2. INCOME TAX AND SOCIAL WELFARE POLICIES

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2.1 Introduction

How can the resources available for tax cuts and welfare increases be put to best use? This is the central question explored by this chapter. A key conclusion is that the resources available should be applied to much needed structural reforms. We point to two neglected areas in the tax/transfer system which need particular attention. First, the mechanism for uprating welfare payments needs to change if long-range targets under the National Anti-Poverty Strategy are to be met.[4] Second, there are compelling arguments for considering new directions in the tax treatment of couples. It is difficult to rationalise the current tax treatment of couples from either an economic or social perspective, as argued by Fahey (1998) in last year's conference; and several factors point to the need for a structural reform in this area of the tax code.

From a macroeconomic perspective, it can be argued that the stimulus to the economy should be limited this year (Duffy, this volume). This implies that income tax cuts should be offset by tax increases or expenditure reductions elsewhere. Here we focus on a different aspect of fiscal policy: the wise spending of whatever level of resources is made available to the tax/transfer system. The scale of the resources applied to tax cuts and welfare increases remains very relevant. The multi-annual projections accompanying Budget 1998 indicated "prudent provision" for tax cuts costing £250m in a full year, and expenditure increases (in which welfare increases over and above price inflation could be expected to bulk large) of about £120m. In fact, the following year's budget saw a tax package costing some £580m in a full year, with welfare increases of approximately £230m over and above inflation. Multi-annual projections accompanying last year's budget also indicated provision for tax cuts in Budget 2000 costing £350m in a full year, and expenditure increases limited to "an overall net current expenditure envelope of 4% per annum". But Exchequer returns indicate that there may be scope for a package of tax/welfare changes of a similar scale to last year's.

[3] This study draws on the 1994 and 1997 waves of the Living in Ireland Survey, the Irish element of the European Community Household Panel. James Williams and Dorothy Watson of the ESRI's Survey Unit were responsible for the survey design, data collection and database creation for 1997, while the 1994 design, data collection and database creation were the responsibility of Brendan Whelan and James Williams.

[4] This issue was highlighted in our paper to last year's Budget Conference.

This experience suggests that, whether or not a substantial tax/welfare package is desirable on macroeconomic grounds, substantial resources may be devoted to this area. If this does happen, it is vital that the package should exploit the potential for introducing tax reforms at a time of tax cuts in order to compensate potential losers from the reform. Past experience indicates this is the most likely way in which reforms will take place in the Irish tax transfer system (e.g., standardisation of mortgage interest tax relief took place over a 4 year period, within a context of general tax cuts which allowed compensation for most potential losers from the reform).

The remainder of the chapter is structured as follows. Section 2.2 outlines the framework for our analysis of the distributive impact of budgetary policy, and the inherent problems with the conventional "opening budget" as a benchmark for policy analysis. Section 2.3 considers the interrelationship between changes in tax/welfare policy, income distribution, poverty and financial work incentives between 1987 and 1998. Section 2.4 focuses on the impact of last year's budget, and looks ahead at the distributive implications of some options for Budget 2000. Section 2.5 considers two key areas for structural reform: the uprating mechanism for welfare payments, in the context of the broader national anti-poverty strategy (NAPS); and the complex issues surrounding the tax treatment of couples, childcare costs, child-related income supports and the labour supply needs of a rapidly expanding economy. The main conclusions are drawn together in the final section.

2.2 Measuring Budgetary Impact

In last year's conference paper we pointed to some major drawbacks in the conventional analysis of the distributional impact of the budget, and proposed a simple alternative using *SWITCH*, the ESRI tax-benefit model. The conventional approach has been to analyse the impact of the budget using selected hypothetical individuals or families. This can help to tease out some implications of policy changes, but cannot provide an overall picture of the gains and losses associated with reform packages. Furthermore, the concentration on the selected households may lead to the neglect of effects which are important for other households: a small number of selected households cannot adequately deal with the diversity of circumstances relevant to the tax and welfare situation of real households.

SWITCH: THE ESRI TAX-BENEFIT MODEL

Tax-benefit models are needed to assess the complex and far-reaching effects of changes to tax and social welfare policy. *SWITCH,* the ESRI tax-benefit model (the acronym stands for *S*imulating *W*elfare and *I*ncome *T*ax *Ch*anges) is now a well-established tool for such analysis. It is based on the Living in Ireland Survey*,* a large-scale nationally representative survey of households undertaken by the ESRI in 1994. The model database has been adjusted in ways which ensure that it adequately reflects changes in incomes, employment, unemployment and population since then – and draws on projections of such changes as far ahead as 2002 to provide a framework for medium-term analysis of budgetary issues.

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 scale: 1 for the first adult in the family, 0.66 for a second adult and 0.33 for children.

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 estimated at the ESRI, in a framework which will allow simulation of the dynamic effects of policy changes in future.

SWITCH, the ESRI tax-benefit model (see box), overcomes these disadvantages. It is based on a large-scale, nationally representative sample of actual households. This means that it automatically takes account of the wide diversity of circumstances in the real population. The model is designed to calculate the impact of policy changes on each family's disposable income, and can therefore be used to identify patterns of gain and loss across income groups or demographic groups. In addition, the model can be used to assess the impact of policy changes on financial incentives to work in a more systematic way than has heretofore been possible.

A second aspect of the conventional approach – its implicit benchmark against which distributional impact is measured – was also called into question. Budgetary convention dictates that the "opening budget" before the Minister for Finance stands up to speak is framed on the basis that income tax and social welfare parameters are unchanged in nominal terms.[5] In last year's paper we pointed to the drawbacks of this convention as a benchmark for assessment of the distributional impact of the budget. We can clarify this further by considering what would happen in distributional terms if the "opening budget" were actually implemented. In order to answer this question, we make a stylised assumption that wages, salaries, self-employment earnings (including farming), profits and occupational pensions would all grow by a common factor – say close to 4 per cent – between 1999 and 2000, with prices set to rise by close to 2 per cent.[6] Figure 2.1 then shows how growth in real disposable incomes (i.e., after taxes and social welfare benefits) would vary across income groups between 1999 and 2000. (For an explanation of Figures 2.1 to 2.7 see Box on how to understand the charts.)

