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### **The Impact of the National Child Benefit Supplement on the Low Income Status of Canadian Families with Children: The SPSD/M Results**

Report Prepared by the Centre for the Study of Living Standards

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## **The Impact of the National Child Benefit on the Low Income Status of Canadian Families with Children: The SPSD/M Results**

### **Abstract**

This report presents the results of a number of simulations with the Social Policy Simulation Database and Model (SPSD/M) of National Child Benefit (NCB) rules, isolating the impact of these rules on low-income or poverty rates and gaps in Canada. According to the after-tax LICO, now the most widely reported measure of low income or poverty, the national poverty rate for economic families with children – after the provincial clawback of the NCB supplement (NCBS) from social assistance recipients and the provincial re-investment in cash or income-support programs (excluding in-kind programs) are factored in – fell 4.6 per cent between 1996 and 1999 because of the introduction of the NCBS. The drop in the poverty gap was even greater: 8.7 per cent. Under the rules set to be in place by 2004, the decline in the after-tax LICO poverty rate is projected to be 11.8 per cent and that in the poverty gap 18.0 per cent relative to the rate and gap that would have prevailed in the pre-NCBS world. The improvement in the economic well-being of low-income families with children would be even larger if the impact of provincial in-kind programs financed by the NCBS through the social assistance clawback were included.

# **The Impact of the National Child Benefit on the Low Income Status of Canadian Families with Children: The SPSD/M Results**

## **Executive Summary**

On July 1, 1998, the federal, provincial (excluding Quebec), and territorial governments introduced the National Child Benefit, which provided a supplement to the basic child benefit to Canadian families with low incomes. One of the goals of this initiative was to reduce the depth of poverty suffered by children in Canada. The objective of this report is to evaluate the impact of this program on the low-income status of families with children in Canada. This report presents the results of a number of simulations run by Statistics Canada for the Centre for the Study of Living Standards (CSLS) with the Social Policy Simulation Database and Model (SPSD/M) on different child benefit regimes, isolating the impact of these rules on low-income rates and gaps.

The report is divided into six parts. Section one examines trends in child poverty in Canada in the 1990s. Section two discusses the motivation and nature of the National Child Benefit. Section three outlines the 14 scenarios that have been developed for the purposes of the impact analysis. Section four analyzes the impact of the introduction of the National Child Benefit Supplement (NCBS) under 1999 and 2004 rules for three measures of the low-income or poverty rate and gap for all economic families with children and separately for single-parent and two-parent families. The fifth section summarizes the main findings and the final section concludes.

The main findings on the impact of the NCBS on poverty in Canada are highlighted below.

- The impact of the changes in the child benefits, primarily the establishment of the NCBS, on the low-income or poverty rate, expressed in terms of percentage points, is quite consistent across the three measures of low income. The difference between the scenarios based on 1996 and 1999 rules (including clawback and reinvestment) ranges from -0.6 to -0.8 points and between the scenarios based on 1996 and 2004 rules from -1.3 to -1.8 points. In per cent terms, the impact is inversely proportional to the level of the poverty or low-income rate. It is highest for the after-tax LIM, which has the lowest poverty rate, and lowest for the before-tax LICO, which has the highest poverty rate.
- The impact of the NCBS on the low-income gap is always greater than on the low-income rate, expressed in percentage terms.
- In terms of the overall effect of the NCBS relative to the 1996 base, around one half of the impact on the low-income rate and gap is realized by 1999, with the other half to be realized between 1999 and 2004.

- The impact of the NCBS in terms of the per cent change in the poverty rate and poverty gap appears to be somewhat greater for two-parent families than for single-parent families, reflecting the lower poverty levels for this family type.

The policy objectives of the NCBS include both the reduction in the poverty rate of families with children in Canada and, more importantly, the decrease in the depth of poverty for these families. The results of the simulations thus suggest that such a reduction was achieved by 1999, and will be even greater by 2004.

According to the after-tax LICO, now the most widely reported measure of low income or poverty, the national poverty rate for economic families with children – after the provincial clawback of NCBS from social assistance recipients and the provincial re-investment in cash or income-support programs (excluding in-kind programs) are factored in – fell 4.6 per cent between 1996 and 1999 because of the introduction of the NCBS. The drop in the poverty gap was even greater: 8.7 per cent.

Under the rules set to be in place by 2004, the after-tax LICO rate is projected to fall 11.8 per cent and the poverty gap 18.0 per cent relative to the rates and gap that would have prevailed in the pre-NCBS world. The improvement in the economic well-being of low-income families with children would be even larger if the impact of provincial in-kind programs financed by the NCBS through the social assistance clawback were included.

Given the amount of resources devoted to the NCBS, these declines in the poverty rate and gap for families with children are not surprising. Indeed, they would have been even greater if a larger portion of NCBS funds went to the poor, although the reasons this is not the case – the use of net income and the income of only the two parents (excluding the income of other family member) for NCBS eligibility – are legitimate in the eyes of many. Poverty can indeed be reduced by transferring money to the poor, as has been seen with the strong downward trend in poverty for the elderly in Canada in recent decades due to the introduction of the GIS and CPP. The impact of the NCBS on the labour market behaviour of families with children is more difficult to predict.

While the National Child Benefit Supplement has been successful in achieving its objective of reducing child poverty, the impact of changes in other social programs such as social assistance and employment insurance has not been as positive. Indeed, these policy changes appear to have more than offset the impact of the NCBS on poverty. This may account for the limited decline in the poverty rate in the 1990s despite the strong economic growth in the latter part of the decade.

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# **The Impact of the National Child Benefit on the Low Income Status of Canadian Families with Children: The SPSD/M Results<sup>1</sup>**

## **Introduction**

On July 1, 1998, the federal, provincial (excluding Quebec), and territorial governments introduced the National Child Benefit (NCB), which provided a supplement (NCBS) to the basic child benefit to Canadian families with low incomes. One of the goals of the initiative was to reduce the rate and depth of poverty suffered by children in Canada. The objective of this report is to evaluate the impact of this program on low-income status of families with children in Canada. This report presents the results of a number of simulations run by Statistics Canada for the Centre for the Study of Living Standards (CSLS) with the Social Policy Simulation Database and Model (SPSD/M) on different child benefit regimes, isolating the impact of these rules on low-income rates and gaps. The SPSD/M is described in Exhibit 1.

The report is divided into six parts. Section one examines trends in child poverty in Canada in the 1990s. Section two discusses the motivation and nature of the National Child Benefit. Section three outlines the 14 scenarios that have been developed for the purposes of the impact analysis. Section four analyzes the impact of the introduction of the National Child Benefit under 1999 and 2004 rules for three measures of the low-income or poverty rate and gap for all economic families with children and separately for single-parent and two-parent families. The fifth section summarizes the main findings and the final section concludes.

## **Trends in Child Poverty in Canada**

Child poverty has increased significantly in Canada in the 1990s. In 1989, the proportion of Canadian children living below the poverty line, defined in terms of the after-tax Low Income Cutoff or LICO, was 11.8 per cent (Chart 1). With the recession and slow recovery of the early and mid-1990s, the child poverty rate rose to a peak of 16.8 per cent in 1996. The solid economic growth of the late 1990s produced an improvement, with child poverty dropping to 13.9 per cent by 1998 and 13.7 per cent in 1999, the most recent year for which data are available. It is likely that child poverty dropped in 2000 with the robust economic growth of 4.4 per cent that year, but the

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<sup>1</sup> This study was conducted by the Centre for the Study of Living Standards (CSLS) for the Social Policy Branch of Human Resources Development Canada (HRDC). The CSLS would like to thank HRDC officials Jérôme Mercier, Gary Bagley, and especially Yves Gingras for their support and assistance with this project. In addition, the CSLS would like to thank Brian Murphy and his team at Statistics Canada for their exemplary work with the SPSD/M, without which this report would not have been produced. The study was written by Andrew Sharpe with assistance from Jeremy Smith and Lynne Browne.



magnitude of the decline is very uncertain.<sup>2</sup> The poverty rate at the end of the decade was thus still nearly 2 per cent age points greater than in 1989.

The trend in the number of children in poverty has mirrored the evolution of the overall child poverty rate (Chart 2). It rose from 786 thousand in 1989 to a peak of 1,186 in 1996, before decreasing to 978 thousand in 1998 and 962 thousand in 1999, still well above the 1989 figure. In absolute terms, the number of children in poverty living in two-parent families is slightly greater than the number in lone-parent families. But the poverty rate for two-parent families is around one fifth that of lone-parent families (Chart 3). In 1999, the poverty rate for the former was 7.3 per cent compared to 36.9 per cent for the latter. Within lone-parent families, families headed by a woman had 2-3 times as high a poverty rate as families headed by a man. Like the number of children in poverty, the number of families in poverty is roughly equally divided between two-parent families and lone-parent families (Chart 4).

A key determinant of poverty is the number of earners in a family. Families with no earners, whether lone parent or two-parent, have much higher poverty rates than families with earners (Chart 5). For example, in 1999 the poverty rate for lone-parent families with no earners was 86.9 per cent and two-parent families with no earners 77.4 per cent. In contrast, the rate for lone-parent families with one earner was 32.5 per cent. For two-parent families with one earner the poverty rate was 19.1 per cent, falling dramatically to 3.7 per cent with two earners.

The average income gap represents the difference between the income level at the poverty threshold and the average income level for households with income below the threshold. In 1989, for two parent families with children the gap was \$7,019, expressed in 1999 dollars (Chart 6). It was \$5,646 for lone-parent families. The gap for both family types rose in the first half of the 1990s, declining during the second part of the decade. By 1999, the gap in absolute terms was slightly below the 1989 level (\$6,904 for two-parent families and \$5,569 for lone-parent families).<sup>3</sup>

## **The National Child Benefit Supplement**

The issue of child poverty was high on the political agenda in Canada in the 1990s, and continues to be today.<sup>4</sup> This political interest was manifested when the House of Commons in 1989 unanimously passed a resolution for the government to undertake

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<sup>2</sup> In 1999, the child poverty rate fell only 0.2 percentage points despite real GDP growth of 5.1 per cent and a 0.7 percentage point decline in the unemployment rate. In contrast, in 1998 the child poverty rate fell a much greater 2.1 points even though the improvements in economic conditions were comparable (3.9 per cent real GDP growth and a 0.8 point fall in the unemployment rate).

<sup>3</sup> If the real value of the poverty threshold increased over the 1989-99 period, the relative income gap (the gap as a proportion of the poverty threshold) would not have declined.

<sup>4</sup> See, for example, the September 17, 2001 cover story in *Maclean's* on child poverty in Canada (McClelland, 2001).

measures to eliminate child poverty by 2000. This in part explains why during the fiscal retrenchment of the 1990s, the federal government chose to allocate additional resources and develop new programs to alleviate child poverty. This issue was and is a national priority.

The National Child Benefit (NCB) is a partnership between federal, provincial and territorial governments to improve the well-being of children in low-income families.<sup>5</sup> The three goals of the NCB are: 1) to help prevent and reduce the depth of child poverty; 2) to promote attachment to the labour market by ensuring that families will always be better off as a result of working;<sup>6</sup> and 3) to reduce overlap and duplication by harmonizing program objectives and benefits and simplifying administration. It is the evaluation of the attainment of the first of the three objectives that is the focus of this report.

The NCB achieves its goals by assisting parents move from welfare into the labour market and by helping low-income parents already in the labour market to stay there. It provides financial assistance to low-income working families and enhanced benefits and services tailored to the needs of all low-income families. The NCB includes increased federal income support to Canadian families, called the National Child Benefit Supplement (NCBS), and provincial, territorial, and First Nations reinvestments and investment in programs and services.

As part of the NCB, the federal government on July 1, 1998 began to provide the NCBS to all low-income families, in addition to the basic child benefit already being received from the federal government (the basic child benefit and the NCBS together are called the Canada Child Tax Benefit or CCTB). This provides a basic level of income support for children whether their parents are employed or receiving social assistance. In return, most provinces and territories have reduced the level of income support they provide children through social assistance while making sure the cash benefits to those families are at least as high as they were before the NCB was introduced. The provincial and territorial governments have committed themselves to reinvest all savings from their reduced social assistance costs in new and enhanced benefits and services for low-income families with children.

Under the NCB, when families leave welfare for employment they no longer lose that portion of their welfare benefits that went to cover the cost of raising children, which is now provided by the NCBS outside the social assistance system. The rationale for the introduction of the NCBS was thus to break down the “welfare wall,” that is the financial

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<sup>5</sup> This section draws on the National Child Benefit Progress Report: 2000 (Federal/Provincial/Territorial Ministers Responsible for Social Services, 2001).

<sup>6</sup> This attachment of low-income families to the labour market is valued for both financial and social reasons. For example, Kornberger, Fast and Williamson (2001) find that children from working poor families had slightly higher levels of verbal development than children from welfare-dependent families and that these developmental differences were only partially attributable to differences in home and family characteristics of the two groups.

barrier represented by the benefits for their children that welfare families lost when they made the transition from social assistance to employment.<sup>7</sup>

Thus the process of federal increases in the NCBS and the provincial adjustment to social assistance (i.e. the clawback) is integral to the restructuring of child benefits that the NCB initiative is bringing about. Through this process of federal increases and provincial adjustments, child benefits provided through the welfare system are being displaced by a national platform of income tested child benefits.

