CANADIAN TAX JOURNAL / REVUE FISCALE CANADIENNE (2016) 64:3, 601-18

Finances of the Nation

*Kevin Milligan**

THE TAX RECOGNITION OF CHILDREN IN CANADA: EXEMPTIONS, CREDITS, AND CASH TRANSFERS

For almost 60 years, the Canadian Tax Foundation published an annual monograph, Finances of the Nation, *and its predecessor,* The National Finances. *In a change of format, the 2014* Canadian Tax Journal *introduced a new "Finances of the Nation" feature, which presents a series of articles on topical matters related to taxation and public expenditures in Canada. Previous articles include surveys of provincial and territorial budgets for fiscal years 2013-14, 2014-15, and 2015-16, prepared by Vivien Morgan, and monographs by Kevin Milligan, "The Growth of Government in Canada: A 21st-Century Perspective"; Kenneth J. McKenzie, "The Corporate Income Tax in Canada—Past, Present, and Future"; and Richard Bird and Michael Smart, "Taxing Consumption in Canada: Rates, Revenues, and Redistribution." In this issue, Kevin Milligan discusses the evolution of the child benefit system in Canada and documents the distributional impact of federal transfers by income level and family type over a 50-year period (1966-2016).*

The underlying data for the Finances of the Nation *monographs and the articles in this journal will be published online in the near future.*

KEYWORDS: CHILDREN ■ FAMILY ALLOWANCES ■ INCOME TAXES ■ TAX DEDUCTIONS ■ TAX CREDITS

CONTENTS

* Of the Vancouver School of Economics, University of British Columbia. I thank Ken McKenzie, Vivien Morgan, and Michael Smart for careful reading and helpful suggestions on an early draft.

INTRODUCTION

Most countries include special provisions for families with children as part of their income tax and transfer systems. The form of these provisions varies by year and time—a deduction from taxable income, a non-refundable or refundable credit against taxes owed, or a transfer of income (possibly means-tested) from the spending side of the budget. What are the motivations and justifications for this special tax treatment? How much has the net benefit to families changed through time?

This article addresses these questions in the Canadian context, presenting a historical review and analysis of federal tax-based child transfers (in the form of refundable or non-refundable credits) alongside broadly based expenditure-side programs like the family allowance and the universal child-care benefit. Excluded from the analysis are welfare and social assistance programs, which often have child-specific elements. Provincial governments (largely responsible for social assistance payments) may implicitly or explicitly take tax-based or broadly based benefits into account when setting social assistance rates, so the distinction between the programs may not be as clean as suggested here.

The analysis reveals that Canada's child benefit system has moved far beyond the simple issuance of a universal monthly family allowance cheque to a more refined income-tested system that delivers substantial transfers to families with children, particularly those at lower income levels.

I begin the article with a discussion of the principles underlying special tax treatment for families with children. I follow with a history of such special treatment in Canada, including a description of the federal programs introduced over the years to deliver child tax benefits. Finally, I present simulations to document the net tax benefit of these programs to Canadian families, at different income levels and of different household types, over a 50-year period (1966-2016).

PRINCIPLES

Special tax treatment for families with children is a common feature of income taxes around the world.[1] Why is this so? The arguments can be categorized as coming from a concern for efficiency or a concern for equity.

On the efficiency side, two arguments can be made. First, children may produce positive externalities affecting other members of society in addition to their parents.

1 The Organisation for Economic Co-operation and Development, "OECD Family Database" (www.oecd.org/els/family/database.htm), at table PF1.3, documents cash or tax benefits for children in all OECD countries except Turkey and South Korea.

As with anything producing positive externalities, subsidizing production can improve efficiency by aligning private incentives with social incentives. One form of externality is fiscal: if a child eventually contributes taxes toward the repayment of government debt or the funding of current fixed-cost, publicly provided goods, the burden on other taxpayers is lightened.[2] Another externality comes more from the social milieu, through the continuation of culture, language, and traditions. By perpetuating a culture, a new child can pay dividends to his or her society beyond those reaped by the child's own family. This type of externality may have motivated, in part, Quebec's decision to institute a baby bonus between 1989 and 1997.[3]

The second efficiency argument depends on liquidity constraints—the idea that some households may not be able to borrow against future income to fund current desired expenditures or investments. If some of those expenditures take the form of investments in children (such as educational inputs, better nutrition or living conditions, or productive time spent with parents), providing income to families through the fiscal system can lead to improved investment decisions.[4]

In addition to these efficiency arguments, many posit an equity argument based on a family's circumstances and ability to pay. A family with eight children has greater basic consumption needs than a family with one child, so if those families have equal incomes, it might be argued the eight-child family has a lower ability to pay taxes given the extra basic demands on its family budget.

A common objection to this line of reasoning arises from the underlying choices made by different families. In many (if not most) cases, having a child involves at least some element of choice. So, arguably, a family with eight children has chosen to use its income to raise children. If another family chooses to buy a boat or drive a more expensive car, why should those choices be looked at differently than the choice to support children?

Many have argued that children are indeed different than boats or other consumption choices.[5] Boessenkool and Davies posit that because parents have a "moral and

2 A full accounting of the fiscal surplus or deficit of promised taxes and benefits for newborns can be generated using generational accounting. See Philip Oreopoulos, "Canada: On the Road to Fiscal Balance," in Alan J. Auerbach, Laurence J. Kotlikoff, and Willi Leibfitz, eds., *Generational Accounting Around the World* (Chicago: University of Chicago Press, 1999), chapter 9. Oreopoulos finds that as of 1995, newborns were projected to pay much more in taxes than they received in government services and transfers over their lifetimes.

