
INCOME REDISTRIBUTION IN CANADA

ANDREW SHARPE

Andrew Sharpe is Executive Director of the Ottawa-based Centre for the Study of Living Standards, a non-profit research organization he founded in 1995. Prior to this he was Head of Research at the Canadian Labour Market and Productivity Centre and Chief, Business Sector Analysis, at the Department of Finance. He is also founder and Editor of the *International Productivity Monitor* and Executive Director of the International Association for Research in Income and Wealth. He received a PhD in economics from McGill University in 1982.

Most developed countries have experienced increased market income inequalities in recent decades. A large number of factors have been identified as contributing to this development. The decline in unionization has meant that fewer workers enjoy the benefits of collective bargaining, an equalizing force in income distribution. Governments in many instances have failed to raise minimum wages in line with overall wage gains, disadvantaging the worst paid workers. Deregulation has often hurt certain groups of workers such as truck drivers and air flight attendants, as has privatization of public services.

At the same time, skill-biased technological change, related to the information technology revolution, has reduced the overall demand for the services of the poorly educated, and globalization has meant that employers can now outsource production to low-cost countries. This decreases the bargaining power of workers and so reduces their incomes further.


At the other end of the spectrum, faulty corporate governance oversight procedures have resulted in a massive rise in CEO compensation relative to the average worker.

This has hugely boosted the income of the top 1%, the income group that has been driving, almost single-handedly, the recent rise in inequality. Overly generous compensation practices in the financial sector have also contributed to the large increases in the incomes of top earners.

At a household level, increased assortative mating, defined as the tendency for persons with similar education and qualifications to marry one another (a male doctor who in the past married a nurse now marries another doctor), has led to the rise in the number of high income two-earner households.

THE IMPACT OF INCOME TRANSFERS AND TAXES ON INEQUALITY IN CANADA

The distribution of income in this country is greatly affected by government policy. Statistics Canada produces estimates of income distribution based on three different measures: (i) market income, defined as earnings plus net investment income and private retirement income; (ii) total income, which includes transfer payments; and (iii) after-tax income (which includes all taxes and transfers). It is the after-tax distribution



Ratio of top to bottom quintile income in Canada, adjusted for family size

| | Market income | Total income | After-tax income |
|------|---------------|--------------|------------------|
| 1981 | 9.70 | 5.66 | 4.78 |
| 1989 | 10.26 | 5.60 | 4.57 |
| 2000 | 13.13 | 6.95 | 5.69 |
| 2009 | 14.28 | 7.06 | 5.64 |

Point change

| | | | |
|-----------|-----|------|------|
| 1981–1989 | 0.6 | -0.1 | -0.2 |
| 1989–2000 | 2.9 | 1.3 | 1.1 |
| 1981–2000 | 4.6 | 1.4 | 0.9 |
| 1981–2009 | 1.1 | 0.1 | 0.0 |

Total Growth %

| | | | |
|-----------|------|------|------|
| 1981–2009 | 47.2 | 24.7 | 18.1 |
|-----------|------|------|------|

SOURCE: Statistics Canada (2011) *Income in Canada 2009*.

Figure 1

that is the most relevant from the perspective of private consumption, as it reflects the inequality in access to marketed output. It does not, however, reflect access to public services. Once this is factored in, we see a slightly different picture, as I explain below.

In 2009, the ratio of the market income of the top quintile to the bottom quintile was 14.28 to 1.¹ For every dollar of market income earned by a person in the bottom quintile, a person in the top quintile received \$14.28 (**Figure 1**). Income transfers greatly boosted the total income of those in the bottom quintile and reduced the top/bottom income ratio by one half to 7.06 to 1. This is the result of the high government transfer rate for the lowest quintile (amounting to 52.0% of adjusted total income of this quintile) compared to

