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ANALYSIS OF BASIC INCOME SCHEMES FOR IRELAND

Tim Callan, Cathal O'Donoghue and Ciarán O'Neill

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GENERAL SUMMARY

Why Study Basic Income?

The idea of a basic income is a simple and attractive one. Under a "pure" basic income system every individual, whether employed or unemployed, would receive a basic benefit automatically and free of tax; all other income would be subject to tax at a single rate, with no allowances or exemptions. At an aggregate level, this system would replace both the income tax and the social welfare systems. At an individual level, unemployed people would see the benefit as replacing their social welfare payments, while those in employment would see it as replacing their tax-free allowances. The amount of the basic income payment might vary with age (with higher payments for the elderly, and lower payments for children) but would not depend on the earnings or employment status of the individual, or that of his or her spouse.

A key feature of a basic income system is that the benefit would be paid unconditionally to all (in much the same way as child benefit is paid in respect of all children at present). This would do away with the need to monitor "availability for work" of the unemployed. At present there are restrictions on the extent to which unemployed people can take up part-time or occasional work without loss of social welfare benefits. Under a basic income system, they would be free to take up whatever employment was available, subject only to tax at the same rate as all other citizens: the benefit they would receive would be a base on which to build. This would do away with the extreme forms of the "unemployment trap", whereby some individuals may be "better off on the dole". It would also eliminate the "poverty trap", whereby some families may actually see their disposable income fall when the family's gross earnings increase.

A basic income structure would also provide a comprehensive and automatic "safety-net" income level: it would do away with problems concerning the take-up of social welfare benefits. It would be simple to administer and to understand: there would be no means-tests or qualifying conditions in terms of social insurance contributions. In addition, it would

provide an *independent* income to all adults, including those who do not participate in the paid labour market because they are caring for children, the elderly, or others with special needs.

This report sets out a number of schemes which build on this simple idea. What tax rates would be required to finance them? What could such schemes achieve in an Irish context? What light can they shed on directions for reform of the tax and transfer systems? These are the questions explored in the paper.

Defining the Options

Despite its attractions, no country has yet adopted a full-scale basic income system. The major drawback is that there is a sharp trade-off between the level of a basic income payment and the tax rate(s) required to finance it. A number of modifications of the "pure" basic income structure have attempted to improve the trade-off between the level of the payment and the income required to finance it. Among the options considered are:

(1) Rather than pay the same amount of basic income to all adults, a scheme may pay a lower amount to couples, as does the current system, while still retaining unconditionality and a separate, independent payment to all adults. We label this compromise a *basic family income*.

(2) The tax structure may be modified to impose a high rate at lower incomes, while still doing away with the extreme forms of "unemployment trap" and "poverty trap". We label this a *dual rate* tax structure. While this may seem contrary to the idea of a progressive tax structure, the effect may in fact be *more* progressive than the current system.

(3) An alternative compromise is to leave the income support system for adults unchanged, but to institute a full *basic income for children*, by which we mean an increased child benefit payment, equal, at about £75 per month, to the current rate of child benefit *plus* the rate of child dependant additions paid with most social welfare payments.

(4) Option (3) requires a net increase in resources for child income support, financed by an increase in the standard tax rate. An alternative is to restrict the gains to high income families with children by including the increased child benefit in the income tax base. We label this option an *integrated child benefit*.

A Framework for the Analysis

In order to assess whether a basic income reform would represent an improvement on the current system, we must take account of the net revenue which the tax/transfer system must generate. At present, the tax/transfer system makes a substantial contribution towards the financing of other government expenditure: annual receipts from income tax and social insurance contributions exceed annual expenditure on social welfare by well over £1,500m. A somewhat lower figure may be appropriate for a basic income system, because of savings in other areas. For example, unconditional basic income payments to *all* young people may do away with the need for explicit educational maintenance grants and training allowances. Some savings on such expenditure are taken into account in our calculations. It may also be argued that basic income payments should be used to replace various forms of farm income support; and that the simplicity of the system might lead ultimately to substantial administrative savings. However, a substantial net contribution to government revenue must still be expected from a reformed tax/transfer system if the comparison with the current system is to be an appropriate one.

Costing Basic Incomes

This study uses the ESRI tax-benefit model to assess the cost, distributive and incentive implications of alternative basic income schemes. Much of the analysis is conducted on the basis of the 1987 situation, during which the Survey data were collected; but estimates of the costs and impact of schemes in a 1993/94 setting are made with appropriately adjusted data.

Our results confirm earlier findings (such as Honohan's (1987) calculations based on administrative statistics) that a tax rate of the order of 60 per cent would be required to finance a basic income scheme close to the lowest welfare payments in 1987 (about £35 per week). Special increases in the lowest rates of social welfare over the intervening period mean that they are now pitched at about £60 per week. Our updated analysis shows that a tax rate about 5 percentage points *higher* than in 1987 would now be required to finance a basic income at these levels: over 68 per cent for a fully individualised scheme, and 63 per cent for a basic family income. This reflects the fact that the minimum social welfare incomes are now a higher proportion of average incomes than in 1987. Dual rate options are of less interest in this context because even an initial rate of close to 70 per cent would leave the subsequent tax rate at a high level.

A basic income for children (a child benefit payment of £75 per month) could be financed by an increase in the standard tax rate of just under 7 percentage points. If child benefit were at the same time included in the income tax base, an increase in the standard tax rate from 27 per cent to just under 31 per cent would suffice.

Distributional Implications: Who Gains? Who Loses?

The precise pattern of gains and losses under basic income schemes depends on many factors: the level and age-structure of the basic income payment; whether it is an individual-based scheme or a basic family income; the tax structure; and the tax rates required to finance the scheme. But some common themes emerge from our analysis of gains and losses under the schemes.

Under all the schemes considered there are substantial numbers of gains and losses. Families with children tend to gain, while single persons tend to lose. Lone parents tend to lose because of the loss of the special status accorded them under the current tax and social welfare systems. For a given family composition, those with higher incomes tend to lose, and those at the bottom of the income distribution tend to gain. We can combine these two perspectives by considering the effects on the distribution of income, adjusted for family size and composition. Most schemes show gains and losses at each level of the income distribution, but with gains outweighing losses at the bottom, and losses outweighing gains at the top. While the aggregate gains and losses balance out in money terms, the number of "tax units" (single persons or couples, together with their dependent children) who gain is often lower than the number who lose.

Incentive Issues

One of the major advantages claimed for a basic income system is that by improving the incentive to work it would unleash a dynamic leading to increased employment. Our analysis deals with the first part of this claim: the issue of whether basic income structures, appropriately costed, would improve the incentive to work. No single measure can capture all elements of work incentives. We would argue, however, that if a positive dynamic is to be unleashed it must operate on the balance of rewards between income in employment and income out of work. This is conventionally measured by a replacement rate, which measures net disposable income out of work as a proportion of net income when at work. The "unemployment

trap" involves replacement rates of over 100 per cent; but high rates, in the region of 80 to 100 per cent, can also reduce the chances of jobs being offered and taken up.

We set out measures of the distribution of replacement rates for the unemployed under the actual 1987 and 1993 systems, and under the various basic income schemes. We found that some of the basic income options were able to eliminate the "unemployment trap" and greatly reduce the incidence of high replacement rates. But basic income schemes with the highest tax rates had less impact on the balance of incentives. The current system has tax and PRSI exemptions, which, together with the Family Income Supplement (FIS), tend to improve in-work incomes for families with children. The basic income structure avoids the withdrawal of benefit, but imposes a high tax rate - often upwards of 60 per cent - from the very first pound of earned income.

The rate of take-up of FIS is a key issue in establishing whether a reform represents progress on the current situation. Improvements in FIS between 1987 and 1994 have more than doubled expenditure on the scheme and have almost doubled the numbers in receipt. But take-up of the scheme appears to be low, and experience in the UK suggests that there are limits on the extent to which take-up can be improved. The reform options considered here are able to overcome any take-up problems. Basic income for children, and the option of an integrated child benefit can be assured of almost 100 per cent take-up; and could be financed by relatively modest increases in the standard tax rate. Our analysis suggests that this could represent a considerable improvement on the current situation with regard to work incentives.

Conclusions

What light does our analysis shed on directions for reform of the tax/transfer system? It is clear, to begin with, that a basic income system is not a panacea. The tax rates required to finance such schemes are highly sensitive to the level of payment involved, in relation to other incomes in the economy. If the income guarantee is to be close to that provided by the current system, and is to grow in line with other incomes, then tax rates of the order of 60 per cent or more would be required to finance a basic income. Tax rates of this magnitude would be likely to frustrate the hoped-for dynamic effects on work incentives and employment. Options such as a basic income for children and an integrated child benefit seem to be able to achieve many of the advantages of the more radical schemes without the attendant high tax rates.

Chapter 1

INTRODUCTION

1.1 Context of the Study

Many people see a fully integrated tax/transfer system, with a basic income paid unconditionally to all citizens, as the ultimate goal for reform of the income tax and social welfare systems. If this is the case, then basic income can serve as a guiding light in the reform process. Others regard the costs of basic income schemes as posing an insuperable obstacle to their achievement. If this is true, then attempting to use a full basic income as a guidepost may lead the reform process to founder. In this study, we explore a number of basic income options to see what costs are involved, the rates of taxation required to finance them, and some of the likely distributive and incentive implications. This information can be used to assess what long-term and short-term roles such options can play in guiding reform of the tax and welfare systems.

The structure of the report is as follows. In the remainder of this chapter, we outline briefly the current system of taxes and transfers, noting some of its problems. Chapter 2 clarifies the structure of the different basic income options which are to be considered in our analyses. Chapters 3 to 6 set out the empirical analyses of the basic income schemes based on the ESRI microsimulation model of the tax and welfare systems. Because the Survey data on which our analysis is based refers to 1987, our initial exploration of the costs, distributive and incentive effects of the different schemes is undertaken in that context. Chapter 3 establishes the costs involved, and the tax rates required to finance them under different assumptions. The distributive impacts of the different schemes are analysed in Chapter 4. The gains and losses at different income levels, and the distribution of gains and losses across family types are examined. In Chapter 5 we turn to the impact of the alternative reforms on incentives, focusing in particular on the impact which they would have on the replacement rates for those currently unemployed.

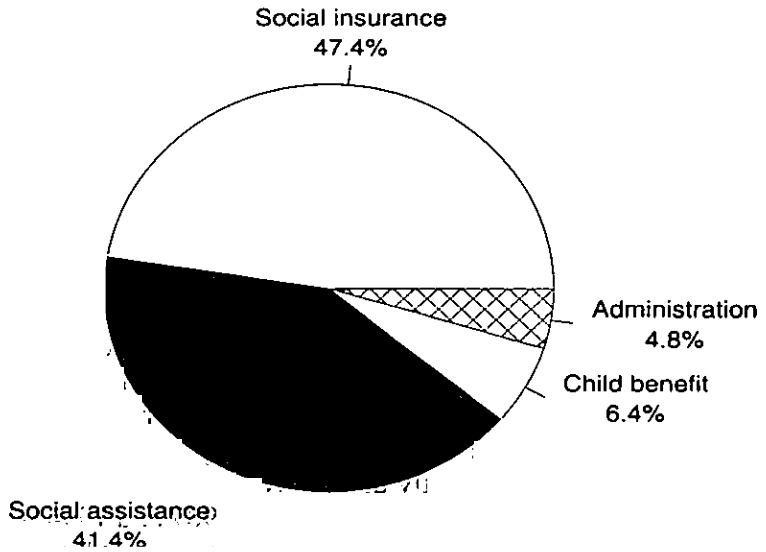
Chapter 6 sets out the main changes between 1987 and 1994 which are relevant to the consideration of basic income reforms and outlines the ways in which the model-based analysis attempts to capture these changes. Some

of the critical issues identified by the earlier chapters are then analysed in a more up-to-date context. The final chapter draws together the main findings and conclusions.

1.2 The Current Tax/Transfer System: Outline and Problems

Total expenditure in the social welfare system was more than £3,600m in 1993. Close to half of this was spent on income support through social insurance schemes; over 40 per cent on social assistance schemes; just over 6 per cent on child benefit; and less than 5 per cent on administration.[1] The key characteristics of the social insurance schemes are that entitlement to benefit depends essentially on individual circumstances[2]; depends on contingencies such as old age, illness and unemployment rather than income; and is linked to past contributions, which in turn depended on the nature and extent of an individual's employment experience.

Figure 1.1: *Social Welfare Budget Shares, 1993*



[1]For a detailed description of the system, and its historical development, see the Commission on Social Welfare (1986).

[2]The amount of payment may depend on a spouse's earnings, since the 1987 equal treatment provisions.

For short-term benefits (such as disability or unemployment) the contribution test was based principally on the recent past: it is on the number of weeks for which contributions were paid or credited in a recent 12 month period.[3] For long-term benefits (such as old age contributory pension) a lower number of contributions per year is required, but averaged over a much longer period or in principle, since the first contribution was paid, and therefore covering in many cases an entire labour market career. While some *paid* contributions are required for all schemes there are also extensive provisions for *credited* contributions which maintain entitlements when an individual is not actually paying a contribution.

The social assistance schemes are also related to particular contingencies, including old age and unemployment.[4] But entitlement to benefit depends on a *means test* which includes an assessment of the means of a spouse, and in some cases, the means of other household members.

Child benefit is a universal payment made in respect of all children aged under 16, or aged under 18 and in full-time education. No contribution conditions are required and no means test is applied.

The *P*ay *R*elated *S*ocial *I*nsurance system (PRSI) requires contributions from employees and employers: it raised revenue of almost £1,500m in 1993. The most common rate of contribution in the private sector is 7.75 per cent for employees and 12.2 per cent for employers, which includes a health contribution and an employment and training levy. This rate is payable in respect of employment in the A1 category up to an income ceiling of £20,900 per annum for employees and a ceiling of £25,800 for employers. Employees earning less than £173 per week (£9,000 per annum) are not required to pay a contribution, but those with earnings just over that limit must pay the full rate. The rate of contribution for employers and employees can vary over 18 different private sector classes and sub-classes; 12 public sector categories; and 3 self-employment categories. In addition, there are a number of thresholds which affect the rate payable for each of these groups.

[3] Technically in the "governing tax year" which is usually the last complete tax year (ending in April) before the start of the current calendar year. So in September 1994, a claim would depend on contributions during the year ending April 1993.

[4] There is provision for a means-tested payment in respect of long-term illness: Disabled Person's Maintenance Allowance, administered by the health boards. But there is no explicit means-tested payment in respect of short-term illness: individuals without social insurance cover must rely on the safety net provided by the Supplementary Welfare Allowance scheme, also administered by the health boards.

Income tax revenue amounted to over £3,700m in 1993. A personal allowance of £2,350 is available to single persons, with double this amount for married couples and to lone parents with children. There is in addition a system of exemption limits, which includes additions in respect of children. The exemption limit for a married couple is £7,200; a couple with four children can earn up to £9,400 free of tax. Above these limits, tax applies at a 40 per cent rate until the tax bill is equal to that which would apply at the standard 27 per cent on income above the couple's total tax free allowances. There is a wide range of other allowances, reliefs and exemptions. The standard rate of tax is 27 per cent which applies to the first £8,200 of taxable income (£16,400 for a couple); and 48 per cent on all other income.

A key feature of the current tax/transfer system is that it generate a substantial net revenue which contributes to the financing of other government expenditures. Income tax revenue and social insurance contributions by employers and employees exceed social welfare payments by over £1,500m per year at present.

The general structure of the social welfare system owes much to the Beveridge plan in which social insurance would provide the bulk of income support, with social assistance playing a residual and relatively minor role. An economy operating at or close to full employment was needed to underpin this vision. The re-emergence of mass unemployment has put such systems under budgetary pressure in many countries; Ireland is no exception, with its particularly high level of unemployment. Changes in the nature of the labour market have also tended to reduce the efficacy of such systems in achieving anti-poverty objectives. Webb (1992) documents how most of those in low income groups in the UK do not receive social insurance. This arises from gaps in coverage, due in large part to the application of the contribution condition. In the UK context, some of these gaps can be expected to become greater in the future, with greater movement into and out of the labour market and trends towards greater marital instability.

The Irish policy response has been rather different, tending to widen the coverage of social insurance. For example, cover has been extended to include deserted wives, part-time workers earning over £25 per week, and most recently to widowers. The extension of the system to provide credits for those caring full-time for young children has also been on the policy agenda, while in the context of preparations for a divorce referendum, there may also be a widening of the coverage to a surviving spouse and a surviving ex-spouse. While such extensions could help to avoid the

growing gaps in coverage evident in the UK, they do raise questions about the long-term funding of the system. If the coverage of the system is expected to widen substantially, it may be better, as Honohan (1987) argues, to plan for universal coverage on a fully costed basis.

The separate and combined effects of the current tax and social welfare systems can create important disincentives to the generation of increased employment. Table 1.1 outlines some of the disincentives which can be identified in the current structure. Some of these are discussed in more detail in Chapters 5 and 6. Here we simply note that the complexity of the social welfare, tax and PRSI systems can give rise to many forms of withdrawal of benefit which contribute to a high tax rate. For this reason, a simple system with one or two tax/benefit withdrawal rates, limited to well below 100 per cent, is often seen as an attractive alternative.

The current tax/transfer system has also been criticised for providing a level of payment for many schemes which is regarded as inadequate. The report of the Commission on Social Welfare (1986) gave primacy to this issue. There is a tension between the approach of this Commission, which sought increased payment levels funded by widening of the tax and social insurance base, and the approach of the Commission on Taxation (1982), which recommended reductions in tax rates funded by widening of the tax base. Given the net resources available to or required from to the tax/transfer system,[5] the tax rates required to fund the system are particularly sensitive to the level of payment, as a percentage of average income. There is, therefore, a tradeoff between the level of the income guarantee provided by the tax/transfer system, and its impact on incentives and employment. This study seeks to establish whether a fully integrated scheme known as a *basic income* could improve the trade-off which can be achieved. For example, could it provide a similar income guarantee to that currently in operation, but with less damage to work incentives; or provide a higher and/or more effective minimum income guarantee with no greater damage to incentives and employment.

[5]As seen above, the net revenue generated by the current tax/transfer system is over £1,500m per annum.

