INTERNATIONAL MONETARY FUND

Staff Country Reports

July 2001
IMF Country Report No. 01/96

Kingdom of the Netherlands - Netherlands: Selected Issues—The Labor Income Tax Credit in an International Perspective

This Selected Issues Paper on the Kingdom of the Netherlands - Netherlands was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on **May 21, 2001**. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the Kingdom of the Netherlands - Netherlands or the Executive Board of the IMF.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to Publicationpolicy@imf.org.

Copies of this report are available to the public from
International Monetary Fund • Publication Services
700 19th Street, N.W. • Washington, D.C. 20431
Telephone: (202) 623 7430 • Telefax: (202) 623 7201
E-mail: publications@imf.org • Internet: http://www.imf.org

Price: $15.00 a copy

International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

KINGDOM OF THE NETHERLANDS—NETHERLANDS

Selected Issues

The Labor Income Tax Credit in an International Perspective

Prepared by Enrica Detragiache (EU1)

Approved by the European I Department

May 21, 2001

Contents Page

I. The Labor Tax Credit in the Netherlands 2
II. The EITC in the United States 6
III. The Working Families' Tax Credit in the United Kingdom 7
IV. The Prime Pour l'Emploi in France 9
V. Conclusions 10

References 11

Figures
1. Labor Tax Credits in Selected Countries 3

Tables
1. Labor Tax Credit and Average Income Tax Rate 5

The Labor Income Tax Credit in an International Perspective

1. The 2001 income tax reform introduced a labor income tax credit (LTC), which provides tax relief to earners of labor income to improve incentives for employment. This paper reviews the LTC and compares it with three programs that share a similar goal in the United States (the Earned Income Tax Credit, or EITC), the United Kingdom (the Working Families' Tax Credit, or WFTC), and France (the *Prime Pour l'Emploi*, or PPE).

I. The Labor Tax Credit in the Netherlands

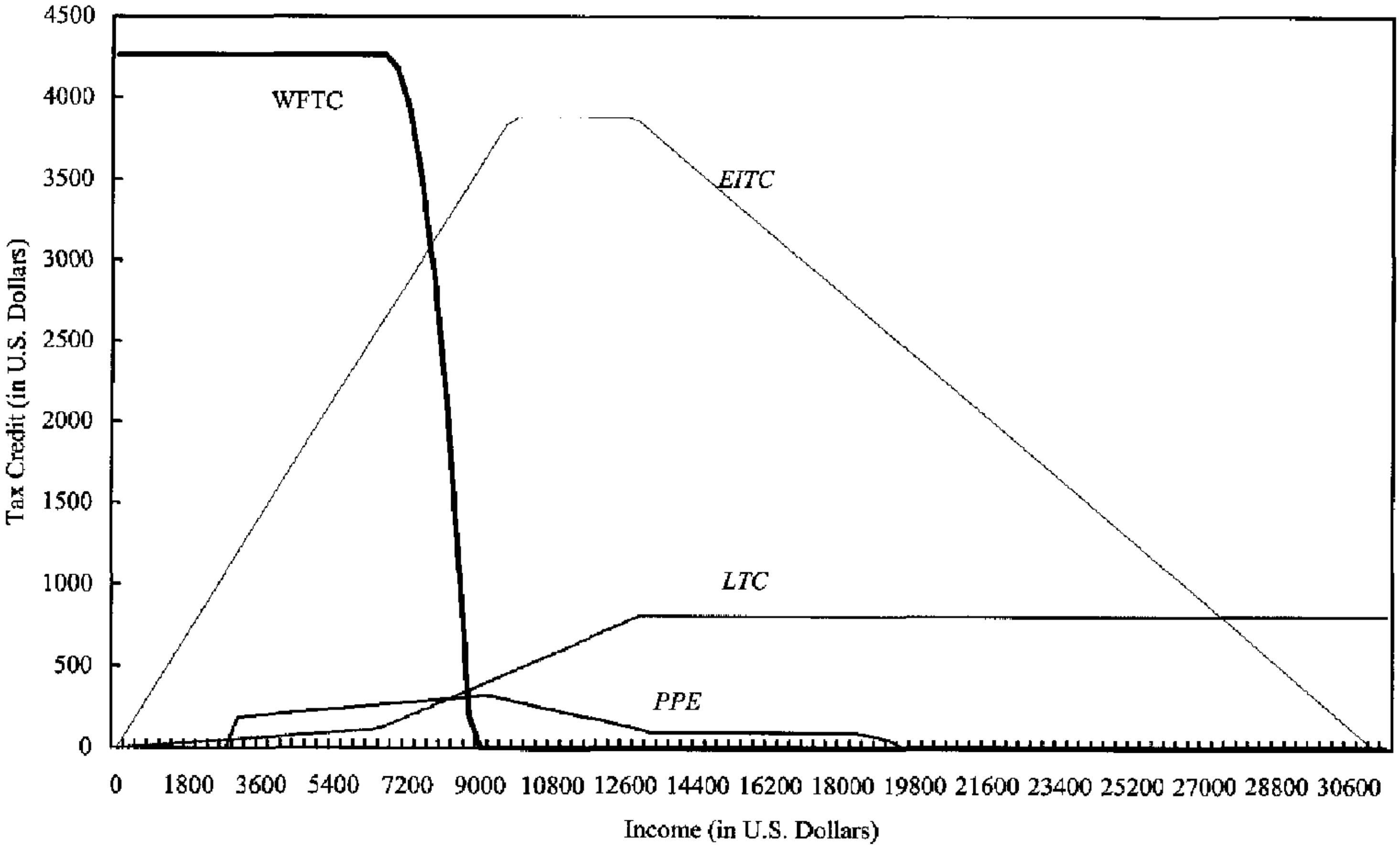
2. The LTC, which replaces a labor-cost deduction, can be claimed by any taxpayer who earns income from labor. Because the income tax system taxes individuals rather than households, the credit can be claimed by both spouses. The amount of the LTC is determined as follows (Figure 1): for income up to NLG 16,219 the credit is equal to 1.751 percent of income. For any income above NLG 16,219, the taxpayer receives an additional credit equal to 10.751 percent of the excess up to a maximum of NLG 2,027, which is reached at an income of NLG 32,431. At this income, the LTC amounts to 6.25 percent of income. The annual income of a full-time worker earning the statutory minimum wage in 2000 is NLG 29,375. The LTC reaches its maximum for workers earning 110.4 percent of the statutory minimum wage (for a full-time worker) of NLG 29,375.