These income-tested child benefits (the CCTB and the provincial/territorial income-tested child benefits) are portable from social assistance to work. Before implementation of the NCB, parents leaving social assistance for work often faced the loss of important benefits for their children. This served as a disincentive to entering the labour force. These income-tested child benefits are also less stigmatizing than child benefits delivered through the welfare system.

For the 12 months running from July 1, 1998 to June 30, 1999, the federal government allocated \$1.1 billion to the NCB supplement. The allocation to the Working Income Supplement (WIS), the program the NCB supplement replaced, was \$0.5 billion in 1997-98 and \$0.3 billion in 1995-96 and 1996-97. Since the NCB supplement was introduced in 1998-99, the expenditures have been progressively increased, rising to \$1.5 billion in 1999-2000, \$1.9 billion in 2000-01 and are forecast at \$2.5 billion in 2001-02 (Federal/Provincial/Territorial Ministers Responsible for Social Services, 2002:33). Expenditures on the base child benefit have also risen, from \$2.6 billion in 1998-99 to \$2.7 billion in 1999-00, \$2.8 billion in 2000-01 and forecast to increase to \$3.1 billion in 2001-02.

Total expenditures for both the NCB supplement and the basis benefit are determined by a number of factors, including statutory benefits per child and income cut-off levels or thresholds, the rate of inflation, demographic and migration trends affecting the number of children, and economic growth, which affects real income levels.

The rules used for the calculation of the CCTB are complex. From July 1, 2000 to June 30, 2001, the basic benefit of the CCTB was calculated for children in all provinces and territories, except Alberta, as follows (Government of Canada, 2001):

- \$92 a month for each child under 18; plus
- \$6.41 a month for each third and additional child; plus
- \$18.25 a month for each child under the age of seven, with this amount reduced by 25 per cent of any amount claimed for child care expenses; and

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<sup>7</sup> For discussion of the motivation behind the NCBS, see Battle (1997a and 1997b), Battle and Mendelson (1997) and Battle and Torjman (1993).

- for families with net income greater than \$30,004, the benefit is reduced by 2.5 per cent for a one-child family and 5 per cent for families with two or more children.

The National Child Benefit Supplement in 2000-2001 was calculated as follows:

- \$81.41 a month for the first child;
- \$64.25 for the second child;
- \$57.83 for each additional child; and
- for families with net income more than \$21,214, the NCBS is reduced 11.1 per cent for a one-child family, 19.9 per cent for a two-child family, and 27.8 per cent for families with more than two children.

Based on the above rules, a family with two children between 7 and 17 with net income less than \$21,214 in 2000-01 received \$329.66 per month or \$3,955.92 per year. This represented a minimum of 18.6 per cent of net income.

The increased total spending for the NCB supplement and the base benefit represents a substantial increase in child benefits for poor families. For example, the maximum federal child benefit (Canada Tax Benefit and Working Income Supplement) in 1996-97 for a family with one child was \$1,520. In 2001-02, the benefits increased 56 per cent to \$2,372. For a family with two children the increase was even larger – 79 per cent from \$2,540 to \$4,544. It was even larger still for families with more than two children: 85 per cent for three children from \$3,635 to \$6,719 and 88 per cent for four children from \$4,730 to \$8,894.

As noted above, the provinces and territories have used the funds clawed back from social assistance recipients to provide additional income support and social services for poor families. The value of the cash or income-support of these reinvestments was \$291 million in 1999-00, rose to \$321 million in 2000-01, and is estimated at \$379 in 2001-02. (Appendix Table 1). These cash reinvestments represented 72.2 per cent of the value of the NCB reinvestments in 1999-00, 63.2 per cent in 2000-01, and an estimated 69.2 per cent in 2001-02. In addition, under the NCB initiative, the provinces and territories allocated, over and above their reinvestments, additional resources for child programs. These new funds totaled \$84 million in 1999-00, \$85 million in 2000-01, and an estimated \$118 million in 2001-02 (Appendix Table 1).

## **Definitions of the Scenarios**

A total of 14 scenarios based on different rules for child benefits have been defined. The rules run from July 1 to June 30 of a particular year, but they have been applied to the calendar year in which July 1 falls since SPSPD/M is on a calendar year

basis. These rules are provided in Appendix 2. They were first applied to the Canadian population structure as it is estimated for 1997 in the SPSD/M. The year 1997 was the most recent base year for the SPSD/M at the time these simulations were conducted. The tax and transfer system in place in 1997, as well as the 1997 real income levels and income distribution are implicit in the simulations.

The rules were also applied to the estimated population in 2004, with projections used for the size and age distribution of the population and the size of the economy and real income levels. The tax/transfer system in 2004 used in these simulations is based on the most recent rules or changes announced for 2004. The income distribution for 2004, however, is assumed identical to that in 1997. Consequently, a total of 28 scenarios were run, 14 based on the 1997 population, real income, and tax/transfer system; and 14 based on the projected 2004 population, real income, and tax/transfer system.

It is important to acknowledge that the simulations are static in nature and ignore any effect that the NCB may have on labour market behaviour. Thus, the dynamic effects of the NCB in terms of providing incentives for workers with children to stay in low-paying jobs and for persons on welfare to seek employment are not captured. Neither are other non-labour market behavioural responses to receiving the NCB captured, such as: a greater willingness to report income since low-income recipients face a reduced welfare wall and so likely a reduced effective marginal tax rate; and possible changes in decisions regarding family formation and dissolution, child support by absent parents, and fertility, which could impact either favourably or unfavourably the number of children in low income.

It is also important to note the incomplete coverage of social assistance (SA) benefits in household surveys such as the SCF and SLID.<sup>8</sup> The underreporting of SA benefits results in an overestimation of the number of low-income working families and therefore could upwardly bias estimates of the impact of the NCBS.

This also means it is very difficult to model transitions off and onto SA in the SPSD/M. It can be assumed that if an individual receives SA at some point during the year, she receives it for 12 months of the year. However, recent work<sup>9</sup> suggests that this assumption is not realistic. To address this problem monthly adjustments have been made by Statistics Canada, using SA caseload information provided by the provinces of Alberta, Saskatchewan, Manitoba, Ontario and Newfoundland and Labrador. These data have allowed Statistics Canada to better assess the impact of the NCB on a monthly basis thus avoiding the assumption that recipients receive SA for the entire year.

The first three of these scenarios (no child benefits; rules in 1977, the last year of the Family Allowance before the introduction of the child tax benefit and only tax deductions for children; and the rules in 1992 with the Family Allowance with recovery/Child Tax Credit/dependent tax credits) are useful for an historical analysis of the

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<sup>8</sup> Kapsalis (2001) concludes that the rate of underreporting of SA on the SLID is about 50 per cent.

<sup>9</sup> See Barrett and Cragg (1998), Duclos, Fortin and Roberge (1998) and Ross (2000), for example.

evolution of the child benefits system in Canada, but are not relevant for analyzing the impact of the NCBS on low-income. Consequently, they will not be discussed in this document. The results from these scenarios may be obtained by contacting the CSLs.

Scenario 4 is defined as the Canada Child Tax Benefit (CCTB) base on July 1, 1996, two year before the NCBS was introduced on July 1, 1998. This benefit goes to a high proportion of families with children on a sliding scale basis. The year 1997 was one of transition to the NCBS and therefore not appropriate as a benchmark year.<sup>10</sup> In this scenario the value of the CCTB has been indexed to inflation to preserve its 1996 real value. According to SPSD/M, the total value of this benefit for the 1997 calendar year, expressed in 1997 dollars and based on 1997 population, income distribution, and tax/transfer system, was \$4,825 million. This assumption means that some of the enrichment of the NCBS is “eaten away” through indexation relative to a scenario with no indexation.

Scenario 5 is defined as the CCTB in place on July 1, 1996 plus the WIS. Like scenario 4, the value of child benefits in this scenario has been indexed to inflation to preserve its 1996 real value. According to SPSD/M, the total value of this benefit for the 1997 calendar year, expressed in 1997 dollars and based on 1997 population, income distribution, and tax/transfer system, was \$240 million. With the CCTB, total child benefits were thus \$5,064 million. This scenario is particularly important for the analysis in this document as it represents the level of federal child benefits before the introduction of the NCBS in 1998. It thus serves as one of the two base or reference cases for the impact analysis of the introduction of the NCBS on low income in 1999.

A second assumption is that the child benefits are not indexed between 1996 and 1999, losing part of their real value. This assumption is incorporated in scenario 14. As CPI inflation averaged only 1.5 per cent per year from 1996 to 1999, or 4.5 per cent over the total period, the difference between the scenarios in terms of the value of the CCTB and WIS are small, although not insignificant. The value of the CCTB is now \$4,442 million (versus \$4,823 million in scenario 5) and the WIS \$212 million (versus \$240 million in scenario 5), all expressed in 1997 dollars.<sup>11</sup>

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<sup>10</sup> The Working Income Supplement (WIS) was a lump-sum payment going to working families. In 1997, as part of the transition to the new system, the WIS was restructured, with maximum benefits increasing from \$500 per family to \$605 for the first child, \$405 for the second, and \$330 for each additional child.

<sup>11</sup> The ratio of the values under the two scenarios exceed the inflation rate between 1996 and 1999 for the following reasons. Except for a few WIS recipients, all same size families already in receipt of benefits will receive the same increase, equal to the dollar increase in the maximum benefit. Families who had been in receipt of the maximum will then realize an increase equal to the inflation rate, but almost all of the other families who had been in receipt of reduced benefits will then experience a greater percentage increase. Also, the income inflexion points (thresholds) of the NCBS and of the WIS were also indexed, resulting in further per cent increases for families affected by the movements in these inflexion points. Finally, it is also possible that some families would qualify for some benefits due to indexation, while they would not have been qualified without it.

HRDC and Finance officials have indicated they believe this is the most realistic assumption. While recognizing that it is difficult to speculate on what might have happened between 1996 and 1999, they believe it is not unreasonable to assume that in the absence of the introduction of the NCBS in 1998, there would not have been an indexation of child tax benefits before the year 2000, at which point full indexation of the fiscal system was reinstated.

This scenario is particularly important for the analysis in this document as it represents the level of federal child benefits before the introduction of the NCBS in 1998. It thus serves as the second base or reference case for the impact analysis of the introduction of the NCBS on low income in 1999.

Scenario 6 is the first of three scenarios for the child benefit rules in place on July 1, 1999. It includes the CCTB and the NCBS paid by the federal government based on the 1997 population, income distribution, and tax/transfer system. It is important to note that the CCTB was not indexed between 1996 and 1999, losing around 5 per cent of its real value. For this reason, the value of the CCTB in the 1999 scenarios is less than in the indexed 1996 scenario. Under this scenario, the CCTB totaled \$4,441 million (compared to \$4,823 million in 1996) and the NCBS \$1,194 million, indicating that total child benefits paid by the federal government were \$5,635 million. All values are expressed in 1997 dollars. The replacement of the WIS by the NCBS and changes to the CCTB base meant that the value of total federal child benefits based on 1999 rules was \$571 million or 11.3 per cent greater than the regime based on 1996 rules. This reflected the replacement of the WIS by the NCBS, offset somewhat by the erosion in the real value of the CCTB because of a lack of indexation.

The introduction of the NCBS on July 1, 1998 was a joint federal, provincial and territorial initiative. A key objective of the NCBS is to dismantle the welfare wall and make it more worthwhile for persons on welfare to seek work by increasing child benefits for the working poor. Social assistance (SA) recipients would no longer lose the component of their welfare cheque that was meant to cover the expenses of raising children. Most provincial governments reduced or clawbacked a proportion of welfare payments to offset the increased benefits welfare families received from the federal government arising from the introduction of the NCBS.

Scenario 7 is defined as the CCTB and NCBS paid by the federal government based on the rules of July 1, 1999 (basically the same as scenario 6) minus the amount of the NCBS clawed back from social assistance recipients by provincial and territorial governments. The amount clawed back by provincial government was \$309 million from provincial social assistance and \$167 million from provincial family programs, or a total of \$476 million. This represents 39.7 per cent of the value of the NCBS under the 1999 rules in scenario 7 (\$1,199 million), 49.6 per cent of the value the NCBS net of the WIS in scenario 5 (\$959 million), and 82.5 per cent of the total increase (CCTB plus NCBS) in federal child benefits between the 1996 (CCTB plus WIS in scenario 5) and 1999 (CCTB plus NCBS in scenario 7) rules (\$577 million).

As part of the joint initiative of Canada's federal, provincial and territorial governments, provincial and territorial governments agreed to use all funds recovered from social assistance recipients to provide additional income support benefits for working families with children or non-cash benefits for poor families with children in general. These provincial income support or cash reinvestment programs in place on July 1, 1999 have been modeled and incorporated into scenario 8.

