

## CHAPTER 2

# Making work pay<sup>1</sup>

### A. INTRODUCTION AND MAIN FINDINGS

#### 1. Introduction

Taxes and benefits are the most direct way in which governments can affect the financial incentives for individuals to work and for employers to hire them. But current tax and benefit systems owe many of their features to a bygone era and have failed to keep pace with recent changes in the labour market.

The OECD *Jobs Study* highlighted tax and benefit systems as a cause of some labour market problems. Taxes increase the costs of employing workers, particularly low-wage workers; and benefit systems are alleged to leave little incentive to work, especially for low-wage families.

This chapter highlights two ways in which taxes and benefits may fail to “make work pay”:<sup>2</sup>

- *the unemployment trap*: benefits paid to the unemployed and their families are high relative to expected earnings in work so they have little incentive to find a job; and
- *the poverty trap*: incremental increases in earnings or income lead to withdrawal of benefits and higher tax and social security payments, so people on low incomes receiving benefits are discouraged from additional effort.

Tax and benefit systems can only be restructured to raise work incentives when this is consistent with their fundamental purpose. Taxes must raise revenues and benefits are intended to provide for those with insufficient incomes. Nearly all reforms which “make work pay” involve trade-offs between these fundamental objectives. Reforms of the tax and benefit system require political judgements, as well as sound economic analysis.

This chapter treats the financial incentives to work as important, for three reasons. The first is that they matter *at the margin*. Many people will seek work even if they would get more money receiving benefits, but even more will seek work when there is a financial incentive to do so. Secondly, taking up work involves costs for travel, work clothing and equipment and

possibly childcare. If work does not pay, those with very few resources may not be able to afford to undertake it without denying resources to their children. Partly for this reason, employers will not offer jobs at wages which they know no job-seeker could accept without being worse off than they would be were they to remain unemployed. The third reason for discussing the financial incentives to work is that empirical studies suggest they matter [see OECD (1994b)].

This focus on the financial incentives is not to deny the importance of other factors which influence whether people work or not. Sometimes rational people will opt to work even where this seems, at first sight, to be irrational, since their income would be higher if they were not working. If there is no immediate financial reward to working, a low-paid job is nevertheless often the first step on the ladder towards higher earnings (see Chapter 3). There may be significant non-pecuniary benefits from working, such as better health and social status. People might also wish to work because they *like* working.

The chapter is structured as follows. Section B outlines labour market changes of special importance for tax and benefit systems. The unemployment and poverty traps are discussed in Sections C and D respectively. The final section draws some conclusions.

#### 2. Main findings

An index of benefit entitlements suggests that gross replacement rates have on average increased since the beginning of the 1960s. During the 1990s, some countries have reduced benefit entitlements. Overall, however, the OECD-wide average value of the index has risen slightly since 1989. In 1995 it stood at 30 per cent of previous earnings compared with 16 per cent in 1961 and 28 per cent in 1989. Examination of incomes in and out of work (taking account of taxation, family benefits, housing benefits and social assistance benefits) suggests that net replacement rates can be much higher, even for those on average earnings. In particular, the unemployment trap for families with children can be particularly pronounced, reflecting society’s anxiety to ensure a reasonable standard of living for children.

The effective unemployment trap is even deeper for some of those without jobs. In-work expenses, in particular for child-care, can eliminate any financial reward from working. Those receiving unemployment or related benefits may be entitled to additional benefits, such as subsidised medical care, which is not readily available to those in work, even if on low wages. Delays in paying benefits to those in work and retention of taxes at source create a further barrier to those wishing to enter employment. Furthermore, lack of knowledge about tax and benefit systems can lead the unemployed to conclude that incomes in work are too uncertain to risk giving up their low, but secure, benefit income. Finally, the use of disability and early-retirement benefits as alternative means of supporting those without work withdraws people from the labour force, but does not reduce the dependency of family incomes on benefits.

The most straightforward solution to the unemployment trap would be to cut benefit entitlements. However, making major cuts would be likely to exacerbate poverty among vulnerable groups. Hence most government have opted either to make only small cuts in benefit entitlements or to tighten controls on job-search activity and make eligibility conditions more onerous.

A poverty trap is particularly likely when benefits are means-tested against family incomes. Such benefits have been growing in importance across the OECD area, including countries where insurance benefits have traditionally played the dominant role in social policy. The combination of taxation and withdrawal of benefits leaves part-time work unattractive in many countries. Other countries have allowed the combination of part-time work and reduced benefit receipt. But in making part-time work more attractive than no work, it can also be made more attractive than full-time work. Some countries have sought to restrict such policy changes to those for whom full-time work may not always be a realistic option, such as the long-term unemployed and lone parents. Badly designed means-tests can also contribute to the polarising of families into “work-rich” and “work-poor” households. Means-tests can leave no incentive to work for the spouses of unemployed persons. Australia has recently tackled this problem by giving individuals within a household their own benefit entitlement which is partially independent of that of other household members.

The most notable recent innovation in tax and benefit policy in recent years is the use of employment-conditional tax credits or benefits. These now exist in six OECD countries. They can reduce the extent of the unemployment trap by increasing incomes in-work without reducing out-of-work incomes. But in order to be restricted to a reasonable cost, they must be withdrawn from individuals as

their earnings rise, so reducing the incentive to increase earnings. Such policies can increase participation and (probably) aggregate labour supply. They are therefore a useful policy tool. However, their importance should not be exaggerated. There are administrative difficulties in running such schemes which can reduce their effectiveness. Furthermore, they will work best when they can significantly raise the family incomes of those with low earnings, without being paid to more than a minority of those in employment. This suggests that they will be most effective in countries with wide earnings’ distributions and low tax rates.

## B. TAXES AND BENEFITS AND THE CHANGING NATURE OF THE LABOUR MARKET

The 1994 Australian White Paper recently stated, in proposing major reforms, that

*“Social Security arrangements for unemployed people still largely reflect the unemployment benefit system introduced in the 1940s, around the time of the release of the White Paper on Full Employment [in 1945].”* [Australia (1994), p. 143.]

This observation applies with equal justification to most OECD countries. Unemployment benefits were designed for situations where unemployment was infrequent and of limited duration, and youth unemployment and lone-parent families (other than widows) were not of policy concern. Other areas of social policy – housing, early retirement, and invalidity – could be treated as separate from the support given to the unemployed. The welfare system was designed for a population where participation rates were high among men and low among women, and people could expect an uninterrupted working life. Cyclical variations in employment were mainly absorbed by women withdrawing from the labour market during recessions, and entering it during upswings.

In these circumstances, it was relatively easy to design benefit systems to be welfare-enhancing. Risk-averse individuals wanted insurance against loss of earnings as a result of a spell of unemployment and were content to pay premiums related to expected calls on the benefit system. Benefits were only to be required for some limited amount of time; the expectation was that new work would be found relatively quickly.

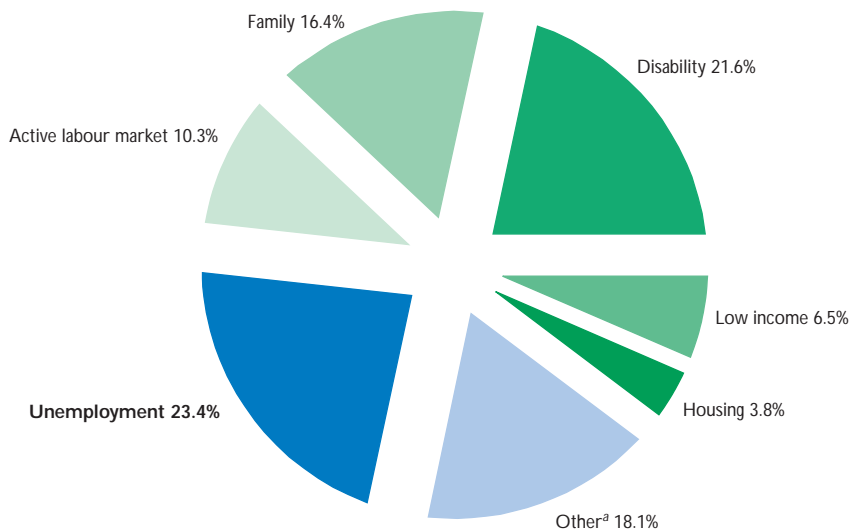
However, there have been some major changes to OECD labour markets since benefit systems were first designed. Benefit systems have responded to these changes by distinguishing between more labour market and family situations, and differentiating according to labour market and family situation. The most important changes in labour markets are:

- unemployment is generally at a much higher level than when current unemployment insurance schemes were put in place after 1945;
- one-third of the unemployed are out of work for more than a year in around half of OECD countries (Statistical Annex, Table Q). Many who lose jobs suffer extended bouts of unemployment and as a result exhaust their basic unemployment benefit entitlement;
- youth unemployment is high and has increased in many countries (Chapter 4). Youths have limited or no work experience: they have not contributed to insurance schemes and so are often not entitled to these benefits;
- the labour force participation of adult men has declined. Many of those withdrawing from the labour force nevertheless receive benefits for invalidity, sickness or early retirement. Female participation has grown. As a result, two-earner couples are more common, as are lone-parent families.<sup>3</sup> The traditional model of the male breadwinner supporting wife and children has become ever less typical. Insuring individual workers against loss of wages is less effective in ensuring adequate *family* incomes and well-being when increasing numbers of households of working age are not part of the labour force;
- part-time work has grown in most OECD countries (Statistical Annex, Table E). The relationship of the benefit system to part-time work is complex. Not all part-time workers have rights to insurance benefits, leaving a gap in the coverage of the working population by the insurance benefit system. Sometimes working part-time is consistent with benefit receipt, sometimes not; and
- the earnings distribution appears to have widened markedly in some countries during the 1980s (Chapter 3). Without benefit income, some families with a single full-time earner

Chart 2.1.

### Distribution of social outlays

Expenditures as a percentage of outlays directed towards the non-aged population (1993)



a) Other: sickness, maternity, and occupational injury and disease.  
Source: OECD Social Expenditure database.

might not reach a socially acceptable standard of living. The dispersion of the distribution of original income (*i.e.* before taxes and transfer payments) has widened since 1980 in Australia, Japan, the Netherlands, Sweden, the United Kingdom and the United States. However, in some countries, the tax and benefit systems have meant that changes in the distribution of disposable incomes of households may have been small.

As working and family patterns have become more diverse, so have the types of benefits received. Chart 2.1 shows that, although unemployment benefits are the largest single form of social expenditure directed at people below retirement age, they account for less than 25 per cent on average across the OECD. Family benefits, other income maintenance benefits and disability benefits are all often individually more important than is unemployment benefit. Families will take account of the relationship between net incomes in and out of work allowing for all taxes and benefits, not just unemployment benefits, when making work decisions. Therefore, the tax and benefit system must be considered in its entirety when attempting to assess the differing work incentives facing the working population.

### C. THE UNEMPLOYMENT TRAP

#### 1. Replacement rates

The unemployment benefit system provides insurance against job loss which individuals would find extremely difficult, if not impossible, to obtain from private insurers. This is a source of welfare gain. Benefits also allow the unemployed to search for a job which matches their abilities, rather than being forced by financial hardship into accepting the first available job offer. Having the right people in the right jobs raises productivity and reduces the chance of them becoming unemployed in future. In this way, unemployment benefits can help labour markets work more effectively.

But unemployment benefits can also have negative effects on labour markets and social welfare. By “freeing” the unemployed from having to take less ideal jobs, they increase the duration of unemployment spells. Unemployment benefits also alter incentives in wage bargaining. If the financial consequences of unemployment are harsh, workers will be wary of pushing up wages and so risking their jobs. Furthermore, unemployment benefits can subsidise seasonal employment patterns. Without countervailing factors, the higher benefits are relative to earnings (the so-called “replacement rate”), the higher unemployment will be.

#### ***Have unemployment benefit systems become more generous?***

As part of the OECD *Jobs Study*, an index was constructed for almost all OECD countries, summarising gross (*i.e.* before-tax) unemployment benefit entitlements relative to gross earnings. It was found that growth in unemployment benefit entitlements, from an OECD (unweighted) average of 16 per cent of earnings in 1961 to 29 per cent in 1991, could have contributed to the rise in unemployment over that period. But it also found that there were long time-lags of up to a decade or more before the full effects were felt.<sup>4</sup>

Chart 2.2 updates this series to 1995. The index does not indicate that the response of most governments to high and persistent unemployment has been to cut benefit entitlements (see Box 1). Indeed, the area-wide summary index has risen slightly since 1991, to 31 per cent in 1995.

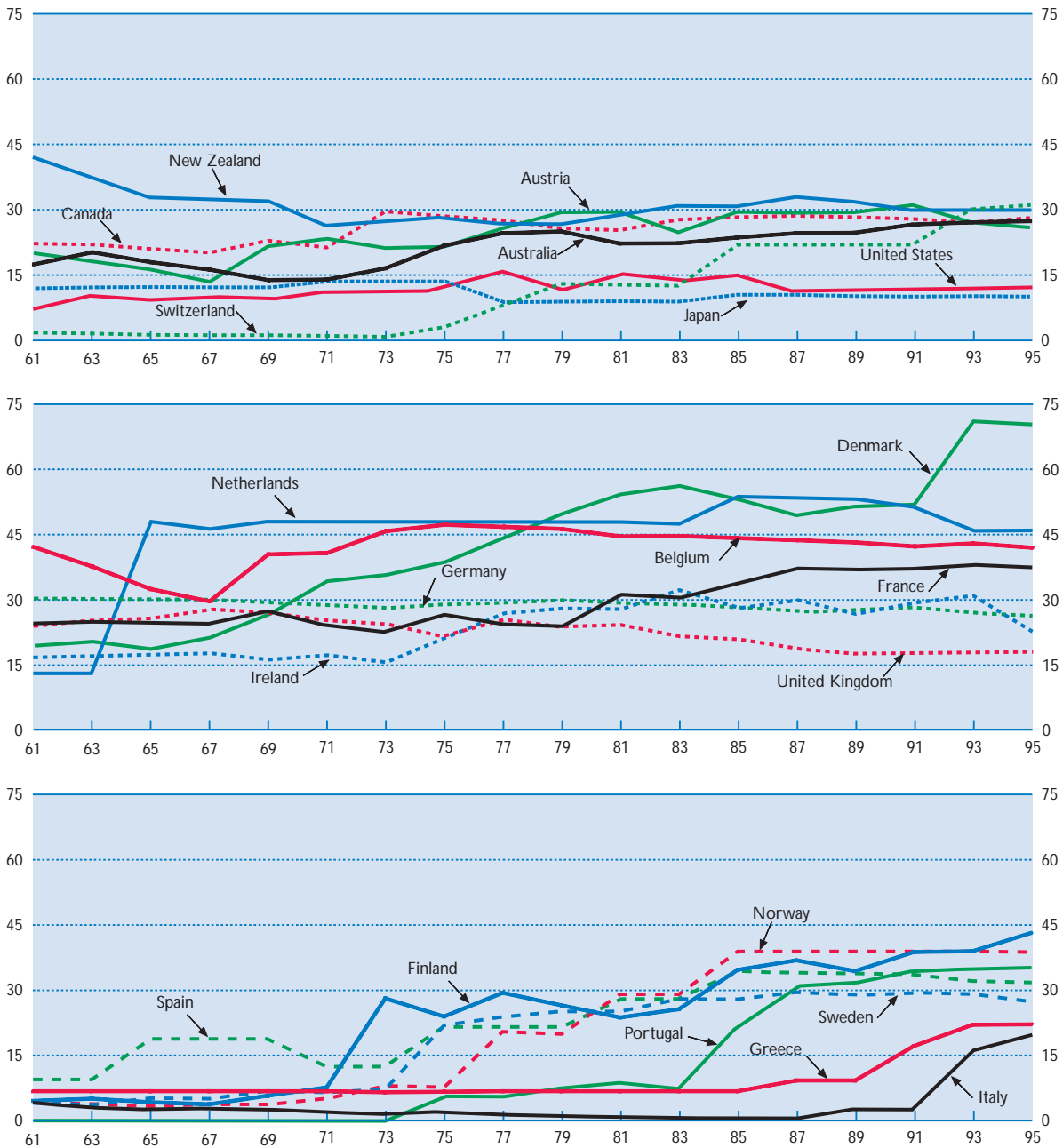
The index does not capture all changes in unemployment benefit generosity and (its limitations are discussed in detail in OECD, 1994*b*). In particular, it focuses on changes in benefit levels and durations, not on eligibility or administrative controls on job-search requirements. For example, since 1979, Belgium, Denmark, France, Germany, Greece, the Netherlands, Sweden, Switzerland and the United Kingdom have all increased the period of employment required to qualify for unemployment insurance. But these changes do not affect the index of benefit entitlement.