3 See Kevin Milligan, "Subsidizing the Stork: New Evidence on Tax Incentives and Fertility" (2005) 87:3 *Review of Economics and Statistics* 539-55, in which I offer an explanation and examination of the Quebec allocation for newborn children.

4 Lauren E. Jones, Kevin S. Milligan, and Mark Stabile, *Child Cash Benefits and Family Expenditures: Evidence from the National Child Benefit*, NBER Working Paper no. 21101 (Cambridge, MA: National Bureau of Economic Research, April 2015). This paper shows evidence of positive health and education spending in response to the expansion of child benefits in Canada.

5 See Jonathan R. Kesselman, "The Child Tax Benefit: Simple, Fair, Responsive?" (1993) 19:2 *Canadian Public Policy* 109-32. Kesselman argued that without universal recognition of children in the tax system, the tax system was treating expenditures on children the same as a purchase

legal obligation to care for their children," the funds spent on the basic care for children are not optional.[6] Furthermore, they argue, since this obligation to pay for the care of children is universal, whether one is rich or poor, tax recognition of children ought to be universal as well.

This argument suffers from two weaknesses. First, there remains an element of choice by parents in their initial decision to take on the legal obligation that follows from having children. An obligation adopted voluntarily is an obligation taken on by choice.[7] Second, the "legal obligation" rationale goes too far: there is also a legal requirement to care for animals kept as pets, yet there is no tax recognition of pets.

Another approach to defending tax recognition of children starts with the observation that children are humans.[8] For adult humans, Canada's tax system provides an exemption for a first tranche of income to recognize the basic expenses of maintaining life. Children, as humans, ought to be granted the same recognition since they also require basic necessities to survive. This amount might be smaller in order to recognize age-dependent differences in consumption needs. But it is clearly greater than zero.

The important distinction in the "child-as-human" argument compared with the "legal-obligation-of-parents" argument comes from who is entitled—the child or the parent. In the case of the child-as-human argument, the tax recognition belongs to the children. No child made a choice to be born, but once born any child arguably deserves tax recognition. The tax benefit might be claimed by the parents, as stewards of the child's well-being, but the entitlement begins with and belongs to the child.

Which of the various motivations suggested above lie behind the tax recognition of children has consequences for policy design. Specifically, different motivations imply different optimal patterns for how benefits change as the number of children in a family grows. A fifth child costs less than a second child because of hand-me-downs, bulk food purchases, and household expenses that do not increase with family size. So, under the family ability-to-pay motivation, a fifth child should receive less tax support than a second child. In contrast, under the child-as-human motivation, every child should have the same entitlement according to the principle of equality.

---

of a "fancy boat." Also see Kenneth J. Boessenkool and James B. Davies, *Giving Mom and Dad a Break: Returning Fairness to Families in Canada's Tax and Transfer System*, C.D. Howe Institute Commentary no. 117 (Toronto: C.D. Howe Institute, November 1998), for an expansion of the argument.

6 Boessenkool and Davies, supra note 5, at 19.

7 Of course, there are circumstances of unplanned or unwanted pregnancies, and the decision to carry a pregnancy to term. Some may argue that the element of choice is removed in some of these cases, depending on one's position on contraception, abortion, and related issues. I set these issues aside in the current discussion.

8 This argument was first made in Kevin Milligan, "A Reset for the Child Tax Benefit System" [2013] no. 34 *Inroads Journal* 52-62.

For the pro-natalist efficiency arguments, benefits ought to be geared to where the decision is most sensitive to price. The design of different elements of the system may simply reflect differences in the underlying motivation for and purpose of the tax recognition of children.

HISTORICAL DEVELOPMENT

In this section, I outline how tax benefits directed to families with children have evolved under Canada's tax system. The discussion is organized chronologically according to the introduction of each measure.

Exemption for Children

The most basic way that children affect a family's tax burden is through an exemption for dependent children. As discussed above, using the ability-to-pay ideal, a family with more children might be thought to have a lower ability to pay than families with fewer children, so exempting an amount for each child could restore fairness to the interfamily comparison.

In 1918, the second year of Canada's income tax, an exemption of $200 ($2,984 in 2016 dollars) for each dependent child was introduced.[9] The exemption was changed to a non-refundable credit in 1942, out of concern that the exemption benefited high earners more than others.[10] The credit was still differentiated by income (with amounts between $28 and $108 per child), but less differentiated than the exemption it replaced. In 1947, following the war, the credit was switched back to an exemption. In 1961, the exemption was $250 ($2,043 in 2016 dollars), with a $500 amount for children aged 16 and 17. Both of these amounts were boosted by $50 in 1962, and then subject to annual indexing from 1974. The 1988 tax reform saw the exemption transformed into a non-refundable tax credit. From 1988 to 1992, a special extra amount for families with three or more children was available.

Equivalent-to-Spouse Amount

From the start of the income tax, a single person with a dependent child could claim an exemption equivalent to the spousal amount. If there was more than one child, only one claim could be made. This exemption amount was transformed to a non-refundable tax credit in 1988.

---

9 This discussion is drawn from table 1 of Kesselman, supra note 5, and from Jonathan R. Kesselman, "Credits, Exemptions, and Demogrants in Canadian Tax-Transfer Policy" (1979) 27:6 *Canadian Tax Journal* 653-88. The reader is directed to those articles for a more complete and comprehensive history.