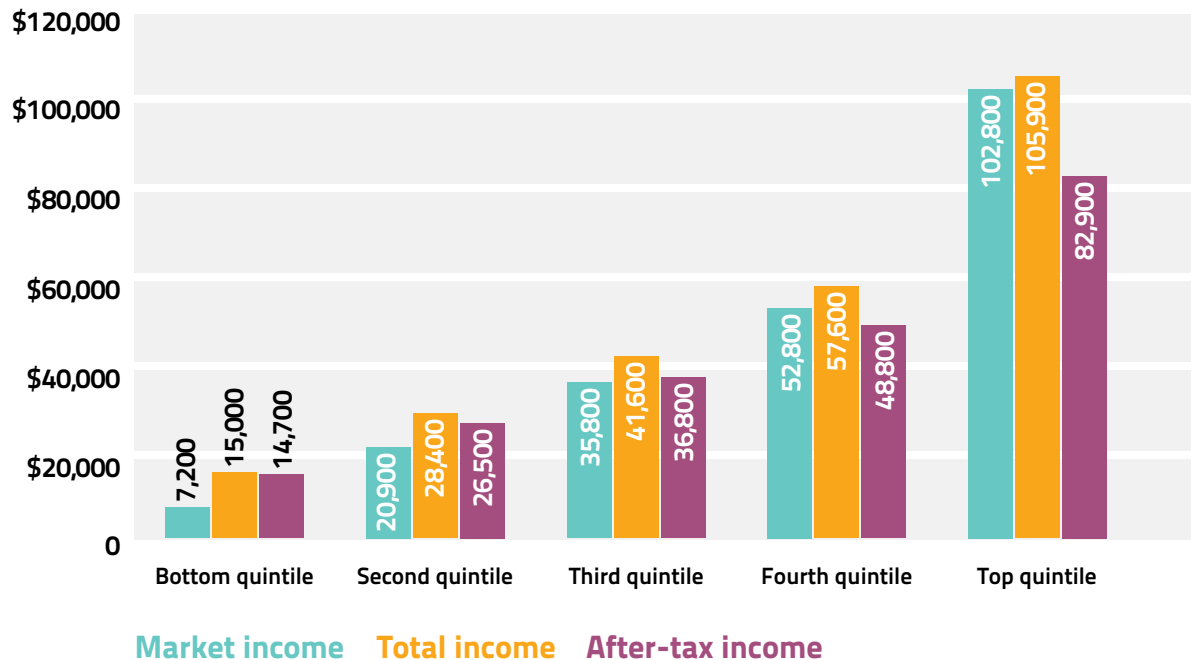
the highest quintile (2.9%). The final, after-tax ratio between the top and bottom quintiles was lower still at 5.64 to 1 or 40% of the market income ratio. **Figure 2** shows the absolute figures for the various measures of income for the year 2009.

To track broad trends in income inequality, the Gini coefficient is a well-accepted indicator. It reflects the dispersion of the income distribution, and its value ranges from zero to one. While a value of zero would indicate that income is equally divided among Canadians, a value of one would mean that a single household receives all the income in the economy. Therefore, when income inequality increases, the Gini coefficient goes up and *vice versa*.

The Gini coefficient tells the same story about the impact of transfers and taxes

¹ A quintile is a portion of a frequency distribution containing one-fifth of the total sample. The top quintile represents the average adjusted income of the 20% of all economic families who recorded the highest income; the bottom quintile is the same for those with the lowest income. The quintile distribution takes into account only economic families (not unattached individuals) and is adjusted for changes in family size over time.

Adjusted income by quintile for economic families, 2009



SOURCE: Statistics Canada (2011) *Income in Canada 2009*.

Figure 2

on income inequality. In 2009, the Gini coefficient for market income was 0.515. When income transfers were included, it dropped by 16.5% (0.085 points) to 0.430. With taxes factored in, it was an additional 0.036 points lower at 0.394, a further 7.0% decline. Income inequality as expressed by the after-tax Gini coefficient was thus roughly three quarters (76.5%) of the level of inequality for market income.