#### ***Typical net replacement rates***

Gross replacement rates of 30 to 40 per cent, which Chart 2.2 shows are common in many OECD countries, suggest that benefit systems do not impose large work disincentives. But a more detailed examination of incomes in and out of work suggests that such a conclusion would be premature. Taxation (including social security contributions), benefits to children, social assistance and housing benefits, which are not included in the index in Chart 2.2, can have large impacts on the level of replacement rates. Table 2.1 presents a comparison of gross and net (after-tax) replacement rates which different families might face in different circumstances. Columns 1 and 2 are similar to two of the three cases which make up the index of Chart 2.2;<sup>5</sup> the other columns are refinements of that measure. [See OECD (forthcoming), for a more detailed discussion of replacement rates facing a wider variety of family types than are considered here.] Gross earnings are related to those earned by the average production worker (APW) in each country [see OECD (1995*c*) for a description].

Chart 2.2.

Index of benefit entitlements,<sup>a</sup> 1961-1995<sup>b</sup>  
Percentages



a) The average of the unemployment benefit replacement rates for two earnings levels, three family situations and three durations of unemployment. For further details, see OECD, *The OECD Jobs Study: Evidence and Explanations*, Chapter 8. The earnings data used to compute replacement rates for 1995 are Secretariat estimates.

b) Final year data refer to 1994 for the United States.

Source: OECD database on Unemployment Benefit Entitlements and Replacement Rates.

## Box 1

**Recent changes in unemployment benefit systems and their impact on the index of benefit entitlements**

The index is an average of replacement rates, calculated at average earnings and two-thirds of average earnings, for people unemployed for one year, for 2 to 3 years and for 4 to 5 years, and for single people, married people with an employed spouse, and married people with an unemployed spouse. The index does not give an average level of *actual* unemployment benefit receipts. For example, a cut in entitlement in the fourth and fifth year of unemployment would affect very few of the actual unemployed, but would have a relatively large effect on the index. The index is, on the other hand, a good indicator of the generosity of a country's unemployment benefit system. If high benefits were paid in the first months of unemployment but nothing thereafter, most people, actual and potential recipients, would conclude that it is a less generous system than one which paid a lower level of benefit indefinitely. However, average benefit receipt would be higher in the former system than in the latter. It is also perfectly possible for changes in the benefit system to have resulted in budgetary savings while at the same time increasing the index of unemployment benefit entitlements. (For more discussion, see Annex 8a of the OECD *Jobs Study: Evidence and Explanations*, Part II, 1994.)

Some recent changes in benefit systems and their effects on the index are as follows:

*Australia*: a shift to independent entitlements for husband and wife and reduction in benefit withdrawal rates in 1995. Both changes make it easier for a member of the household to have some earnings without losing all benefit entitlements. Earnings are assumed to be high in the "working spouse" case in the index, so the changes have had no effect on the summary measure.

*Austria*: reduction in maximum benefit levels in 1993. Minimum contribution period increased to 26 weeks in 1995.

*Belgium*: recent restrictions in access to benefits and tighter policing of job search are not captured by the index.

*Canada*: a reduction in benefit amounts for couples in 1993.

*Denmark*: extensions in the legal duration of benefit entitlements to seven years in 1994 have increased the index markedly. However, as it was relatively easy in the 1980s to re-qualify for the benefit through public work and training programmes, the *de jure* change has appeared to increase the generosity of the scheme whereas the *de facto* outcome may have been to reduce it.

*Finland*: means-testing of the basic unemployment allowance was ended in 1994. The Labour Market Support benefit introduced in 1994 has increased gross benefit entitlement.

*France*: the level of benefit declines the longer someone is unemployed. Benefit reductions are now smaller, but more frequent, than previously. The system is more generous in the second year of unemployment, less generous in years 4 and 5 of unemployment than previously. But the net effect of these changes has been to raise the index slightly.

*Germany*: insurance benefit was reduced in 1993 by 3 percentage points for single people and 1 percentage point for couples.

*Greece*: eligibility conditions changed making it easier to get longer UI benefits in 1989 and UA benefit entitlement was extended in 1991, increasing the index.

*Ireland*: benefits were increased more rapidly than inflation until 1993; in 1995 the earnings-related element was abolished.

*Italy*: in 1991, a mobility benefit was introduced for certain categories of the unemployed. Mobility benefit is included in the OECD index, unlike the benefit for short-time working, the Cassa Integrazione Guadagni Straordinaria, which is not included because its recipients are not formally counted as unemployed. The basic unemployment benefit was increased in stages to 30 per cent and then to 40 per cent of average earnings over the previous three years. An average of the mobility benefit and the ordinary UI benefit, based on the number of recipients of these two benefits has been used to compute the index post-1990.

*Netherlands*: conditions for receipt of earnings-related insurance benefits were tightened in 1993. The work test in social assistance was tightened in 1996.

*New Zealand*: in 1991, benefits were reduced (for example, by 25 per cent for young single adults). Tests and sanctions were tightened and waiting periods increased.

*Portugal*: increased benefit entitlement.

*Spain*: a reform in 1993 altered contribution periods and rate structures. The index decreased.

*Sweden*: unemployment insurance was reduced first to 80 per cent of previous earnings, and more recently to 75 per cent.

*Switzerland*: duration increased in 1993 with a small cut in the replacement rate. The overall effect of the changes has been to increase the index.

Table 2.1. **Replacement rates<sup>a</sup> for single-earner households, 1994**  
 Panel A. Replacement rates at the average production worker (APW) level of earnings

	Replacement rates in first month of unemployment: no social assistance					60th month of unemployment: including social assistance	
	Gross replacement rates (before tax)		Net replacement rates (after tax and other benefits)			Gross replacement rates (before tax)	Net replacement rates (after tax and other benefits)
	(1) Single	(2) Couple, no children	(3) Couple, no children	(4) Couple, 2 children	(5) Couple, 2 children housing benefits	(6) Couple, no children	(7) Couple, 2 children, housing benefits
Australia <sup>b, c, d</sup>	22	40	49	64	71	40	71
Belgium	46	46	64	66	66	42	70
Canada	55	55	63	67	67	0	47
Denmark <sup>e</sup>	60	60	69	73	83	60	83
Finland	53	53	<b>63</b>	<b>75</b>	<b>88</b>	25	98
France	57	57	69	71	80	36	65
Germany	37	42	60	71	78	37	71
Ireland <sup>c</sup>	23	37	49	64	64	37	64
Italy	30	30	37	47	47	0	11
Japan <sup>c</sup>	37	37	<b>43</b>	<b>42</b>	<b>42</b>	0	68
Netherlands	70	70	77	77	84	0	80
New Zealand <sup>c, d</sup>	26	43	48	64	70	43	70
Norway	62	62	<b>67</b>	<b>73</b>	<b>73</b>	0	83
Spain	70	70	75	75	74	0	46
Sweden <sup>b, e</sup>	80	80	<b>81</b>	<b>84</b>	<b>89</b>	0	99 <sup>b</sup>
Switzerland	70	70	77	89	89	0	89
United Kingdom <sup>c</sup>	16	26	35	51	77	25	77
United States <sup>f</sup>	50	50	60	68	68	0	17
<b>Average (unweighted)</b>	52	52	60	68	73	19	67

The main conclusions to draw from Table 2.1 are:

- taxation means that net replacement rates are invariably higher than gross replacement rates. Benefits are sometimes untaxed and are usually not subject to social security contributions. Even when they are taxed, credits, allowances and progressive marginal tax rates usually ensure that those with earnings face a higher average tax rate than if they were out of work. Comparing columns 2 and 3, it can be seen that the difference is particularly large when benefits are not taxed (as in Germany and Belgium). But the difference can be large for other reasons. For example, in France the structure and level of personal income tax allowances has a similar result;
- benefits paid to families with children are often higher than for those without children. In countries like Australia, Germany, Ireland and the United Kingdom, this means that replacement rates are also higher for families with children. In other countries, such as Belgium and France, provisions in the tax system mean that net incomes in work are also relatively high for families with children. In these coun-

tries, replacement rates for families with and without children are similar;

- fourteen countries have some form of income-related housing benefits payable to the unemployed and those on low incomes.<sup>6</sup> Column 5 indicates that replacement rates appear relatively low in the United Kingdom compared with other countries unless housing benefits are taken into account;<sup>7</sup>
- net replacement rates at  $\frac{2}{3}$  APW earnings are sometimes little different from those at APW earnings in the first month of unemployment (compare panels A and B). The exceptions are countries with either flat-rate benefits (Australia, Ireland, New Zealand and the United Kingdom), or minimum benefit levels (Belgium and France) which have a strong effect on replacement rates at this level of earnings. Families with children in the United States can receive food stamps even when they are working. Replacement rates are lower for low-earning families with children than for higher-earning families; and
- after 60 months, unemployment benefits are often lower or sometimes not paid at all

Table 2.1. **Replacement rates<sup>a</sup> for single-earner households, 1994** (cont.)  
 Panel B. Replacement rates at 2/3 of the average production worker (APW) level of earnings

	Replacement rates in first month of unemployment: no social assistance					60th month of unemployment: including social assistance	
	Gross replacement rates (before tax)		Net replacement rates (after tax and other benefits)			Gross replacement rates (before tax)	Net replacement rates (after tax and other benefits)
	(1) Single	(2) Couple, no children	(3) Couple, no children	(4) Couple, 2 children	(5) Couple, 2 children housing benefits	(6) Couple, no children	(7) Couple, 2 children, housing benefits
Australia <sup>b, c, d</sup>	34	61	66	76	78	61	78
Belgium	60	60	<b>75</b>	<b>76</b>	<b>76</b>	55	91
Canada	55	55	64	67	67	0	61
Denmark <sup>e</sup>	86	86	92	93	95	86	95
Finland	60	60	<b>67</b>	<b>83</b>	<b>89</b>	37	100
France	65	65	79	81	88	54	83
Germany	40	44	<b>60</b>	<b>70</b>	<b>77</b>	39	80
Ireland <sup>c</sup>	35	66	67	70	70	66	70
Italy	30	30	36	45	45	0	14
Japan <sup>c</sup>	43	43	<b>49</b>	<b>48</b>	<b>48</b>	0	86
Netherlands	70	70	<b>79</b>	<b>78</b>	<b>84</b>	0	95
New Zealand <sup>c, d</sup>	38	64	70	80	86	64	86
Norway	62	62	<b>66</b>	<b>75</b>	<b>75</b>	0	100
Spain	70	70	74	78	77	0	66
Sweden <sup>b, e</sup>	80	80	<b>82</b>	<b>85</b>	<b>89</b>	0	121 <sup>b</sup>
Switzerland	70	70	<b>75</b>	<b>87</b>	<b>87</b>	0	97
United Kingdom <sup>c</sup>	24	39	52	67	90	38	90
United States <sup>f</sup>	50	50	66	60	60	0	19
<b>Average (unweighted)</b>	54	60	68	73	77	28	80

Notes: In the first month of unemployment it is assumed that families possess enough assets to be ineligible for social assistance. In the 60th month it is assumed that they no longer have such assets and so social assistance (SA) is assumed to be paid where it is higher than other benefits to which they may still be entitled. Figures in **bold** indicate those cases where families would be entitled to SA on the basis of their income, were they not to have been assumed to have been disqualified by an assets test. The replacement rates reflect a strict application of legal provisions rather than common practice, where these differ.

- a) It is assumed that the worker is 40 years old, and started work at 18. The replacement rates are for the first month of unemployment, after waiting periods have been satisfied. This entitlement is then multiplied by 12 to give an annualised equivalent, on which tax is calculated. The person is fully unemployed. Social assistance is calculated according to a "typical rate" for the country concerned. This may involve making assumptions about housing costs.
- b) Benefit amounts for couples are calculated on the basis of both spouses actively seeking work.
- c) Figures for Australia, Ireland, New Zealand and the United Kingdom are for 1995. Unemployment benefit parameters for Japan are for 1996.
- d) There is no social insurance in Australia or New Zealand. All figures in the table, including columns 1-5, refer to the assistance benefit.
- e) Social assistance is only available when there is a "social event" such as unemployment. Low earnings are not themselves a social event.
- f) The taxes and benefits are calculated using the rules applying in Detroit, Michigan. All figures include aid to families with dependent children (AFDC) and food stamps. If these are treated as being equivalent to social assistance, columns 3, 4, and 5 would read 60, 59 and 59 at the level of APW, and 59, 52 and 52 at 2/3 APW.

Source: OECD database on taxation and benefit entitlements.

(compare column 6 with column 2). However, if the individual who has been unemployed for 5 years is eligible for social assistance, replacement rates can still be relatively high, except in Italy and the United States (compare column 7 with column 5). Indeed, in eight countries, the estimated net replacement rates exceed 90 per cent.

