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**Working Paper**

## Financial Incentives to Work - Conceptions and Results in Great Britain, Ireland and Canada

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# Working Papers

## FINANCIAL INCENTIVES TO WORK – CONCEPTIONS AND RESULTS IN GREAT BRITAIN, IRELAND AND CANADA

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## FINANCIAL INCENTIVES TO WORK – CONCEPTIONS AND RESULTS IN GREAT BRITAIN, IRELAND AND CANADA

### Abstract

Some English speaking countries provide employment-conditional tax credits and benefits with a view to increasing employment and improving family income in the low wage brackets. This article deals with Great Britain's Working Families' Tax Credit, Ireland's Back to Work Allowance and her Family Income Supplement, as well as Canada's Child Tax Benefit and her Self-sufficiency Project. It analyses the effects of these programmes and examines whether they can be transplanted to continental European countries.

JEL Classification: J31, J38.

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## **Financial Incentives to Work – Conceptions and Results in Great Britain, Ireland and Canada**

### **1. Employment Promotion and Income Improvement in Low Wage Sectors of the Economy**

In most OECD-countries, less qualified people make up a large part of the unemployed. The rate of unemployment among such groups is in general higher than the average. The demand for less well qualified workers is reduced among other things by labour costs (net wage, taxes on wage income, contributions to social security etc.) which exceed the low productivity of this kind of labour (OECD 1999: 151 ff.). Recipients of unemployment benefits or of social assistance may at the same time feel little incentive to seek or accept employment. This may be due to the slight difference between the net income obtained from unemployment benefits or social assistance and the level of their disposable income if employed (net replacement rate). Another factor which often reduces the incentive to work is the fact that any improvement in gross income that a benefit recipient may manage to achieve is offset in whole or in part by a reduction in benefits. In other words, additional earnings are subject to a high transfer reduction rate. This problem is referred to as the “unemployment trap” (OECD 1997; Wissenschaftlicher Beirat beim Bundesministerium für Wirtschaft 1996).

Faced by high unemployment among the less qualified members of the work force, an increasing number of industrial countries have resorted to measures whose goal is to *make work pay*. Belgium, France, Great Britain, and the Netherlands have reduced the social security contributions for low wage earners. The list of countries which grant direct wage subsidies to employers is even longer (OECD 1999b: 49 and 119 ff.). In countries with high replacement rates, the amount and the time length of unemployment benefits have been reduced and the requirements for the entitlement have been tightened. In order to moderate the effects of the unemployment trap, in some countries the marginal transfer reduction rate has been reduced for social assistance recipients. The English speaking countries have introduced tax credits and employment-conditional benefits in the low wage brackets in order to deal with the problem of their *working poor*. In September 2001 the following programmes were in place:

- In Australia the Employment Entry Payment and the Special Employment Advance;
- in Great Britain the Working Families’ Tax Credit;
- in Ireland the Back to Work Allowance and the Family Income Supplement;
- in Canada the Child Tax Benefit;
- in New Zealand the Family Tax Credit; and
- in the United States the Earned Income Tax Credit.

One can also mention Finland’s Earned Income Tax Credit and more recently France’s *Prime pour l’emploi*. Canada’s Self-sufficiency Project has expired (Wolfgang Ochel

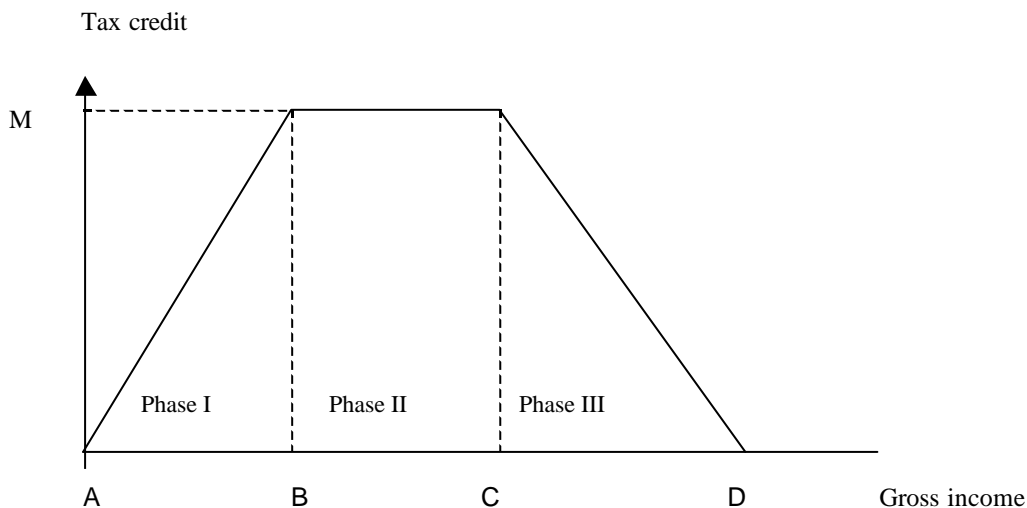
2000). The following remarks are confined to the above mentioned programmes with special reference to Great Britain, Ireland and Canada.

## 2. Employment-conditional Tax Credits and Benefits

By conferring tax credits and benefits to employees, Great Britain, Ireland and Canada attempt to increase employment and net income in the low-wage areas of the economy without imposing a burden on the state's budget. The measures implemented do not aim at guaranteeing the subsistence level. Rather, having a job is the eligibility condition. Two types of programmes may be distinguished. The Working Families' Tax Credit, the Family Income Supplement, and the Child Tax Benefit are directed at improving the net income of working families with children in which at least one adult is in employment. Eligibility depends on family income being low. But since only working families can take advantage of these benefits, they not only raise the family's net income and thus contribute to reducing poverty, but at the same time they create work incentives. On the other hand, the Back to Work Allowance and the Self-sufficiency Project seek to ease the transition from long-term unemployment to work. All long-term unemployed or single parents who take a job with a weekly work time of at least 20 hours (30 in the case of single parents) are entitled to these benefits. Whilst the first set of measures run for an unlimited period, the second group expires at the end of three years. Payments are made weekly or monthly through the post, through a savings bank or other financial institution or directly by the employer as part of wage payments. These forms of payment ensure a high degree of transparency and to a large extent prevent the recipients from being stigmatised socially (see table 1).

