

DICE REPORTS¹

EMPLOYMENT-CONDITIONAL TAX CREDIT AND BENEFIT SYSTEMS

In light of high unemployment among less skilled workers and the relatively low pay in the low-wage sector, several Anglo-Saxon countries (and Finland) give tax credits and wage-related transfers to workers in this labour segment. Currently the following systems are in force: Australia's Employment Entry Payment and Special Employment Advance, Finland's Earned Income Tax Credit, the U.K.'s Working Families' Tax Credit, Ireland's multifaceted programme, Canada's Child Tax Benefit, New Zealand's Family Tax Credit, and the Earned Income Tax Credit of the United States (OECD 1999a; OECD 1999b).

In all of these systems there is no guarantee of a minimum standard of living. Rather, a current job is required to claim these benefits. Only low-wage earners generally qualify for the benefits, and here, too, eligibility is primarily limited to families with children. The limitation to the low-wage sector means that, from a particular level of income, net transfers are diminished and ultimately reduced to zero. In this range the marginal charges on gross income are very high. Benefits are usually for an unlimited period.

The Earned Income Tax Credit in the United States

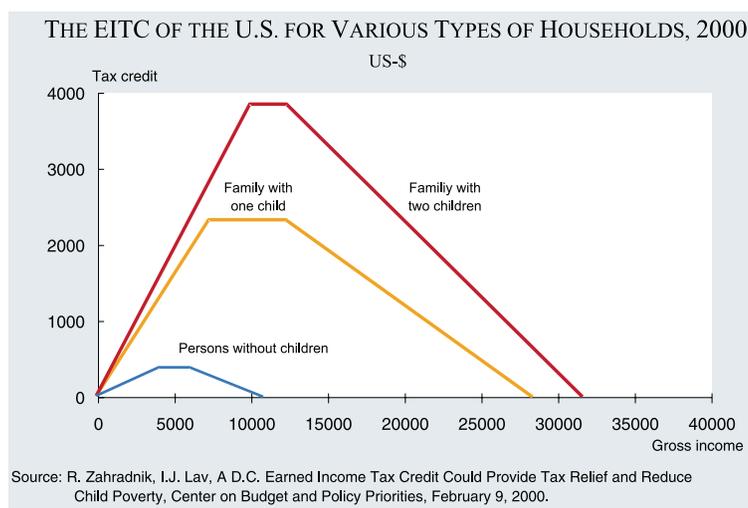
Probably the best known programme to assist low-income groups is the Earned Income Tax Credit (EITC) introduced in the U.S. in 1975.² Its goal is to

create financial incentives for low-wage earners and boost their incomes. The programme was modified and considerably expanded in 1986, 1990 and 1993. Today, it is the most important measure for combating poverty in the U.S.

The EITC is a tax credit that is granted under certain conditions to low-income households. The beneficiaries are subject to federal income tax. If the tax credit is higher than the income tax owed, the difference is paid out to the eligible families. Otherwise it is deducted from their income tax liability. EITC is administered by the Internal Revenue Service.

Employment is required for eligibility, and the programme is primarily aimed at working people with children. The amount of tax credit is based on gross earnings. Figure 1 illustrates the three phases of the EITC. Initially the tax credit rises in linear fashion with increasing income (phase I), then it remains constant (phase II) and declines again from a particular income level (phase III). The amount of tax credit and the income levels differ according to household type. Distinctions are made as to families with two and more children, families with one child, and people without children. The highest benefit is given to families with two or more children.

Figure 1



¹ DICE = Database of Institutional Comparison in Europe (www.cesifo.de).

² The following is a description of the programme at the federal level.