3. Like the other tax credits introduced by the 2001 tax reform, the LTC is not refundable; that is, it cannot exceed the total tax liability of the individual. This raises the question of whether low income individuals have a sufficiently large tax liability to take full advantage of the credit. In the Netherlands, the income tax rate (inclusive of social security contributions) starts at 32.35 percent, and increases to 37.6 percent for annual income above NLG 32,769.[1] Taxpayers are entitled to a general tax credit of NLG 3,473, so that income up to NLG 10,736 is effectively tax exempt. Furthermore, if the taxpayer has a partner with no income, she can use the credit of the partner to reduce her tax liability, thereby doubling exempt income. Thus, individuals with income below NLG 10,736 or couples with only one working partner and income below NLG 21,472 cannot take advantage of the LTC, as they would have no income tax liability. These thresholds are higher for taxpayers entitled to other tax credits besides the general tax credit.[2]

[1] Income tax rates in the first two brackets are 2.95 percent and 8.2 percent, so the bulk (29.4 percentage points) of the levy consists of social security contributions.

[2] There are additional small tax credits for individuals with children. Single parents are entitled to a more substantial flat tax credit of NLG 2,779. In addition, if they have children under 12 years of age and work outside of the home, single parents can claim, as part of the LTC, an additional credit of 4.3 percent of taxable labor income, to a maximum of NLG 2,779.

Figure 1. Labor Tax Credits in Selected Countries
(All programs expressed in U.S. dollars at current exchange rates)



4. The LTC affects labor supply decisions in two ways. First, it reduces the average tax rate, thus increasing after-tax labor income and making labor (at any level of effort) more attractive relative to leisure, social assistance benefits, or work inside the home. This effect should expand activity both by reducing unemployment and by increasing labor force participation. Second, because it rises with income (until the maximum is reached), the credit reduces the marginal tax rate. This effect should induce individuals already in the labor force to expend more work effort and seek higher income through training.[3]