Social assistance complicates the pattern of employment incentives. Columns 1 to 5 are calculated for the main unemployment benefit, usually

unemployment insurance. However, social assistance rates can be higher than the unemployment insurance level; they can even be higher than the 2/3 APW earnings level assumed in the lower panel of Table 2.1. Cases where social assistance is payable at a higher rate than unemployment benefit are highlighted in bold in Table 2.1. However, eligibility for social assistance is circumscribed to some extent by income and asset tests which, in some cases, are very restrictive. In Sweden, for example, the social assistance rate suggested by the government (the benefit

is administered by local authorities) for a family with two children exceeds the APW level of income. In order to receive this benefit for more than a short time, all assets must be sold, including owner-occupied housing if alternative rental accommodation is available.<sup>8</sup> In other countries, social assistance is discretionary. Finally, where employment rates remain high and unemployment is low, fewer households need assistance. Although the level of social assistance may be high in some countries, relatively few people of working age may receive such benefits for one or more of these reasons (for example, Switzerland and Japan). This contrasts with other countries, such as Finland, where access to social assistance is easier.

Benefits supplementing incomes of families with low earnings are used to raise work incentives in Australia, Canada, Ireland, Italy, New Zealand (where a new Independent Family Tax Credit was recently announced), the United Kingdom and the United States. These benefits are often focused on groups who would otherwise have high replacement rates, particularly families with children. In most cases, the upper limits for earnings eligibility mean that most full-time employees do not receive such benefits. However, they can make a dramatic difference to replacement rates for groups not included in Table 2.1, such as part-time workers (and in particular for lone parents).<sup>9</sup>

### ***Duration of benefits***

The likelihood of an unemployed person leaving unemployment increases markedly in the period before a fall in benefit entitlement [Atkinson and Micklewright (1991)]. But the destination can be either a job or inactivity (including another benefit, such as invalidity or early retirement). Unemployment benefit systems often have limited durations of entitlement. Chart 2.3<sup>10</sup> summarises the major benefit transitions which an unemployed person will face over an eight-year spell of unemployment. Unemployment insurance duration often varies by employment record (Germany, Greece, Japan, the Netherlands, Spain and Switzerland) or by age (Austria, Germany,<sup>11</sup> Luxembourg and Portugal), or by family type (Belgium). Furthermore, in practice, durations may be more complex than examination of the benefit rules might imply. In Sweden, benefit entitlement can be renewed by participation in labour market programmes. Similar complications arise in other (especially Nordic) countries. With durations ranging from 3 months (Japan) to unlimited (Belgian families<sup>12</sup>), the initial replacement rate upon entry into unemployment is an inadequate guide to benefit generosity.

### ***The distribution of work incentives over the population***

Microsimulation models can be used to calculate labour market incentives by comparing the incomes of those currently employed with what they might expect to receive if they became unemployed. The labour market incentives are hypothetical – based on assumptions about what might happen if employed people lose their jobs, or those without jobs find them.<sup>13</sup> The tax and benefit system can have particularly large disincentive effects on some of the latter groups.

#### *Incentives facing employees*

The pattern of incentives found using microsimulation models for 12 OECD countries,<sup>14</sup> summarised in Chart 2.4, broadly confirms the picture from the hypothetical cases in Table 2.1.<sup>15</sup> In Australia and the United States, the most common replacement rate<sup>16</sup> is in the 21 to 40 per cent range. This means that wages after tax are 60 to 80 per cent more than the net benefits they would receive were they unemployed. In Denmark and Sweden, replacement rates are concentrated in the 81 to 100 per cent range. In Germany, Ireland, New Zealand and the United Kingdom, the most common replacement rates are in the range 41 to 60 per cent and in Belgium, Canada, Italy and Norway they are between 61 and 80 per cent. Few workers in any country will benefit financially from moving into unemployment.<sup>17</sup>

#### *Incentives facing those without jobs*

If unemployed persons expect to receive a large increase in net income if they started work, they will be more likely to search for employment. The incentive to work, of course, depends on the expected wage. At the median full-time wage, the replacement rate is under 40 per cent for most Australians and Americans who are not currently working,<sup>18</sup> much higher for non-working Danish and Swedish persons, and somewhere in between for other countries. If only low-wage jobs are available (at the lowest decile of earnings), at least a third of people without jobs in Canada and the United States would face replacement rates of over 100 per cent. In Sweden, the proportion of those unemployed with replacement rates below 80 per cent is much higher in the bottom household income decile than for those with higher incomes. This is because unemployment insurance is voluntary and a higher proportion of those in the bottom decile are not insured. Those unemployed who are not covered by insurance receive lower benefits and, as a result, have relatively low replacement rates.

Chart 2.3.

## Duration of unemployment benefit entitlements in 1996

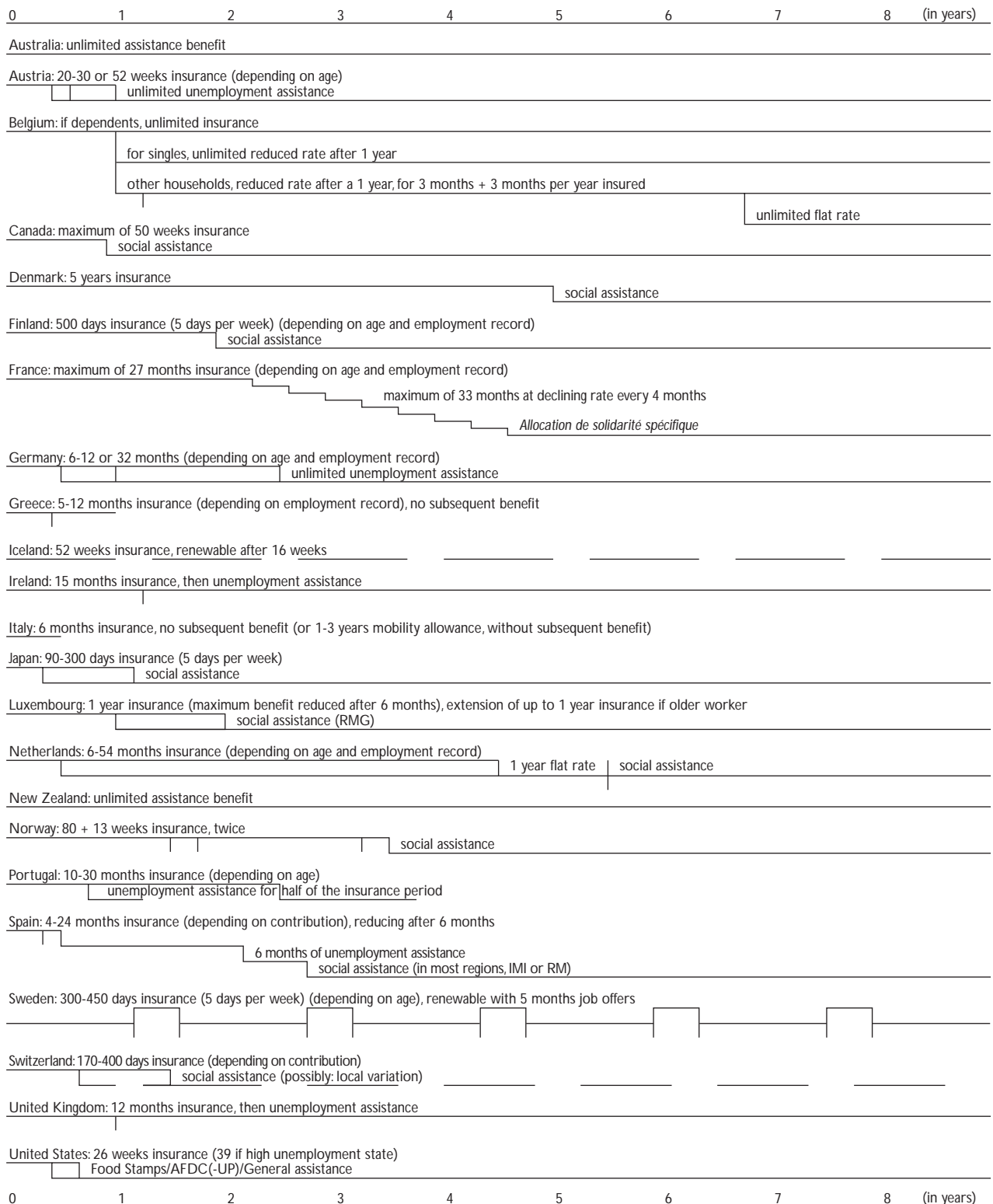
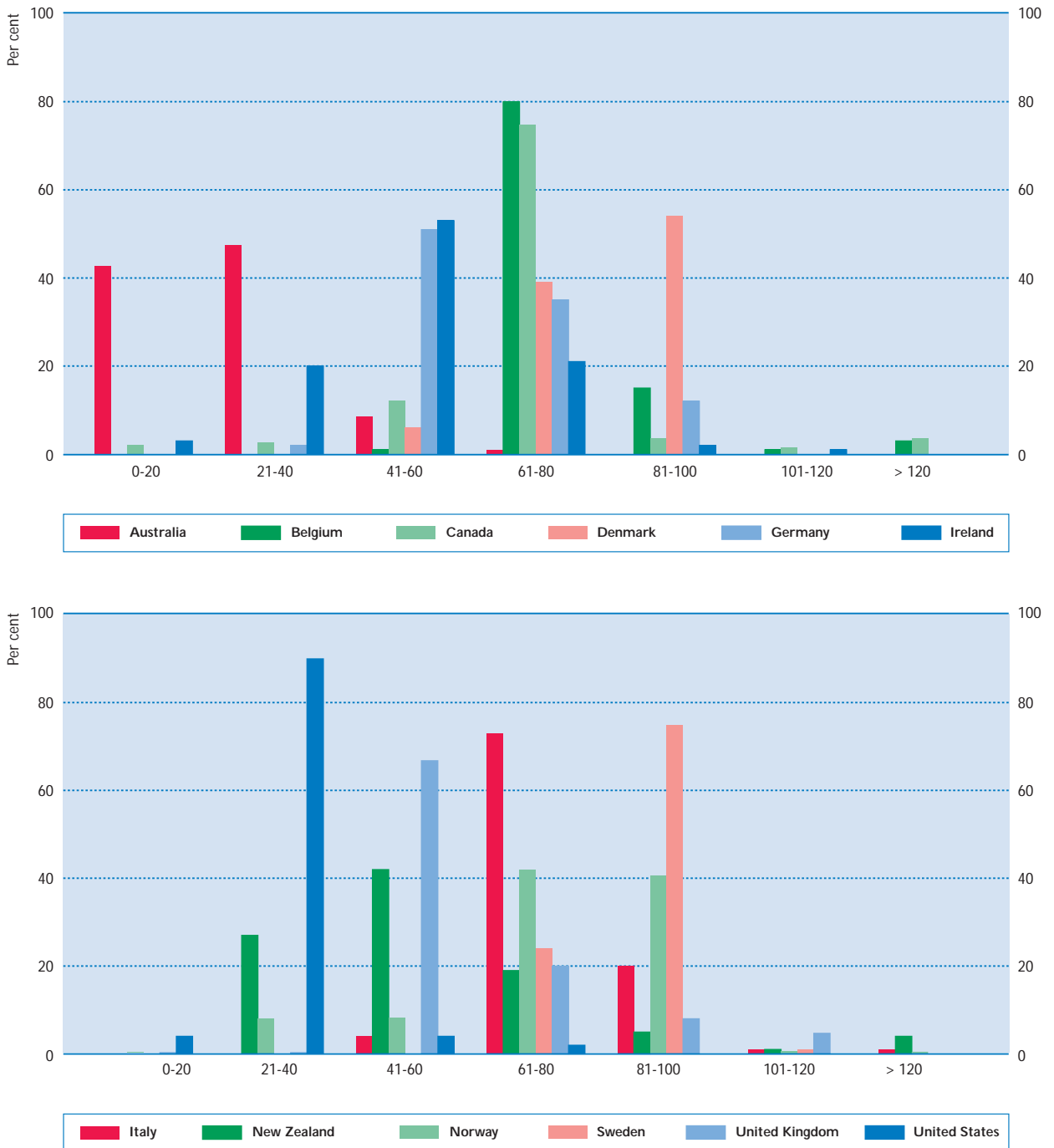


Chart 2.4.

**Distribution of work incentives**  
Replacement rates of the employed



Note: Replacement rates are individualised.  
Source: National microsimulation models: see text.

Generally, the unemployed face higher replacement rates (and therefore lower work incentives) than others without jobs. For example, two-thirds of the unemployed in Denmark face replacement rates of 80 per cent or more. In Italy, the unemployed have replacement rates of 61 to 80 per cent, whereas others without jobs are found predominantly in the 41 to 60 per cent region. In New Zealand, around half the unemployed have replacement rates of 61 to 80 per cent, whereas other without jobs have much lower replacement rates.

### *Incentives facing different family types*

Chart 2.5 shows how high replacement rates are concentrated on particular family types. If the bar is above the line, a disproportionately large proportion of that family type has replacement rates of over 80 per cent. For example, in Denmark, Germany, Italy and New Zealand there are fewer single people and couples with no children with high replacement rates than lone-parent families and couples with children. Low labour market incentives are concentrated in families with children and are a consequence of societies' unwillingness to allow children to grow-up in poverty. In Belgium, Canada, Ireland, Norway, Sweden and the United Kingdom, the pattern is different. Although benefits to families with children in Canada, Ireland and the United Kingdom are higher than for families without children, these countries also provide benefits and tax concessions targeted to families in employment, reducing replacement rates for this group. High replacement rates in Belgium and Norway are concentrated on single people, with or without children. Replacement rates for couples with children are relatively low because the tax system is relatively generous to spouses and dependent children.

### **Are replacement rates "too high"?**

The question of whether benefits paid to those out of work are "too high" or not is more complex than a simple trade-off between economic efficiency and social preferences (see Box 2). A range of factors outside the scope of this Chapter, such as the role of the public employment service and active labour market policies, should also be considered when setting benefit levels.

People may work despite high replacement rates for a number of reasons, including administrative controls, social pressures and expectations of higher future wages. But, in the longer term, high replacement rates will tend to undermine work incentives. Systems have been reformed in some countries with the highest replacement rates (see Box 1). In many cases, the main reason for reform has been the high

budgetary cost of the benefits, although the subsidiary effect has been to improve work incentives.

However, some of these apparent reductions in generosity are illusory. Sweden, for example, has eased conditions for regaining eligibility for unemployment insurance following a period out of work. In Finland, as in most other countries, the social assistance benefit can be used to "top-up" incomes below the social assistance level, and, while unemployment insurance has been reduced, social assistance has not. There was a large rise in the number of social assistance recipients (from 165 000 households in 1989 to 333 000 in 1994). Although higher levels of unemployment amongst those not eligible for insurance benefits and increased take-up as a result of greater awareness of social assistance contributed to this increase, the "top-up" of the insurance benefit was the main cause. In 1989, 18 per cent of social assistance recipients were also receiving unemployment payments. By 1994, the proportion had risen to 52 per cent. Furthermore, Finland introduced a new benefit (Labour Market Support) to cover those no longer eligible for the main benefit. Benefit reforms must take account of these kinds of system-wide interdependencies.