The parameters of the EITC in 2000 are shown in the table. For example, a family with two or more children and an income between USD 1 and 9,720 receives a tax credit of 40 cents on every dollar earned. With a gross income of USD 9,720 the maximum credit of \$3,888 is reached. This remains constant until gross income reaches USD 12,690. For every dollar earned above USD 12,690, the tax credit is reduced by 21 cents. When gross income reaches USD 31,152, the tax credit is reduced to 0. In the third phase in which the tax credit is reduced, the marginal charge on income is higher than the marginal rate of income tax. In this phase of tax credit reduction the former amounts to about 50%, as a rule (Gern 1996, p. 292; Eissa and Liebman 1995, p. 34).

In 1998, 19.8 million workers (including 16.4 million families with children) took advantage of EITC. The tax credit amounted to an average of USD 1,584 or USD 1870 for families with children (Economic Report of the President 1999, Box 3.-3).

The Working Families' Tax Credit in the United Kingdom

The U.K. along with the U.S. has a long tradition of assisting working people with low incomes. As far back as 1971 a Family Income Supplement was introduced. This was replaced in 1988 by the Family Credit (FC). This in turn was replaced at the end of 1999 by the Working Families' Tax Credit (WFTC).

Families with at least one child can claim the WFTC as long as one adult works at least 16 hours a week. The financial rules are quite similar to those of the FC, but the benefits are more generous:

- The standard rate for adults is GBP 53.15 a week (or GBP 2,763.80 a year) and for children, depending on age, either GBP 25.60 or GBP 26.35 a week (or GBP 1,331.20 and GBP 1,370.20 a year). For work of 30 hours or more per week, the benefits increase by GBP 11.25 a week.
- Although child care costs can no longer be deducted in calculating net income, as was the case for the Family Credit, up to 70% of child care costs (up to certain upper levels) can be used to increase the tax credit.
- In calculating net income for the WFTC, a standard deduction of GBP 91.45 a week (or GBP 4,755.40 a year) is allowed, and
- the withdrawal rate has been reduced from 70% to 55% in comparison to the FC (Blundell,

Duncan, McCrae and Meghir 2000, pp. 77ff.; Gregg, Johnson and Reed 1999, pp. 99f.; Blundell 2000, pp. 27ff.

The more generous design of the WFTC is reflected in budget expenditures of GBP 5 billion a year or GBP 1.5 billion more than was spent on the Family Credit programme.

The Earned Income Tax Credit in Finland

The only non-Anglo Saxon country to introduce an Earned Income Tax Credit is Finland. The Finnish EITC is less generous than similar programmes in the U.S. and the U.K. The Finnish programme is administered by the 450 municipalities. They levy their own income tax, the proportional tax rate of which averages 18%. (In individual cases it ranges from 15% to 20%.) The EITC has the following features: With a labour income of FIM 15,000–49,000, 20% of income can be deducted from the tax base of the municipal income tax. At FIM 49,000 the maximum deduction of FIM 9,800 is reached. This remains constant up to an income of FIM 75,000 (= 50% of average income). Between FIM 75,000 and 355,000, the deduction declines. From every finmark earned in excess of FIM 75,000 3.5% is deducted from the maximum tax deduction. When income reaches FIM 355,000, the deduction from the tax base is zero. At a proportional tax rate of 18%, taxes saved amount to 18% of the deduction from the tax base. Taxes saved reach a maximum of FIM 1,764 (see Table and Figure 2).

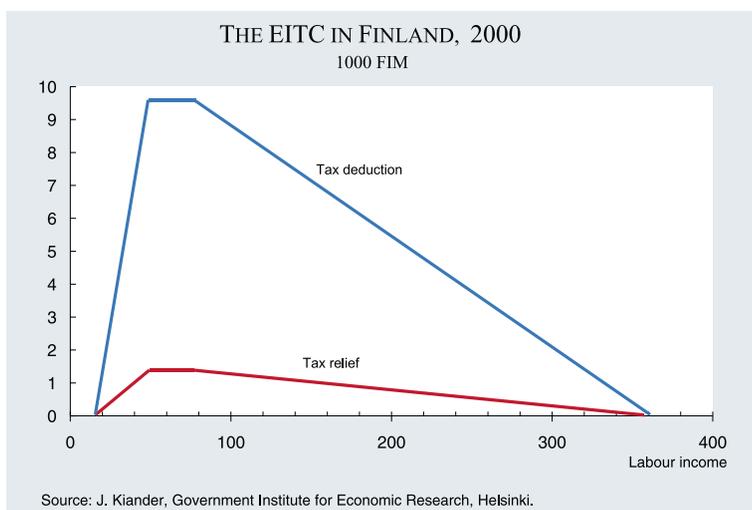
Assisting low-income workers in Ireland

There are several programmes to assist low-income workers in Ireland:

