



# C.D. Howe Institute

# *Backgrounder*

[www.cdhowe.org](http://www.cdhowe.org)

No. 113, February 2008

**Social Policy**

## Still High:

*Marginal Effective Tax Rates on  
Low-Income Families*

Finn Poschmann

### **The Backgrounder in Brief**

*Most federal and provincial government benefits for families with children are sharply income-tested. Reductions in these benefits, as family income rises, mean that low-income families face much higher effective tax rates than most others do, and deny such families the full benefit of the broad-based tax rate relief other Canadians have enjoyed in recent years.*

## ***About the Author***

*Finn Poschmann* is Director of Research at the C.D Howe Institute.

## ***The C.D. Howe Institute***

The C.D. Howe Institute is a national, nonpartisan, nonprofit organization that aims to improve Canadians' standard of living by fostering sound economic and social policy.

The Institute promotes the application of independent research and analysis to major economic and social issues affecting the quality of life of Canadians throughout the country. It takes a global perspective by considering the impact of international factors on Canada and bringing insights from other jurisdictions to the discussion of Canadian policy. Recommendations in the Institute's publications are founded on quality research conducted by leading experts and subject to rigorous peer review. The Institute communicates clearly the analysis and recommendations arising from its work to the general public, the media, academia, experts, and policy makers.

The Institute began life in 1958 when a group of prominent business and labour leaders organized the Private Planning Association of Canada to research and promote educational activities related to public economic and social policy. The PPAC renamed itself the C.D. Howe Research Institute in 1973 following a merger with the C.D. Howe Memorial Foundation, an organization created in 1961 to memorialize the Right Honourable Clarence Decatur Howe. In 1981, the Institute adopted its current name after the Memorial Foundation again became a separate entity to focus more directly on memorializing C.D. Howe. The C.D. Howe Institute celebrates its 50th Anniversary as the gold standard for Canadian public policy research in 2008.

The Institute encourages participation in and support of its activities from business, organized labour, associations, the professions, and interested individuals. For further information, please contact the Institute's Development Officer.

The Chairman of the Institute is Tim Hearn; William B.P. Robson is President and Chief Executive Officer.

\* \* \* \* \*

*C.D. Howe Institute Background*® is an occasional publication of the C.D. Howe Institute. Its purpose is to comment briefly on policy issues of concern to Canadians. James Fleming edited the manuscript; Diane King prepared it for publication. As with all Institute publications, the views expressed here are those of the authors, and do not necessarily reflect the opinions of the Institute's members or Board of Directors.

To order a hard copy of this publication, please contact: Renouf Publishing Co. Ltd., 5369 Canotek Rd., Unit 1, Ottawa K1J 9J3 (tel.: 613-745-2665; fax: 613-745-7660 e-mail: [order.dept@renoufbooks.com](mailto:order.dept@renoufbooks.com)), or the C.D. Howe Institute, 67 Yonge Street, Suite 300, Toronto M5E 1J8 (tel.: 416-865-1904; fax: 416-865-1866; e-mail: [cdhowe@cdhowe.org](mailto:cdhowe@cdhowe.org)). Quotation with appropriate credit is permissible.

\$5.00; ISBN 0-88806-738-0;  
ISSN 1499-7983 (print); ISSN 1499-7991 (online)

**R**ecent tax relief initiatives on the part of the federal and some provincial governments, while beneficial for Canada overall, were accompanied by measures that had a perverse effect for many families — raising rather than lowering the effective tax rate on their incremental income. This *Backgrounder* shows what happened, discusses briefly why it matters, and enumerates some possible remedies.

The rise in effective tax rates followed from the growth of income-tested family benefits — transfers from governments to individuals — through overlapping benefit plans introduced by Ottawa and the provinces. Clawbacks and benefit reductions built into these programs' design take effect as family income increases, combining with other tax levies to create very high Marginal Effective Tax Rates (METRs) for low- and middle-income earners on each additional dollar they earn. The result is low or even negative financial returns to taking on additional work, or for leaving social assistance to take on a job.

The spectre of low or negative returns to paid work is at the heart of economists' concern over high METRs. Small gains from taking on paid work mean poor incentives to do so, and an increased likelihood of potential workers' relying on public benefits rather than entering the labour force, building skills and rising up the income scale. To the extent that happens, the economy suffers in the near term, and families suffer in the long term, in particular because low education and low-income status tend to be inter-generationally transmitted.