## **2. Other barriers to work caused by the tax and benefit system**

Replacement rates only give a partial picture of incentives to enter employment. Two other factors must be taken into account to get a fuller picture. First, benefits that do not require active job search, such as invalidity and early retirement benefits, may sometimes be used as alternatives to unemployment benefits. Secondly, aspects of the benefit system other than generosity can also influence the labour market through effects on the transition from unemployment to employment.

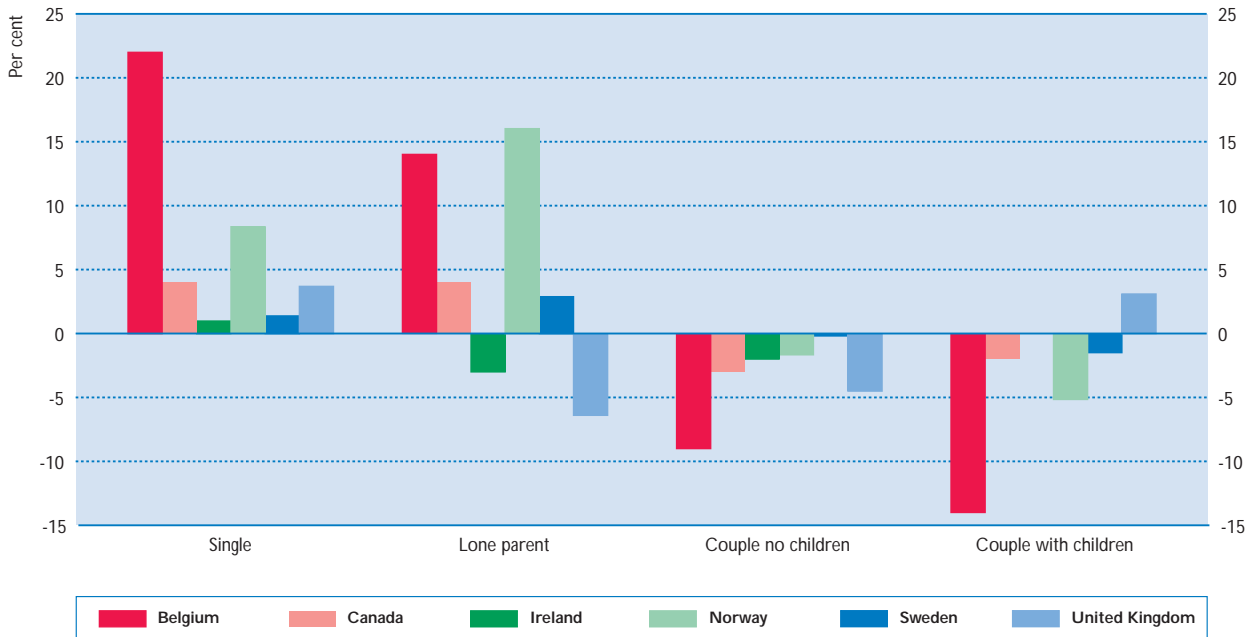
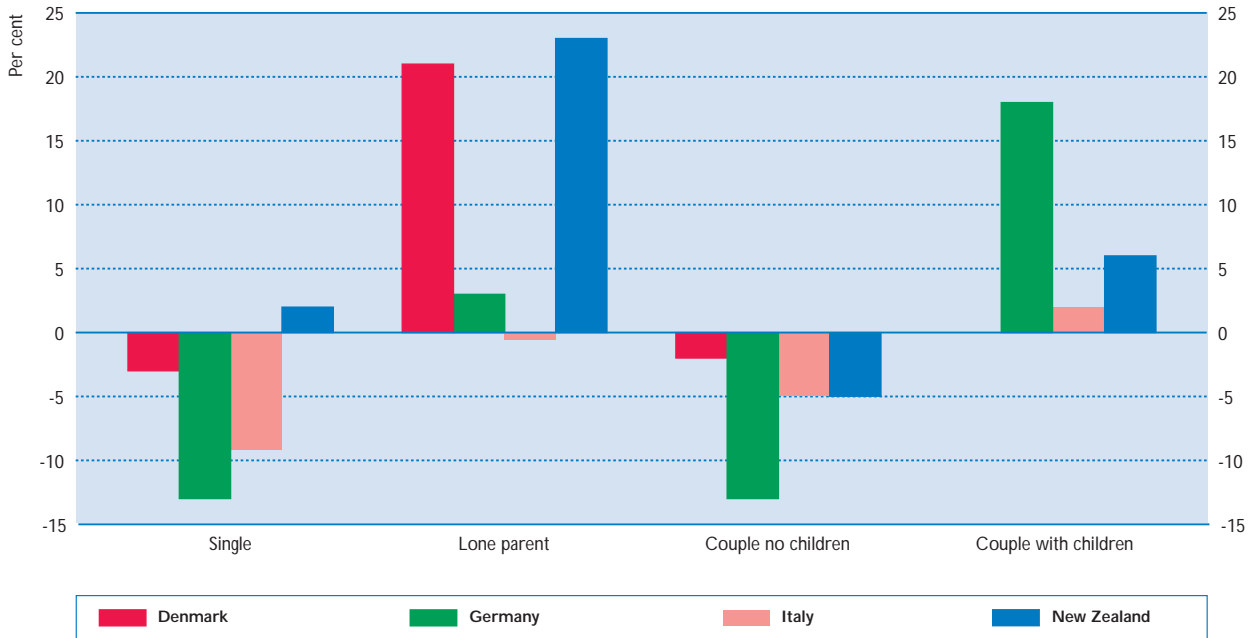
### ***Other out-of-work benefits and unemployment benefits***

In many OECD countries more people of working age receive benefits which do not require any job search than are supported by unemployment benefits or active labour market programmes. Recipients of invalidity benefits outnumbered the registered unemployed in 1990 in 12 of the 23 OECD countries for which data<sup>19</sup> are available. Their number has been growing rapidly, increasing by over 50 per cent since 1980 in Greece, Ireland, Luxembourg, Spain, Sweden and the United Kingdom [Blondal and Pearson (1995)]. Along with early retirement schemes, invalidity benefits remove a substantial part of the working-age population from the labour force.

Chart 2.5.

**Which family types face strong work disincentives?**

Over or under representation compared with the average of the country, of family types facing replacement rates of more than 80%



Note: Replacement rates are individualised.  
 Source: National microsimulation models: see text.

## Box 2

**Considerations in setting benefit levels**

Social policy objectives are best served by high levels of benefits, but this can have negative labour market consequences. The level of out-of-work benefits should take the following factors into account:

**Risk-aversion of workers**

Benefits should be high when people want to insure themselves against loss of earnings arising from unemployment or other risks such as disability. This risk aversion will vary between individuals and over time. The degree of risk aversion may also vary between countries: in some societies people may be more prepared to gamble with their incomes than in others.

**Relationship between wages and benefit levels**

If benefits are high, wages may be pushed higher as well, increasing the cost of labour and causing unemployment. The responsiveness of wages to out-of-work benefit levels will depend on institutional factors and the degree of competition in labour and product markets.

**Benefit financing**

High benefit levels require high taxes or social contributions to finance them. If taxes on labour are high, there is a risk that the cost of labour will be increased, causing unemployment.

**Job search**

Most people wish to work not just for financial reasons, but because of a strong work ethic, or because of the social interactions work provides. Where this is the case, high replacement rates will not reduce the effort the unemployed put into searching for work. Otherwise, benefit systems rely upon administrative controls to ensure that the unemployed search for work. If these controls are effective, high replacement rates will not extend the duration of unemployment unduly. Where they are ineffective, some may adapt to living off benefit income, and not look for work, so increasing unemployment and its persistence.

**Public employment service**

If public employment services or their private-sector equivalents are effective, jobs appropriate to the abilities of the unemployed will be rapidly brought to their attention. Benefits will only need to be sufficient to cover a short period of unemployment as longer job-search will not find better job-offers. If the unemployed have to rely on their own resources in searching for jobs, benefits have to be sufficiently high to support a reasonable length of job-search. Otherwise the unemployed may be forced by financial considerations into accepting inappropriate jobs for their skills.

**Active labour market policies (ALMPs)**

By improving the productivity and employability of the unemployed, active labour market policies can reduce the disincentive effects of any given replacement rate. Conversely, "If the unemployment benefits system is generous and poorly managed, it is very difficult to operate ALMPs in ways which increase labour market efficiency and reduce structural unemployment" [see OECD (1996)].

**Marginal effective tax rates (METRs)**

Increases in earnings may bring very little net increase in family incomes. The result is a reduced incentive to increase earnings. The higher the out-of-work benefit, the higher the METR will have to be and/or the larger the income range over which high METRs apply (see Section D), so deepening or widening this work disincentive.

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Source: This discussion is based in part on Snessens and van den Linden (1994).

If invalidity benefits were restricted to those incapable of work, there would be few grounds for concern. However, there is evidence that invalidity and other out-of-work benefits substitute for unemployment benefits in some countries as a means of supporting those who would otherwise be counted as unemployed. Other benefits are usually unlimited in duration and do not require evidence of job-search. They are also often at a higher level than unemployment benefits. For example, Blondal and Pearson (1995) compare gross invalidity, sickness and early retirement benefits with the index of unemployment benefit entitlements shown in Chart 2.2. Under similar assumptions about earnings before receiving benefit, they found replacement rates for the partially disabled were usually much higher than for the unemployed, and for those fully disabled were on average 25 percentage points higher. A range of early-retirement benefits was found to have even higher replacement rates, especially where the beneficiary had been in employment for a long period before benefit receipt.

For these reasons, it is often better from the individual perspective to receive one of these benefits rather than unemployment benefit. In addition, governments reap the political gain from lower headline unemployment rates and employers may find it easier to reduce their work forces if those losing their jobs receive relatively generous benefits for an unlimited period. Invalidity benefits may be used in this way if medical requirements are not rigidly enforced (either as explicit government policy or by default), as appears to have happened in Austria, Germany, Italy, the Netherlands, Norway, Sweden, and the United Kingdom. A similar trend may be starting in Finland and New Zealand.

Early retirement schemes differ in purpose. Some are merely arrangements whereby individuals can retire early on actuarially reduced pensions. These sorts of early retirement can be justified on the grounds of individuals' control over their own labour supply or of horizontal equity. More controversial are schemes explicitly designed to remove from the labour force those who might otherwise be unemployed. Such schemes may well reduce measured unemployment temporarily, but they will do nothing to reduce the number of families relying on benefits as their main or only source of income.<sup>20</sup>

Income support for lone parents raises similar issues. In some countries, such as Sweden, child care is available on demand and all lone parents applying for income support are required to seek work in the same way as other unemployed people. But in many other countries, lone parents are not required to look for work until their youngest child reaches a certain age (16 in Australia and the United Kingdom).

The use of benefits that do not require active job search may lead to complex labour market effects even if the stated intention of these benefits appears to be unrelated to the labour market. In particular, their use as *de facto* unemployment benefits can artificially reduce unemployment rates, without addressing the fundamental causes of unemployment. Furthermore, due account must also be taken of the debilitating effects on families of living on benefits. Paying people not to work when they are able to do so is a waste of resources and harmful to the work ethic.

### ***Incomes and expenses in and out of work***

Cash benefits only account for some of the help given to those who find themselves without jobs. Sometimes benefits in-kind are also provided. For example, although housing benefits can be included in replacement rate calculations (see Table 2.1 above), it is difficult to value other types of help such as provision of social housing. Sometimes help may be restricted to those in receipt of benefits (see Table 2.2).<sup>21</sup>

The most substantial of these payments is probably Medicaid in the United States, which covers health care costs for some low-income groups. Since 1991, more has been spent on Medicaid for the 12.1 million recipients of Aid to Families with Dependent Children (AFDC) (\$21.9 bn in 1991), than was spent on AFDC cash benefits themselves (\$20.9 bn) [US House of Representatives (1994a)]. Medicaid is received until AFDC entitlement is exhausted. In order to reduce the disincentive to work which this rule implies, Medicaid entitlement is kept for 9 to 15 months after losing AFDC. Ireland has a similar scheme whereby the long-term unemployed continue to receive health-care cover for three years after taking a new job. In Luxembourg, there is a sudden drop in income when earnings exceed a certain level because housing benefits are conditional on social assistance receipt. Other recent reforms to the provision of non-cash benefits include the 1996 reforms in New Zealand, which increased the qualifying income for a Community Services card by 7.7 per cent, thereby extending benefits to more low-income, in-work families and so smoothing the transition from unemployment to work.

Apart from loss of benefits which are available to those without work, there are increased costs for those in work. These may include commuting expenses, the costs of special clothing and tools, trade union dues and child-care.<sup>22</sup> Conversely, the unemployed may have out-of-work expenses – such as job search costs – which are not incurred in work.<sup>23</sup>

Fourteen OECD countries report deductions for work-related expenses in the personal income tax

Table 2.2. **Typical extra benefits which can be given to those receiving social assistance or unemployment benefits**

Some of the items which can be made available to those on benefit income	
Australia	Health care card (reduced cost medicines). Public and private providers sometimes use the card as a passport for other concessions of which reduced cost transport is the most important. (Benefit recipients get these cards as a right; low-earning households can get them on application.) School uniforms, books, help with utility payments are given in some states.
Canada	Clothing, health premiums, prescriptions, dental, optical (varies by province), educational costs, removal costs. For example, Ontario pays a winter clothing allowance of C\$104, and a "back-to-school" allowance of C\$126. Six out of ten Provinces give these benefits to those on low wages as well.
Denmark	Medical expenses.
Finland	Various one-off payments. Health care costs sometimes covered.
Germany	Medical insurance, prescriptions, lower price public services.
Ireland	Back-to-school allowance. Free school meals/transport. Fuel allowance. Medicaid.
Japan	Exempted from inhabitants' tax (local tax). Cheap rail travel.
Luxembourg	Free transport. Medical insurance.
New Zealand	Health-care costs (including prescriptions). Available to all those with low incomes, not just benefit recipients.
Norway	Municipal services (child care, etc.) are often income related.
Spain	Health insurance.
Sweden	Prescription costs, glasses, dental.
United Kingdom	If on income support: cold-weather payments; school meals; prescriptions; optical and dental. Other people on low incomes must apply for some of these payments.
United States	Medical insurance (Medicaid).

*Source:* Eardley *et al.* (1996) and information provided by national authorities.