The value of these new programs was \$340 million, using as a base the value of provincial family programs in scenario 7 (\$1,023 million) with the SA clawback (the value of the cash reinvestments is \$173 million when before-clawback scenario 6 is used as the base). The net decline in the value of provincial social assistance and family programs between the no clawback and no reinvestment scenario 6 (\$13,752 million) and the clawback and reinvestment scenario 8 (\$13,595 million) is \$157 million. The discrepancy between the value of the clawback (\$476 million) and the increase in income support programs for poor families with children financed by the NCBS (\$340 million) is in principle accounted for by increases in non-cash programs for poor families with children. These benefits cannot at this time be incorporated into the SPSD/M.

Five scenarios have been developed with child benefit rules for 2004. Again, these rules were being applied to the Canadian population as it is estimated for 1997 (not 2004) in the SPSD/M. The tax and transfer system in place in 1997, as well as the income distribution in 1997 are also again implicit in the simulations. The first of these scenarios, scenario 9, is defined at the mature CCTB or base benefit only, valued at \$5,470 million, expressed in 1997 dollars. This represents an increase of 13.4 per cent in real terms relative to the CCTB in place in 1996.

The second scenario for 2004, scenario 10, is defined as the mature CCTB base with the indexed WIS. The value of the WIS was \$154 million, down from \$240 million under 1996 rules in scenario 5. This scenario can be considered the most relevant base case for comparing child benefits under the NCBS in 2004.

The third scenario for 2004, scenario 11, is defined at the mature CCTB and the NCBS with neither clawback nor recovery of social assistance or cash reinvestment programs. Under 2004 rules, the value of the NCBS is \$2,141 million, 79.3 per cent more than under 1999 rules, reflecting the enrichment of the benefit. The value of the CCTB is virtually unchanged from scenario 10 at \$5,467 million (versus \$5,468 million in scenario 10), making the value of total child benefits \$7,608 million.

Scenario 12, the fourth scenario with 2004 rules, is defined as the CCTB and NCBS paid by the federal government based on the rules of July 1, 2004 (basically the same as scenario 11) minus the amount of the NCBS clawed back from social assistance recipients by provincial and territorial governments. The amount clawed back by provincial government was \$431 million from provincial social assistance and \$240 million from provincial family programs, or a total of \$671 million. This represents 31.3 per cent of the value of the NCBS under the 2004 rules (\$2,141 million in scenario 11), 33.8 per cent of the value the NCBS net of the WIS (\$1,987 million), and 26.4 per cent of



the total increase of \$2,544 million in federal child benefits between the 1996 rules (CCTB plus WIS in scenario 5) and 2004 rules (CCTB and NCBS in scenario 11).

Scenario 13, the fifth scenario under 2004 rules incorporates the provincial income support or cash reinvestment programs expected to be in place on July 1, 2004. The value of these new programs was \$257 million, using as a base the value of provincial family programs in scenario 12 with the SA clawback (the value is only \$17 million when before-clawback scenario 11 is used as the base). The non-indexation of these programs between 1999 and 2004 may account for the decline in their real value. The net decline in the value of provincial social assistance and family programs between the no clawback and no reinvestment scenario 11 and the clawback and reinvestment scenario 13 is \$420 million. The discrepancy between the value of the clawback (\$671 million) and the increase in income support programs for poor families with children (\$257 million) is in principle accounted for by increases in non-cash programs for poor families with children. These benefits cannot at this time be incorporated into the SPSD/M.

## **The Impact of the NCBS on Low Income<sup>12</sup>**

### Definitions of low income

According to Statistics Canada (2000:122), low income cutoffs (LICOs) are established using data from the Survey of Household Spending. They convey the income level at which a family may be in straitened circumstances because it has spent a greater proportion of its income on necessities than the average family of similar size (44 per cent on an after-tax basis and 35 per cent on a before-tax basis in 1992). Specifically, the threshold is defined as the income below which a family is likely to spend 20 percentage points more of its income on food, shelter and clothing than the average family. There are separate cutoffs for seven sizes of family – from unattached individuals to families of seven or more persons – and for five sizes of area of residence – from rural areas to urban areas with a population of more than 500,000.

LICOs are calculated on both a pre-tax or money income and an after-tax basis. Starting with data for 1998, Statistics Canada has chosen to highlight the after-tax rate for two reasons. First, income taxes and transfers are essentially two methods of redistribution. Thus, the before-tax rates only partly reflect the entire redistributive impact of Canada's tax/transfer system by including the effect of transfers but not the effect of income taxes. Second, since the purchase of necessities is made with after-tax dollars, it is logical to use people's after-tax income to draw conclusions about their overall economic well-being.

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<sup>12</sup> An earlier set of estimates from this study that did not take into account the average duration of spells families remain on social assistance was used in Appendix 4 of the 2001 National Child Benefit Progress Report (Federal, Provincial and Territorial Ministers Responsible for Social Services, 2002). The impacts of the NCBS on poverty are somewhat larger in this version of the study.

Statistics Canada also produces a third low income definition called the Low Income Measure (LIM). Unlike the LICOs, it is a purely relative measure of poverty or low income. It is defined as the proportion of households with income below one half median equivalent household income.

In this report, all three definitions or concepts of low income are used: the before-tax LICO, the after-tax LICO, and the after-tax Low Income Measure (LIM). Persons or households with equivalent income below these thresholds are defined as low income. The three definitions of low income have been applied to both the incidence of low income or the low income rate, and to the depth or deficiency of low income or the low income gap.

A large number of groups use Statistics Canada LICO estimates as a de facto definition of poverty. The LICOs do not represent Statistics Canada's view of how poverty should be measured (Statistics Canada has in fact no official definition of poverty as poverty is a concept that is judgmental or subjective in nature). But, as noted by Chief Statistician Ivan Fellegi (*Income in Canada*, Statistics Canada, 2000:125), Statistics Canada has no quarrel with groups who wish to use the LICOs as poverty measures if these groups believe the LICOs correspond in their own considered opinion to how poverty should be defined in Canada. In this document, the terms low income and poverty will be used interchangeably.

The poverty measures derived from the income levels calculated from the SPSD/M for 1999 are similar but not identical to those published by Statistics Canada for 1999 based on the SLID. For example, for the after-tax LICO the poverty rate for persons under 18 based on the SLID was 13.7 per cent while that for all families with children was 14.5 per cent, based on scenario 8 from SPSD/M, which corresponds the closest to what actually happened in 1999. The variation does not reflect differences in the definitions of the poverty measures, but rather in the data sources used (SCF for the SPSD/M and SLID for Statistics Canada measures) and in the fact that the SPSD/M results for 1999 are based on simulations.

#### Results based on 1999 rules and 1997 population and tax/transfer system

Table 1 provides estimates of the number of families receiving federal child benefits, the average benefits per family, and low income rates and gaps for economic families with children for 1997 for the three low income measures for child benefit regimes based on two 1996 and three 1999 sets of rules or benefits. The first set of rules (number 1 or scenario 5) is that in place on July 1, 1996, indexed to preserve its real 1996 value for comparison with scenarios based on 1999 rules.

Under this scenario, a total of 3,162 thousand families in Canada received federal child benefits in 1996 and the average value of the benefits per family was \$1,602 (\$1997). The low-income rate was 18.4 per cent for the before-tax LICO, 15.2 per cent for the after-tax LICO, and 11.6 per cent for the after-tax LIM. The lower rate for the after-tax LICO relative to the before-tax LICO reflects the progressive nature of the

income tax system. Some families that are low income before taking taxes into account are relatively better off and not low income on an after-tax basis. The lower rate for the LIM relative to the two LICO measures reflects the fact that one half equivalent median income, the threshold for the LIM, is lower than the thresholds for the two LICO measures.

The size of the income gap also follows the pattern for the three low income rates, falling from \$6,313 million, expressed in 1997 dollars, for the before-tax LICO to \$3,722 million for the after-tax LICO, to \$2,072 million for the after-tax LIM.

The impact on changes in the child benefits system on low-income is modeled as the difference between the low income estimates under a new or shock set of rules and the base case or benchmark or control set of rules. The impact of a lack of indexation of child benefits between 1996 and 1999 on low income, the second base case, can be seen comparing scenario 14 with scenario 5 (2 with 1 in Table 1). Without indexation, the low income rate is 0.1 percentage points higher for the before-tax LICO and 0.2 percentage points higher for both the after-tax LICO and after-tax LIM. The low-income gap ranges from \$38 million to \$82 million greater. This is not a large difference in absolute terms, but it can be important for the analysis of differences in differences. For those who feel that there would have been some indexation in child benefits over this period if the NCBS had not been introduced, scenario 5 may be a more appropriate benchmark for impact calculations.

Table 2, calculated from Table 1, provides the impact or shock minus control results of the introduction of the NCBS on the number of families receiving federal child benefits, average benefits and low income rates and gaps for the three low income measures under 1999 child benefit rules for three scenarios. There are two base cases, that is the indexation base case or scenario 5 and the non-indexation base case or scenario 14. The first is the CCTB plus WIS in 1996, with the value of benefits indexed to maintain its real value. The second is the unindexed 1996 value of the CCTB plus the WIS.

The introduction of the NCBS, combined with the erosion of the real value of the CCTB between 1996 and 1999, would have reduced by 1999 the before-tax LICO 0.6 percentage points relative to the rate under child benefit levels in 1996. The reduction for the after-tax LICO was greater (1.0 points), and for the after-tax LIM even more (1.6 points). The introduction of the NCBS reduced the low income gap by \$614 million under the before-tax LICO, \$512 million for the after-tax LICO, and \$426 million under the after-tax LIM. Since the absolute size of the gap declines as one moves from the before-tax LICO to the after-tax LICO to the after-tax LIM, the per cent decline in the low income gap actually increases, going from 9.7 per cent for the before-tax LICO to 13.8 per cent for the after-tax LICO to 20.6 per cent for the after-tax LIM. The average value of federal child benefits increased \$220 relative to benefits received in 1996.

These results, of course, exclude the impact of the recovery of social assistance and the cash reinvestment programs on low income. Obviously, the clawback on SA from

welfare recipients reduces significantly the impact of the NCBS on low income, as seen in a comparison of the difference between scenario 7 and 5 relative to the difference between scenario 6 and 5. For the before-tax LICO, the impact of the NCBS on low income falls to 0.3 points from 0.6 points, for the after-tax LICO to 0.4 points from 1.0 points, and for the after-tax LIM to 0.4 points from 1.6 points. There are comparable absolute and relative declines for the low-income gap.

The inclusion of the new provincial cash reinvestment or income support programs financed by the SA clawback offsets some, but generally not all, of the negative impact of the SA clawbacks on the poverty-reduction effects of the NCBS, as seen in Table 2 (scenario 8 minus 5). The impacts on the low income rates and gaps for five of the six measures are between the results without clawback and reinvestment and the results with clawback of SA.

This difference between scenarios 8 and 5 (5-1 in Table 2) is the most important impact for evaluating the CCTB as it captures the complete dynamics of the CCTB, the introduction of the benefit by the federal government, the clawback of social assistance by provincial governments, and the introduction of new income support programs for families with children by provincial governments. The impact on the poverty rate ranges from 0.6 points for the before-tax LICO to 0.8 points for the after-tax LIM, or 3.3 per cent to 6.9 per cent. The after-tax LICO impact is 4.6 per cent (Chart 7). The impact on the poverty gap ranges from 6.3 per cent for the before-tax LICO to 12.1 per cent for the after-tax LIM. The after-tax LICO poverty gap impact is 8.7 per cent (Chart 7).

The results based on the non-indexation reference case (second part of Table 2) differ somewhat from the results based on the indexation case. The after-tax LICO poverty rate now falls 5.8 per cent instead of 4.6 per cent and the poverty gap 10.3 per cent instead of 8.7 per cent. The increase in federal child benefits per family is now \$318, not \$221, representing a 21.1 per cent increase, compared to only 13.8 per cent in the indexation scenario. This is a significant difference.

Appendix Table 2 includes estimates of the three poverty rates and gaps under the 1999 rules for two types of families with children under 18, that is single adult or parent families and two or more adult families. Because of conceptual and data problems in the SPSD/M associated with the definitions and coding of family type, these results may be less reliable than the results for all economic families. Consequently, they should be interpreted with some caution. Appendix Table 3 provides the impact of the NCBS on poverty by family type. As noted earlier, the poverty rate for single parent families is over four times that of two-parent families (Chart 3).

In percentage point terms, the impact of the NCBS on the poverty rate is greater for single-parent families than for dual-parent families, given the much higher poverty rates for the former. But in per cent terms, the impacts are greater for dual-parent families. For example, the impact on the after-tax LICO rate of the introduction of the NCBS in scenario 8 relative to the base case (scenario 5) for families headed by a single parent is 1.3 percentage points, compared to only 0.6 points for families with two parents.

But because of the much higher poverty for the former, the per cent impacts are 3.0 per cent and 5.8 per cent respectively (Chart 7).

The per cent impacts of the introduction of the NCBS on the absolute poverty gap are also greater for dual-parent families. For the after-tax LICO under scenario 8 with both clawback and reinvestment programs, the poverty gap falls 7.4 per cent for single-parent families compared to a 9.5 per cent decline for dual-parent families with children. Thus, the poverty-reducing effects of the introduction of the NCBS appear to be somewhat greater for two-parent families than single parent families with children.