In figure 1 the typical pattern of a tax credit for employees is presented graphically. The amount of the tax credit is a function of gross income. Three phases can be distinguished: at first the tax credit increases as income increases (phase I), in a second phase it remains constant, and beyond a certain level of income it decreases (phase III).

**Figure 1:**  
**Tax Credits for Employees (stylised)**



Source: ifo Institute.

**Table 1: Employment-conditional Tax Credits and Benefits in Great Britain, Ireland and Canada**

<sup>a)</sup> Single parent and couple with at least one child

	<b>Great Britain</b>	<b>Ireland</b>		<b>Canada</b>	
	Working Families' Tax Credit	Back to Work Allowance	Family Income Supplement	Child Tax Benefit	Self-sufficiency Project
Instrument	Tax credit	Benefit	Benefit	Tax credit	Benefit
Responsible authority	Tax Office	Social Welfare Office	Social Welfare Office	Tax Office	Social Welfare Office
Eligibility	Low net family income	Transition from long-term unemployment to work	Low net family income	Low net family income	Transition from long-term unemployment to work
Civil status of recipient	Family with child <sup>a)</sup>	All	Family with child <sup>a)</sup>	Family with child <sup>a)</sup>	Single parent
Minimum hours of work (week)	16	20	19	-	30
Entitlement ends after	No limit	3 years	52 Weeks (extension possible)	No limit	3 years
Mode of payment	Monthly: as part of wage payment	Weekly: through the post	Weekly: through the post	Monthly: Payment through bank or other financial institution	Monthly: Payment through bank or other financial institution

Source: Compilation by Ifo Institute.

One of the objectives pursued in granting tax credits or benefits to employees is that of creating incentives for the unemployed to seek and accept work. This objective will be attained if the replacement rate and the transfer reduction rate are lowered, so bringing the reservation wage (the lowest wage for which a person will work) in line with the (effective) market wage.

Employment-conditional tax credits and benefits do not only affect the decision whether or not to participate in the labour market; they also affect the volume of labour services which those who are already in employment are prepared to supply. The behaviour of this last group is influenced by the following mechanisms. Owing to cost considerations, the programmes analysed here restrict themselves to households with low income (or to those formerly long-term unemployed). Beyond the level of income marked C in figure 1, the tax credit declines as income increases, reaching nil at point D. In phase III there are two effects which work in the same direction: the reduction in the tax credit associated with an increase in gross income adds to the increase in the income tax rate. These two effects taken together result in a high marginal tax burden on income. The fact that for every additional dollar earned only a very small amount remains in the worker's pocket is certain to have a negative effect on the hours he is willing to work.

The magnitude of the transfer reduction rate depends in the first place on the extent of the wage differentials. If we assume a given budget for the political unit concerned, the less the wage dispersion, the more it will be necessary to reduce the employee subsidy (expressed as a percent of household income) as household income increases. But the magnitude of the transfer reduction rate also depends on the maximum amount of the employee subsidy (M). Setting M higher with a view towards providing a stronger incentive for unemployed to take a job, results in a higher transfer reduction rate which has a negative effect on the willingness to work of those already employed.

Whilst subsidies for employees clearly exert a positive incentive on the unemployed to accept work, their effect on total hours worked, is not so clear. Two effects must be distinguished: the income and the substitution effect. By increasing the net income of employees the subsidies make it possible for the beneficiaries to enjoy more leisure and reduce working time (income effect). At the same time, the subsidies change the relative prices of work and leisure, which leads to substitution effects, whose strength varies according to the tax credit phase (see figure 1). For a worker in the initial phase, the tax credit creates incentives to work more and to reduce time away from work. In phase II substitution effects no longer take place. And finally, in phase III the individual worker no longer has any incentive to work more; by withdrawing the tax credit additional income is effectively taxed which creates a disincentive for the supply of additional working hours. The sum of income and substitution effect is in phase II and III negative and in phase I indeterminate. Only empirical studies can tell us how the supply of labour will in fact respond (see table 2).

**Table 2: Incentives for Additional Labour Supply Through Granting Employees a Tax Credit**

	<b>Phase I</b>	<b>Phase II</b>	<b>Phase III</b>
Substitution effect	positive (tax advantage for additional hours worked)	none	negative (implicit tax on additional hours worked)
Income effect	negative	negative	negative
Total effect	?	negative	negative

Source: W. Schelkle 2000: 10.

### **3. The Working Families' Tax Credit in Great Britain**

In-work benefits have a long tradition in Great Britain. As early as 1971 the Family Income Supplement was introduced; in 1988 this was replaced by the Family Credit (FC); and in 1999 its place was taken by the Working Families' Tax Credit (WFTC).

The Family Credit aimed to increase the net income of low wage earners. An incentive was created to accept work with low pay. Families with at least one dependent child were entitled to the Family Credit if at least one adult worked at least 16 hours a week. Families with net assets exceeding £ 8000<sup>1</sup> were excluded.

The amount of the Family Credit depended on the size of the family. In 1997 the standard amount for one adult was £47.65 weekly; the credit for a child ranged between £12.05 and £34.70 per week, depending on the child's age. If the weekly working time of the employed adult in the family exceeded 30 hours, the transfer was increased by £10. Each family was potentially eligible to a maximum amount. This amount was payable if the family's net income was lower than a threshold of £77.15 a week. Net income in excess of this threshold reduced entitlement to the Family Credit from the maximum by 70p for every £1 of excess income. In determining the family's net income, costs of child care not exceeding £60 a week could be deducted (see table 3). With a benefit withdrawal rate of 70 per cent recipients of Family Credit could face marginal effective tax rates in excess of 80 per cent once direct taxes had been deducted. (Alan Duncan and Christopher Giles 1996; Lioba Trabert 1999).