- the Back to Work Allowance (BTWA)
- the Family Income Supplement (FIS)
- the Continued Child Dependent Payment (CCDP) and
- the Part Time Job Incentive (PTJI)

The objective of the Back to Work Allowance is to create incentives to take on a job (Department of Social Community and Family Affairs 1999). Unemployed people who take on jobs can keep part of the previous unemployment compensation for a limited period of time. To claim BTWA bene-

Figure 2



fits, the person must be older than twenty-two, unemployed for twelve months, and must have received unemployment benefits amounting to at least IRP 40 (singles) or IRP 62 (couples); additionally, a single parent who has received assistance for twelve months also qualifies. Furthermore, by hiring these people the employer's total number of jobs must have increased. Qualifying people receive:

- 75% of their unemployment benefits during their first year on the job,
- 50% in the second year,
- 25% in the third year (see Table).

The Family Income Supplement provides a benefit to families that are employed in low-paying jobs (Callan, O'Neill and O'Donoghue 1995). To qualify, employment must be for at least nineteen hours a week and for a projected three months or more. The working hours of a married couple or partners may be combined. The transfer payments amount to 60% of the difference between the net income of the family (gross income minus taxes and minus social insurance contributions) and the relevant income limit. This increases to IRP 233 a week for one child, IRP 253 for two children, and up to a limit of IRP 355 for seven and more children. The minimum benefit is IRP 10 a week. At the end of 1999, 37,600 families claimed benefits under BTWA and 14,500 under FSI.³

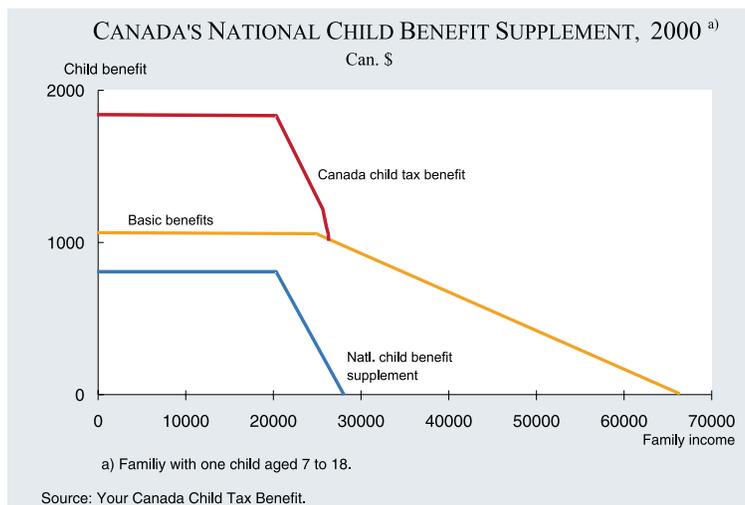
The Canada Child Tax Benefit

The assistance of 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 a Working Income Supplement for families with low incomes. At the end of the 1990s both were incorporated into the Canada Child Tax Benefit (CCTB) (Battle 1997, pp. 89ff.).