[OECD (1995c)] at the earnings of the average production worker (see below for a discussion of child-care), although they vary enormously in value.<sup>24</sup> Some countries – Belgium, Denmark, Finland, Germany, the Netherlands, Switzerland and the United States – also have specific rules relating to the deductibility of commuting expenses. Although the cost of providing such deductions is difficult to assess, tax expenditure accounts give an indication. In France, for example, identifiable revenues foregone for work-related expenses in 1992 include contributions to trades unions (FF 190 m), child-care costs (FF 1 bn for the purchase of such care; providers also receive concessions on the social contributions they are required to make); food vouchers or work canteens (FF 650 m); holiday vouchers (FF 25 m); and transport costs (FF 255 m) [France, ministère des Finances (1993)].

As these data on revenues foregone indicate, child-care costs are often the most substantial in-work expense. They are commonly identified as a barrier to taking employment, especially for lone-parent families or when one partner is already working. Public policies to provide access to affordable child-care

facilities for parents who wish to work are many but diverse [Ergas (1990)]. Publicly provided day-care facilities may be subsidised by central or local government, with only nominal charges to users.

Other countries, including Belgium, Canada, the Netherlands, New Zealand and Norway allow some or all of expenses on formal child-care to be deducted from personal income tax liabilities.<sup>25</sup> Although administratively straightforward, these deductions may be worth more to people paying higher tax rates, and nothing for those earning below the tax threshold. They have little effect on replacement rates of the low-paid.

Table 2.3 underlines the fact that child-care costs can be a serious barrier to work. Columns 2 and 5 show the gain in net income a one-earner couple receives from working compared with being unemployed (it reflects the first-month unemployment assumption of Table 2.1, including all benefits). At both APW and  $\frac{2}{3}$  APW earnings, there is a clear financial gain from working in all the countries included in the table. Columns 3 and 6 show the gain in net income if the child-care costs of column 1 are taken into account (it is assumed that child care is

Table 2.3. **Child-care costs and benefits: a barrier to work?**

Percentage gain in net income from work, for a one-earner couple with two children taking account of child-care costs and benefits

	Child-care cost assumption	2/3 of APW			APW		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	\$ per week	Ignoring child-care costs and benefits	After child-care costs for those in work	After child-care costs and benefits for those in work	Ignoring child-care costs and benefits	After child-care costs for those in work	After child-care costs and benefits for those in work
Australia	167 (max) 75	28 28	-27 -21	-1 3	41 41	-25 -19	-5 0
Canada	140 (max) 75	50 50	5 3	20 18	50 50	18 15	45 43
Finland	(145) <sup>a</sup>	15	-43 <sup>a</sup>	15	16	-32 <sup>a</sup>	16
Japan <sup>b</sup>	(242) <sup>a</sup>	108	50 <sup>a</sup>	108	138	92 <sup>a</sup>	115
United Kingdom	60 (max) 75	27 27	-2 -10	50 45	54 54	27 21	30 24

Notes: In columns 2 and 5, child-care costs and benefits are ignored. In columns 3, 4, 6 and 7, it is assumed that when in work the costs in column 1 must be incurred. When unemployed the family is assumed not to use child-care facilities (see text for a discussion of the treatment of child care for the unemployed). The table gives the percentage increase in net income compared with that which would be received when in the first month of unemployment. In Australia, Canada and the United Kingdom, two cases are included in the table. The maximum level of child-care costs which will qualify for help may be above typical child-care costs, so the effects of having costs of \$75 per week are illustrated. The gains in net income are calculated for a one-earner couple with two children (except in the United Kingdom, where the benefit provision applies only to lone-parents). The pattern of incentives for other family types closely follows that in the table; the case of a one-earner couple is included as this family type is discussed in more detail in Table 2.1.

a) In Finland and Japan, payments for child care are made according to income. There is therefore no underlying child-care cost. The figure here refers to the maximum that would be paid for two children. In each country, this amount would only be paid by someone with substantially more than average earnings. Columns 3 and 6 refer to the net gain in income were the family to pay the maximum amount, as opposed to the amount relevant for someone with their income level.

b) The figures here reflect payments in the Osaka municipality.  
Source: OECD database on taxation and benefit entitlements.

purchased only when employed). Work no longer brings significant financial reward; on the contrary, in some of the cases in Table 2.3, the family would be better off remaining on benefit than working. Columns 4 and 7 show that special provisions in tax and benefit systems can substantially reduce the barriers to work from child-care costs.

Such barriers will be particularly important where informal arrangements for child care are unavailable, in particular for lone-parent families and families where both earners wish to work.<sup>26</sup> These are two of the groups which most estimates suggest are particularly responsive to financial incentives to work. Australia has increased the level of support for child care through subsidising provision and through cash rebates and benefits. In the United Kingdom, up to £40 per week of child-care costs can now be disregarded when determining benefit receipt. It is estimated that 40 000 extra lone parents will work as a result of this change in the rules [Duncan *et al.* (1994)]. New Zealand also offers an earnings disregard to lone parents with child-care costs (along with a general income-tested child-care subsidy).

### **Cash-flow and the transition to work**

Even where there is an apparent financial benefit in becoming employed, the short-term consequences may be the opposite. For households which are (almost by definition) short of money, this may appear to the families concerned an almost insurmountable barrier to taking a job. The cash-flow consequences of taking employment can be unfortunate if there is a hiatus in public support. For example, several countries have one system of supporting those who are unemployed and another which supplements the income of those who have low earnings. In some cases, they are administered by different agencies, causing co-ordination problems. The transition from one benefit regime to another can lead to delays in payment, causing severe hardship to the families in question and discouraging attempts to move off benefit.

Transitional problems are likely to be of most consequence in countries with low benefit levels. This has been identified as a problem in the United Kingdom, where a commitment has now been made

to process all claims for the employment-conditional Family Credit in a maximum of two days. In the United States, the Earned Income Tax Credit gives a substantial boost to in-work incomes (see below). But it may have had a limited labour supply impact in practice because it is generally paid annually when tax returns have been filed, rather than on an ongoing basis when it would have most impact. In New Zealand, some out-of-work benefits will continue to be paid for a period until in-work benefits are granted, with an end-of-year reconciliation.<sup>27</sup> In Australia, unemployment benefits are paid two weeks in arrears, meaning that benefits will continue to be received for a short period when moving into work.

“Back-to-work bonuses” have a similar effect. Not only do they help the transition to employment, but they can also be structured to encourage job search. Such a system is in place in Japan, where the more rapidly an unemployed person finds a job, the larger is the bonus paid, up to a maximum equal to 4 months of benefit. Some long-term unemployed in Australia receive a payment of A\$ 100 on entry into employment. New Zealand pays NZ\$ 250 towards the back-to-work expenses of those who find work after a year or more of unemployment. Experiments with similar schemes in the United States suggested that they encouraged enough benefit recipients to find jobs more quickly than they otherwise would have done for the schemes to more than cover their costs.<sup>28</sup>

### ***Uncertainty and the transition to work***

The calculations referred to so far imply that a replacement rate can be identified for individuals and they will respond in a predictable way to the resultant incentives. However, calculating the net incomes of someone in and out of work, taking account of family allowances, earnings additions, peculiarities of the tax system, the interactions of benefits and the timing of payments, requires knowledge of many pages of regulations. Small wonder, then, that surveys suggest people have very little idea of how much net income they might have were they to move from being employed to unemployed or vice versa. For example, in reviewing changes in Australia, researchers concluded that “the majority of respondents were largely unaware of how the income test works and the effect that earning income had on their allowance or pension. The impact of social income tests tends to be misinterpreted in that they are generally viewed as being harsher than they actually are” [Puniard and Harrington (1993)]. In the United Kingdom, the employment-conditional Family Credit is not widely understood: many recipients underestimate how much they might be able to earn without exhausting their rights to the benefit [Marsh and McKay (1993)].

This lack of understanding about the benefit system and the incomes which can be expected in and out of work has three possible effects. First, when combined with the effects of the administrative burden placed on claimants, the result is that the take-up of certain key benefits may be low. Low take-up has historically been a particular problem with benefits paid to those on low incomes in-work. Hence, provisions of the benefit system which in theory should have positive effects on the incentive to work may have a lesser effect in practice. Secondly, misperceptions of net incomes in and out of work may lead people to behave irrationally. In theory, the effects of such misperceptions on employment and unemployment are unclear. People might over- or under-estimate net incomes in employment or unemployment. Thirdly, lack of knowledge adds to the uncertainty surrounding incomes in work as opposed to incomes out of work. Taking a job involves assessing the values of a host of unknown variables – work expenses, tax bills, benefit entitlements<sup>29</sup> – which those without jobs are unable to gauge with much accuracy. Complex administrative procedures add to the belief that actual benefit receipts are something of a lottery. The requirement to reapply for benefits if any job is lost again implies that families must throw themselves on the mercy of an ill-understood and apparently arbitrary system, so discouraging the acceptance of “risky” jobs.<sup>30</sup>

The uncertainty over incomes in and out of work is caused by a lack of transparency in tax and benefit systems. Transparency could be increased by simplifying them. Short of this, there are still several policy options which have been tried in different OECD countries. Information campaigns in the United Kingdom have had a dramatic effect on take-up of Family Credit, the main employment-conditional benefit. Several countries have identified a particular problem with the long-term unemployed being unaware of net incomes in work, and attempt to target information campaigns on them. Employers may be a source of advice to prospective employees when job-offers are made, so it is important that they too understand the tax and benefit system.<sup>31</sup>

### **3. Policy responses to promote employment**

Although the effects of replacement rates on unemployment are relatively uncontroversial in sign, it is often questioned whether the social cost resulting from cuts in benefits is a price worth paying. General reforms to reduce replacement rates have therefore been rare (see Box 1). Most recent reforms have usually been targeted. Reforms in Denmark in 1994 and 1995 restricted the maximum amount of social assistance compared with lost earnings<sup>32</sup> and the period over which high levels of social assistance

can be received. Maximum rates of housing benefit in the United Kingdom will be reduced.<sup>33</sup> In addition, some countries have up-rated their benefits or the minima and maxima in the insurance benefits in line with price inflation rather than earnings. This led to a slight increase in replacement rates around 1992-1993, as real earnings fell. Over a longer period of time, however, this has more often led to a reduction in replacement rates (e.g. in the United Kingdom). Young people have been the focus of a general trend, with removal of rights to benefit for 16- to 17-year-olds in Canada and New Zealand, restrictions on the amount of benefit paid to young people in the Netherlands and the duration of benefits for young people in Denmark.<sup>34</sup>

Other than cutting replacement rates, reforms have concentrated on other aspects of policy mentioned in Box 2 or recommended in the *Jobs Study* [OECD (1994a, 1995b)]. They include:

- *reinforcing the insurance principle*. This has taken various forms. Some countries are looking to reduce heavy individual use of the unemployment insurance system. Canada is considering a reform which would reduce entitlements to those who repeatedly become unemployed. Austria may experience-rate employers' social security contributions to reflect the numbers they lay-off. Other countries are reducing entitlements to unemployment insurance benefits (Belgium and Norway have reformed unemployment insurance for part-time work; longer contribution periods before receipt of unemployment insurance benefits are now required in Spain and Sweden). In Finland, access to the basic unemployment insurance for those without work experience was restricted in 1994, with a new means-tested benefit introduced for those who no longer qualify. In the Netherlands, access to wage-related benefit has been tightened;
- *encouraging job search*. Belgium has tightened administration of the requirement to search for work. As a result 35 000 people lost their unemployment insurance entitlements in 1993. A similar tightening has recently taken place in Denmark and the United Kingdom. In the Netherlands, 90 000 recipients of unemployment insurance were "sanctioned" in 1993 compared with around 40 000 in 1990. In 1996, more detailed proof of job-search activity was required to gain access to the means-tested benefit in the Netherlands. Job-search requirements were tightened in Spain in 1992;
- *improving access to child-care*. Some countries with relatively poor records in providing child-care have recently focused more attention on this area. In Australia, child-care costs

are refunded in part according to parental income, suppliers are subsidised and a third of remaining expenditures is granted a cash rebate. Some families pay as little as A\$ 19 for a full week of child care (12 per cent of the cost of provision). Government expenditures on child care now amount to A\$ 1 bn (12 per cent of expenditure on unemployment benefits). The United Kingdom increased the earnings which are disregarded for expenditure on child care and has started a programme giving vouchers to parents of young children which can be used to purchase nursery school places; and

- *increasing in-work incomes*. Tax reductions for those on low incomes can increase net incomes in work, although the effect on replacement rates depends on the tax treatment of benefits and the financing of the tax reduction. An area of tax and benefit policy which has received much more attention is the payment of benefits or income tax credits on condition that the recipient is in employment. But they raise another labour market problem, that of high marginal effective tax rates, which is considered next.

#### D. THE POVERTY TRAP AND HIGH MARGINAL EFFECTIVE TAX RATES

##### 1. What causes high METRs?

If benefits were withdrawn as soon as earnings rose above zero, there would be a severe disincentive to work – the unemployment trap would be very deep. Hence, countries withdraw benefits *gradually* as earnings rise. In many countries, a significant number of people with earnings continue to receive benefits even while they are paying taxes and social security contributions. The rate at which benefits are withdrawn and taxes and social security contributions are increased as earnings rise is known as the marginal effective tax rate (METR). People facing very high METRs have very little financial reward for increased work hours and effort, and lose very little if they work less. METRs can be lowered by cutting the benefit reduction rate (BRR), but only at the cost of extending benefit entitlements further up the income distribution.

Table 2.4 shows that many examples of high METRs arise from policy towards families (as in Australia, Germany, Ireland, the United Kingdom and the United States). Child tax allowances and universal child benefits are paid in most OECD countries but the budgetary cost means that they are usually not

Table 2.4. **Incidence and causes of high marginal effective tax rates (METR) caused by cumulative benefit receipt**

One-earner couples

	METR	Region where METR applies (% of APW earnings)	Tax and benefit combinations causing high METRs
Australia	90%	38-62%	Income tax (20%), parenting allowance (70%).
	38%	62-78%	Income tax (34%), low-income rebate withdrawal (4%).
	104%	78-84%	Income tax (34%), Medicare payments (20%), additional family payment (50%).
	85%	84-100%	Income tax (34%), additional family payment (50%), Medicare levy (1.45%).
France	78%	57-91%	<i>Revenu minimum d'insertion (RMI)</i> disregard (50%), social security (18.7%), <i>Contribution sociale généralisée (CSG)</i> (2.3%), housing benefit (16.5% average).
Germany	89%	72-82%	<i>Milderungszone</i> [phase out of income-tax free zone (this has now been abolished)]; income tax (51%), social security (18.3%), housing benefit (20%).
Ireland	105.5%	62-76%	Social security (5.5%), income tax (40%), family income supplement (60%).
Sweden	72%	147-160%	Income tax (20%), social security contributions (2%), local tax (31%), housing benefit (20%).
United Kingdom	97%	46-65%	Income tax (20%), social security (10%), family credit (70%), housing benefit (65%), Council tax benefit (20%).
	80.5%	65-77%	Income tax (25%), social security (10%), family credit (70%).
United States	72%	62-71%	Social security (7.65%), income tax (15%), local tax (5%), food stamps (24%), earned income tax credit (17.68% for family with two children).