Table 1.1: *A Taxonomy of Disincentives under Current Tax and Social Welfare Rules*

Label	*Description*	*Potential causes*	*Groups most affected*
Unemployment trap	Individual's net income is higher when unemployed than when in (full-time) employment.	Size of personal unemployment payment; size of child and adult dependant payments when unemployed which are withdrawn when employed; low (hourly) pay; amounts of tax and PRSI payable at low rates of pay	Married persons with large families
High replacement rates	Individual's net income when unemployed is a high proportion of income when employed (full-time) and/or absolute gap between income in and out of work is small.	As for unemployment trap	Married persons with large families
Poverty trap	Net disposable income (after tax and social welfare benefits) of a family is reduced by an increase in gross earnings	Withdrawal rate of FIS, coupled with marginal relief rate of income tax; withdrawal of medical card; differential rent scheme for local authority tenants	Married men *and* married women
Medical card withdrawal	An increase in gross income which makes a family ineligible for a medical card can leave the family worse off.	The medical card involves a subsidy of health care costs which (though difficult to value precisely) is given in total or not at all.	Low paid employees
High tax-cum-benefit withdrawal rates	An increase in a family's gross earnings is taxed at a very high rate; a less severe form of the poverty trap	Include same factors as for poverty trap, though marginal relief and/or FIS may not apply	Married men *and* married women
Dependant addition withdrawal	Family income falls if the spouse of the recipient of a contributory benefit takes on a part-time or low-paid job; spouse faces high effective tax rate on earnings.	Full withdrawal of the adult dependant addition (ADA) and half of child dependant additions (CDAs) if spouse earns more than £55 per week	Spouses of recipients of unemployment benefit, disability benefit and invalidity pension

Label	*Description*	*Potential causes*	*Groups most affected*
High *average* tax rates on employment	The average direct tax rate (income tax plus PRSI) on a job can be of the order of 40 to 55% for a potential second earner; or 30 to 40% for a single person	Apart from PAYE and PRSI allowances, the marginal rate on the initial earnings of the spouse is, in effect, equal to the marginal rate on the last pound earned by the higher earner. With a narrow standard rate band, the higher rate soon applies	Married women and single people: these tend to be the most responsive elements of the labour supply.
High *marginal* tax rates on employment income	Additional income can be subject to tax at 51.25%, to 55.75%	Top rate of tax; 3.25% in health contribution and levies; and over a narrow range of income, 5.5% PRSI	Single people and 2-earner couples on average wages high earners
PRSI exemption kinks	An increase in gross earnings from below £60 per week to a figure above £60 per week can lead to a drop in net income, or attract a very high implicit tax rate.	No PRSI is payable on earnings below £60; but those earning above £60 must pay PRSI on their full income, including the slice below £60	Part-time workers, low-paid workers
Income levy exemption kink	An increase in earnings from below £9,000 per annum to a figure above that limit can lead to a drop in net income or attract a very high implicit tax rate	No levy is payable on earnings below £9,000 p.a.; but those earning above that figure must pay on their full income, including the slice below £9,000 p.a.	Employees earning close to £9,000 per annum
UA means test	100% benefit withdrawal rate earnings of spouse, or on irregular/part-time earnings	1. Pound for pound withdrawal of benefit with respect to net earnings of spouse, after initial concessions 2. Current position on irregular/part-time earnings of UA recipients may give rise to high withdrawal rate.	UA recipients and their spouses
Lone Parents' Allce means test	100% benefit withdrawal rate on earnings of lone parents	Pound-for-pound withdrawal of benefit with respect to increases in net earnings	Single mothers, widows, separated spouses

Note: 1. In the interests of brevity, the term "effective tax rate" is used as synonymous with "tax-cum-benefit withdrawal rate".

Chapter 2

BASIC INCOME: DEFINING THE OPTIONS

2.1 Introduction

One of the attractions of a basic income is its simplicity; but the terminology surrounding variants of the basic income is far from clear. Some writers regard terms such as "negative income tax", "demogrant" and "guaranteed basic income" as interchangeable,[1] while others wish to reserve the term basic income only for the purest form of the scheme.[2] This makes it difficult to find a clear correspondence between the terms currently in use and the key features of the various proposals. In our view, the essential element of a basic income scheme is that the amount paid does not depend on income or work status: it is, in this sense, unconditional. We therefore use the term basic income to refer to a range of schemes which share this feature. Such schemes can differ in several important ways. In Section 2.2, we set out the key aspects on which tax/transfer structures can be classified. Section 2.3 describes a "pure" basic income scheme in terms of these aspects, and the advantages claimed for it. Section 2.4 describes some variants of this scheme, in terms of the categories already established.

2.2 Key Aspects of Tax/Transfer Systems

Table 2.1 (adapted from Dilnot and Webb, 1991) lists features which must be defined for any reform proposal, including basic income schemes. The *basis of entitlement* under the current system includes a mixture of PRSI contributions (for insurance benefits) personal contingencies (for both insurance and assistance benefits) and a "work test"[3] for unemployment benefit and unemployment assistance. Entitlement under basic income schemes is not related to contributions, contingencies, income or a "work test". It may, however, be related to either residence (with length of residence being used to define the extent of pension entitlement) or citizenship, or some combination of the two. This distinction between citizenship and residence is potentially important in Ireland, particularly in

[1]For example, Honohan, 1987.

[2]For example, Parker, 1994.

[3]The abbreviated term for a test of availability for work, which requires that applicants are *not* engaged in (full-time) work.

a context in which EU citizens can move freely between member states, and Irish citizens are particularly mobile.[4] In our empirical analysis, however, we simply treat the resident household population as the relevant one for the purposes of the present study.

Table 2.1: *Key Features of Tax/Transfer Systems*

Feature	*Existing system (as of July 1994)*	*Alternatives under Basic Income*
Basis of entitlement	Contingencies; contributions; income.	Citizenship and/or residence
Unit of assessment	Mixed: individual, family and household elements	Family or individual
Period of assessment	Mixed: current for social welfare; annual for income tax.	Current or annual
Level of payment	£58.90 to £75.70 p.w. personal rate; £36.60 to £51.00 p.w. adult dependant	See Chapter 6.
Structure of effective tax rates	Complex; high initial rates	Flat rate; dual rate.
Financing	Income tax; PRSI	See Chapter 3
Administrative structures	Separate agencies (DSW, Revenue Commissioners, Health Boards)	Single agency

The *unit of assessment* under the current system varies. The tax system is essentially based on a family unit, but has some individual elements; the social welfare system has elements of individual, family and household bases of assessment. A fully integrated tax and welfare system would have the same unit of assessment for tax and welfare purposes. Some would claim that the term "basic income" implies an individual basis of

[4]For example, a favourable treatment of young people might attract citizens of other EU states; a basic income payment which is high relative to UK social security entitlements might induce some return migration; and increased taxes on those in employment in Ireland might stimulate some emigration.

assessment, but others (e.g., Brittan and Webb, 1990) explore a basic income on a family unit basis. We allow for either possibility in our analysis.

The *period of assessment* also differs as between the current income tax and social welfare systems. The tax system operates on the basis of annual income, while the social assistance, and some parts of the social insurance system, deal largely with current weekly income and current needs. If a basic income is financed by a single-rate tax system, the distinction may become irrelevant; but if more than one rate is envisaged, the period of assessment again becomes an issue.

The *level of payment* for those with no income from other sources is a critical feature of all tax/transfer schemes. The *structure of effective tax-cum-benefit withdrawal rates* under the current system is very complex, but for social welfare recipients, it involves high initial rates of benefit withdrawal with respect to non-social welfare income. In a pure basic income scheme, a single tax rate applies to all other income, but variants with a high initial rate, or with several rates, can also be considered.

The *financing* of reforms is obviously a critical feature. We must know whether PRSI is to continue, what income base is to be used for tax (and PRSI, if relevant), and what other resources, if any, can be used to finance the reform. Two approaches to the costing of reforms can be distinguished. One approach is to specify in advance the rate or rates of tax which would apply in the reform, as well as the level of benefit payment. The net exchequer cost (or gain) can then be derived: but the question then arises as to how this cost is to be financed. A second approach is to specify in advance what resources are available besides income tax, along with the level of benefit: the rate of tax required to bridge the gap can then be directly determined. This approach is preferable in the present context, where many different options are to be considered.[5]

Reforms may also involve changes in *administrative structures*. Taxes and benefits are now administered by separate agencies, but a fully integrated tax-benefit system might be administered by a single agency. Distinctions between in-work and out-of-work benefits, and between contributory and non-contributory benefits could also disappear under a basic income system. While there would be significant transitional costs in the short run, these simplifications could lead to substantial savings in costs of administration and compliance in the longer term.

[5]In some cases, the amount of resources available to the tax-transfer system may depend on the structure of the system; this issue will be taken up again in the next chapter.

2.3 A "Pure" Basic Income

We can define a pure basic income scheme as one in which a basic benefit is paid to all individuals,[6] replacing all existing social welfare schemes, with a single tax rate on all other income replacing the existing income tax system. The basic benefit is paid automatically, unconditionally and free of tax to all adults: there is no work test or means test to be satisfied. The basic benefit may be age-related, at least to the extent that the rate for adults may be higher than that for children. An individual basis of assessment would apply. The period of assessment would not be of central importance, given a single tax rate, so we may think of the system as operating on current weekly or monthly income. A single agency would be sufficient to administer the system, with payments being made automatically to all individuals. The precise way in which this is done is not central to the impact of the scheme, but it is important that the payment be made automatically rather than requiring a claim from the individual.

Figure 2.1 illustrates the relationship between earnings and net disposable income which this system could give rise to, with an illustrative basic payment of £50 per week and a tax rate of 62 per cent.

This "pure" form of basic income has a number of attractive features:

(1) It eliminates "poverty traps" and "unemployment traps" i.e., tax-cum-benefit withdrawal rates on earnings in excess of 100 per cent. Because the basic income payment would be unconditional, it would not be withdrawn from those who are unemployed if they took up employment: it would instead provide an income base on which they could build, subject only to the single tax rate applying to all other income.

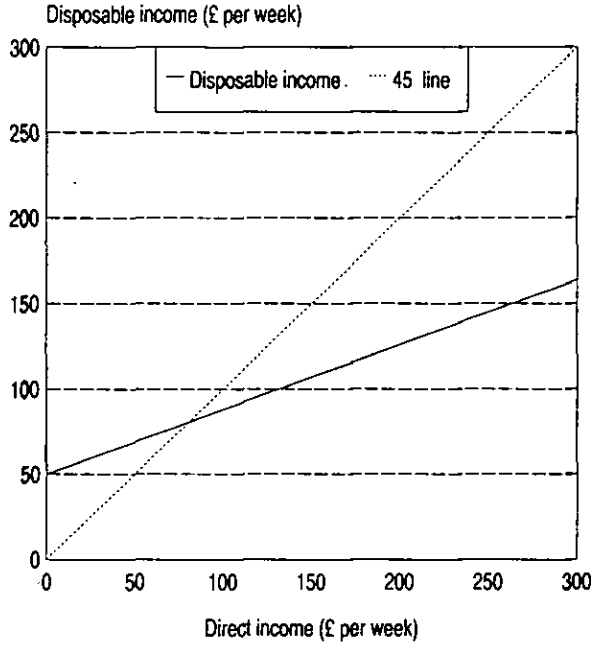
(2) It provides a comprehensive and automatic "safety-net" income level: it does away with problems concerning take-up and welfare stigma.

(3) It is simple to administer and to understand. It does away with the need to monitor the availability for work of the unemployed, the other contingencies relevant to social welfare benefits, and to keep track of PRSI contribution records.

[6]As noted above, we do not discuss further the issue of whether citizenship and/or residence would be the basis of entitlement.

(4) It provides an independent income to all individuals, including those who do not participate in the paid labour market because they are caring for children, caring for elderly relatives and others with special needs. There are no means-tests or qualifying conditions.

Figure 2.1 *A "Pure" Basic Income*



Notes: 1. Illustrative basic benefit of £50 per week, tax rate 62 per cent.
2. The intersection of the 45° line and the disposable income schedule indicates the "break-even" level of income, at which income *before* taxes and transfers is equal to income *after* taxes and transfers. Those at lower incomes have disposable incomes above the 45° line and are net recipients of transfers; those with higher incomes have disposable incomes below the 45° line and are net taxpayers.

In our empirical analysis, we explore the trade-off in schemes of this type between the level of the basic payment and the tax rate required to finance it. This information is essential if we are to judge whether the basic income structure can achieve an acceptable trade-off between these elements, and retain all the advantages noted above. If resources are

insufficient to permit this, some compromise on the "pure" form of the scheme may, however, be able to retain many of the advantages. It is to such variants of the pure basic income that we now turn.

2.4 Variants of Basic Income

One compromise on the pure form of basic income which can still achieve many of the advantages claimed for it is to have a family unit basis of assessment, which takes account of the economies of scale in living together as a married or unmarried couple. Currently, the social welfare rates for "adult dependants" are approximately 60 per cent of the personal rate. Where a pure basic income might pay, say, £60 per week to all individuals, irrespective of marital or cohabitation status, this would involve an increase in income for married couples currently on social welfare. A *basic family income* might pay instead £60 per week to individuals who were not cohabiting, and £96 per week to married or cohabiting couples, which could be paid as £48 per week to each member. The basic family income would still be unconditional as regards the work status of all individuals. It could retain most of the advantages set out in Section 2.3 above, including the payment of an independent income to those (mostly women) who are out of the labour market because of their role in caring for children or others. It would also clearly involve a substantially lower cost, and, other things being equal, require a lower rate of tax to finance the reform. What is lost in moving from the pure scheme is that the amount of the basic income would depend on cohabitation status, so that monitoring of household living arrangements would remain a feature of the tax/transfer system. In our empirical analysis we explore the possible importance of this issue by costing basic income schemes on both an individual and a family unit basis.

A second compromise which can be investigated is to move from a single rate of tax to a dual rate structure, with a higher initial rate of tax acting to withdraw the basic benefit more quickly.[7] Parker (1994) refers to schemes of this type as fully or partially withdrawable basic incomes,

[7]At first sight, this may seem to conflict with commonly held notions as to the desirability of progressivity in the tax/transfer system. But the effect of this system could be a *greater* redistribution towards low incomes than under other systems, depending on the level of the basic payment. A progressive marginal rate structure would do little to reduce the "standard" rate of tax required to finance a basic income.

depending on whether the higher tax rate applies until the benefit is fully withdrawn,[8] or ends at a lower level of income, before the basic benefit is fully withdrawn.

The Honohan scheme

Honohan (1987) examined a scheme which involved age-related basic income payments and a two-tier tax system. By comparison with simpler versions of basic income, the specific features of this scheme limited the extent of redistribution towards large families and allowed a low *marginal* tax rate on higher incomes (although the *average* tax rate, net of transfers, increased with income).

The basic income payments were pitched just above the lowest social welfare payments (except for the 18 to 25 age group). Adjusted to 1986/87 prices they were:

Under 18 years	£13.65
18-25 years	£26.25
26-65 years	£36.75
Over 66	£52.50

A key feature of the financing of the scheme was that, in addition to a basic rate of tax of about 40 per cent, was to be supplemented by an additional tax. This *supplementary tax* was equal to 27 per cent of income, with the total basic income received by the family as a ceiling. In effect, therefore, a couple with two children would face a marginal tax rate of over 67 per cent unless their income was above £19,000 per annum. (If instead, a single tax rate applied to all income, that rate would have been over 64 per cent.)

[8]Benefit can be regarded as "fully withdrawn" when tax payments equal the benefit level; in a unified system "benefit withdrawal" is simply a convenient label for a high initial tax rate. While the term "fully withdrawable" may seem to imply some diminution of the unconditionality of the benefit, this is not in fact the case: benefit continues to be paid unconditionally to all.

Honohan's (1987) variant of this dual-tax rate approach is different (see box above). The higher initial tax rate can be regarded as being made up of the "standard" rate, plus a "supplementary tax rate". The higher initial tax rate applies until the *supplementary tax* equals the basic benefit: thus it still applies above the "breakeven point" at which *total* income taxes equal the amount of the basic benefit.

Each of these structures is designed to limit what may be thought of as the "standard" rate of tax. But they involve different trade-offs between the numbers of people facing the higher tax rate and the height of the "standard" tax rate. For example, more people would face the "higher" rate of tax under the Honohan scheme than under a fully withdrawable basic income. The relationship between income before and after tax and transfers for a "fully withdrawable" and "Honohan" scheme are illustrated in Table 2.2 and in Figures 2.2 and 2.3, with tax rates (and the benefit level) chosen purely for illustrative purposes.

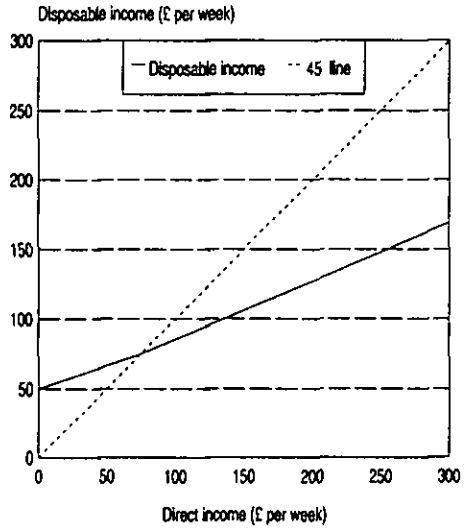
Table 2.2: *Basic Income under Alternative Tax Rate Structures*

	Income after taxes and transfers under:	
Income before tax and transfers	*Fully withdrawable basic income*	*Honohan structure*
£ per week	*£ per week*	
0	50	50
25	58	58
50	67	67
75	75	75
100	85	83
150	106	100
200	127	116
250	148	143
300	169	171
500	253	285
1000	463	570

Note: Basic benefit of £50 per week and initial tax rate of 67% for each scheme. Under the fully withdrawable scheme, the subsequent tax rate is 58%, but the Honohan scheme allows a lower subsequent tax rate, assumed in the example to be 43%. Figures rounded to nearest pound.

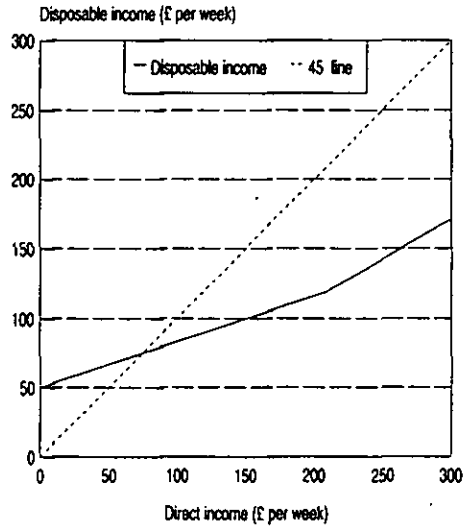
In Table 2.2, the benefit level (£50 per week) and the initial tax rates (67 per cent) are held constant. The difference between the two schemes is the income level at which the higher rate ceases to apply, and the subsequent tax rates. Under a fully withdrawable basic income, the higher tax rate ceases to apply at £75 per week, where total income tax paid (at 67 per cent of direct income) is exactly equal to the amount of the basic benefit. Under the Honohan structure, the higher tax rate continues to apply until £208 per week, where the *supplementary* tax (at 24 per cent of income) is equal to the amount of the basic benefit. This allows a lower tax rate (43 per cent in the example) to apply to incomes above that level.

Figure 2.2 *A "Fully Withdrawable" Basic Income*



Note: Basic benefit of £50 per week, initial tax rate 67%, subsequent tax rate 58%.

Figure 2.3: *Honohan's (1987) Dual Tax Rate Basic Income*



Note: Basic benefit of £50 per week, initial tax rate of 67%, subsequent tax rate of 43%.

A third form of compromise which seeks to retain the advantages of a basic income while avoiding the high tax rates often associated with pure basic income schemes is to pay a *partial basic income*, i.e., a payment which is not intended to be adequate in itself for living expenses, but which is "topped up" by social welfare payments. Some regard this as a "stepping stone" to a full basic income, but others who do not see a full basic income

as achievable may regard it as a worthwhile reform in itself. The term partial basic income is generally used to refer to schemes in which the amount of the basic benefit payable for both adults and children is relatively small. But it is useful to separate out the adult and child components of a basic income.

The current system of child benefit can be regarded as a "partial basic income for children", with the top-up payments provided by child dependant additions to social welfare recipients. In our analysis we consider a *partial basic income for adults*, leaving the existing system of child income support in place. We also consider a full *basic income for children*, at a rate of over £17 per week, approximately equal to the combined payment for child dependant additions and child benefit. This option involves consolidating the resources currently used in various forms of child income support (mainly child dependant additions to social welfare payments, but also including child additions to the income tax exemption limits and Family Income Supplement payments) into the unconditional child benefit payment. In our analysis, the additional resources required to finance this option are gathered through an increase in income tax. A basic income for children can also be regarded as either a stepping stone to a full basic income scheme, or simply an option worth considering in its own right.