There are no easy solutions. Lowering clawback rates, which would permit higher-income families to keep more of the same benefits that are available to lower-income families, can be extremely costly. The alternative, reducing benefits, is politically unattractive. Likely routes to improvement include better federal and provincial policy cooperation, a better governmental understanding of the costs of taxation, and the political will to make any Canadian jurisdiction a better attraction to potential residents, with respect to taxes and benefits offered.

## **Rising Benefits, Rising Marginal Tax Rates**

Tax relief for Canadian families began in earnest with the 2000 federal budget, which set out a multiyear program for reducing personal income taxes and increasing some benefits payable to low- and middle-income families.<sup>1</sup> Subsequent federal budgets, up to and including the 2007 federal Economic Statement, and some provincial budgets, notably Alberta's, offered further tax relief. For many Canadians, the personal income tax rate they pay on incremental income is now lower than before, and the thresholds at which they face higher rates are at higher taxable-income levels than before. This means improved financial returns, and improved incentives for Canadians, when they work, save and invest.

Amid this generally good news, however, lurks a contrary trend toward higher, rather than lower, marginal effective tax rates on income earned by

---

The author thanks John Richards and Bill Robson for advice and encouragement, and participants at the CABE Moneco-Econtro 2007 Economic Outlook/Policy Forum in Kingston for their feedback.

1 The 2000 budget also set out a schedule for general corporate income tax rate reductions, discussed elsewhere.

families with children, especially in low- and middle-income households. The METR, which determines the financial reward to taking on additional paid work, is defined by the sum of federal and provincial statutory income tax rates, as well as the effective tax rates imposed by benefit and tax-credit reductions and clawbacks, which in turn may be geared to family or individual income.<sup>2</sup>

The principal drivers of high METRs are clawbacks on federal and provincial family-based benefits and tax credits, as well as sales-tax credit reductions. There are also clawbacks on seniors' benefits and credits, and numerous other income-tested government transfers to individuals, and there are payroll taxes, such as Employment Insurance premiums and Canada/Quebec Pension Plan contributions. For families not on social assistance, the largest contributor to high METRs (other than income taxes) is usually the clawback on federal and provincial child benefits.

The reasons for rising tax rates on modest family incomes are not lost to history. In 1992 the federal government introduced the Child Tax Benefit, which replaced the Family Allowance (a universal monthly payment to families), the so-called dependants' amount (a small nonrefundable tax credit that depended on the number of young children in a family and their ages), and the Child Tax Credit, a refundable tax credit inaugurated in the late 1970s, which had framed the idea of a tax credit, geared to income, that was payable to families whether or not income tax was payable by that family.

The new Child Tax Benefit offered every family an annual, income-tested payment, beginning at \$1,020 per young child, and a potentially huge boost to household buying power. The value of the benefit was reduced by five cents on the dollar of family net income above about \$26,000.<sup>3</sup> And that was not all. At the same time, the federal government introduced an Earned Income Supplement, which for very low-income individuals rose (to a maximum of \$500) in step with their earned income — a mechanism intended to offset the costs of taking on work and therefore boost labour force participation among people on the edge of regular work. Its value declined once family income rose above about \$21,000.

The Earned Income Supplement's clawback (the rate at which the benefit's value is reduced, for family incomes above the \$21,000 threshold) was set at 10 percent of net income. This was stacked on top of: (i) a basic federal tax rate of 17 percent, (ii) a federal surtax, (iii) provincial income taxes, and (iv) Canada Pension Plan contributions and Employment Insurance premiums. That stacking effect caused families with incomes under \$26,000 to pay higher effective tax rates on incremental earnings than did most families with higher earnings. Those families did receive cash benefits while higher income families did not, yet the precedent was set for a scenario where low-income families paid higher marginal tax rates on their labour earnings than did families further up the income scale.

Little changed until 1997, when a new federal budget introduced the National Child Benefit System. The NCBS had a clear logic to it: the federal government

---

2 In the analysis that follows, the central focus is on census families with employment income. The social assistance clawbacks on welfare beneficiaries with some market income — typically ranging from 50-to-100 percent of incremental income, depending on the province and family type — are generally ignored here.