10 Kesselman, "Credits, Exemptions . . . ," supra note 9, at 662, quotes Minister of Finance J.L. Ilsley's motivation for the change as an equalizer between the tax treatment of children for a "poor man" and a "wealthy man."

Family Allowance

In accordance with the recommendations of the Marsh report of 1943, the Liberal government introduced legislation for a new family allowance in 1944.[11] The first payments of the untaxed, universal benefit were made on July 1, 1945 and targeted at mothers. Originally, the monthly amount varied between $2 and $8, depending on the age and number of the children, with less going to larger families and more going to older children. As well, the family allowance was originally both income-tested and partially integrated with the non-refundable tax credit for children. However, this was found to be administratively cumbersome, and the income-testing provision was abandoned in 1947.[12]

The structure of the family allowance was simplified in 1949 to depend only on age, with $5 per month ($53 in 2016 dollars) for children from birth to age 5, rising to $8 at ages 13 and 14. The amounts were increased again in 1957, and an extra benefit for children aged 16 to 17 was added in 1961 for residents of Quebec and in 1964 for the rest of Canada.

A major change in the family allowance took place in 1974. The amounts jumped significantly to $20 per month ($101 in 2016 dollars) and were made taxable. Also in 1974, Quebec decided to make family allowance payments to Quebec residents differentiated by the number of children, with substantial increments for having more children. Alberta made its payments conditional on age, with higher payments for older children. Finally, 1974 also saw the start of annual indexation.

Monthly family allowance payments were knocked back down to $20 per month in 1979, reflecting the introduction of the refundable child tax credit (discussed below). Payments became subject to an income test above $50,000 of individual net income starting in 1989. The last year in which the family allowance was paid was 1992, after which it was folded into the new Canada child tax benefit, introduced in 1993 (and also discussed below).

Child-Care Expense Deduction

Another element of family taxation was introduced in 1972—the child-care expense deduction. The 1972 tax reform put into action many of the ideas of the 1966 Royal Commission on Taxation (the Carter commission), but as with other elements of the reform, the commission's recommendations with respect to family taxation were not followed precisely. In the case of child-care expenses, the Carter commission

11 This discussion is drawn from various issues of *The National Finances* (Toronto: Canadian Tax Foundation) from the 1960s. The Marsh report was authored by McGill University social scientist Leonard Marsh: Leonard C. Marsh, *Report on Social Security for Canada*, prepared for the Advisory Committee on Reconstruction (Ottawa: King's Printer, 1943).

12 See the discussion in Kesselman, "Credits, Exemptions . . . ," supra note 9, at 663. Payroll deductions had to be modified depending on how much family allowance was received, and the linking of the husband's taxes with the wife's family allowance payments also proved administratively difficult.

recommended a tax credit at the rate of the highest bracket, so that child-care expenses would receive the same tax discount whatever the family's actual tax bracket might be.[13]

Instead, the tax measure introduced in 1972 was a deduction from taxable income, the net tax value of which varied by the tax bracket of the parents. The deduction must be taken by the lower-income spouse, subject to certain income thresholds. The amount was never explicitly indexed, but jumps in the nominal dollar amount occurred in 1976, 1983, 1988, 1993, 1998, and 2015.

Refundable Child Tax Credit

Following the publication of the 1970 white paper on income security, several attempts were made to completely or partially replace the family allowance with a targeted, income-tested program.[14] Legislation was introduced in 1971 but was not passed by Parliament. This policy thrust finally took shape for the 1978 tax year, when a new refundable child tax credit was introduced and the family allowance was reduced, starting in 1979. The refundable credit was delivered as part of the regular tax form to the person receiving the family allowance (typically the mother), and was refundable as part of the balance owing shown at the end of the tax form. This refundable credit remained part of the tax system until 1992, after which it was folded into the new Canada child tax benefit, as explained below.

The mechanics of the income-testing in this new refundable child tax credit is worth extra emphasis because it has become the model for income-testing of benefits in the Canadian tax system. For the income test, a family income measure was calculated and the benefit phased out at a specified rate for every dollar of family income exceeding a threshold. The income measure used for the phaseout of benefits was net income. Net income allows for some deductions and exemptions, making it an intermediate calculation between line 150 total income and line 260 taxable income on the tax form. To put this measure on a family basis, the net income of both the recipient and her or his spouse was included for the purposes of determining the phaseout.

Initially, the amount was set at $200 per child with a 5 percent phaseout for family net income over $18,000 (equivalent to $717 and $64,508, respectively, in 2016 dollars). Both the amount and the threshold were indexed for inflation, with extra above-inflation increases made in 1982, 1986, and 1988. By 1992, the last year for which the credit was available, the amount had reached $601 per year per child, phased out at 5 percent for family net income above $25,921.

13 See Canada, *Report of the Royal Commission on Taxation*, vol. 3 (Ottawa: Queen's Printer, 1966), at 19.

14 This discussion follows the description of the evolution of the tax system published in *The National Finances* (Toronto: Canadian Tax Foundation), in the 1970s. The 1970 white paper was published as Canada, Department of National Health and Welfare, *Income Security for Canadians* (Ottawa: Queen's Printer, 1970).

Sales Tax Credit

In 1986, a refundable sales tax credit was introduced, with a $25 per year amount for each child and $50 for each adult. The family's total credit was phased out at 5 percent for family net income over $15,000. When the credit was introduced, it was part of the income tax form and included in the final calculation of the balance due at the end of the tax return. The amount for each child was increased to $70 per year by 1990, and the threshold for the clawback increased to $18,000.