Notes: 1994 systems, except for Australia and the United Kingdom (1995). Family credit is only revised every 6 months, so the long-term METR given in the table for the United Kingdom may be substantially higher than that faced in the short term. Fewer than half of Ireland's family income supplement recipients are on earnings' levels that are exposed to the METR indicated. The benefit level, once set, is not revised downwards for 12 months, even if income increases in the meantime. The long-term rate presented in the table is substantially higher than that faced in the short term. Figures for individual taxes and benefits do not sum to the overall METR in France and the United Kingdom because benefits are withdrawn against net, rather than gross income. The 38% rate for Australia is included to give a more complete impression of Australian METRs.

Source: OECD database on taxation and benefit entitlements.

very high. In those countries where unemployment benefit levels are low, such payments are insufficient to prevent child poverty, and as a result additional child payments are sometimes made to families receiving benefits.

To avoid the sudden loss of family income on entering employment referred to above, two policies have been followed. In some countries, including Australia, Germany and New Zealand, the family payment is withdrawn gradually as income rises (although the means tests for family payments were eliminated in Germany in 1996). In Ireland and the United Kingdom, a separate benefit is paid to families in employment, which again is withdrawn as incomes increase. In each case, the withdrawal of the benefit leads to high METRs.

High METRs are more general, both in these and other countries, than Table 2.4 suggests. Payments which are means-tested on family income are often reduced by the amount of all other income – the

METR is 100 per cent. In such circumstances, it is sometimes said that recipients face a poverty trap – any attempt to increase earnings has no effect on household incomes. The numbers of benefit recipients who have exhausted their unemployment insurance benefits or who, having never worked have never contributed to unemployment insurance schemes, have risen, leading to greater reliance on means-tested benefits. Some of the more dramatic increases are noted in Table 2.5. In addition, most special benefits for lone-parents are means-tested.

## 2. High METRs and the labour market

Sometimes, it is argued that the importance of high METRs is exaggerated. Most labour market decisions are not “marginal” in the sense of working only a few more hours, or trying to earn a slightly higher wage. Instead they consist of large, discrete changes in status – for example, from not working to working

Table 2.5. **Growth in receipt of means-tested benefits**  
(1980 = 100)

	1980	1985	1990	1992
Austria (unemployment assistance)	100	1 233	1 067	967
Belgium (Minimex)	100 <sup>a</sup>	174 <sup>b</sup>	195	252 <sup>c</sup>
Canada (social assistance)	100 <sup>a</sup>	144	144	228 <sup>c</sup>
Finland (social assistance) (number of persons)	100	143	187	343 <sup>c</sup>
France ( <i>RMI</i> )	-	-	100	155 <sup>d</sup>
Germany ( <i>Sozialhilfe</i> )	100	156	219	276
Germany (unemployment assistance)	100	549	355	-
Netherlands ( <i>RWW</i> - unemployment assistance)	100	378	319	300
Spain (assistance benefit)	100	562	581	687 <sup>e</sup>
Sweden (social assistance) (number of persons)	100	156	150	208
United Kingdom (income support, excluding disabled or over age 60)	100	238 <sup>b</sup>	178	247
United States (food stamps)	100	104	104	139 <sup>d</sup>

Notes: Number of households, except where noted otherwise. The French *RMI* was introduced in 1989. Figures for the United Kingdom are for supplementary benefit in 1980 and 1986.

a) 1981.

b) 1986.

c) 1994.

d) 1993.

e) 1991.

Source: Eardley *et al.* (1996).

full-time. Where high METRs exist for only a short range of earnings, they are unlikely to distort labour market behaviour. But there are cases where high METRs do matter. Where the marginal rates are high over a relatively wide range of earnings they indicate a breaking of the link between effort and reward which reduces work incentives.<sup>35</sup> One of the many country-specific examples which could be cited concerns elderly workers in Japan. Beyond the age of 60, if earnings were relatively low, they could be combined with 80 per cent of the full pension. Above a certain threshold of earnings, the amount of pension would be reduced to 60 per cent of the full pension, and so on. As a result, earnings of those entitled to a pension were highly concentrated just below the level which would result in a big loss of pension. No such pattern was observed for those with no pension entitlement. People apparently do respond to the incentives facing them [Seike (1994); Seike and Shimada (1995)] and the Japanese authorities have responded by reforming this system.

The other area where high METRs have a strong impact on the labour market is when they affect the most disadvantaged groups. Social assistance recipients often face METRs of 100 per cent. The consequence is that it is not possible, in these circumstances, to increase disposable income unless a full-time job can be found. Thus, tax and benefit systems can interact to prevent formal part-time work, and thereby encourage fraud and long-term benefit dependency. METRs are particularly important in three policy areas: the poverty trap; the use of

employment-conditional taxes and benefits; and the taxation of the family.

### **The poverty trap**

Two problems arise in the application of means-tests to families receiving social assistance. First, after work-related expenses, the family can find itself with *reduced* disposable income if one member undertakes low-paid or part-time work. This is a "poverty trap": income is low, but a few hours of work might leave them worse off than relying on benefits as the sole source of family income. In the absence of full-time work, they are discouraged from any contact with the labour market. Lack of contact with the labour market over a long period reduces the effectiveness with which people can search for jobs, while there is an increasing risk that employers will regard such individuals as "unemployable". A study of AFDC recipients in the United States concluded that, after taking account of work expenses, METRs can be more than 100 per cent, with "pernicious" effects [Giannarelli and Steuerle (1994)].

The second problem is that the incentive for one member of the family to work is affected by the labour market position of other family members. The earnings of one spouse reduce the benefit entitlement of the other. This has long been recognised as a problem in countries with extensive means-testing, such as Australia and the United Kingdom [Scherer (1978)]. Disincentives in the benefit system are not the sole cause of the strong correlation between spouses' employment. Spouses usually have similar

educational profiles and, of course, are usually searching for jobs in the same local labour market. However, econometric analyses in Germany, the Netherlands and the United Kingdom,<sup>36</sup> controlling for characteristics which might explain wives' participation rates, suggest that the shortfall in employment rates of women married to unemployed men cannot always be explained by these factors alone.

If earnings' potential is low, more than one wage may be necessary to lift families off benefit income. But the structure of the benefit system may mean that, if one member of a household is unemployed, other members may have little incentive to work. To get out of this trap, both members of a couple must find a job simultaneously. Hence, poorly-designed means-tested benefits run the risk of polarising the population into so-called "work-rich" and "work-poor" households. In the former, at least one member of the household works and the other faces high incentives to work as well; in the latter, the incentive to work of both spouses is low.

Recent reforms in Australia have addressed this problem by giving each partner in a household where neither partner has a high level of earnings an individual benefit entitlement and reducing the METR below 100 per cent.<sup>37</sup> The Australian White Paper (1994, p. 187) put it thus: "The major rationale for moving towards individual entitlement is that it would encourage greater and more effective job search by both partners of a married couple. This would respond to the fact that many of the job opportunities are more likely to be gained by women than men given the increase in part-time work and the greater increase in jobs in traditionally female areas of the labour force." Similar effects can be achieved by employment-conditional benefits paid to those with low incomes. Increasingly, recipients of Family Credit in the United Kingdom are not the unemployed finding low-paid jobs, but spouses in two-earner couples when one partner loses a job [Marsh and McKay (1993)].

### **Employment-conditional benefits and tax credits**

The distinguishing feature of employment-conditional tax credits and benefits is that they are income-tested, but payable only to those in work. These benefits are designed to shift the balance between incomes in and out of work to encourage labour force participation. By phasing out the benefit as earnings rise, resources are wholly targeted on low-paid workers. This is difficult to achieve with other policy instruments such as changing the structure of income tax or social security contributions. This phasing out, however, means higher METRs reach further up the earnings' scale, reducing work incentives for those already in work. Table 2.6 gives a

brief description of the main examples of such benefits in OECD countries.

In the United States, the value of the EITC (Earned Income Credit) increases as gross earnings rise, reaches a plateau at the maximum credit and is then phased out at higher earnings. Around 3.5 million families will lie in the phase-in range when the extensions of the credit envisaged in the Omnibus Budget Reconciliation Act 1993 are fully implemented. The mean marginal rate from the federal income tax and social security contributions will be minus 21.3 per cent (*i.e.* a credit). For the 2.5 million families on the plateau, the marginal rate is unchanged (averaging 17 per cent), but marginal rates for 9.8 million families in the phase-out region are increased to around 44 per cent [Holtzblatt *et al.* (1994)]. Many more families face higher marginal rates than lower as a result of the EITC. This creates an incentive for workers to reduce their hours of work. However, by increasing net income in work at all levels of earnings up to the end of the phase-out, the effect on the incentive to take a job is unambiguously positive. Canada introduced a more modest tax credit for working families with children as part of a more general reform of child support in 1993. In addition, the province of Quebec operates a generous employment-conditional benefit: *Aide aux parents pour leurs revenus du travail*, APPORT.<sup>38</sup>

The Irish employment-conditional benefit, Family Income Supplement (FIS), in contrast to the American one, tends to be received by those in the middle of the income distribution. As a poverty-prevention measure, it is less well targeted. Because of this, FIS raises METRs substantially. Its interaction with income tax and social security contributions allows METRs to exceed 100 per cent. But FIS also enhances the incentive to take a job. Microsimulations which assume full take-up of FIS (an important assumption, as discussed in Box 3), suggest that replacement rates are reduced substantially (by over 10 percentage points) for 8 200 families; 6 400 see a reduction of 5 to 10 percentage points and 11 900 see a smaller reduction compared with a system without this benefit.<sup>39</sup>

The employment-conditional benefit in the United Kingdom requires claimants to work 16 hours or more, while social assistance is restricted to those working fewer than 16 hours. The net cost of Family Credit, taking account of reduced receipt of other benefits, is two-thirds of the gross expenditure shown in Table 2.6. The effect of Family Credit on incentives follows the pattern in Ireland and the United States. METRs are increased for four-fifths of the 0.5 million recipients to 70 per cent or more. Replacement rates are reduced for nearly all recipients. However, about 250 000 two earner couples who together earn just too much to be eligible for Family Credit have a

Table 2.6. **Employment-conditional tax credits and benefits**

	Canada	Ireland	Italy	New Zealand	United Kingdom	United States
Name	Child tax benefit	Family income supplement	Family benefits for employees <sup>a</sup>	Independent Family Tax Credit (IFTC, to be introduced)	Family credit	Earned income tax credit (EITC)
Cost	CS250 m = \$200 m	Ir£21.3 m = \$33.9 m	L5 763 bln = \$3.76 bln	NZ\$210 m = \$142.7 m	£1.1 bln = \$1.7 bln	\$26.7 bln
Number of recipients	0.7 m	11 000	–	150 000	0.5 m	19 m
Average receipt	CS\$357	Ir£1 925 = \$3 075	–	NZ\$27	£2 400 = \$3 800	\$1 450
Responsible department	Tax administration	Social welfare	Social security	Tax administration	Social security	Tax administration
Maximum benefit	CS\$500 pa	<sup>b</sup>	L2.76 m pa	NZ\$15 pw (per child)	£67.80 pw <sup>c</sup>	\$2 152/\$3 556/ \$323 pa
Minimum earnings	CS\$3 750	None	<sup>d</sup>	–	None	\$0
Phase in rate	8%	None	None	–	None	34/40/7.65%
Earnings when phasing out begins	CS\$20 921	Immediately	L15 984 m	–	£73 pw	\$11 610/\$11 610/ \$5 280 pa
Withdrawal rate	10% of gross income	60% of gross income	10% of gross income	18% between NZ\$20 000 and NZ\$27 000, 30% above <sup>e</sup>	70% of net income	16.0/21.1/7.7% of gross income
Minimum hours worked	No limit	20 hours (19 from July 1996)	No limit <sup>f</sup>	–	16 hours. Supplement for 30 hours or more.	No limit
Family type	Families with children	Families with children <sup>g</sup>	Families receiving unemployment benefit	–	Families with children. Pilot scheme for childless	First figure is for 1-child families, 2nd for 2 or more children, 3rd for no children

Key: m = million bln = billion pa = per annum pw = per week

Notes: Data on the entitlement rules refer to 1995 except for New Zealand (IFTC, 1997) and the United States (1996). Data on costs, number of recipients etc. refer to 1993 for Canada and Ireland, 1990 for Italy and 1994 for the United Kingdom and United States. IFTC figures for New Zealand are forecasts for when the scheme is fully implemented in 1998-99. The pre-existing Guaranteed Minimum Family Income, which is a smaller employment-conditional payment, will continue to be paid. The GMFI is paid to lone parents working more than 20 hours and couples working more than 30 hours. The maximum benefit is around NZ\$110 per week. The difference between family income and NZ\$320 is paid. As all eligible families receive family benefits, and there is a minimum wage of around NZ\$6.25 per hour, maximum benefit for lone parents is around NZ\$110, substantially less (around NZ\$30) for single-earner couples. It has approximately 5 000 recipients. It is operated through the tax administration. Figures for the EITC are total programme costs including the outlay on repayments and the tax expenditure component (the reduction in tax liabilities).

a) In addition to this payment, Italy has income-related tax credits for dependent spouses and children.

b) Payment is 60 per cent of the difference between family income before tax and a weekly threshold of Ir£165 plus Ir£20 per child with a minimum payment of Ir£5.

c) Rates depend on age and number of children. The above figure is for 2 children aged under 11 years old.

d) Ordinary unemployment benefit only lasts for 6 months in Italy, so the allowance operates *de facto* as an employment-conditional benefit.

e) IFTC and Family Support are subject to the same means test.

f) At least 70 per cent of family income must be from earnings (or pensions).

g) There are other employment-conditional benefits in Ireland. The *part-time job incentive scheme* is open to the long-term unemployed (15 months or more) who work for less than 24 hours a week. A flat-rate payment (Ir£40 per week for singles, Ir£66 for one-earner couples) is paid where this is more beneficial than means-tested unemployment assistance. The *Back-to-Work Allowance* is paid to the long-term unemployed (1 year or more) who are aged 23 years or more and to lone parents (no age limit) where the person takes up self-employment or a new job (*i.e.* additional in the economy). 75 per cent of the standard means-tested unemployment or lone parent assistance are paid in the first year, 50 per cent in the second year and 25 per cent in the third year.

Sources: United Kingdom Department of Social Security (1994); US House of Representatives (1994b) and information supplied by national authorities.

reduced incentive to work. If one of them were to leave their job, the family would be entitled to Family Credit and net family income would be little reduced. Incentives for those out of work to take a low-paid job are increased.