3 Or 2.5 cents on the dollar for single-child families.

---

would provide a significant benefit, beginning at about \$1,800 per young child, which would be clawed back at a steady rate for families with incomes above about \$21,000.<sup>4</sup> This federal, basic benefit was offered as a way to supplant provincial child-centric welfare benefits. Thereafter, provincial welfare programs would in theory aim at adults, while the immediate needs of poor children would be at least partially addressed by federal transfers directly to low-income families (see Poschmann and Richards, 2000, for more detail).

In theory, therefore, the NCBS helped families with their transition out of welfare, by freeing at least the child-based portion of social assistance from the 50-to-100 percent reduction rates that typically kicked in when adults using social assistance took on paid work. This gain came at a cost: for families with net incomes above \$21,000, the benefit reduction rate, or clawback, became 12.1 percent (rather than 10 percent) for families with one child; 20.2 percent for families with two; and 26.8 percent for families with three or more children. These stiff clawback rates ensured that, for most families, the largest part of the child benefit would disappear as family incomes rose from \$21,000 to \$26,000, while the remainder of the benefit would be reduced at a 2.5 percent rate (for one-child families) or at a 5.0 percent rate (for families with more than one child) as family incomes rose above \$26,000.

Federal budgets since the NCBS' introduction increased the cash benefits available, raised the thresholds at which benefits were phased out — in part to offset inflation's impact on disposable income — and revised the clawback rates. The federal reduction rates applying to the child benefit (for families above about \$21,000 in net income) are now 12.2 percent for families with one child, 23.0 percent for families with two, and 33.3 percent for families with three or more children. Above about \$38,000 in family net income, reduction rates are 4.0 percent of marginal income for families with two or more children, and 2.0 percent otherwise.<sup>5</sup>

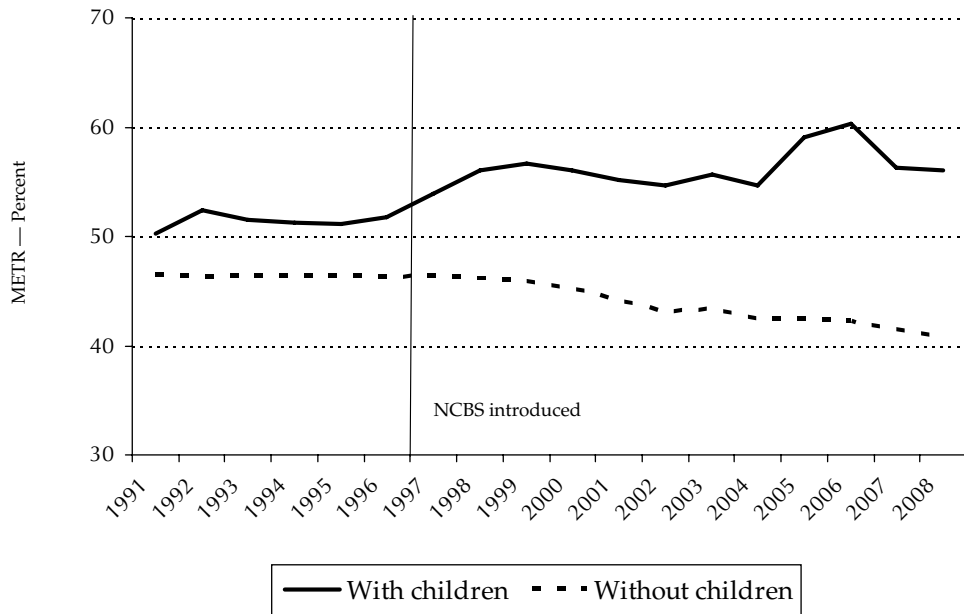
While providing greatly increased cash payments to low-income families, a significant benefit for them to be sure, the NCBS increased the average METR for families with children (Davies, 1998, and Poschmann, 1999). Beginning in 1997, a wide gap emerged between the average effective tax rates faced by families with children, as opposed to those without; a gap that has since persisted and in some years widened.<sup>6</sup> The gap, meaning the gap in returns to paid work for families with and without children, emerged most poignantly for families between \$20,000 and \$40,000 in annual net income. In 1991, the difference in marginal rates paid by families with and without children (in the \$20,000-to-\$40,000 income range) was 3.8 percent; by 1997 it was 7.6 percent, and as of 2008 it remained at 15.2 percent (see Figure 1).

4 When the larger child benefit was integrated into the basic earned income supplement in 1997, the requirement that taxpayers earn income to qualify for the earned income supplement disappeared.