With the introduction of the goods and services tax (GST) in 1991, the refundable sales tax credit was transformed into the GST credit. This new credit was payable quarterly on an annual cycle starting each July, with the amount being based on the recipient's tax filing for the previous year. The amounts for children were increased to $100 per child, with a $100 supplement for single parents. The phaseout threshold was advanced to $24,800, based on the previous year's net income of the family head and spouse. The GST credit was partially indexed to inflation through the 1990s, but since 2000 has been indexed annually. In 2015, the amounts had reached $143 per year per child, phased out at a rate of 5 percent for family net income above $35,465.

Canada Child Tax Benefit

In 1993, the Conservative government (which was defeated in the federal election later that year) implemented a consolidation of the child benefit system, replacing three separate elements with the new Canada child tax benefit. Cancelled were the taxable family allowance, the refundable child tax credit, and the non-refundable dependant tax credit. In the place of that trio of tax measures, the new benefit paid $85 per month for each child ($128 in 2016 dollars) starting in July 1993, with payments being income-tested, based on family net income in 1992. The threshold for the income test was $25,921, and the phaseout rate was set at 2.5 percent for families with one child, and 5 percent for those with two or more children. As with the family allowance, Quebec chose (until 1998) to determine payments by the number of children in the family, and Alberta chose to have payments increase with the age of each child. Benefits were fully indexed to inflation starting in 2000.

In addition to the main benefit, there were three separate add-ons. First, families with three or more children received an extra $6.25 per month. Second, families who did not claim the child-care expense deduction were eligible for a supplement of $17.75 per month for children under the age of seven. This supplement was cancelled in 2006. Third, there was a $500 working income supplement phased in with earned income over $3,750. This was the first attempt to mimic the earned income tax credit in the United States, but lasted only until 1997, when it was superseded by the national child benefit supplement.

National Child Benefit Supplement

In 1998, the Liberal government introduced a new benefit in partnership with provinces and territories with an eye on skyrocketing provincial social assistance caseloads. Based on a model pioneered in British Columbia in 1996, the new national child benefit supplement targeted the lowest-income families with children. Provinces and territories, at their discretion, agreed to subtract this new benefit from provincial social assistance payments, dollar for dollar. The provinces committed to using these "savings" from social assistance for new program spending targeted at low-income families. The benefit is phased out with family net income, with the threshold in 1998 set at $20,591 and monthly payments combined with the Canada child tax benefit on the same July-to-June cycle based on the previous year's tax filing. The phaseout rates were set to ensure that the national child benefit supplement would vanish when family net income reached $25,921—the level at which the Canada child tax benefit phaseout began—to avoid the erosion of benefits by overlapping rates.

The maximum amounts were set initially at $605 annually for the first child, $405 for the second child, and $330 for each subsequent child. Payments began in 1997, although the full structure featuring integration with provincial social assistance did not come into effect until 1998. There were large, above-inflation increases almost annually until 2006, after which the increases were in line with inflation. By 2015, the maximum annual payments had risen to $2,279 for one child, $2,016 for the second child, and $1,918 for each subsequent child. When the supplement was combined with the Canada child tax benefit, the maximum amount for a family with one child was $312.50 per month—a large increase compared with the original $85 per month in the 1993 configuration of the Canada child tax benefit and $35 per month in the last year of the family allowance.

Under the traditional structure for social assistance, employment earnings reduced the social assistance entitlement dollar for dollar, creating what became known as the "welfare wall" and providing a strong disincentive for work for low income earners. The impact of the new structure was effectively to "take children off welfare" by replacing the part of the social assistance payment targeting children with this new benefit. If parents successfully transitioned into employment, they could take this payment with them into the workplace until their family income reached the cutoff amount of $25,921. This accommodation partially lowered the welfare wall and provided a stronger incentive to join the workforce. There is evidence suggesting that the structure of the national child benefit supplement boosted employment rates and substantially lowered the social assistance takeup rates of single mothers.[15]

Several, but not all, provinces implemented the national child benefit supplement clawback of social assistance explicitly by subtracting the new benefit directly from their social assistance payments. Other provinces began to adjust their social

15 For evidence on the impact of the changes in child benefits on work by single parents, see Kevin Milligan and Mark Stabile, "The Integration of Child Tax Credits and Welfare: Evidence from the Canadian National Child Benefit Program" (2007) 91:1-2 *Journal of Public Economics* 305-26; and Kevin Milligan, "The Design of Tax Policy in Canada: Thoughts Prompted by Richard Blundell's 'Empirical Evidence and Tax Policy Design' " (2011) 44:4 *Canadian Journal of Economics* 1184-94.

assistance plans to reduce the supplemental social assistance payments for children, in effect implementing the clawback implicitly on the top line, rather than subtracting it explicitly on the bottom line. Through time, provinces have moved to the implicit model, with the result that the extra benefit for families with children is delivered exclusively through the child benefit system rather than through social assistance. This is an important point in understanding the evolution of both provincial social assistance programs and the child benefit system. To a large extent, these two policy elements have now been combined for benefits related to children.

Non-Refundable Child Tax Credit

The next major innovation in child tax benefits was announced in the first budget of the newly elected Conservative government in 2006. A non-refundable tax credit for dependent children was brought back, in the amount of $2,000 per child up to the age of 17. This was the third instance of a non-refundable tax credit for dependent children, following its appearances in 1942-1946 and 1988-1992. The amount was indexed annually for inflation and could be claimed by either parent. The credit was cancelled for taxation years after 2014.