One further option which has much in common with a basic income for children is a *integrated child benefit*, under which, as with a basic income for children, child income support is concentrated into a single child benefit payment (equal, in our analysis, to the combined rate of payment of child dependant additions and child benefit), but with part of the finance for this increased child benefit coming from its inclusion in the income tax base, as well as an increase in the standard rate of income tax. This would limit the extent of the redistribution from childless people to those with children, by clawing back some of the gains from higher income families.

The major issues with all these forms of partial basic income (including the basic income for children, and the integrated child benefit) are what level of partial basic income can be achieved, what tax rate or rates are required to finance it, and what this package actually achieves in terms of altering the balance between incomes in and out of employment. These issues are investigated in Chapters 3, 5 and 6.

Chapter 3

COSTING BASIC INCOMES

3.1 Introduction

If workable basic income proposals are to be developed it is essential that they be carefully costed. In this chapter, we set out the framework within which we arrive at costings for alternative basic income schemes, and discuss the results of applying this framework to particular policies in a 1987 context. This gives a good insight into the trade-offs involved which is still relevant; more up-to-date costings are considered in Chapter 6.

The issue of what resources might be available to fund a basic income is an important one. In the next section, we set out the resources which are taken into account in the present analysis, and the methods used to cost alternative basic income schemes. The detailed options considered in the costings are described in Section 3.3, and the tax rate(s) required to finance them are then examined. They include basic income schemes on both individual and family bases of assessment, with single or dual tax rates, and partial basic income schemes for adults; we defer consideration of basic income for children and a integrated child benefit until Chapter 6. Section 3.4 assesses the results, and considers some of the broader issues which arise in attempting to finance a basic income. This includes consideration of the possible impact of additional resources which might be available to fund a basic income.

3.2 Methodological Issues

Estimates of the cost of simple basic income schemes can be derived on the basis of administrative statistics: Honohan (1987) provided such estimates for a number of alternative schemes. In this chapter, however, we take a different approach: we use the ESRI tax-benefit model, based on a large-scale national survey of households undertaken in 1987, to simulate the effects, including the net cost, of alternative basic income reforms. Essentially, this involves calculating the social welfare entitlements and tax liabilities of each of the households in the sample under the rules current in 1987 (or, later, in 1993/94) and then the entitlements and liabilities under a basic income reform. This allows us to estimate not only the aggregate revenue and expenditure under each system, but also the individual gains and losses of each household.

SWITCH: The ESRI Tax-Benefit Model

Changes in the level and structure of taxes and benefits can have complex and far-reaching effects on the incomes and effective tax-cum-benefit withdrawal rates of different families. The ESRI tax-benefit model simulates the amounts of social welfare entitlements and tax liabilities for a representative sample of households in order to capture the effects of ***S***ocial ***W***elfare and ***I***ncome ***T***ax ***C***hanges on ***H***ouseholds (hence its acronym, ***SWITCH***). Details of the model's structure and operation are given in Callan (1991) and Callan and O'Neill (1993). These studies show that the 1987 survey data on which the model is based have good coverage of the income tax base and social welfare client population.

The model first estimates the social welfare entitlements and tax liabilities of each family in the nationally representative household survey under the actual tax and social welfare policies in force in 1987. Then, the same calculations are undertaken for a policy reform - such as a basic income. This allows us to identify the gains and losses for each family. If a reform is to be self-financing, the gains and losses for individual families must balance out. The modelling process allows us to identify tax rates which, given the available resources, ensure that reforms are "revenue neutral"; and gives us a picture of the overall effects of the reform on different types of family and at different points in the income distribution.

There is, of course, a margin of error attached to the estimated tax rates produced by the model - as, indeed, with estimates based on administrative statistics. Differences between model-based estimates and administrative statistics at quite detailed levels are to be expected. Some of these may be offsetting: it is the overall effect on the estimated tax rate or rates which is of greatest importance. Model-based estimates of a single tax rate required to finance the benefit levels set out in the Honohan (1987) scheme are within 1 percentage point of Honohan's estimates, which are based on administrative statistics. This reinforces confidence in the usefulness of the model for costing more elaborate schemes.

This approach has a number of advantages: it facilitates consideration of quite complex variants on the pure basic income approach; it allows estimates of the extent and nature of gains and losses based on the actual population rather than supposedly typical households; and it permits additional analysis of the effects on incentives, including replacement rates. The representativeness of the ESRI data, and its general suitability for the analysis of tax/transfer policy changes has already been established (see box). Additional checks confirm that the model produces similar overall costings to those in the Honohan (1987) study.

Basic income schemes aim to provide an automatic and unconditional income support to *all* individuals, with a tax being levied on all other income. In order to cost such schemes, we need to specify what existing income supports are being wholly or partly replaced, and which allowances and/or reliefs are to be abolished as part of the restructuring of the income tax system. Table 3.1 sets out the major items taken into account in our analysis of basic income in a 1987 context.

Table 3.1: *Resources Included in Model-Based Analysis*

Category	*Model-based estimate*
	£m per annum
Social welfare expenditure[1]	2,365
Income tax base[2]	9,423
Grants and scholarships to 3rd level students: estimated maintenance element	18
Training allowances[3]	44

Notes: 1. Schemes included are detailed below.
2. Includes the present income tax base plus abolition of personal allowances, age, widowed and lone parent allowances, general and age exemption limits, PAYE and PRSI allowances. Social welfare income currently included in the income tax base is no longer relevant, as it is replaced by a non-taxable basic benefit. Estimates of the "revenue forgone" by various allowances are dependent on the tax rates in force; for basic income analyses, where the tax rate is to be determined, it is more helpful to think in terms of the total income tax base.
3. Identifiable in the ESRI 1987 Survey; see text for discussion.

The social welfare expenditure of £2,365m per year includes all the major cash transfers administered by the Department of Social Welfare and the Health Boards:

Old Age Contributory and Non-Contributory Pensions
Widow's Contributory and Non-Contributory Pensions
Unemployment Benefit and Unemployment Assistance
Disability, Disablement and Injury Benefit
Invalidity Pension
Maternity Allowance
Disabled Person's Maintenance Allowance
Domiciliary Care Allowance
Unmarried Mother's Allowance
Deserted Wife's Benefit and Allowance
Single Woman's Allowance
Family Income Supplement
Child Benefit

In addition, it is assumed that the basic benefit replaces standard weekly payments under the Supplementary Welfare Allowance (SWA) scheme. One-off payments and additional payments for special needs (such as heating or diet) are assumed to continue. Expenditure on rent and mortgage supplements under the SWA scheme, and on rent subsidies to local authority tenants is not taken into account. Administrative data for the amounts paid in rent and mortgage supplements in 1987 is limited (Commission on Social Welfare, 1986) but suggests that the aggregate amounts were, at that stage, in the region of £5m per annum. Information on local authority rent subsidies is also limited, but could be significantly greater. It should be noted, however, that each of these payments would have constituted an addition to the lowest rates of social welfare benefit then in force. Thus, when costing a basic income which maintains the minimum income guaranteed by the current tax/transfer system, there is an argument for maintaining some form of additional subsidy for housing costs. Our analyses of basic income schemes can be treated as assuming that some form of housing cost subsidy is maintained.

On the taxation side, the institution of a basic income is taken to involve the abolition of all the major personal allowances and exemption limits. In addition, revenue arising from the abolition of the PAYE and PRSI allowances is taken into account. The tax structure under basic income schemes is also taken as replacing the *employee* element of social insurance contributions (PRSI). It is assumed in the present analysis that the revenue currently raised by employer PRSI contributions is replaced by

a similar tax on employers: if not, this would represent a substantial loss of revenue which make the reform package harder to finance. This is in part a technical assumption, but the fact that PRSI is often the main form of tax received from multinational corporations operating in Ireland provides a substantive justification for this approach.

A basic income could replace at least a part of other state expenditures which can be regarded as income maintenance payments, e.g., the maintenance element of educational grants, training allowances under FÁS schemes, and some farm income supports. The ESRI Survey data includes some information on the educational grants and on training allowances. It is possible to identify payments which are estimated at £34m annually for student grants (including fees payments), and £44m for training allowances on FAS schemes. This has been used to take account of these two elements in a rough and ready way: the idea is that basic income payments are "clawed back" in full from training allowances and the maintenance element of the grants. This means that recipients of grants and training allowances are left no worse off than under the existing system: the basic income replaces the existing payment where the amount of the basic benefit is above the grant or allowance; but if the existing payment is higher than the basic benefit, a residual grant or allowance is paid to ensure that income is topped up to the existing level. An alternative approach would simply cancel the grants and training allowances, with some consequent losses; but our estimates show little difference between these approaches for the options considered in 1987. Total expenditure on training allowances and similar schemes is likely to have been higher than the amounts identifiable here, but the procedure adopted here will reduce the impact of any such discrepancy on the tax rate.[1]

The Survey does not include information which is adequate to deal with the complex issues involved in restructuring farm price and income supports. However, the possibility of reorienting expenditures on farm income support to finance a basic income are considered in Section 3.4.

As with costings based on administrative statistics, the costings undertaken here are on a "static" basis: they do not take account of possible behavioural responses to changed incentives. The impact of alternative schemes on incentives will be considered in Chapter 5, which will give some insight into the potential behavioural responses to alternative

[1]Any training allowances not correctly identified by the Survey will be included as part of the tax base: thus, even if these amounted to, say, £100m, the implied tax rate would be likely to fall by less than half of 1 per cent.

schemes by the resident population. Migration flows could also respond to changes in the structure, as noted in Chapter 2: this could put upward pressure on costs.

Costing Basic Income: A Useful Rule of Thumb

Akerlof (1978) provides an interesting analysis of the economics of a universal basic income payment as against welfare payments which are "tagged" to particular non-income characteristics - for example, old age, disability and unemployment. One element of his analysis focuses on a simple scheme which pays a particular proportion, say **P** per cent, of average (pre-tax and transfer) income as a basic income. If the net contribution of the income tax and transfer system towards the financing of other government services can be expressed as **G** per cent of total income, then the tax rate (**t**) required to finance the basic income is simply the sum of **P** and **G**

$$t = P + G$$

This formula helps to show the tradeoff between higher basic income payments and the tax rates required to finance them. For example, a benchmark calculation might show that **G** is 7 per cent for Ireland. Then a basic income payment at about 50 per cent of average income would require a single tax rate of 57 per cent; while a scheme with payments which are one-fifth higher (implying that they are about 60 per cent of average income) would require a tax rate some 10 percentage points higher.

One aspect of basic income is that it replaces a tax free allowance by a cash payment. The scheme might be administered in either of two ways: the cash payment could be made to *all* individuals, and tax levied on all other income; or the benefit could be offset against tax liabilities for those whose tax liabilities would exceed the benefit (while others would receive direct payment). Aggregate tax revenue and expenditure would be higher in the former case, where the cash payment is made unconditionally to all. But, as Monckton (1993) points out, the tax burden would be no higher in this case, despite the higher tax revenue: individuals and families would face the same incentive structure in either case, contrary to what he characterises as the "Treasury view". The differences in the method of

administration could have some significant effects (for example, on the rate of "take-up" of benefit, with a universal payment ensuring maximum take-up), but a difference in the "tax burden" is not one of them.

The issue of the cost of basic income is better explored, therefore, in terms of the tax *rates* on income which individuals and families face. Given the level of the basic income payment, and the specification set out above of the income support payments which it replaces and the tax free allowances which are to be abolished, it is possible to determine using the model the tax rate which is required to make the reform package revenue-neutral. For schemes which involve a dual rate structure, we must also specify what the initial tax rate is to be. In general, we have set this rate at just over two-thirds or 67.5 per cent. The tax rate applying after this rate ceases can then be estimated by the requirements of revenue neutrality.

3.3 Results for Alternative Basic Income Schemes

In order to check the model-based costings against those based on administrative statistics, we modelled initially a basic income scheme along the lines set out in Honohan (1987).[2] We found that the single tax rate required to finance this scheme in a 1987 context was within 1 percentage point of the 64 per cent reported by Honohan. The concordance between these independently derived estimates reinforces confidence in each. We explored the use of reported social welfare receipts in the ESRI Survey as against model-based estimates of social welfare entitlements. The estimated tax rates were very similar in each case - the model-based estimates resulted in slightly lower tax rates than the use of reported social welfare receipts.

While it is possible to analyse the 1987 data on either basis, model-based estimates must be used in attempting any more up-to-date analysis. For this reason, we report analysis using model-based estimates of social welfare entitlements throughout. Thus, the analysis assumes full take-up of these entitlements. One implication is that the analysis does not capture the effects of a basic income in overcoming problems with take-up, most notably in the Family Income Supplement scheme.

[2]The Honohan scheme is summarised in the box in Section 2.4.

Table 3.2: *Summary of Basic Income Schemes, 1987*

Option No.	*Unit of assessment*	*Payment 18-65*	*Payment 66+*	*Payment under 18*	*Tax structure*
1.	Individual	£35.10	£47.10	£12.67	Single rate
2.	Individual	£35.10	£47.10	£12.67	Dual rate, fully withdrawable
3.	Individual	£35.10	£47.10	£12.67	Dual rate, Honohan
4.	Individual	£55.10	£55.10	£14.97	Single rate
5.	Family	£35.10	£47.10	£12.67	Single rate
6.	Family	£35.10	£47.10	£12.67	Dual rate, fully withdrawable
7.	Family	£35.10	£47.10	£12.67	Dual rate, Honohan
8.	Family	£55.10	£55.10	£14.97	Single rate

In Chapter 2, we identified a number of key dimensions on which basic income schemes might vary: the unit of assessment, the level of payment, and the structure of effective tax rates. Table 3.2 summarises the different policy options examined. We use two alternative units of assessment: an individual basis, under which each member of a couple receives the same payment as a single person; and a family unit basis, under which the couple receives a total benefit of 1.6 times the single rate (which could be paid as 0.8 times the single rate to each member of the couple). We also consider two levels of payment for a full basic income: one of £35.10 per week for an adult, equal to the personal rate of long-term unemployment assistance (one of the lowest paid schemes) in 1987, with a supplement to the elderly bringing them up to the Old Age Non-Contributory Pension level of £47.10; and one of £55.10 per week, equal to the rate for the highest paid scheme, the Old Age Contributory Pension. Corresponding to these rates for adults we use a low rate of payment for children under 18 of £12.67 per week, and a high rate of payment of £14.97, each of which can again be thought of as based on either the lowest or highest rate of child dependant allowance, together with the rate for child benefit. We explore three

different effective tax rate structures: a single rate tax; a dual rate tax with the higher rate applying until benefit is fully withdrawn; a dual rate tax with the higher rate applying even higher up the income scale, à la Honohan.

The tax rates associated with the different options in Table 3.2 are set out in Table 3.3.

Table 3.3: *Tax Rates Required to Finance Alternative Basic Income Schemes, 1987*

Option No.	*Unit of assessment*	*Payment 18-65*	*Initial tax rate*	*"Standard" Tax rate*	*Proportion of taxpayers on "standard" rate*
1.	Individual	£35.10	*	61.6	100
2.	Individual	£35.10	67.5	58.4	50
3.	Individual	£35.10	67.5	42.9	26
4.	Individual	£55.10	*	86.8	100
5.	Family	£35.10	*	56.7	100
6.	Family	£35.10	67.5	52.0	53
7.	Family	£35.10	67.5	39.7	35
8.	Family	£55.10	*	79.0	100

Note: * Single tax rate applies to all income.

The sharp trade-offs between the level of payment, individual and family bases of assessment, and the tax rates required to finance a basic income are immediately apparent. An individual basic income of just over £35 per week in 1987 would have required a single tax rate in excess of 60 per cent for revenue neutrality. A basic income of just over £55 per week, equal to the Old Age Contributory Pension and similar to the payment level recommended by the Commission on Social Welfare, would have required a tax rate of 86 per cent to be self-financing. The corresponding figures for a basic family income would have been between 5 and 8 percentage points lower.

In each of the options considered above the rate of benefit is the same for all adults aged 18 to 65. For many young people, this implies a more favourable treatment than under the current system. Unemployment Assistance (UA) payments to those living with their parents tend to be below the maximum rate, while educational maintenance grants are also below the maximum rate of UA. It could be argued that an unconditional

basic income payment at something below the UA rate for those aged, say, 18 to 21, would still represent an improvement most in this age group, particularly as it would allow recipients to take up full time education or training. We estimate that the single tax rate required to finance Option 1 above would be reduced by one percentage point if the payment to those aged between 18 and 21 were restricted to £25 per week, as against the rate for older adults of £35.10. Extending this restriction to those aged between 21 and 25 would reduce the tax rate just over another percentage point. In the remainder of our analysis we continue, for simplicity, to use a single rate for all adults aged 18 to 65, but the possible cost savings associated with lower payments for young adults should be borne in mind.

We noted earlier that a high initial withdrawal rate could be used to try to limit the tax rate applying at somewhat higher income levels. The height of the single tax rate for a basic income of £55 per week, either on an individual or a family unit basis, precludes any such strategy in this case. But for the lower payment of £35 per week, we are able to derive a lower tax rate which would apply if an initial tax or benefit withdrawal rate of 67.5 per cent were to apply. If this high initial tax rate were to apply up to the "break-even" income level, where tax liabilities equal the amount of benefit paid, the "standard" tax rate could fall to 58.4 per cent: about equal numbers of taxpayers would face the "high" and "standard" rates. If, instead, the Honohan structure were to apply, so that the high withdrawal rate continued on a further slice of income, the "standard" tax rate could fall to just under 43 per cent. But in this case almost three-quarters of taxpayers would face the high initial rate of tax. A family unit basis of assessment would see these rates fall further, to 52 per cent and just under 40 per cent respectively: but about half, or two-thirds, of taxpayers would still face the high initial rate of tax of 67.5 per cent.

The other compromise structure which sought to retain some of the advantages of a basic income was to pay a more limited "partial" basic income, which would be "topped up" by existing social welfare payments. The underlying idea here is a simple one: if a partial basic income is paid to all individuals, then social welfare rates can be adjusted downwards by the amount of the basic income, while leaving those solely dependent on social welfare payments no worse off. Complications arise from the fact that a partial basic income is financed in part by the abolition of personal tax free allowances, and that some (by now, most) social welfare payments are taxable. When social welfare payments are replaced by a full, non-taxable basic income, this issue does not arise; but in the context of a partial basic income, if the incomes of social welfare recipients are to be

protected, some adjustment is necessary. This could either take the form of making *all* social welfare payments non-taxable, or increasing the gross rate for those schemes which are taxable. The effective differences between these two approaches appear to be relatively minor, so in our analysis we have chosen the former alternative.

Table 3.4: *Tax Rates Required to Finance Partial Basic Income Schemes, 1987*

Option No.	*Unit of assessment*	*Payment 18-65*	*Payment 0-17*	*Child benefit abolished?*	*PRSI abolished?*	*Tax rate(s)*[1]
9.	Individual	£21.00	0	NO	NO	34.3, 48, 58
10.	Individual	£21.00	7.50	YES	NO	37.3, 48, 58
11.	Individual	£21.00	7.50	YES	YES	48.7
12.	Family	£21.00	7.50	YES	YES	43.2

Note: 1. Where three rates are shown, bands are as in 1987.