5. Considering the first effect, for an individual outside of the labor force contemplating a job paying 50 percent of average income (close to the full-time minimum wage) the LTC would increase gross labor income by 5.5 percent (Table 1).[4] If the individual is married, has two children, and is the only earner of labor income, the average tax rate is 7.5 percent, and the LTC would reduce it to 2 percent.[5] However, if the individual receives social assistance, the implicit tax rate on labor income is substantially higher than the nominal tax rate, because many benefits are reduced as labor income accrues. For example, a single benefit recipient who takes up a job earning 130 percent of the minimum wage faces an implicit tax rate of 88 percent because of the combined effect of income taxation and benefit withdrawal (Ministry of Finance, 2000). Thus, for beneficiaries of social assistance the incentive to remain outside the labor market is likely to remain substantial even after the introduction of the LTC.[6]

[3] The incentive to substitute leisure for work, however, may be tempered by the income effect induced by the credit, if leisure is a normal good. In this case, the tax credit should increase the demand for leisure as it raises disposable income.

[4] The LTC is calculated as $0.01751 \times 16{,}219 + 0.10751(Y-16{,}219)$, where Y is pre-tax income.

[5] This calculation assumes that the individual is entitled to maximum tax credits (general levy rebate, child rebate, supplementary child rebate, and combination rebate). In the case of a job paying 30 percent of per-capita income, the LTC amounts to 2 percent of income, but the individual would have no tax liability to offset. If the individual was entitled only to the general tax credit in addition to the LTC, he would face a tax liability of 11.6 percent of income, which the LTC would reduce to 9.6 percent.

[6] There is also labor demand to consider. Demand for low-skilled labor may not expand if non-wage labor costs or the minimum wage are too high (Hotz and Scholz, 2000). This issue should be addressed by ensuring that wage differentials (as seen by the employer) reflect productivity differentials (Watson at al., 1999).

Table 1. Netherlands: Labor Tax Credit and Average Income Tax Rate

For a married individual	Labor tax credit as a percentage of gross income		Average tax rate[1] (in percentage)	
	Earnings of 50 percent of per-capita income	Earnings of 30 percent of per-capita income	Earnings of 50 percent of per-capita income	Earnings of 30 percent of per-capita income
Netherlands	5.5	2.0	7.5	0
United Kingdom	23.8	68.1	14.1	11.7
United States	12.9	33.6	7.65	7.65
France	2.8	4.2	20.9	20.9

Source: Fund staff calculations based on information from the Ministry of Finance of the Netherlands, the U.S. Internal Revenue Service, the U.K. Inland Revenue Service, the Ministry of the Economy and Finance, and Industry of France, and Chennels, Dilnot, and Roback (2000).
[1]The tax rate takes into account the standard deduction or generalized tax credit and social security contributions, but not the labor tax credit.

6. Turning to the effect of the LTC on marginal tax rates, and thus on work incentives for those already employed, individuals with income up to NLG 16,219 would see little change, because they are likely to have little tax liability to offset and, in any case, the LTC reduces the marginal tax rate by only 1.751 percentage points. On the other hand, for workers with income between NLG 16,219 and NLG 32,431 who have a positive tax liability after exhausting other tax credits, the LTC reduces the marginal tax rate from 32.35 percent to 21.60 percent. Thus, for this category of workers the net increase in disposable income from increasing working hours will be substantially higher. Also, incentives to increase earnings by acquiring more education and training should improve for this category.

7. A key feature of the Dutch LTC is that the credit, after reaching a maximum, is not phased out as income rises further. Thus, all labor income earners get a tax cut. This has the advantage of avoiding adverse effects on work incentives higher up the earnings schedule: just as in the phase-in range the credit reduces the effective marginal tax rate improving incentives, in the phase-out range the marginal tax rate would be increased as credit is withdrawn. However, simulations using the MIMIC econometric model suggest that, at an equal cost to the budget, a program with a fairly wide phase-out range would provide better labor supply incentives than the current LTC (van Oers and others, 1999). The drawback of not withdrawing the credit as income rises is that the policy becomes much more expensive, as a large number of individuals receive a tax cut while facing unchanged incentives ("windfall beneficiaries"). In fact, all individuals earning more than NLG 32,431 before the introduction of the LTC can be considered windfall beneficiaries, because their labor force participation decision will not be affected by the credit (they are already in the labor force) and their marginal tax rate remains unchanged (because the LTC has reached the maximum level). The authorities estimate that 80 percent of the cost of the LTC will go to these "windfall beneficiaries."

8. In addition, because the size of the credit depends on total annual income, individuals earning relatively high wages but working only a few hours during the year could benefit from the full credit. For example, this may be the case for highly-skilled secondary earners in a two-income family. In this sense, the program is not targeted specifically at low-income households.