Universal Child-Care Benefit

Another major change in 2006 was the introduction of a new universal child-care benefit, which paid $100 per month per child up to the age of five, taxable on the return of the lower-income spouse. In order to ensure that this new benefit did not reduce the phaseout of the Canada child tax benefit and national child benefit supplement, special measures were introduced to remove the Canada child tax benefit from net income when calculating the phaseout. In addition, as a minor change, the small child-care component of the Canada child tax benefit was cancelled when the universal child-care benefit was introduced.

Children's Fitness and Arts Credits

Two additional, small measures were introduced in the next few years related to child-specific expenditures. In 2007, a new credit for children's fitness expenses was introduced, with up to $500 in expenses eligible for a 15 percent federal credit. This was joined in 2011 by a credit for children's participation in arts programs, also set at a maximum of $500 per year per child.

The 2014-15 Child Tax Package

A new, substantial tax package reshuffled the situation for families with children in the fall of 2014, during the run-up to the 2015 election. There were five main elements:

1. The existing universal child-care benefit was augmented with a new $60 per month supplement for any child up to the age of 17. As a result, families with children aged 5 and younger now received a total monthly payment of $160 per child. The supplement was taxed in the same way as the original benefit.

This change was effective January 1, 2015, but payments did not begin until July 2015, at which time a lump-sum payment was made for the backlog.
2. The non-refundable child tax credit that had been introduced in 2006 was eliminated, effective for the 2015 tax year.
3. A new family tax cut was introduced beginning in the 2015 tax year. This measure would permit a notional transfer of up to $50,000 of income between spouses if there were children aged 17 or younger in the family. Any resulting difference in the joint tax burden was delivered via a non-refundable tax credit capped at $2,000.
4. The upper limit of the child-care expense deduction was expanded by $1,000 to reach $8,000 per child for children up to the age of 6, effective 2015.
5. The maximum amount of the children's fitness tax credit was doubled from $500 to $1,000, effective 2014, and was also made refundable for 2015.

This entire package was predicted to cost $4.62 billion per year in 2015-16, netting the cancelled benefits against the new ones.

Canada Child Benefit

Competing child benefit packages featured prominently in the October 2015 federal election, with the Liberals offering a new consolidated child benefit in their platform to counter the fall 2014 family taxation changes made by the Conservative government. The New Democratic Party promised to keep some aspects of the fall 2014 package, but rescind others. After the election of a Liberal majority government, the 2016 budget marked the next focal point for the evolution of the child benefit system.

The budget delivered in March 2016 again shuffled family tax benefits in Canada. First, the government confirmed the removal of the family tax cut income-splitting measure and announced the phased removal of the children's fitness tax credit and children's arts tax credit. Then it introduced a new child benefit to consolidate and replace the universal child-care benefit, the national child benefit supplement, and the Canada child tax credit. The new Canada child benefit pays $5,400 per year for each child aged 6 to 17, and $6,400 per year for each child aged 5 and younger. The amount is delivered as a monthly refundable tax credit and is phased out with increasing family net income, starting at a threshold of $30,000.

Summary

The history of child fiscal benefits in Canada, outlined above, can be capsulized in three main points. First, the size of the child benefits has grown substantially through time to become a major feature of the tax and transfer system. Second, starting with the reintroduction of income-testing for the refundable tax credit of 1978, income-testing has slowly taken over the tax recognition of children. With the introduction of the Canada child benefit, no universal recognition of children remains in the tax system. Third, we have now seen two cycles in which the splintered introduction of multiple tax benefits has been followed by consolidation into a single tax package (in 1993 and 2016). In order to document the magnitude of these shifts, the next section presents simulations of the tax benefits to families with children over time and across family types.

SIMULATIONS

With simulations presented below, I explore the evolution and composition of tax benefits for children in Canada. In these simulations, I do not consider child-care expenses or children's fitness or art amounts. I begin with several time-series charts comparing each year over the 50-year period from 1966 to 2016. Following that, I present a deeper analysis of the recent period of transformation in the child benefit system between 2014 and 2016.

In this analysis, I compute the income tax assessment and benefit entitlement of a family with children as compared with a family without children. The calculations are performed using the Canadian Tax and Credit Simulator (CTaCS).[16]

Figure 1 illustrates the total tax benefit from 1966 to 2016 for different parts of the income distribution. To determine the incomes used in the analysis, I take the midpoint of the time period (1991), and using Statistics Canada's Survey of Consumer Finances,[17] I select families with children and record the relevant percentiles of the family income distribution. I then use the consumer price index to shift the 1991 income percentiles to each year between 1966 and 2016. For this simulation, I assume that the family has one income earner and two children, aged four and seven. The 1991 values of the income distribution are noted in the legend to the figure.