The CCTB contains the payment of child allowances. It consists of basic benefits and the National Child Benefit Supplement (NCBS) for low-income families. The NCBS supplements the basic benefits. It grants low-income families CAD 785 per year for the first child, CAD 585 for the second child and CAD 510 for each additional child. Above a net income of CAD 20,921, the child allowance is reduced for each additionally earned dollar by 11.5% for families with one child, 20.1% (two children) and 27.5% (three children). At an income level of about CAD 27,750, entitlement for child allowances within the NCBS ends (see Table). Figure 3 shows that a family with one child and a low income receives CAD 1,805 in child allowances a year. Above a net income of CAD 25,921, child allowances first decline rapidly and

³ For an explanation of CCDP and PTJI, see Department of Social and Community Affairs.

Figure 3



Employment-conditional Tax Credits and Benefits, ^{a)} 2000

	Responsible department	Minimum earnings (conditions)	Phase-in rate	Earnings where phasing-in stops	Maximum benefit	Earnings where phasing-out begins	Withdrawal rate	Minimum hours worked	Family type
Finland Earned Income Tax Credit	Tax administration	FIM 15,000	20% (reduction of tax base)	FIM 49,000	FIM 9,800 (reduction of tax base) FIM 1,764 (tax saving)	FIM 75,000	3.5% of income above FIM 75,000	No limit	All families
Ireland ^{b)} Back to Work Allowance	Social security	For long term unemployed now in employment			75% of unemployment assistance (first year) 50% (second year) 25% (third year)	Limit: 3 years		20 hours per week	Individual based
Ireland Family Income Supplement	Social security	For families with low income			60% x (family income - income limit)	Duration: 1 year (renewable without limit)		19 hours per week (for at least 3 months)	Families with children (and low income)
United Kingdom Working Families' Tax Credit	Tax administration	None	None		GBP 2,763.80 adults GBP 1,331.20 children (0-15 years) GBP 1,370.20 children (16-18 years)	Threshold of GBP 4,755.40	55% of net income above GBP 4,775.40	16 hours, supplement for 30 hours or more	Families with children
Australia Employment Entry Payment	Social security	Paid to people entering into full-time employment			AUD 100 (once)			No limit	Individual based
Australia Special Employment Advance	Social security	Payment when a particular expense is associated with starting a job			AUD 50 - 500			No limit	Individual based

continued Table:

	Responsible department	Minimum earnings (conditions)	Phase-in rate	Earnings where phasing-in stops	Maximum benefit	Earnings where phasing-out begins	Withdrawal rate	Minimum hours worked	Family type
Canada ^{a)} National Child Benefit Supplement	Tax administration	None	None		CAD 785 first child CAD 585 second child CAD 510 each additional child	CAD 20,921	11.5% (1 child) 20.1% (2 children) 27.5% (3 and more children) of family net income above CAD 20,291	No limit	Low-income families with children
New Zealand Family Tax Credit	Tax administration	None			NZD 14,872 family income (after tax) per year			20 hours per week (single-parent family) 30 hours per week (two-parent family combined)	Low-income families with children
United States ^{d)} Federal Earned Income Tax Credit	Tax administration	None	34% 40% 7.65% of gross income	USD 6,920 USD 9,720 USD 4,610	USD 2,353 USD 3,888 USD 353	USD 12,690 USD 12,690 USD 5,770	15.98% 21.06% 7.65% of gross income above income where phasing out begins	No limit	

(a) 100 FIM = 15.93 USD; 1 GBP = 1.58 USD; 1 AUD = 0.60 USD; 1 CAD = 0.68 USD; 1 NZD = 0.5 USD (April 2000); - (b) There are two other schemes: The Continued Child Dependent Payment and the Part-time Job Incentive; - (c) At the provincial level (British Columbia, New Brunswick) there is a further program: the self-sufficiency project; - (d) First figure is for one child families, second for two and more children, third for no children.

Source: CESifo.

later, after the NCBS runs out, at a slower pace. The CCTB is claimed by 3.2 million Canadian families accounting for 80% of all children (Department of Finance 2000).