HOW TO UNDERSTAND THE CHARTS

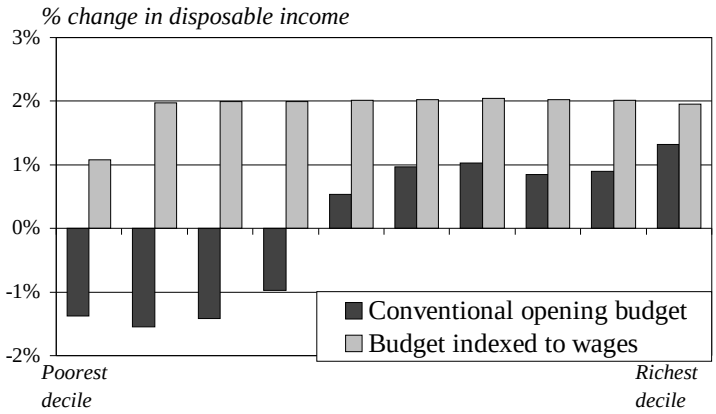
[5] This was also the practice in the UK until quite recently, when indexation of income tax bands and allowances in line with price inflation was introduced.

[6] In our subsequent budgetary analysis we allow for differential income growth between employees and the self-employed (including farmers), but a common growth factor helps to illustrate the nature of the alternative benchmarks.

Family units – consisting of an adult or couple, together with their dependent children if any – are first ranked by disposable income per adult equivalent. This is calculated as follows. The first adult counts as 1 adult equivalent, the second adult as 0.66 and each child as 0.33. Thus a family with 2 adults and 2 children, with a disposable income of £200 per week, would have an equivalence scale of 2.32 (=1+0.66+0.33+0.33), and an income per adult equivalent of £86.20 (=£200/2.32). In this way, we take account of differences in family size and structure, to produce a ranking of income adjusted for needs. For example, the income of the family just described can be compared with a single person unit to see which should be ranked as having the higher income.

Then family units are ranked from poorest to richest and divided into 10 approximately equal-sized groups or "equivalent income deciles". Figure 2.1 shows average income growth for each decile between 2000 and 1999 under alternative budgetary benchmarks. The conventional benchmark – no change in nominal terms in tax and welfare parameters – is shown to be distributionally skewed, while the alternative wage indexation benchmark is approximately neutral in its distributional impact. Figures 2.2 to 2.7 show the average income growth for each decile under alternative policies *relative to this neutral wage indexation benchmark*.

Figure 2.1: Changes in Disposable Income (1999-2000) by Income Group under Alternative Budgetary Benchmarks



We see that real incomes would fall by between 1 and 1½ per cent for those in the bottom four deciles, while for those in the upper half of the income distribution there would be gains of about 1 per cent.[7] This is a highly skewed distributional outcome and cannot be treated as an adequate benchmark for distributional analysis, as argued in last year's paper. Indexation of policy in line with prices is of some interest, but again, cannot be treated as distributionally neutral: it would see real incomes unchanged for most of those in the bottom four deciles, while

[7] Average real income grows by about ½ per cent, with fiscal drag boosting tax revenues.

there would be gains in real income of between 1.3 and 1.6 per cent for most of the top half of the income distribution.

The alternative benchmark we proposed in last year's *Budget Perspectives* was indexation of tax allowances and bands, and of social welfare rates, in line with earnings growth. Figure 2.1 shows how growth in disposable income in the year 2000 would vary across income groups under this benchmark. The pattern of income growth is much more even, with a gain of close to 2 per cent for all income deciles except the first. The reasons for the lower increase in the bottom decile deserve further study. This pattern may reflect the particular character of the bottom decile, which includes students, self-employed with losses and others for whom tax and welfare changes may have little impact. While the pattern is not perfectly even, it provides a much better starting point for the analysis of distributional impact than the conventional one.

It is worth noting that the "wage indexation benchmark" can also be viewed as a "neutral" option in macroeconomic perspective, as outlined by Lane (this volume). Indexing policy to wage growth would keep government revenue and expenditure roughly constant as a proportion of national income.[8]

2.3 Income Distribution, Poverty and Incentives, 1987-1998

If the resources available for reform of the tax and welfare system are to be put to best use, it is important to understand how poverty, income distribution and work incentives have been affected by measures implemented in recent years. Recent studies at the Institute have added to our understanding on these issues. (Callan *et al.*, 1996; Callan and Nolan, 1999; Callan *et al.*, 1999). Here we summarise some of the main findings, relating first of all to the 1987 to 1994 period, and then go on to consider findings for more recent years.

2.3.1 1987 TO 1994

Macroeconomic Environment and Policy Trends

The period between 1987 and 1994 was one of fluctuating fortunes from year to year but overall the experience was of substantial economic growth, with growth in real GNP amounting to about 33 per cent. The annual rate of price inflation was relatively low throughout, with prices increasing by about 20 per cent overall from 1987 to 1994. GNP in nominal terms rose by about 63 per cent over the period. The national accounts aggregate remuneration of employees increased by 60 per cent in nominal terms while transfers to households, mostly comprising social welfare payments, rose by 45 per cent. Overall, personal disposable income rose by 56 per cent between 1987 and 1994. There was a very substantial increase, of 92,000, in the numbers at work, but the numbers unemployed fell by only 15,000 as net emigration fell sharply.

[8] There is a literature suggesting that government expenditure tends to rise as a proportion of GNP ("Wagner's Law"). This is not to suggest that there is a simple, mechanical relationship between government expenditure and national income; but it could certainly be argued that many of the goods and services which bulk large in many governments' expenditures (health, education and roads for example) are not inferior goods: public demand for them grows at least in line with income.

Significant changes in the social welfare and income tax systems were implemented between 1987 and 1994 in terms of both rates and structures. The rate of increase between 1987 and 1994 in the basic personal rate varied from 29 per cent for Old Age Pensions up to 73 per cent for Supplementary Welfare Allowance and short-term Unemployment Assistance, with Unemployment and Disability Benefit rising by an intermediate 44 per cent. This reflects the strategy, in line with the recommendations of the Commission on Social Welfare (1986), of giving priority to bringing up the lowest rates. Additional cash and non-cash payments available to social welfare recipients or low income households generally also expanded.