5 Some of these parameters differ across provinces.

6 All METR estimates reported here rely on Statistics Canada's Social Policy Simulation Database and Model, Release 15.0; responsibility for the results and their interpretation is the author's.

**Figure 1:** *Marginal Effective Tax Rates for Families with and without Children — Canadian Average, Family Net Incomes \$20,000 to \$40,000, 1991 – 2008*



Source: Author's calculations, Statistics Canada Social Policy Database and Model, Release 15.0.

## What Happened Where

The underlying change in taxes and benefits was federal, therefore generating similar income and tax profiles across all provinces. However, not all provinces responded the same way, with some offering their own working income supplement top-ups (as did Saskatchewan and British Columbia, among others) and some provinces giving child benefit top-ups with thresholds and other parameters that differed slightly from the federal model (Quebec and Alberta, for example), and others adding very little to the federal program.

Notwithstanding these provincial variations, the general picture is that for many families with children, and particularly for those families at the low end of the income scale, METRs are higher in 2008 than they were before child-benefit reform began in 1992 (see Figure 2, panels a through j). On average across the income spectrum, METRs for families with children have changed little since 1991, notwithstanding federal and provincial tax relief and reform, while for families without children the typical METR declined by about four percentage points by 2008.

After the advent of the NCBS, some provinces' top-ups quickly created extraordinarily high METRs for families in the \$20,000-to-\$30,000 income range, as did Saskatchewan and British Columbia (Poschmann and Richards, 2000), where METRs often exceeded 80 or even 90 percent. Saskatchewan later took small reform steps to lower the sharpest peaks in family METRs. But in Quebec,