The replacement of the Family Credit by the Working Families' Tax Credit led to two changes. The tax office has taken over operative responsibility from the social welfare office. And the WFTC is more generous financially:

- The basic amount for an adult is now £59.00 per week; children's credits range between £26.00 and 26.75. If more than 30 hours are worked per week the credit is increased by £11.45.

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<sup>1</sup> In April 2001 a £ sterling was worth €1.62.



- Costs of child care are no longer a deduction for tax purposes from household's gross income as they were for the old Family Credit, but in revenge they are added to the new Working Families' Tax Credit in the proportion 70 per cent of eligible child care costs up to an upper limit of £94.50 weekly (for families with two or more children £ 140). Single parents can claim this entitlement if she or he works more than 16 hours a week; for couples with a child or children both must work more than 16 hours.
- In taking into account the household's net income, an exemption of £92.90 per week is now allowed.
- For net income exceeding £92.90 a withdrawal rate of 55 per cent is now applied (Inland Revenue 2001; Véronique Dalarue 2000).

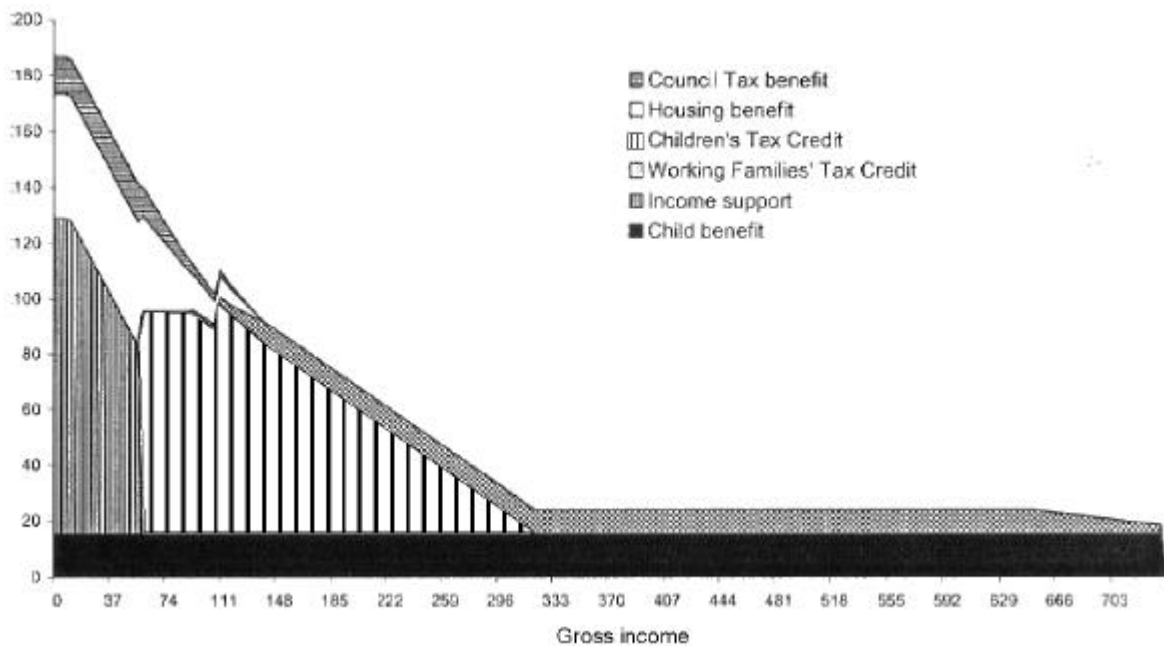
**Table 3: Parameters of the Family Credit and the Working Families' Tax Credit in Great Britain**

	<b>Family Credit 1997</b>	<b>Working Families' Tax Credit 2001</b>
Basic tax credits (£ per week)		
Adult	47.65	59.00
Children		
between 0 - 10 years of age	12.05	26.00
between 11 - 15 years of age	19.95	
between 16 - 17 years of age	24.80	26.75
18 years old	34.70	
Treatment of child care costs	Possibility of deducting these costs from gross income up to £ 60 a week	Child's tax credit increased by 70% of child care costs up to £140 a week
Withdrawal rate (per cent)	70	55
Income threshold (£ per week)	77.15	92.90
Upper limit to assets allowed (£)	8000	8000
Minimum work week (hours)	16	16
Additional credit if work week exceeds 30 hours (£ per week)	10	11.45
Responsible authority	Social welfare office	Tax office

Source: OECD 1999d; R. Blundell, A. Duncan, J. McCrae, and C. Meghir 2000: 77 ff.; Inland Revenue 2001.

**Figure 2:**

**System of Support for Families with Children in Britain ( £ per week)**



Source: M. Brewer and P. Gregg 2001: 44.

In order to determine the incentive effect of the WFTC it is necessary to compare the in-work benefits with the out-of-work benefits. People in employment with a dependent child or children in the low-wage brackets who work at least 16 hours a week receive the WFTC as well as a generous allowance for the expenses of child care (child tax credit). For the unemployed or for those with a weekly working time of less than 16 hours there is the Job Seeker Allowance or the Income Support (the last named applies only to couples with dependents who are ill or disabled and to single parents). Furthermore, households with low income can receive Housing Benefits and an exemption from local taxes (Council Tax Benefit). In addition, a Child Benefit independent of income is paid (see figure 2).

The WFTC reduces the net replacement rate considerably. Without WFTC, in 2001 the net replacement rate for a couple with one dependent child was 143 per cent in the case of part-time employment, or 92 per cent with a full-time job. WFTC results in the disposable income of the unemployed being only 76 per cent of that of part-time employed or 60 per cent of that of full-time employed (assuming the employed are paid the minimum wage). The WFTC has a similar effect on the income position of single parents. But if one takes into account the Housing Benefit and the Council Tax Benefit, which are much more important for the unemployed or for those with very low incomes, then the net replacement rate is much higher (see table 4). On the other hand, it is decreased by the generous Child Care Tax Credit, which is not taken into account in these calculations.