As far as income tax and PRSI are concerned, personal allowances increased by much less than average incomes, indeed below the increase in prices. In 1987 there were three tax rates, of 58 per cent, 48 per cent and 35 per cent, but by 1994 there were only two and these were at 48 per cent and 27 per cent. Tax exemption limits were increased substantially and additions for children introduced. The earnings ceiling for calculation of the Health levy was abolished, and a lower exemption limit below which PRSI contributions were not payable was introduced.

Poverty Trends

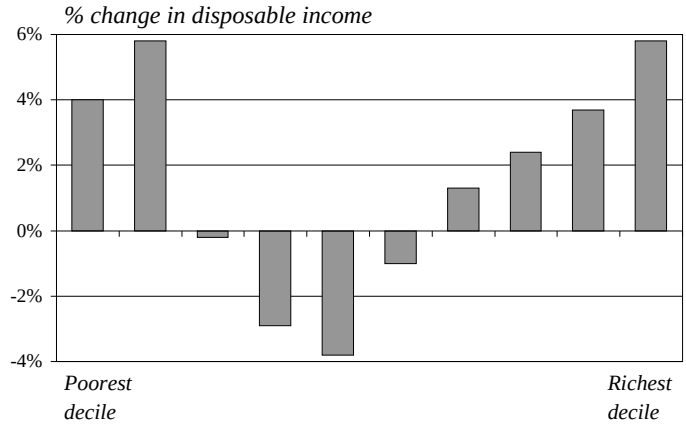
Callan *et al.* (1996) used data from the ESRI's 1987 and 1994 surveys to document the evolution of poverty trends over that period. Mean disposable income averaged over households in the 1994 Living in Ireland survey was 42 per cent higher than the corresponding mean in the 1987 ESRI household survey. Compared with 1987, the proportion of persons below the 50 per cent (and even more below the 60 per cent) relative income poverty line had increased by 1994. However, aggregate poverty measures which take into account the depth of poverty shortfalls as well as numbers below the relative income lines showed a consistent fall in aggregate poverty between 1987 and 1994. As well as purely relative income lines, the numbers under income thresholds held constant in real terms since 1987 were examined and showed a substantial decline. Non-monetary indicators of deprivation as well as income were used to identify those experiencing generalised deprivation or exclusion due to lack of resources. Focusing on a sub-set of items representing basic deprivation, there was a small reduction between 1987 and 1994 in the percentage of households both below the relative income poverty lines and experiencing basic deprivation. In 1987, 16 per cent of households were below the 60 per cent income line and experiencing enforced absence of at least one basic item, while in 1994 the corresponding figure was 15 per cent.

Distributive Impact of Tax/Welfare Policy Changes

Figure 2.2 shows the distributive impact of 1994 tax and welfare policy relative to a wage-indexed 1987 baseline. This shows considerable gains on average for the poorest 20 per cent of families, reflecting the focus on increasing the lowest rates of welfare payment. There were losses relative to the simple wage-indexed benchmark policy for many low and middle-income earners, reflecting the lack of indexation of personal allowances. For higher earners, tax rate cuts more than compensated for the lack of

indexation of allowances to earnings growth. These gains were greatest for top income earners.

Figure 2.2: Distributive Impact of Budgetary Policy, 1987-1994, Measured Against Wage Indexed Policy



Evolution of Work Incentives

As well as combating poverty, a central theme in debates about tax and welfare policy here and elsewhere has been the promotion of work incentives and avoidance of "dependency". In assessing the impact of changes in the tax and social welfare systems on work incentives, a variety of complex methodological issues must be faced. Tax-benefit microsimulation models can be particularly valuable in this context, as illustrated in our study using *SWITCH* of the evolution of financial incentives to take up work between 1987 and 1994 (Callan and Nolan, 1999). The results show, for example, that the average cash replacement rate facing the unemployed in Ireland was roughly constant between 1987 and 1994, but that the impact of improvements in FIS or alterations to income tax bands, allowances and exemption limits do not always show up in calculations focusing on that average. As illustrated in Table 2.1, tax/welfare policy did in fact serve to reduce the incidence of replacement rates above 80 per cent, balanced by an increase in the numbers with replacement rates between 70-80 per cent.

One of the assumptions underlying this table is that take-up of FIS is no higher than about one in three of those entitled. Particularly given the continued expansion of this scheme, assessing how take-up levels have evolved more recently is an important task. (One's assumption about whether close-to-full take-up can in fact be achieved is critical to the role which can sensibly be assigned to this type of in-work transfer in promoting work incentives. They appear to have been given a central role in recent UK policy, which has altered the delivery mechanism from the benefit system to the tax system.) Since 1994, average earnings have risen a good deal more rapidly than weekly welfare rates for the unemployed, and earnings towards the bottom also appear to have increased more rapidly than those in middle of the distribution (see Nolan and McCormick in Nolan *et al.,* 1999). The impact this has had on the level and distribution of cash replacement rates is currently being assessed using *SWITCH*.

Table 2.1 Distribution of Replacement Rates Estimated Using Predicted Wages, 1987 and 1994

	33 per cent take-up of FIS	
	1987	**1994**
0<10	1.0	1.7
10<20	1.7	2.4
20<30	4.3	3.3
30<40	9.3	8.5
40<50	11.7	11.8
50<60	16.4	15.3
60<70	19.1	19.6
70<80	13.9	22.0
80<90	13.1	9.1
90<100	5.4	4.6
Over 100	4.0	1.6
Total	100	100

Recent studies by the OECD have also demonstrated the value of microsimulation models in seeking a comparative perspective on incentives, drawing on models for 12 countries (including *SWITCH*).[9] Where the point of comparison is the median full-time wage, the microsimulation results show that the replacement rate is under 40 per cent for most unemployed Australians and Americans, much higher for Danes and Swedes, and somewhere in between for other countries studied including Ireland. High replacement rates tend to be concentrated in particular family types, but in a manner which varies across countries. Another comparison of microsimulation-based replacement rates for Ireland and the UK, which we have produced using consistent definitions, suggested that in the mid-1990s a considerably higher proportion of the unemployed in Ireland faced rates above 60 per cent. The replacement rate was strongly influenced by family composition in each country, primarily because of the impact of extra income support payments for dependants. Thus single individuals had much lower replacement rates than those who were married without children, and married individuals with children had the highest rates. In understanding the Ireland-UK comparative picture, the fact that income support for the long-term unemployed in Ireland is a good deal more generous relative to average earnings was the single most important difference identified between the two tax/benefit systems. The corollary was that the Irish system was more effective in reducing poverty among the unemployed – bringing out the need to always keep both incentive promotion and poverty reduction objectives in view in assessing the impact of welfare policies.