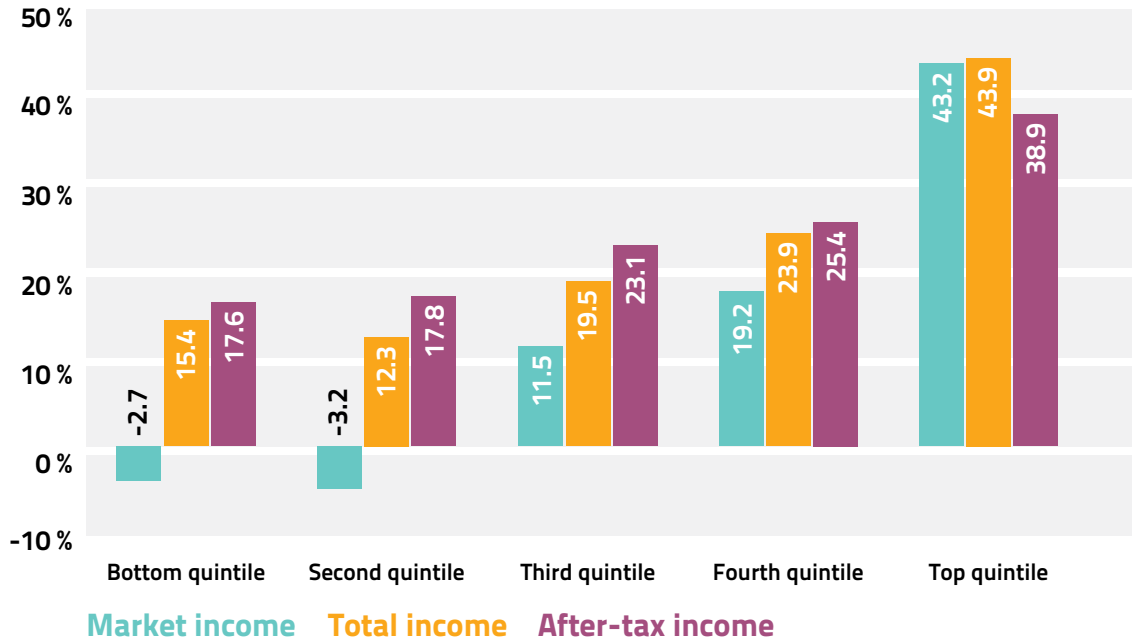
HOW HAVE REDISTRIBUTIVE MEASURES CHANGED OVER TIME?

Between 1981 and 2009 inequality in Canada grew, according to both measures (top to bottom quintile ratio and the Gini coefficient). **Figure 3** shows that the real market incomes of the bottom two quintiles actually fell over this period, while that of the top quintile rose by 43.2%. When taxes and transfers are taken into account the incomes of both the bottom

quintiles grew by around 18%, the income of the middle quintiles grew by around 25%, but the incomes of the top quintile grew by close to 40%.

Figure 1 shows the extent to which taxes and transfers have reduced market income inequality over the period 1981 to 2009. In 1981 the low to high quintile ratio of income after taxes and transfers was 4.78, or about half what it would have been for market income (9.7). By 2009 these figures had switched to 5.64 (after taxes and transfers) and 14.28 (market). In simple terms, then, after-tax income inequality rose by 18.1% over this period while market income inequality rose by 47.2%. Redistribution measures had more of an effect on the lowest quintile in 2009 than they did in 1981. But such measures were not strong enough fully to offset the sharp increase in market inequality that took place over this period.

Percentage change in income for economic families 1981 – 2009



SOURCE: Statistics Canada (2011) *Income in Canada 2009*.

Figure 3

Gini coefficients for the time tell a similar tale. Canada was a more unequal society in terms of income distribution in 2009 than it was in 1981, but it would have been far more unequal without the greater redistributive role of the state.² Nonetheless, there was still a significant increase in after-tax income inequality in this country over the period: government could have done, and could be doing, more to offset rising market inequalities.