**Figure 2:** Marginal Effective Tax Rates for Families with Children, 1991 and 2008 (by province)

Figure 2a: Newfoundland

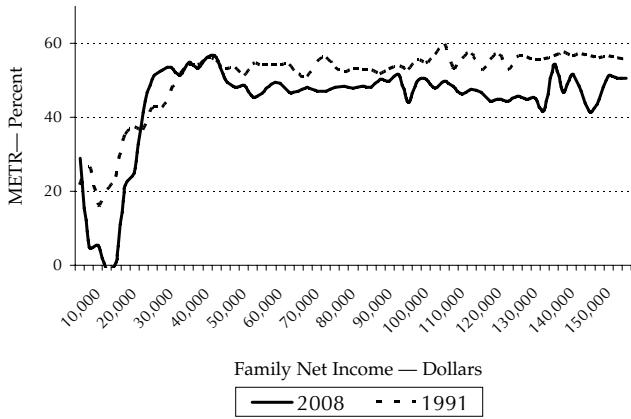


Figure 2b: Prince Edward Island

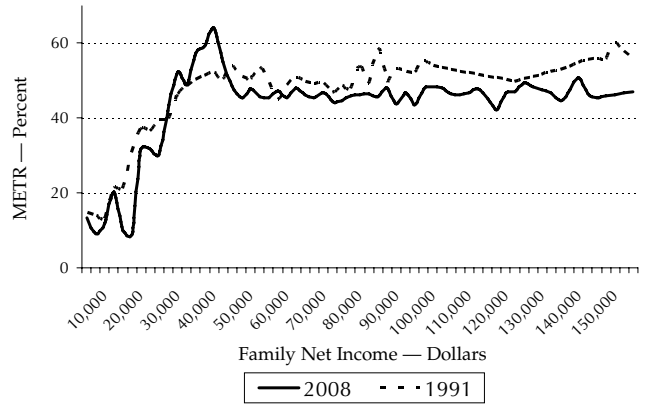


Figure 2c: Nova Scotia

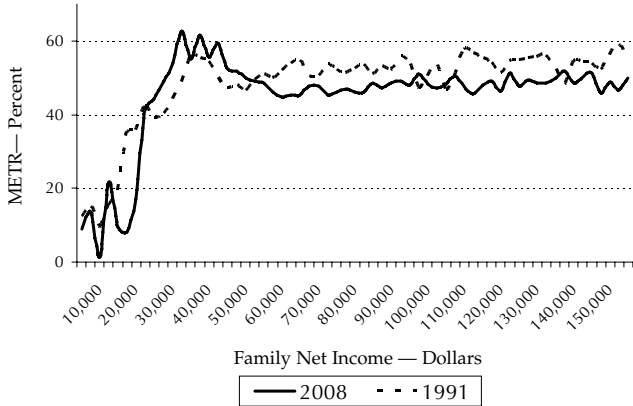


Figure 2d: New Brunswick

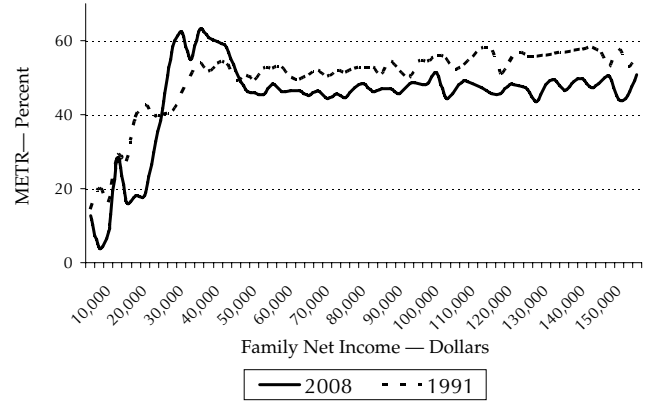
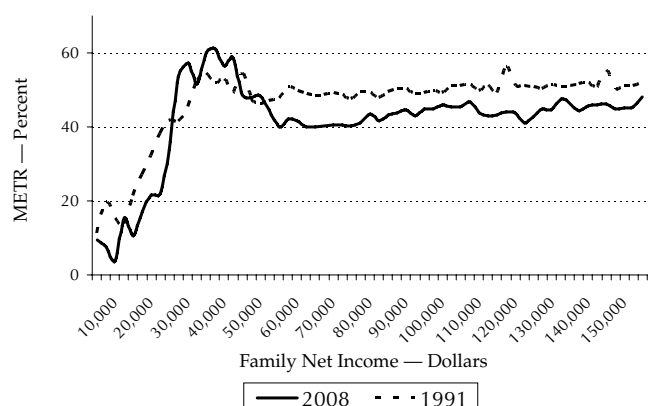
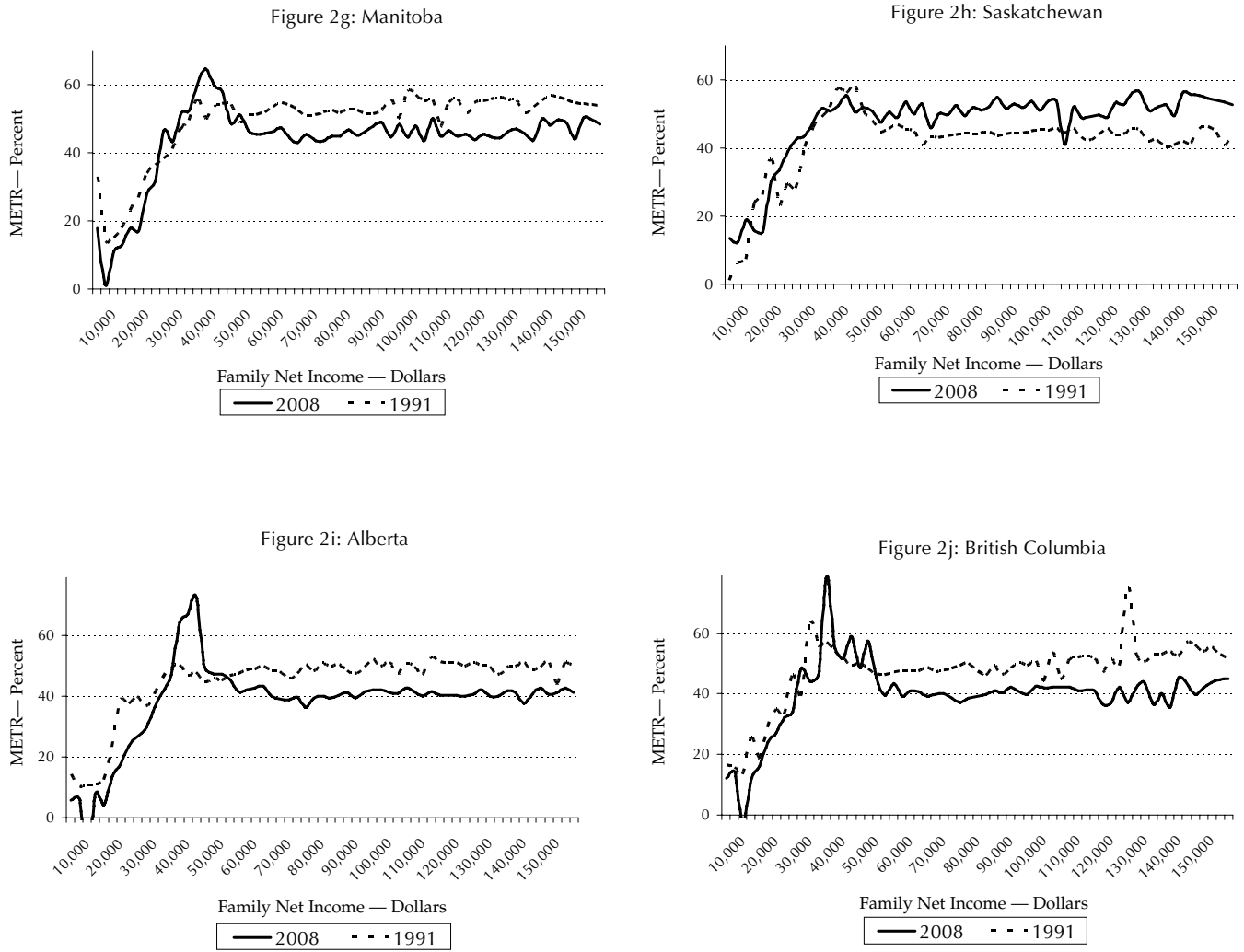