[9] The OECD, in the course of the Jobs Study, has also produced time-series on average hypothetical replacement rates for most member countries. The overall index for Ireland in 1995, at about the same level as in the mid-1980s, was below the average for OECD countries though above the UK. The index does not take into account the impact of taxation, housing benefit, or benefits to children, and Callan and Nolan (1999) discuss how apparently minor issues of definition and measurement can make a major difference to the comparative picture provided by these hypothetical calculations.

Replacement rates generally compare the level of weekly unemployment benefit or assistance with take-home pay, but means-tested non-cash benefits and additional cash allowances and payments received when unemployed (but not when in work) can also affect work incentives. Assigning a cash value to non-cash benefits in calculating replacement rates and assessing their impact on labour market behaviour is difficult. Entitlement to free health care for those who meet the income test for medical card cover is an important element in the Irish structure not found in many other European countries, and since 1997 unemployed individuals moving into work have been allowed retain that cover for a number of years even if they exceed the income limit, in order to ease the transition from unemployment to work. It is thus of interest to explore how important this entitlement actually appeared to be to respondents in the 1994 ESRI survey. The responses, also analysed in Callan and Nolan (1999), suggested that retention of medical card cover is likely to directly influence the reservation wage of only a relatively small minority of the unemployed, but that for that minority the amounts involved are quite substantial. Another element of the income support structure, which has assumed increasing importance in recent years, is direct and indirect support for housing costs.

Useful reviews by the OECD of the direction policy has taken in different countries show that for the most part reforms have been targeted rather than seeking to bring about a general reduction in replacement rates. Common themes have been tightening job search obligations, improving access to child care, focusing tax reductions on the low paid, improving in-work benefits, and reducing support or increasing conditionality for young people.

2.3.2 1994 TO 1997

Poverty Targeting in the NAPS

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 we concluded that they were 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% to less than 5 to 10%, as measured by the ESRI.*

As we shall see, new data for 1997 have recently allowed us to present an updated picture of trends in poverty, and the NAPS poverty target has been revised in the light of these findings.

Poverty Trends from 1994 to 1997

Our results for 1994 were drawn from the first wave of the Living in Ireland survey, the Irish element of the European Community Household Panel survey. Callan *et al.* (1999) used the fourth wave to examine trends in poverty and deprivation between 1994 and 1997, and we draw on their results here. 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 recipiency, and appeared not to have a significant impact on the structure of the sample. Full descriptions of the 1994 and 1997 surveys and results are in Callan *et al.,* (1996) and Callan *et al.,* (1999) respectively.

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.

We first examine trends in relative income poverty between 1994 and 1997. Household income in the two surveys is used to create relative income poverty lines, based on proportions of mean equivalent disposable household income, with an equivalence scale giving the household head a value 1, each extra adult 0.66 and each child 0.33. (Other equivalence scales are used to test the sensitivity of the results in Callan *et al.* (1999)

and the main findings reported here continue to hold.) Table 2.2 shows that, despite the buoyant economic situation between 1994 and 1997, the percentage of households below the relative income lines increased over the period, consistently from the 40 per cent up to the 60 per cent line, by about 2-3 percentage points. The table also shows that when one focuses on the percentage of persons living in these households, the same trend is seen.

Table 2.2: 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
	Percentage of households below line	
40% relative income line	5.0	7.6
50% relative income line	18.8	21.9
60% relative income line	34.6	36.5
	Percentage of persons in households below line	
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.

It is also important to know what has been happening to real incomes. We therefore also look at how many households fell below 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.

Between 1994 and 1997 the risk of being below half average income rose rapidly for single person households, notably where the head is aged 65 or over, and fell for some types of households with children. The risk of relative income poverty remained very high for households headed by an unemployed person, but the numbers in that situation declined as the unemployment rate fell sharply. This reflected the two factors already noted, the decline in unemployment together with the faster increase in market incomes than transfers.

Against this background, what happened to deprivation levels, and to numbers below our combined relative income and basic deprivation measure, between 1994 and 1997? Deprivation levels, as measured by the range of non-monetary indicators available in our surveys, fell substantially. The percentage scoring zero on the 8-item "basic deprivation index" rose from 75 per cent to 85 per cent, while the percentage scoring more than one fell from 12 per cent to 7 per cent.

This decline is also seen with the other indicators, in what we have called the secondary and housing dimensions. However, since the basic indicators are employed in the poverty measure on which the NAPS target is based, they are most salient for present purposes. In Table 2.3 we show the percentage of households below the 50 per cent and 60 per cent relative income lines and experiencing basic deprivation for 1994 and

1997, using the same set of deprivation indicators in each year. We see that the percentage below the 60 per cent line and experiencing basic deprivation has fallen from 15 per cent to 10 per cent – having fallen only marginally, from 16 per cent to 15 per cent, between 1987 and 1994. The numbers below the 60 per cent relative income line and experiencing basic deprivation had already fallen by 1997 to the level the global poverty reduction target sought for 2007. The percentage below the 50 per cent relative income line and experiencing basic deprivation has also fallen, 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.