A number of implementations of partial basic incomes were considered, including some which stayed quite close to the 1987 baseline policies and others which moved further towards the structure of a full basic income (Table 3.4). The abolition of tax free allowances, including the PAYE and PRSI allowances, would have been sufficient to fund a partial basic income of approximately £21 per week for adults in 1987, at tax rates very little different from those then prevailing: the standard tax rate could even fall slightly. This option included the retention of employee social insurance contributions. If a partial basic income for children of £7.50 were to be introduced at the same time, the standard tax rate would have to rise to just over 37 per cent. Alternatively, a payment for adults of £21 per week, and of £7.50 for children could have been financed by a single tax rate of just under 49 per cent, with employee PRSI being abolished. A family unit version of this policy would have a lower single tax rate of just over 43 per cent.

3.4 Assessment

There are two common, and contrasting reactions to high estimates of the cost of full basic income schemes such as those in the previous section. One is that the income tax rate required to finance the scheme is unsustainably high; another is that additional resources *must* be found to

"bridge the gap" i.e., reduce the tax rate to some acceptable level. Each of these reactions points to important elements of the costing process, but neglects others. The first reaction stresses the importance of comparing revenue neutral options. If basic income requires a shift from income tax to other taxes in order to arrive at an acceptable income tax rate, the appropriate comparison is not between the current system and a basic income, but between a reformed system with lower income taxes and/or increased benefits and a basic income. The second reaction stresses that there are other resources which could be relevant to the funding of a basic income. What it neglects is that even when such resources are taken into account, it may not be possible to "bridge the gap" without consequences which vitiate the aims of the reform.

In this section, we discuss some issues concerning additional resources which might be relevant to funding of basic income proposals. We have noted already that schemes outside of the Department of Social Welfare and the Health Boards, but with a substantial income support element, may provide resources relevant to the funding of basic incomes, which would not be available for less radical reforms of the tax/transfer system. Healy and Reynolds (1993) point to training allowances, educational maintenance grants and farm income supports as important elements in this process. An attempt is already made to incorporate the first two of these elements into the costings provided above. Even if the amounts taken into account in our analysis are somewhat lower than the total resources available in terms of *educational maintenance grants* and *training allowances*, the total impact of including such resources on the tax rate(s) required to finance a basic income seems likely to be modest.

What about including *farm income supports* as part of the resources used to pay a basic benefit? This is clearly an important issue, given the substantial amounts of resources which flow through this mechanism: CSO estimates indicate a figure of the order of £400m for subsidies in 1993.[3] The technical issues which arise in this context (as to which farm supports can be classified as income supports, and whether or not EU funds could be used to pay a basic income to farmers instead of a farm income support) are outside the scope of this study. If they can be resolved, there is then a

[3]Restructuring of the Common Agricultural Policy has led to a shift away from price support and towards income support; but price-support expenditure (including export refunds and the costs of intervention storage) still accounts for most CAP expenditure in Ireland. Much of this may also be regarded as, in effect, raising the incomes of farmers.

wide range of options for the treatment of farm income supports in the context of a basic income reform, with different potential effects on the aggregate disposable income of the farm sector.

At present, most farmers receive headage and other payments which may be regarded as income supports; a much smaller number receive Unemployment Assistance; and the aggregate amount of income tax paid is low. Under a basic income scheme which simply replaced the tax and social welfare systems, and did not "claw back" headage payments or other income supports, the aggregate disposable income of the farm sector could rise significantly. This represents one extreme on the spectrum of options. At the other extreme, assuming that any technical difficulties could be overcome, all or almost all farm support expenditure might be abolished and replaced simply by an unconditional basic income payment. This option could give rise to significant reductions in the disposable income of the farm sector. A third option could lie between these two extremes, aiming at a reform package which would redistribute income within the farm sector, but be approximately neutral in its net effect on disposable income in the sector.

A detailed analysis of the issues arising in this context is outside of the scope of the present study, but we can give some indication of the likely impact of such a clawback on the tax rates required to finance a basic income. In a 1994 context, rough calculations suggest that for every £100m of farm income support which can be used to finance a basic income payment for farmers, the tax rate required to finance the basic income is reduced by about three-quarters of 1 per cent. This suggests that the substantive and technical issues involved in the treatment of farm income supports merit further investigation.

The simplicity of basic income could result in significant long-run *savings in administrative costs*. Other reforms may also be able to generate some of these savings, but the unconditional nature of basic income reduces monitoring requirements to an absolute minimum, and would therefore generate maximal savings. The full extent of the exchequer savings should not be overestimated however. The major savings would be on the social welfare side of the budget, where administrative costs in 1992 were of the order of £160m. If this entire amount could be saved by a combination of cost cuts on the social welfare and tax collection side, it would reduce the single tax rate required by something under 2 percentage points. A partial basic income would not generate such savings: the existing structures

would be maintained, and although the amounts paid out through these structures would be reduced (by the extent of the partial basic income), the overall costs of administration would not be likely to fall.

Other potential resources which could be applied to fund a basic income include extensions to the income tax base, e.g., abolition of tax reliefs on mortgage interest and covenants; increases in other taxes, e.g., introduction of a comprehensive (residential) property tax, or increases in indirect taxation; reductions in other government expenditures; and, in a longer-term context, the fruits of economic growth.[4] But in these cases, the additional resources could equally be applied to other reforms of the tax/transfer system; and the effects of increases in other taxes and reductions in other government expenditures would also have to be taken into account. At present, income tax and PRSI contributions, net of social welfare payments, make a significant contribution to the financing of other government expenditures. There are good reasons for such an alteration in the balance between taxes on income and other taxes (particularly taxes on property). However, it must be recognised that if this alteration is achievable, the relevant comparison is not between the current tax/transfer system and a basic income structure, but between tax/transfer systems which have access to the same resources. Similar considerations apply to the extension of the income tax base: other reforms could also be financed by the resources released by this mechanism. This is not simply a technical point. The resources required to allow a reduction in the tax rate for a basic income from around 60 or 65 per cent to approximately 50 per cent would permit very substantial reforms in the tax/transfer structure: for example, very large reductions in income tax rates or increases in allowances, or substantial increases in social welfare payment rates.

3.5 Conclusions

Given the existing resources of the tax and welfare systems, and some of those currently applied to training allowances and maintenance grants for those in third-level education, we find that the tax rates required to fund an individual basic income close to the lowest 1987 social welfare rates are of the order of 62 per cent. A family unit basis of assessment could reduce this rate to around 57 per cent. But the required tax rate rises sharply with increases in the amount of the basic income payment: even on a family unit basis, a payment of £55 per week, close to the Old Age Contributory

[4]The extent to which growth would help to make a basic income easier to finance is considered in Chapter 6.

Pension level, would require a tax rate of 79 per cent to be revenue-neutral. The results for partial basic income schemes show that there are, indeed, variants of this more limited form of basic income which could be financed without major changes in income tax rates. In the next two chapters we examine the implications of full and partial basic incomes options from a distributional and incentive perspective. One theme which will be important is whether the partial schemes can retain the advantages of a full basic income structure, or share instead many of the problems of the existing system.

Turning to the question of how these tax rates might be reduced by the inclusion of additional resources, we stress the importance of distinguishing between different types of resources. In principle, income support expenditures outside the tax and welfare systems should be taken into account, with farm income supports forming the most important component. After initial transition costs, administrative savings could also be expected for schemes which replace most social welfare payments by a simple unconditional payment; but partial basic incomes would not have this advantage. As for other resources, a key point to remember is that, in general, they would also be available for alternative reforms of the tax and welfare systems. Rather than simply ask if a basic income, with such extra resources, represented an improvement on the current system, one would then have to ask: Is basic income the *best* reform of the tax and social welfare systems that could be achieved if such extra resources were available?

Chapter 4

DISTRIBUTIONAL ISSUES: GAINS AND LOSSES UNDER BASIC INCOME

4.1 Introduction

The distribution of gains and losses from alternative basic income schemes is of interest from a number of points of view. From a practical point of view, large losses may weigh more heavily than large gains in the political calculus. If the focus is on avoiding heavy losses for certain individuals or groups over time, a knowledge of the extent and distribution of such losses may be necessary for the design of a temporary compensation package. More fundamentally, reform packages will involve a redistribution between different *positions* in the societal distribution of income. Even if the individuals currently occupying these positions are compensated, the reform will involve changes as between those ultimately occupying the positions in future. A picture of the overall distributive effects is therefore important in order to assess whether the particular redistributions involved in alternative packages are desirable.

Assessments of the gains and losses from basic income reforms are often built around the effect the reform would have on a small number of hypothetical cases. While this approach can be helpful in understanding the nature of the effect of basic incomes on particular families, it can be seriously misleading as a guide to the overall impact of the reform. Calculations for a small number of supposedly representative families cannot take into account the wide diversity of family situations relevant to tax liabilities and social welfare entitlements. In order to overcome this problem, we need to assess the impact of the reform by simulating its effect on the net incomes of a large-scale sample of households: this is precisely what is done by the ESRI tax-benefit model, based on the 1987 ESRI Survey of Income Distribution, Poverty and Usage of State Services. It should be emphasised that the picture provided in this chapter is a cross-sectional one. Some policy changes, such as those favouring families with children, may result in redistribution from one stage of the life cycle to another. The extent of redistribution across individuals on a life-cycle basis may therefore be much more limited than the degree of redistribution shown on a snapshot or cross-sectional basis.

In Section 4.2, we examine the distributive impact of a full basic income on an individual basis at a rate of £35 per week for adults, £47.10 for the elderly, and £12.67 for children - approximately at or just above the lowest levels of social welfare support for each of these groups. In Section 4.3 we go on to see how the distributive effects are changed by a shift to a family unit basis of assessment, with either a single or dual-rate tax structure, or a partial basic income. Section 4.4 summarises the main results.

4.2 Distributive Effects of a Full Basic Individual Income

A fully-fledged basic income scheme, even at rates close to the lowest social welfare rates in 1987, would involve very substantial gains and losses for most of the population. The revenue-neutral scheme set out in Chapter 3, with a single tax rate of 61.6 per cent, would lead to gains for close to 600,000 families, but to losses for almost 900,000, i.e., losers would outnumber gainers by about 3 to 2. The average gain, at about £24 per week, would be greater than the average loss of £15.60 per week. About one-third of families would lose more than £10 per week, while around a quarter would gain by the same amount.

Table 4.1 shows the impact effect of these substantial changes on the distribution of income across "tax units", i.e., single people or couples, together with their dependent children. From here on, we will use the term "family" as interchangeable with tax unit, but children who have completed full-time education are regarded as separate tax units. The income concept used is current disposable income, adjusted for the size and composition of the tax unit. The equivalence scale used is 1 for the first adult, 0.66 for a spouse or partner, and 0.33 for each child. We use the term "equivalent income" to refer to the income per adult equivalent, i.e., income adjusted for the numbers of adults and children in the tax unit. The income ranges are chosen with a view to splitting the population into 10 equal sized groups, ranging from the poorest to the richest. However, since many families on social welfare have exactly identical incomes, there are some exceptions, so the percentage of families in each group varies slightly in the lower reaches of the income distribution.

Table 4.1: *Distribution of Gains and Losses from an Individual Basic Income, 1987*

Net equivalent income[1] (£ p w)		*% of tax units*	*% Change in ave. income*	*Aggregate Gain*	*Aggregate Loss*
More than	*Less than*			*£m p a*	*£m p a*
	37.70	10.0	49.0	158.6	16.8
37.70	43.90	11.4	8.9	78.0	19.2
43.90	49.10	8.6	3.2	57.5	42.3
49.10	54.30	9.2	9.0	88.2	36.7
54.30	62.53	10.9	5.5	90.8	46.8
62.53	77.60	10.0	5.9	100.4	42.5
77.60	94.80	10.0	1.6	71.4	52.7
94.80	113.73	10.0	-6.0	35.6	114.3
113.73	144.70	10.0	-7.3	27.9	145.9
144.70		9.9	-7.6	18.0	208.5
ALL		100.0	0.0	726.9	725.0

Notes: 1. Under baseline 1987 policy and equivalence scale: 1 for the first adult, 0.66 for other adults, and 0.33 per child.
2. A "tax unit" is defined as an individual, or married couple, together with dependent children (aged under 15 or in full-time education).
3. Columns may not add to totals due to rounding.

The net impact effect of the reform package is a very substantial transfer of resources from the top of the equivalent income distribution towards the bottom, with some net gains also accruing to the middle of the distribution. The net loss for the top third of the income distribution is close to £380m per annum, while the bottom quartile of the distribution gains, on balance, over half of this amount. Within this overall pattern, there are significant variations: even at the lowest income levels, there are some losses, while there are also gains at very high income levels. High-income gainers comprise mainly families with several children, for whom the increased payments in respect of children outweigh the effects of a high tax rate. Low-income losers would include individuals with and without children who benefitted from social welfare payments higher than those at the lowest rates. Couples who were on a higher rate of social welfare payment would often find that the loss involved in moving from a

higher to a lower rate was offset by the fact that two full individual payments would be made, rather than one at the full rate and one "adult dependant" payment.

An examination of the distribution of gains and losses over different family types helps to shed further light on the gainers and losers from this package. We classify family units using information on marital status (married or other), presence or absence of children, and information on the self-reported labour force status (employee, unemployed or retired) and age (above or below the social welfare pension age of 66) for one or both adults. A couple with one person employed and the other unemployed is allocated to the category "one-earner couple", with or without children as appropriate; a couple with one person unemployed and the other not employed (e.g., in "home duties") is allocated to the category "unemployed couple", along with couples where both members are unemployed. The small number of unemployed lone parents are grouped with other non-employed lone parents, most of whom are dependent on the special social welfare payments for this group, rather than the general unemployment benefit and assistance schemes. A residual category picks up those tax units which are not lone parents or pensioners, and have no member in employment or unemployed.

Table 4.2 shows the distribution of gains and losses across these family or tax unit types. There is considerable diversity of experience across each of the groups. One-earner couples with children are among those most likely to experience large gains, and almost 45 per cent of those with gains above £10 per week are in this group. Lone parents, whether employed or not, and two-earner couples without children are among those most likely to experience large losses: close to 80 per cent of lone parents, and almost 85 per cent of two-earner childless couples would lose more than £10 per week. In the case of lone parents, the losses relate to the abolition of special social welfare rates (including widow's contributory and non-contributory pensions) for this group, and to the abolition of special tax allowances; for two-earner couples the losses have more to do with the height of the tax rate required to finance the basic income scheme. Almost 40 per cent of those with the largest losses (over £10 per week) are single employees.

Table 4.2: *Distribution of Gains and Losses by Family Type: Individual Basic Income 1987*

Tax unit type	*Loss p w*				*Gain p w*			
	Over £10	*£5-£10*	*£1-£5*	*Gain or loss < £1*	*£1-£5*	*£5-£10*	*Over £10*	*ALL*
				Thousands of tax units				
Single								
Employee	202	43	33	17	28	20	50	393
Unemployed	17	30	46	2	3	5	31	134
Employed Lone Parent	10	1	0	0	0	0	2	12
Other Lone Parent	24	1	1	1	2	0	3	31
Pensioner	36	40	49	23	5	4	9	166
Couples								
One earner, no children	26	3	4	4	4	4	22	66
One earner, with children	55	9	10	6	15	21	178	293
Two earners, no children	25	1	1	0	1	1	1	29
Two earners, with children	35	6	3	3	3	5	20	76
Two earners, 1 rel. asst.	2	0	0	0	0	1	31	35
Unemployed, no children	2	0	1	2	1	3	1	9
Unemployed, with children	4	2	18	8	9	25	12	79
Pensioner	25	19	8	9	2	4	23	90
Other Tax Units	53	28	6	7	2	6	18	119
ALL	516	182	180	83	73	99	398	1531

Note: 1. Columns and rows may not add to totals due to rounding.

4.3 Basic Family Income and Partial Basic Income

In this section, we examine how the extent and nature of the distributional effects are altered by a shift to a family unit basis of assessment, or a partial basic income. Table 4.3 presents the results for a basic family income of £35 per week for an individual, and £56 for a couple, with the same payment for children (£12.70) as before: this required a tax rate of 56 per cent as against 61 per cent for a basic individual income. The number of gainers and losers is very similar to that under a basic individual income, but the average gain and loss are slightly lower, at around £22 and £14 per week respectively. About a quarter of tax units would experience a gain of over £10 per week, while about 28 per cent would lose a similar amount. Losses remain concentrated at the top of the income distribution, with net losses of about £200m per annum - about half the figure for the full basic income - for the top 30 per cent of the population.

Table 4.3: *Distribution of Gains and Losses from a Basic Family Income, 1987*

Net equivalent income[1] (£ p w)		*% of tax units*	*% Change in ave. income*	*Aggregate Gain*	*Aggregate Loss*
More than	*Less than*			*£m p a*	*£m p a*
	37.70	10.0	42.6	140.9	17.7
37.70	43.90	11.4	-1.9	50.1	62.5
43.90	49.10	8.6	-1.4	46.7	53.1
49.10	54.30	9.2	6.1	77.1	42.3
54.30	62.53	10.9	0.1	80.1	79.6
62.53	77.60	10.0	3.7	92.6	56.7
77.60	94.80	10.0	2.5	74.2	44.2
94.80	113.73	10.0	-3.6	38.8	86.4
113.73	144.70	10.0	-4.1	31.8	98.4
144.70		9.9	-3.8	30.7	125.4
ALL		100.0	0.0	662.7	666.1

Notes: 1. Under baseline 1987 policy and equivalence scale: 1 for the first adult, 0.66 for other adults, and 0.33 per child.

2. A "tax unit" is defined as an individual, or married couple, together with dependent children (aged under 15 or in full-time education).

3. Columns may not add to totals due to rounding.

Table 4.4: *Distribution of Gains and Losses by Family Type: Basic Family Income, 1987*

Tax unit type	*Loss p w*				*Gain p w*			
	Over £10	*£5-£10*	*£1-£5*	*Gain or loss < £1*	*£1-£5*	*£5-£10*	*Over £10*	*ALL*
Single				*Thousands of tax units*				
Employee	58	101	63	35	41	37	58	393
Unemployed	17	30	46	2	3	5	31	134
Employed Lone Parent	8	2	0	0	0	0	2	12
Other Lone Parent	23	2	1	1	2	0	3	31
Pensioner	30	42	50	26	2	6	11	166
Couples								
One earner, no children	28	5	5	2	6	5	14	66
One earner, with children	42	11	13	5	16	25	182	293
Two earners, no children	26	1	1	0	0	0	1	29
Two earners, with children	30	8	5	2	5	5	22	76
Two earners, 1 rel. asst.	3	1	1	1	1	3	25	35
Unemployed, no children	5	3	0	0	0	0	0	9
Unemployed, with children	36	30	5	1	0	1	6	79
Pensioner	59	3	2	2	8	5	11	90
Other Tax Units	63	23	4	2	3	5	18	119
ALL	429	262	193	79	87	98	383	1531

Net gains are heavily concentrated on the bottom 10 per cent of the population, but in contrast with the basic individual income, there are net losses rather than net gains for the next 20 per cent of the population. This has much to do with the difference in the treatment of couples. Couples who originally benefitted from a social welfare payment at a higher rate would, in general, lose from a move to a basic family income at the lowest rates of social welfare payment; but they would lose less, or even gain, if, as in the option considered in Section 4.2, each individual received the same rate of payment as a single adult. The other net gains go to the 4th, 5th and 7th deciles of the equivalent income distribution.