Figure 2e: Quebec



Figure 2f: Ontario



**Figure 2 (cont'd):** Marginal Effective Tax Rates for Families with Children, 1991 and 2008 (by province)

Source: Author's calculations, Statistics Canada Social Policy Database and Model, Release 15.0.

extraordinarily high METRs applied to families in the \$28,000-to-\$38,000 income range, with effective tax rates for most families exceeding 70 percent, and in some cases exceeding 100 percent.<sup>7</sup> In fact, if these METR estimates took account of losses of income-tested, in-kind benefits, such as access to child and dental-care services or public transit passes at low or no cost, many low-income families would be seen to derive negative returns from paid work.

<sup>7</sup> See Duclos et al. (2006) for a detailed study of the Quebec case, including documentation of the circumstances that produced METRs higher than 100 percent.



---

## Why High Marginal Rates Matter

Economists tend to concern themselves with METRs because low or negative returns to paid work reduce the incentive to take on paid work. Returns matter on the margin — the decision whether to take on additional work or invest in skills upgrading — and net returns affect the decision to work at all. That creates a long-term issue, because low income (and the low education that tends to travel with it) are inter-generationally transmitted. And that makes METRs a poverty reduction problem.

Many antipoverty activists reject concern over METRs, by saying for example that most people in fact do want to work, that people see rising incomes as connected to success in the workplace rather than reliance on public benefits, and that once they are engaged in fulltime work the impact of high METRs is small. Moreover, on this line of argument, Canada's child benefits are adjusted only with a lag, as family income changes, and the impact shows up not in a weekly paycheque but in later changes in federal benefits received directly in a bank account. Further, it is argued, this explains individuals' muted response to poor aftertax returns to generating extra income.

While the foregoing arguments are reasonable, they are impressionistic. Work such as Davies (1998) and Poschmann (1999) draws on empirical studies of labour market responses to tax-rate changes to derive estimates of the social welfare loss created by work disincentives. Such studies find that tax rates do affect labour market activity on the margin, especially for secondary earners with loose labour force attachment (Blundell et al., 1998). Individuals' labour market contributions do respond to real changes in their incomes, and this matters for broader social policy because increasing employment is a critical strategy in reducing poverty (Richards, 2007 and Eissa and Hoynes, 2005).

The bottom line is that METRs matter, particularly when they are very high over large income ranges, and empirical evidence suggests as much. Furthermore, individuals do understand the rewards and penalties built into our tax and transfer system, and from an equity perspective, it seems clear that tax and transfer policy should support individuals' labour market efforts, rather than penalize them.

## What to do

If high METRs matter, the next question is what to do about them.

Richards and Poschmann (2000) recommended a nonrefundable tax credit of \$2,000 per child, modeled after the dependants' amount that disappeared in 1992. Our reasoning was that a nonrefundable credit delivered at least some recognition that the cost of raising families should be delivered through the tax system in a nontargeted manner, hence providing support to families without putting upward pressure on METRs. This proposal was adopted in the 2007 federal budget.

