty Mountain' in A. Bowen and K. Mayhew (eds.), *Improving Incentives for the Low-Paid*, UK: National Development Office and Macmillan.
- BASLELAER, A. VON., G. LEMAITRE and P. MARIANNA, 1997. "International Comparisons of Part-time work" OECD *Economic Studies* No. 29 (II).
- BINGLEY, P. and I. WALKER, 1997. "The Labour Supply, Unemployment and Participation of Lone Mothers in In-Work Transfer Programs", *Economic Journal*, Vol. 107, pp. 1375-1390.
- BRADLEY, J., J. FITZ GERALD, P. HONOHAN and I. KEARNEY, 1997. "Interpreting the Recent Irish Growth Experience", in D. Duffy, J. Fitz Gerald, I. Kearney and F. Shortall (eds.), *Medium-Term Review: 1997-2003*, Dublin: The Economic and Social Research Institute.
- BREWER, M., 2000. *Comparing In-work Benefits and Financial Work Incentives for Low-wage Families in the US and the UK*, Working Paper WP00/16, London: Institute of Fiscal Studies.
- BROWN, J.C., 1988. *Child Benefit: Investing in the Future*, London: Child Poverty Action Group.
- CALLAN, T. (ed.), 1997. *Income Support and Work Incentives: Ireland and the UK*, Policy Research Series Paper No. 30, Dublin: The Economic and Social Research Institute.
- CALLAN, T. and B. NOLAN, 1999. *Tax and Welfare Changes, Poverty and Work Incentives in Ireland 1987-1994*, Policy Research Series Paper No. 34, Dublin: The Economic and Social Research Institute.
- CALLAN, T., B. NOLAN and J. WALSH, 1998. "Income Tax and Social Welfare Policies" in T. Callan (ed.), *Budget Perspectives*, Proceedings of a Conference, October, Dublin: The Economic and Social Research Institute.
- CALLAN, T. B. NOLAN and C.T. WHELAN, 1996. *A Review of the Commission on Social Welfare's Minimum Adequate Income*, Dublin: The Economic and Social Research Institute.
- CALLAN, T., C. O'DONOGHUE and C.J. O'NEILL, 1996. "What has happened to replacement rates?" *The Economic and Social Review*, Vol. 27, No. 5, pp. 439-456.
- CALLAN, T., C.J. O'NEILL and C. O'DONOGHUE, 1995. *Supplementing Family Income*, Policy Research Series Paper No. 23, Dublin: The Economic and Social Research Institute.
- CALLAN, T., S. ADAMS, S. DEX, S. GUSTAFSSON, J. SCHUPP and N. SMITH, 1995. *Gender, Wage Differentials: New Cross-Country Evidence*, ESRI Working Paper No. 62, Dublin: The Economic and Social Research Institute.
- CALLAN, T., G. BOYLE, T. MCCARTHY, B. NOLAN, J. WALSH, R. NESTOR and D. VAN DE GAER, 2000. "Dynamic Effects of a Basic Income: Phase 2 of a Study for the Working Group on Basic Income", *Final Report*, <http://www.irlgov.ie/taoiseach/publication/basicincome>
- CALLAN, T., B. NOLAN, J. WALSH, J. McBRIDE, R. NESTOR, 2000. "Basic Income in Ireland: A Study for the Working Group on Basic Income", *Final Report*, <http://www.irlgov.ie/taoiseach/publication/basicincome>

- CALLAN, T., B. NOLAN, B.J. WHELAN, C.T. WHELAN, J. WILLIAMS, 1996. *Poverty in the 1990s: Evidence from the 1994 Living in Ireland Survey*, Dublin: Oak Tree Press.
- CHENNELLS, L. and A. DILNOT (eds.), 1999. *The IFS Green Budget: January 1999*, IFS Commentary 76.
- COATE, S., 2000. "An Efficiency Approach to the Evaluation of Policy Changes", *Economic Journal*, Vol. 110, No. 463, April, pp. 437-455.
- COMBAT POVERTY AGENCY, 2001. "Analysis of Budget 2001", *Poverty Today (Supplement)*, No. 50, March/April.
- de BUTLEIR, D. and D. THORNHILL, 2001. "A Mechanism for Sharing the Fruits of Growth", in D. McCoy *et al.*, *Quarterly Economic Commentary*, March, Dublin: The Economic and Social Research Institute.