Single employees still bulk large among those experiencing losses, but the extent of their losses is more limited: the number of single employees experiencing a loss of over £10 per week is less than one-third of that for an individual basic income at the same level. Lone parents still have a high probability of experiencing such losses, but the overall incidence of losses in excess of £10 per week is more evenly spread across family types. One-earner couples with children still predominate among those with large gains.

A dual tax rate scheme can significantly affect the extent and pattern of vertical redistribution, as shown in Table 4.5.

Table 4.5: *Distribution of Gains and Losses from a Dual Rate Basic Family Income, 1987*[1]

Net equivalent income[2] *(£ p w)*		*% of tax units*	*% Change in ave. income*	*Aggregate Gain*	*Aggregate Loss*
More than	*Less than*			*£m p a*	*£m p a*
	37.70	10.0	41.0	136.02	17.92
37.70	43.90	11.4	-2.6	45.40	62.74
43.90	49.10	8.6	-2.9	39.89	53.74
49.10	54.30	9.2	3.8	65.13	43.52
54.30	62.53	10.9	-2.0	67.97	85.02
62.53	77.60	10.0	1.8	83.09	64.12
77.60	94.80	10.0	1.0	64.83	52.95
94.80	113.73	10.0	-4.2	39.14	96.66
113.73	144.70	10.0	-2.8	35.20	77.66
144.70		9.9	-0.8	59.51	78.47
ALL		100.0	0.0	636.2	632.8

Notes: 1. Initial tax rate 67.5%, applicable up to "break-even" income; subsequent tax rate 52%.
2. Under baseline 1987 policy and equivalence scale: 1 for the first adult, 0.66 for other adults, and 0.33 per child.

While there are still substantial net gains at the bottom of the distribution, the net losses for the top two income groups are curtailed by the lowering of the top tax rate from almost 57 per cent to 52 per cent. Net gains for all other income groups are reduced (or net losses increased) by the dual tax rate structure, as the high initial rate of tax claws back the basic benefit more quickly. The pattern of gains and losses by family type under a dual tax rate structure is still broadly similar to that shown in Table 4.4. The reduction in the top tax rate helps to reduce the numbers losing over £10 per week by about 30,000 but this still leaves almost 400,000 families in this category.

The pattern of distributive effects differs again under a Honohan-type basic individual income (Table 4.6), where the high initial withdrawal rate (67.5 per cent) applies over a longer range of incomes, and the subsequent tax rate is 43 per cent. Net losses are concentrated in the upper middle reaches of the distribution, while the top experiences a small net gain; there are major gains for the 20 per cent of families with the lowest net equivalent

incomes. The gains at the top can be explained by the lowering of the top tax rate, which is of great importance to that group. For those at the bottom of the distribution, on the other hand, the only change is an increase in the tax rate applying to their other incomes from about 61 per cent to 67.5 per cent, which has little effect. This change has the greatest effect on families who have large amounts of income to which the increased tax rate applies: these lie in the upper middle reaches of the equivalent income distribution.

Table 4.6: *Distribution of Gains and Losses from a Honohan-type Individual Basic Income, 1987*[1]

Net equivalent income[2] *(£ p w)*		*% of tax units*	*% Change in ave. income*	*Aggregate Gain*	*Aggregate Loss*
More than	*Less than*			*£m p a*	*£m p a*
	37.70	10.0	48.1	155.7	17.1
37.70	43.90	11.4	8.5	75.1	19.3
43.90	49.10	8.6	1.9	51.9	42.7
49.10	54.30	9.2	6.2	73.0	37.3
54.30	62.53	11.2	2.7	73.6	51.2
62.53	77.60	10.4	1.3	68.4	55.5
77.60	94.80	9.6	-2.8	48.8	81.1
94.80	113.73	10.5	-9.1	31.1	156.0
113.73	144.70	9.4	-6.1	33.5	127.6
144.70		9.7	-0.8	87.2	108.3
ALL		100.0	0.0	696.1	698.2

Notes: 1. Initial tax rate 67.5%, applicable up to "break-even" income; subsequent tax rate 41%.
2. Under baseline 1987 policy and equivalence scale: 1 for the first adult, 0.66 for other adults, and 0.33 per child.

It might be expected that a partial basic income, aimed mainly at replacing a part of existing social welfare payments and the personal allowances in the income tax system, would have much more limited distributional consequences. The version of partial basic income we examine here was indeed very close to the 1987 system in many respects. Tax bands stayed unchanged and the only alteration in rates was a slight fall in the standard rate. Deductions, such as mortgage interest relief, remained the same. Employee PRSI contributions were retained. For

reasons set out in Chapter 2, we assumed that all social welfare payments were excluded from the revised income tax base. Table 4.7 sets out the distributional impact of this reform.

Table 4.7: *Distribution of Gains and Losses from a Partial Basic Income, 1987* [1]

Net equivalent income[2] *(£ p w)*		*% of tax units*	*% Change in ave. income*	*Aggregate Gain*	*Aggregate Loss*
More than	*Less than*			*£m p a*	*£m p a*
	37.70	10.0	15.5	70.0	25.6
37.70	43.90	11.4	3.1	23.3	3.3
43.90	49.10	8.6	3.1	21.0	6.2
49.10	54.30	9.2	4.2	31.5	7.2
54.30	62.53	10.9	2.3	32.4	13.9
62.53	77.60	10.0	3.2	46.4	16.4
77.60	94.80	10.0	1.1	44.1	30.2
94.80	113.73	10.0	-2.1	25.0	52.2
113.73	144.70	10.0	-4.0	19.7	86.5
144.70		9.9	-2.7	20.0	89.2
ALL[3]		100.0	0.0	333.4	330.7

Notes: 1. Partial basic income of £21 per week for each adult, with personal and adult dependant rates for social welfare schemes adjusted accordingly. Child income support continues through child benefit and child dependant additions. Personal income tax allowances (including PAYE, PRSI, lone parent and widowed allowances) and exemption limits (including age exemptions and child additions) abolished. Tax bands are identical to 1987 levels, and tax rates are 34.5 per cent, 48 per cent and 58 per cent: almost identical to 1987.

2. Under baseline 1987 policy and equivalence scale: 1 for the first adult, 0.66 for other adults, and 0.33 per child.

3. Figures may not add to totals because of rounding.

It is true that the extent of large gains and losses is somewhat lower than for the more radical basic income options. About 1 family in 6 would experience a gain or loss in excess of £10 per week, and about 1 in 10 would experience a gain or loss of between £5 and £10 per week. But there are substantial net losses in the top three income deciles. These arise mainly because the partial basic income is less valuable to these families than the personal tax allowances evaluated at the higher or top rates of tax. The £21 per week basic income is just above what is needed to compensate

a *standard rate* taxpayer for the loss of the personal allowance of £2,000 and the PAYE and PRSI allowances of £986. But higher and top rate taxpayers lose from this change. There are small gains (less than £1 per week) to employees on the standard rate of tax and larger gains to farmers and the self-employed on the standard rate of tax. A significant part of the gains goes to those at the bottom of the distribution, including young single people whose unemployment assistance entitlements are curtailed by the rules concerning "benefit and privilege" assessment; but there are also significant net gains in the middle part of the income distribution. A reform which at the same time, abolished PRSI, and moved to a single tax rate would have rather different implications for the upper half of the distribution: the top decile would experience a net gain, while losses in the 7th and 8th deciles would be greater.

The distribution of gains and losses by family type shows a great diversity of experience. Two-earner couples, with or without children, are likely to lose. So too are the small number of employed lone parents; but other lone parents are often unaffected, as their social welfare payment "tops up" their partial basic income to the same level as before. There are some losses among the unemployed, though most find their income unchanged.

Table 4.8: *Distribution of Gains and Losses by Family Type: Partial Basic Income, 1987*

Tax unit type	*Loss p w*				*Gain p w*			
	Over £10	*£5-£10*	*£1-£5*	*Gain or loss < £1*	*£1-£5*	*£5-£10*	*Over £10*	*ALL*
Single				*Thousands of tax units*				
Employee	77	95	60	44	58	29	29	393
Unemployed	30	2	2	76	5	9	11	134
Employed Lone Parent	10	0	1	1	0	0	1	12
Other Lone Parent	6	1	1	20	0	0	4	31
Pensioner	8	17	18	111	7	3	2	166
Couples								
One earner, no children	12	5	6	5	5	17	16	66
One earner, with children	39	14	21	16	22	91	90	293
Two earners, no children	19	3	2	0	3	1	1	29
Two earners, with children	33	9	8	2	5	6	12	76
Two earners, 1 rel. asst.	1	1	4	5	1	4	20	35
Unemployed, no children	1	0	1	7	0	0	0	9
Unemployed, with children	2	1	3	66	0	1	6	79
Pensioner	12	7	14	36	4	5	12	90
Other Tax Units	7	4	6	73	5	11	14	119
ALL	255	160	148	460	113	177	218	1531

4.4 Summary

The nature and extent of the redistribution involved in a basic income depend very much on the level of the payment, and the tax rate(s) required to finance it. Furthermore, each of the options considered generated very diverse outcomes: there were significant gains and losses within each income group and family type. A basic individual income close to the lowest rates of payment of social welfare in 1987 (about £35 per week) would involve a very substantial redistribution of resources from the top of the income distribution towards the bottom. A basic family income at similar rates to the lowest social welfare payments could be financed by a lower tax rate, and would involve a smaller, though still substantial, redistribution from the top to the bottom of the income scale. One-earner families with children would be particularly likely to benefit from this radical reform. Lone parents, whether in or out of employment, would lose from the abolition of their special treatment under the current tax and social welfare codes. Two-earner couples with children would be more likely to lose.

A partial basic income which "cashed out" the value of personal tax free allowances at the standard rate, but retained the PRSI system and the existing structure of tax rates and bands would involve a redistribution from high to low incomes. High or top-rate taxpayers would tend to lose out from the change, as the value of their tax free allowances under the current system would be greater than the partial basic income replacing them. But a partial basic income which abolished PRSI and moved to a single rate of tax would lead to different effects, particularly for the upper half of the income distribution.

All of this discussion is predicated on analysis which assumes that labour market behaviour and outcomes do not respond to the radical change in tax/transfer policy. But current labour market structure and behaviour reflects, to some degree, the incentives created by the current tax/transfer system. For many, the rationale for integrating the income tax and welfare systems into a basic income system is that it will make it more attractive to offer and take up employment. It is to this crucial issue that we turn in the next chapter.

Chapter 5

INCENTIVE ISSUES

5.1 Introduction

An important part of the motivation for the basic income approach to reform of the tax/transfer system is that it would improve the incentive to work. The dynamic unleashed by this change would, it is hoped, lead to an increase in employment and a fall in unemployment. If this is the case, the higher level of employment would lead to higher tax revenue for any given tax rates. This, in turn, would permit a reduction in the rate of tax needed to finance the reform. Our analysis up to this point has made the technical assumption that labour market behaviour and pre-tax incomes remain unchanged under the reform: we now consider what impact the reformed system, costed on this basis, would have on the incentives to work faced by different individuals. This is an essential starting point if we are to assess whether the "virtuous cycle" of improved incentives and reduced tax rates is likely to become a reality.

There are many facets to the incentive to work. A reform may improve the incentive to work for some individuals and disimprove it for others; or improve certain aspects of work incentives for a given individual and worsen other aspects. In Section 5.2, we outline some of the dimensions of work incentives which are most salient from the point of view of employment growth. We conclude that it is the effect of basic incomes on the balance between in-work and out-of-work incomes which is most likely to give rise to positive dynamic effects. Replacement rates, showing out-of-work income as a proportion of in-work income, are commonly used to measure this balance. In Section 5.3, we focus more closely on the issues arising in constructing measures of replacement rates. Section 5.4 presents results on replacement rates for 1987, under the policies then prevailing. Section 5.5 considers how these replacement rates would be affected by alternative full and partial basic income proposals. The final section draws together the main findings.

5.2 Tax, Incentives and Employment

The labour market is a complex one, with many unique characteristics. It is, of course, a simplification to speak of "the" labour market; but there are many factors linking the markets for different types of labour services, so that it does make sense to consider the aggregate market for labour. As

in other markets, supply and demand forces each play a role in determining the price and quantities which are bought and sold. The price in this case is the wage rate, and the quantity can be thought of as the total hours of work, which takes into account not only the numbers employed but also the hours worked by each employee.

A key feature of the labour market is that the various taxes on expenditure, income and employment drive a wedge between the cost of labour to employers and the real net income gained from employment by employees.[1] In simple, perfectly competitive models of the labour market, an increase in the tax wedge can lead to fewer workers offering themselves for employment at any given wage level; this in turn can lead to an increased wage and lower employment. Conversely, a tax cut which makes it more attractive to take up employment at a given gross wage level can lead to an increase in the numbers offering themselves for work, a fall in the gross wage (while net incomes after tax rise) and an increase in employment: employers facing a lower gross wage are willing to hire more labour.[2] Labour market models of supply and demand forces operating under perfect competition cannot explain the existence of involuntary unemployment. More complex models, which allow for collective bargaining at plant, industry or national level, can allow for this possibility. In some, though not all, of these models, the tax wedge has effects which are similar in nature to those under perfect competition.

The level and structure of employment and unemployment can also be influenced by the withdrawal of cash and non-cash benefits for those moving from unemployment into employment. The withdrawal of cash and non-cash benefits (such as medical card entitlement or rent reductions under the local authorities' differential rent schemes) may make it difficult for low wage employment to be created.

Given the overall government budget constraint, reductions in employment related taxes must be offset by reductions in government expenditure or increases in other taxes. As noted in Chapter 3, there are arguments for a shift in the balance of taxes away from employment, towards property. But the key feature of a basic income scheme is a change in the structure of personal taxes and transfers, for a given level of

[1]The nature of the "tax wedge" is cogently summarised by Tansey, 1991.

[2]Technically, this is a shift along the demand curve for labour, brought about by an upward shift in the supply curve. All of the reforms considered here would seek to operate in this way, so we can focus on their effects on the supply of labour.

resources in the tax/transfer system. For that reason, we can concentrate on evaluating its potential dynamic effects in the context of costings which use the same resources as are used by the current tax/transfer system.

The overall supply of labour can be seen as reflecting individual decisions on whether or not to seek work, and on how many hours of work to seek (e.g., to seek voluntary overtime, or to seek part-time work). These individual choices may be constrained by demand-side factors: job seekers may not receive a job offer, and others may be faced with a choice between no work or full-time work, when they would prefer to work part-time. But the overall supply of labour to the market is influenced by individual choices as to what wage levels are acceptable and preferred hours of work. In the Irish context, decisions regarding emigration and return migration are also relevant.

A reform of income taxes and transfers, given a fixed net revenue requirement, may improve work incentives for some groups and worsen them for others. It may, however, have a significant positive effect on overall labour supply by increasing the incentive to supply labour for the most responsive groups[3]; or by removing barriers to the labour market integration of groups which are currently faced with particularly high rates of tax-cum-benefit withdrawal.

One of the major advantages claimed for basic income schemes is that they would allow those currently unemployed to build on their out-of-work income in a way which is not allowed by the current tax/transfer structure. This change would, it is hoped, lead to an increase in employment. Employers would be able to find job-seekers at lower wages than they can currently offer, and job-seekers would find these wages acceptable under the new tax-transfer system. For this to come about, it must be the case that the basic income structure makes the balance between income out of work and income in work more rewarding than at present for low wages. This balance is generally measured by replacement rates, which calculate the percentage of in-work income that individuals would receive when unemployed. In the next section we discuss the issues arising in the measurement of replacement rates, and in subsequent sections we apply these measures for the system current in 1987 and some basic income options.

[3]For a detailed argument along these lines, see Callan and Farrell (1991).

A further improvement in incentives offered by a basic income structure is the effective abolition of the low income poverty trap for employees with families. This arises because as earnings increase, Family Income Supplement is withdrawn at the rate of 60 per cent of gross income; while income tax may take as much as 40 per cent of gross income. A detailed assessment of the evolution of this trap between 1987 and 1993 is provided in Callan and O'Neill (1993). The numbers of individuals *directly* affected by this trap are limited. Reforms which tackle this issue are, indeed, desirable - even if only as a matter of fairness to the relatively small number of families directly affected. But if this change is to have substantial dynamic effects they too will come from altering the balance of incentives as between income out of work and income in employment. For this reason, we do not specifically set out the impact of the basic income schemes on the low-poverty trap - which is clearly beneficial - but instead focus our attention on the impact on replacement rates, which measure the balance between incomes in work and income when unemployed.

Basic income reforms can be regarded as designed specifically to address each of these two incentive problems. But they can have other, detrimental side-effects on incentives. The tax rates required to finance a basic income can mean that many employees face higher marginal tax rates than under the current system. This can have an impact on the willingness of such employees to work additional hours, or may make reductions in working hours attractive to them. Other things being equal, the reduction in their labour supply could put upward pressure on labour costs, tending to worsen the prospects for employment.[4] Perhaps more significantly, the reforms could have the effect of worsening the income situation of young, single employees. The high taxes already paid by this group are a factor in inducing emigration; a further reduction in the labour supply of this group to the Irish economy could also lead to upward pressure on wages. Our analysis does not deal with these potentially detrimental side-effects, but focuses instead on the area where a basic income reform could be expected to have its greatest positive impact on incentives and employment: the balance between income in work and out of work.

5.3 Replacement Rates: Concepts and Measures

The general idea of a replacement rate is to provide a measure of the balance between income in work and income out of work. This can be of

[4]Provided that wage costs did not increase, there could be a redistribution of work from those currently in employment to those currently unemployed; but the proviso is a significant one.

importance from a number of points of view. For example, it could be relevant in assessing the financial incentive for unemployed persons to seek employment or accept job offers, or the incentive facing employees to continue in employment or accept a redundancy package. It could also be relevant in assessing the adequacy of the income replacement package for those becoming unemployed.

There is no unique rate which is the "best" measure for all purposes. Obviously, earnings from employment (or potential employment) and cash benefits (or potential cash benefits) from unemployment are key components in the calculation of replacement rates. But calculations may include or exclude other income (including the earnings of a spouse, for example), secondary non-cash benefits and work expenses (such as travel and child minding). Furthermore the time period and the time path involved may be significant. At the time of the Survey, insured workers could initially qualify for Unemployment Benefit and Pay-Related Benefit. When entitlement to these benefits was exhausted, Unemployment Assistance was payable, at a lower rate. On the other side of the balance, the issue arises of whether past earnings or prospective future earnings were more relevant for the decisions of the unemployed. Net earnings may also be affected by the time pattern of employment and unemployment, because of the cumulative nature of the PAYE system, and the special tax-free status of Unemployment Assistance, and (formerly) of Unemployment Benefit.

From the point of view of income adequacy, a replacement rate based on the ratio of benefits to after-tax earnings in the last job, or on after-tax incomes out of work and in the last job may be most relevant. Atkinson and Micklewright (1985) also suggest that the ratio of benefits to net earnings in the last job may be of interest from an incentive point of view: it may play a role as a "rule of thumb" which influences the reservation wage of the unemployed. Some results based on this measure were presented in Callan and Nolan (1994). But in many models of search behaviour, the key elements are after-tax income in a prospective job, and after-tax income when out of work. Replacement rates based on this concept have been used in many studies of the incentive effects of the benefit system on the unemployed in the UK (e.g., Nickell, 1979; Narendranathan, Nickell and Stern, 1985). It is this concept which is the basis for the replacement rates analysed in this chapter. We extend the usual analysis of replacement rates for the unemployed to encompass replacement rates for employees. This is particularly relevant for reforms of the basic income type, where transfers become unconditional, so that employed individuals with high replacement rates could choose to "opt out" of employment and maintain most of their

income. We do not address the issue of whether or not employed individuals would be likely to make such a choice: our aim here is simply to set out the financial incentives facing them, in the same way as for the unemployed.