We also recommended in 2000 that the reduction rate applied to child benefits be limited to 10 percent. If the income threshold that triggered the reduction rate was simultaneously lowered, federal costs could at the time have been limited to about \$0.8 billion. That cost would now be no larger, and would parallel the lowering of marginal tax rates enjoyed by most Canadians. There is a tradeoff,

---

however, that deserves recognition. Lowering the reduction rate would mean that more families were exposed to it, because their eligibility for benefits would run out more slowly as their income rose. The predicted net impact on social welfare is uncertain.

Richards (2007) took a close look at in-work benefits, exemplified by the Working Income Tax Benefit introduced in the 2007 federal budget, which restored the link between rising earned incomes and rising (instead of falling) benefits for very low income earners. Richards came to the conclusion that while the program likely offered positive net benefits for Canada, further expansion and revision should be undertaken by the provinces, who would tune the program to suit regional labour-market needs and could do a better job of quickly delivering benefits so that they felt more like wages.

Robson et al. (2008) raised the possibility of expanding the basic amount of the federal working supplement by about 50 percent, at a cost of roughly \$500 million per year. The reasoning was that an increased maximum for the working income benefit would extend the income range over which the benefit was phased in, meaning better marginal incentives for more entrants to the labour force, and for existing beneficiaries who took on extended hours of work. Raising the amount of the benefit would also have the effect of slightly increasing the range over which it was phased out (risking a net increase in METRs over the phase-out range).

## **Concluding Comments**

What emerges from the foregoing is that there are no magic resolutions to the problem of high METRs on Canadians of modest income. There are equity tradeoffs in benefit design. The desire to deliver meaningful cash benefits to families who need them bumps against the fiscal necessity of income-testing those benefits, thereby raising effective tax rates on low-income families. And there are economic efficiency tradeoffs. Higher benefits that increase the rewards to work for low-income earners raise the METR on slightly higher-income workers, creating perverse work incentives for them.

What is certain is that the growth of otherwise beneficial cash transfers to low-income families has prevented them from sharing in the full benefits of federal and provincial tax relief that governments have delivered to other families, particularly families without children.

And what governments must do, for the moment, is not make matters worse. Every family benefit need not be income-tested. The federal and provincial

---

---

governments should continue efforts to reform their transfer programs so that benefit phase-outs do not stack one on the other, and ensure that future reforms result in falling effective tax rates on low-income families.

## References

- Blundell, Richard, Alan Duncan and Costas Meghir. 1998. "Estimating Labor Supply Responses Using Tax Reforms." *Econometrica*. Econometric Society, vol. 66(4), pp 827-862, July.
- Davies, James B. 1998. *Marginal Tax Rates in Canada: High and Getting Higher*. C.D. Howe Institute Commentary 103.
- Duclos, Jean-Yves, Bernard Fortin, and Andree-Anne Fournier. 2006. « Une Analyse des Taux Marginaux Effectifs d'Imposition au Quebec. » CIRPEE Working Paper No. 06-27 Available at SSRN: <http://ssrn.com/abstract=923633>.
- Eissa, Nada, and Hilary Hoynes. 2005. "Behavioural Responses to Taxes: Lessons from the EITC and Labour Supply." NBER Working Paper 11729. Cambridge, MA: National Bureau of Economic Research.
- Poschmann, Finn. 1999. "Growing Child Benefits, Growing Tax Rates." C.D. Howe Institute Backgrounder.
- Poschmann, Finn and John Richards. 2000. *How to Lower Taxes and Improve Social Policy: A Case of Eating Your Cake and Having It Too*. C.D. Howe Institute Commentary 136.
- Richards, John. 2007. *Reducing Poverty: What has Worked, and What Should Come Next*. C.D. Howe Institute Commentary No. 255.
- Robson, William B.P., Finn Poschmann, Robin Banerjee, Colin Busby and Benjamin Dachis. 2008. "Steering Through Turbulence: The Shadow Federal Budget for 2008." C.D. Howe Institute Backgrounder.
-