Giving the unemployed strong incentives to work (strong even when compared to the Earned Income Tax of the United States) is, however, accompanied by high withdrawal

rates when the WFTC enters phase III. Although the withdrawal rate has been lowered from the FC's 70 per cent to 55 per cent, nevertheless, the marginal tax burden (including the effects of the income tax) remains high. Amongst the 1.1 million families benefiting from WFTC in 2000, 950,000 were in phase III and were subject to a marginal rate of income loss of 60 per cent or more, and 210,000 of these were losing benefits and paying taxes to the amount of 80 pence or more on every additional pound earned. This extremely high marginal tax burden cannot fail to have a negative effect on the hours employees are willing to work.

**Table 4: Net Replacement Rate (with Employment at Minimum Wage) in Great Britain 2001 (in %)**

	Single Parent, 1 Child		Couple, 1 Child	
	Part-time employment	Full-time employment	Part-time employment	Full-time employment
A Without WFTC	110	70	143	92
B With WFTC	58	46	76	60
C With Housing Benefit	83	71	93	86

- A Net replacement rate = disposable income without work/disposable income with work. The disposable income includes: gross wages, income support, child benefit minus employee's contributions to social security and income tax. Assumptions: minimum wage = £3.70 an hour; 4.3 weeks = 1 month; child care costs not included.
- B As in A, but WFTC
- C As in B, but with Housing Benefit and Council Tax Benefit.

Source: M. Brewer 2000: 55, 56 and 58.

The WFTC and the child tax credit exert a strong incentive to take up gainful employment. According to estimates by the experts of the Institute for Fiscal Studies, if these in-work benefits had not been in place, a considerably smaller number of unemployed would have found work. At the same time, the extent to which WFTC has been claimed is another indicator of its effectiveness. In 1989 approximately 300,000 families took advantage of FC; by 1999 this number had increased to round 870,000 families; as mentioned above, in 2000 1.1 million families – out of 27 million employed – fulfilled the eligibility criteria of WFTC (Mike Brewer 2000: 48). (Of course, not all of those benefiting from WFTC were necessarily formerly unemployed). According to the Labour Force Survey, the proportion of children living in families in which no one was employed declined from 17.3 per cent in 1999 to 15.8 per cent in 2000 (Mike Brewer and Paul Gregg 2001: 22). Simulations carried out by Paul Gregg, Paul Johnson and Howard Reed (1999) and by Richard Blundell *et al.* (2000) indicate that the strongest incentive to work is exerted by WFTC on single mothers, but also married men and women (without a partner with a job) feel a strong incentive to work as a result of WFTC. On the other hand, WFTC exerts a negative incentive on married women whose husbands are in work. The rapid increase in employment of single parents (Mike Brewer and Paul Gregg 2001: 23) is in all likelihood due to the fact that since the introduction of the Child Tax Credit 70 per cent of child care costs have been taken over

by the state; this arrangement removes an important obstacle to women's participation in the labour market.

WFTC strongly promotes the taking up of employment by those previously unemployed. It does not, however, offer any incentives for those already in work to work more hours. Despite the reduction of the withdrawal rate to 55 per cent in phase III, the WFTC still leads to a high marginal effective tax rate. Hence, there is a tendency to limit the total time worked weekly, instead of increasing it. As a result, the proportion of part-time workers with a working week of 16 hours (and more) is high (Richard Blundell 2000: 42).

#### **4. In-work Benefits in Ireland**

There are several programmes in Ireland providing support for employed persons with low income:

- the Back to Work Allowance (BTWA);
- the Family Income Supplement (FIS);
- the Continued Child Payment (CCP); and
- the Part Time Job Incentive (PTJI).<sup>2</sup>

The Back to Work Allowance aims at creating incentives for taking up employment (Department of Social, Community and Family Affairs 1999). To this end, unemployed who find a job that will last at least one year can continue to receive for a limited time a part of their unemployment benefits. In order to claim this entitlement a person must be older than 22, have been unemployed for at least 15 months, and have received unemployment benefits of at least IR£ 40 (for single persons) or IR£62 (for couples); in the case of single parents it suffices to fulfil the 15 month requirement.<sup>3</sup> Another requirement is that the employment of the persons involved must be accompanied by an increase in the total number of people employed at their place of work. In addition, weekly working time must be at least 20 hours. Those entitled to the BTWA receive:

- 75 per cent of the unemployment benefit for one working year;
- 50 per cent in the second year;
- 25 per cent in the third year;
- under certain conditions a continuation of secondary benefits for a period of three years.

These payments are not subject to tax. They are paid out by bank giro (see table 5).

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<sup>2</sup> On Ireland's employment policy in general see Paul Tansey 1998, chap. 10.

<sup>3</sup> In April 2001 a IR£ was worth €1.22.

**Table 5: In-work Benefits in Ireland in 2001**

	<b>Back to Work Allowance</b>	<b>Family Income Supplement</b>	<b>Continued Child Payment</b>	<b>Part Time Job Incentive</b>
Objective	Continuation of social assistance transfers after taking a job	Increasing net family income	Continuation of support for children in families which were previously unemployed	Compensation for the loss of unemployment benefits
Eligibility	Taking a job after long-term unemployment; increase in the total number of people employed at place of work; work week of at least 20 hours	Work week of at least 19 hours; low income	Transition from long-term unemployment to a full-time job	Transition from long-term unemployment to part-time employment
Magnitude of the transfer	75 % of previous benefits in the 1 <sup>st</sup> year; 50 % in the 2 <sup>nd</sup> year; 25 % in the 3 <sup>rd</sup> year	60 % (Net income minus income limit)	Support received previously on account of children	IR£ 49.00 per week (single persons) IR£ 81.60 per week (couples)
Length of the entitlement	3 years	52 weeks (possibility of extension)	13 weeks	2 years

Source: Department of Social Community and Family Affairs 2001a and b.