For the purposes of the present analysis, we propose two strategic simplifications. First, in a situation where long-term unemployment has risen markedly, we argue that it is the rate of long-term unemployment assistance which is the most relevant to the debate on incentives. This means that we can abstract from issues surrounding tax refunds, pay-related benefit and differences between unemployment benefit and unemployment assistance. Many of these distinctions have in any case become less relevant, as social welfare rates for unemployment benefit and long-term unemployment assistance have almost converged and pay-related benefit has been abolished. Second, because our interest is mainly in the effect of changes in the tax/transfer system on replacement rates, we can focus exclusively on replacement rates in cash terms: it is essentially the cash element of the calculations which is affected by basic income reforms. Thus, we can leave aside secondary and non-cash benefits such as medical cards, and differential rents for local authority tenants as issues which can be analysed separately from reform of cash transfers and taxes. We do not suggest that the measure used here is the only one which is relevant in the debate concerning work incentives. But it is suitable for the purpose of analysing the effects of alternative basic income reforms on replacement rates, in the context in which there is high long-term unemployment.

The measure used here is, therefore, the ratio of disposable income (i.e., income after tax, PRSI and benefits) when unemployed to disposable income when employed. In the case of married couples, we concentrate on the replacement rate facing the husband, with the wife's labour force status and gross earnings held constant: her net earnings and/or social welfare entitlement may, however, be affected by whether or not her husband is in employment. The focus is in the family's disposable income when the man is employed and unemployed: similar results could be expected for married women when the husband's labour force status and earnings are held constant.

For the unemployed, gross earnings when employed are predicted using separate wage equations for married and single men and women (Callan and Wren, 1994, Chapter 4). These wage equations establish a relationship between personal characteristics (such as level of education and length of labour market experience) and the wages received by those in employment. The resulting distribution of wage rates for the unemployed

is compared with the overall wage distribution of those in employment in Table 5.1. It can be seen that those who are currently unemployed are concentrated towards the lower end of the wage distribution. Thus, the wage they could earn if they became employed would typically be lower than the average wage of those in employment - something which is not taken into account in calculations which focus on replacement rates at average industrial earnings (about £4.70 per hour in 1987).

Table 5.1: *Distribution of Hourly Wage Rates for Employees and Predicted Hourly Wage Rates for Unemployed, 1987*

Wage Rate (£ per hour)	*% of employees*	*% of unemployed*
< 2	9.8	18.8
2 < 3	12.7	44.0
3 < 4	22.0	19.2
4 < 5	19.2	14.8
5 < 6	11.9	2.6
6 < 7	7.8	0.4
7 < 8	4.7	0.2
> 8	11.9	0.1
ALL[1]	100.0	100.0

Note: 1. Figures may not add to totals because of rounding.

In this approach, predicted wages for the unemployed are based on the relationship between wages and personal characteristics for those who have jobs. The predicted wages are therefore influenced by the current structure of employment and the level of wages. It may be that under a basic income, lower wages than those currently paid would become relevant. For this reason, we have also considered the impact of basic income reforms on replacement rates at some fixed wage levels (including £100 per week and £200 per week in 1987). In this way we are able to directly address two separate, but related, questions. First, does the basic income reform improve the incentive to work for jobs at, say, £100 per week? Second, does the basic income reform improve the incentive to work at wages corresponding to the education and experience profile of the unemployed?

While in this report we follow the usual practice of focusing on the replacement *ratio* as a convenient summary statistic, it should be noted that the incentive to work may vary for individuals facing the same replacement rate. For example, a replacement rate of 80 per cent could arise from an

income in work of £100 and an income out of work of £80, or from income levels which are double (or treble) these amounts. In other words, the amount of extra income which could be earned by taking up employment could vary markedly even for individuals facing the same replacement rate.

5.4 Replacement Rates in 1987

Replacement rates based on long-term unemployment assistance entitlements in 1987, and calculated as described in Section 5.2, are reported in Table 5.2. It should be remembered that these calculations concentrate on cash transfers and taxes; they do not take into account work expenses, the value of medical card entitlements, differential rents or benefits "passported" on social welfare status. They do, however, take full account of the distribution of prospective wages faced by the unemployed - including the fact that the average wage faced is lower than the average industrial wage, and that some individuals face very low potential wages indeed. It is of interest that only about 10 per cent of unemployed persons face a replacement rate in these terms of over 80 per cent. Furthermore, over half of all those facing replacement rates in excess of 80 per cent are currently in employment. The contrast is even more striking in terms of the most extreme replacement rates of over 100 per cent, where the vast majority are in employment.

Nevertheless, it should also be noted that the unemployment rate tends to be higher at higher replacement rates. Among those with replacement rates below 60 per cent, the unemployment rate is just over 20 per cent, while for those with replacement rates above 60 per cent the unemployment rate is above 40 per cent. There are several possible explanations for this relationship. One is that unemployment tends to be greater in unskilled occupations and industries, which also tend to have lower wage rates and hence higher replacement rates; another is that the individuals concerned tend to have longer spells of unemployment because of the higher replacement rates. A great deal of research has been undertaken internationally in an attempt to disentangle these and other influences. Recent surveys of the evidence (e.g., Chiplin, 1992) suggest that high replacement rates do have significant effects on the length of unemployment spells, but that the impact on aggregate unemployment is limited. Further research on this issue is needed in the Irish context: the data gathered in the EU-sponsored Household Panel Study, currently being undertaken by the ESRI, will provide a suitable basis for such research.

Table 5.2: *Replacement Rates for Employees and Unemployed, 1987*[1]

Replacement rate (per cent)	*% of unemployed*	*% of employees*
0 < 20	3.8	9.0
20 < 40	14.6	36.4
40 < 60	39.4	33.6
60 < 80	31.9	16.7
80 < 100	9.6	2.9
> 100	0.6	1.4
	100.0	100.0
Population estimate:	220,800	634,800

Note: 1. Replacement rates calculated from modelled social welfare entitlements for both groups; actual wage income for employees, and predicted hourly wages for the unemployed, assuming a 40 hour week.

Looking more closely at the unemployed, we now ask how replacement rates vary by marital status, and for those with and without children? Table 5.3 summarises the distributions for single persons without children, and for married persons with and without children.[5] Almost 9 out of 10 single persons face replacement rates below 60 per cent, and all but a few face rates below 80 per cent. About 1 in 10 of those married without children face rates of between 80 and 100 per cent. But almost a quarter of those who are married with children face rates above 80 per cent.

[5]The number of single persons with children is too low to allow a separate breakdown for this group.

Table 5.3: *Replacement Rates for Unemployed Classified by Marital Status and Presence of Children, 1987*[1]

Replacement rate (per cent)	*Single, no children*	*Married, no children*	*Married, with children*
0 < 20	6.2	0.0	0.7
20 < 40	24.9	6.3	1.0
40 < 60	55.6	59.5	13.0
60 < 80	12.9	23.5	60.4
80 < 100	0.2	10.7	23.6
> 100	0.2	0.0	1.2
	100.0	100.0	100.0

Note: 1. Replacement rates calculated from modelled social welfare entitlements for both groups; actual wage income for employees, and predicted hourly wages for the unemployed, assuming a 40 hour week.

5.5 Replacement Rates under Basic Income Reforms

We now consider the impact of alternative basic income reforms on the distribution of replacement rates for the unemployed and for those currently in employment. Table 5.4 presents the results for a basic individual income of £35 per week, with a child payment of £12.70 per week, financed by a uniform income tax rate of 61.6 per cent. The proportion of unemployed individuals with replacement rates above 80 per cent falls from about 1 in 10 to about 1 in 100. Thus, the highest replacement rates are all but eliminated. Replacement rates of between 60 and 80 per cent become more common. The impact on the highest replacement rates for employees is not so dramatic: the proportion with rates above 80 per cent is approximately halved, to about 2.1 per cent. Replacement rates of between 60 and 80 per cent also become somewhat more common for employees.

Table 5.4: *Replacement Rates for Employees and Unemployed, 1987 and Basic Individual Income*[1]

Replacement rate (per cent)	*% of unemployed*		*% of employees*	
	1987	*Basic individual income*	*1987*	*Basic individual income*
0 < 20	3.8	0	9.0	1.0
20 < 40	14.6	13.0	36.4	30.0
40 < 60	39.4	45.7	33.6	47.5
60 < 80	31.9	40.3	16.7	19.5
80 < 100	9.6	1.0	2.9	2.1
> 100	0.6	0.0	1.4	0.0
	100.0	100.0	100.0	100.0
Population estimate:	220,800		634,800	

Note: 1. Replacement rates calculated from modelled social welfare entitlements for both groups; actual wage income for employees, and predicted hourly wages for the unemployed, assuming a 40 hour week.

A basic family income (of £35 for an individual, and £56 for a couple, financed by a uniform tax rate of 56.7 per cent) would have very similar effects on the incidence of the highest replacement rates, as shown in Table 5.5. The highest rates are almost eliminated for the unemployed, and the incidence is more than halved for employees. But in contrast with an individual basic income, replacement rates of between 60 and 80 per cent become *less* common, both for employees and the unemployed. This reflects the impact of a lower tax rate needed to finance the basic family income. A dual rate basic family income has similar effects, despite the higher initial tax rate.

Table 5.5: *Replacement Rates for Employees and Unemployed, 1987 and Basic Family Income*[1]

Replacement rate (per cent)	*% of unemployed*			*% of employees*		
	1987	*Basic family income*	*Dual Rate Basic family income*	*1987*	*Basic family income*	*Dual Rate Basic family income*
0 < 20	3.8	0	0.0	9.0	2.0	2.5
20 < 40	14.6	16.4	15.0	36.4	41.9	41.0
40 < 60	39.4	58.8	56.4	33.6	40.7	40.1
60 < 80	31.9	24.5	27.4	16.7	13.5	15.0
80 < 100	9.6	0.3	1.2	2.9	1.9	1.4
> 100	0.6	0.0	0.0	1.4	0.0	0.0
	100.0	100.0	100.0	100.0	100.0	100.0
Population estimate:		220,800			634,800	

Note: 1. Replacement rates calculated from modelled social welfare entitlements for both groups; actual wage income for employees, and predicted hourly wages for the unemployed, assuming a 40 hour week.

How effective is a partial basic income in reducing high replacement rates? Table 5.6 shows that a partial basic income of £21 per week, financed by the abolition of most personal allowances (including PAYE and PRSI allowances) could reduce the incidence of high replacement rates among the unemployed by over half: from 10.2 per cent to 4.7 per cent. There is little impact on the replacement rates faced by employees. This is a common feature across all the schemes examined above. Thus, for these schemes, fears that the high tax rates required for revenue neutrality would have a major impact on the replacement rates faced by employees do not seem to be borne out.[6]

[6]It is true, of course, that many employees will face a higher *marginal* rate of tax than under the 1987 system.

Table 5.6: *Replacement Rates for Employees and Unemployed, 1987 and Partial Basic Income*[1]

Replacement rate (per cent)	*% of unemployed*		*% of employees*	
	1987	*Partial basic income*	*1987*	*Partial basic income*
0 < 20	3.8	1.8	9.0	4.2
20 < 40	14.6	17.5	36.4	37.1
40 < 60	39.4	40.0	33.6	36.8
60 < 80	31.9	36.1	16.7	18.6
80 < 100	9.6	4.6	2.9	2.6
> 100	0.6	0.1	1.4	0.7
	100.0	100.0	100.0	100.0
Population estimate:	220,800		634,800	

Note: 1. Replacement rates calculated from modelled social welfare entitlements for both groups: actual wage income for employees, and predicted hourly wages for the unemployed, assuming a 40 hour week.

Thus far we have concentrated our analysis on the impact of reforms on replacement rates calculated at predicted wage rates for the unemployed, on the assumption of a 40 hour week. We also find that the highest replacement rates tend to be reduced by a basic income reform when looking at jobs at a fixed wage of either £100 or £200 per week.

5.6 Conclusions

We have argued that the strongest positive dynamic for employment creation which would arise from a basic income scheme would be likely to come from its impact on the balance between income from work and income when unemployed. Replacement rates, based on net incomes in and out of employment, are commonly used to assess the financial incentive to take up employment facing those currently out of work.[7] There is no single replacement rate calculation which is best for all purposes; but for our analysis, which is focused on a radical reform of the tax/transfer structure, a replacement rate which focuses on cash transfers and taxes seems most

[7]They may also be used to assess the incentive facing those currently employed to continue in employment or to become unemployed.

appropriate. Given the extent of long-term unemployment, the rate of long-term unemployment assistance seems to be the most relevant benefit on which to base the calculations.

Our analysis of the 1987 situation showed that about 1 in 10 of the unemployed faced a replacement rate of over 80 per cent. But a greater number of *employed* persons faced replacement rates of this level. While this indicates that high replacement rates (even in excess of 100 per cent) are not an absolute barrier to employment, it does not mean that high replacement rates have *no* effect: the rate of unemployment was much higher for persons with a high replacement rate. Married persons, particularly those with children, were particularly likely to have a high replacement rate: about a quarter had a replacement rate of over 80 per cent.

An individual basic income, at about £35 per week, was found sufficient to virtually eliminate replacement rates of over 80 per cent for those who are unemployed, and halve the incidence of such replacement rates for employees. A basic family income, which could be financed by a lower tax rate, had an even stronger effect in reducing replacement rates, including those between 60 and 80 per cent. A partial basic income would achieve about half the effect of a full basic income on high replacement rates.

The analysis in this chapter has concentrated on the effect of a basic income (or a partial basic income) on the budget constraints actually faced by employed and unemployed persons. It could also be argued that a basic income, or partial basic income, would create greater certainty as to income in employment and do away with problems concerning take up of benefits aimed at low income earners, such as the Family Income Supplement. This would reinforce the favourable incentive effects of these reforms. On the other hand, there are disincentive effects of the reforms which are not captured by the analysis of replacement rates. Chief among these are the high tax rates for basic individual and family incomes, which would create incentives for a reduction in labour supply by those in employment; and an incentive to emigrate for young persons, whose tax burden could rise even relative to the current level. The overall effect on the supply of labour, and on employment, is therefore uncertain; but the analysis shows that the impact on replacement rates of basic income schemes could have been positive in a 1987 context. In the next chapter (Section 6.4) we will reconsider this issue in a more up-to-date setting.

Chapter 6

RECENT DEVELOPMENTS

6.1 Introduction

The findings in the last three chapters concerning the cost, distributive and incentive impact of alternative basic income schemes were based on analysis of the situation prevailing in 1987. Many of the trade-offs identified remain valid today. But there is, naturally, a particular interest in exploring how the trade-offs may have changed since then. Have policy developments since 1987 made it easier or more difficult to introduce a basic income? Have changes in the structure of the population made a basic income easier to finance? These are the questions to which we turn in this chapter. In Section 6.2, we describe briefly the most relevant developments in the structure of the economy and of tax and welfare policy, and describe how these changes are dealt with in the modelling procedures. The main results on the cost and distributive effects of a basic individual income at the lowest social welfare rates in 1993/94, a basic family income at similar levels, and a partial basic income financed by the abolition of tax free allowances, are set out in Section 6.3. Section 6.4 goes on to examine the evolution of replacement rates in recent years, and the likely impact of alternative basic income schemes on the current distribution. Section 6.5 examines reforms of child income support which draw on the notion of a basic income for children, financed either from general taxation or from a combination of general taxes and the inclusion of child benefit in the income tax base. The main findings are drawn together in the concluding section.

6.2 Uprating and Rebasing

The cost, distributive and incentive implications of basic income reforms can be altered substantially by a change in the baseline on which these reforms operate. Changes in this baseline can be divided into two types: changes in the baseline tax and social welfare policies, and changes in the population and economic structure. There have been significant changes in each of these main areas since 1987.

Looking first at the changes in policies, there have been substantial changes in both the income tax and social welfare systems. The top rate of income tax in 1987 was 58 per cent; it is now 48 per cent, with the top two rates of income tax having been amalgamated. The standard rate of income

tax is 27 per cent, down from 35 per cent in 1987. There has been some widening of the standard rate band of income tax. On the social welfare side, there have been many changes tending to harmonise and streamline the rates of payment. Special increases for the schemes with the lowest rates of payment have brought the personal rates of payment on different schemes into a much narrower range. Similarly, there has been a harmonisation of rates of payment for child dependant additions.

Turning to the population and economic structures, there has been a small rise in the total population, and a more marked shift in its composition: a sharp fall in the number of children, and a more modest rise in the number of elderly people. The Live Register stood at around 230,000 in 1986, but is now closer to 300,000: unemployment on a Labour Force Survey basis has been more stable. There was also a smaller rise in employment, most of which is accounted for by a rise in women's employment. There has been substantial real growth in rates of pay for employees, and farm incomes have also seen real growth from the very low levels of 1986 (the base year for the ESRI farm income estimates).[1]

These developments have been incorporated into the modelling process in three ways. First, the changes in policy parameters, such as tax rates and social welfare rates, have been directly modelled. This makes it possible to conduct analysis using a baseline of 1993/94 policy parameters. Second, income growth for different sources of income can also be taken into account. Using a combination of National Accounts and Labour Force Survey information (supplemented, where necessary, by recent *Quarterly Economic Commentary* estimates of the relevant statistics) it is possible to uprate wage and salary incomes, farm incomes, and other self-employment or capital incomes by the average growth in each of these income sources. This uprating takes the income base for the model up to 1994: thus, the scenario for the analysis of reform can be compared with the "opening position" for the 1994 budget.

Changes in the structure of the population require a more complex procedure. Essentially this changes the "weights" attached to each household in the ESRI Survey so that the grossed-up Survey results capture some key features of the 1994 population. Households with characteristics which have become more common (e.g., containing an unemployed person) are likely to have a higher weight; households of a type which has

[1]There may also have been an increase in the efficacy of revenue collection over this period. This is not taken into account in the model, but if it were, it would not be likely to alter the results significantly.

become less common (e.g., containing families with large numbers of children) tend to receive a lower weight. The methods by which the weights were derived are set out in Atkinson, Gomulka and Sutherland (1988) and Gomulka (1992).[2] The procedure changes the weights in order to force the grossed-up estimates to conform to key statistics on the levels of employment (for men and women); numbers in receipt of unemployment benefit and unemployment assistance; the distribution of families by the number of children in receipt of child benefit; and the number of married persons; and the number of elderly persons. Ideally, as Gomulka (1992) stresses, one would use alternative control totals to test the sensitivity of results to these reweighting procedures; but in the time available to date, we have concentrated on analysis using one uprated weight, and found that the costings of a basic individual income did not greatly diverge from analysis based on the original 1987 weights.