Table 2.3: Percentage of Households Below Relative Income Thresholds and Experiencing Basic Deprivation in 1994 and 1997 Samples

Relative Income Line (Eq. Scale 1/0.66/0.33)	Percentage of Households Below Line and Experiencing Enforced Basic Deprivation	
	1994	1997
50% line	8.9	7.3
60% line	14.9	9.9

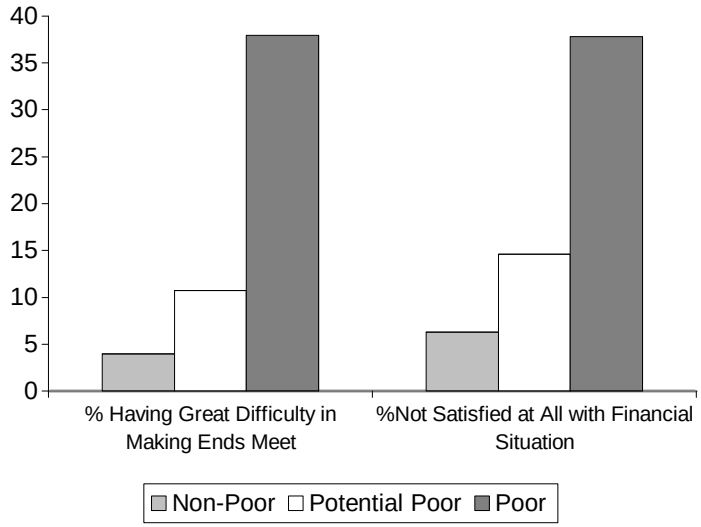
Implications for Poverty Targeting

This combined poverty measure was never intended to be a mixture of relative income with deprivation indicators which remain fixed indefinitely. Instead, the need to adapt and augment the non-monetary deprivation indicators in the light of changing perceptions about what constitute necessities and potential transformations of the underlying structure of deprivation was central to the conceptual underpinnings. As living standards rose, has an unchanged set of indicators continued to adequately capture what is regarded as generalised deprivation? The set of indicators included in our basic deprivation measure has remained unchanged since 1987 when we first had data available. We want to be sure that this measure is not missing fundamental changes in living patterns and expectations

We have explored this by looking over the whole period from 1987 to 1997, and found that expectations have indeed followed the general upward trend in the extent of possession of items. As a result, 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, it has to be emphasised that not all socially perceived necessities are suitable for incorporation into the combined income/deprivation measure, but only those tapping the underlying generalised deprivation one is attempting to capture. Factor

analysis shows that these five items continue to load on what we have called secondary deprivation dimension, rather than cluster with the basic items (Layte *et al.,* 1999). This supports the argument that the basic deprivation index should not at this point be expanded to include these additional five items.

Figure 2.3: Self-reported Economic Strain By Poverty Status



We have also examined the additional households who would be counted as poor if one did indeed broaden the deprivation element of the measure by incorporating these five additional items – the "potentially poor". In terms of self-assessed economic strain, psychological distress and fatalism the consistent picture was that the profile of these households was similar to that of the "non-poor" and strikingly different from the "poor" (see Layte *et al.,* 1999). For example, Figure 2.1 shows that almost 40 per cent of those counted as poor with our current combined income and deprivation measure report "extreme difficulty" making ends meet. This compares to only about 11 per cent of the additional group who would be counted as poor if the deprivation criteria were expanded and under 5 per cent of those who are non-poor even with the expanded criteria.

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. The decline in numbers of poor by this measure captures the effects of improvements in living standards that are not reflected in the relative income line results. However, we also found that the disparity in life-style deprivation between poor and non-poor households widened between 1987 and 1997. There was a significant improvement in the situation of poor households with regard to enforced absence of the five secondary items we have already mentioned, but in each case the proportionate reduction in deprivation was smaller than among non-poor households, and the disparity between the two groups increased.

So what is the significance of relative income poverty rates in such a context? If it is to achieve its core objectives, a national poverty target has to be seen as broadly acceptable by the general public. When deprivation is falling markedly, many people may not simply 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, 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, however – over which a poverty target may be operating – the fact that real and relative income levels are diverging so markedly cannot be simply ignored. The key challenge in setting and monitoring poverty targets is to capture these realities, but also take into account the long-term consequences of lower incomes, and social security rates in particular, lagging behind growth in average incomes.

At a minimum, this means that a poverty target should be re-based regularly, rather than cast in stone. In the light of the results described here, the government has recently decided to take the 1997 level as the new baseline for NAPS purposes, and adopted a revised target to reduce the numbers in "consistent poverty" to below 5 per cent by 2004. More fundamentally, though, it may be worth broadening the scope of poverty targets with distinct targets along the following lines:

(a) 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;
(b) 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;
(c) 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:

(a) 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;
(b) 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;
(c) 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.

As we discuss below, 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.

Distributive Impact of Tax/Welfare Policy Changes

Figure 2.4 shows the distributive impact of policy over the 1994 to 1998 period, relative to simple wage indexation of the 1994 policy – the benchmark described in Section 2 above. In general, welfare rates have risen by a little more than prices, but not as fast as other incomes. There were, however, special increases for pensioners in the 1998 budget and these are included in our analysis. There have been some further cuts in tax rates, along with widening of the standard rate band and increases in

personal allowances. There has also been restructuring of the PRSI system, with an allowance structure being introduced.

Figure 2.4: Distributive Impact of Budgetary Policy, 1994-1998, Measured Against Wage Indexed Policy

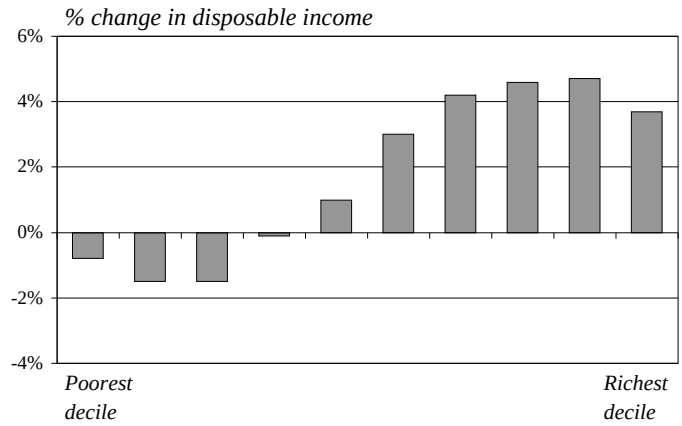


Figure 2.4 shows that the richest 10 per cent of families gained about 4 per cent from Budget day changes, over and above what they would have gained from a simple wage indexation rule. But the poorest 30 per cent of the population gained 2 per cent less from the more complex and costly Budget day changes actually introduced than they would have from simple wage indexation. In the next section we shall see how the different income groups fared under the rather different 1999 tax and welfare package.