II. THE EITC IN THE UNITED STATES

9. The EITC has existed in the United States since 1975, but was substantially expanded in the 1990s. It is now the largest federal income support program for low-income families, exceeding the block grants assigned to the states by the federal government to finance public assistance programs (TANF) (Blank, Card, and Robins, 1999). The EITC is conceived both as an instrument to improve labor market participation and as a mechanism to provide income support to working families with children.

10. Figure 1 shows the EITC in the United States for a family with two children. The credit has three ranges: a phase-in range, in which it is equal to 40 percent of earned income (for a family with two children). Once income reaches $9,700, the credit is flat at $3,888. In the third range, which starts at an income of $12,750 (about 1.2 times the full-time minimum wage), the credit is withdrawn at a rate of 21.06 percent and falls to zero for incomes above $31,152. For a childless household, the structure of the credit is the same, but the amounts are substantially smaller. In addition, in contrast with the LTC, the EITC is fully refundable. Indeed, because tax rates and social security contributions at low income levels are low, taxpayers with children in the phase-in range typically receive a net payment.[7] Thus, although it is administered by the tax authorities outside of the traditional social assistance programs, the EITC is effectively an income subsidy program as much as a tax credit.

11. How does the EITC change incentives to participate in the labor force? For an individual considering a job earning 50 percent of average income, the EITC would increase gross labor income by 12.9 percent, in contrast with 5.5 percent under the LTC. The effect is even larger at lower income levels: at earnings equal to 30 percent of average income (about the U.S. full-time minimum wage), the EITC reaches 33.6 percent of income. In both instances the worker would receive a net payment from the tax authorities, because the only tax liability would be social security contributions (at 7.65 percent). Thus, the EITC provides more substantial incentives to labor market participation than the LTC, at least for individuals with dependent children. Because of its high phase-in rate and its refundability, the EITC offsets some of the negative work incentives created by income taxation and by the loss of social assistance benefits by working families with children.[8] Studies of the effects of

---

[7] For childless families, the credit in the phase-in range is set at 7.65 percent, so that it exactly offsets social security contributions.

[8] The EITC is not counted as income for the purposes of determining social assistance benefits.

the EITC suggest a strong positive effect on labor market participation by single women with children (Eissa and Liebman, 1996, Blank, Card, and Philips, 1999, Meyer and Rosenbaum, 1999). The EITC is also substantially cheaper to administer than other income subsidy programs, and it reaches a high proportion of eligible taxpayers (Hotz and Scholz, 2000).

12. Turning to work effort incentives for individuals already in the labor force, the EITC reduces marginal tax rates by 40 percentage points in the phase-in range, leaves them unaltered in the flat range, and raises them in the phase-out range, where taxpayers face a marginal tax rate of 21.06 percent in addition to the statutory marginal income tax rate of 15 percent for that tax bracket. Thus, while at very low income levels the EITC provides much stronger incentives to increase work effort than the LTC (which at most lowers marginal tax rates by 10.751 percent), at higher income levels the effect is reversed. However, empirical studies suggest that the negative effects on work in the "phase out" range are small in practice, perhaps because beneficiaries do not clearly understand how the amount of the credit is determined (Eissa and Liebman, 1996, Liebman, 1998).[9] The advantage of phasing out the EITC is that, since households with income above $31,152 receive no credit, the EITC creates far fewer "windfall beneficiaries" than the LTC does.

13. Like the LTC, the EITC is based on annual income, so individuals working a small number of hours but at a very high wage are eligible.[10] However, because such individuals are unlikely to be the only earners of labor income in a family with children and the credit is given to families as opposed to individuals, the problem is likely to be small in the United States, because the income of the high-wage second earner is likely to push family income above the threshold to qualify for the EITC. A somewhat more serious drawback is that the EITC creates adverse work incentives for secondary earners in a two-parent family, since the income from the second job is likely to place the family in the phase-out range or beyond. Empirical estimates indicate that this effect is significant (Eissa and Hoynes, 1998). Also, there are incentives for over reporting the number of qualifying children, a severe problem according to a 1995 study (Scholz, 1997). Subsequent to the study, measures to improve compliance with eligibility requirements have been strengthened.