The results obtained in this report are similar to those in the recently released 2001 National Child Benefit Progress Report issued by federal/provincial/territorial Ministers responsible for social services. Based on an analysis of the impact on the NCBS using the SLID data base, that report found that the pre-tax LICO low-income rate fell 0.4 percentage points and the low-income gap 6.5 per cent in 1999 relative to a situation where the NCBS had not been introduced. This compares with estimates of 0.6 percentage points and 6.3 per cent respectively found in this study (Table 2). For the post-tax LICO measures, the results were even more similar: 0.7 percentage points for both reports and 9.0 per cent for the progress report versus 8.7 per cent for this report.

#### Results based on 2004 rules and 1997 population and tax/transfer system

Table 3 provides estimates of the number of families receiving federal child benefits, average benefits, and low income rates and gaps for economic families with children under the population structure and tax/transfer system of 1997 for the three low income measures for child benefit regimes based on what would have been the mature CCTB with the indexed WIS in 2004 (scenario 10) and three 2004 sets of NCBS rules or benefits.

Again, the impact on changes in the child benefits system on low-income is modeled as the difference between the low income estimates under a new or shock set of rules and the base case or benchmark or control set of rules. Table 4, calculated from Table 3, provides the impact or shock minus control results of the introduction of the NCBS on low income rates and gaps for economic families with children in Canada for the three low income measures under 2004 child benefit rules for three scenarios. Again, the base case is scenario 10, that is, the mature CCTB plus the indexed 1996 WIS.

The introduction of the NCBS by itself by 2004 would have reduced the before-tax LICO 1.5 percentage points relative to the rate under child benefit levels in 1996, as seen from scenario 11. The reduction for the after-tax LICO was greater (2.3 points), and for the after-tax LIM even more (2.7 points). The introduction of the NCBS reduced the low income gap by \$1,204 million (\$1997) under the before-tax LICO, \$971 million under the after-tax LICO, and \$716 million under the after-tax LIM. Since the absolute size of the gap declines as one moves from the before-tax LICO to the after-tax LICO to the after-tax LIM, the per cent decline in the low income gap actually increases, going

from 18.9 per cent for the before-tax LICO to 25.8 per cent for the after-tax LICO to 34.0 per cent for the after-tax LIM.

These results of course exclude the impact of the recovery of social assistance and the cash reinvestment programs on low income. Obviously, the clawback of SA benefits from welfare recipients reduces significantly the impact of the NCBS on low income, as seen in a comparison of the difference between columns one and two in Table 4 (scenario 11 minus scenario 10 compared to scenario 12 minus scenario 10). For the before-tax LICO, the impact of the NCBS on low income falls to 1.0 points from 1.5 points, for the after-tax LICO to 1.5 points from 2.3 points, and for the after-tax LIM to 1.3 points from 2.7 points. There are comparable absolute and relative declines for the low income gap.

The inclusion of the new provincial cash reinvestment or income support programs financed by the SA clawback offsets some, but generally not all, of the negative impact of the SA clawbacks on the poverty-reduction effects of the NCBS, as seen in column 3 of Table 4 (scenario 13 minus scenario 10). The impacts on the low income rates and gaps for the six measures are between the results without clawback and reinvestment and the results with clawback of SA.

This difference between scenario 13 and 10 (column 3 in Table 4) is the most important impact for evaluating the NCBS as it captures the complete dynamics of the NCBS, the introduction of the benefit by the federal government, the clawback of social assistance by provincial governments, and the introduction of new income support programs for families with children by provincial governments. The impact on the poverty rate ranges from 1.3 points for the before-tax LICO to 1.6 points for the after-tax LIM to 1.8 points for the after-tax LICO. In percentage terms, these declines were 7.0 per cent, 13.6 per cent, and 11.8 per cent respectively. The impact on the poverty gap ranges from 13.2 per cent for the before-tax LICO, to 18.0 per cent for the after-tax LICO, to 23.0 per cent for the after-tax LIM.

Appendix Table 4 includes estimates of the three poverty rates and gaps under the 2004 rules for two types of families with children under 18, that is single adult or parent families and two or more adult families. Appendix Table 5 provides the impact of the NCBS on poverty by family type. Again, the percentage impact tends to be somewhat higher for two-parent families.

#### Results based on 2004 population and tax/transfer system

The most recent version of the SPSD/M at the time these simulations were run was based on the actual 1997 population structure and tax/transfer system. The SPSD/M can also be run with a projected population structure and tax/transfer system. Consequently, the same set of simulations has been run for the age structure, tax transfer system, and real income levels projected to exist in 2004. The income distribution is however assumed the same as in 1997. Appendix Table 6 shows these results and Appendix Table 7 the impacts for the 1999 rules, while Appendix Table 8 shows the results and Appendix Table 9 the impacts for the 2004 rules.

The two LICO poverty rates are 3-4 percentage points lower under 2004 demographic and economic projections than under the actual 1997 population, real income levels and tax/transfer system while the LIM poverty rate is virtually identical. This difference is accounted for by the fact that LICO poverty measures are partly absolute in nature, with real income growth reducing poverty while the LIM is a relative poverty measure, with real income growth having no effect on the poverty rate when the distribution of income is unchanged. Real income levels are assumed to grow significantly in the 1997-2004 period.

More importantly, the impact of the introduction of the NCBS on poverty rates and gaps is not greatly affected by the shift to 2004 demographic and economic projections from the actual 1997 values for these variables. As there is uncertainty associated with these projections, the analysis in this report will be restricted to the simulations based on the actual values of the underlying demographic, fiscal, and economic variables in 1997.

#### Impact of the NCBS on average child benefits received and number of families receiving benefits

Table 5 provides estimates of the average child benefits received for families receiving benefits and the number of economic families receiving benefits for a number of scenarios using 1999 and 2004 rules under the 1997 population and tax/transfer system by family type. The introduction of the NCBS under 1999 rules increased the real value of benefits for single parent families receiving benefits relative to the base scenario 5 (indexed 1996 child benefit rates) an average 33.3 per cent from \$1,804 to \$2,405 (1997 dollars). When the unindexed base is used the increase becomes 40.0 per cent. The increase for dual-parent families was only 5.8 per cent in the indexed scenario, but rises to 16.2 per cent in the unindexed scenario. Under 2004 rules, the value of the child benefits for single-parent families rises to \$3,065 (1997 dollars), a 69.9 per cent increase relative to the base scenario. For two parent families under 2004 rules, it is \$1,806 (1997 dollars), a 45.3 per cent increase.

The number of single parent families with children receiving child benefits under 1996, 1999, and 2004 rules is stable. In the base scenario for 1996 with the CCTB and WIS indexed to maintain their value in 1999, 552 thousand families received child benefits. This actually dropped to 550 thousand in the three scenarios based on 1999 rules, and then rose to 556 thousand under 2004 rules. This situation implies that the NCBS is supplementing the incomes of single-parent families who already receive child benefits, and is not going to families who do not already receive benefits.

The situation for two-parent families is somewhat different. In the base scenario for 1996 with the CCTB and WIS indexed to maintain their value in 1999, 2,648 thousand families received child benefits. This dropped 2.6 per cent to 2,543 thousand in the three scenarios based on 1999 rules, and then rose 11.5 per cent to 2,911 thousand under 2004 rules. This increase under 2004 rules implies that the NCBS is going to a

significant number of families (300 thousand) who previously did not receive child benefits.

### Proportion of NCBS funds going to persons in poverty

It appears that only a relatively small proportion of the additional resources that the federal government has devoted to the child benefits program will actually go to the poor. Relative to the 1996 rules in scenario 5 (CCTB plus WIS indexed to maintain its real 1996 value), federal child benefits increase by \$2,544 million under the 2004 rules (scenario 11). Yet the decline in the before-tax LICO income gap for economic families with children is \$1,154 million, indicating that only 45.4 per cent went to families below the before-tax LICO. The proportion is even smaller for the other two measures of low-income – 36.8 per cent for the after-tax LICO and 26.9 per cent for the after-tax LIM.

This situation reflects a number of factors, outlined below:

- a significant part of the overall increase in child benefits between the 1996 and 2004 rules is the increase in the basic benefit (\$644 million) which goes to a high proportion of all families with children and most of these families are above the poverty line;
- the NCBS goes to many families above the low-income cut-off because of the use of net income as the income definition for benefit determination (in contrast, gross income is used in the calculation of both the LICO and LIM measures);
- the use of the income of census families (which includes the income of adult children and others adults in the household) for determination of low-income rates while the income of only the two parents (nuclear family) is used to determine eligibility for the child benefit – this means that the NCBS is going to families with medium or even high incomes in cases where these incomes are not earned by the two parents; and
- the decline in the poverty gap and hence proportion of the NCBS going to poverty reduction is much less between scenario 5 and scenario 12 (i.e. the scenario with the clawback of the NCBS going to social assistance recipients by most provincial governments) and also less between scenario 5 and scenario 13 (clawback and reinvestment of cash provincial programs), although this scenario fails to include in the low-income measures the non-cash benefits of provincial family support programs financed in part by the clawback.

## **Summary Observations on Results**

This section provides a number of summary observations on the impact of the NCBS on poverty in Canada.



- The impact of the changes in the child benefits, primarily the establishment of the NCBS, on the low-income or poverty rate, expressed in terms of percentage points, is quite consistent across the three measures of low income. The difference between the scenarios based on 1996 and 1999 rules (including clawback and reinvestment) ranges from -0.6 to -0.8 points and between the scenarios based on 2004 and 1996 rules from -1.3 to -1.8 points. In per cent terms, the impact is inversely proportional to the level of the poverty or low-income rate. It is highest for the after-tax LIM, which has the lowest poverty rate, and lowest for the before-tax LICO, which has the highest poverty rate.
- The impact of the NCBS on the low-income gap is always greater than on the low-income rate, expressed in percentage terms. For the before-tax LICO, the per cent impact on the low-income gap is about twice that on the low-income rate under both 1999 and 2004 rules; for the after-tax LICO, the impact was around 67 per cent greater for the gap under 1999 rules and 40 per cent greater under 2004 rules; for the after-tax LIM, the impact was at least 50 per cent greater for the gap under 1999 and 2004 rules.
- In terms of the overall effect of the NCBS relative to the 1996 base, around 40 per cent of the impact on the low-income rate and gap is realized by 1999, with the other 60 per cent realized between 1999 and 2004, at least for the after-tax LICO.
- The impact of the NCBS in terms of the per cent change in the poverty rate and poverty gap is generally somewhat greater for two-parent families than for single-parent families.

## Conclusion

The policy objectives of the NCBS include both the reduction in the poverty rate of families with children in Canada and, more importantly, the decrease in the depth of poverty for these families. The results of the simulations reported on in this paper suggest that such a reduction was achieved by 1999, and will be even greater by 2004.

According to the after-tax LICO, now the most widely reported measure of low income or poverty, the national poverty rate for economic families with children – after the provincial clawback of NCBS from social assistance recipients and the provincial reinvestment in cash or income-support programs (excluding in-kind programs) are factored in – fell 4.6 per cent between 1996 (indexed benefits levels) and 1999 because of the introduction of the NCBS. The drop in the poverty gap was even greater: 8.7 per cent (Table 2). The impacts are somewhat larger – 5.8 per cent and 10.3 per cent respectively – when 1996 benefits are not indexed.

Under the rules set to be in place by 2004, the decline in both the poverty rate and the gap, relative to what would have prevailed under the pre-NCBS rules, is expected to be significantly greater than has occurred by 1999. The after-tax LICO rate is projected to

fall 11.8 per cent and the poverty gap 18.0 per cent relative to the rates and gap that would have prevailed in the pre-NCBS world (Table 4). The improvement in the economic well-being of low-income families with children would likely be even larger if the impact of provincial in-kind programs financed by the NCBS through the social assistance clawback were included.

Given the amount of resources devoted to the NCBS, these declines in the poverty rate and gap for families with children are not surprising. Indeed, they would have been even greater if a larger portion of NCBS funds went to the poor, although the reasons this is not the case – the use of net income and the income of only the two parents (excluding the income of other family member) for NCBS eligibility– are legitimate in the eyes of many. Poverty can indeed be reduced by transferring money to the poor, as has been seen with the strong downward trend in poverty for the elderly in Canada in recent decades due to the introduction of the GIS and CPP (Osberg, 2001). The impact of the NCBS on the labour market behaviour of families with children is more difficult to predict. The NCB Working Group is currently having evaluation work undertaken on this issue.

While the National Child Benefit Supplement has been successful in achieving its objective of reducing child poverty, the impact of changes in other social programs such as social assistance and employment insurance has not been as positive. Indeed, these policy changes appear to have more than offset the impact of the NCBS on poverty. This may account for the limited decline in the poverty rate in the 1990s despite the strong economic growth in the latter part of the decade.<sup>13</sup>

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<sup>13</sup> Two major changes in social programs in Canada in the 1990s were the cuts to social assistance and to employment insurance. From 1996 to 1999, Picot et al. (2001) find that average social assistance benefits going to low-income families headed by a person under 65 fell \$523 (1996\$) per family while average EI benefits decreased \$185. In contrast, other benefits, largely child benefits, increased \$436. Overall, average total transfers were down \$271. The decline was less than the \$435 fall per family recorded in the 1993-96 period when social assistance dropped \$266, employment insurance \$229, and other benefits only rose by \$60. In contrast to the post-1993 period, the 1980s and early 1990s saw large increases in total transfers to the poor, reducing the poverty rate. For example, between 1981 and 1989 total transfers to low-income families headed by a person below 65 increased \$979 per family. Between 1988 and 1993 they increased a further \$1,025.