Work Incentives

The impacts of policy changes on financial work incentives in more recent years are currently being studied at the Institute. A number of factors point towards the likelihood of falls in cash replacement rates. First, welfare rates for the unemployed have been increased by less than the rate of increase in gross earnings. Second, tax cuts mean that net earnings have increased even faster than gross earnings. Third, child dependant additions in nominal terms have been frozen, with resources being concentrated on increases in child benefit, paid to those in and out of work. The retention of medical cards by unemployed persons entering employment, as recommended by the Expert Working Group on the Integration of the Income Tax and Social Welfare Systems, was designed to facilitate transitions into employment. Administrative difficulties were encountered at an early stage in the implementation of this proposal: a review of its implementation and impact would now be timely.

While the value of a medical card has in the past been seen as a potentially critical item in the balance between in- and out-of-work incomes, this role may in future belong to housing-related benefits. For example, the Rent and Mortgage Supplements payable under the Supplementary Welfare Allowance scheme are available only to those not in employment. Given the rapid rise in housing costs in recent years, this could give rise to significant financial disincentives to the take-up of employment. While much of the focus in discussion of housing costs has, quite properly, been on measures to stimulate the supply side of the

market, greater attention must be paid to the design of housing subsidies and their work incentive effects.

2.4 Distributional Impact of Budget 1999 and Outlook for Budget 2000

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. What has been the impact of this new strategy? And how does the distributive impact of the 1999 Budget compare with that of its predecessors, which typically involved a mix of increased (unstandardised) personal allowances, widening of the standard rate band, and cuts in tax rates?[10]

Figure 2.5 shows that the overall package did indeed give the greatest gains in proportionate terms to those in the middle reaches of the income distribution, with substantial gains for low earners and lesser gains for high earners. It also shows that the bottom 20 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 10 per cent of the population fared less well than under simple wage indexation of tax and welfare parameters, while the next 10 per cent fared only marginally better than this benchmark, while gains of 2 to 3 per cent were typical for the middle and upper reaches of the income distribution.

Figure 2.5: Distributive Impact of 1999 Budget Against 1998 Policy Indexed to Earnings

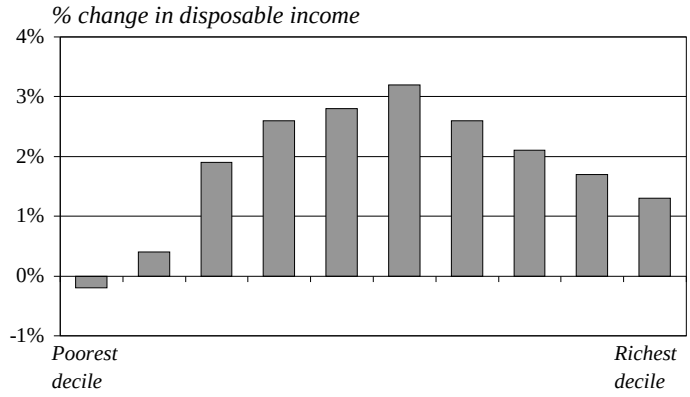


Figure 2.6 Distributive Impact of 1999 Budget Against Continuation of Past Policy Mix

[10] Examination of the distributive effects of some budgets could be difficult because the size of the overall package might be relatively modest; but the size of the 1999 budget creates no such difficulties, and the *SWITCH* model was calibrated to give similar estimates of tax yields and welfare costs as official estimates. See Callan, Walsh, Nestor and McBride (forthcoming) for details.

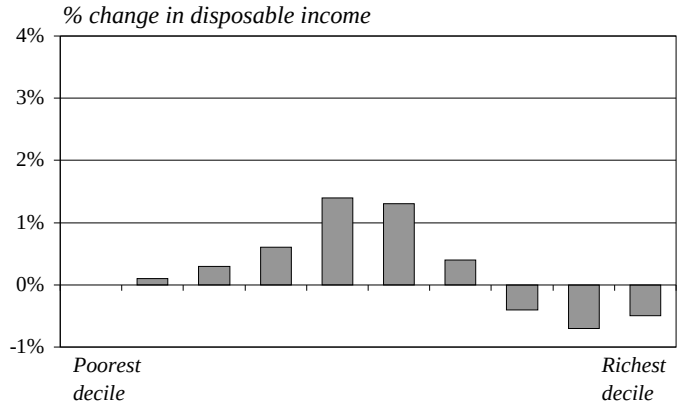
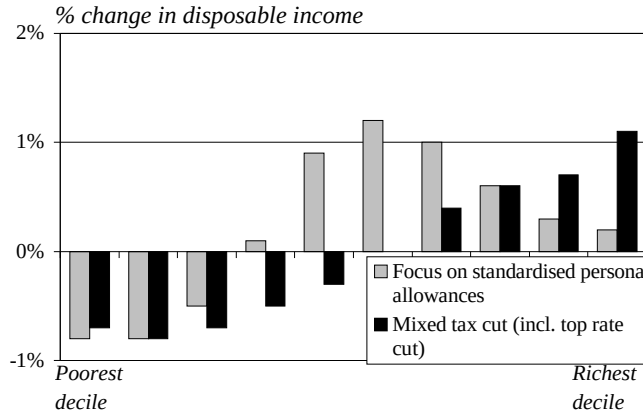


Figure 2.6 shows the impact of actual 1999 policy compared with a budgetary package which would have continued past policy trends (a 2 percentage point cut in the standard rate of tax, a widening of the standard rate band, and an increase in the (unstandardised) personal allowance): the welfare elements of both packages are the same, with special increases for the elderly and the general rate of social welfare increase being less than wages but more than price inflation. This comparison shows that the actual Budget 1999 policies were more favourable for those in the middle reaches of the income distribution, and less favourable for the upper third of the population. There is little difference between the packages for most of those in the bottom 20 to 30 per cent of the income distribution.

Figure 2.7 Distributional Impact of Alternative Budget 2000 Tax Cuts, with Social Welfare Increase Below Wage Increase



Note: Distributional impact of each package is measured against a baseline of 1998 tax and welfare policy, uprated by 4 per cent.