6.3 Estimates of Cost and Distributive Impacts of Basic Incomes in 1993/1994

We now briefly review the main results obtained from the analysis of the 1993/94 situation. Three policy options were explored. First, an individual basic income of £60 per week, close to the social welfare rate for long-term unemployment assistance of £59.20 in 1993/94; together with a child rate of £17.40 per week (based on a child dependant addition of £12.80 and child benefit of £4.60 per week). Second, a basic family income of £60 for an individual and £96 for a couple, with £17.40 for a child. Third, a partial basic income, at £21 per week per adult (with no child rate). This amount was originally chosen in 1987, as an approximation of the value of the personal, PAYE and PRSI allowances at the then standard rate of tax of 35 per cent. The fall in the standard rate of tax means that a similar calculation in 1993/94 arrives at a figure below £17 per week; but a partial basic income at a higher level, financed by a small increase in the standard rate of tax may be of interest.

The estimated revenue-neutral tax rate for an individual basic income is 68.6 per cent - significantly higher than that required in 1987 to fund a basic income at the lowest rates of social welfare then prevailing. While the degree of precision attached to this estimate is a good deal less than our estimates for 1987, it is clear that the dominant factor behind this change is that the lowest rates of social welfare have increased more rapidly than

[2]We are grateful to Joanna Gomulka for her advice on grossing-up issues, and for estimating the weights used in the present analysis.

other incomes.[3] For example, the personal rate of long-term unemployment assistance increased from £36.70 in 1986 to £59.20 in 1993 - an increase of over 60 per cent, as compared with an increase of about 45 per cent in earnings per person employed. Similarly, the tax rate required to finance a basic family income (at £60 per week for an individual and £96 per week for a couple), is now 62.7 per cent - 6 percentage points higher than the rate required to finance a payment at the lowest social welfare rates in 1987. The height of these tax rates makes dual rate tax structures of more limited interest than in 1987: the initial tax rate for a basic individual income would probably have to be at least 80 per cent if a significant reduction in the subsequent tax rate were to be attained. The partial basic income which was revenue-neutral with a small fall in the standard tax rate in 1987 now requires a one percentage point rise in the standard tax rate for revenue neutrality.

[3]This outweighs any easement in the net revenue constraint for financing basic income arising from, for example, the rise in the level of unemployment.

Table 6.1: *Distribution of Gains and Losses from a £60 Basic Individual Income, 1993/94*

Net equivalent income[1] (£ p w)		*% of tax units*	*% Change in ave. income*	*Aggregate Gain*	*Aggregate Loss*
More than	*Less than*			*£m p a*	*£m p a*
	55.44	9.8	63.7	353.1	8.3
55.44	59.20	15.6	15.3	179.5	19.1
59.20	62.60	3.7	19.4	57.5	2.7
62.60	70.60	10.9	12.6	130.2	33.2
70.60	83.22	9.9	17.6	230.4	31.7
83.22	108.70	10.1	11.3	197.3	45.9
108.70	135.75	10.1	1.8	135.0	103.7
135.75	165.41	10.0	-9.0	65.8	236.9
165.41	212.90	10.0	-11.7	44.6	325.5
212.90		9.9	-15.2	30.3	615.9
ALL		100.0	0.0	1423.7	1422.8

Note: 1. Net equivalent income under the baseline 1993/94 tax and social welfare policy, with equivalence scale: 1 for the first adult, 0.66 for other adults, and 0.33 per child.

The net impact effect of the £60 basic income is a very substantial transfer of resources away from the top of the equivalent income distribution, towards the bottom and middle of the income distribution. The net loss for the top third of the income distribution is now over £1000m per annum. The losses for those at the top are even more substantial (in proportionate terms) than in 1987, as are the gains for the bottom and middle income deciles. About two-thirds of all tax units would stand to gain or lose more than £10 per week from the change. Single employees would again form the bulk of those losing out from the change.

A basic income on a family unit basis would, as in 1987, involve a slightly less extensive redistribution. Nevertheless, losses in the top three deciles would be over £700m per annum, and more than 3 out of every 5 families would experience a gain or loss of over £10 per week.

Table 6.2: *Distribution of Gains and Losses from a £21 Partial Basic Income, 1993/94*

Net equivalent income[1] *(£ p w)*		*% of tax units*	*% Change in ave. income*	*Aggregate Gain*	*Aggregate Loss*
More than	*Less than*			*£m p a*	*£m p a*
	55.44	9.8	12.5	82.7	15.0
55.44	59.20	15.6	-0.2	14.8	16.3
59.20	62.60	3.7	1.1	8.0	4.5
62.60	70.60	10.9	1.6	23.3	10.8
70.60	83.22	9.9	3.0	49.2	15.5
83.22	108.70	10.1	2.8	64.4	26.2
108.70	135.75	10.1	1.2	57.8	37.1
135.75	165.41	10.0	-2.4	28.4	73.1
165.41	212.90	10.0	-3.0	22.8	98.6
212.90		9.9	-1.4	31.3	84.0
ALL		100.0	0.0	382.7	381.2

Note: 1. Net equivalent income under the baseline 1993/94 tax and social welfare policy, with equivalence scale: 1 for the first adult, 0.66 for other adults, and 0.33 per child.

A partial basic income would involve a much more limited redistribution and could be financed by a 1 percentage point rise in the standard tax rate, to 28 per cent. Net losses for the top three deciles (Table 6.2) would be about £170m per annum, with over half of this amount going to the bottom decile and the remainder spread over the middle income deciles.

6.4 Replacement Rates in 1993/1994 and Under Alternative Basic Income Schemes

In order to investigate the effects of the reforms on replacement rates, we must first derive a baseline distribution of replacement rates for 1994, by repeating the analysis in Chapter 5 with uprated policies, incomes and weights. The effects of these changes on the distribution of replacement rates is of considerable independent interest. Table 6.3 sets out the estimated distributions for 1987 and 1993/94 for the unemployed and for employees.

Table 6.3: *Replacement Rates for Employees and Unemployed, 1987 and 1993/94*

Replacement rate (per cent)	*% of unemployed*		*% of employees*	
	1987	*1993/94*	*1987*	*1993/94*
0 < 20	3.8	5.5	9.0	10.0
20 < 40	14.6	15.2	36.4	37.2
40 < 60	39.4	34.5	33.6	31.6
60 < 80	31.9	40.6	16.7	15.5
80 < 100	9.6	3.9	2.9	4.1
> 100	0.6	0.3	1.4	1.7
	100.0	100.0	100.0	100.0
Population estimate:	244,479		632,765	

Improvements in Family Income Supplement, and reductions or exemptions in income tax for low income employees with children have tended to improve the in-work incomes for those with potentially high replacement rates. At the same time, the special increases in the personal rate of payment for the long-term unemployed have tended to increase replacement rates, other things being equal. The balance between these opposing forces (and some other relevant changes in policy and in wage levels) varies with the particular circumstances of each family. The net result, as shown in the table, is that there has been a sharp decline in the proportion of the unemployed facing high long-term replacement rates (above 80 per cent), from 10.2 per cent to 4.2 per cent. At the same time, the proportion of employees facing replacement rates above 80 per cent has risen from 4.3 per cent to 5.8 per cent. Because the population of employees is substantially greater than the population of the unemployed, the total number of persons facing these replacement rates is not much changed. The amelioration of the "unemployment trap" facing those currently unemployed has, however, been accompanied by a worsening of the high tax-cum-benefit-withdrawal rates on employees with low incomes and large families.

Why have replacement rates become higher for those in employment and lower for those who are unemployed? For both groups, gross pay in work (or potential gross pay in work) rises by 45 per cent, much less than the 60 per cent increase in the personal rate of long-term unemployment assistance. But it must be remembered that, as seen in Chapter 5, those who are unemployed tend to have low wages when in employment. Thus, their potential in-work incomes have been boosted by the increases in tax

exemption limits and child additions to tax exemption limits, together with improvements in Family Income Supplement. These increases have been sufficient to increase potential in-work incomes ahead of unemployment compensation. For those with higher incomes, the tax concessions have not been sufficient to offset the faster growth of unemployment assistance relative to gross earnings.

These calculations assume that all who are entitled to Family Income Supplement actually take up their entitlement. The available evidence (Callan and O'Neill, 1993) suggests that the rate of take-up remains low, despite the fact that expenditure on the scheme has more than doubled since 1987, and the numbers in receipt have almost doubled. We have conducted a sensitivity analysis which assumes, instead, that only 1 family in 3 actually takes up their entitlement to FIS.[4] The results indicate that the incidence of high replacement rates remains substantial because of the lack of take-up of FIS. There has been some improvement between 1987 and 1993/94 even on this basis; but the virtual elimination of high replacement rates indicated by the 100 per cent take-up assumption may be misleading. Evidence from the UK and elsewhere suggests that the maximum take-up rate for such benefits is well below 100 per cent; and the Irish rate of take-up appears, on the available evidence, to be below that in the UK.

How would basic income reforms affect the distribution of replacement rates? An individual basic income of £60 per week would eliminate replacement rates of over 100 per cent for both employees and the unemployed. In 1987, it would also have led to a sharp reduction in the proportion of the unemployed with replacement rates above 80 per cent. In a 1993/94 context, the effect depends on what rate of take-up for FIS is assumed. If complete take-up is assumed, the proportion of the unemployed with replacement rates above 80 per cent is not much changed. But if only 1 family in 3 actually takes up a FIS entitlement, the effect of a basic income could be much greater.

Part of the attraction of a basic income scheme is that it ensures 100 per cent take-up, which is not achieved by the current system. An individual basic income would reduce the numbers facing the highest replacement rates, but would increase the numbers facing rates of between 60 and 80 per cent. A basic family income, which could be financed at a lower tax rate, could achieve an even greater reduction in the incidence of the highest rates without this drawback.

[4]A random process was used to decide whether an individual family would or would not take up an entitlement to FIS.

Table 6.4: *Replacement Rates for Unemployed, 1993/94 and Basic Income Schemes*

Replacement rate (per cent)	*1993/94:*		*Reform options*		
	100% take-up of FIS	*33% take-up of FIS*	*Basic individual income*[1]	*Partial basic income*[2]	*Dual rate basic family income*[3]
			% of unemployed		
0 < 20	5.5	5.9	0.0	2.3	0.0
20 < 40	15.2	15.0	6.3	15.2	9.7
40 < 60	34.5	34.3	27.2	41.7	38.8
60 < 80	40.6	35.3	62.1	36.9	49.7
80 < 100	3.9	8.4	4.4	3.9	1.8
> 100	0.3	1.1	0.0	0.0	0.0
	100.0	100.0	100.0	100.0	100.0

Notes: 1. £60 per week to each individual.
2. £21 per week to each individual, with corresponding reductions in all social welfare rates of payment.
3. £60 per week to all single individuals; £96 per week to couples.

A partial basic income of £21 per week would have similar effects to a basic family income on the incidence of the highest replacement rates, but would increase the numbers facing rates between 60 and 80 per cent. A dual rate basic family income (an initial 67.5 per cent tax rate, followed by a rate of 59 per cent) would have a somewhat greater impact. It would eliminate the incidence of the highest replacement rates, and reduce the proportion facing replacement rates of between 80 and 100 per cent to less than 2 per cent. But there would be a 13 percentage point rise in the incidence of replacement rates between 60 and 80 per cent.

Each of these basic income options has a more muted impact on replacement rates than the corresponding options examined in a 1987 context in Chapter 5. The main reasons for this is that the 1993/94 basic income options require a higher tax rate than those in 1987. This reflects the fact that the minimum income offered by the 1993/94 social welfare system forms a higher proportion of average income than that offered by the 1987 system. Thus, the hoped for dynamic effects can be stifled by a high tax rate.

6.5 Basic Incomes for Children

We outlined in Chapter 2 some policy options which built on the idea of a basic income for children. The first of these can be thought of as a basic income for children, pure and simple. Under this scheme, the new rate of child benefit is set equal to the current (1993) rate of child benefit *plus* the amount of child dependant allowance payable to social welfare recipients; child dependant additions are, at the same time, abolished. The weekly payment for all children would, therefore, be the same as that currently received by most social welfare clients, about £17.40 per week. (The existing and revised policy parameters for child income support are set out in Table 6.5.) So too are child dependant additions to the income tax exemption limits. It could be argued that Family Income Supplement should also be abolished; but this could reduce the support received by some low income families in employment. An alternative approach is simply to reduce the income limits for the FIS scheme by an amount which will "claw back" the full increase in child benefit. This is the option modelled in our analysis. Essentially, then, almost all child income support is channelled into child benefit. This is not a self-financing option: there is a substantial net additional expenditure on child income support. In our analysis, this is financed by an increase in the standard rate of tax, from 27 per cent to 33.7 per cent.

Table 6.5: *Child Income Support: 1993/94 and Reform Options*

Policy instrument	*1993/94*	*Basic Income for Children*	*Integrated Child Benefit*
Child benefit (per month):			
First 3 children	20.00	75.30	75.30
Other children	23.00	75.30	75.30
Child dependant additions (per week)			
Most schemes	12.80	0	0
Lone parents	14.90	0	0
Child additions to income tax exemption limits (per annum):			
First 2 children	350	0	590
Other children	550	0	826
Standard tax rate	27%	33.7%	30.7%

An alternative approach, which has much in common with a basic income for children, is to consolidate child income support into a *taxable* child benefit payment. Again, the new level of payment would be equal to the current rate of child benefit plus the rate of child dependant additions (about £17.40 per week). The benefit would be paid direct and free of tax in the usual way (normally to the mother), but would form part of the taxable income of the tax unit which received it. Despite the taxation of child benefit, all families would receive a net benefit from the increase; but, of course, this would have to be paid for out of general taxation. However, a much smaller increase in the standard rate - from 27 per cent to 30.7 per cent - is sufficient to finance this policy. This implies a lesser degree of redistribution from those without children towards families with children. The overall distributional effects of these two options are, however, quite complex, as subsequent analysis will show.

Table 6.6: *Distribution of Gains and Losses from Alternative Reforms of Child Income Support, 1993/94*

Net equivalent income[1] (£ p w)		*% of tax units*	*Basic income for children*			*Integrated child benefit*		
			% Change in ave. income	*Aggregate Gain*	*Aggregate Loss*	*% Change in ave. income*	*Aggregate Gain*	*Aggregate Loss*
More than	*Less than*			*£m p a*	*£m p a*		*£m p a*	*£m p a*
	55.44	9.8	3.0	18.0	1.7	3.0	18.2	1.7
55.44	59.20	15.6	0.6	8.1	1.6	0.5	7.1	1.6
59.20	62.60	3.7	1.7	6.8	1.9	1.2	5.6	2.0
62.60	70.60	10.9	1.6	14.9	2.7	1.3	12.2	2.5
70.60	83.22	9.9	4.9	57.3	2.3	3.7	43.2	1.9
83.22	108.70	10.1	3.4	56.0	10.1	2.1	33.6	5.9
108.70	135.75	10.1	1.3	56.0	32.6	0.5	30.0	20.6
135.75	165.41	10.0	-1.8	23.4	58.1	-1.5	8.1	36.1
165.41	212.90	10.0	-2.4	18.6	76.2	-1.7	5.0	45.9
212.90		9.9	-2.0	11.8	87.1	-1.3	2.7	51.0
ALL		100.0	0.0	270.8	274.2	0.0	165.7	169.2

Note: 1. Equivalence scale: 1 for the first adult, 0.66 for other adults, and 0.33 per child.

Under a *basic income for children* the number of losers is about double the number of gainers (626,000 as against 302,000). Close to 280,000 single employees lose between £5 and £10 per week, because of the sharp rise in the standard tax rate. The results show some significant gains at the bottom of the income distribution. The gainers cannot be social welfare recipients, who do not benefit directly from the change: in general, they receive the same amount of money for each child, but now receive all of it as child benefit, which is not subject to withdrawal as their incomes increase. It seems likely, therefore, that the gains at the bottom of the distribution are mainly self-employed and farmers. Low-paid employees are likely to have a modelled entitlement to Family Income Supplement, so that they too are unlikely to be shown as net income gainers. There are substantial net gains for families in the middle of the income distribution: almost £125m for deciles 5 to 7. Net losses by the top three deciles are estimated at more than £165m.

While there are a greater number of losers under an *integrated child benefit* than under the basic income for children, the amounts of the losses are much reduced. No single employee loses more than £10 per week. As with a basic income for children, there are also significant gains (and very limited losses) in the bottom half of the distribution. There are substantial net gains in the middle of the income distribution - almost £80m per annum shared between deciles 5 and 7. These net gains are counterbalanced by substantial losses at the top of the distribution (where gains to those with children are partly clawed back by tax liabilities). This pattern is consistent with gains for those on low, and hence, non-taxable self-employment or farm incomes at the bottom of the distribution; very little change for the many social welfare recipients in deciles 2 and 3; gains for families with employment incomes in the middle of the distribution; and losses for high earners with few or no children.

What of the effects of such policies on replacement rates? As with full-scale basic incomes, improvement of the incentive to work could be a major part of the motivation for these reforms of child income support.

Table 6.7: *Replacement Rates for Unemployed, 1993/94 and Child Income Support Reforms*

Replacement rate (per cent)	*1993/94*		*Reform options*	
	100% take-up of FIS	*33% take-up of FIS*	*Basic income for children*	*Integrated child benefit*
0 < 20	5.5	5.9	4.3	4.7
20 < 40	15.2	15.0	13.3	13.8
40 < 60	34.5	34.3	34.2	33.9
60 < 80	40.6	35.3	44.6	44.4
80 < 100	3.9	8.4	3.5	2.9
> 100	0.3	1.1	0.1	0.1
	100.0	100.0	100.0	100.0

Once again, the effects depend crucially on the rate of take-up of FIS. Measured against a situation of complete take-up, neither reform option has a substantial impact. But compared with the situation under a low rate of take-up, a non-taxable child benefit at £75.30 per month would reduce the incidence of high replacement rates (i.e., those over 80 per cent) substantially. It would lead to an increase of 4 percentage points in the proportion of individuals facing replacement rates between 60 and 80 per cent. An integrated (i.e., taxable) child benefit would have a somewhat greater effect on high replacement rates, reducing the incidence from almost 10 per cent to 3 per cent. Again, there would be some increase in the incidence of replacement rates between 60 and 80 per cent, though not as great as under several of the more radical basic income options. Overall, these two options compare quite favourably in its effects on replacement rates with the other basic income and partial basic income options.

6.6 Conclusions

The results of the analysis on a 1993/1994 basis are helpful in drawing a number of conclusions. They suggest that an individual basic income at levels close to the lowest existing social welfare rates would require, other things being equal, a tax rate in excess of 68 per cent, and a rate of close to 63 per cent for a basic family income. But they are also helpful in pointing

towards a key issue: the sensitivity of the tax rate required to finance basic income options to the level of the income guarantee, *as a percentage of average income.*

The adjustment between 1987 and 1994 may have been a unique one, as the lowest rates of social welfare payment were "levelled-up" into line with what had previously been middle-ranking rates. This process, which was in part a response to the recommendations of the Commission on Social Welfare, raised the minimum income guarantee as a percentage of average income. A key question for the future is how this ratio will evolve. This is central to understanding whether real economic growth will help to make a basic income easier to finance (i.e., revenue-neutral at a lower tax rate). It is true, of course, that a basic income fixed in real terms (indexed to prices) will become easier to finance as real incomes grow. If the target basic income is fixed in *relative* terms (indexed to average incomes) then the extent to which real income growth will help to reduce the tax rate required to finance a basic income is much more limited. Furthermore, if the target basic income increases faster than other incomes, the tax rate required to finance it can increase.