In 2000, the BWTA was claimed by 34,506 persons. Compared to the 95,000 long-term unemployed (in 1999) it is clear that it has considerable impact on the extent of long-term unemployment in Ireland. 73 per cent of recipients of BWTA stated in a survey that without the continued payment of unemployment benefits they would not have accepted work. 60 per cent of the BTWA recipients also reported that they had been unemployed for more than two years and only 50 per cent had been actively seeking work in the previous six months. This indicates that BWTA is not being paid to large numbers of people who would probably have found a job even without the programme. The increase in net income of between IR£50 and IR£70 a week is a strong incentive for unemployed people to seek work. At the same time, BWTA makes it possible for the employer to lower gross wages and 47 per cent of them have taken advantage of this possibility. The effects of BWTA are not transitory: 62 – 65 per cent of the recipients have been employed without interruption for at least three years. The requirement that BWTA is only paid as long as total employment in the recipient's place of work has increased has kept displacement effects within narrow limits. BWTA payments per recipient amounted to IR£2,750 in 1998. There is no information available on the reduction in unemployment benefits and taxes paid by BWTA recipients. Table 6 summarises the BWTA arrangement.

**Table 6: Results of the Back-to-Work-Allowance**

Criterion	Result
Claims	34,506 (2000) with 95,000 long-term unemployed in 1999
Estimates of the percentage of unemployed who would have found employment without BWTa	27 % (73 % of the BWTa recipients would not have accepted employment without the continuation of the unemployment benefits)
Length of previous unemployment of BWTa recipients (1997)	60 %: 2 years or more 34 %: 3 years or more
Proportion of those entering the BWTa programme who had actively sought employment in the previous six months	50 %
Increase in net income of BWTa recipients	IR£50 - IR£70 per week
Proportion of BWTa recipients receiving a wage that is lower than normal	47 %
Length of employment	62 – 65 % of BWTa recipients have been employed for at least three years without interruption
Displacement effect	5 %
BWTa payments per recipients (1998)	£ 2,750 (expenditure saved on unemployment benefits not taken into consideration).

Source: Department of Social Community and Family Affairs 1999.

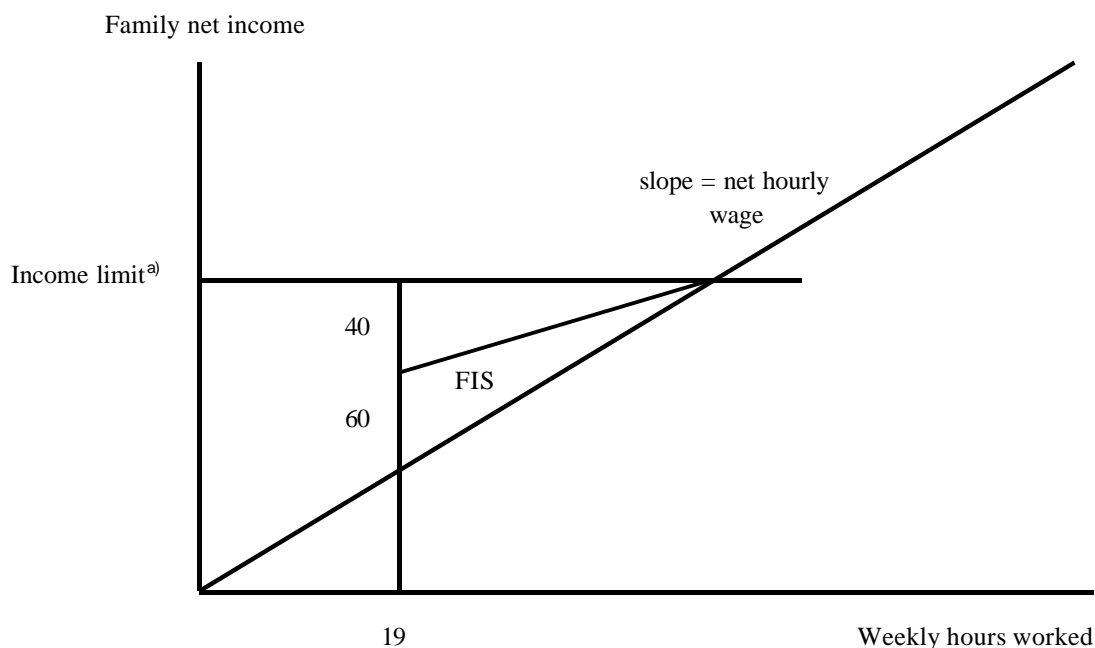
The Family Income Supplement is a support payment granted to families with low net incomes (Tim Callan, Ciarán J. O'Neill and Cathal O'Donoghue 1995). In 2000, 13,062 families claimed this benefit. A working week of at least 19 hours is a requirement, and there must be a prospect for employment lasting at least three months. A couple can cumulate their working time to fulfil the 19 hour requirement. The support is calculated as 60 per cent of the difference between the family's net income (gross income minus taxes and social security contributions) and an income limit which varies according to the size of the family. In 2001 these limits for the weekly income were: IR£258 for a family with one child, IR£278 for two children, and up to IR£397 for eight or more children. The minimum benefit is IR£10 per week. The amount of the benefit is fixed for a year (unless the employment ends during that time) and is reviewed at the end of the year. A family may receive BWTa and FIS at the same time (Department of Social Community and Family Affairs 2001b and figure 3).

The calculations contained in table 7 make the incentive effect of FIS clear. A married couple with two children whose potential breadwinner(s) are classed as long-term unemployed would have received in the years 1997/1998 unemployment benefits of yearly IR£6,990. In the absence of FIS, a gross wage of IR£8,000 would not have been an incentive to accept employment, since it would have been equivalent to a net income of IR£6,744. With FIS, however, the net income would be raised to IR£9,364 thus creating an earnings differential which would make it more attractive to accept the job. The parameters of the system are set in such a way, however, that beyond gross earnings of IR£8,000, there is no longer any practical incentive to work longer or harder in order to improve the family's net income. For only when gross earnings exceed

IR£12,000 will there be an improvement in net income as a result of a further increase in working efforts.