Employment-conditional credits and benefits (and indeed all benefits paid to those in work) involve a trade-off between increasing the incentive for people to take a low-paid job and encouraging those in work to reduce their hours of work. Evaluating this trade-off is an empirical question. Simulations by Scholz (1996) suggest that the increase in employment as a result of the EITC in 1996 will be around 350 000. The proportion of lone parents working will increase by 6.6 percentage points [see also Dickert, *et al.* (1995)]. A smaller, 0.4 percentage point, rise is predicted for married couples, since one partner in most couples already works. For secondary earners, a small reduction in participation results because their additional earnings often take a family into the phase-out range, thus reducing the credit received. Scholz also estimates the reduction in hours among those working in response to the higher METR. With an assumption about the hours of those encouraged to take jobs, he estimates that the negative effect on current workers offsets around one third of the effect of increased participation. On balance, the EITC increases aggregate hours worked (by around 90 million hours in aggregate). Similar results were found by Eissa and Liebman (1995) in their analysis of the 1987 expansion of the EITC.<sup>40</sup>

The hours rule for Family Credit in the United Kingdom was reduced from 24 to 16 hours in 1992. Dilnot and Duncan (1992) investigated the effect of the new incentive to work between 16 and 24 hours. They found that over 4 per cent of lone parents would increase their labour supply, many of whom were not working previously. Three per cent of lone parents would reduce hours, mainly Family Credit recipients moving from above the old ceiling to between 16 and 24 hours.

Policy reforms are often discussed on the basis of their aggregate effects. If the hours worked by those entering employment as a result of a policy reform exceed the reduction in hours worked by those already in employment, a policy reform is judged to be a good one. The above discussion suggests that existing employment-conditional benefits and tax credits probably would pass a criterion of success defined on this basis, but only just. However, using *aggregate* hours as a way of determining policy desirability implies that the *distribution* of hours worked is of no interest. For both social and labour market reasons, it may be desirable to introduce reforms which promote employment of those who would otherwise be excluded from the labour market, even if the net effect is to reduce total labour supply. On this

latter basis, it is rather clearer that such policies can be desirable.

Even so, caution is required about using such policies for two additional reasons. First, the benefits reduce the difference between the net incomes of those with low skills and those with high skills, reducing the incentive to invest in education and training. Second, a general payment to those with low earnings may lead to lower wages as a result of increased supply of low-wage labour in response to the benefit. There are two ways of viewing such an effect. One is that, although this will reduce the incentive effect on individuals, it will indirectly reduce the cost of hiring low-wage workers, potentially promoting their employment. The other is that wages may be reduced below the value of the labour supplied, artificially boosting the profits of employers of low-wage labour. Concerns of this sort have led to suggestions that employment-conditional benefits should be combined with a minimum wage so as to prevent excessive reductions in wage rates.<sup>41</sup>

There are grounds for believing that employment-conditional benefits have had positive effects in the countries where they already exist. Whether this means that they can be introduced in other countries with equal success is far less clear. To be worthwhile, the benefit must raise in-work incomes for low-wage families significantly above out-of-work incomes. But on grounds of cost and because of the effects of high METRs on work incentives, the benefit must be fully withdrawn from earnings which are received by the bulk of the working population. These constraints suggest that employment-conditional benefits will be most successful in countries where benefits are low relative to average earnings and/or the earnings' distribution is wide.

These results, however, fail to take into account the issue of how exactly the employment-conditional benefit or credit is designed. Policy design, including whether the payment should be made through the tax or benefit system, may be crucial to the success or otherwise of the policy (see Box 3).

### 3. Tax and benefit systems and part-time work

Unemployment benefit systems were introduced when part-time work was not a major feature of the labour market. Policy towards part-time work oscillates between competing views. One view holds that it is desirable to encourage part-time work as a way of keeping benefit recipients in touch with the labour market. This suggests that paying benefits to supplement part-time earnings may be appropriate. On the other hand, the benefit system is intended to support those who cannot support themselves. By providing a

## Box 3

**The design of employment-conditional tax credits and benefits**

*Transparency:* the impact of employment-conditional benefits depends on workers correctly perceiving the change to their net income received at a particular level of earnings. In the United States, fewer than 1 per cent of recipients use the advance payment option enabling their employers to pay the credit through the year. The credit is therefore mainly received as a tax refund after the year end. Although this occurs in part due to ignorance of the option, in many cases people were unwilling to ask their employer for a regular payment or were concerned that they might have to re-pay the credit at the year-end if their circumstances changed [US General Accounting Office (1992)]. Given the marginal rate structure resulting from the credit, fluctuating income and non-cumulative withholding of income tax, the fear of over-payment is justified [Alstott (1994, 1995); Holt (1992)]. Over half of EITC (Earned Income Tax Credit) recipients also rely on professional assistance in preparing their income tax returns, so may not understand the relationship between their work effort and net incomes [Olson and Davis (1994)]. The new Independent Family Tax Credit in New Zealand will either be received fortnightly with Family Support or paid at the end of the year as a lump-sum tax credit. The link between the end-of-year credits in these schemes and work experience during the year is not likely to be clear. In contrast, payments made through the benefit system may be more transparent although there may be a trade-off with benefit take-up [Whitehouse (1996).]

*Take-up:* if people do not claim their in-work benefit entitlement, due to stigma, costs of claiming or ignorance, then again the beneficial effect on incentives is lost. Assessment for taxation is automatic and private compared with claiming means-tested benefits. In the United States, a taxpayer will be informed by the Internal Revenue Service if they have filed a return appearing to be eligible for the EITC but have not claimed it. Empirical studies tend to show EITC take-up of over 80 per cent [Scholz, (1990, 1994)]. The figures for means-tested benefits are much lower: for food stamps, the rate is 59 per cent [US House of Representatives (1993)]. Similarly, Family Credit and Family Income Supplement suffer from less than full take-up. The take-up rate is around 25 per cent in Ireland [Callan *et al.* (1995)]. In the United Kingdom, it has risen from a little over 50 per cent when Family Credit was introduced in 1988 to around 80 per cent now [UK Department of Social Security (1994)].

*Non-compliance:* take-up of the EITC exceeds the number of families eligible. The IRS (Internal Revenue Service) conducted a study of 1 000 EITC claimants who filed electronically in a two-week period in January. (These taxpayers may not be typical, because the majority file paper returns and the filing season extends into April.) The study found that the total credit paid out exceeded entitlements by 26 per cent. The study did not take account of IRS enforcement work or recent modifications to the EITC. If these changes are included, the rate of over-claim falls to 19 per cent. It has been suggested that the EITC is vulnerable to deception [Steuerle (1993); Yin and Forman (1993)]. The benefit means-testing process is often more rigorous than a tax audit. A problem with Family Credit is that once a claim is settled, the resulting entitlement is paid for six months regardless of fluctuations in income. The initial assessment covers earnings over a period of six weeks. This opens the scheme to deliberate manipulation of earnings to ensure eligibility, with no reassessment for six months. There is no evidence on the degree of manipulation, but estimates suggest that one half of recipients would not be eligible given their *current* income [Fry and Stark (1993)].

*Assessment of entitlement:* tax and benefit systems operate very different sets of rules about the unit of assessment (individual or family), period of assessment (weekly, monthly, annual), the definition of income and the treatment of wealth. Using the family as the unit of assessment targets help on those with high replacement rates. Under an individual system, women married to relatively well-off men, for example, would be eligible, although they face few work disincentives from the tax and benefit system. Hence, most of these schemes are focused on families with children. In the majority of OECD countries, individual assessment of income tax and the fact that tax authorities do not collect information on children would preclude use of the tax system to implement an employment-conditional payment. The definition of income for tax purposes is often less comprehensive than the one used in assessing benefits. The EITC is assessed against gross earnings and "adjusted gross income" (taxable income), which excludes certain income sources which are exempt from income tax (such as a portion of social security and interest from municipal bonds). According to the United States General Accounting Office (1995), including all social security benefits, tax-exempt interest and non-taxable pensions in the measure of income used to determine EITC eligibility would save almost 6 per cent of total expenditure. But it would add significantly to the burden of administering the income tax [see also O'Neil and Nelsestuen (1994)]. From 1996, taxpayers will be ineligible for the EITC if income from interest, dividends, rents and royalties exceeds \$2 350, excluding around 3 per cent of EITC recipients. The US General Accounting Office (1995) concluded that operating a wealth test in the EITC would be "impractical". In contrast, means-tested benefit systems can successfully operate assets tests (including Family Credit in the United Kingdom and AFDC in the United States).

(continued on next page)

(continued)

*In-work benefits and wages:* if gross wages are relatively sensitive to changes in taxation, wage rates will fall in response to employment-conditional benefits. The benefit will in effect act as a wage subsidy. If wages adjust fully, then net incomes in work are unchanged, and no labour supply response can be expected. Due to the shift in labour costs, a demand-side response may occur, however. There is no empirical evidence of whether this is the case. Attitudinal evidence in the United Kingdom suggests that employers are insufficiently aware of the structure of Family Credit for it to have a direct effect on the setting of wages or hours of work [Callender *et al.* (1994)]. There may, however, be an unconscious response to increased labour supply at low wages.

sustainable alternative to full-time work or unemployment, labour supply may be reduced.

Increasingly, policies have been aimed at reducing the resulting disincentives. For example, those currently receiving the Revenu Minimum d'Insertion in France face a withdrawal rate of 50 per cent of earnings. Employers' social contributions are also reduced by 30 per cent for some categories of part-time workers. In Germany, an unemployed person (who was formerly in full-time employment) is allowed to work up to 18 hours per week with half of his pay deducted from benefits. Denmark allows a recipient of social assistance to earn up to Dkr 2 000 per month for 6 months after 3 months benefit receipt. Subject to certain limits, half of all earnings of the unemployed in the United Kingdom are paid as a re-employment bonus when they find a full-time job. Ireland has a part-time job incentive scheme paid to those receiving the long-term rate of unemployment assistance who work for less than 24 hours a week. In Canada, provinces disregard some earnings (typically C\$ 50 to C\$ 200 per month, depending on family size) in the social assistance means-tests. The first \$90 per month is disregarded from AFDC benefits in the United States, with a further \$175 per month available for childcare expenses.

In many of these cases, special rules allowing part-time work to be combined with benefits are limited to those who were previously unemployed. Australia has gone further and allows those who were working full-time and whose hours have been sufficiently reduced to be entitled to means-tested benefit (although benefit entitlement remains conditional on availability for full-time work if it is offered). About 15 per cent of Australian unemployment benefit recipients work part-time.

Table 2.7 illustrates the effects of the various disregards and special schemes that apply to part-time work. It is assumed that an unemployed person with a family and two children works two days a week, earning two-fifths of the APW level of earnings (other assumptions are as in Table 2.1).

The first year of unemployment in Ireland, in Norway when social assistance is received, and in the United Kingdom when less than 16 hours are worked, all follow the "traditional" social assistance model. Apart from (small) earnings disregards, there is no immediate financial incentive to work part-time.<sup>42</sup> In other cases, the features of the benefit system mentioned above have an impact. Hence, the incentive to work part-time is sometimes significant, for example, in Australia. But the trade-off is apparent: the higher is the incentive to work part-time, the less attractive is full-time work.

The effective administration of job-search tests is important when there is an incentive to work part-time. The experiences of Belgium and Norway illustrate the problems caused by increasing the attraction of part-time relative to full-time work. Both employers and employees altered their behaviour to take advantage of the possibility of working part-time while claiming benefit. The result was "a costly growth in the incidence of part-time work among people who would otherwise be working full-time" [OECD (1994b)]. Both countries have since attempted to reduce such unintended use of the benefit system. New Zealand has recently experienced rapid growth in part-time and seasonal employment. Administrative measures and an extension of the waiting period for re-qualification for benefits are being used to prevent inappropriate combinations of these work patterns with benefit receipt. In the United Kingdom, Family Credit is paid to those who work at least 16 hours. A supplement has recently been introduced for those working 30 hours to provide an incentive to move beyond part-time work.

One partial response to the dilemma of wanting to promote part-time work without unnecessarily discouraging full-time work is to recognise that for some groups, such as lone parents, part-time work may be a more realistic option than full-time work. Benefit systems could be adjusted so that benefit reduction rates for these groups are lowered, increasing the incentive to take part-time work, albeit at the cost of making full-time work less attractive [Duncan and

Table 2.7. **The incentive to work part-time for an unemployed person with two children**

Benefit		Percentage of net income in full-time work	
		Fully unemployed	Part-time worker earning 40 per cent of full-time weekly wages
Australia	Job-search allowance	71	86
Denmark	Unemployment insurance	83	88
Germany	<i>Arbeitslosengeld</i> (unemployment insurance)	78	92
Ireland	Unemployment insurance/unemployment assistance	64	64
	Unemployment assistance/part-time job incentive	64	84
Netherlands	Unemployment insurance	84	91
	Social assistance with disregard	80	91
	Social assistance without disregard	80	82
Norway	Unemployment insurance	73	84
	Social assistance	83	84
Spain	Unemployment insurance	74	85
United Kingdom	Income support (less than 16 hours work)	74	78
	Family credit (more than 16 hours work)	74	79

Notes: Incomes are expressed as percentages of net incomes in full-time work at APW wages. Figures are for a couple with 2 children. An earnings disregard of 15 per cent of benefit is applied for a maximum of 2 years in the Netherlands. Thereafter, there is no earnings disregard.  
Source: OECD database on taxation and benefit entitlements.

Giles (1996)]. Similarly, METRs for the long-term unemployed on the first segment of earnings could be reduced to encourage them to maintain contact with the labour market even where it is not possible to lift someone fully off benefit.

Similar issues are raised by “short-term work” – temporary, often casual employment. An earnings credit scheme, as recently introduced in Australia, can help make such work worthwhile for the long-term unemployed. Each benefit assessment period’s earnings disregard can be accumulated (up to a certain limit). When someone who has been unemployed gets a short-term job, they can use this cumulated disregard to reduce the impact on their benefit. In the same way that means tests must trade-off incentives to part-time work with disincentives to full-time work, an earnings credit must trade-off incentives to occasional casual work with some disincentives to continuing work.

#### 4. Policy responses to reduce high METRs and tackle the poverty trap

High METRs have become more important as a policy issue. First, increasing numbers of people are receiving means-tested benefits, in part because of

tightening of the conditions for receipt of insurance benefits. Second, social policy concerns have meant that unemployment benefits are supplemented by child benefits or family allowances. Extending these latter benefits to those in work on low earnings to avoid sharp falls in income on entering employment have extended the range of high METRs. Third, the desire to ensure that there is a financial incentive to work has resulted in a recourse to employment conditional benefits in some countries.