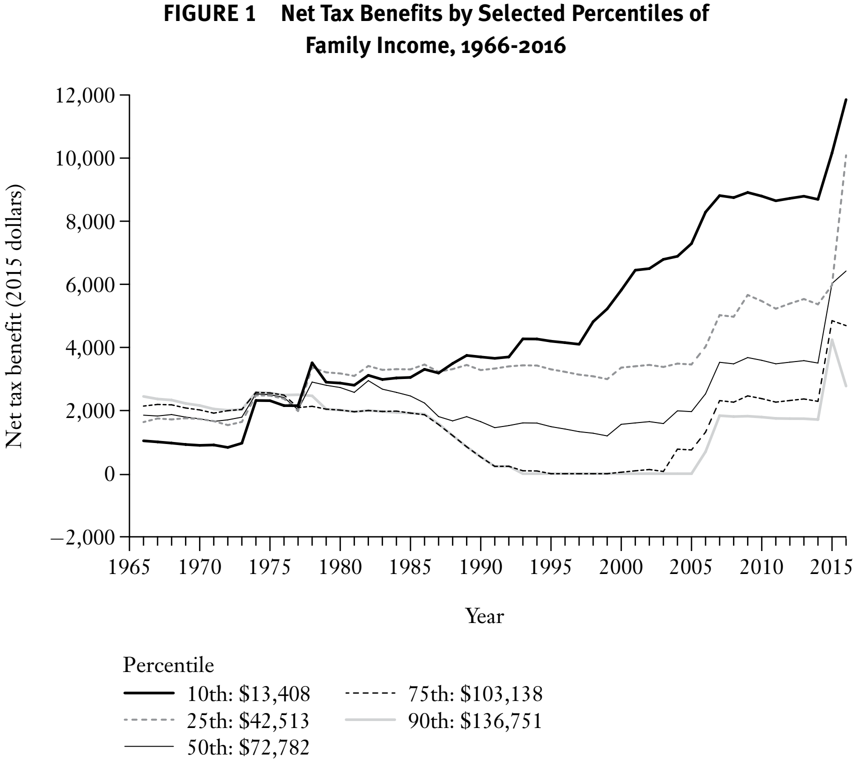
Figure 1 reveals that higher earners have a higher tax benefit from children than low earners until 1978, reflecting the higher value of a deduction for high-bracket individuals. With the introduction of the income-tested refundable child tax credit in 1978, this changes. Moving to a non-refundable credit in 1988 and adding the income-testing of the family allowance starting in 1989 further reduces the benefit for the 90th percentile family. The introduction of the Canada child tax benefit in 1993 does not seem to strongly affect the pattern across income groups, with the exception of the highest earners, who are pushed to zero. With the introduction of the national child benefit supplement in 1998, families in the 10th percentile see their child benefits rise substantially. With the substantial changes in 2014-2016, all families see a boost, with the largest increase going to those in the bottom half of the income distribution.

Next, in figure 2, I explore the differences across marital status. I again assume two children aged four and seven, and take the 50th percentile of income using the

16 Kevin Milligan, "Canadian Tax and Credit Simulator: CTaCS," version 2016-1 (http://faculty.arts.ubc.ca/kmilligan/ctacs/).

17 Statistics Canada, Survey of Consumer Finances, 1992 (Canada): Census Families [public use microdata file] (Ottawa: Statistics Canada, Household Surveys Division).

FIGURE 1 Net Tax Benefits by Selected Percentiles of Family Income, 1966-2016



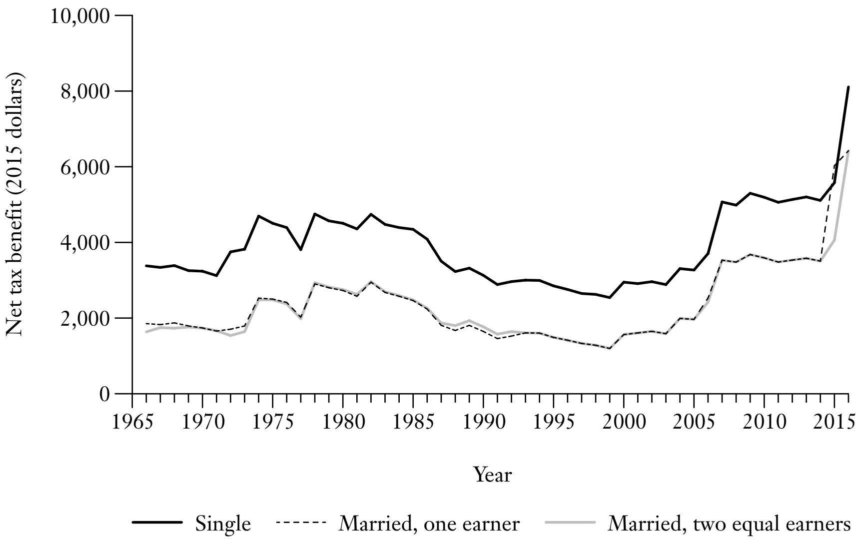
Notes: Income distribution is taken from Statistics Canada's Survey of Consumer Finances, 1992 (data for 1991, the midpoint of the 1966-2016 period). The cutpoints for the percentiles listed in the legend are in 1991 dollars. The family used in this simulation is assumed to have one earner and two children, aged four and seven. Calculations performed with "Canadian Tax and Credit Simulator: CTaCS," version 2016-1 (http://faculty.arts.ubc.ca/kmilligan/ctacs/).

1991 family income source discussed above. I compare a single-parent family with two two-parent families. For the two-parent families, I compare one in which the family income is split evenly between two earners with one that has a single earner.

The single-parent family does better in all years because of the equivalent-to-spouse amount. This exemption/credit allows a single parent to claim one dependent child as equivalent to a spouse and provides a larger net benefit relative to two-parent families. There are some minimal differences over the years between the two-parent families with one and two earners because of differing values for the exemption in the early years, the individual-income test used for the family allowance between 1989 and 1992, and the family tax cut in 2015.