**Figure 3:**

### **The Family Income Supplement in Ireland**



a) The income limit depends on the number of minor dependents.

Source: Department of Social and Community Affairs 2001b.

The Continued Child Payment (CCP) makes it possible for long-term unemployed (those who have been unemployed for more than twelve months) and for participants in public employment programmes to continue to receive child support for a period of 13 weeks, provided that they accept full-time employment that has a prospect of lasting longer than four weeks.

The Part Time Job Incentive (PTJI) provides for payments to long-term unemployed who accept part-time employment. Instead of their unemployment benefits they receive a weekly payment of IR£49 (IR£81.60 for couples). There is no deduction based on earnings (see table 5).

**Table 7: Effects of FIS on the Disposable Income of a Married Couple with Two Children in the Years 1997/98 (IR£ yearly)**

Gross earnings (1)	Income tax (2)	Local taxes on income (3)	Net earnings (4)=(1)–(2+3)	FIS (5)	Net family income (6)=(4)+(5)	Unemployment benefits (7)
8,000	173	1,083	6,744	2,340	9,364	6,990
9,000	258	1,135	7,607	1,768	9,375	6,990
10,000	703	1,129	8,168	1,177	9,345	6,990
11,000	1,395	1,112	8,493	753	9,246	6,990
12,000	1,862	1,117	9,021	260	9,280	6,990

Source: Irish National Organisation of the Unemployed 1997: 11.

## 5. Canada's Child Tax Benefit

Support for working families with children has a long tradition in Canada. In 1993 the Family Allowance was replaced by the Child Tax Benefit, which was later supplemented by the Working Income Supplement for families with low incomes. At the end of the 1990s, both of these benefits were integrated in Canada's Child Tax Benefit (CCTB). This last reform ended the preferential treatment, with respect to child allowances, of families receiving social assistance vis-à-vis working families, and thus ended a negative incentive which discouraged seeking or accepting work (Ken Battle 1999).

The CCTB includes the payment of a child allowance. It consists of the basic benefit and the National Child Benefit Supplement (NCBS) for families with low income. The NCBS supplements the basic benefit. Below a certain income level, the NCBS gives families Cdn\$1,225 yearly for the first child, Cdn\$1,055 for the second child, and Cdn\$980 for any further children.<sup>4</sup> Starting from a yearly net income of Cdn\$21,744 onwards, each additional dollar earned leads to a reduction in the children's allowance of Cdn\$0.122 for families with one child, of Cdn\$0.225 for two children, or Cdn\$0.321 for three children. Thus at a yearly income of Cdn\$32,030 NCBS provides no further benefit (see table 8). Figure 4 shows that a low income family with one child receives a yearly child allowance of Cdn\$2,372. At a net income of Cdn\$21,744 the child allowance to which the family is entitled starts to decline rapidly as the income from other sources improves. Once the income limit for the NCBS is reached, the decline in the child allowance resulting from a further improvement in earnings is more moderate. In 2000, 3.1 million families, i.e. 80 per cent of all Canadian families, received CCTB (Ken Battle and Michael Mendelson 2001).

<sup>4</sup> In April 2001 a Cdn\$ was worth €0.72.



**Table 8: Parameters of Canada's Child Tax Benefit, 2001 <sup>a)</sup>**

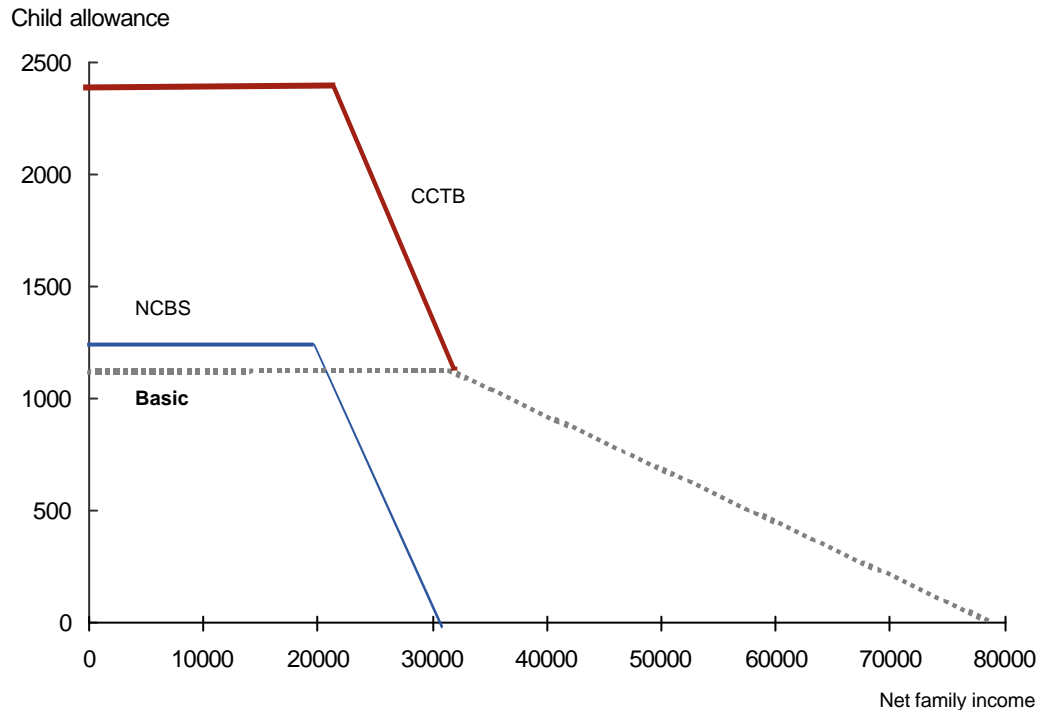
	<b>Basic Benefit</b>	<b>National Child Benefit Supplement (NCBS)</b>
Objective	Raise the net family income of families with children	Raise the net income of low income families with children
Eligibility	Family with a child or children	Family with a child or children and low income
Amount of child allowance	Cdn\$1,117 p.a. for each child under 18 years; Cdn\$78 additional starting with the 3 <sup>rd</sup> child; Cdn\$221 for each child under 7 years of age <sup>b)</sup>	Cdn\$1,255 p.a. for the 1 <sup>st</sup> child; Cdn\$1,055 for the 2 <sup>nd</sup> child; Cdn\$980 for each additional child.
Benefit reduction rate	(Family net income minus Cdn\$32,000) multiplied by 2.5 % for families with one child and by 5 % for families with more than one child	(Family net income minus Cdn\$21,744) multiplied by 12.2 % for families with one child, 22.5% for families with two children and 32.1% for families with more than two children
a) July 2001 – June 2002. – b) Less 25 % of child care costs declared in the income tax return.		