The consequences of these developments have been disincentives to work part-time and/or for spouses of the unemployed to work. Recent policy reforms have sought to reduce these disincentives:

- *earning while receiving benefits*. Some countries have increased the amount which can be earned before means-tested benefits are reduced or otherwise altered the benefit system to permit a modest amount of part-time work. These earnings disregards provide an incentive for those on social assistance to maintain a link with the labour market. Such reforms have taken place in Australia, Canada, Denmark, Ireland, the Netherlands, New Zealand and the United Kingdom. Benefits specifically for those in part-time work have

been introduced in Ireland. However, Belgium and Norway have restricted the extent to which part-time work and benefits can be combined, in order to curb abuses. Italy provides direct subsidies to employers and reductions in employers' social security contributions, and France has recently extended its contributions exemption for part-time work. Spain reduces employer contributions for some categories of part-time work;

- *reducing the prevalence of high METRs.* Taxes on low earnings have been reduced in several countries (Denmark, New Zealand, the United Kingdom), but budgetary constraints limit the possibilities of extending this and many other policies. Benefit reduction rates for older workers have been cut sharply in Japan. The current reform in New Zealand will lower the reduction rate from 70 to 30 per cent over a NZ\$ 100 earnings range for lone parents and invalidity benefit recipients; and
- *ensuring women married to unemployed men have an incentive to work.* Australia has reduced very high METRs by individualising the benefit system. Some incentive to work is retained by the spouses of the unemployed, even where they are in receipt of means-tested benefits. A similar effect is achieved through employment-conditional benefits, as in Ireland and the United Kingdom, which reduce the incentive for both spouses to leave employment when one becomes unemployed.

## E. CONCLUSIONS

If work does not pay, people will be reluctant to work. For the majority of the population in the OECD area, there are clear, immediate, financial incentives to work. But such incentives may be lacking for many people with low potential wages, particularly if they have children. Some will work in spite of this, because work experience improves long-run job prospects or for other reasons. Nevertheless, for these groups, social and labour market goals may clash. Benefits need to be high enough to ensure income is adequate, but this may mean that taking a job brings little or no extra income, trapping families in a cycle of dependency.

Two problems caused by tax and benefit systems were considered in this chapter. The first is the "unemployment trap" which occurs when benefits are high compared with expected incomes when working. The second problem is the "poverty trap": low-wage workers have little immediate financial incentive to

increase their hours worked. Also, the incentive to work part-time or to invest in education and training to move up the wage ladder is blunted.

There are no easy or obvious solutions to these two problems. Cutting benefits is the simplest way of increasing the incentive to work, but it is not necessarily the best and the social costs may be unacceptable. If benefits are reduced to an inadequate level or if job-search is inefficiently short, poverty may increase. Few countries have opted for more than marginal cuts in benefits. Nevertheless, if benefits are higher than potential in-work incomes, long-term benefit dependency out of work may be encouraged. The benefit level may need to be cut. In addition, the duration of earnings-related benefits should be designed to encourage reappraisal of acceptable wages by those who do not rapidly find work.

Another potential solution which has attracted much interest in recent years, is employment-conditional tax credits or benefits. These can reduce the unemployment trap by increasing in-work incomes for the low-paid at lower budgetary cost than general tax cuts. But such policies are not appropriate everywhere. The wider is the earnings' distribution and the lower are METRs before introducing the benefit, the greater is the likelihood that employment-conditional benefits will increase aggregate labour supply. These schemes are best limited to families with children because they usually have higher benefit entitlements and therefore smaller work incentives.

Two areas where balancing the various objectives of tax and benefit systems is particularly difficult are the benefit position of spouses of unemployed persons and the combination of part-time work with benefit receipt. The number of recipients of means-tested benefits has increased rapidly in nearly every OECD country because of failure to qualify for, and exhaustion of, insurance benefits, growth in youth unemployment and in the number of lone-parent families. Depending on the design of the means-test, it can reduce the incentive to work part-time or for low earnings not just by the unemployed person but also by their spouse. Means-tested benefits should be designed so that each member of the household has an incentive to work, e.g. by separating benefit entitlements for individuals. Part-time work which promotes contact with the labour market should be encouraged for those such as lone-parents or the long-term unemployed for whom full-time work may not be a realistic option. Allowing part-time work to be combined with reduced benefit receipt for a limited period will help such groups. But experience suggests that it is important to maintain tight controls on part-time unemployment benefits to guard against abuses.

Tax and benefit systems are pursuing multiple objectives, including, *inter alia*, raising revenue;

insuring against labour-market risk; supporting families without resources; and trying to preserve incentives to work. It is inevitable that not all of these goals can be achieved simultaneously. But this chapter has identified avoidable barriers to employment caused by administrative complexities, poor integration of the various parts of the tax and benefit systems and badly designed means-tests. It has also

indicated several policy areas where policies will increase employment opportunities for the most disadvantaged, but reduce work incentives for the majority. The social and labour market consequences of permanently excluding a significant minority of the population from the world of work are apparent in too many OECD countries for such policies to be spurned.

## Notes

1. This chapter is based on a larger report to be published later this year under the title "Making Work Pay: A Thematic Review of Taxes, Benefits, Employment and Unemployment".
2. The effects of taxation on labour costs are discussed in OECD (1995a).
3. In the United States, the proportion of "traditional" households (couples with the husband as sole earner) has declined from 70 to 20 per cent since 1940. Two-earner households have increased from 9 to 40 per cent [Hayghe (1990)]. The number of lone-parent families has doubled in almost all OECD countries since the early 1970s and accounted for 15 per cent of all families with children in 1990-1991 [OECD (1993); Ermisch (1990); Eurostat (1995)].
4. "This comparison [between unemployment benefits and aggregate unemployment rates] suggests that, although there is not an immediate statistical link between unemployment rates and unemployment benefit entitlements, the hypothesis of a longer-term link is plausible [OECD (1994 b)]." However, using the same data, Blondal and Pearson (1995) find that the index is also statistically linked with labour force participation. Higher benefits encourage labour force participation. Hence, there is no statistically significant effect of the index on the employment to population ratio.
5. Table 2.1 considers the first month of unemployment. The index in Chart 2.2 relates to an average of replacement rates over time. Otherwise, the benefits included and their calculation are same.
6. Countries with no benefit payments for housing costs are Belgium, Ireland (although an element can be added to Social Welfare payments), Italy and the United States (although local schemes exist).
7. It is assumed that housing costs are always 20 per cent of gross APW earnings regardless of the income level or family type. This approximates to actual average housing costs across the OECD area, but may not be representative of the housing costs of families on benefit in any one country. Replacement rates are expressed *before* housing costs. In this respect, the income definition differs from that adopted by the Seven Country Study (1996) which uses an income concept net of housing costs including utility costs, and that of the Dutch Central Planning Bureau (1995), which uses an income concept net of housing costs and private medical insurance. As discussed in Martin (1996), these differences in the income definition account for nearly all the large variation in net replacement rates reported in the different studies for certain countries.
8. Even so, countries have recently recognised the problems caused by having social assistance at a level higher than unemployment insurance. The maximum in Denmark, for example, is limited now to 90 per cent of the maximum UI benefit.
9. For example, in the United Kingdom, someone working 16 hours per week at £5 per hour would earn £80 gross. A lone parent would typically be entitled to benefit income of £133 per week, so there would be little incentive to work. However, with the employment-conditional benefit, Family Credit, worth in this case £68 per week, the replacement rate drops dramatically to 65 per cent. Employment-conditional benefits must be withdrawn from those with higher incomes leading to high marginal tax rates (in the United Kingdom case above, the marginal tax rate would be over 86 per cent). See United Kingdom DSS (1995) for full details of the United Kingdom tax and benefit system.
10. For more detail on benefit transitions in some countries, see the Seven Country Study (1996).
11. Those aged over 45 also have a longer duration of benefit.
12. Although theoretically unlimited, in practice unemployment insurance in Belgium may be limited to one-and-a-half times the average duration for similar unemployed people.
13. There is relatively little evidence on what happens when people actually change labour force status, but what evidence there is confirms the picture given in this chapter. The results of a study of how much people actually gained when they moved into employment from being without work in the United Kingdom showed that most gained a large amount, the mean difference between earnings and benefits being £69 per week. However, 3 per cent of the sample were worse-off in work than when unemployed, and a third of females earned less than 20 per cent more than they received in benefit. When considering the benefit/earnings ratio (approximately the same concept as replacement rate), high ratios were predominantly found in those families with children and who get housing benefit.
14. Definitions of employment status, family type, earnings and taxation have been standardised as much as possible. Nevertheless, insofar as sample sizes differ; the year of the data underlying the models differ; and other features of the models cannot be made identical, the estimates are not strictly comparable. For more details of the models and the procedures followed, see OECD (forthcoming).
15. Italy is an exception: microsimulation analysis points to much higher replacement rates than in the stylised cases. This reflects both the complexity of the Italian benefit system and, in particular, the treatment of the mobility allowance, the Cassa Integrazione Guadagni

- Straordinaria and employers' social security contributions [see OECD (forthcoming)].
16. The replacement rates are "individualised" (otherwise known as average effective tax rates). They are the change in net family income as a percentage of the change in earnings as employment status changes. The replacement rate is calculated for the first week of unemployment, ignoring waiting periods. In the absence of evidence to the contrary, it is assumed that previously employed individuals qualify for unemployment insurance [see OECD (forthcoming)].
  17. Very high (over 100 per cent) replacement rates are often the result of special provisions in the benefit system. For example, in Norway the benefit level is based on income in the previous year or the average of the income over the past 3 years. A decline in earnings can leave the benefit based on the latter rule appearing to be relatively high. Furthermore, older workers are entitled to a minimum benefit based on a wage level which may be higher than their current earnings, again resulting in high replacement rates.
  18. Those not working include the unemployed and those who are non-employed but who are in a position to work. They exclude students in full-time education and those in receipt of invalidity or early-retirement benefits.
  19. Austria, Finland, Greece, Iceland, Italy, Japan, Luxembourg, Netherlands, Norway, Portugal, Sweden and Switzerland.
  20. See Blondal and Pearson (1995) for an econometric examination of the effects of non-employment benefits on unemployment, employment and labour force participation rates.
  21. An Irish study suggests that the value of the non-cash benefits (medicard, butter, footwear and fuel) is nearly IR£ 12 per week for a couple with two children. This is 10 per cent of the cash assistance the family can receive [Irish Department of Enterprise and Employment (1996)].
  22. Garman *et al.* (1992) found that two-thirds of the unemployed in the United Kingdom reported average travel-to-work costs of nearly 7 per cent of earnings. Of the unemployed moving into a job, 18 per cent reported increased expenses, mainly one-off, "back-to-work" costs, such as tools or clothing.
  23. Over four-fifths of the unemployed reported regular job-search expenses averaging £5 per week in the United Kingdom [Garman *et al.* (1992)]. Typical weekly job-search costs in Ireland are IR£ 6.40 per week [Irish Department of Enterprise and Employment (1996)].
  24. The largest deduction is in Norway (nearly 14 per cent of APW earnings). Generally, deductions are 3-7 per cent of APW earnings [OECD (1995c)].
  25. For example, in Canada these are limited to two-thirds of earnings and C\$ 5 000 for children under 7 and C\$ 3 000 for children aged 7 to 14 (1994 figures). In the United Kingdom, employer-provided child-care has not been taxed as a benefit-in-kind since 1990.
  26. These family types were not included in Table 2.3 in order to retain comparability with the single-earner family cases discussed in more detail in Table 2.1. However, the size of the barriers to work caused by child-care costs are similar to those indicated in Table 2.3.
  27. The tax system can also reduce the cash-flow returns to working. In most OECD countries, personal income tax is withheld from earnings at source at a rate which will approximate at year-end the annual tax liability. If someone enters employment after a period of receiving benefit, there will be an over-retention of earnings at source in a progressive tax system. There will eventually be a repayment of the excess tax paid, but, in the meantime, the cash-constrained individual has in effect been obliged to give a loan to the government.
  28. See O'Leary *et al.* (1995) and Meyer (1995) for a summary of these experiments and their results.
  29. For example, Corden and Craig (1991) report that *none* they interviewed who had taken a low-paid job in the United Kingdom had calculated how much Family Credit to which they were entitled.
  30. Sometimes such suspicion is justified. Current benefit provisions in the United Kingdom mean that many of those who leave benefit for a job, which they subsequently lose, will find that they receive less housing benefit than before.
  31. The head of the Commission of the French Assembly investigating the use of public funds to promote employment noted that the first role of the commission would be to identify all such schemes. He stated that "if we, who are supposed to be competent, don't know [which schemes are available], how can an employer know about them? Therefore, he does not use all the schemes which are in theory available to him" (Michel Péricard, translation of remarks reported in *La Tribune Desfossés*, 22 March 1996). Few employers understand how Family Credit works in the United Kingdom [Callender *et al.* (1994)].
  32. The rule pre-exists 1994, but it was possible to receive more than 90 per cent if total income was less than 80 per cent of the maximum unemployment benefit.
  33. Maximum rents covered by housing benefit for new claimants will be restricted to the average for the type of accommodation and area.
  34. An exception to the trend is Belgium, where benefit receipt has been extended to 18-21 year olds.
  35. Means-tests can have effects outside the labour market as well. Assets can be held in such a way as to ensure that incomes are minimised, so avoiding the means-test. Furthermore, it has been argued that because rules seem unreasonable and cannot easily be enforced, non-compliance can become widespread, contributing to reduced standards of public morality [see Field (1995)].
  36. For Germany, see Giannelli and Micklewright (1995); for the Netherlands, see Kersten *et al.* (1993); and for the United Kingdom, see Kell and Wright (1990) and Davies *et al.* (1992). However, a recent Australian study [Bradbury *et al.* (1995)] suggests that all the differences in employment rates of married women can be explained by differences in background characteristics.

37. Individual income testing cannot in itself promote participation in part-time work by the wives of unemployed men unless means tests are structured to permit this, as in Australia [Heady and Smyth (1989); Moylan *et al.* (1984)].
38. APPORT is paid in respect of each month in which earnings exceed C\$ 100. The benefit for a two-earner couple with two children earning C\$ 14 000 is over \$3 800. Housing allowances of up to C\$ 1 080 and child-care expenses can be paid on top.
39. Results provided to the Secretariat by the ESRI, Dublin. See OECD (forthcoming) for a discussion of the microsimulation models used in this chapter.
40. Other studies have focused only on the effect on hours worked and not on participation [US General Accounting Office (1993); Holtzblatt *et al.* (1994)].
41. For example, Howard Davies, the former director-general of the Confederation for British Industry and now Deputy Governor of the Bank of England, has suggested that such a policy might be necessary to prevent exploitation of the government by "cowboy employers" (as reported in *The Independent*, 22 September 1995).
42. This is so unless part-time work is not declared to the authorities. Thus, when means-tests are reduced, it is not possible to measure the extent to which any declared increase in part-time work is a genuine increase or simply increased reporting.

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