Distributive impact is not, of course, the only factor entering into decisions regarding tax and welfare policy. But it is of interest to outline some choices which are faced in framing Budget 2000. No recommendation for either package is implied on our part in examining these choices. Figure 2.7 shows the distributive impact of two packages,

each framed within the parameters set out in the multi-annual projections accompanying last year's budget. As indicated earlier, the actual tax/welfare policy may be on a larger scale, but similar choices regarding the distributive impact will still be on offer. The "mixed tax cut" package includes a cut of 1 percentage point in both the standard and top rates of tax, in line with the commitment in the government's *Action Programme for the Millennium* to "reduce the standard rate to 20% and the higher rate to 42%" over a 5 year period, a widening of the standard rate band, and an increase in the new, standardised personal allowance. This could be seen as a reversion to the typical package of the recent past. An alternative package could focus most resources on an increase in the new standardised personal allowance.[11] It is readily apparent from Figure 2.7 that a mixed tax cut, including a top rate tax cut, would be more favourable for high income earners, while a focus on the standardised personal allowance would favour those in the middle of the income distribution (which includes many low paid workers). As the welfare element of each package involves an increase less than the rate of wage growth, welfare recipients would lose out relative to the neutral "wage indexation" benchmark.

2.5 Key Issues for Tax and Welfare Reform

2.5.1 INDEXATION, WELFARE UPRATING AND NAPS

We emphasised earlier that 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 credible national anti-poverty strategy. This is particularly important given the recent emphasis in Ireland and the UK on area-based policies to tackle "social exclusion" by targeting the "worst estates". Whatever about the merits of the proposed policies and the way target areas are selected, the fact that most poor people do not live in such estates means that this will not on its own have a major impact on the global poverty target. In Nolan, Whelan and Williams (1998) the degree of concentration of poor households in these terms in 1994 was seen to be little greater than in 1987, and even if this has increased somewhat as unemployment has fallen – which remains to be seen – the general message remains the same.

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, as highlighted in our paper to this conference last year, the uprating of social security benefits. Falling unemployment has been central to the impact of rapid economic growth on poverty, as our recent results for 1997 bring out (Callan *et al.,* 1999).

[11] The package examined here is at one extreme in focusing all resources on the increased, standardised personal allowance. This would leave the top rate tax threshold unchanged in nominal terms, creating a "fiscal drag" effect. Indexation in line with wage increases would require an increase in the standard rate band of between 4 and 6 per cent (IR£600 to IR£900). Even indexation would do nothing to alter the fact that this threshold is relatively low for single persons, who face the top rate of tax at income levels close to average industrial earnings: this issue is taken up in greater depth in Section 2.5 below.

The risk of poverty for the much smaller numbers now unemployed remains high, however, and movement from unemployment onto temporary schemes is not likely to have a lasting impact. As O'Connell's paper to this conference last year and his more recent seminar paper (1998, 1999) have both highlighted, the most effective and efficient way forward is to increase expenditures on highly effective programmes targeted exclusively and intensively on the long-term unemployed, while allowing market forces to absorb younger relatively short-term unemployed. This entails an expansion of programmes with strong labour links, and a reduction in the numbers participating in Community Employment: the two should be clearly linked. An expansion in the role of the Public Employment Service, to give it a central role in co-ordinating services for the unemployed, is also recommended.

When considering issues relating to the uprating of welfare payments, it is worth noting the broader context in which budgetary decisions will be operating. With our changed economic circumstances, a corresponding re-evaluation of anti-poverty strategy is required. What are to be the central elements of that strategy in an environment where unemployment has been brought down so markedly? The minimum wage to be introduced next year, for example, while it should improve work incentives is not likely to have a major direct impact on household poverty (see Nolan, 1998). The National Anti Poverty Strategy is extremely important in providing a framework within which such a re-evaluation can be carried out. The strategy gives a prominent place to the need for strong institutional structures to underpin its development and delivery. Each government department, State agency and local and regional authority is obliged to address the question of poverty in the overall strategy statements they are now required to produce, and departments will also have to produce annual statements to the inter-departmental committee setting out progress achieved over the previous year in relation to the strategy. Further mechanisms for "poverty proofing" policy decisions, including in the annual Budget, are currently being piloted.

A focus on budget day decisions regarding tax and welfare, in this as in other areas, must not be allowed to distract attention from the structural issues which must be tackled in the medium to long term. For example, issues such as early school leaving and the low entry rate to third level education among many social groups may require a much broader programme of intervention than has previously been considered. While resources must be allocated to adult education and tackling early school leaving after the event, there may be high returns to investment in early education. The lack of state investment in the under-4 age group was one of the areas highlighted by the Commission on the Family (1998). The Commission proposed an "Early Years Opportunity Subsidy" for 3 year olds, to encourage and support early education in a wide variety of settings. Cogent arguments in favour of a rebalancing of expenditure in favour of education before the official school leaving age – second level and particularly primary education – were also adduced by Tussing (1978) and remain relevant today.

TAX TREATMENT OF COUPLES

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 is relatively low in Ireland. This has been a persistent feature of the income tax system. A comparison with the

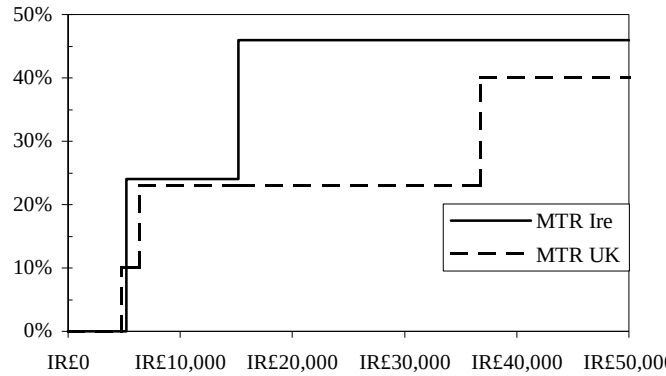
situation in the UK (Figure 2.8) shows stark differences in the marginal tax rates facing single persons at incomes between about IR£15,000 and IR£35,000. The difference is much less marked for one-earner couples, as shown in Figure 2.9. One-earner couples in Ireland face similar (and sometimes lower) 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.