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## Appendix 1

### Description of the SPSD/M

Statistics Canada's Social Policy Simulation Database and Model (SPSD/M) is a tool designed to assist those interested in analyzing the financial interactions of governments and individuals in Canada. The SPSD/M is a static microsimulation model that has been in use by policy analysts in Canada since 1985. It can help one to assess the cost implications or income redistributive effects of changes in the personal taxation and cash transfer system. As the name implies, SPSD/M consists of two integrated parts: a database (SPSD), and a model (SPSM). The SPSD is a non-confidential, statistically representative database of individuals in their family context, with enough information on each individual to compute taxes paid to and cash transfers received from government. The SPSM is a static accounting model which processes each individual and family on the SPSD, calculates taxes and transfers using legislated or proposed programs and algorithms, and reports on the results.

The SPSD was constructed by combining individual administrative data from personal income tax returns and Employment Insurance claimant histories with survey data on family incomes, employment and expenditure patterns. The techniques used to create the database and avoid confidential data disclosure include various forms of categorical matching and stochastic imputation. While no one record on the database contains information for the same individual from the five bases, the database has been constructed in such a way as to provide a micro-statistically representative sample of Canadians.

Certain adjustments have been made to the data that force agreement between data and known control totals. For example, survey weights have been adjusted to ensure that the population by age and sex corresponds to census data, and the number of high income Canadians corresponds to the number reported by Revenue Canada. Further adjustments have been made to compensate for item non-response in the surveys (e.g. to increase the number of families receiving social assistance). It should be noted that the SPSD coverage does not extend to the Yukon or Northwest Territories, persons residing on reservations, or armed forces personnel residing in barracks.

The central program, the SPSM, is a micro-simulation-based model that calculates taxes and transfers for individuals and families as appropriate. These calculations are performed for everyone on the SPSD and then aggregated to obtain estimates. The SPSM is a static impact model and is therefore not intended to simulate how an individual's behaviour is likely to change in response to various policy options. The SPSM is driven by over 750 parameters that control three main processes. The SPSM is written and compiled using the C programming language.

The SPSD/M comes with the necessary algorithms and parameters to simulate the Canadian tax/transfer systems from 1988 to 2005. The tax algorithms simulate all major federal and provincial personal income taxes and payroll taxes. Cash transfers simulated

include all major federal and provincial transfer programs such as Unemployment Insurance Benefits, Old Age Security benefits, Guaranteed Income Supplement benefits, Family Allowance benefits, the Child Tax Credit, the Federal Child Benefit, and the Sales Tax Credit. All algorithms operate on an annualized basis.

## Appendix 2

## Definition of Scenarios

	Base	FA	FA/CTC	CTB96	CTBWIS96	CTBS99	CTBSC99	CTBSCR99	CTB04	CTBWIS04	CTBS04	CTBSC04	CTBSCR04	
Program Element	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>
Family Allowance		X												
Child		X	X											
Deductions/credits														
Child Tax Credit			X											
Child Tax Benefit (Base)				X	X	X	X	X	X	X	X	X	X	X
Working Income Supplement					X					X				
Unindexed Working Income Supplement														X
Child Benefit Supplement						X	X	X			X	X	X	
Clawback/Recovery							X	X				X	X	
Reinvestment								X					X	
2004 NCTB rules									X	X	X	X	X	
CB Rules at July 1, 19XX/20XX		1977	1992	1996	1996	1999	1999	1999	2004	2004	2004	2004	2004	1999

## Scenario Definitions

1. Base year of SPSPD/M with no child benefits (1997)
2. Rules of 1977 Last year of Family Allowance only plus tax deductions for children
3. Rules of 1992 Family Allowance with recovery/Child Tax Credit/dependant tax credits
4. Rules at July 1, 1996 – CCTB base only (same rules apply 1996 through 1999)
5. Rules at July 1, 1996 – CCTB plus WIS
6. Rules at July 1, 1999 – CCTB + NCBS (No re-investment/recovery programs)
7. Rules at July 1, 1999 – CCTB + NCBS with recovery of SA (no cash reinvestment)
8. Rules at July 1, 1999 – CCTB + NCBS with recovery of SA and cash reinvestment programs
9. Rules at July 1, 2004 - Mature CCTB base only (No re-investment/recovery programs)
10. Rules at July 1, 2004 - Mature CCTB base with indexed 1996 WIS (No re-investment/recovery programs)
11. Rules at July 1, 2004 - Mature CCTB + NCBS (No re-investment/recovery programs)
12. Rules at July 1, 2004 - Mature CCTB + NCBS with recovery of SA (No re-investment)
13. Rules at July 1, 2004 - Mature CCTB + NCBS with recovery of SA and cash reinvestment programs
14. Rules at July 1, 1999 – Unindexed CCTB + WIS deflated to 1997\$ (No re-investment/recovery programs)

## Tables in the Text

**Table 1**

### **Low-Income Rates and Gaps with 1997 Population and Tax/Transfer System under 1999 Rules for Child Benefits for Economic Families with Children**

**Scenarios**

1. Rules at July 1, 1996 CCTB plus WIS fully indexed to 1999 (scenario 5 in detailed tables)
2. Rules at July 1, 1996 not indexed to 1999 (scenario 14 in detailed tables)
3. Rules at July 1, 1999 CCTB plus NCBS (no recovery of SA and re-investment) (scenario 6 in detailed tables)
4. Rules at July 1, 1999 CCTB plus NCBS with recovery of SA (no reinvestment) (scenario 7 in detailed tables)
5. Rules at July 1, 1999- CCTB+NCBS with recovery of SA and cash reinvestment programs (scenario 8 in detailed tables)

	1	2	3	4	5
Families receiving federal child benefits (000s)	3,162	3,093	3,093	3,093	3,093
Total federal child benefits (millions of 1997 dollars)	5,064	4,654	5,635	5,641	5,640
Average benefits received per family (1997 dollars)	1,602	1,505	1,822	1,824	1,823
<u>Below before-tax LICO</u>					
low income rate (%)	18.4	18.5	17.8	18.1	17.8
low income gap	6,313	6,395	5,699	6,058	5,914
<u>Below after-tax LICO</u>					
low income rate (%)	15.2	15.4	14.2	14.8	14.5
low Income gap	3,722	3,789	3,210	3,504	3,397
<u>Below after-tax LIM</u>					
low income rate (%)	11.6	11.8	10.0	11.2	10.8
low income gap	2,072	2,110	1,646	1,883	1,822

Note: The gap is expressed in millions of 1997 dollars



**Table 2**

**Shock-Minus-Control Impacts on Low-Income Rates and Gaps with 1997  
Population and Tax/Transfer System under 1999 Rules for Child Benefits for  
Economic Families with Children**

**Scenarios**

1. Reference Case 1: Rules at July 1, 1996 CCTB plus WIS fully indexed to 1999 (scenario 5 in detailed tables)
2. Reference Case 2: Rules at July 1, 1996 not indexed to 1999 (scenario 14 in detailed tables)
3. Rules at July 1, 1999 CCTB plus NCBS (no recovery of SA and re-investment) (scenario 6 in detailed tables)
4. Rules at July 1, 1999 CCTB plus NCBS with recovery of SA (no reinvestment) (scenario 7 in detailed tables)
5. Rules at July 1, 1999- CCTB+NCBS with recovery of SA and cash reinvestment programs (scenario 8 in detailed tables)

**Reference Case Based on Indexation of 1996 Benefits**

	3-1	4-1	5-1
Families receiving federal child benefits (000s)	-69	-69	-69
Federal child benefits per family (1997 dollars)	220	222	221
<u>Below before-tax LICO</u>			
incidence of low income (percentage points)	-0.6	-0.3	-0.6
incidence of low income (per cent)	-3.3	-1.6	-3.3
low income gap (millions of 1997 dollars)	-614	-255	-399
low income gap (per cent)	-9.7	-4.0	-6.3
<u>Below after-tax LICO</u>			
incidence of low income (percentage points)	-1.0	-0.4	-0.7
incidence of low income (per cent)	-6.6	-2.6	-4.6
low income gap (millions of 1997 dollars)	-512	-218	-325
low income gap (per cent)	-13.8	-5.9	-8.7
<u>Below after-tax LIM</u>			
incidence of low income (percentage points)	-1.6	-0.4	-0.8
incidence of low income (per cent)	-13.8	-3.4	-6.9
low income gap (millions of 1997 dollars)	-426	-189	-250
low income gap (per cent)	-20.6	-9.1	-12.1

**Reference Case Based on Non-Indexation of 1996 Benefits**

	3-2	4-2	5-2
Families receiving federal child benefits (000s)	0	0	0
Federal child benefits per family (1997 dollars)	317	319	318
<u>Below before-tax LICO</u>			
incidence of low income (percentage points)	-0.7	-0.4	-0.7
incidence of low income (per cent)	-3.8	-2.2	-3.8
low income gap (millions of 1997 dollars)	-696	-337	-481
low income gap (per cent)	-10.9	-5.3	-7.5
<u>Below after-tax LICO</u>			
incidence of low income (percentage points)	-1.2	-0.6	-0.9
incidence of low income (per cent)	-7.8	-3.9	-5.8
low income gap (millions of 1997 dollars)	-579	-285	-392
low income gap (per cent)	-15.3	-7.5	-10.3
<u>Below after-tax LIM</u>			
incidence of low income (percentage points)	-1.8	-0.6	-1.0
incidence of low income (per cent)	-15.3	-5.1	-8.5
low income gap (millions of 1997 dollars)	-464	-227	-288
low income gap (per cent)	-22.0	-10.8	-13.6

**Table 3****Low-Income Rates and Gaps with 1997 Population and Tax/Transfer System under 2004 Rules for Child Benefits for Economic Families with Children****Scenarios**

1. Rules at July 1, 2004- mature CCTB plus indexed 1996 WIS (scenario 10 in detailed tables)
2. Rules at July 1, 2004- mature CCTB+NCBS without SA recovery and re-investment (scenario 11 in detailed tables)
3. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and no re-investment (scenario 12 in detailed tables)
4. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and re-investment (scenario 13 in detailed tables)

	1	2	3	4
Families receiving federal child benefits (000s)	3,467	3,467	3,467	3,467
Total federal child benefits (millions of 1997 dollars)	5,622	7,608	7,618	7,617
Federal child benefits per family (1997 dollars)	1,622	2,194	2,197	2,197
<u>Below before-tax LICO</u>				
low income rate (%)	18.5	17.0	17.5	17.2
low income gap	6,363	5,159	5,643	5,522
<u>Below after-tax LICO</u>				
low income rate (%)	15.3	13.0	13.8	13.5
low Income gap	3,757	2,786	3,167	3,080
<u>Below after-tax LIM</u>				
low income rate (%)	11.8	9.1	10.5	10.2
low income gap	2,104	1,388	1,674	1,621

Note: The gap is expressed in millions of 1997 dollars

**Table 4**

**Shock-Minus-Control Impacts on Low-Income Rates and Gaps with 1997  
Population and Tax/Transfer System under 2004 Rules for Child Benefits for  
Economic Families with Children**

**Scenarios**

1. Reference Case: Rules at July 1, 2004- mature CCTB plus indexed 1996 WIS (scenario 10 in detailed tables)
2. Rules at July 1, 2004- mature CCTB+NCBS (no SA recovery and re-investment (scenario 11 in detailed tables)
3. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and no re-investment (scenario 12 in detailed tables)
4. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and re-investment (scenario 13 in detailed tables)

	2-1	3-1	4-1
Families receiving federal child benefits (000s)	0	0	0
Federal child benefits per family (1997 dollars)	572	575	575
<u>Below before-tax LICO</u>			
incidence of low income (percentage points)	-1.5	-1.0	-1.3
incidence of low income (per cent)	-8.1	-5.4	-7.0
low income gap (millions of 1997 dollars)	-1,204	-720	-841
low income gap (per cent)	-18.9	-11.3	-13.2
<u>Below after-tax LICO</u>			
incidence of low income (percentage points)	-2.3	-1.5	-1.8
incidence of low income (per cent)	-15.0	-9.8	-11.8
low income gap (millions of 1997 dollars)	-971	-590	-677
low income gap (per cent)	-25.8	-15.7	-18.0
<u>Below after-tax LIM</u>			
incidence of low income (percentage points)	-2.7	-1.3	-1.6
incidence of low income (per cent)	-22.9	-11.0	-13.6
low income gap (millions of 1997 dollars)	-716	-430	-483
low income gap (per cent)	-34.0	-20.4	-23.0

**Table 5**

**Average Child Benefits Received and Number of Economic Families Receiving  
Child Benefits with 1997 Population and Tax/Transfer System under 1999 and 2004  
Rules for Child Benefits for Economic Families with Children**