Australia's Employment Entry Payment and Special Employment Advance; New Zealand's Family Tax Credit

In contrast to the aforementioned systems, Australia focuses on the transition from joblessness to employment. When an unemployed person takes on a job, he receives AUD 100 under the Employment Entry Payment scheme. As an alternative, a Special Employment Advance can also be claimed. It includes the payment of expenses involved in assuming work up to a maximum of AUD 500.⁴

With its Family Tax Credit, New Zealand supplements the net income of low-income families. For family incomes that are less than NZD 286 a week or NZD 14,872 a year after taxes, the difference is transferred by the tax authorities. To claim the Family Tax Credit, one parent must work. Single parents must work twenty hours a week. Partners must work a total of at least thirty hours a week. Each partner receives 50% of the transfer payments (see Table).⁵

Effect on income and employment

The objective of granting tax credits and job-linked transfers is to increase the net incomes in the low-income range and the labour supply. The income objective is largely met by these systems. In the United States half of all EITC payments go to families with incomes below the poverty level. It is estimated that EITC lifted 4.3 million people above the poverty level and made an important contribution to preventing child poverty (Economic Report of the President 2000). The WFTC in the United Kingdom and the NCBS in Canada especially help families at the bottom of the income pyramid. Only the FSI in Ireland and the EITC in Finland appear to help other groups besides low-income recipients. The income-related withdrawal rates as well as a cut-off income level

assure that the benefits go to the deserving. This also constrains budget expenditures.

In contrast to the income effects, the impact of the employment subsidies on labour supply and (given sufficient demand) on employment in the low-wage sector is not straightforward. To be sure, the increase in net incomes and the accompanying increase in the wage differential create work incentives. On the other hand, the high marginal charges on income in the transfer withdrawal range cause those with jobs to work fewer hours (effect on hours worked). There is thus a trade-off between the likelihood of participation and the effect on hours worked. Both effects appear to offset each other in terms of the total number of man-hours supplied.

Empirical studies show that the effects on the labour supply differ according to the design of the assistance system and the family situation of the beneficiaries. In the United States, the EITC has given single mothers a strong incentive to work. There has been little impact on the labour-market participation of married men, whereas the participation of married women has declined slightly. The latter effect may be the result of the fact that the EITC is linked not to individual incomes but to the labour income of the family, so that it becomes unattractive for married women (with employed husbands) to take on jobs because of the high marginal charges on income in the withdrawal phase. The working behaviour of those with jobs is also affected in various ways. Whereas the hours worked by married women, and also by married men, have declined, the hours of single mothers have remained stable. In conclusion, the employment/workforce ratio has been raised by the EITC, working hours supplied have been reduced, and the total number of man-hours worked have increased slightly.

The WFTC in the United Kingdom provides a strong work incentive. The only contrary effect concerns married women with a working partner. Labour participation is estimated to have increased by 30,000 as a result of the WFTC. On the other hand, the high marginal charges on income for weekly working times in excess of 16 hours provides a strong incentive to work only 16 hours a week.

In assessing these results, it must be kept in mind that the negative indirect employment effects that

⁴ See <http://www.centrelink.gov.au>.

⁵ See <http://www.ird.govt.nz/famiasst/famiasst.htm>.

have been caused by the financing of these programmes from general tax revenues have not been included. If these were taken into consideration, the small increase in employment would be reduced further.⁶ Wolfgang Ochel

⁶ In addition to the effects on income and employment, the impact of the transfer systems on education and further training, on savings and marriage patterns, etc. is also important. See the papers presented at the conference of the Joint Center for Poverty Research at Northwestern University, Evanston, on 7–8 October 1999 (<http://www.jcpr.org>).