As noted, the top 1% of earners have accumulated massive sums in recent years. The market income share of the top 1% of super-rich households increased 5.9 percentage points from 7.7% in 1982 to 13.8% in 2007, accounting for the entire increased income share for the top quintile as a whole.³ The after-tax income share of the top 1% increased 3.4 points from 6.5%

to 9.9% between 1982 and 2007. This means that 1% of Canadian households command nearly 10% of our total income, a trend towards income polarization that is at once alarming and very public. Such accumulation at the top has almost certainly contributed to the perception that overall inequality has risen more than is in fact the case. This is something that needs to be accorded special attention in the development of future federal government redistributive policies.

A BROADER APPROACH TO REDISTRIBUTION

Discussions of redistribution are generally framed in terms of government taxes and transfer payments and the effect of these on various income groups. But the issues are much broader. The discussion can be extended

² Heisz (2007) reached a similar conclusion for the 1981 – 2004 period. While governments are now doing more on the redistributive front relative to 1981 – as gauged by their impact on after-tax income relative to market income – an OECD study found that the extent of this redistribution effort has diminished since 1994 (OECD, 2008). This decline has been largely driven by the declining role of transfers such as welfare payments and employment insurance.

to include government spending on public goods, such as education and health, and how this is distributed between groups. It can also take in other breakdowns of the population such as by age group, educational attainment level, and region.

Erosion of public services will tend to increase inequality

The Centre for the Study of Living Standards (CSLS) has recently released a report that provides such a broader analysis of the net redistributive effects of government taxation and total spending.⁴ It found that in 2005, the latest year for which data are available, net government expenditures in Canada were \$2,557 (2000 US dollars) per household, consisting of \$11,653 in government transfers i.e. income support programs, \$9,306 in public consumption (e.g. education, health), and -\$18,401 in taxes. A household in the bottom income quintile received \$4,245 in net government expenditure, in the second lowest quintile \$6,065, in the middle quintile \$7,588, in fourth quintile \$4,707, and in the top quintile -\$9,821.

It is notable that it is the middle quintile, not the bottom quintile, that benefits the most from net government spending and that it is the top quintile that benefits the least (largely because of the higher taxes paid by households in this quintile).

Different types of government expenditure programs have different redistributive impacts. For example, absolute spending on healthcare was found to be similar across income groups, implying an equalizing effect on the overall income distribution, given that this spending represents a much greater share of the broadly-defined income of the poor than of the rich. In contrast, education spending was concentrated in the

top four income quintiles, and was much weaker in the bottom quintile, largely due to differential rates of enrollment in post-secondary education.

This broader approach to redistribution highlights the important redistributive role played by government spending on goods and services such as health and education. Public services are therefore an essential element of the redistributive effort of government. Erosion of public services will thus tend to increase inequality, something that is not often at the forefront of discussion when cuts are proposed.

Another interesting fact that comes to light when taking a broader view of distribution issues is that the largest redistribution in Canada, in terms of net government expenditure, actually takes place across generations, not income groups. In 2005, households headed by a person 65 or over received, on average, net government spending of \$24,091, compared to -\$2,452 for households with a head aged below 65. This situation reflects the Old Age Security and Guaranteed Income Supplement payments made to seniors, the higher healthcare expenditures for this group, and the lower taxes paid, reflecting lower income.

This generational redistribution is a normal part of the implicit contract between the state and the population, whereby persons pay taxes during their working lives and then receive significant income support and health benefits during the latter part of their lives. However, this aspect of overall redistribution can easily be forgotten. There is a tendency for people to believe that most of the contributions they are paying to redistributive efforts favour the poorest income groups, when in fact they mostly favour the old (there is of course some overlap between these two groups).

³ Veall, M. (2010) "Top Income Shares in Canada: Updates and Extension". *Working Paper Department of Economics*, McMaster University. (<http://worthwhile.typepad.com/veall.pdf>)

⁴ Sharpe, A., Murray, A., Evans, B. & Hazell, E. (2011) "The Levy Institute Measure of Economic Well-being: Estimates for Canada, 2000 and 2005". *CSLS Research Report* 2011-09.