The reason for this pattern is a substantially different tax treatment of couples in the two jurisdictions. Until the late 1970s, there was a similar approach in the two countries, built around the "male breadwinner" idea. This system was both unfair, and in the Irish case, unconstitutional in the bias against married two-earner couples. The Irish policy response was to move to what is known as an "income-splitting" system. This involves aggregating family income, and splitting it equally between the partners for income tax purposes. Alternatively, this can be characterised as involving full transferability not only of income tax allowances, but of rate bands as well. 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 came later, and 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 the most recent budget.

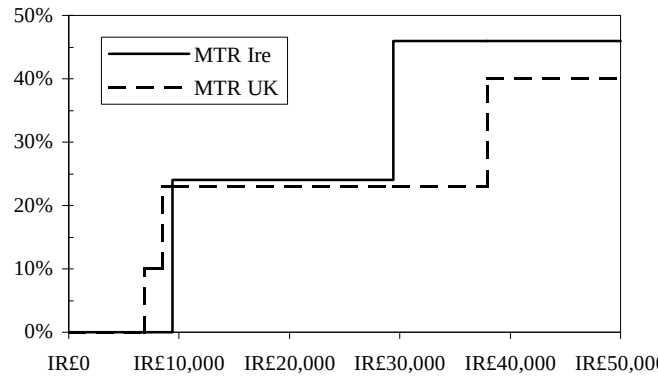
The net effect of these different policy responses is that Ireland has ended up at one extreme with respect to the tax treatment of couples, while the UK is close to the other extreme. Other countries can be found with intermediate positions. One implication of the current Irish system is that widening of the standard rate band is much more expensive in revenue terms in Ireland than in the UK. In order to widen the band by £1,000 for single persons, it must 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 is an important feature which 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.

Figure 2.8 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 2.9 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=UK0.92.

It is now time to consider a change in policy direction, introducing greater independence in the tax treatment of husbands and wives, and restricting the transferability of bands and/or allowances. Some options along these lines were considered in the recent report of the Working Group Examining the Treatment of Married, Cohabiting and One-Parent Families Under the Tax and Social Welfare Codes (1999). They drew on an initial analysis of cost and distributive effects using the *SWITCH* proposal, but this analysis was far from complete, because of the reporting deadlines involved. A more extensive analysis is currently under way, but here we focus on the responses of the Working Group, and on some conceptual issues.

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 main stated objection is by the Department of Finance, on the grounds that "the option ignores the key justification for the introduction of the existing married treatment i.e., the need to avoid unjustifiable discrimination against one-earner married households".

An example may help to illustrate why we regard this objection as misplaced.8

Consider two different couples, one with two earners, the other with one earner. Each couple has an aggregate income of £30,000, but in the case of the two-earner couple this arises from an income of £15,000 each (close to the average industrial wage). At present, the income tax liabilities of the two couples are almost identical. The only difference arises from the fact that the two-earner couple benefit from two PAYE allowances, this being one of the few non-transferable allowances. The net result is that the one-earner couple pays income tax of £5,384 per annum, as against £5,144 for the two earner couple.

Now consider the "ability to pay" principle of taxation. The one-earner couple benefits from having one partner available to manage the home and care for children. The two-earner couple, on the other hand, may have to pay for childcare costs, and has, collectively, less time to devote to managing the home and leisure activities. In terms of ability to pay, a substantially higher tax liability for the one-earner couple could be justified: this would not represent "unjustifiable discrimination".

Other objections to the introduction of more independent taxation relate to the incipient losses for those who benefit from the current system, and particularly the losses for those who are at or near retirement age, for whom a change in the ground rules might be regarded as inequitable: it may be unrealistic to expect increased labour market participation from those who have taken decisions on the basis of the current tax system over a long number of years. As recognised by the Group, there are ways of dealing with such objections. One vital element is that compensation of incipient losses is much easier in the context of general tax reductions. Another is that "grandfathering" provisions could be used to ensure that those at or near retirement age are not unfairly treated.

The Working Group report also includes consideration of the distributive implications. Here it is necessary to point out that research indicates (Callan and van Soest, 1996) that significant labour supply responses can be expected: a change in the tax system to a more independent taxation of husbands and wives would tend to increase

married women's labour market participation. Further work is ongoing in this area, but it should be noted that in the current economic context, increased labour supply from the existing population imposes fewer demands on physical infrastructure such as housing than an increase in labour supply arising from immigration.

A further complex issue arises in considering the distributive implications. As we have noted above, the "total income" of a couple can be regarded as including the value of the work done by a spouse in the home. At present, the SWITCH model can only examine the implications for the cash income distribution; but an adjustment to take account of the value of work done in the home would seem to be necessary for an adequate examination of this policy issue.

A full consideration of the economic and social issues involved in restructuring child income support and dealing with issues related to childcare is not possible in this chapter,[12] but as indicated, research into these issues is continuing. Independent taxation and increased child benefit 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 address childcare costs in an even-handed and neutral way. The usual political temptation is to have an explicitly labelled "scheme" or tax break for each of the desirable activities. The recommendations of the Expert Working Group on Childcare (1999) lean in this direction, with the use of tax relief being recommended. The Commission on the Family, perhaps due to its wider remit, shows the logic of one payment to focus resources on children.

2.6 Conclusions

As argued in last year's paper, the mechanism for uprating welfare payments and adjusting tax parameters is in urgent need of attention. The old-style conventions concerning the "opening budget" position do not provide an adequate benchmark for the assessment of policy, and should be supplemented by analyses using a wage-indexed benchmark as shown here.

Ireland and the UK now have tax treatments of couples which are extremely different. A shift in the Irish system away from its extreme position, and towards greater independence in the tax treatment of husbands and wives has many attractions, and should be considered seriously. Budgetary resources for tax and welfare should be used to compensate incipient losers from such structural reforms. In the short term, this could take the form of an increase in a new non-transferable earned income allowance (like the PAYE allowance, but given also to those in self-employment and farming). Greater attention also needs to be paid to the incentive effects of housing subsidies such as the Rent and Mortgage Supplement, given recent increases in housing costs.

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