Bibliography

- Battle, K. (1997), "The 1997 Budget and the Child Benefits Package", in: Th. J. Courchene und Th. A. Wilson (eds.), *The 1997 Federal Budget: Retrospect and Prospect*, Kingston, p. 85–116.
- Blank, R.M., D. Card und Ph.K. Robins (1999), "Financial Incentives for Increasing Work and Income Among Low-Income Families", *NBER Working Paper* No. 6998, Cambridge, MA, March.
- Blundell R. (2000), "Work-Incentives and 'In-work' Benefit Reforms: A Review", *Oxford Review of Economic Policy* 16 (1), p. 27–44.
- Blundell, R., A. Duncan, J. McCrae und C. Meghir (2000), "The Labour Market Impact of the Working Families' Tax Credit", in: *Fiscal Studies* 21 (1), p. 75–104.
- Callan, T., C. J. O'Neill und C. O'Donoghue (1995), *Supplementing Family Income*, Dublin.
- Department of Finance (2000), *The Budget Plan 2000*, Ottawa.
- Department of Social Community and Family Affairs (1999), *Review of Expenditure Programmes, Back to Work Allowance Scheme*, Dublin, August.
- Department of Social Community and Family Affairs (2000a). (<http://www.dsca.ie/dept/leaflets/sw93.htm>).
- Department of Social Community and Family Affairs (2000b). (http://www.dsca.ie/dept/booklets/sw_4_22) sowie http://www.dsca.ie/dept/leaflets/rates/sw_19).
- Dickert, St., S. Houser und J.K. Scholz (1995), "The Earned Income Tax Credit and Transfer Programs: A Study of Labor Market and Program Participation", in: J.M. Poterba (ed.), *Tax Policy and Economy*, 9, Cambridge, MA, p. 1–50.
- Dilnot, A.W. und A.S. Duncan (1992), "Lone Mothers, Family Credit and Paid Work", *Fiscal Studies* (1), p. 1–21.
- Duncan, A.S. und C. Giles (1996), "Labour Supply Incentives and Recent Family Credit Reforms", *The Economic Journal* 106, January, p. 142–155.
- Economic Report of the President (1999), *Transmitted to the Congress*, February 1999, Washington D. C.
- Economic Report of the President (2000), *Transmitted to the Congress*, February 2000, Washington D. C.
- Eissa, N. und J.B. Liebman (1995), "Labor Supply Response to the Earned Income Tax Credit", *NBER Working Paper* No. 5158.
- Eissa, N. und J.B. Liebman (1996), "Labor Supply Response to the Earned Income Tax Credit", *The Quarterly Journal of Economics*, May, p. 605–637.
- Eissa, N. und H.W. Hoynes (1998), "The Earned Income Tax Credit and the Labor Supply of Married Couples", *NBER Working Paper* No. 6856, Cambridge, MA, December.
- Gern, K.-J. (1996), *Das "Bürgergeld" – ein sinnvolles Konzept?*, Abschlussbericht zum Forschungsauftrag der Friedrich-Naumann-Stiftung, Kiel.
- Gregg, A., P. Johnson und H. Reed (1999), *Entering Work and the British Tax and Benefit System*, London.
- Holzblatt, J., J. McCubbin und R. Gillette (1994), "Promoting Work Through the EITC", *National Tax Journal* 47(3), p. 591–608.
- Meyer, B.D. und D.T. Rosenbaum (1999), "Welfare, The Earned Income Tax Credit, and the Labor Supply of Single Mothers", *NBER Working Paper* No. 7363, Cambridge, MA, September.
- OECD (1997), *Making Work Pay, Taxation, Benefits, Employment and Unemployment*, Paris.
- OECD (1999a), *Implementing the OECD Jobs Strategy, Assessing Performance and Policy*, Paris.
- OECD (1999b), *Benefit Systems and Work Incentives, 1999 edition*, Paris.
- Scholz, J.K. (1996), "In-Work Benefits in the United States: The Earned Income Tax Credit", *The Economic Journal* 106, p. 156–169.
- Whitehouse, E. (1996), "Designing and Implementing In-Work Benefits", *The Economic Journal* 106, p. 130–141.
- Zahradnik, R. und I.J. Lav (2000), "A D. C. Earned Income Tax Credit Could Provide Tax Relief and Reduce Child Poverty, Center on Budget and Policy Priorities", February 9, (http://www.cbpp.org/2-9-00_sfp.htm).