POLICY RESPONSES

Fundamental changes have occurred in the Canadian labour market, and in society in general, in recent decades due to globalization and technological change. During this time, redistribution policies have played a key role in reducing income inequality in Canada. However, the tax/transfer system should do still more to ensure that the after-tax distribution of income in this country remains within a socially acceptable range.

The system must evolve to keep up with the changing economic environment. In a recent paper Robin Boadway from Queen's University has cogently argued that the redistributive role of the tax/transfer system in Canada is inadequate and needs rethinking.⁵ He points out that the rate structure of the tax system as a whole has considerably flattened, especially at the provincial level, and that transfers to the least advantaged, such as those on welfare, have worsened significantly over the last 30 years. In his view, an equitable tax transfer system should redistribute so as to compensate for the (dis)advantages with which people are endowed "through the luck of birth" (page 176).

Boadway argues for an equality of opportunity agenda. This would be a significant modification of the system that we currently have in place, which is largely focused on outcomes and smoothing the excesses of market allocations, with relatively little regard for starting points.

Boadway focuses particularly on intergenerational inequality and access to post-secondary education.

// Intergenerational inequality

Unlike most other developed countries, including the United States, Canada does not have an inheritance tax in place. The introduction of such a tax could contribute significantly to greater equality of opportunity in this country and should have a moderating effect on market income inequalities down the line. Critical implementation issues include the income threshold at which the tax kicks in (people with relatively modest estates should not be affected) and how to minimize tax avoidance possibilities for the rich.

// Post-secondary education

There are a number of market failures associated with post-secondary education. Education is a particularly risky form of investment: low income individuals are subject to liquidity constraints because of the difficulty of borrowing against future human capital, and persons from disadvantaged backgrounds are poorly prepared to succeed. Government policies are needed to address these market failures. This would, in turn, help reduce inequality as more people from lower quintiles would be able to access the type of education that enables them to move up the income ladder. Potential policies in this areas include greater sheltering of investment in human capital through the tax system (for example, a wider range of deductions for expenditures linked to education), a fully-funded income-contingent student loan system, and more grants to students from low income families.

⁵ Boadway, R. (2011) "Rethinking Tax-Transfer Policy for 21st Century Canada" in Gorbet, F. & Sharpe, A. (eds.) *New Directions for Intelligent Government in Canada: Papers in Honour of Ian Stewart*. Ottawa: CSLS.

A reasonable degree of equality is widely regarded as a key societal goal. Given the inherent tendencies of the market to generate inequality, it is important that government intervene through redistributive policies to offset market forces and ensure that income inequalities remain within socially acceptable limits. These policies take three forms. First, tax/transfer policies drive a wedge between market and post-tax income shares. Second, government spending on public goods and public services such as education and health is profoundly equalizing (something that needs to be clearly recognized as we plan for the future of such services). Third, equality of opportunity can temper the growth of market inequalities in the first place.

The way forward for Canada to become a more equal society must include all three policy approaches. Programs that are effective in assisting disadvantaged groups should be

expanded and the contribution that the rich make to achieving greater equality of outcomes should be increased. Public services that benefit all citizens, such as public transit, should be further developed. Measures that promote equality of opportunity, such as inheritance taxes and better access to post-secondary education for the poor, should also be implemented.

The Occupy Wall Street movement has focused the attention of the world on growing inequality. Many political leaders, including the Governor of the Bank of Canada and the Minister of Finance, have expressed sympathy with the issues identified by this movement. This situation provides an historic opportunity for Canadians to rethink our approach to addressing inequality. A national debate on how governments in Canada can most effectively redistribute income to prevent growing inequalities is urgently needed. ■

REFERENCES

- Heisz, A. (2007) "Income Inequality and Redistribution in Canada: 1976 to 2004". *Statistics Canada Analytical Studies Research Paper 298*.
- OECD (2008) *Growing Unequal: Income Distribution and Poverty in OECD Countries*. Paris: OECD.
- Sharpe, A. & Ross, C. (2011) "The Living Standards Domain of the Canadian Index of Well-being: An Update". *CSLS Research Report 2011-15*.