- DEPARTMENT OF FINANCE, 2001a. *Public Financial Procedures*, <http://www.irlgov.ie/govacc>
- DEPARTMENT OF FINANCE, 2001b. *Budget 2001*, Dublin: Stationery Office, Annex C, C47-C50.
- DEPARTMENT OF FINANCE, 1998. *Budget 1999*, Dublin: Stationery Office.
- DEPARTMENT OF SOCIAL, COMMUNITY AND FAMILY AFFAIRS, 2001. *Poverty Proofing*, <http://www.dscfa.ie/dept/budget01/poverty.htm>
- DEPARTMENT OF SOCIAL, COMMUNITY AND FAMILY AFFAIRS, 1999. *The Report of the Working Group Examining the Treatment of Married, Cohabiting and One-Parent Families under the Tax and Social Welfare Codes*, Dublin: The Stationery Office.
- DEPARTMENT OF SOCIAL, COMMUNITY AND FAMILY AFFAIRS, 1999. *Statistical Information on Social Welfare Services*, Dublin: Stationery Office.
- DEPARTMENT OF THE TAOISEACH, 2001. *Report of the Working Group on Basic Income*, <http://www.irlgov.ie/taoiseach/publication/basicincome>
- DoUDEIJNS, M., M. EINERHAND and A. VAN DE MEERENDONK, 2000. "Financial Incentives to Take up Low Paid Work: An International Comparison of the Role of Tax and Benefit Systems" in W. Salverda, C. Lucifora and B. Nolan (eds.), *Policy Measures for Low-Wage Employment in Europe*, LoWER, Cheltenham, UK: Edward Elgar.
- EARDLEY, T., J. BRADSHAW, J. DITCH, I. GOUGH AND P. WHITEFORD, 1996. *Social Assistance in OECD Countries: Synthesis Report*, Department of Social Security Research Report No. 46, Paris: OECD.
- EISSA, N. and H. HOYNES, 2000. "Explaining the Fall and Rise in the Tax Cost of Marriage: The Effect of Tax Laws and Demographic Trends, 1984-97", *National Tax Journal*, Vol. LIII, No. 3, Part 2.
- EISSA, N. and H.W. HOYNES, 1998. "The Earned Income Tax Credit and the Labor Supply of Married Couples" Mimeo, Berkeley: Department of Economics, University of California.
- EU COMMISSION, 1996. *Taxation in the European Union Report on the Development of Tax Systems*, COM (96) 546, Final Report.
- EUROSTAT, 2000. *Structures of the Taxation Systems in the European Union 1970-1997*, 2000 Edition, Luxembourg: Office of Official Publications of the European Communities.
- EVANS, M., 2001. *Welfare to Work and the Organisation of Opportunity: Lessons from Abroad*, CASE Paper 20, London School of Economics.
- FAHEY, T., 1998. "Childcare Policy Options" in T. Callan (ed.), *Budget Perspectives*, Proceedings of a Conference, October, Dublin: The Economic and Social Research Institute.
- GRAHAM, J., 1984. *Take-up of Family Income Supplement Knowledge, Attitudes and Experience – Claimants and Non-claimants*, PPRU Occasional Paper 2, Northern Ireland: Policy, Planning and Research Unit, Social Research Division, Department of Finance and Personnel.



- GREENWOOD, J. and J-P. VOYER, 2000. "Experimental Evidence on the Use of Earnings Supplements as a Strategy to Make Work Pay," *OECD Economic Studies*, Vol. 31, No. 2, pp. 43-68.
- GREGG, P., P. JOHNSON and H. REED, 1999. *Entering Work and the British Tax and Benefit System*, London: Institute of Fiscal Studies.
- HARDIMAN, N., 2000. "Social Partnership, Wage Bargaining, and Growth", in B. Nolan, P.J. O'Connell and C.T. Whelan (eds.), *Bust to Boom? The Irish Experience of Growth and Inequality*, Dublin: IPA.
- HECKMAN, J.J., 1993. "What has been Learned about Labour Supply in the Past Twenty Years?", *American Economic Review, Papers and Proceedings*, Vol. 83, No. 2, pp. 116-21.
- HM TREASURY, 2001. *The Income Tax (Indexation) Order 2001* Statutory Instrument, No. 638.