III. The Working Families' Tax Credit in the United Kingdom

14. The United Kingdom has a long history of in-work benefits. Recently, such benefits have been replaced by the Working Families' Tax Credit (WFTC), a refundable tax credit that shares many of the features of the EITC. This program, introduced in October 1999, is aimed at providing income support and work incentives to low-income families with children, and is expected to reach 1.5 million households, nearly twice as many as the

[9] EITC recipients often use third parties to prepare their tax returns. They seem to have a clear understanding that the credit is available only if they work (Hotz and Scholtz, 2000).

[10] Individuals with non-labor income beyond a certain threshold are not entitled to the credit.

programs it replaced (Dilnot and McCrae, 2000). As in the United States and in the Netherlands, the WFTC will be administered by the tax authorities rather than by social assistance agencies. Instead of receiving the credit when taxes are filed, U.K. beneficiaries receive it from their employees as part of their paycheck. That is, beneficiaries file an application with the tax authorities. The tax authorities determine eligibility, and issue the necessary instructions to employers. Self-employed individuals receive the credit directly from the tax authorities.

15. The structure of the WFTC is as follows: there is a flat portion, which varies with the number of children, and a phase-out range starting at an annual income (net of taxes and national insurance contributions) of £4,755. In the phase-out range, the credit is withdrawn at a rate of 55 percent. A key feature of the WFTC is that only individuals working more than 16 hours a week are entitled, and there is a small additional credit for working more than 30 hours a week.[11] Figure 1 shows the WFTC for a family with two children in which at least one member works over 30 hours a week.[12] The flat credit amounts to £115.6 per week payable for 26 weeks, namely £3,005.6. For a family earning 50 percent of per-capita income, the WFTC increases gross income from labor by 23.8 percent, while for earnings of 30 percent of per-capita income the increase is 68.1 percent (Table 1). Thus, the WFTC provides stronger incentives to join the labor force than either the LTC or the EITC.[13]

16. Turning now to incentives to alter work effort for those already in the labor force, the WFTC encourages workers to work at least 16 hours a week because of the eligibility restriction. The WFTC does not reduce marginal tax rates, because it has no phase-in range. In the phase-out range, marginal income tax rates are increased by 55 percentage points (on top of a marginal tax rate of 33 percent), thus worsening work effort incentives substantially. Also, like the EITC, the WFTC creates negative work incentives for secondary earners, because the additional income could push family income into the phase-out range. Blundell, Duncan, McCrea and Meghir (2000) have simulated the effects of the introduction of the WFTC using cross-sectional household data. They find a positive impact on labor force participation by single parents and women with unemployed partners and a small decline in the participation of women with employed partners. The net effect is estimated to be an increase in participation of between 10,000 and 45,000 work-years.

[11] To enforce this requirement, employers report hours worked.

[12] The tax credit increases slightly if the children are between 16 and 18 years of age.

[13] The WFTC contains an additional tax credit for child care expenses. Both the Netherlands and the U.S. have tax relief measures linked to child care expenses under separate programs. These programs are beyond the scope of this paper.

IV. The Prime Pour l'Emploi in France

17. This labor tax credit was introduced in France in early 2001. As with the EITC and WFTC, the *Prime Pour l'Emploi* (PPE) is fully refundable and is phased out at higher income levels. All earners of labor income are eligible, though different regimes apply depending on family status. Each individual in a two-earner household is entitled to the credit, but the credit is more generous for single-income households. As with the EITC, the PPE is claimed at the time the income tax return is filed. Because low-income French households typically do not owe any income tax, the refund effectively offsets part of the employee's share of social security contributions.

18. The PPE can be claimed only if labor income falls between FF 20,575 and FF 146,257 (FF 96,016 for unmarried workers or married workers in a two-income family). For a married single earner with two dependent children, the credit accumulates at a rate of 2.2 percent of income up to a maximum of FF 2,400, or 3.5 percent of income (Figure 1). This ceiling is reached at an income of FF 68,583 (the full-time statutory minimum wage or about 46 percent of average income). For income between 1 and 1.4 times the minimum wage, the PPE is withdrawn at a rate of 5.5 percent. After that, the PPE remains constant until income reaches twice the minimum wage (FF 137,166). A second phase-out range starts at that income level, in which the withdrawal rate is again 5.5 percent. Finally, the credit falls to zero as the maximum eligible income of FF 146,257 is reached.

19. For part-time workers, income is determined on the basis of full-time equivalent income, thus excluding part-time workers who earn high hourly wages. In the case of a two-income household, both spouses can claim the credit, but the amount is less generous than for a single-earner household. In addition, there is a ceiling on household income beyond which no credit can be claimed which varies according to family status. For a married couple with two children, the ceiling is FF 269,440.