## NOTES

## NOTES

## NOTES

## Recent C.D. Howe Institute Publications

- February 2008 Busby, Colin and William B.P. Robson. "Off the Mark: Canada's 2008 Fiscal Accountability Ranking." C.D. Howe Institute Backgrounder 112.
- Février 2008 Busby, Colin and William B.P. Robson. « Objectifs manqués : le classement 2008 de la responsabilité fiscale au Canada. » C.D. Howe Institute / Institut C.D. Howe, Bulletin de recherche.
- February 2008 Busby, Colin. "After the Oil Rush: A Blueprint for Alberta's Long-term Happiness." C.D. Howe Institute e-brief.
- February 2008 William B.P. Robson and Finn Poschmann, with Robin Banerjee, Colin Busby and Benjamin Dachis. "Steering Through Turbulence: The Shadow Federal Budget for 2008." C.D. Howe Institute Backgrounder 111.
- February 2008 Johnson, David. *School Grades: Identifying British Columbia's Best Schools*. C.D. Howe Institute Commentary 258.
- January 2008 Laidler, David. "Fixing the Exchange Rate: Still a Bad Idea." C.D. Howe Institute e-brief.
- January 2008 Robson, William B.P. "Safe Harbours: Providing Protection for Canada's Money-Purchase Plan Sponsors." C.D. Howe Institute Backgrounder 110.
- December 2007 Robson, William B.P. "Time and Money: The Challenge of Demographic Change and Government Finances in Canada." C.D. Howe Institute Backgrounder 109.
- December 2007 Chen, Duanjie. "Flaherty's Missed Opportunity." C.D. Howe Institute e-brief.
- December 2007 Guillemette, Yvan. "Chronic Rigidity: The East's Labour Market Problem and How to Fix It." C.D. Howe Institute e-brief.
- December 2007 Kotowski, Maciej. *Insuring Canada's Exports: The Case for Reform at Export Development Canada*. C.D. Howe Institute Commentary 257.
- December 2007 Koning, John-Paul. "Why the Bank of Canada Act Needs Updating: A Lesson from the Sub-Prime Crisis." C.D. Howe Institute e-brief.
- November 2007 Jaccard, Mark. *Designing Canada's Low-Carb Diet: Options for Effective Climate Policy*. Benefactors Lecture 2007.
- November 2007 Banerjee, Robin. "Deals on Wheels: An Analysis of the New Federal Auto Feebate." C.D. Howe Institute Backgrounder 108.
- November 2007 Freedman, Charles, and Clyde Goodlet. *Financial Stability: What It Is and Why It Matters*. C.D. Howe Institute Commentary 256.
- November 2007 Guillemette, Yvan, and William B.P. Robson. "Realistic Expectations: Demographics and the Pursuit of Prosperity in Saskatchewan." C.D. Howe Institute Backgrounder 107.
- October 2007 Macmillan, Kathleen E., and Patrick Grady. "A New Prescription: Can the BC-Alberta TILMA Resuscitate Internal Trade in Canada?" C.D. Howe Institute Backgrounder 106.
- October 2007 Richards, John. *Reducing Poverty: What has Worked, and What Should Come Next*. C.D. Howe Institute Commentary 255.
- October 2007 Guillemette, Yvan. "Breaking Down Monopolies: Expanding Choice and Competition in Education." C.D. Howe Institute Backgrounder 105.
- September 2007 Mintz, Jack M. *The 2007 Tax Competitiveness Report: A Call for Comprehensive Tax Reform*. C.D. Howe Institute Commentary 254.
- September 2007 Chen, Duanjie, Jack Mintz and Andrey Tarasov. "The High-Tax Handicap: How the World's Major Economies Shoot Themselves in the Foot with High Corporate Income Tax Rates." C.D. Howe Institute e-brief.
- September 2007 Johnson, David. "School Grades: Identifying Alberta's Best Public Schools." C.D. Howe Institute Backgrounder 104.
- August 2007 Vaillancourt, Francois, Dominique Lemay and Luc Vaillancourt. "Laggards No More: The Changed Socioeconomic Status of Francophones in Quebec." C.D. Howe Institute Backgrounder 103.
- août 2007 Vaillancourt, François, Dominique Lemay and Luc Vaillancourt. « Le français plus payant : L'évolution du statut socio-économique des francophones au Québec. » Institut C.D. Howe, Bulletin de recherche 103.
- August 2007 Robson, William B.P. "Stuck on a Spoke: Proliferating Bilateral Trade Deals are a Dangerous Game for Canada." C.D. Howe Institute e-brief.

**C.D. Howe Institute**  
67 Yonge Street  
Toronto, Ontario  
M5E 1J8

Canadian Publication Mail Sales  
Product Agreement #40008848