- HONOHAN, P., 1999. "Fiscal Adjustment and Disinflation in Ireland: Setting the Macro Basis of Economic Recovery and Expansion", in F. Barry (ed.), *Understanding Ireland's Economic Growth*, Basingstoke: Macmillan Press.
- IMMERVOLL, H., 2000. "The Impact of Inflation on Income Taxes and Social Insurance Contributions in Europe", EUROMOD Working Paper, Microsimulation Unit, University of Cambridge.
- IMMERVOLL, H., H. SUTHERLAND and K. DE VOS, 2001. "Reducing child poverty in the European Union: the role of child benefits" in K. Vleminckx and T.M. Smeeding (eds.), *Child Well-Being, Child Poverty and Child Policy in Modern Nations*, Bristol, UK: The Policy Press.
- INGLES, D., 2000. *Rationalising the Interaction of Tax and Social Security: Part 1: Specific Problem Areas*, Discussion Paper No. 423, Canberra: Centre for Economic Policy Research, Australian National University.
- KALDOR, N., 1939. "Welfare propositions of economics and interpersonal comparisons of utility", *Economic Journal*, Vol. 49, pp. 549-52.
- LAYTE, R., B. MAÎTRE, B. NOLAN, C.T. WHELAN, D. WATSON, J. WILLIAMS and B. CASEY, 2001. "Monitoring Poverty Trends and Exploring Poverty Dynamics in Ireland", Policy Research Series No. 41, Dublin: The Economic and Social Research Institute.
- LIEBMAN, J.B., 1998. "The Impact of the Earned Income Tax Credit on Incentives and Income Distribution", *Tax Policy and the Economy*, Vol. 12, pp. 83-119, MIT Press.
- LITTLE, I., 1958. *A Critique of Welfare Economics*, London: Oxford University Press.
- LUNDBERG, S.J., R.A. POLLACK, and T.J. WALES, 1997. "Do husbands and wives pool their resources? Evidence from the UK Child Benefit", *Journal of Human Resources*, Vol. 32, No 3, pp. 462-480.
- MARSH, A. and S. MCKAY, 1993. *Families, Work and Benefits*, London: Policy Studies Institute.
- MARTIN, J., 1996. "Measures of Replacement Rates for the Purpose of International Comparisons", *OECD Economic Studies*.
- MEYERS, M.K., J.C. GORNICK, L.R. PECK and A.J. LOCKSHIN, 2001. "Public Policies that Support Families with Young Children: Variation Across US States in K. Vleminckx and T.M. Smeeding (eds.), *Child Well-Being, Child Poverty and Child Policy in Modern Nations*, Bristol, UK: The Policy Press.
- MUSGRAVE, R.A., 1996. "Progressive Taxation, Equity and Tax Design", in J. Slemrod (ed.), *Tax Progressivity and Income Inequality*, Cambridge: CUP.
- MCCOY, D., D. DUFFY, J. HORE and C. MACCOILLE, 2001. *Quarterly Economic Commentary*, March, Dublin: The Economic and Social Research Institute.
- MCCOY, D., D. DUFFY, J. HORE and C. MACCOILLE, 2001. *Quarterly Economic Commentary*, July, Dublin: The Economic and Social Research Institute.

- McHALE, J., 2001. "Adding an Instrument to Social Partnership: A Proposal for Deferred Compensation", in McCoy *et al.*, *Quarterly Economic Commentary*, March, Dublin: The Economic and Social Research Institute.
- NATIONAL ANTI-POVERTY STRATEGY UNIT, 1999. *Guidelines for the Implementation of Poverty Proofing Procedures*, Dublin: the Department of Social, Community and Family Affairs.
- NATIONAL ECONOMIC AND SOCIAL COUNCIL (NESC), 1999. *Opportunities, Challenges and Capacities for Choice*, No. 105, Dublin: NESC.
- NOLAN, B., B. MAÎTRE, D. O'NEILL and O. SWEETMAN, 2000. *The Distribution of Income in Ireland*, Dublin: Oak Tree Press in association with Combat Poverty Agency.
- NOLAN, B. and I. MARX, 2000. "Low Pay and Household Poverty" in M. Gregory, W. Salverda and S. Brazen, *Labour Market Inequalities*, Oxford: Oxford University Press.