**Scenarios**

1. Rules at July 1, 1996 CCTB plus WIS fully indexed to 1999 (scenario 5 in detailed tables)
2. Rules at July 1, 1996 not indexed to 1999 (scenario 14 in detailed tables)
3. Rules at July 1, 1999 CCTB plus NCBS (no recovery of SA and re-investment) (scenario 6 in detailed tables)
4. Rules at July 1, 1999 CCTB plus NCBS with recovery of SA (no reinvestment) (scenario 7 in detailed tables)
5. Rules at July 1, 1999- CCTB+NCBS with recovery of SA and cash reinvestment programs (scenario 8 in detailed tables)
6. Rules at July 1, 2004 – mature CCTB base with indexed 1999 WIS (scenario 10)
7. Rules at July 1, 2004- mature CCTB+NCBS (no SA recovery and re-investment) (scenario 11 in detailed tables)
8. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and no re-investment (scenario 12 in detailed tables)
9. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and re-investment (scenario 13 in detailed tables)

**Average Child Benefits Received (1997 dollars)**

	1	2	3	4	5
One adult with children	1,804	1,718	2,405	2,409	2,409
Two+ adults With children	1,243	1,132	1,315	1,316	1,316
	6	7	8	9	
One adult with children	1,824	3,065	3,071	3,071	
Two+ adults With children	1,410	1,806	1,808	1,808	

**Number of Economic Families Receiving Child Benefits (thousands)**

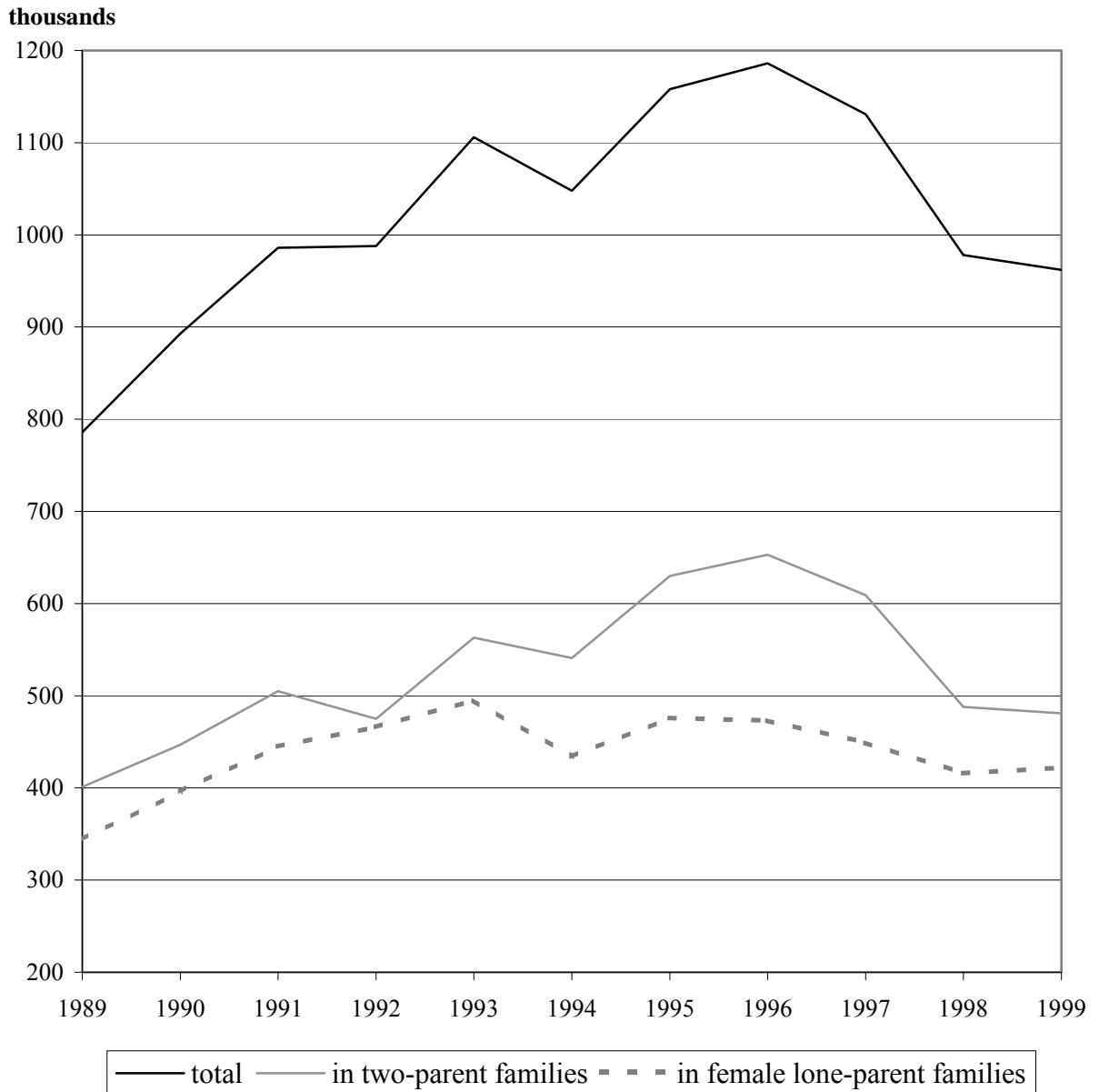
	1	2	3	4	5
One adult with children	552	550	550	550	550
Two+ adults With children	2,611	2,543	2,543	2,543	2,543
	6	7	8	9	
One adult with children	556	556	556	556	
Two+ adults With children	2,911	2,911	2,911	2,911	

**Chart 1**  
**Child Poverty in Canada, 1989-1999**  
(after-tax LICO (1992 base) for persons under 18 years of age)



Source: Table 8.1, Income in Canada, 1998 and 1999.

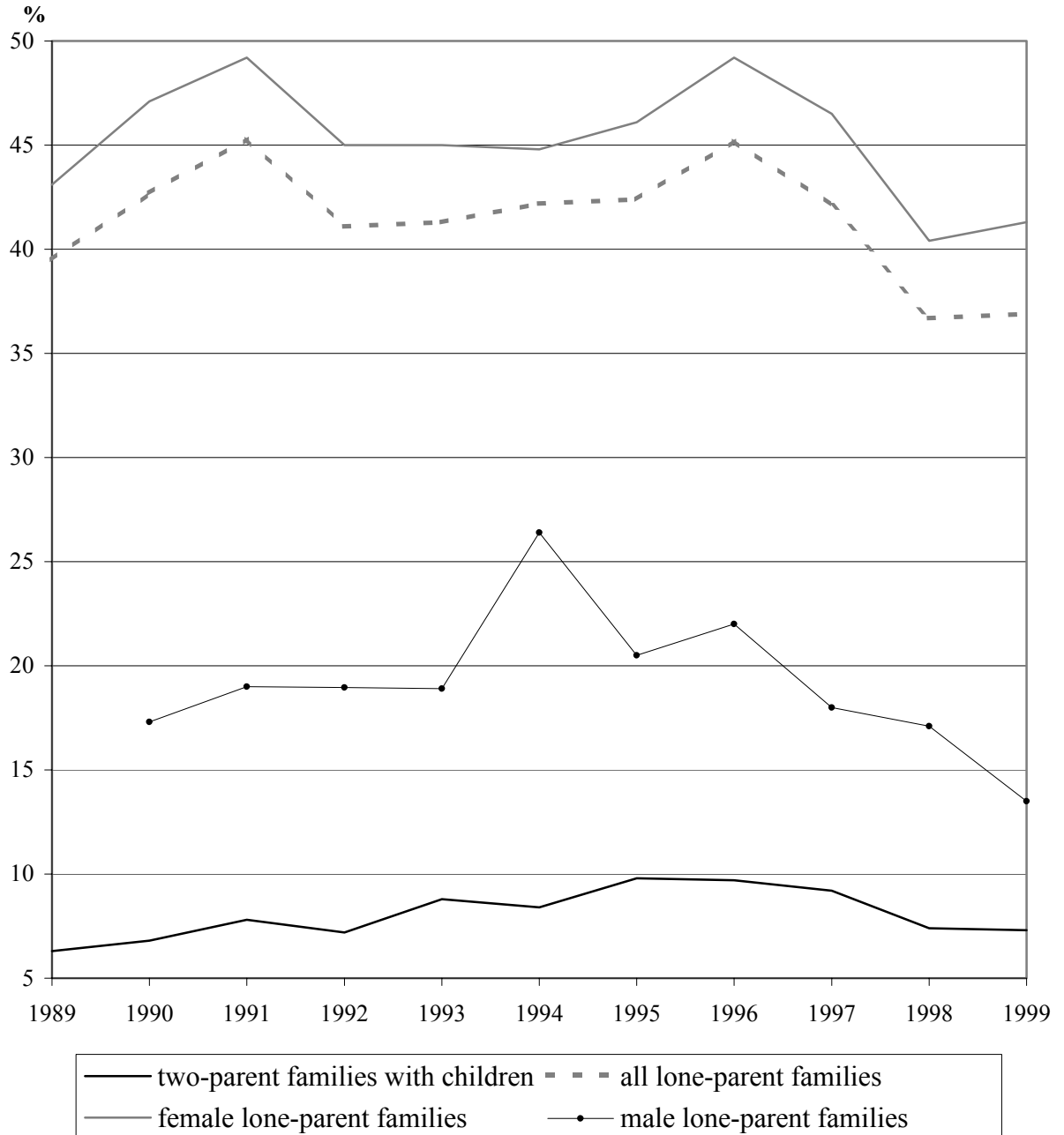
**Chart 2**  
**Number of Children in Poverty in Canada by Family Type, 1989-1999**  
 (after-tax LICO (1992 base) for persons under 18 years of age)



Source: Table 8.1, Income in Canada, 1998 and 1999.



**Chart 3**  
**Poverty Rate by Family Type, 1989-1999**  
 (after-tax LICO, 1992 base)



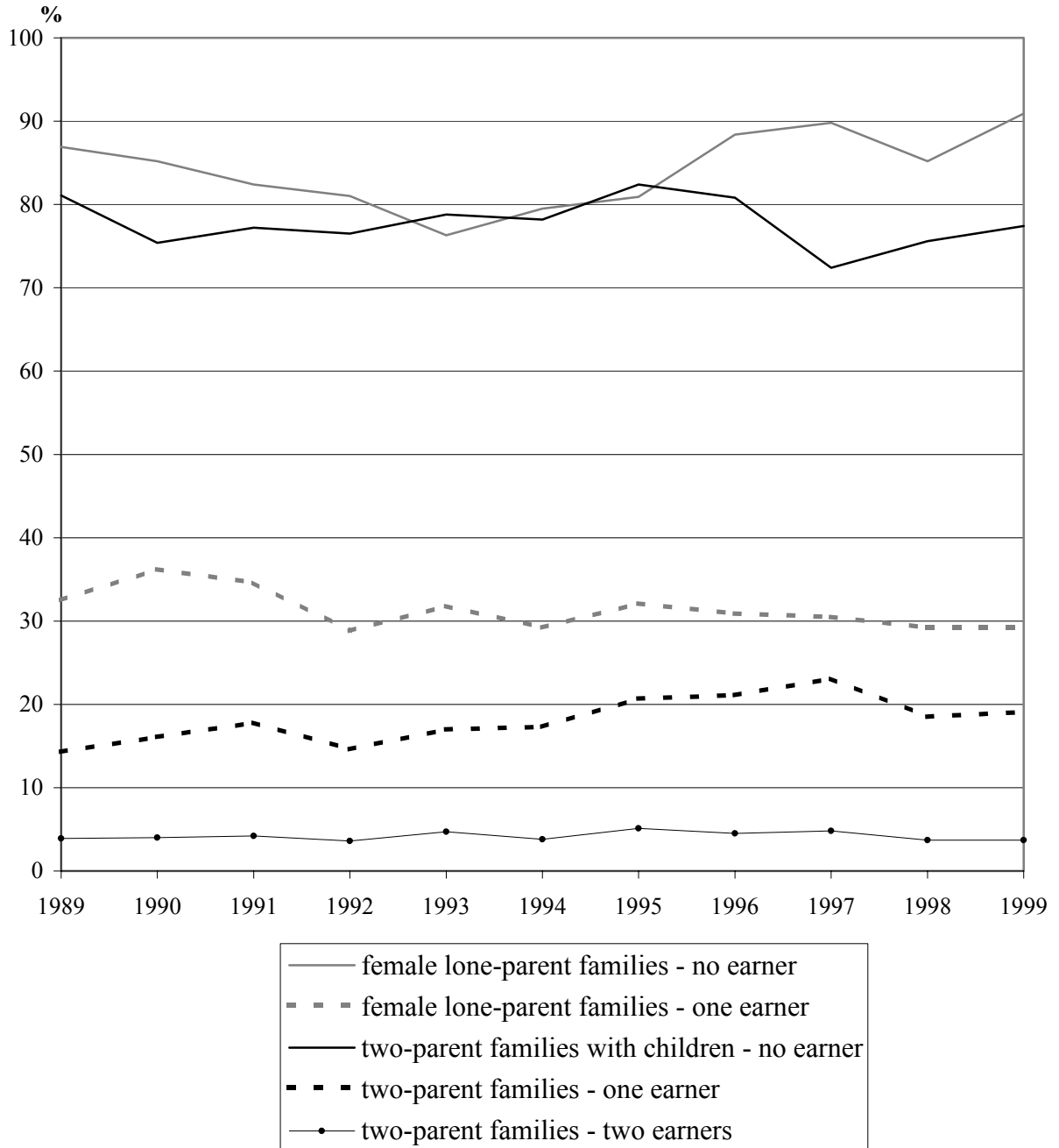
Source: Table 8.3, Income in Canada, 1998 and 1999.