Source: Canada Customs and Revenue Agency 2001.

The CCTB provides the unemployed with no incentives to seek or accept work. It has been mentioned that the reform carried out at the end of the 1990s provided that all low income families with a given number of children should receive the same child allowance, whether the adult members are employed or not; this has been referred to as the elimination of the “welfare wall” (Ken Battle and Michael Mendelson 1998: 4). But on the other hand, the benefit reduction rate which is particularly high in the income bracket in which NCBS approaches its termination point, will have a negative effect on the willingness of employed people in this situation to increase their supply of labour services. In evaluating the incentive effects one must, however, take into account that the tax office sets each taxpayer's CCTB entitlement in July based on the family's income in the previous year. Owing to the time lag between the change in hours worked and its effect on the amount of child allowance actually received, the individual worker is less aware of the high transfer reduction rate, especially since the economist's tendency to think in terms of marginal effects is not very widespread in the general population (Ken Battle 1998:16).

**Figure 4:**

**Canada's National Child Benefit Supplement, 2001<sup>a)</sup>, CDN\$**



a) Family with one minor dependent between 7 and 18 years of age.

Source: Customs and Revenue Agency 2001.

Besides the child tax benefit, from the end of 1992 to the beginning of 1999 Canada carried out an experimental reform with the name "Self-Sufficiency Project" (SSP) in the provinces British Columbia and New Brunswick. Its goal was to give long-term unemployed single parents (i.e. single parents who had been without a job for twelve months or more) an incentive to accept full-time employment (defined as a working week of at least 30 hours) and the termination of unemployment benefits. A person entitled to SSP benefits received 50 per cent of the difference between his or her gross income (without transfers and without wage or salary income from other family members) and the income limit ("earnings benchmark") applicable to his or her case. At the beginning of the project this income limit was Cdn\$37,000 in British Columbia and Cdn\$30,000 in New Brunswick; it was adjusted in the following years to keep it in line with the development of the cost of living and the level of unemployment benefits. As a result of the transfers, which are subject to tax, the recipient's gross income was approximately doubled.

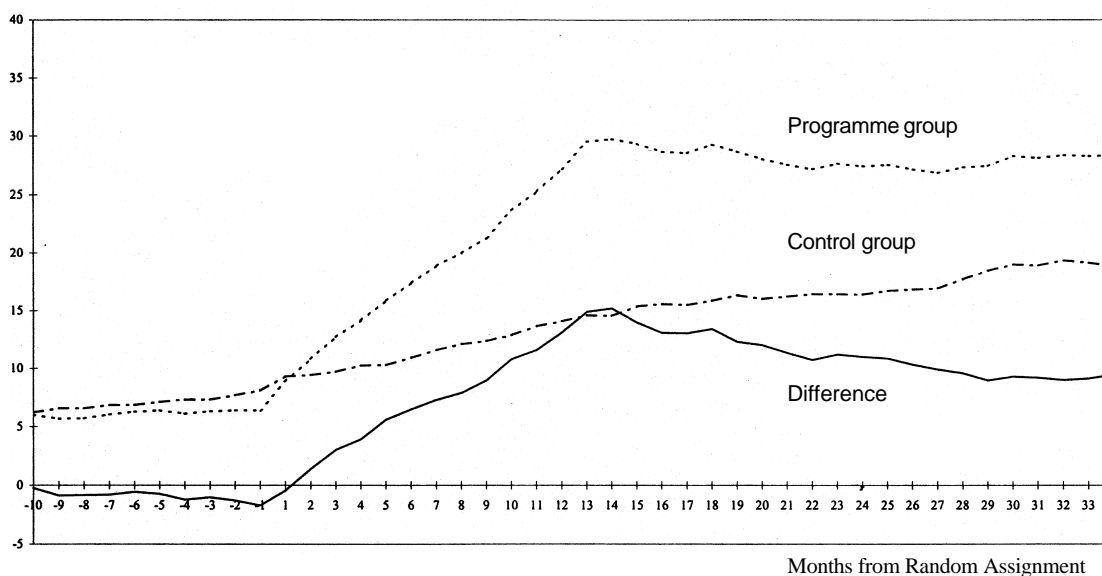
The project was carried out in the following way. At the end of 1992, 6,000 single parents were chosen randomly and divided equally into two groups: those in the first group (programme group) were allowed to participate in SSP entitlements, the other group, excluded from such benefits, served as a control group. The members of the first

group were given one year to fulfil the requirements for receiving SSP benefits, i.e. to find and start full-time work. As soon as the requirements were met, transfer payments, which were limited to three years, began. At the end of the three year period no further SSP benefits could be claimed.

The SSP payments contributed to speeding up the transition from unemployment to full-time work. Upon termination of the selection procedure eight per cent of the people in both groups were in full-time employment. Twelve months later, 29 per cent of the participating group were employed full-time. Full-time employment also increased in the same period in the control group, but only to 14 per cent. The 15 percentage points difference expresses the initial effectiveness of the SSP. After a year the SSP began – as was to be expected – to lose its incentive effect. The proportion of full-time employed stagnated in the programme group, whilst it continued to increase in the control group. At the end of three years the difference between the two groups was only ten percentage points. The fraction of full-time workers in the control group is an estimate of the fraction of windfall beneficiaries of SSP. Assuming that all the full-time workers in the programme group are SSP recipients (which is an over-estimate), two thirds of SSP recipients are windfall beneficiaries and one third are “incentivized” beneficiaries-people who would not be working full-time without the supplement (David Card 2000: 13).