I now turn to differences across families with differing numbers of children, calculating the results for one to four children separately. Here I again use a median-income, one-earner family. The results are shown in figure 3. The gaps between the

FIGURE 2 Net Tax Benefits by Marital Status, 1966-2016

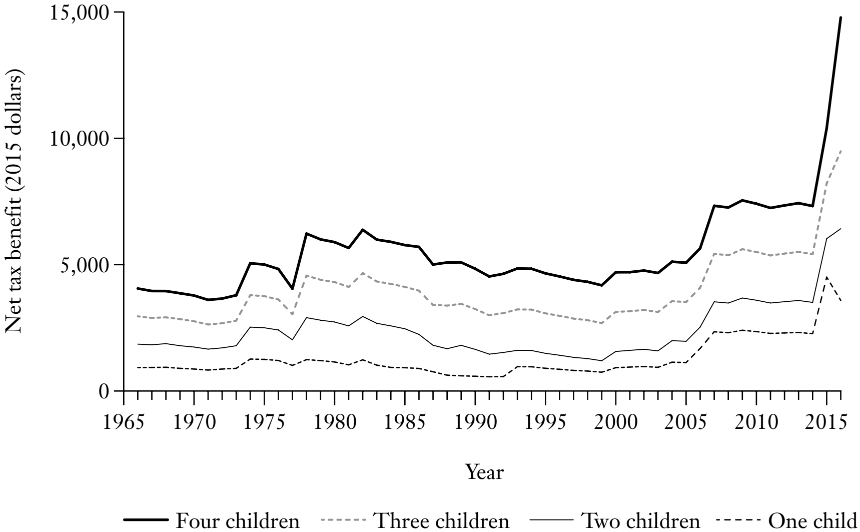


Notes: Income distribution is taken from Statistics Canada's Survey of Consumer Finances, 1992 (data for 1991, the midpoint of the 1966-2016 period). The family used in this simulation is assumed to have median family income and two children, aged four and seven. The same family income amount is used for all three marital circumstances, split across the spouses in different ways. Calculations performed with "Canadian Tax and Credit Simulator: CTaCS," version 2016-1 (http://faculty.arts.ubc.ca/kmilligan/ctacs/).

family sizes are fairly constant over most of the range of the graph. The dominant feature of the graph is the great leap in benefits in 2014-2016. Four-child families gain by far the most, in both percentage and absolute terms. The one-child family does slightly worse in 2016 than in 2015 because of the loss of the family tax cut; however, if the families are assumed to have equal earners, the one-child family also gains in 2016 compared with 2015.

The final time-series graph in figure 4 breaks down the benefits into their components in order to emphasize which benefits are affecting which years. Again I use a two-child, median-income, one-earner couple. Along the bottom of the graph, the value of the income tax benefits reflects the refundable child tax credit until 1988, then the non-refundable child tax credit (net of the taxation of the universal child-care benefit) after 2006. The 2015 bump comes from the family tax cut. The family allowance was boosted substantially in 1974, then pulled back in 1979 when the refundable child tax credit was introduced. The national child benefit supplement is not shown in this graph because the median-earning family is above the income level where this measure is completely phased out. Finally, the impact of the Canada child benefit is shown by the single dot in 2016 at the level of $6,422, replacing the other measures.

FIGURE 3 Net Tax Benefits by Number of Children, 1966-2016



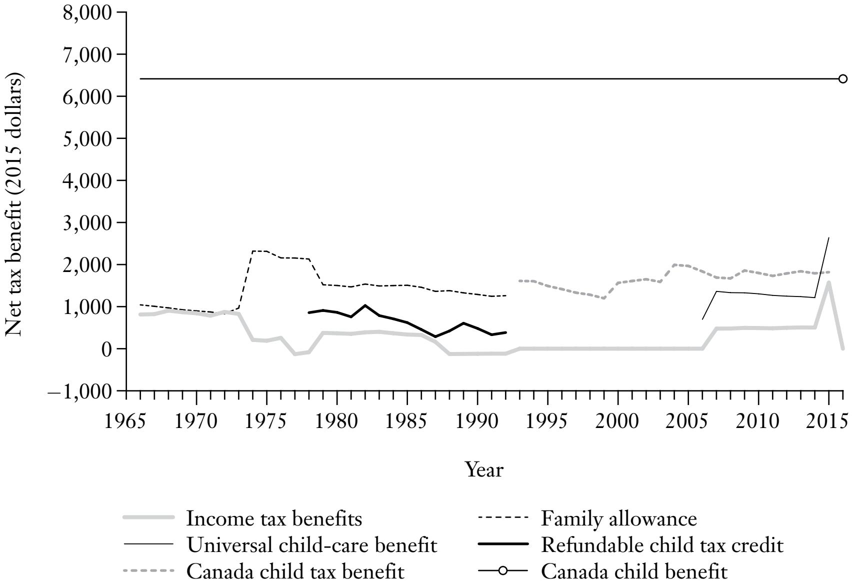
Notes: Income distribution is taken from Statistics Canada's Survey of Consumer Finances, 1992 (data for 1991, the midpoint of the 1966-2016 period). For these simulations, the family is assumed to have the same median family income, with one earner. The ages assumed for the children are, in ascending order by the number of children in the family, 4, 7, 10, and 13 years. Calculations performed with "Canadian Tax and Credit Simulator: CTaCS," version 2016-1 (http://faculty.arts.ubc.ca/kmilligan/ctacs/).

The above figures reveal a substantial transformation of the way children are treated in the Canadian tax system between 2014 and 2016. The large package announced in the fall of 2014 added an expansion of the universal child-care benefit and a new family tax cut, but took away the non-refundable child tax credit. As of July 2016, these two expansions were combined with the national child benefit supplement and the Canada child tax benefit to form the new Canada child benefit.