**Chart 4**  
**Number of Families in Poverty by Family Type, 1989-1999**  
 (after-tax LICO, 1992 base)



Source: Table 8.3, Income in Canada, 1998 and 1999.

**Chart 5**  
**Poverty Rate by Number of Earners, 1989-1999**  
 (after-tax LICO, 1992 base)



Source: Table 8.3, Income in Canada, 1998 and 1999.

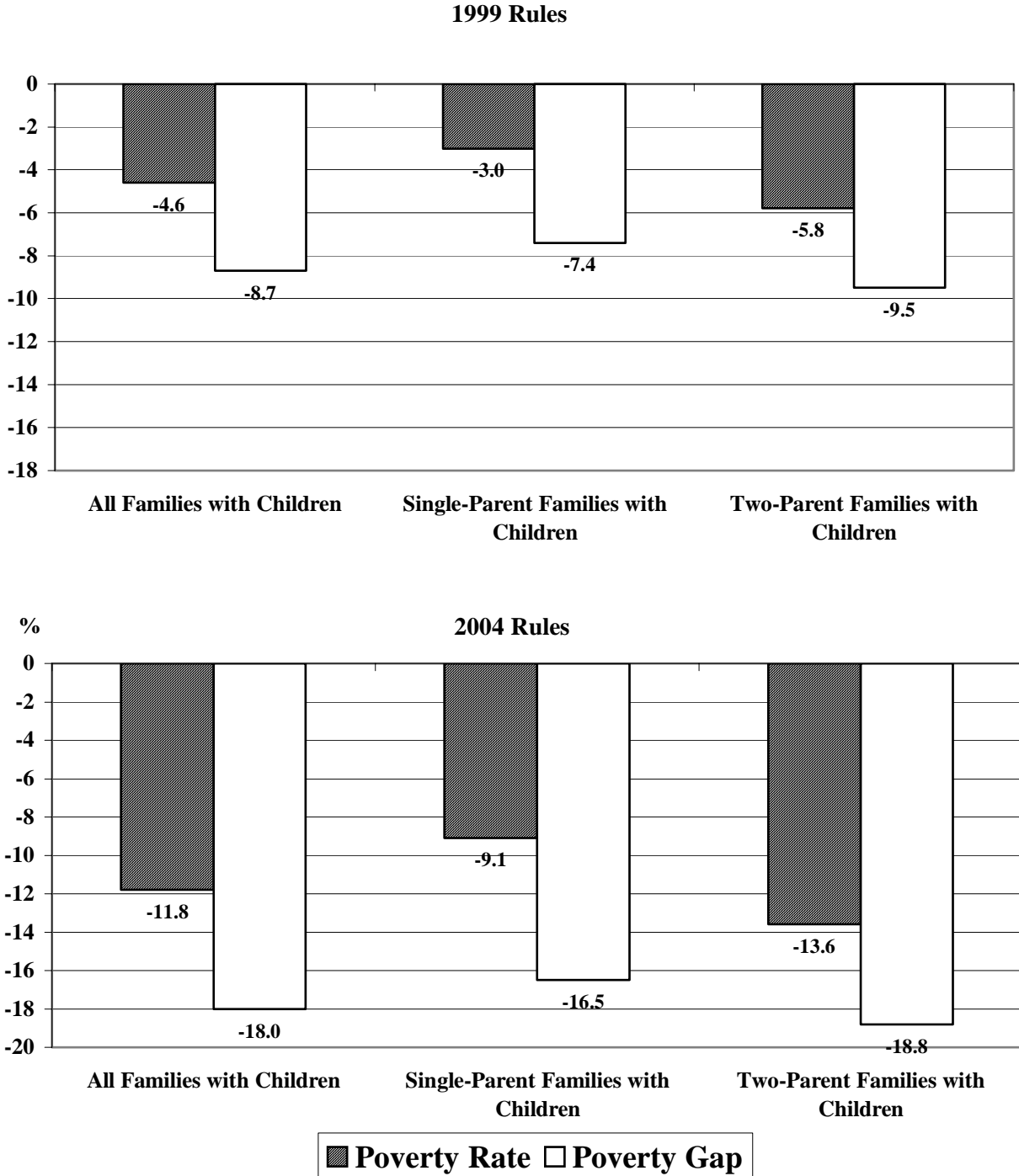
**Chart 6**  
**Average Income Gap for Families in Poverty by Family Type, 1989-1999**  
 (after-tax LICO, 1992 base)

1999 constant dollars



Source: Table 8.3, Income in Canada, 1998 and 1999.

**Chart 7**  
**Impact of NCBS on Low Income in Canada, 1999 and 2004**  
 (per cent change in after-tax LICO after clawback and reinvestment)



Source: CSLS estimates based on SPSPD/M

## Tables in the Appendix

### Appendix Table 1

#### NCB Supplement and NCB Initiatives by Province and Territory

##### Column Definition

1. National Child Benefit Supplement paid by federal government (goes to SA and non-SA poor families)
2. Total NCB Initiatives (Reinvestments plus Investments) by province (millions) (sum of columns 3 and 4)
3. Total NCB Reinvestments by province (equal to SA clawback)
4. Total NCB Investments (new funds) by province
5. Amount of NCB Initiatives going to cash or income-support programs ( all child benefits and earnings supplements programs and some child care and shelter supplements) for all poor families by province
6. Proportion of NCB Reinvestments to the NCB supplement (column 3/1)
7. Proportion of Income Support to Reinvestment or clawback (column 5/3)

#### July 1, 1999- June 30, 2000 (expenditures)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(millions of dollars)						
Newfoundland	31	13.2	5.1	8.1	6.4	16.5%	125.5%
PEI	7	1.4	1.4	0	0	20.0	0
Nova Scotia	50	16.9	16.9	0	16.2	33.8	95.9
New Brunswick	41	5.3	0	5.3	0	0	0
Quebec	341	na	na	na	na	na	na
Ontario	504	184.0	151.0	33	153.8	30.0	101.9
Manitoba	69	19.4	15.6	3.8	0	22.6	0
Saskatchewan	70	45.1	22.2	22.9	19.8	31.7	89.2
Alberta	138	22.0	22.0	0	4.6	15.9	20.9
British Columbia	199	121.3	121.3	0	85.4	61.0	70.4
Provincial total	1450	428.6	355.5	73.1	286.2	32.0	80.5
Yukon	2	0.6	0.2	0.4	0.3	10.0	150.0
Nunavut	3	2.3	1.6	0.7	2.0	53.3	125.0
NWT	3	2.1	0.7	1.4	2.0	23.3	285.7
First Nations	na	50.2	41.9	8.3	na	na	na
CIC	na	2.3	2.3	0	na	na	na
Total	1,458*	486.1	402.2	83.9	290.5	27.6*	72.2

\*Totals may not add due to rounding

**July 1, 2000-June 30, 2001 (expenditures)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(millions of dollars)						
Newfoundland	38	16.7	6.8	9.9	8.1	17.9%	119.1%
PEI	9	1.8	1.8	0	0	20.0	0
Nova Scotia	63	21.5	21.5	0	20.7	34.1	96.3
New Brunswick	51	8.4	0	8.4	0	0	0
Quebec	437	na	na	na	na	na	na
Ontario	646	205.9	166.7	39.2	157.5	25.8	94.5
Manitoba	91	30.7	17.0	13.7	0	18.7	0
Saskatchewan	90	35.8	29.0	6.8	25.0	32.2	86.2
Alberta	185	32.1	32.1	0	7.0	17.4	21.8
British Columbia	256	176.3	176.3	0	97.7	68.9	55.4
Total Provinces	1429	529.2	451.2	78.0	316.0	31.6	70.0
Yukon	1.7	0.9	0.2	0.7	0.4	11.8	200.0
Nunavut	3	2.8	2.3	0.5	2.3	76.7	100.0
NWT	4	2.1	0.8	1.3	1.8	20.0	225.0
First Nations	na	54.3	50.2	4.1	na	na	na
CIC	na	3.1	2.3	0.8	na	na	na
Total	1875*	592.4	507.0	85.4	320.5	27.0*	63.2

\*Totals may not add due to rounding

**July 1, 2001-June 30, 2002 (estimates)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(millions of dollars)						
Newfoundland	na	18.0	7.0	11.0	7.5	na	107.1%
PEI	na	2.2	2.0	0.2	0	na	0
Nova Scotia	na	33.2	20.2	13.0	31.8	na	157.4
New Brunswick	na	8.8	0	8.8	0	na	0
Quebec	na	na	na	na	na	na	na
Ontario	na	253.8	193.8	60.0	175.0	na	90.3
Manitoba	na	35.1	12.7	22.4	0	na	0
Saskatchewan	na	41.0	38.0	3.0	29.0	na	76.3
Alberta	na	35.2	35.2	0	6.4	na	18.2
British Columbia	na	239.3	239.3	0	129.6	na	54.2
Provincial total	na	666.6	548.2	118.4	379.3	na	69.2

Yukon	na	1.1	0.3	0.8	0.5	na	166.7
Nunavut	na	2.6	2.5	0.1	2.3	na	92.0
NWT	na	2.2	1.3	0.9	1.8	na	138.5
First Nations	na	59.5	53.8	5.7	na	na	na
CIC	na	2.8	1.8	1.0	na	na	na
Total	na	734.8	607.9	126.9	383.9	na	63.2

The names of the provincial income support programs comprising the NCB Initiative, with the 1999-2000, 2000-2001, and 2001-2002 estimates in brackets (in millions) are

- 1) Newfoundland and Labrador Child Benefit (6.4/8.1/7.5)
- 2) Nova Scotia Child Benefits (15.3/19.4/30.5)  
WIS Client Supplement (1.0/1.3/1.3/)
- 3) Quebec Family Allowance
- 4) Ontario Child Care Supplement for Working Families (153.8/157.5/175.0)
- 5) Saskatchewan Child Benefit (17.0/20.0/19.0)  
Saskatchewan Employment Supplement (2.8/5.0/10.0)
- 6) Alberta SFI Shelter Increases (4.6/5.7/5.1)  
Alberta SFI School Allowances increase (0/1.3/1.3)
- 7) BC Earned Income Benefit (66.0/69.8/68.4)  
BC Family Bonus Increase (7.5/10.0/43.0)  
Family Earnings Exemption (11.9/17.9/18.2)
- 8) Yukon Child Benefit (0.3/0.5)
- 9) NWT Child Benefit/Territorial Workers' Supplement (2.0/1.8/1.8)
- 10) Nunavut Child Benefit/Workers' Supplement (2.0/2.3/2.3)

Source: *The National Child Benefits Progress Report: 2001* May 2002.



**Appendix Table 2****Low-Income Rates and Gaps by Type of Family with 1997 Population and Tax/Transfer System under 1999 Rules for Child Benefits for Economic Families with Children****Scenarios**

1. Reference Case 1: Rules at July 1, 1996 CCTB plus WIS fully indexed to 1999 (scenario 5 in detailed tables)
2. Reference Case 2: Rules at July 1, 1996 not indexed to 1999 (scenario 14 in detailed tables)
3. Rules at July 1, 1999 CCTB plus NCBS (no recovery of SA and re-investment) (scenario 6 in detailed tables)
4. Rules at July 1, 1999 CCTB plus NCBS with recovery of SA (no reinvestment) (scenario 7 in detailed tables)
5. Rules at July 1, 1999- CCTB+NCBS with recovery of SA and cash reinvestment programs (scenario 8 in detailed tables)

	1	2	3	4	5
<b>One Adult with Children</b>					
Families receiving federal child benefits (000s)	552	550	550	550	550
Federal child benefits per family (1997 dollars)	1,804	1,718	2,405	2,409	2,409
<u>Below before-tax LICO</u>					
low income rate (%)	52.4	52.4	50.3	51.2	50.5
low income gap	2,479	2,505	2,192	2,382	2,355
<u>Below after-tax LICO</u>					
low income rate (%)	43.7	44.4	40.9	43.1	42.4
low income gap	1,371	1,393	1,127	1,287	1,270
<u>Below after-tax LIM</u>					
low income rate (%)	38.3	38.9	31.4	37.2	36.8
low income gap	781	796	571	705	692

	<b>Two+ Adults with Children</b>				
Families receiving federal child benefits (000s)	2,611	2,543	2,543	2,543	2,543
Federal child benefits per family (1997 dollars)	1,243	1,132	1,315	1,316	1,316
<u>Below before-tax LICO</u>					
low income rate (%)	12.6	12.7	12.2	12.4	12.2
low income gap	3,834	3,890	3,507	3,676	3,559
<u>Below after-tax LICO</u>					
low income rate (%)	10.3	10.4	9.6	9.9	9.7
low income gap	2,351	2,396	2,083	2,216	2,127
<u>Below after-tax LIM</u>					
low income rate (%)	7.1	7.1	6.3	6.7	6.4
low income gap	1,291	1,314	1,075	1,178	1,130

Note: The gap is expressed in millions of 1997 dollars.