- NOLAN, B., W. SALVERDA and C. LUCIFORA, 2000. *Policy Measures for Low-wage Employment in Europe*, Cheltenham: Edward Elgar.
- NOLAN, B., 1993. *Low Pay in Ireland*, General Research Series Paper, No. 159, Dublin: The Economic and Social Research Institute.
- NOLAN, B., 1998a. *Low Pay in Ireland*, Vol. II of the Report of the National Minimum Wage Commission, Dublin: Stationery Office.
- NOLAN, B., C.T. WHELAN and J. WILLIAMS, 1998b. *Where are the Poor Households? The Spatial Distribution of Poverty in Ireland*, Dublin: Oak Tree Press.
- NOLAN, B. and S. CANTILLON, 1998c. "Are Married Women More Deprived than Their Husbands?", *Journal of Social Policy*, Vol. 27, pp. 151-171.
- NOLAN, B. and B. FARRELL, 1990. *Child Poverty in Ireland*, Report for the Combat Poverty Agency.
- O'DONOGHUE, C. and H. SUTHERLAND, 1999. "Accounting for the Family in European Income Tax Systems", *Cambridge Journal of Economics*, Vol. 23, No. 5, pp. 565-598.
- OECD, 1977. *The Treatment of Family Units in OECD Member Countries Under Tax and Transfer Systems*, A Report by the Committee on Fiscal Affairs, Paris: OECD.
- OECD, 1998. "Making Work Pay – Taxation, Benefits, Employment and Unemployment", *The OECD Jobs Strategy*.
- O' NEILL, D. and O. SWEETMAN, 1998. "Poverty and Inequality in Ireland 1978-1994: A Comparison Using Measures of Income and Consumption", mimeo, Department of Economics, Maynooth: National University of Ireland.
- OXLEY, H., T. DANG, M.F. FORSTER and M. PELLIZZARI, 2001. "Income Inequalities and Poverty among Children and Households with Children in Selected OECD Countries" in K. Vleminckx and T.M. Smeeding (eds.), *Child Well-Being, Child Poverty and Child Policy in Modern Nations*, Bristol, UK: The Policy Press.
- REDMOND, G., H. SUTHERLAND and M. WILSON, 1998. *The Arithmetic of Tax-Benefit Reform*, Cambridge: CUP.
- ROBBINS, L., 1938. "Interpersonal Comparisons of Utility: A Comment", *Economic Journal*, Royal Economic Society.
- ROSEN, H., 1977. "Is it Time to Abandon Joint Filing", *National Tax Journal*, Vol. 30, No. 4, pp. 423-428.
- SALVERDA, W., C. LUCIFORA and B. NOLAN, 2000. *Policy Measures for Low-Wage Employment in Europe*, LoWer European Low-Wage Employment Network, UK: Edward Elgar.
- SAUNDERS, P., 1995. "Improving Work Incentives in a Means-tested Welfare System: the 1994 Australian Social Security Reforms", *Fiscal Studies*, Vol. 16, No. 2, pp. 45-70.
- SEXTON, J.J., B. NOLAN and B. McCORMICK, 1999. "Review of Earnings in the Irish Economy since 1997", *Special Article, Quarterly Economic Commentary*, December, pp.47-76.

- SEXTON, J. and P.J. O'CONNELL (eds.), 1996. *Labour Market Studies Ireland*, EU Commission, Directorate-General for Employment, Industrial Relations and Social Affairs.
- SOCIAL WELFARE BENCHMARKING AND INDEXATION WORKING GROUP, 2001. *Final Report of the Social Welfare Benchmarking and Indexation Working Group*, Dublin: Department of Social, Community and Family Affairs.
- TAX STRATEGY GROUP, 2000a. *2001 Budget Strategy*, <http://www.ir.gov.ie/finance/publications/tsg/tsg00index.htm>
- TAX STRATEGY GROUP, 2000b. *Discussion Paper on Poverty Proofing of Income Tax and Social Welfare Measures*, Doc. 00/27, <http://www.ir.gov.ie/finance/publications/tsg/tsg00index.htm>
- VLEMINCKX, K. and T.M. SMEEDING, 2001. "Ending Child Poverty in Industrialised Nations", in K. Vleminckx and T.M. Smeeding (eds.), *Child Well-Being, Child Poverty and Child Policy in Modern Nations: What do we know?* Bristol, UK: The Policy Press.