In the shorter term, the same issues arise in the context of a possible easing of the public finance constraint. It seems likely, from estimates in the ESRI's *Medium Term Review* (Cantillon, Curtis and Fitz Gerald, 1994) that there may be scope for tax cuts of up to £100m per year between now and the end of the decade. Whether this scope actually emerges depends in part on whether social welfare payments are simply indexed in line with inflation, or social welfare rates share in the real income growth in the rest of the economy. Obviously the ratio of social welfare rates to average incomes is not cast in stone; but it may be that the ability to finance a basic income at acceptable levels of taxation requires a substantial cut in this ratio. In effect, this would alter the net resources available to the tax/transfer system, so that many other reforms would also need to be considered.

On balance, changes in tax/transfer policy over the past 7 years have led to a significant fall in the proportion of the unemployed facing the highest replacement rates (over 80 per cent, or over 100 per cent). This assumes that they take into account their potential entitlement to Family Income Supplement. There has, however, been a rise in the proportion of those in employment who face similar replacement rates. The potential impact of a basic income scheme on replacement rates, measured against a situation of complete FIS take-up, is, therefore, rather less at present that it was in 1987. But part of the attraction of basic income and similar options

is precisely that they would achieve complete take-up of benefit. The partial basic income schemes could, therefore, have a substantial impact on work incentives by increasing the certainty with which calculations as regards income in employment could be made by the unemployed, and avoiding the problems of low-take up which continue to be associated with the FIS scheme.

To some extent, the hoped for dynamic effects from the more radical basic income reforms are frustrated by the high tax rates required in a 1993/94 context. The more limited option of instituting a *basic income for children*, or an *integrated child benefit* offer some advantages in this respect. The latter option would abolish child dependant additions to social welfare payments, and instead give a taxable child benefit to all families at a rate of £75.30 per month.[5] It could be financed by a rise in the standard rate of tax of just over 3 per cent. *Basic income for children* is a similar option, but with child benefit remaining non-taxable: it could be financed by an increase in the standard rate of tax from 27 per cent to 34 per cent. Despite the small increases in tax rates, losers would outnumber gainers by about 2 to 1 under both of these schemes. Single employees bulk large among the losers under each scheme. An integrated child benefit would restrict their losses somewhat, but under a basic income for children a substantial number would lose more than £10 per week. Each of these options could, again, have a substantial impact on work incentives facing the unemployed and families currently qualifying for FIS, when the low take-up of FIS is taken into account. The trend towards smaller families will also help to make options of this type easier to finance in future.

[5]Equal to the combination of child dependant addition and child benefit received by most social welfare clients.

Chapter 7

CONCLUSIONS

7.1 Introduction

In this chapter we summarise the main findings from the analysis (Section 7.2) and go on to draw our conclusions as to the implications for reform of the tax and welfare systems. First, we briefly review the main reform options we have considered.

There are "narrow" and "broad" definitions of a basic income. In this study, we have operated with a "broad" definition that a basic income is a payment made automatically to all individuals in society, irrespective of their labour market status. It is intended that this payment should replace, in full or in part, other income supports currently provided - mainly social welfare payments, but also including, for example, training allowances and the maintenance element of educational grants. At the same time, personal income tax allowances would be abolished, and all income other than the basic income would be taxable under a simple rate structure.

Within this broad framework, one can distinguish between a number of variants of basic income. A "pure" scheme would have an individual basis of assessment: the amount paid to an individual would not depend, for example, on his or her marital status or living arrangements. It would also have a single rate of tax. A *basic family income* would, like the current social welfare system, make some allowance for economies of scale by having a lower payment rate for a married or unmarried couple than for two single persons living independently. It could, therefore, be financed by a lower rate of tax; the disadvantage being that it would require continued monitoring of cohabitation status. A *dual rate* tax structure, with a high initial rate, could reduce the effective rate of tax-cum-benefit withdrawal on those currently at low incomes, while limiting the increase in taxation on those at higher incomes. Two variants of such structures are considered: a "fully withdrawable" basic benefit, under which the high initial tax rate continues until the basic benefit is fully withdrawn by taxation[1]; and a variant proposed by Honohan (1987) under which the high initial tax rate

[1]That is the high initial rate applies up to the "break-even" income level, where income after taxes and transfers is the same as income before taxes and transfers.

is regarded as composed of the "ordinary" rate, and a "supplementary benefit withdrawal rate", which continues until the basic benefit is fully withdrawn *by the supplementary withdrawal rate.*

A *partial basic income for adults* can be regarded as an interim measure, or as a reform option of interest in its own right. It would involve a basic income payment at a level which was not intended, of itself, to be sufficient to live on. These payments would be "topped-up" to current social welfare levels. One way of doing this would be to retain most of the current social welfare system, and simply subtract the appropriate partial basic income payment from the relevant social welfare rates of payment. The partial basic income would be financed by these "clawbacks" in social welfare rates, and by the abolition of personal tax free allowances, which would be replaced by the cash payment of a partial basic income.

Similarly, a *basic income for children* could be regarded as an interim step towards a full basic income for adults and children; or simply as a policy option in its own right. It would involve the abolition of child dependant additions to social welfare rates, and a compensating increase in child benefit. Thus, the new rate of child benefit would be just over £75 per month: equal to the current rate of child benefit *plus* the current rate of child dependant additions for most social welfare schemes. An *integrated child benefit* shares many of the same features, but also makes child benefit taxable: this can be seen as limiting the horizontal redistribution away from the childless, and clawing back some of the gains from families at the top of the income distribution.

7.2 Main Findings

The costing of basic income proposals is a critical issue. Once the net resources available to the tax/transfer system have been decided, the level of the basic benefit determines the tax rate which is required to finance it.[2] At present, the tax/transfer system makes a substantial contribution to the financing of other government expenditures. While a shift in this balance may be desirable, it is appropriate in making comparisons between a basic income and the current system to hold the net contribution to the government budget at a constant level. Similarly, a broadening of the income tax base may be desirable, but if basic incomes are to be compared on an equal footing with the current system calculations which hold the

[2]Under dual tax rate schemes, given the initial tax rate and the conditions under which it applies, the level of payment and the net resources available to the tax/transfer system determine the other tax rate.

income tax base constant are of particular value. This does not mean that income taxes and social welfare payments are the only elements relevant to the costing of basic income. The unconditional nature of a basic income means that it can also replace, in full or in part, some other elements of government expenditure. This could include training allowances, and the maintenance element of educational grants. The costings undertaken here attempt to take account of these elements.

Given this framework, we find that an individual basic income at levels close to the lowest social welfare rates would have required a tax rate of about 62 per cent in 1987 - close to what Honohan's (1987) estimates suggest. A basic family income at similar levels would have required a rate of about 57 per cent. A higher payment of £55 per week, close to the Old Age Contributory Pension rate, would have required a tax rate of almost 87 per cent for an individual basic income and 79 per cent for a basic family income. A partial basic income for adults of £21 per week could, however, be financed by the abolition of the personal, PAYE and PRSI allowances and a "clawback" of social welfare payments, while retaining the 1987 tax system and tax rates in other respects.

Each of the basic income reforms involved a very substantial and complex redistribution of income. While there would be gains and losses at every income level, the net impact of an individual basic income close to the lowest social welfare rates would have been favourable for those at the bottom and middle of the distribution of equivalent income (i.e., income adjusted for the number of adults and children in a family). Substantial net losses would have been incurred by those in the top third of the income distribution. A basic family income would have involved gains for the lowest equivalent income decile, but some losses for the next two deciles - largely those on the higher rates of social welfare payment. Again, most losses would be concentrated in the top third of the income distribution. Single employees and lone parents were prominent among those who would lose from the reform, while one-earner families with children were among those most likely to gain.

What impact would basic income schemes have on the incentives facing the unemployed? In order to answer this question, we examined the impact of the reforms on the replacement rate, measured as the ratio of the net disposable income of the individual[3] when unemployed, and in receipt of Long-term Unemployment Assistance, to net disposable income when

[3]Or, in the case of a couple, the income of the family unit.

employed (using a predicted wage for those currently unemployed, which took account of the lower potential earnings of this group). In 1987, we estimated that about 1 in 10 of the unemployed faced replacement rates above 80 per cent. An individual basic income close to the lowest social welfare rates would have reduced this figure to about 1 in 100, and a basic family income at similar rates would have led to an even greater reduction. A partial basic income of £21 per week would have had about half this effect.

Results uprated to approximate the 1993/1994 population, economic structure and tax and social welfare policies show some significant changes. The fact that the lowest personal rates of social welfare payment have increased at a faster rate than average earnings means that a basic income at the lowest social welfare rates in 1994 would require a higher tax rate than that shown by our 1987 analysis. An individual basic income of £60 could require a tax rate of over 68 per cent, while a basic family income would require a tax rate of almost 63 per cent. These high tax rates limit the impact of basic income reforms on replacement rates facing the unemployed. There is little impact when measured against a 1993/94 baseline which assumes 100 per cent take-up of Family Income Supplement: improvements in that scheme mean that the potential in-work incomes of the unemployed have risen faster than unemployment compensation. But when the low take-up of FIS is taken into account, there impact of basic income reforms is much greater. There could also be some increase in the incentive for those currently unemployed to undertake low wage or occasional work - which in the current situation, may be all that is available to them.

7.3 Assessment

Tax rates required to finance a basic income scheme are highly sensitive to the level of the income guarantee. Our estimates have concentrated on income guarantees which are close to the lowest social welfare rates in 1987 and 1993. Even at the 1987 social welfare rates, the tax rates required were of the order of 60 per cent. The higher social welfare minimum (relative to other incomes) in 1993 makes an even higher rate necessary to finance a scheme with the same guarantee in this context. A basic income could become easier to finance at a lower tax rate if social welfare benefits grew less rapidly than other incomes in future; but in this case, the shape of the baseline tax/transfer system, and other possible reforms, could also be radically different.

A full basic income scheme on an individual basis involves both the removal of the "work" test by the provision of a payment which is not conditional on work status, and a payment to (married) couples which is double that for single people. The tax rates calculated for such schemes are, as has often been found, very high. Lower tax rates apply when a basic income which does depend on family circumstances is considered. While we have labelled such schemes as *basic family incomes*, it is important to be clear that each adult could still receive an independent payment: the concept of "adult dependancy" could be abolished. What would remain from the current system is that the amount of the payment to a couple would reflect the economies of scale in their living expenses.

It may be that a reform which involves *either* full individualisation of benefits *or* unconditionality is achievable, but that a reform involving both of these elements is not possible. If so, then a choice must be made as to which of these aims is to be preferred. Opinions will differ on this: some will see removal of the work test as a priority, while others will favour full individualisation of benefits. In our view, removal of the "work test" should take priority, for two reasons. First, because this promises the greatest potential for integration of those currently outside the labour market. Second, because removal of the work test would, at the same time, allow a "partial" individualisation of benefits in the sense that every individual can then receive an independent payment. This would represent considerable progress over the current structure of contingency and means-tested benefits, without imposing the high costs of full individualisation.

A *basic family income* at levels close to existing social welfare rates for the long-term unemployed could still require a tax rate of up to 63 per cent in 1993/94 terms. Our analysis suggests that this would not have sufficient impact on replacement rates facing those currently unemployed to give rise to the hoped for dynamic effects on employment. On the positive side, this system would allow greater freedom to combine a state transfer with other income, subject only to the 63 per cent tax rate. While there are currently schemes which allow such combinations on favourable terms, the complexity of the overall regulations, uncertainties regarding in-work income, and low take-up of FIS point to the attractions of a simpler system. On the negative side, the impact of the scheme on incentives facing those in employment to work fewer hours, or to emigrate, must also be considered if the likely overall impact on the labour market is to be assessed.

Many would see a basic income structure as desirable, if the tax rate on income could be kept at a lower level - say, of the order of 50 per cent. Suggested means of achieving this aim include the use of resources currently employed in non-standard forms of income support; extensions of the income tax base; increases in other taxes; cuts in government expenditure; lower levels of basic benefit; and the deployment of the fruits of economic growth. Each of these possibilities deserves careful scrutiny, not just in terms of the *feasibility* of financing a basic income, but also in terms of the *desirability* of the package which would then result, as against other alternatives. For example, extensions of the income tax base or increases in other taxes sufficient to bring the tax rate for an individual basic income down to 50 per cent would involve the raising of revenues of the order of 70 per cent of the current income tax yield; alternative uses of such resources could include, for example, very substantial cuts in existing income taxes, which might have a more favourable impact on employment than a basic income scheme.

Partial basic income schemes can indeed be financed at much lower tax rates, very close to those currently in operation. But can they achieve the desirable effects of a full-scale basic income, without the high tax rates found in this study? In a 1993/94 context, the impact of such options can indeed be favourable, if measured against a baseline which takes account of the low take-up of Family Income Supplement. We also examined a *basic income for children*, involving an increase in child benefit to £75 per month, coupled with the abolition of child dependant allowances, elimination of child additions to the income tax exemption limits, and reductions in FIS; and an *integrated child benefit*, which, in addition, made child benefit taxable, and restored child additions to the income tax exemption limits to an even higher level. Each of these options could improve the balance between income in employment and out of employment for many of those unemployed, by ensuring that they actually received benefits while in work.

It is clear from our analysis that basic income systems do not provide a panacea for the ills of the current tax/transfer system. The critical nature of the overall budget constraint must be recognised in planning reform of the tax/transfer system. The modelling process brings the impact of the budget constraint into sharp focus. While results to date may not have lit up a highway to reform, they have helped to map out some previously uncharted territory. The options of a basic income for children and an integrated child benefit deserve further consideration.

BIBLIOGRAPHY

AKERLOF, G., 1978. "The Economics of 'Tagging' as Applied to Optimal Income Tax, Welfare Programs and Manpower Planning", *American Economic Review*, Papers and Proceedings, Vol. 68, No. 1.

ATKINSON, A.B., J. GOMULKA and H. SUTHERLAND, 1988. "Grossing-up FES Data for Tax-Benefit Models", in A.B. Atkinson and H. Sutherland (eds.) *Tax-Benefit Models*, London: ST/ICERD.

ATKINSON, A.B. and J. MICKLEWRIGHT, 1985. *Unemployment Benefits and Unemployment Duration*, London: ST/ICERD.

ATKINSON, A.B. and H. SUTHERLAND, 1988. "Integrating Income Taxation and Social Security: Analysis of a Partial Basic Income", ESRC Programme on Taxation, Incentives and the Distribution of Income Discussion Paper No. 123.

BLUNDELL, R., V. FRY and I. WALKER, 1988. "Modelling the Take-up of Means-Tested Benefits: The Case of Housing Benefits in the UK", *Economic Journal*, Conference Supplement.

BOSTON, J., 1993. "Reshaping Social Policy in New Zealand", *Fiscal Studies*, Vol. 14, 64-85.

BRITTAN, S. and S. WEBB, 1990. *Beyond the Welfare State: An Examination of Basic Incomes in a Market Economy*, Hume Paper No. 17, Aberdeen: Aberdeen University Press and The David Hume Institute.

CALLAN, T. 1991. *Income Tax and Welfare Reforms: Microsimulation Modelling and Analysis*, Dublin: The Economic and Social Research Institute, General Research Series Paper No. 154.

CALLAN, T. and B. FARRELL, 1991. *Women's Participation in the Irish Labour Market*, Dublin: National Economic and Social Council Report No. 91.

CALLAN, T. and B. NOLAN, 1994. "Unemployment and Poverty", in B. Nolan and T. Callan (eds.) *Poverty and Policy in Ireland*, Dublin: Gill and Macmillan.

CALLAN, T., B. NOLAN and B.J. WHELAN, D.F. HANNAN with S. CREIGHTON, 1989. *Poverty, Income and Welfare in Ireland*, Dublin: The Economic and Social Research Institute, General Research Series Paper No. 146.

CALLAN, T. and C. O'NEILL, 1993. *Income-Related Support: Analysis and Policy Modelling*, report to the Department of Social Welfare, November.

CALLAN, T. and A. WREN, 1994. *Male-Female Wage Differentials: Analysis and Policy Issues*, Dublin: The Economic and Social Research Institute, General Research Series Paper No. 163.

CANTILLON, S., J. CURTIS and J. FITZ GERALD, 1994. *Medium-Term Review 1994-2000*, Dublin: The Economic and Social Research Institute.

CHIPLIN, B., 1992. "Unemployment and the Labour Market", in J. Creedy and B. Thomas (eds.), *The Economics of the Labour Market*, London: Butterworth.

COMMISSION ON SOCIAL WELFARE, 1986. *Report of the Commission on Social Welfare*, Dublin: Stationery Office.

COMMISSION ON TAXATION, 1982. *Direct Taxation*, Dublin: Stationery Office.

DILNOT, A. and S. WEBB, 1991. " A Practical Framework for the Analysis of Social Security Reform", *Fiscal Studies*, Vol. 12, No. 4, pp. 33-35.

DOWLING, B., 1977. *Integrated Approaches to Personal Income Taxes and Transfers*, NESC Report No. 37, Dublin: Stationery Office.

GOMULKA, J., 1992. "Grossing Up Revisited" in R. Hancock and H. Sutherland (eds.) *Microsimulation Models for Public Policy Analysis: New Frontiers*, London: ST/ICERD.

HEALY, S. and B. REYNOLDS, 1993. "Work, Jobs and Income: Towards a New Paradigm", in B. Reynolds and S. Healy (eds.) *New Frontiers for Full Citizenship*, Dublin: CMRS.

HONOHAN, P., 1987. "A Radical Reform of Social Welfare and Income Tax Evaluated", *Administration*, Vol. 35, No. 1, pp. 69-87.

HONOHAN, P., 1994. "Basic Income as a Reform of Tax and Social Welfare", paper prepared for National Economic and Social Forum.

IMMONEN, R., R. KANBUR, M. KEEN and M. TUOMALA, 1994. "Tagging and Taxing: The Optimal Use of Categorical and Income Information in Designing Tax/Transfer Schemes", London: Institute for Fiscal Studies Working Paper No. 94/5.

JOHNSON, P., G. STARK and S. WEBB, 1990. "TAXBEN2: The New IFS Tax-Benefit Model", London: Institute for Fiscal Studies Working Paper No. 90/5.

MONCKTON, C. 1993. "Universal Benefit", *Citizen's Income Research Group Bulletin*, No. 16, July.

NARENDRANATHAN, W., S. NICKELL and J. STERN, 1985. "Unemployment Benefits Revisited", *Economic Journal*, Vol. 95, pp. 307-329.

NICKELL, S., 1979. "The Effects of Unemployment and Related Benefits on the Duration of Unemployment", *Economic Journal*, Vol. 89, pp. 34-49.

NOLAN, B., 1993a. *Low Pay in Ireland*, Dublin: The Economic and Social Research Institute, General Research Series Paper No. 159.

NOLAN, B., 1993b. *Reforming Child Income Support*, Dublin: Combat Poverty Agency.

PARKER, H., 1994. "Citizen's Income", *Citizen's Income Research Group Bulletin*, No. 17, January.

PARKER, H., and H. SUTHERLAND, 1991. *Child Tax Allowances?* London: ST/ICERD.

TANSEY, P., 1991. *Making the Labour Market Work*, Dublin: Gill and Macmillan.

VAN PARIJS, P., 1992. *Arguing for Basic Income: Ethical Foundations for a Radical Reform*, London: Verso.

WALTER, T., 1989. *Basic Income: Freedom From Poverty, Freedom to Work*, London: Marion Boyars.

WEBB, S., 1992. "Social Insurance and Poverty Alleviation: An Empirical Analysis", paper presented to conference on *Social Security: 50 Years after Beveridge*, York, 27-30 September.

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