Finally, in figure 5, I explore the transformation by comparing across family types and incomes. There is a separate line for each year from 2014 to 2016 for single-earner families, along with a line just for two-earner families in 2015. I show the two lines for 2015 in order to highlight the effect of the family tax cut, which had a differential impact depending on the mix of income between the two earners.

The benefits for 2014 decline sharply at 23 percent once the threshold for phasing out the national child benefit supplement is reached at $25,584. At $43,953, the Canada child tax benefit begins to be phased out, at a much gentler 4 percent rate. At $116,253, the Canada child tax benefit has gone to zero, but the families at higher incomes still keep the universal child-care benefit and the non-refundable child tax credits. There is little difference between one- and two-earner families in 2014, so only one line is shown.

FIGURE 4 Components of Child Tax Benefits Through Time, 1966-2016



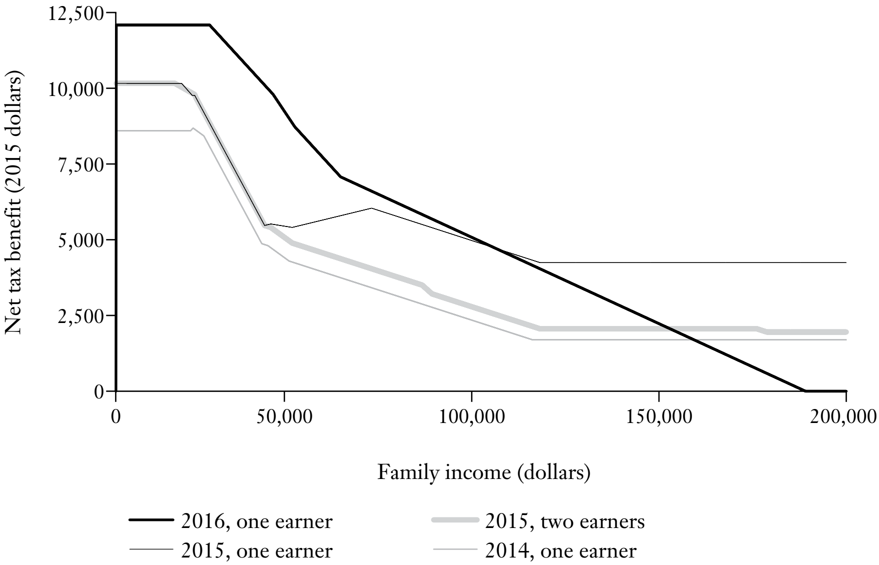
Notes: Income distribution is taken from Statistics Canada's Survey of Consumer Finances, 1992 (data for 1991, the midpoint of the 1966-2016 period). For these simulations, the family is assumed to have median family income, one earner, and two children, aged four and seven. Calculations performed with "Canadian Tax and Credit Simulator: CTaCS," version 2016-1 (http://faculty.arts.ubc.ca/kmilligan/ctacs/).

In 2015, there is no longer any non-refundable child tax credit, but families gain from the taxable universal child-care benefit. The two lines for 2015 highlight the impact of the family tax cut when there is only one earner. Once the earner is out of the first tax bracket above $45,282, the family tax cut begins to benefit the family, as some income is shifted from the second bracket to the first bracket. This benefit is capped at $2,000, limiting the gap between the one- and two-earner families.

The introduction of the consolidated Canada child benefit in July 2016 boosts the benefit compared with other years for most families. The phaseout begins at $30,000 at a rate of 13.5 percent, then shrinks to 5.7 percent after $65,000. The 2016 benefit crosses the 2015 single-earner family at $106,200 and the two-earner family (which does not gain from the family tax cut) at $153,000. The Canada child benefit goes to zero for this family at $189,200.

The differences between these three years are very large. At $50,000, for example, the family goes from a benefit level of $4,408 in 2014 to $9,219 in 2016. That is more than double, and represents an increase of $401 per month, or a 9.6 percent increase in the family's monthly gross income. On the other hand, higher earners—

FIGURE 5 Comparison of Net Tax Benefits by Household Type (Number of Earners), 2014, 2015, and 2016



Notes: The family is assumed to have two children, aged four and seven. Benefits are those in place on July 1 each year. Calculations performed with "Canadian Tax and Credit Simulator: CTaCS," version 2016-1 (http://faculty.arts.ubc.ca/kmilligan/ctacs/).

especially in one-earner families—are worse off, and those at the highest income level lose any tax recognition of their children unless they happen to be paying child-care expenses.

CONCLUSIONS—TRENDS AND IMPLICATIONS FOR THE FUTURE

This article has considered the evolution of the child benefit system in Canada. The analysis reveals two long-term trends—one cyclical and one persistent. The cyclical trend is a pattern featuring the introduction of various tax measures over a period of years, followed by consolidation. The underlying cause of this cyclical pattern likely has roots in the politics and public administration aspects of taxation, which are not considered in the analysis in this article. The persistent long-term trend is a growing reliance on income-testing. Part of this trend may be driven by changes in social preferences for redistribution, but it is also driven by technology. The 1945-46 attempt to income-test the family allowance failed in large part because of administrative difficulties. It is surely not an accident that the increased use of income-testing since it re-emerged in 1978, with the change to a refundable child tax credit, coincides with the widespread computerization of income tax administration.

In the future, two areas of tax policy with respect to children seem ripe for policy attention. First, the child-care expense deduction leaves many families unsatisfied, because of both the upper cap on allowable expenses and the pattern of benefits received across income groups. Second, the question of the universal recognition of children remains contentious. The new Canada child benefit removes the tax recognition of children for some families. Future developments may take aim at that aspect of Canada's tax policy.