**Appendix Table 3****Shock-Minus-Control Impacts on Low-Income Rates and Gaps by Type of Family with 1997 Population and Tax/Transfer System under 1999 Rules for Child Benefits for Economic Families with Children****Scenarios**

1. Reference Case 1: Rules at July 1, 1996 CCTB plus WIS fully indexed to 1999 (scenario 5 in detailed tables)
2. Reference Case 2: Rules at July 1, 1996 not indexed to 1999 (scenario 14 in detailed tables)
3. Rules at July 1, 1999 CCTB plus NCBS (no recovery of SA and re-investment) (scenario 6 in detailed tables)
4. Rules at July 1, 1999 CCTB plus NCBS with recovery of SA (no reinvestment) (scenario 7 in detailed tables)
5. Rules at July 1, 1999- CCTB+NCBS with recovery of SA and cash reinvestment programs (scenario 8 in detailed tables)

3-1                      4-1                      5-1

**One Adult Family with Children****Below before-tax LICO**

incidence of low income (percentage points)	-2.1	-1.2	-1.9
incidence of low income (per cent)	-4.0	-2.3	-3.6
low income gap (millions of 1997 dollars)	-287	-97	-124
low income gap (per cent)	-11.6	-3.9	-5.0

**Below after-tax LICO**

incidence of low income (percentage points)	-2.8	-0.6	-1.3
incidence of low income (per cent)	-6.4	-1.4	-3.0
low income gap (millions of 1997 dollars)	-244	-84	-101
low income gap (per cent)	-17.8	-6.1	-7.4

**Below after-tax LIM**

incidence of low income (percentage points)	-6.9	-1.1	-1.5
incidence of low income (per cent)	-18.0	-2.9	-3.9
low income gap (millions of 1997 dollars)	-210	-76	-89
low income gap (per cent)	-26.9	-9.7	-11.4

**Two+ Adult Family with Child**

	3-1	4-1	5-1
<u>Below before-tax LICO</u>			
incidence of low income (percentage points)	-0.4	-0.2	-0.4
incidence of low income (per cent)	-3.2	-1.6	-3.2
low income gap (millions of 1997 dollars)	-327	-158	-275
low income gap (per cent)	-8.5	-4.1	-7.2
<u>Below after-tax LICO</u>			
incidence of low income (percentage points)	-0.7	-0.4	-0.6
incidence of low income (per cent)	-6.8	-3.9	-5.8
low income gap (millions of 1997 dollars)	-268	-135	-224
low income gap (per cent)	-11.4	-5.7	-9.5
<u>Below after-tax LIM</u>			
incidence of low income (percentage points)	-0.8	-0.4	-0.7
incidence of low income (per cent)	-11.3	-5.6	-9.9
low income gap (millions of 1997 dollars)	-216	-113	-161
low income gap (per cent)	-16.7	-8.8	-12.5

**Appendix Table 4****Low-Income Rates and Gaps by Type of Family with 1997 Population and Tax/Transfer System under 2004 Rules for Child Benefits for Economic Families with Children****Scenarios**

1. Rules at July 1, 2004- mature CCTB plus indexed 1996 WIS (scenario 10 in detailed tables)
2. Rules at July 1, 2004- mature CCTB+NCBS without SA recovery and re-investment (scenario 11 in detailed tables)
3. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and no re-investment (scenario 12 in detailed tables)
4. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and re-investment (scenario 13 in detailed tables)

	1	2	3	4
<b>One Adult with Children</b>				
<u>Below before-tax LICO</u>				
low income rate (%)	52.4	48.7	50.1	49.4
low income gap	2,490	1,981	2,238	2,211
<u>Below after-tax LICO</u>				
low income rate (%)	44.0	37.0	40.4	40.0
low income gap	1,378	958	1,166	1,150
<u>Below after-tax LIM</u>				
low income rate (%)	38.8	28.2	34.9	34.4
low income gap	792	458	618	603
<b>Two+ Adults with Children</b>				
<u>Below before-tax LICO</u>				
low income rate (%)	12.6	11.6	11.9	11.7
low income gap	3,874	3,178	3,405	3,311
<u>Below after-tax LICO</u>				
low income rate (%)	10.3	8.8	9.2	8.9
low income gap	2,378	1,828	2,001	1,931
<u>Below after-tax LIM</u>				
low income rate (%)	7.2	5.8	6.3	6.0
low income gap	1,312	930	1,056	1,017

Note: The gap is expressed in millions of 1997 dollars.

**Appendix Table 5****Shock-Minus-Control Impacts on Low-Income Rates and Gaps by Type of Family with 1997 Population and Tax/Transfer System under 2004 Rules for Child Benefits for Economic Families with Children****Scenarios**

1. Rules at July 1, 2004- mature CCTB plus indexed 1996 WIS (scenario 10 in detailed tables)
2. Rules at July 1, 2004- mature CCTB+NCBS (no SA recovery and re-investment (scenario 11 in detailed tables)
3. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and no re-investment (scenario 12 in detailed tables)
4. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and re-investment (scenario 13 in detailed tables)

2-1                      3-1                      4-1

**One Adult Family with Children**Below before-tax LICO

incidence of low income (percentage points)	-3.7	-2.3	-3.0
incidence of low income (per cent)	-7.1	-4.4	-5.7
low income gap (millions of 1997 dollars)	-509	-252	-279
low income gap (per cent)	-20.4	-10.1	-11.2

Below after-tax LICO

incidence of low income (percentage points)	-7.0	-3.6	-4.0
incidence of low income (per cent)	-15.9	-8.2	-9.1
low income gap (millions of 1997 dollars)	-420	-212	-228
low income gap (per cent)	-30.5	-15.4	-16.5

Below after-tax LIM

incidence of low income (percentage points)	-10.6	-3.9	-4.4
incidence of low income (per cent)	-27.3	-10.1	-11.3
low income gap (millions of 1997 dollars)	-334	-174	-189
low income gap (per cent)	-42.2	-22.0	-23.9

**Two+ Adult Family with Children**

	2-1	3-1	4-1
<u>Below before-tax LICO</u>			
incidence of low income (percentage points)	-1.0	-0.7	-0.9
incidence of low income (per cent)	-7.9	-5.6	-7.1
low income gap (millions of 1997 dollars)	-696	-469	-563
low income gap (per cent)	-18.0	-12.1	-14.5
<u>Below after-tax LICO</u>			
incidence of low income (percentage points)	-1.5	-1.1	-1.4
incidence of low income (per cent)	-14.6	-10.7	-13.6
low income gap (millions of 1997 dollars)	-550	-377	-447
low income gap (per cent)	-23.1	-15.9	-18.8
<u>Below after-tax LIM</u>			
incidence of low income (percentage points)	-1.4	-0.9	-1.2
incidence of low income (per cent)	-19.4	-12.5	-16.7
low income gap (millions of 1997 dollars)	-382	-256	-295
low income gap (per cent)	-29.1	-19.5	-22.5

**Appendix Table 6****Low-Income Rates and Gaps with 2004 Population and Tax/Transfer System under 1999 Rules for Child Benefits for Economic Families with Children****Scenarios**

1. Rules at July 1, 1996 CCTB plus WIS fully indexed to 1999 (scenario 5 in detailed tables)
2. Rules at July 1, 1996 not indexed to 1999 (scenario 14 in detailed tables)
3. Rules at July 1, 1999 CCTB plus NCBS (no recovery of SA and re-investment) (scenario 6 in detailed tables)
4. Rules at July 1, 1999 CCTB plus NCBS with recovery of SA (no reinvestment) (scenario 7 in detailed tables)
5. Rules at July 1, 1999- CCTB+NCBS with recovery of SA and cash reinvestment programs (scenario 8 in detailed tables)

	1	2	3	4	5
<u>Below before-tax LICO</u>					
low income rate (%)	14.6	14.7	14.2	14.5	14.2
low income gap (\$2004)	5,124	5,199	4,596	4,913	4,791
<u>Below after-tax LICO</u>					
low income rate (%)	10.9	11.1	10.0	10.5	10.2
low Income gap (\$2004)	2,893	2,920	2,461	2,693	2,608
<u>Below after-tax LIM</u>					
low income rate (%)	11.4	11.5	10.3	10.8	10.6
low income gap (\$2004)	2,643	2,696	2,196	2,448	2,359

Note: The gap is expressed in millions of 2004 dollars



**Appendix Table 7****Shock-Minus-Control Impacts on Low-Income Rates and Gaps with 2004 Population and Tax/Transfer System under 1999 Rules for Child Benefits for Economic Families with Children****Scenarios**

1. Reference Case 1: Rules at July 1, 1996 CCTB plus WIS fully indexed to 1999 (scenario 5 in detailed tables)
2. Reference Case 2: Rules at July 1, 1996 not indexed to 1999 (scenario 14 in detailed tables)
3. Rules at July 1, 1999 CCTB plus NCBS (no recovery of SA and re-investment) (scenario 6 in detailed tables)
4. Rules at July 1, 1999 CCTB plus NCBS with recovery of SA (no reinvestment) (scenario 7 in detailed tables)
5. Rules at July 1, 1999- CCTB+NCBS with recovery of SA and cash reinvestment programs (scenario 8 in detailed tables)

	3-1	4-1	5-1	5-2
<u>Below before-tax LICO</u>				
incidence of low income (percentage points)	-0.4	-0.1	-0.4	-0.5
incidence of low income (per cent)	-2.7	-0.7	-2.7	-3.4
low income gap (millions of 2004 dollars)	-528	-211	-333	-408
low income gap (per cent)	-10.3	-4.1	-6.5	-7.8
<u>Below after-tax LICO</u>				
incidence of low income (percentage points)	-0.9	-0.4	-0.7	-0.9
incidence of low income (per cent)	-8.3	-3.7	-6.4	-8.1
low income gap (millions of 2004 dollars)	-432	-200	-285	-312
low income gap (per cent)	-14.9	-6.9	-9.9	-10.7
<u>Below after-tax LIM</u>				
incidence of low income (percentage points)	-1.1	-0.6	-0.8	-0.9
incidence of low income (per cent)	-9.6	-5.3	-7.0	-7.8
low income gap (millions of 2004 dollars)	-447	-195	-284	-337
low income gap (per cent)	-16.9	-7.4	-10.7	-12.5

**Appendix Table 8****Low-Income Rates and Gaps with 2004 Population and Tax/Transfer System under 2004 Rules for Child Benefits for Economic Families with Children****Scenarios**

1. Rules at July 1, 2004 mature CCTB plus indexed 1996 WIS (scenario 10 in detailed tables)
2. Rules at July 1, 2004- mature CCTB+NCBS (no SA recovery and re-investment (scenario 11 in detailed tables)
3. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and no re-investment (scenario 12 in detailed tables)
4. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and re-investment (scenario 13 in detailed tables)

	1	2	3	4
<u>Below before-tax LICO</u>				
low income rate (%)	14.7	13.4	13.9	13.7
low income gap	5,172	4,125	4,551	4,451
<u>Below after-tax LICO</u>				
low income rate (%)	11.0	8.9	9.7	9.5
low income gap	2,896	2,132	2,430	2,363
<u>Below after-tax LIM</u>				
low income rate (%)	11.6	9.1	10.1	9.9
low income gap	2,709	1,891	2,214	2,142

Note: The gap is expressed in millions of 2004 dollars

**Appendix Table 9****Shock-Minus-Control Impacts on Low-Income Rates and Gaps with 2004 Population and Tax/Transfer System under 2004 Rules for Child Benefits for Economic Families with Children****Scenarios**

1. Reference Case 1: Rules at July 1, 2004 mature CCTB plus indexed 1996 WIS (scenario 10 in detailed tables)
2. Rules at July 1, 2004- mature CCTB+NCBS without SA recovery and re-investment (scenario 11 in detailed tables)
3. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and no re-investment (scenario 12 in detailed tables)
4. Rules at July 1, 2004- mature CCTB+NCBS with SA recovery and re-investment (scenario 13 in detailed tables)

	2-1	3-1	4-1
<u>Below before-tax LICO</u>			
incidence of low income (percentage points)	-1.3	-0.8	-1.0
incidence of low income (per cent)	-8.8	-5.4	-6.8
low income gap (millions of 2004 dollars)	-1,047	-621	-721
low income gap (per cent)	-20.2	-12.0	-13.9
<u>Below after-tax LICO</u>			
incidence of low income (percentage points)	-2.1	-1.3	-1.5
incidence of low income (per cent)	-19.1	-11.8	-13.6
low income gap (millions of 2004 dollars)	-764	-466	-533
low income gap (per cent)	-26.4	-16.1	-18.4
<u>Below after-tax LIM</u>			
incidence of low income (percentage points)	-2.5	-1.5	-1.7
incidence of low income (per cent)	-21.6	-12.9	-14.7
low income gap (millions of 2004 dollars)	-818	-495	-567
low income gap (per cent)	-30.2	-18.3	-20.9