**Figure 5:**

**Percentage Employed Full Time in the Self-Sufficiency Project**



Source: Michalopoulos, Ch. et al. (2000): ES-5.

In the programme group with access to SSP entitlements and a higher proportion of full-time employed, average income increased more than in the control group. At the end of three years, individual net monthly income was Cdn\$103, family net income Cdn\$153 higher than in the control group. These correspond to relative income differences of nine respectively eleven per cent. At the same time, the proportion of group members falling below the poverty line was lower in the group enjoying benefits (see table 9).

The success obtained required higher net transfer payments: the net monthly transfer payments from the state received by members of the programme group averaged Cdn\$56 more than the average in the control group. Increasing transfers per family by Cdn\$56 monthly led to an improvement in net income of Cdn\$103 or 153. In David Card's view (2000: 15) this is a reasonable investment.

**Table 9: Effect of SSP on Income and Net Transfer Payments (in the 36<sup>th</sup> Month), *per capita*, in Cdn\$**

	<b>Programme group</b>	<b>Control group</b>	<b>Difference</b>
Individual gross income	1,395	1,259	136
Income tax <sup>a)</sup>	94	61	33
Net transfers <sup>b)</sup>	814	757	56
Individual net income	1,301	1,198	103
Family income (net) <sup>c)</sup>	1,585	1,432	153
Percentage of families below poverty line	76.8	86.2	-9.4

a) Including social security contributions

b) Public expenditure for SSP, unemployment benefits and other transfer payments less income tax paid

c) Individual income of participants plus wage and salary income of other family members.

Source: Ch. Michalopoulos et al. 2000, Tab. ES.2.

## 6. Summary and Conclusions

By means of in-work benefits such as tax credits and transfer payments to employed persons with low income two aims are pursued: (1) an improvement in the income of families whose breadwinner(s) earn low wages; and (2) an increase in the number of people in employment and an increase in the supply of labour in the low-wage sectors of the economy. The programmes in Great Britain, Ireland and Canada examined here have been successful in improving the income situation of families in the low-wage sectors. They also helped to stimulate the willingness of unemployed to seek and accept work. On the other hand, they exerted negative incentives with respect to the provision of labour services on those who were already employed.

The improvement in net income and the reduction of the net replacement rate has led to greater labour market participation. In particular, Britain's WFCT and Canada's SSP created perceptible incentives – especially for single mothers – to seek and accept gainful employment. Against this must be set the impact on the willingness to participate in the labour market on the part of married women as a result of the focus of these programmes on family income. An important factor influencing women, and particularly single mothers, in their decision on labour market participation is the availability of child care facilities and generous treatment – as in Great Britain – of child care costs. Another prerequisite for an increase in the rate of participation in the labour market was an increase in the demand for labour services. The subsidising of labour

income gave the employers an opportunity to lower gross wages, thus effectively lowering labour costs in these wage brackets and this contributed to stimulating the demand for labour.

The improvement in the rates of labour market participation were accompanied by negative incentives for those already in employment. Since it was necessary to limit costs the entitlement had to be restricted to people or families with low income. This meant that beyond a certain income level the subsidies had to be curtailed. The high marginal transfer reduction rates resulted in disincentives to work more hours. They led to a reduction in the total number of man-hours worked of those already employed. The net over-all effect of positive and negative incentives for the relevant systems (WFCT, FIS and CCTB) has not been studied.

The trade-off between participation effects on the unemployed and the reaction of those already employed confronts policy makers with a dilemma: granting a tax credit high enough to influence the decisions of the unemployed with respect to participation in the labour market positively makes a high transfer reduction rate in phase III imperative.; this is the only way to limit the number of beneficiaries and budget costs. A high transfer reduction rate reduces the total number of man-hours worked of those already employed as well as the willingness to gain and improve qualifications and human capital. The transfer reduction rate, however, can be lowered only, if the amount of the original subsidy is set at a lower level. But this reduces the participation effect, unless the amount of other kinds of social transfers such as unemployment benefits or social assistance are also lowered. Adequate design is the principal difficulty in devising an effective system of in-work benefits for employees.

The dilemma just described results directly from the necessity of limiting costs. If there is no budget restriction then a system of incentives can be set up in which the (direct) effects are entirely positive (and negative effects, if present, are indirect). Aside from the SSP, which did result in increased public expenditure for transfer payments, for the systems examined here, data on their impact on the net transfer payments of the state have not been published.

Employment-conditional tax credits and transfer payments - have been used up till now primarily in English speaking countries. If they are to be introduced in countries on the European continent – as is now being done in France – then it is important to examine under what conditions they can be transplanted with success. In countries with a high net replacement rate the subsidies necessary to create effective incentives are greater than if the rate is lower. But the greater the amount of the subsidy, the greater will be *ceteris paribus* the marginal transfer reduction rate. What is more, the amount of this rate depends on the wage differentials in the low-wage brackets. If the differentials are not very pronounced, the marginal transfer reduction rate has to be all the greater, if the number of beneficiaries is to be limited. But then all the negative incentives described above will be associated with such an arrangement. (Granting tax credits will, however, tend to increase the wage differentials in the low-wage areas of the economy).

In discussing financial incentives an important determinant of comportment in the labour market has been dealt with. But it must not be forgotten that finding and accepting employment depends on other factors such as the employability of the unemployed person and a number of non-monetary determinants of comportment as well. Moreover, the interrelationship between granting subsidies to employees and the development of the demand for labour services must be adequately taken into account. Only when all these factors have been considered will it be possible to formulate a strategy to expand employment in the low-wage brackets which promises success.

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