20. The PPE is fairly small at present, but it is expected to increase in 2002 and 2003, when the rate of accumulation in the phase-in range will be raised to 4.4 percent and 6.6 percent respectively. Nonetheless, the PPE will remain smaller than the U.S. and U.K. credit. Compared to the LTC, the PPE is more targeted because it is phased out and it excludes individuals who earn high wages but work a small number of hours. The latter is achieved at the cost of some administrative complication, as part-time workers must declare their full-time equivalent income when they file their tax return to establish eligibility. The French credit allows both workers in a two-income family to claim tax relief. Thus, even though ceiling on family income puts an upper bound on what the second worker can earn without losing the credit, the PPE should create less disincentives for labor market participation of secondary earners relative to the EITC and the WFTC.

V. Conclusions

21. Compared to its U.S. and U.K. counterparts, the LTC is likely to have more limited effects on incentives for primary-earners to enter the labor force, because of the smaller size of the credit. The EITC, the WFTC, and the PPE also create fewer windfall beneficiaries, since the credit is phased out at relatively low levels of income and spouses of high-income earners are not eligible. Without introducing a phase-out range, any significant increase in the LTC to strengthen its effect on the still large poverty trap in the Netherlands is likely to be extremely expensive.

22. But how can the credit be withdrawn without encouraging individuals in the phase-out range or secondary earners to reduce hours worked? Given the easy availability of part-time employment and the high marginal tax rates, the reduction in hours worked could be substantial in the Netherlands. One possibility would be to introduce a minimum work hour requirement, along the lines of the WFTC. Accordingly, eligibility for the credit would be restricted to individuals working more than, say, 20 hours a week. A lower threshold could be applied to single parents, so as not to discourage their labor force participation.[14] A minimum work hour requirement would render ineligible high wage individuals who work only a few hours a week, but it would involve additional administrative costs, and the experience of both the United Kingdom and France would provide useful information in this regard.

[14] In the U.K. the minimum work requirement was lowered from 24 hours to 16 hours per week in 1993 to encourage participation by single mothers.

References

Blank, Rebecca B., David Card, and Philip K. Robins, 1999, Financial Incentives for Increasing Work and Income Among Low-Income Families, NBER Working Paper No. 6998 (Cambridge, MA).

Blundell, Richard, Alan Duncan, Julian McCrae, and Costas Meghir, 1999, Evaluating In-Work Benefit Reform: The Working Families Tax Credit in the UK, mimeo, Institute for Fiscal Studies (London, UK).

Chennels, Lucy, Andrew Dilnot, and Nikki Roback, 2000, A Survey of the U.K. Tax System, Institute of Fiscal Studies Briefing Paper No. 9 (London).

Dilnot, Andrew, and Julian McCrae, 2000, The Family Credit System and the Working Families Tax Credit in the United Kingdom, OECD Economic Studies No. 31.

Eissa, Nada, and Hilary Hoynes Williamson, 1998, The Earned Income Tax Credit and the Labor Supply of Married Women, NBER Working Paper No. 6856.

Eissa, Nada, and Jeffrey B. Liebman, 1996, Labor Supply Response to the Earned-Income Tax Credit, Quarterly Journal of Economics, 112 (2), 605-637.

Hotz, V. Joseph, and John Karl Scholtz, 2000, Not Perfect but Still Pretty Good: The EITC and Other Policies to Support the US Low-Wage Labor Market, OECD Economic Studies No. 31.

Liebman, Jeffrey B., 1998, The Impact of the Earned Income Tax Credit on Incentives and Income Redistribution, in James M. Poterba (Editor), Tax Policy and the Economy, Vol. 12 (Cambridge, MA: MIT Press).

Ministry of Finance of the Netherlands, 2000, *2001 Budget Memorandum. Abridged Edition.*

Van Oers, Floor, M., Ruund A. de Mooij, Johan J. Graafland, and Jan Boone, 1999, An Earned Income Tax Credit in the Netherlands, CPB Research Memorandum No.150, The Hague.

Watson, C. Maxwell, Bas B. Bakker, Jan Kees Martijn, and Ioannis Halikias, 1999, The Netherlands. Transforming a Market Economy, Internaional Monetary Fund, Occasional Paper No. 181 (Washington, D.C.).